

SCHOOL OF ECONOMICS AND MANAGEMENT

A revisiting of African integration: economic growth through self-sustainment?

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Abstract

African exports that end up in other African countries today is less than 20%, a low value compared to that of Europe, Asia and America, all above 50%. However, these intra-African exports are more diversified than African exports reaching other continents. Specifically, it is comprised of higher quality goods that stimulate stronger and more stable economic growth. To capitalize on this, various Regional Economic Communities (RECs) have emerged throughout the continent, reducing trade costs for common members via tariff elimination. The next step in regional economic integration is the implementation of an African continental free trade area, called the AfCFTA. Signed by all 55 African countries and slated to enter into force in July 2020, this agreement aims to strengthen the trading block. Taking a historical and qualitative approach, this work evaluates the RECs' success in achieving their goals by analyzing three case studies: Ghana, Kenya and Uganda. Looking specifically at whether it has stimulated export diversification, structural transformation, and regional supply chain formation, we find that although African countries have seemingly a lot to gain in terms of export diversification –in increasing intra-African trade– both national and regional efforts have come up short in realizing it.

Keywords

Africa, intra-regional trade, export diversification, economic growth, regional economic communities, AfCFTA.

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LIST OF ABBREVIATIONS

AEC	African Economic Community
AFCFTA	African Continental Free Trade Area
AMU	African Maghreb Union
ASEAN	Association of East Asian Nations
AU	African Union
CEN-SAD	Community of Sahel Saharan States
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
ECCAS	Economic Community of Central African States
ECI	Economic Complexity Index
ECOWAS	Economic Community of West African States
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IGAD	Intergovernmental Authority on Development
LDC	Least Developed Country
MERCOSUR	Latin America's Common Market of the South
NAFTA	North American Free Trade Agreement
RCA	Revealed Comparative Advantage
REC	Regional Economic Community
SADC	Southern African Development Community
SSA	Sub-Saharan Africa
TRIEA	Tea Research Institute of East Africa
TFTA	Tripartite Free Trade Area
WAMZ	West African Monetary Zone

Introduction

The increase in raw material prices between 2000 and 2013, known as the 'commodity supercycle', was a monumental occasion for development in many commodity-exporting emerging economies around the globe. This was considerably felt in sub-Saharan Africa, as economic growth in the region passed from around 2% per year during the 1990s, to a whopping 5.1% during the 2000s. This continental-wide surge in economic growth created enormous opportunities for countries in the region to finance development projects and start the path towards