Quantifying the potential for digital trade facilitation through Regulation as a Stimulus in Africa

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Introduction

The goal of this paper is to assess the current challenges for intra-African trade in the aftermath of the Covid 19 pandemic. It looks at intra-African trade growth over the past five years and at the prospects for intra-African trade in the coming years if nothing changes and, more importantly, if the full effects of the African Continent Free Trade Area (AfCFTA)'s trade facilitation measures come into force. It is shown that intra-African trade fell back at an annualised rate of 8.5% between 2016 and 2021. The current trend growth projections in intra-African trade over the next five years if nothing changes suggests annualised growth of just 2.8% from 2022 onwards. This will be insufficient to address the imperative for urgent and targeted growth to aid post-pandemic recovery.

The research finds that regulation to enable digital trade could stimulate nearly $90bn in additional intra-African trade by 2026. This more than doubles intra-African trade on its pre-pandemic levels and increases the share of intra-African trade as a proportion of exports from Africa as a whole to non-African nations from 18.2% in 2019 to around 20.7% by 2026. The costs of trade for some African nations are prohibitively high at over 100% of the revenues gained from trade. The estimates provided here suggest that around $17.6bn across the continent will be saved as a result of streamlining border and pre-border crossings as a result of digital trade enabled through legislation.

What is clear, is that the level of economic growth across Africa to mitigate the socio-economic effects of the pandemic will rely heavily on intra-African trade facilitation. This will reduce dependency on supply chains outside of Africa and integrate African businesses into global value chains. This will influence jobs and revenues to business. This is evident from the quantitative analysis conducted as part of this research which suggests that intra-African trade alone could increase as a share of African external trade by around 2.5% by 2027.

This paper examines the role of digital trade facilitation as a means of accelerating the growth of intra-African trade. This could take the form of a series of regulatory measures aimed at accelerating intra-African trade facilitation and trade promotion (Regulation as a Stimulus – RaaS) as well as the introduction of single windows, and greater use of digital instruments in trade finance. Governments can critically offset some of the short-term adjustment costs associated with increased openness

[1] This paper is based on research conducted in 2021, immediately after the end of the Covid pandemic for the UNDP and Africa Investor. The author is grateful to the UNDP and Africa Investor for their support; the opinions expressed in this paper are entirely those of the author and not of the UNDP or Africa Investor. The numbers have not been updated as they were based on specific responses during time-bound field work with stakeholders and in the form of discourse analysis.

thereby relieving businesses from high export costs and hence providing a stimulus to trade and recovery from the Covid 19 pandemic.

As a policy tool RaaS, in particular, is powerful. It is relatively low cost in that it involves legal reform at a national level alongside the structures provided by the AfCFTA and the Regional Economic Communities (RECs) rather than large scale capital investment. In the current climate of high indebtedness, this means that it is an attractive tool of trade facilitation. Of course, it does not mean that longer-term the investments do not need to be made. Rather, the research suggests that by providing a legal framework for trade facilitation, such as Single Windows, digital ID recognition and transfer of people and capital across borders, Heads of State can enable existing structures and technologies to streamline intra-African trade, thereby reducing costs and acting as a stimulus.

This lends the novelty to the research presented in this paper. Many of the challenges for intra-African trade are well-known, and underpin the existence of the RECs, the AfCFTA, and other initiatives to stimulate trade and trade finance on the continent from multilateral banks such as the African Development Bank and international organisations including the World Trade Organisation, the World Bank, the IFC, the UNDP and others.

The impact of RaaS through digital trade facilitation which is illustrated here serves simply to show that there is huge potential across the region of trade facilitation through regulatory reform. Any numbers are of course projections based on an assumption that market creation and growth will follow within an 18-month period of any regulatory reform and are therefore have to be seen as indicative of the potential rather than absolute. Nevertheless, the approach taken does suggest that there is huge potential to increase intra-African trade and reduce costs for exporters accordingly. This is a wake-up call for the Heads of State to work with the existing legal frameworks to make such changes.

Aims and objectives

This report has one simple aim: to assess the role of RaaS in stimulating intra-African trade through greater digitisation. Its more complex objectives can be summarised here:

- To identify the challenges facing intra-African trade facilitation currently and how these can be addressed through regulation to underpin digital trade facilitation
- To identify regulatory bottlenecks that are obstacles to intra-African trade
- To provide five case studies of intra-African trade facilitation where regulatory solutions may be appropriate.
- To provide estimations of costs and potential cost reductions that would be enabled through RaaS
- To produce a framework for regulatory reform and digital trade facilitation that might accelerate trade growth.
- To ensure that the findings are relevant to the broader agenda of the AfCFTA for socio-economic inclusion (especially women) and focused on the needs of Micro, Small and Medium-sized

Enterprises (MSMEs) and informal economic actors as these constitute a large but hidden proportion of intra-African trade.

This research additionally aimed to:

1. Quantify the intra-African trade, and revenues and jobs impact of any measures over a five-year period to provide a business case for implementing reforms to enable digital and paperless trade.
2. Provide a new focus on regulation rather than replicate known issues in intra-African trade facilitation.

This paper nevertheless only aims to provide ideas and a business case for regulatory reform ahead of the implementation of digital trade facilitation tools and financial instruments. This is a vital agenda for the continent in the wake of the pandemic and it is hoped that the contribution of the work conducted will provide at least pause for thought.

Research caveats

There are several caveats to the research conducted for this paper. The first, and most obvious, is the fact that the economic impact of regulatory reform is intrinsically “unknowable”. Approaches have looked at reduction in the country risk profile from more stable institutions and the extent to which legal reform can create a framework for market mechanisms to take hold and generate growth.[2] However, underlying these studies is the fact that rates of reform are variable and context specific, while economic growth has been hampered by exogenous factors such as volatility in prices, global financial crises or conflict. This means that while institutional and or regulatory reform in themselves must be seen as a good thing in that they provide a framework for catalysing change, it is the actions that follow regulatory reform that will have the economic impact, not the reform itself.

Second, any recommendations for legal reform and associated growth estimates with those are necessarily qualitative in that they are derived from the research itself. There is little or no precedent for estimating the effects of regulatory reform on trade growth. Every attempt has been made here to derive reliable numbers from interviews and discourse analysis, and to triangulate these with numbers established from desk research, other studies and a proprietorial survey of 55 international banks with global operations to estimate “typical” increases in trade business and international trade. As a result, the quantifications provided in this research are based on assumptions about how costs would be

[2] See for example LeBel, P (2006): “Managing Risk in Africa through Institutional Reform.” CERAFT, School of Business, Montclair State University, Upper Montclair, New Jersey 07043; Davis, Kevin E. and Trebilcock, Michael J., The Relationship Between Law and Development: Optimists versus Skeptics (May 1, 2008). American Journal of Comparative Law, Vol. 56, No. 4, 2008, NYU Law School, Public Law Research Paper No. 08-14, NYU Law and Economics Research Paper No. 08-24, Available at SSRN: https://ssrn.com/abstract=1124045; Oto-Peralias, D and Romero-Avila, D. (2017): “Legal Reforms and Economic Performance: Revisiting the Evidence.” Background paper for the World Development Report, 2017, “Governance and the Law.” https://thedocs.worldbank.org/en/doc/193351485539892515-0050022017/original/WDR17BPRevisitingLegalOrigins.pdf

reduced and trade increased as a result of streamlining and market creation, particularly enabling Micro, Small and Medium-Sized enterprises (MSMEs) to enter the market as a result of the changes enabled as a result of regulatory reform. As these are derived from qualitative research they are "untestable" for their accuracy since no precedents exist. This is discussed in more detail in the methodology section.

Finally, the regulatory reform and trade facilitation framework is based on 35 in-depth semi-structured interviews with senior stakeholders across the continent. Within the timeframes of the original research, this was a large number and represented core stakeholder groups. However, more work needs to be done to assess the framework provided and to integrate it with broader engagement work that is being undertaken by the UNDP.

Despite these caveats, the impact on intra-African trade is substantial. As has already been made clear, regulatory reform could facilitate as much as $90bn in additional intra-African trade by 2027, nearly 270,000 new jobs and $500bn in additional revenue for African businesses. Further, it could reduce costs on average by 75% across the continent giving exporters in some countries access to markets that they currently are prevented from entering since their costs are simply too high. Even if the numbers prove to be over-ambitious because the process of change is slower than expected, anything that moves in the direction of helping the continents small businesses to become more competitive and create jobs must be worth doing. This is the essence of the call-to-action for Heads of State.

Structure of this paper

The paper is structured as follows:

- **Section 1** looks at the challenges for Intra-African trade post pandemic and how regulatory reform could provide a catalyst for trade facilitation through paperless trade. It is argued that the current forecasts for intra-African trade growth are insufficient to pull the continent out of the current Covid-induced economic recession. Trade is a necessary, if not alone sufficient, mechanism for creating post-pandemic growth, and legal reform to simplify cross border trade will be a major step towards generating African recovery from within Africa.
- **Section 2** is a summary of the research methodology undertaken and should be read in conjunction with the statistical appendix. It highlights the fact that assessing the impact of legal reform on trade facilitation is fraught with difficulties, as highlighted above, since there are few empirical precedents. This research and its method should be seen as a first attempt and a starting point along that journey as a result.
- **Section 3** is a review of each of the thematic case studies in developing the regulatory framework. It looks at the business environment, pre-border challenges, border challenges, infrastructure and access to finance as the key issues identified during the research scoping. While the challenges faced are well-known, interviews conducted suggested novel ways of amending laws to aid digital trade, access to finance, enable the movement of people and capital across borders and to share experiences and effectiveness of reform programmes so that

others could learn. Most importantly, these measures had some specific recommendations that would enable women to trade more readily across borders.

- **Section 4** is an analysis of the costs of cross-border trade and how RaaS can help to reduce those costs. It estimates that for some countries the savings could be as much as 95% making viable trade in countries like the Democratic Republic of Congo (where costs are currently higher than revenues from international trade).
- **Section 5** looks at the multiplier effects that cost reductions and trade streamlining through legal reform to enable the use of new technologies could create. It is estimated that there could be an additional $40bn of trade just from improved access to finance, $37bn of trade as a result of the cost reductions, and another $12bn of trade by enabling excluded groups, especially female traders, to access international markets without the heavy bureaucracy that delays them at borders.
- **Section 6** draws the analysis together by looking at the Framework Implementation Plan. It is structured around the case studies and looks specifically at how the AfCFTA, the RECs and Heads of State can structure legal frameworks with country level legal reform to facilitate intra-African trade.

As a note of context, one thing is important and came out from all the interviews, documentary research and discussions held during the course of the research: governments have a strategic role to play as regulators and can use this role to facilitate trade in a relatively low-cost way. It does not take away the need for long-term investment in infrastructure or other trade facilitation enablers in the business environment. But regulatory reform does signal an intent to address structural issues at a national and international level. Here the AfCFTA, the IFC, the UNDP and the African Development Bank have a role to play alongside international organisations such as the International Chamber of Commerce and the United Nations Development Programme and of course the World Trade Organisation in providing enabling frameworks that make legal reform the trigger for enabling equal access for MSMEs and large businesses alike to the benefits of trade-based growth in Africa.

Research methodology

It is worth dwelling on the research methodology which was designed to achieve the aims and objectives outlined above. There are a number of methodological issues inherent with this research some of which have been highlighted already and which can be summarised as follows:

1. There is irregular and inconsistent data on intra-African trade values, trade costs and business revenues or employment meaning that predicting the future in a consistent way is at best problematic and at worst unreliable. To compensate for this we have taken data from the United Nations Comtrade database and mirrored it and refined it using the methodology in Appendix 1. This also provides us with a framework for trend forecasting using machine learning/Bayesian techniques.
2. There is little quantitative analysis of the costs and benefits of generic legal reform across the continent. The lack of readily available precedents means that the approach here is novel and indicative rather than a final word on the subject.
3. The scope of the research was to develop the MTFAIP for individual heads of state but, given the independent authorship of this report, it was considered more robust to provide an assessment of the potential market size and cost reductions for individual countries rather than to engage in a political process. This means that the research appears to rely heavily on a quantitative assessment of impact, but this is simply a way of presenting the opportunity to Heads of State rather than an absolute or accurate forecast of impact.

Data sources

The following data sources have been used to underpin the findings of this report:

1. 35 semi-structured interviews with senior stakeholders[3] (list provided in Appendix 4)
2. Discourse analysis: python-based web-scraping techniques across 600 media outlets in total across Africa
3. Documentary, desk-based research and meta-analysis (cited articles in footnotes and literature review at end of Appendix 1)
4. World Ease of Doing Business survey data for 2020
5. Transparency International Corruption Indices for 2020
6. Bureau van Dijk/Moody's ORBIS database
7. UNCTAD freight cost data
8. Survey of 55 international banks and 20 international businesses conducted for the ICC UK in 2021 but with estimates of cost savings, time savings and revenue growth
9. Trade data refined and developed using the methodologies in Appendix 1

[3] Note – the goal was to provide a sample of senior stakeholders who could contribute to the engagement with RaaS in the future. Of the 200 people who were contacted, 35 responded and were senior enough to meet this criterion. The interviewees were not selected on the basis of being representative of the trade sector across all countries in Africa.

Research questions

The research sought to answer five questions:

- **Are there any barriers to the implementation of RaaS across African nations?** This question is addressed by means of a discourse analysis covering 600 media outlets across the Commonwealth, semi-structured interviews and desk research.
- **What are the current biggest challenges facing African nations in trade terms?** This question is addressed by means of the discourse analysis and trade data
- **What are the costs faced by African countries currently?** The costs for the current year are estimated from the Ease of Doing Business survey for pre-border and border costs. Transportation costs are estimated from UNCTAD freight costs for 2019, interview material and documentary research for a typical container shipment worth $25,000. Where no data is available, costs are estimated by taking an average from neighbouring countries and applying that to the country concerned. Informal costs were available from documentary research for some African countries; to derive an estimate for all countries, an average across available data was taken and then weighted up or down using the Transparency International Corruption Index for the specific country. As a result, informal costs shown are relative rather than absolute but serve as a useful benchmark in the absence of other sources.
- **How can these costs be reduced across African nations through RaaS?** A base year of 2019 was taken since this was the last full year of data available. Documentary research, semi-structured interviews and the survey of banks and businesses conducted for the ICC were analysed for cost improvements if RaaS measures contained in the MTFAIP were implemented. The average across all of these processes produced an estimate for cost reduction which was applied to the data derived from 3 above and distributed using a net-present value formula over a five-year period. Cost reduction differentials between nations come from the differential weightings applied to each country reflecting their cost and corruption base.
- **How does streamlining through RaaS impact trade growth?** A baseline forecast of trade was taken (see Technical Appendix). To estimate the effect that cost reductions would have, the following procedure was followed:
    a. The total cost per container was taken from adding border, compliance, transport and informal costs together for each country
    b. The average number of containers worth $25,000 was calculated by dividing the total trade value for 2019 by the number of containers
    c. The average cost per container was calculated by dividing the average number of containers by the total cost per container
    d. Total trade revenue was assumed to be the total value of trade for any given year from 2019 and projected to 2026
    e. The base projections from the forecasting algorithm were derived from the net present value (NPV) coefficient which was a geometric average of the total estimated cost

reduction spread over the time period AND the cost elasticity of trade for each Commonwealth country taken from the literature search.[4]

[4] Taken as an average from academic estimates in the following sources: https://www.researchgate.net/publication/46469498_Estimating_Elasticities_of_Demand_and_Supply_for_South_African_Manufactured_Exports_using_a_Vector_Error_Correction_Model; https://www.atlantis-press.com/journals/jat/125941262/view https://doi.org/10.2991/jat.k.200530.001

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The African Continent Free Trade Area and Africa post-pandemic

The AfCFTA provides a continent-wide legal framework for boosting intra-African trade through a free trade agreement.[5] This framework covers the whole spectrum of trade facilitation, hygiene, non-tariff barriers, rules of origin, service trade and customs and excise procedures, as well as dispute settlement. It aims to:

- remove tariffs on 90% of goods
- progressively liberalise trade in services
- address non-tariff issues such as:
    - import quotas
    - intellectual property rights
    - e-commerce
    - competition policies
    - sanitary standards.[6]

The 54 signatures created a single African market of over a billion consumers with a total GDP of over $3 trillion, making Africa the largest free trade area in the world by population and economic potential.[7] It is estimated by the World Bank that the AfCFTA will boost Africa's income by $450bn and that Africa will contribute around $76bn to the global economy as a result of more integrated supply chains and infrastructures across the continent.[8] In addition, it aims to lift the continent out of poverty, support sustainable economic growth and industrial development, create jobs and improve the competitiveness of African businesses in international markets. It also aims to enable more women to access trade as a priority since they represent between 70% and 80% of all trade in the informal economy in some countries.[9]

The AfCFTA was launched at a time when the world was being rocked by the Covid pandemic. Sub-Saharan Africa entered its first recession in 25 years with GDP forecast to have fallen during 2020 by around 3.3%.[10] While the continent as a whole was expected to return to growth in 2021, this outlook was subject to uncertainties around the likelihood of future waves of the pandemic and their impact on tourism, the consequences of high levels of indebtedness, financial market volatility and commodity price fluctuations, especially if the pressures are downward. Core inflation was rising at the time the research was conducted, not least because of supply chain pressures on food supplies and high energy costs and this could create downside risks to the growth forecasts against a backdrop of, in the views of the African Development Bank, a deteriorating macroeconomic position. This will present itself in terms of stronger inflationary pressures and greater fiscal deficits which are estimated to have doubled to

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[5] https://au.int/cfta
[6] https://african.business/2021/03/trade-investment/afcfta-gives-glimpse-of-new-african-destiny/
[7] Ibid
[8] https://www.worldbank.org/en/topic/trade/publication/the-african-continental-free-trade-area
[9] https://www.un.org/africarenewal/magazine/january-2021/afcfta-africa-now-open-business
[10] https://www.worldbank.org/en/news/press-release/2020/10/08/world-bank-confirms-economic-downturn-in-sub-saharan-africa-outlines-key-polices-needed-for-recovery

historical highs of 8.4% of GDP on average across the continent during the pandemic.[11] Further shocks to the African economy have come from Russia's invasion of Ukraine which impacted grain supplies[12], from lower trade and investment from China, lower demand from OECD countries, and a continental supply shock as supply chain shortages push up domestic costs and add to financial instability.[13]

The socio-economic consequences for the continent are hard to under-estimate. These will include challenges in meeting human development and sustainable development goals (SDGs), building long-lasting economic independence, and ensuring the growth and resilience of supply chains in the future.[14] For example, selected country study estimates suggest that 77% of the population in four countries (Ethiopia, Malawi, Nigeria and Uganda) live in households which have lost income as a result of the pandemic, while only 17% of households in those countries with school-age children have managed to retain pupil-teacher contact during the pandemic.[15] If replicated across the continent, the effects both on livelihoods and long-term education will be devastating.

Regulation and digital - Regulation as a Stimulus (RaaS) as it is used in this paper

What is clear is that the socio-economic context of Covid provides a new urgency to RaaS as a means of catalysing recovery through trade. RaaS is a series of regulatory measures aimed at accelerating intra-African trade facilitation and trade promotion. Through legal reform, governments can offset two things: first, they can address the short-term adjustment costs associated with increased openness that is the inevitable consequence of the Free Trade Area across the continent. Some countries will be more impacted by greater competition and supply chain disruption or redistribution that are the result of this. RaaS has the potential to ameliorate some of these costs by, for example, facilitating costless visas for professionals to cross borders or speeding up the adoption of Single Windows to streamline transportation documentation.

Second, RaaS can provide longer term adjustment support by enabling a legal framework to the adoption of paperless trade, digital identities and use of online accounting systems to enable informal and female-owned businesses to access finance, run their own analysis of costs, reduce exposure to fraud, and complete border documentation more readily. These technologies exist in Africa, but legislative reform would enable trust to build, therefore catalysing their adoption. Many of those we surveyed viewed digital reforms as essential to facilitating intra-African trade – country-level legal reform aided by common standards at an AfCFTA level.

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[11] https://www.afdb.org/en/documents/african-economic-outlook-2021

[12] https://foreignpolicy.com/2023/08/01/black-sea-grain-russia-ukraine-africa-hunger/

[13] https://read.oecd-ilibrary.org/view/?ref=132_132745-u5pt1rdb5x&title=COVID-19-in-Africa-Regional-socio-economic-implications-and-policy-priorities

[14] https://www.africa.undp.org/content/rba/en/home/library/reports/analysing-long-term-socio-economic-impacts-of-covid-19-across-di.html

[15] *"Josephson, Anna; Kilic, Talip; Michler, Jeffrey D.. 2020. Socioeconomic Impacts of COVID-19 in Four African Countries. Policy Research Working Paper;No. 9466. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/34733 License: CC BY 3.0 IGO."* http://hdl.handle.net/10986/34733

Africa's trade profile

It is not the purpose of this section to give a detail on how intra-African trade is structured or, indeed, how intra-African value chains operate. This is done amply elsewhere.[16] However, Figure 1 gives an indication of the dominant sector value chains and illustrates the current challenge if intra-African trade is to begin to support socio-economic welfare as well as economic growth.

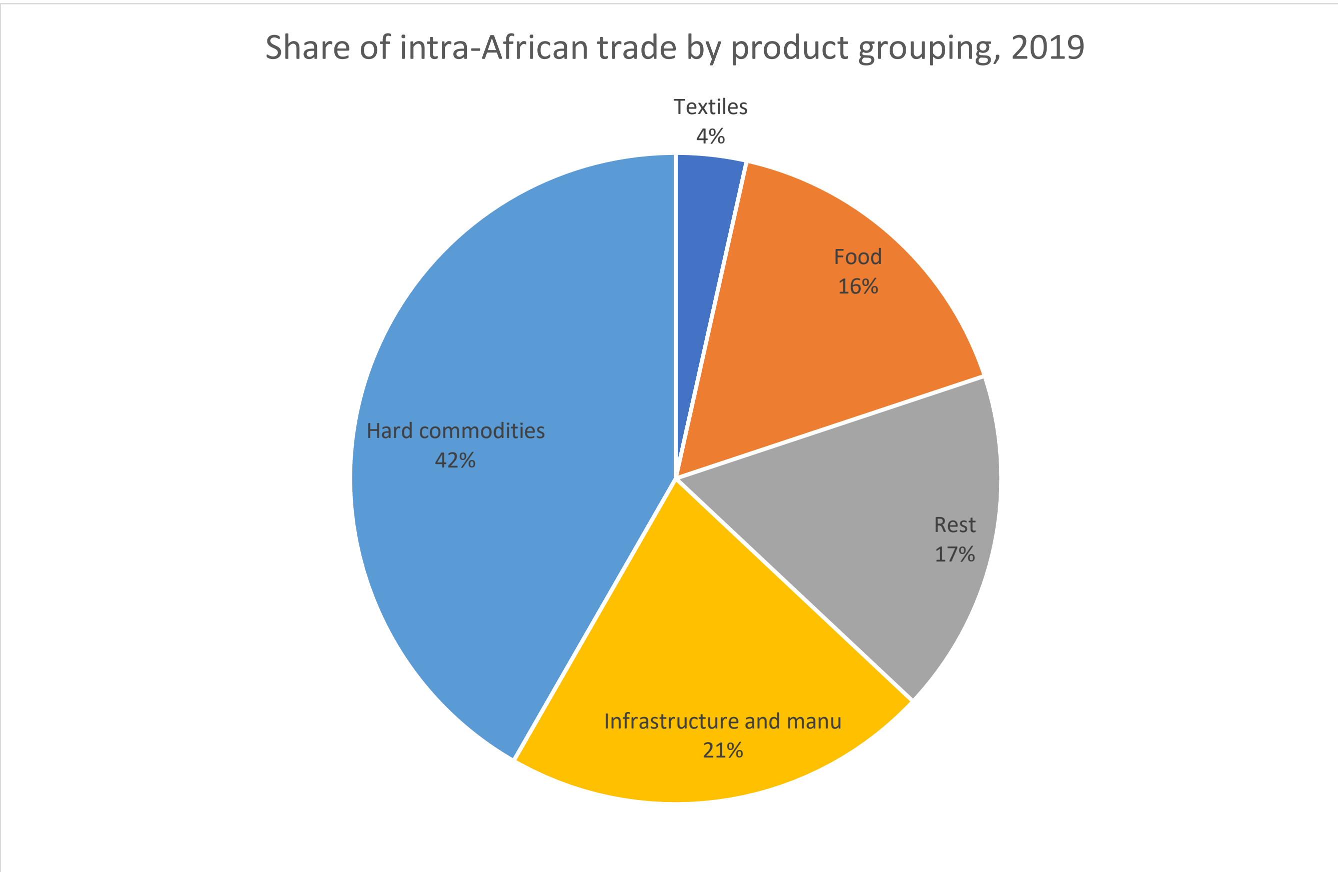


Figure 1
Source: Author's analysis based on UN Comtrade data, mirrored and refined to create intra-Africa trade profile

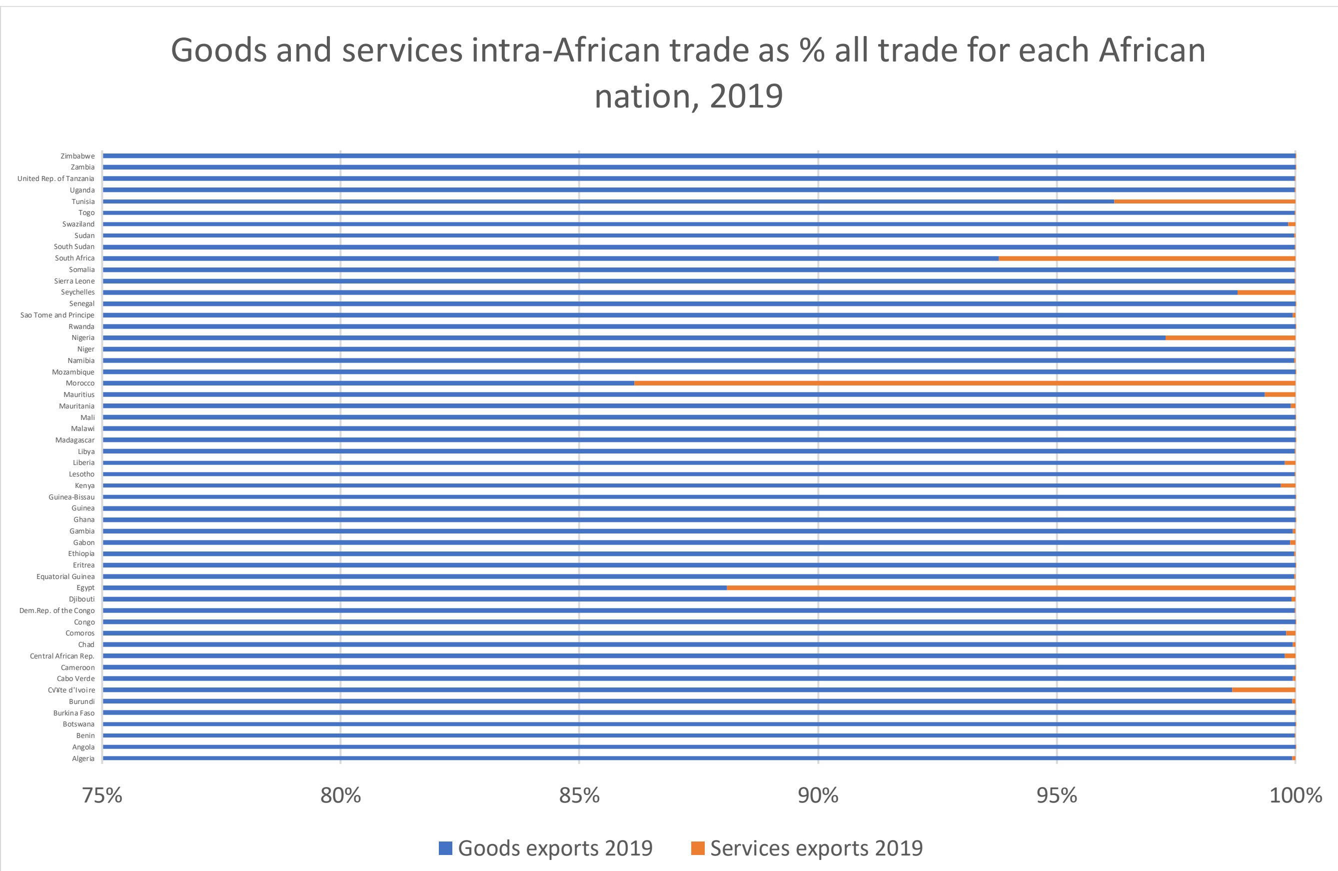
Figure 1 suggests several things:

1. First, intra-African trade is dominated by hard commodities such as fossil fuels, gold, platinum, precious metals and iron and steel. 42% of its trade internally is in these sectors and while this creates jobs and business revenues, this may simply be generating exports in these sectors. For

[16] https://www.gtreview.com/supplements/gtr-africa-2020/africa-trade-briefing-2/, See also, https://www.africa.undp.org/content/rba/en/home/presscenter/pressreleases/2021/afcfta-secretariat-and-undp-release-futures-report-tackling-valu.html which identifies critical supply chains for Africa reflecting diversification away from commodities into sectors like mobile financial services and creative arts.

example, fossil fuels and precious metals and stones alone account for some 73% of all of Africa's trade with the rest of the world.[17]
2. The dependency of Africa on external supply chains for clothing, and to a lesser extent food, is self-evident. Clothing represents just 3.5% of intra-African trade while food is 16% of intra-African trade suggesting that a lot more could be done to promote these sectors alone. As women are proportionately more represented in food and clothing, this would help achieve several sustainable development goals.[18]
3. Africa's trade in manufactured and infrastructure goods is just 21% of its total trade. Again, if the continent is to become self-sufficient, then these sectors need to be prioritised.

This picture is for goods only and Africa's service sector in export terms is hard to measure. This is the case for several reasons, including the fact that it is relatively small, under-developed and often in the informal economy (Figure 2). While this applies equally to goods trade, there is better quantitative information for these simply because they are associated with customs and excise and tax regimes nationally as well as internationally.



[17] The use of Trade in Value Added indicators to assess the value created as commodities flow between African countries would shed further light on this but was beyond the scope of this research.
[18] https://www.africa.undp.org/content/rba/en/home/presscenter/pressreleases/2021/africa_s-women-traders-are-poised-to-transform-economies-through.html

Figure 2
Source: Author calculations based on UN Comtrade data

The chart shows all trade for all nations in Africa. It looks at the total trade of each country to all destinations so mixes intra and extra-African trade but gives a profile for each country of the balance between goods and services exports and shows that while there is some service sector activity, it tends to be under-reported in most countries and, more importantly, larger in the larger trade economies such as Morocco, Egypt and South Africa. This does not mean that there is no services trade, rather that much of it is not reported across the continent and may fall into the informal category of exporters.

Since services trade data is poor, therefore, the analysis from here on focuses on goods trade only.[19] Based on that, and using data for intra and extra African trade, Figure 3 shows how trade has fallen back over the past five years, particularly in 2020, and suggests that some of the bigger trade economies, like South Africa and Egypt will struggle to recapture their pre-pandemic growth. Others, such as Sao Tome and Principe, Benin, Togo and Niger may recover quickly but these are smaller economies whose trade is more volatile over the past five years.

[19] We are aware that there is considerably more services and fintech analysis that might inform this research. However, within the timeframe and terms of reference of the research, we have deliberately excluded these because a thorough and rigorous piece of analysis would not have been possible. The data suffer from inconsistency across countries and timeframes and their inclusion would not have been possible on a comparable basis to the goods data supplied.

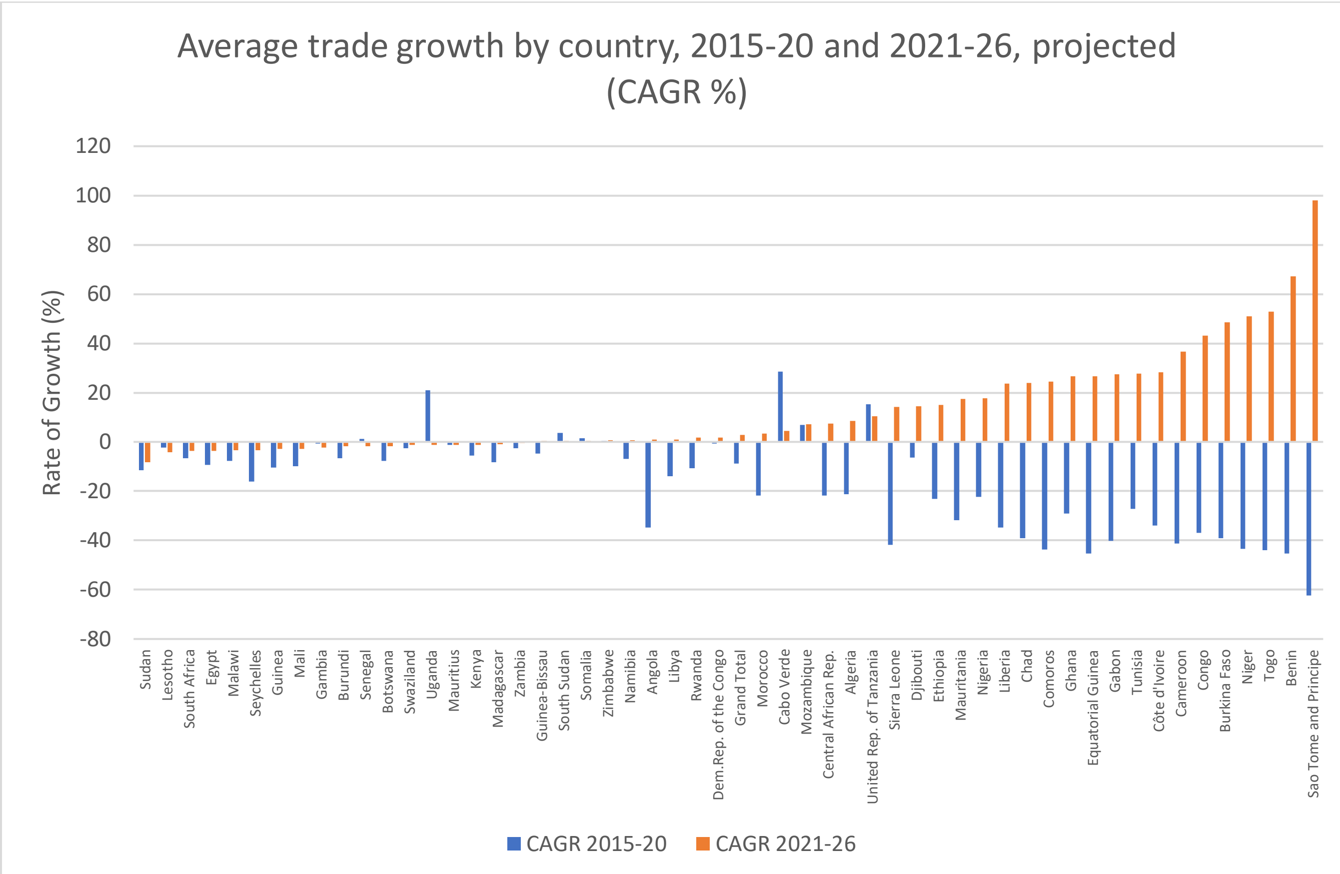


Figure 3
Source: **Author's calculation from UN Comtrade Data**

Perceptions of intra-African trade

All of this suggests that African trade generally is not growing fast enough to recover from the pandemic quickly. Yet in the public discourse across Africa, trade is being viewed increasingly positively (Figure 4).

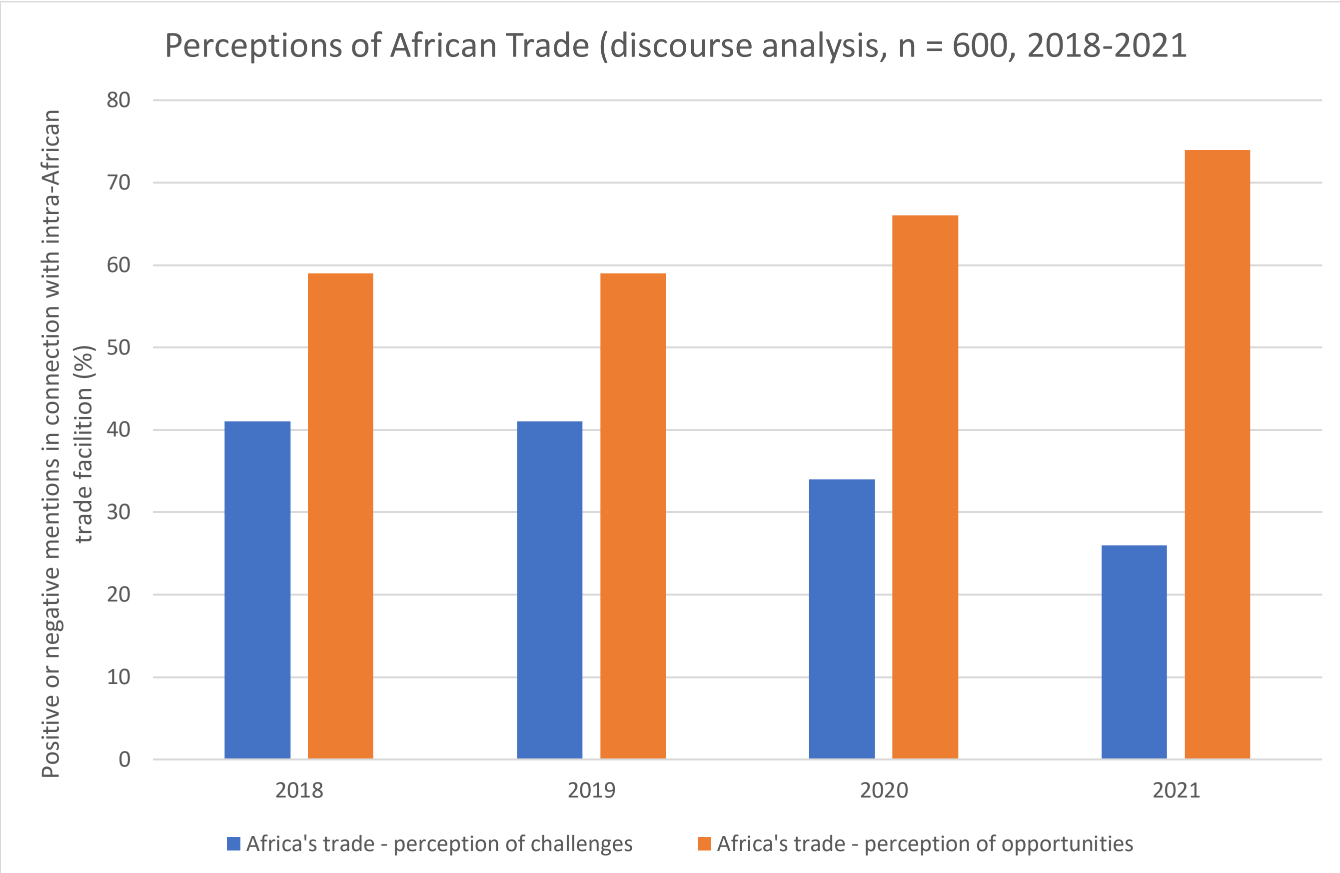


Figure 4
Source: Discourse analysis (n = 600 media outlets across Africa)

Figure 4 illustrates just how much more positively trade is seen within Africa since 2018:

- In 2018 just under 60% of public media sources perceived opportunities for intra-African trade, but by October 2021 the figure had grown to 74%.
- Positive perception of opportunities has been growing since 2018.
- As 2021 covers only the first three quarters of the year, this suggests that the recovery from the pandemic is accompanied by positive sentiment towards intra-African trade.
- Public sentiment will support strong action by policy makers to facilitate trade quickly and effectively.

More granularity is provided in Figure 5 which shows how the perception of where key issues in intra-African trade are.

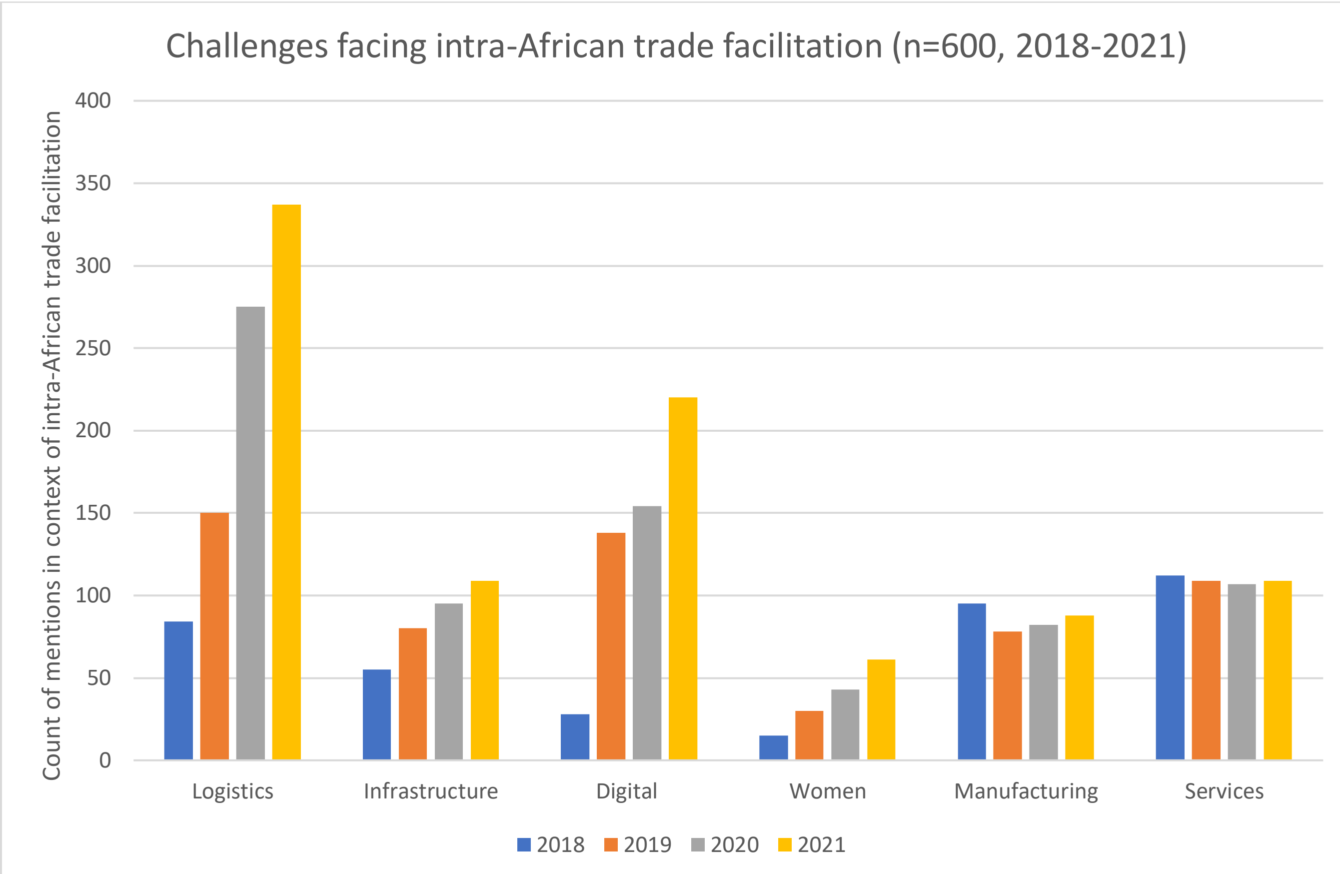


Figure 5
Source: Discourse Analysis, (n = 600 media outlets across Africa)

Manufacturing and services trade seem to have stayed relatively constant in terms of mentions over time. However, in terms of the numbers of mentions, all the other areas have grown significantly relative to their mentions in 2018. For example, mentions of the word “women” in connection with “trade” and “reform” grew by four times to the third quarter of 2021, while mentions of “digital” have grown by nearly five times. Logistics remains the most frequently mentioned word in connection with trade and reform. This provides some indication of where regulatory gaps may be and where priorities should lie for policy makers across the continent. Combined with Figure 4 suggests that there is momentum building behind the opportunities rather than the challenges that Africa faces.

Our analysis of public discourse suggests that infrastructure & logistics, women’s inclusion, greater digitisation and manufacturing and services are the key areas for policy focus. We find that “cautious optimism" characterises the mood amongst AfCFTA policymakers and signatory states currently. There is a recognition of the myriad challenges currently being faced, but also the wealth of opportunities that overcoming these challenges will bring.

One of the more significant findings was also that the issues were generally not seen as isolated, but interdependent. It seems that there is a recognition on the African continent as to how one issue may compound or alleviate another.

Not all increases in references to a given theme are positive. Some are discussing *poor* infrastructure or the need for better digital capabilities, for example. However, this is not necessarily a bad thing; an increase in the frequency of mention, even in a negative light, reflects how critical a particular category is seen to be to the AfCFTA's success and perhaps also the perceived scale of the challenge. In short, it is a recognition of its importance and of the need to improve (i.e., *both* a challenge *and* an opportunity).

In terms of specific issues, the discourse analysis highlighted the challenges given in Figure 6:

Area of discourse	Frequently used negative phrases	Frequently used positive phrases	Implications for AfCFTA and Heads of State
Infrastructure and logistics	Poor road and rail links Excessive border bureaucracy Red Tape Challenge multiplier	Green shoots Bright spots on the horizon Higher investor appetite	Leverage gains across the whole region – infrastructure improvements cannot be one country only or benefits of AfCFTA will go
Inclusion of women	Exclusion, waste, delays, education, illiteracy	Innovation, empowerment, business	Focus on simplifying processes and educating; huge potential to unleash
Digital trade and infrastructure	Computing skills, digital acumen, language barriers, literacy barriers	Technology availability Systems	Centralised online systems; single windows to simplify; requirement for multi-lingual solutions; non-African organisations identify this as key issue so could be means of bringing in investment
Manufacturing and services	Dependency, value chains	Service growth, creative, innovation, education, technology	Scope for integrating supply chains; sustainable intra-

			African capacity building
Border crossings	Delays, 71% increasing in negative mentions of rules of origin 2018-21 303% increase in negative mentions of border crossings	Promote efficiency, predictability Expand integration Strengthen value chains Economic transformation and jobs	Key area of priority – most detail in border crossing complexity but also most discourse around potential to use for positive change

Figure 6
Source: Discourse analysis (N = 600 media outlets)

Summary

Intra-African trade will need to accelerate if the continent is to pull itself out of the pandemic successfully. The effects of any further deterioration in trade conditions are likely to make this acceleration more difficult given the "trade fragmentation" that is self-evident post-pandemic.[20] This challenge serves further to illustrate the fact that trade within Africa must drive value chain integration and self-reliance within the continent while supply chains are being redistributed elsewhere in the world.

Regulation as a Stimulus represents a way of providing a regulatory underpinning to the trade facilitation process at a country and regional level. The analysis in this section suggests that the process should be driven around the supply chains that are essential to achieve sustainable development goals by promoting intra-African trade in food, textiles and manufacturing and services. Food and textiles are sectors where there are proportionately more female exporters, but there is remarkably little intra-African trade as a proportion of the country's total food and clothing requirements. Supporting greater self-sufficiency in these four sectors alone would promote SDGs 2 (zero hunger), 5 (gender equality), 8 (Decent work and economic growth), 9 (Industry and innovation and infrastructure) and 10 (reduced inequalities).

There is real support evident in the discourse analysis of measures to promote trade through legal reform. The main conclusion from that analysis, however, is that this is something that has to be done together across the continent and not by one or two individual states. Particularly in the areas of cross-border trade, digitisation and logistics and infrastructure, the AfCFTA's structures, the RECs and Heads of State need to work together. However, the discourse analysis also suggests that there is scope for

[20] https://www.wto.org/english/res_e/booksp_e/wtr23_e/wtr23_e.pdf

greater inward investment, especially in the digital space, so this, in itself, should act as an incentive to policy makers.

Transforming trade: five case studies

The purpose of the case studies was to develop a clear action plan from the issues raised by interviewees, the documentary research and the discourse analysis. Much of the information presented here in terms of the challenges will be familiar to the reader so it is presented as briefly as possible in order to focus on the MTFAIP associated with each case.

What is clear is that most of the solutions are relatively straightforward and focus around enabling mechanisms to support:

- Single windows for documentation associated with cross-border trade including rules of origin, tariffs and regulations
- Digital identities to reduce the form-filling and therefore literacy requirements for individual exporters
- Legal reform to enable cross border movement of professionals and capital
- Aligned capital treatment between countries
- Acceptance of digital documentation

It should be noted that the African Continent Free Trade Area is not a Single Market or even a Customs Union. For this reason, no recommendations that might suggest any form of closer integration are suggested and the focus is entirely on reforms that can readily be implemented in the short to medium term.

Business environment

Africa's nations rank amongst the lowest in Ease of Doing Business rankings, with only Mauritius and Rwanda having places within the top 50 globally.[21] Recovery from conflict, poor leadership and poor infrastructure and a non-systematic approach to regulation and cross border trade all contribute to well-established issues with intra-African trade.[22] Interviewees felt that reforms to enable swifter business creation within the formal economy rather than the informal economy would be a major trigger to enabling a more dynamic business base.

Key issues highlighted from the interviews included:

[21] https://iclg.com/alb/10428-mixed-report-for-africa-s-business-climate
[22] https://www.igi-global.com/chapter/challenges-of-doing-business-in-africa/80146

- Visa costs and restrictions harm intra-African trade, particularly for trading MSMEs
- Fewer women traders know about trading regulations, which causes a reluctance to formalise their trade, putting them at risk of exploitation and even sexual abuse.[23] Interviews suggested that around 46% of women still say that they are not fully confident or understand trade regimes.[24]
- Due to a lack of relevant information, goods and services are imported by African countries from outside the continent when goods of similar quality and prices could be sourced from other African countries.
- Lack of sufficient deliberate policies to support and protect MSMEs and women traders harm their ability to trade.

Recommendations from the interviews included:

- Smart regulations to protect investors from fraud and non-compliance
- Tighter anti-money laundering and reporting requirements for Know Your Client purposes
- Streamlined mechanisms for obtaining permits to start a business and harmonised taxation rules on capital gains to create longer term investments
- Data ownership and security regulations to prevent identity theft and fraud
- Tighten incentives to trade with African partners rather than non-African ones
- Ensure consular recognition of all AfCFTA countries in every member nation
- Streamline visa requirements for professionals

Before the border

The goal of any measures to reduce costs before the border must be to facilitate and simplify trade for all traders, but particularly those with smaller or perishable loads which are often associated with female owned businesses or MSMEs. The whole continent needs to implement trade and transport information networks so that freight can move relatively seamlessly, and a digital system enabling transport and logistics would help reduce pre-border bureaucracy and administration. Kenya alone has saved $25.4m a year from its single window, and this illustrates how powerful this as a tool could be if replicated across the whole continent.[25]

Key issues highlighted from the interviews include:

[23] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/876256/Query-31-VAW-Traders.pdf ; https://documents1.worldbank.org/curated/en/115591468211805723/pdf/825200WP0Women00Box379865B00PUBLIC0.pdf

[24] Aboudou, F, Oga, A., Tassou, M., and Alamou, K. (2017): Study on the specific problems of women traders on the Abidjan-Lagos Corridor. Borderless Alliance.

[25] Interviews and Bayili, J. (2021): "Cross-border Trade on the Abidjan-Lagos Corridor: Challenges and perspectives" Meeting of the Ministries of Trade and Directors of Benin, Côte d'Ivoire, Ghana, Nigeria and Togo on Trade Facilitation, Customs Cooperation and Transit issues along the Abidjan-Lagos Corridor.

- Different trade regimes and conflicting industry and product standards confuse traders and deter intra-African trade.
- No space that allows for pre-border electronic payments online.
- A lack of digital certifications and documentation causes delays and costs to traders.
- Difficult to access crucial information such as documentation needed, licensing fees, road fees, and REC rules. There isn't one space that provides all needed information or up-to-date communication on any sudden changes (such as borders closing or halts/bans on certain imports); this was exacerbated by COVID-19.
- Complex trade regimes are a barrier for SMEs and women traders.

Again, the policy measures highlighted the importance of cooperation across the whole continent:

- Regulation to make Rules of Origin Certificates easy to access for domestically purchased goods.
- REC level one-stop-shops for all information addressing the relevant procedures, contacts, and licensing fees.

At the border

Divergent trade policy and non-tariff measures are some of the most significant barriers to trade across the region. More than this, unexpected and prohibitive trading charges at the border, often from informal trade costs associated with the illegal payments to get through the bureaucracy quickly were highlighted as being particularly severe. For some countries these costs amount to more than the revenues received from trade, a comment that has been highlighted in the analysis of costs in Figure 6 below.

Key issues highlighted from the interviews include:

- Different countries having different regulations makes border-crossing confusing, complex, costly, and slower.
- Making payments is complicated as countries use different currencies and traders can't pre-pay or pay electronically.
- Implementation of regulations and procedures varies across border officials.
- Taking samples from too many products and traders slows down border crossing.
- Using multiple and out-of-date systems and paper documentation causes delays and makes it impossible to track and report real-time trade and statistics.
- Issues such as delays and unannounced regulation changes were made worse by COVID-19.
- Language and literacy barriers.

Policy recommendations included

1. Consistent regulations on licenses, road fees, and documentary requirements to cross the border

2. Regulated “authorised exporters”
3. Acceptance of digital documentation in online portals (Single Windows) to facilitate trade
4. Regulations to approve private sector agents in streamlining tech and providing independent validation of digital IDs and documentation

Infrastructure and logistics

Differential infrastructure costs across Africa create a challenge for regulation. For example, it costs $50-$60 to connect once to the internet in some parts of Uganda where there are cheaper supplies elsewhere – interviewees asked how that was possible given the intention of creating “level playing fields” across the continent within the Free Trade Area. By way of recognition of the importance of this area, there was a 321% increase in references to infrastructure and logistics over past 4 years in the 600 media sources covered. The key themes that came through were largely negative: poor road and rail links, red tape and excessive border bureaucracy. However, there was some cautious optimism about long term outlook. There was a clear trend in the discourse analysis suggesting that this was an “all or nothing” change – if one Head of State made the change, then others would follow quickly creating a multiplier effect.

Alongside this, digital infrastructure references increased by 685% between 2018 and 2021 with single windows seen as a way of simplifying information flows and document processing. However, the discourse analysis showed clear limits to the role of technology because of access to technology, potential for language barriers and low literacy rates.

Key issues highlighted from the interviews include:

- Infrastructural inequities disadvantage women: border-crossing is significantly more difficult and dangerous for women traders,[26] particularly due to their lack of childcare facilities and pedestrian lanes, bad lighting, poor sanitation, and inadequate lodgings.[27]
- Out-of-date systems and a lack of technology slows down procedures, affects accuracy, and muddies data on traffic and flow.
- Safety is overlooked: overloading trucks in order to reduce costs creates a significant degradation of roads over time and makes vehicles unsafe.
- Lack of inter-connectivity due to poor intra-regional infrastructure.

Policy recommendations included:

1. Regulation for mutual acceptance of digital documentation
2. Frameworks for digital authentication and digital IDs including electronic certificates of origin, bills of lading and trade declarations

[26] https://issuu.com/halayassin/docs/uganda_women_cross-border_traders_-_report_3.0_-_d

[27] ECOWAS commission (April 2020): Diganostic Study on the Movement of Small Scale Cross border women traders on three corridors in West Africa. Final Report. Borderless Alliance Secretariat.

3. Regulation to standardise requirements and trade regimes.

Access to finance

Applications for finance are more frequently rejected by banks in Africa and the financing gap has widened in Africa during the Covid 19 pandemic.[28] This is due to the perceived risks of trade finance, the size of the informal economy and the number of small businesses without audited accounts.

Key issues highlighted from the interviews include:

- Credit analytics is a challenge as SMEs typically do not have audited financial statements or formal books, but use spreadsheets with accounts (payables/receivables and cashflow), which require external validation.
- Banks are more frequently declining SME applications, from a 20% rejection rate in 2013 up to 40% in 2019. This figure could have potentially deteriorated further due to the COVID-19 pandemic, derailing the growth of SME's who are the backbone of trade in African economies.
- Women face many challenges to access finance due to a variety of reasons. They often lack traditional collateral (land) and are therefore seen as riskier borrowers. Financial institutions also lack understanding of women's businesses and lack tailored products and services for women traders that support their nature of trade and needs.
- Know Your Customer (KYC) is a major stumbling block across Africa as it is very difficult to validate IDs, which require verifiable addresses. Businesses and people don't necessarily routinely have ID cards or registration numbers.

Policy recommendations included

1. Standardised regulations to enable digital trade
2. Regulations to enable digital transferable records
3. Regulations to enable acceptance of digital IDs

Summary

The case studies provide qualitative evidence to support the fact that the business environment supporting African exports is not fully functional at present. It disadvantages women and smaller businesses and as a result, many of these tend to work in the informal economy because the requirements around form filling and documentation are prohibitive for many people who fall within these groups. There are significant language barriers since much of the documentation tends to be in English and the fragmented system of documentation and border controls across countries means that

[28] African Development Bank and African Export-Import Bank, 2020. *Trade Finance in Africa: Trends Over the Past Decade and Opportunities Ahead - Policy Research Document 3*. Trade Finance in Africa. [online] African Development Bank Group. Available at: <https://www.afdb.org/en/documents/trade-finance-africa-trends-over-past-decade-and-opportunities-ahead>.

infrastructures and transport and logistics are barriers to trade, pre border and at the border costs are high and represent effective non-tariff barriers to trade across the continent, and access to finance remains a challenge for many African exporters.

Towards a framework for regulation to enable digital transition

What is clear from the discourse analysis and the interviews is that the effects of regulatory reform are greatest if everyone works together. This is something that should be instigated by Heads of State but also supported absolutely by frameworks and initiatives at an REC and AfCFTA level. The multiplicative effects of trade facilitation through regulatory reform are greater if everything happens simultaneously.

Some of the policy measures which could form an accelerated implementation framework over the next 18 months are listed below in Figure 19. The important thing about this table is that it is derived partially from the discourse analysis and partly from interviews and documentary research and is therefore a set of regulatory reforms that would have a high probability of public acceptance.

Regulatory measures	Who	What
Digital	AfCFTA, Regions and nations	Support structures and regulations to enable greater use of digitisation.
	AfCFTA	Single window platform framework
	Regions	Regional agreements on standards and standardisation across continents.
	Nations	Legislation to enable digital IDs.
Financial	AfCFTA, Regions and nations	Regulatory framework and implementation to widen financial access and enable cross-border financial flows.
	AfCFTA	Enabling framework and integrated platform to continent wide initiatives and support frameworks.
	Regions	Agreements on cross-border capital flows and charging/discounting ceilings.
		Regulatory approval of digital accountancy software.

	Nations	Legislation to allow self-validation by businesses of financial forecasting.
		Regulatory approval of digital accountancy software.
		Regulations for liquidity and capital charge ceilings.
Infrastructural	AfCFTA, Regions and nations	Frameworks and support structures to allow cross border trade and reduce costs.
	AfCFTA	Guidelines, framework and platforms for ease of cross-border movement of professionals.
	Regions	Agreements on internal movement of professionals.
	Nations	Legislation to approve free visas for work purposes enabling labour mobility across region.
Enabling frameworks	AfCFTA, Regions and nations	Enabling framework for freedom of movement of goods and services across borders - platform based "single window" across continent.
	AfCFTA	Continent wide acceptance of digital documents.
	Regions	Regional agreements to support digital documents.
	Nations	Legislation to mandate digital documents at ports and logistics hubs.
Inclusion	AfCFTA, Regions and nations	Enabling frameworks for excluded groups, especially women and informal economy.
	AfCFTA	Incentives, education and grants to enable women and informal economy actors into formal economy through access to finance, training and skills.
	Regions	Agreement on policies to support excluded groups and social enterprises as well as informal actors.
	Nations	Legislation to enable quotas for access to finance for excluded groups.
		Legislation to allow protection for informal businesses as they move into formal economy.
		Legislation to require registration and legal identifiers. Clear food standards requirements to support women traders

Figure 19 **Towards a regulatory reform framework for implementation**
Source: Discourse analysis, documentary research and interviews

These are all areas where policy makers can start to structure their thinking immediately. They are not fully costed, nor are they integrated into legislative programmes or lobbying initiatives. They are just derived from the work conducted here which suggested that the technology is available and that the willingness is there.

Assessing the costs of cross border trade

The core challenge of this research was to estimate the costs of trade across borders and to examine how these might be reduced if regulatory reforms were introduced. Regulatory reform would be needed across all of the instruments that have been discussed so far and the targeted action plan by tool above. The cost reductions are based on the fact that all regulatory reforms are introduced simultaneously and quickly but that their impact scales over a five-year period to 2027.

Figure 7 shows the costs of trading across borders in total as a proportion of the revenues from trade by country at the time of the research (2021). The total cross border trading cost is taken to be the sum of the costs of physical and administrative delays, the costs of documentation, transportation costs and "informal" costs associated with speeding up the process of getting across borders. This latter cost disproportionately affects women traders.[29]

[29] https://issuu.com/halayassin/docs/uganda_women_cross-border_traders_-_report_3.0_-_d

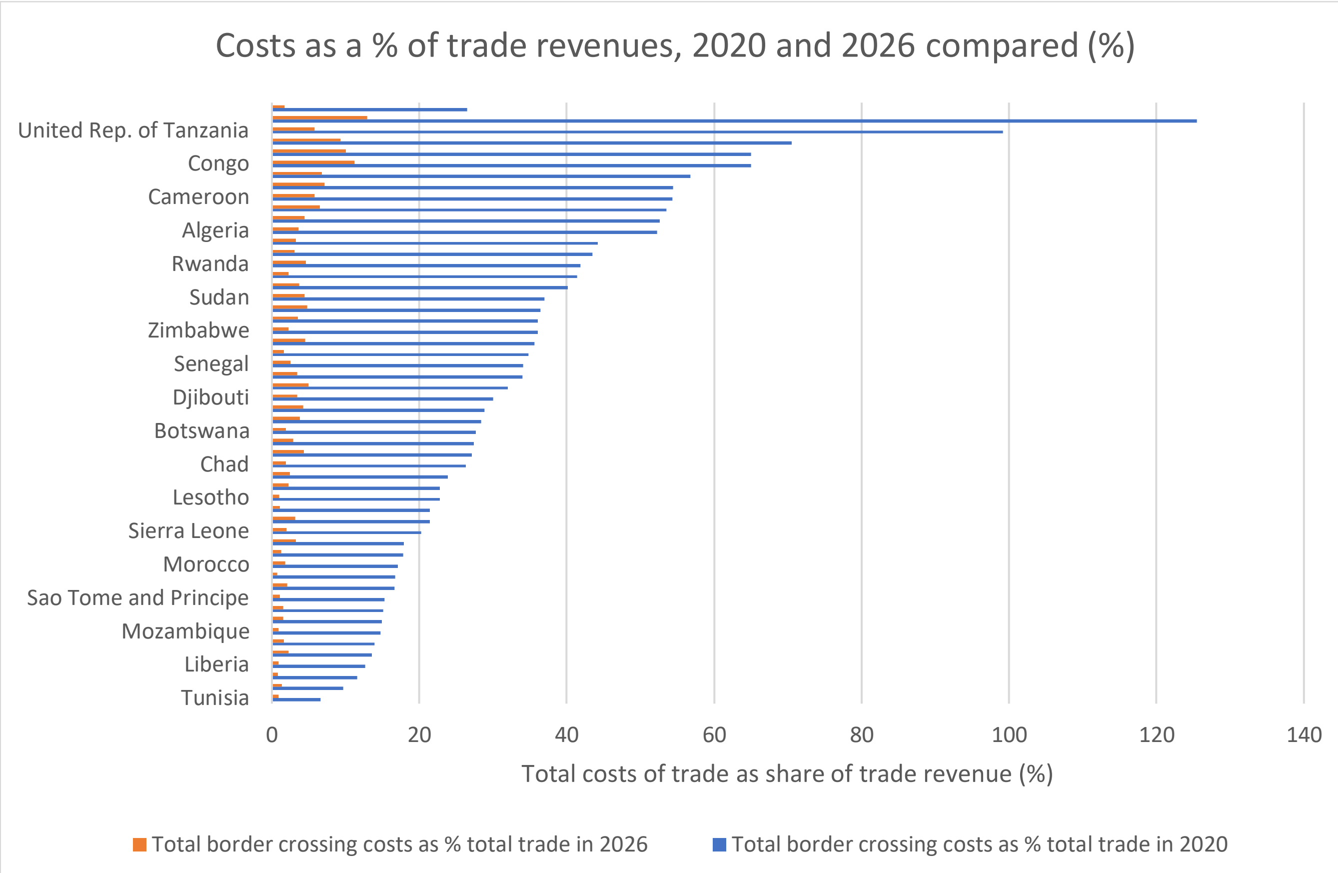


Figure 7

Source: Author's calculations based on Ease of Doing Business Indicators, trade data, meta-data and estimates of cost reductions from qualitative research

For some countries, the costs of cross-border trade are above 50% of their revenues from trade. If the costs of manufacturing, procurement, other associated and distribution costs and sales, marketing and after-sales service are taken into account, this renders exporting across borders within Africa at best barely profitable and at most, loss making.

The net total costs per shipment worth $25,000 are given in Figure 8.

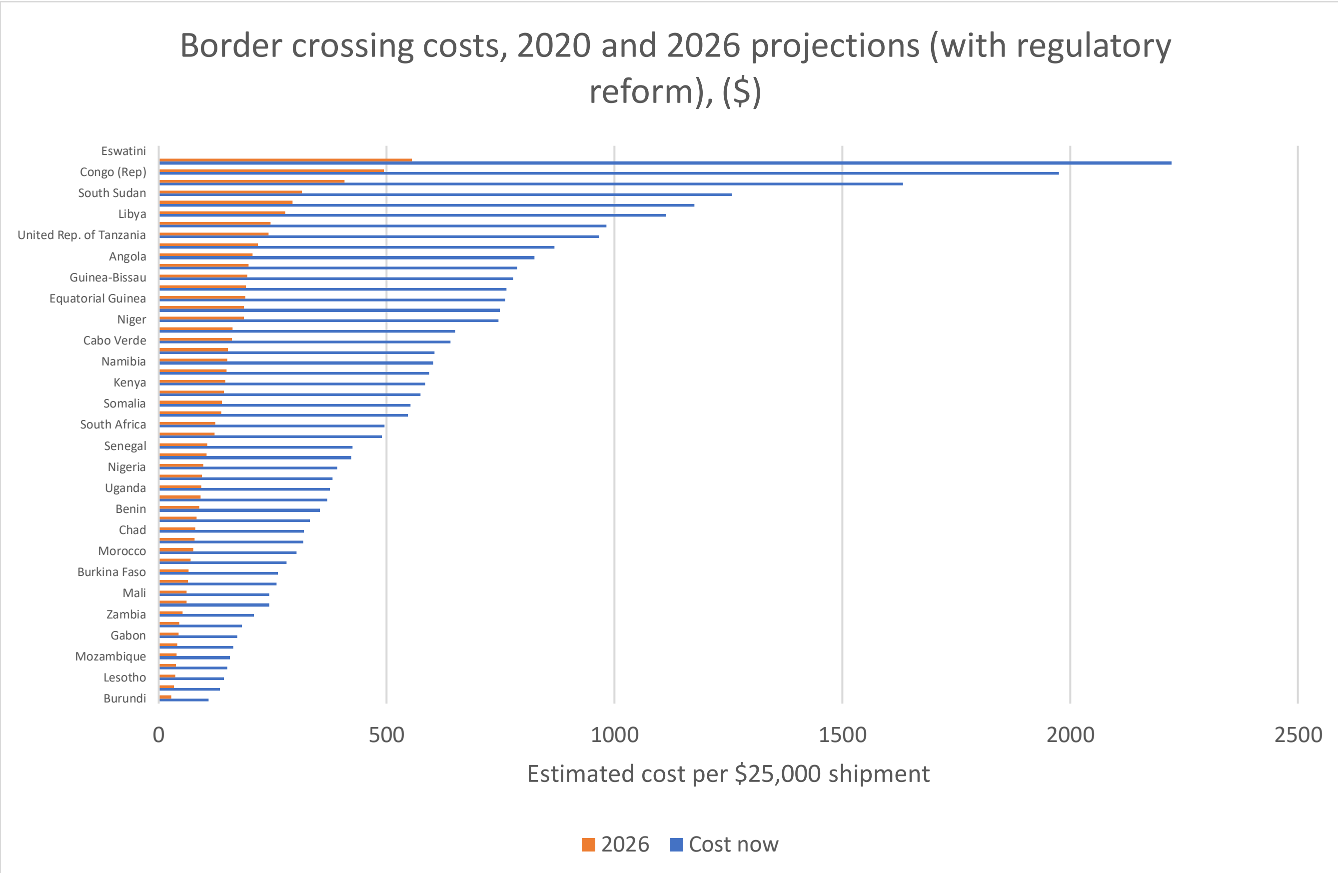


Figure 8
Source: Author's calculations based on Ease of Doing Business Indicators, trade data, meta-data and estimates of cost reductions from qualitative research

Figure 8 suggests:

1. Total costs are lowest in Burundi, Ethiopia and Lesotho at less than 10% of the value of a shipment
2. Total costs are highest in DR Congo and Congo at substantially more than 75% of the cost of the value of a shipment
3. There are significant cost reductions even in the cheapest countries from RaaS

Figures 9 and 10 show the same calculations for cross border costs and transportation before and after RaaS. Again, the assumption is that RaaS can be implemented in full across all countries.

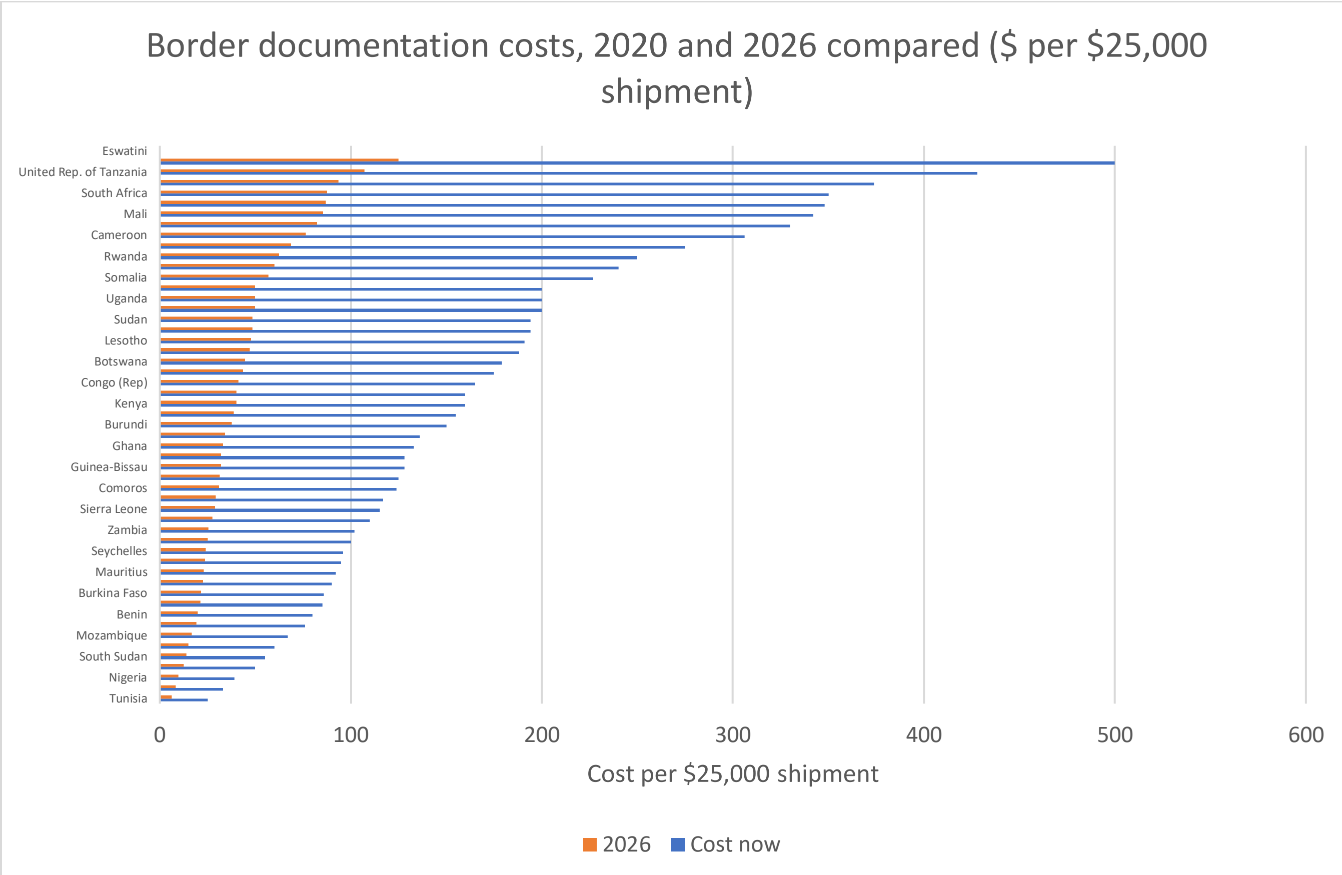


Figure 9

Source: Author's calculations based on Ease of Doing Business Indicators, trade data, meta-data and estimates of cost reductions from qualitative research

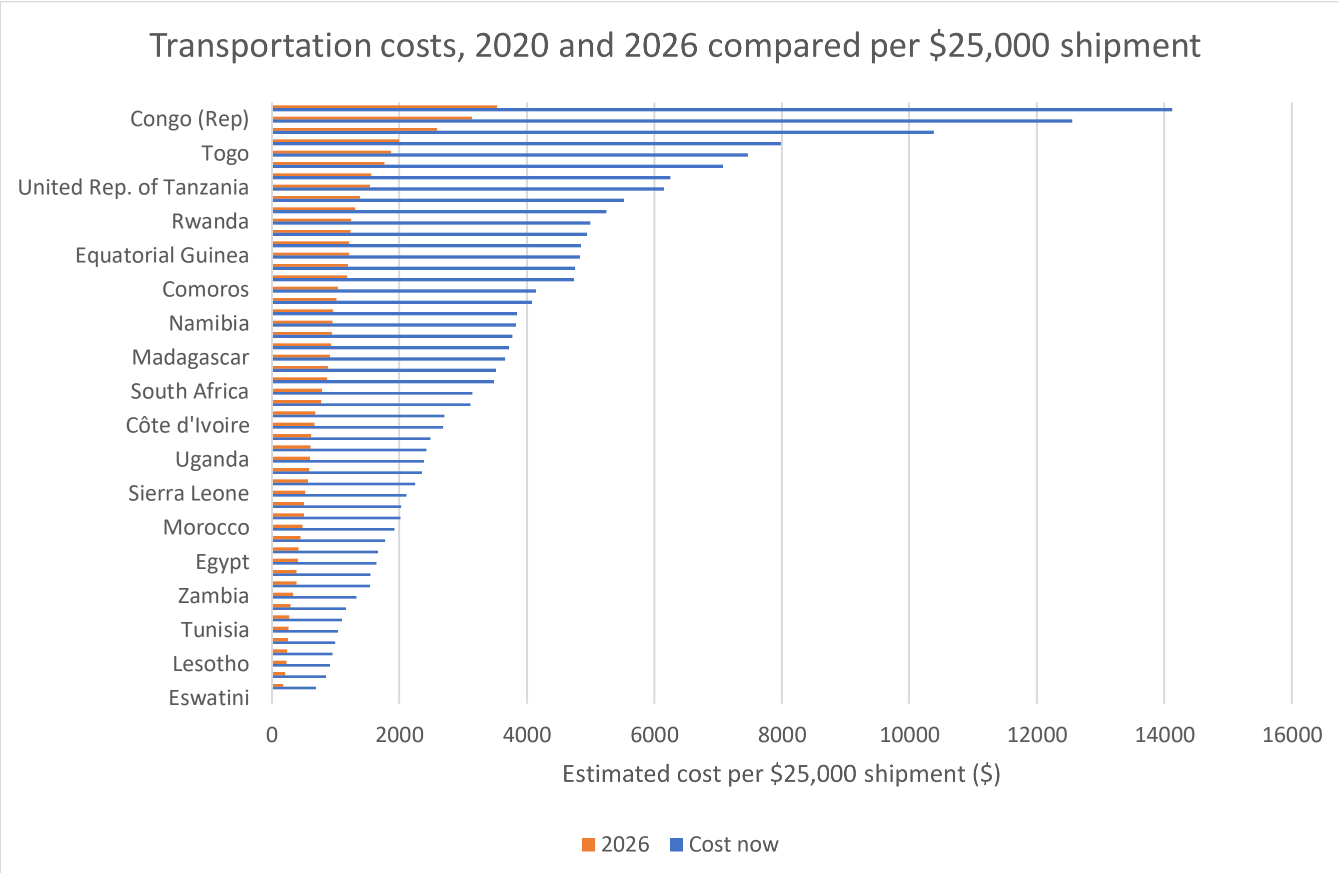


Figure 10
Source: Author's calculations based on Ease of Doing Business Indicators, trade data, meta-data and estimates of cost reductions from qualitative research

The differentials by country in costs savings as a proportion of total trade make it clear which countries will benefit the most from RaaS. This is illustrated in Figure 11 which shows the percentage change between the costs now and the costs after RaaS has been fully implemented by 2025:

1. The average cost saving is 84% across the continent as a whole. In other words, if all countries act together to leverage the AfCFTA frameworks for legal reform, costs across the continent as a whole proportion to the share of trade revenues would reduce by 84%. This is a compelling argument for action at a national and at a coordinated REC and continental level too.
2. For Gabon, the Côte d'Ivoire and Malawi, the costs are more than 95% taking away many of the constraints that are currently holding back trade.
3. DR Congo and Togo are the countries that exhibit the lowest level of improvement in costs but even so the reduction is still above 80%. For DR Congo, where trade has been prohibitively expensive at more than 100% of revenues, this reduction could be a game changer for some of its exporters.

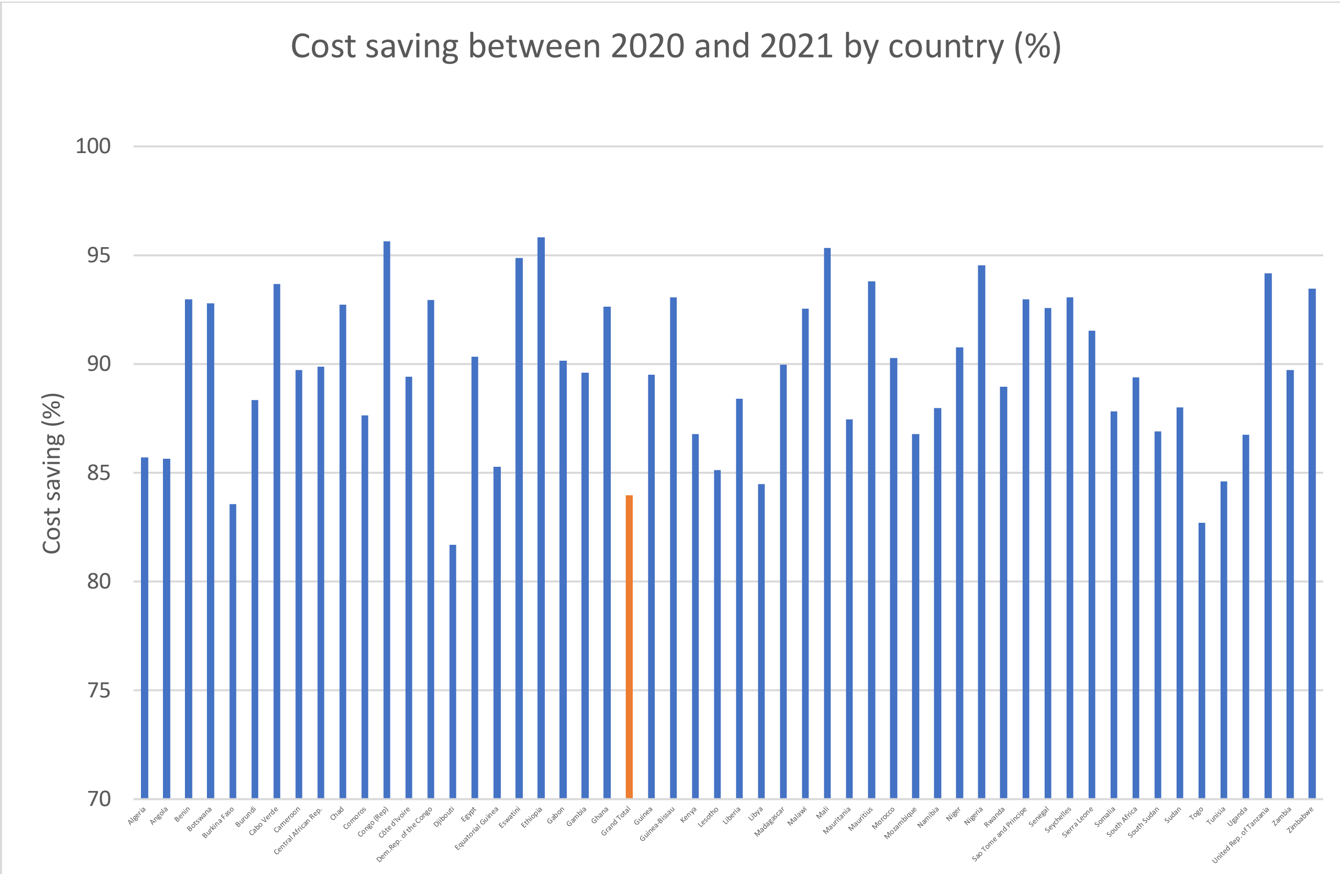


Figure 11
Source: Author’s calculations based on Ease of Doing Business Indicators, trade data, meta-data and estimates of cost reductions from qualitative research

Summary

As has been stressed throughout, the goal here is to show a stylised view of how costs could change if every country acts and implements RaaS together. There are clear “leverage advantages” as described in the discourse analysis and the cost improvements will be smaller if the RaaS measures are implemented partially and on a non-coordinated basis. Even so, any reductions are a compelling reason to start the process of using regulatory reform as a means of exiting the current situation of declining intra-African trade.

Regulatory reform and its impact on trade

Figure 12 shows why regulatory reform is so important in enabling trade. The analysis took the base trend forecast to make two assumptions:

1. An assumption that costs would decrease as outlined in the previous section and that this would have an impact on trade directly associated with the price elasticity of trade for a particular country. It was assumed that the costs would increase into 2026 at a similar rate.
2. That the "leveraged" effects of streamlined access to finance, digitisation and paperless trade at borders would have a multiplicative effect similar to that seen in other studies on trade facilitation and legal reform conducted by the ICC and the Commonwealth.[30] A survey of 55 banks found that the total effect on their trade businesses over a five year period would be an increase growth of 15% annually to 2026 while businesses estimated a similar growth in their international business of 14% annually. These growth rates are assumed to kick in after an 18 month period in the model. This aligns with the RaaS agenda of implementation over the next 18 months and impact felt thereafter.

The chart shows clearly that intra-African trade is on a downward trajectory at present. However regulatory reform has the potential to help stimulate trade in two stages:

1. The cost reductions as a result of streamlined regulations pre-border and at the border increase trade by around $35bn (the orange line).
2. The facilitative effect of digital Single Windows, digital documentation and the leveraged effects of digital IDs, more SMEs and women trading and more businesses moving through from the informal economy creates a multiplier of an additional $52bn (the grey line).

[30] International Chamber of Commerce, UK (2021): "Aligning National Laws to the UNCITRAL Model Law on Electronic Transferrable Records (MLETR): UK business case" and "Creating a Modern Digital Trade Ecosystem: Cutting the Cost and Complexity of Trade – Reforming laws and harmonising legal frameworks." Commonwealth (2021): "Quantification of the impact of legal reform to support paperless trade."

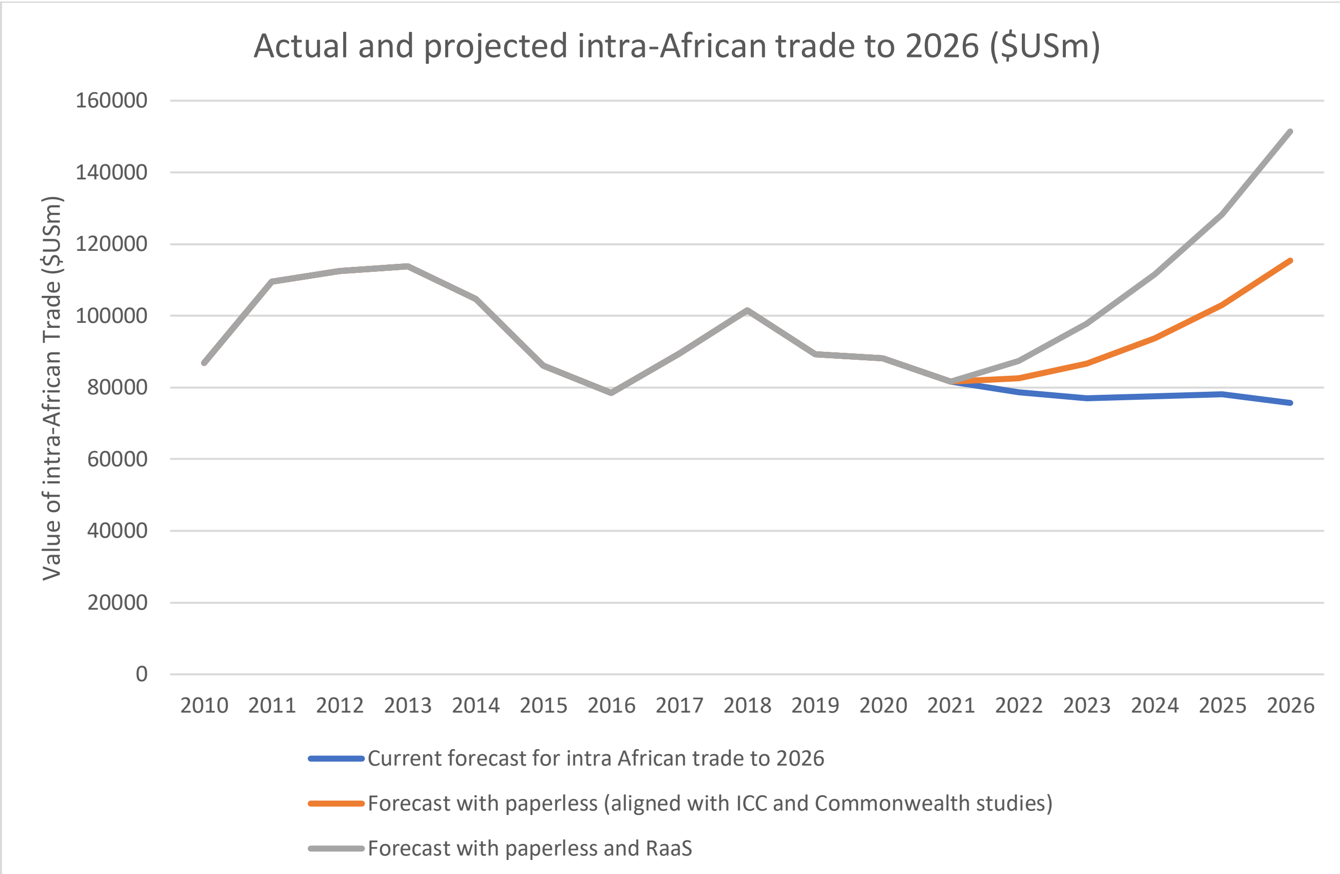


Figure 12
Source: Author's calculations from interviews, documentary research and survey of 55 banks plus cost reduction estimates.

Summary: Business revenues and employment

The reduction in costs and the consequences for trade growth across Africa are self-evident from the analysis above. What is important here is that RaaS helps overcome core regulatory hurdles, such as those associated with paperwork before borders, rules of origin, tariffs and other transportation documentation. The major hindrance to intra-African trade, however, is the informal costs associated with speeding up the process of border crossing – this are broadly seen in as a consequence of levels of corruption.

If these regulatory hurdles can be removed, then the consequences for trade are clear for individual countries. This would help address the declining share of intra-African trade as a share of all trade and, more importantly, increase endogenously intra-African trade itself.

But how would this affect business revenues and jobs? There are currently around 10.8 million businesses registered on the global company database, Orbis[31], collated and collected by Bureau van Dijk, Moody's. Once cleaned and harmonised, Product, revenue or employment data are available for just 251,932 businesses, or just over 2% of businesses in Africa according to the Moody's database. Both revenue ***and*** employment data are available for only some of these businesses – some have employment, others have revenue but rarely do the two coincide. However, these businesses alone provided nearly 100,000 jobs and around $320bn in revenues in 2020.

To estimate the uplift in business revenues and employment, we have taken this sample as representative of all African businesses. Our analysis is based on the method highlighted above assuming an annualised impact from legal reform each year of 16% to 2026. The take-up is likely to be swift after the first 18 months given the need for the solution expressed in interviews. The total increase in turnover and employment over a five-year period using the net present value approach described could be as much as an additional $500bn in revenues and 268,000 more jobs by 2026.

Part of the process of streamlining regulations should to focus on incentivising informal actors, however. The fact that only 5% of African businesses have formal records in international data sources, and that only a proportion of these have turnover or employment data means that we are likely to be under-representing the values by which reform could improve intra-African trade and the revenues and employment of businesses involved in international trade. In particular, the larger businesses from the Orbis database will be biased towards commodity companies and are likely to under-represent female directors and owners.

[31] Bureau van Dijk/Moody's Orbis database used for estimating revenue and employment effects through their API service: https://orbis.dev/api/

Concluding remarks

This research set out to answer five key questions:

- **Are there any barriers to the implementation of RaaS across African nations?** The answer to this question from our discourse analysis is no. There is a strong public sentiment suggesting that there are opportunities in intra-African trade and an appetite for regulations and solutions to enable those opportunities to be realised. This in itself is a necessary but not alone sufficient condition for implementing regulatory or trade reforms in Africa. The interviews suggested that the leadership of the Heads of State had hitherto acted as a barrier but could potentially be the catalyst to increasing rates of adoption and therefore increased intra-African trade.
- **What are the current biggest challenges facing African nations in trade terms?** The biggest challenges facing intra-African trade are its forecast growth rates which, using the methodologies for this research are relatively slow if there is no stimulus post-pandemic. The second major challenge are the prohibitive and unequal costs for traders associated with cross-border trade, people and financial flows. These are all regulatory barriers and affect exporters generally but have a particularly severe impact on female exporters and those in the informal economy since they are proportionately high relative to revenues.
- **What are the costs faced by African countries currently?** The average cost across Africa associated with border crossings and transportation is $2,266 per $25,000 shipment but our research suggests that for some nations, the cost is considerably higher than the value of trade revenues coming in. These costs obviously diverge across countries, as illustrated in the graphs and charts, and this is reflected in the impact that RaaS will have in each African nation. Similarly, high costs disproportionately affect small businesses and those with lower levels of literacy since they are associated with rules of origin compliance, trade and transport identity and documentation costs and delays associated with incorrect documentation.
- **How can these costs be reduced across African nations through RaaS?** RaaS would address this key regulatory hurdle by creating regulations at a country level alongside digital systems such as single windows to streamline the process of border crossing. We estimate an average cost reduction of around 84% across Africa for all exporting businesses.
- **How does streamlining through RaaS impact trade growth?** We applied price elasticity multiples taking into account the costs, and cost reductions, of a typical container worth $25,000. Accordingly, we estimate that intra-African trade could grow by an additional $90bn by 2026 if RaaS measures can be implemented quickly and in a coordinated way across all countries.

The research set out to examine the state of intra-African trade, look at any obstacles in terms of regulation that it might face, the costs associated with those regulatory hurdles and to put together an action plan. Intra-African trade is dominated by hard commodities making in sensitive to external factors including demand for fossil fuels and commodity prices. However, African trade also needs to address the imbalance between trade in these products and ones, like food and clothing, which will help Africa's economy be more sustainable in every sense of the word as well as more inclusive. Women are more representative in these groups.

The research found that the major regulatory issues are pre-border and at-the-border documentation and processing. This pushes up costs prohibitively for some countries, such as the Democratic Republic of Congo, and for some groups, in particular women who are disadvantaged because of the perishability of their produce because it is mostly in soft commodities. Further damage comes from the lack of facilities and high levels of corruption. If these can be addressed then there are potentially reductions in costs for businesses that will be game-changing for the continent's exporters.

To address all of this, a Framework regulatory reform to enable digital trade facilitation suggested:

1. Digital IDs to enhance access to finance for the very smallest, female owned and informal businesses
2. Single Windows to enable streamlined documentation at and before borders
3. Free movement of professionals across borders in Africa
4. Cost ceilings on loans and export or import guarantees to enable trade finance
5. Enabling digital technologies – especially blockchains
6. Regulations to create clear food standards and maximum delays at borders to prevent produce from going off

The success of regulatory reform as a programme will depend absolutely on the speed and the consistency with which it can be implemented. Importantly it is a whole programme and not an individual action so the research presented here suggests simply what might happen were everything to be implemented simultaneously. The results are compelling.

As has been stated throughout, the picture is a stylised one based on a rigorous methodology that was varied and as comprehensive as possible within the time frame of a 10 week piece of work. Its limitations are a function of poor data and timeframes but further research could develop the forecasting, include an analysis of services and fintechs, and expand the interview survey to a representative sample across Africa's trade sector. It has not been possible to cost out everything or indeed provide specific legislative details for every country.

Even so, the AfCFTA, the RECs and national governments have the opportunity to work together on RaaS to provide the right framework for enabling intra-African trade. This should include greater freedom of movement of capital and labour, but also experience sharing between governments as they introduce changes.

In doing this they will be helping Africa as a whole and their individual economies recover from the pandemic with a socio-economic landscape that is better than it was before.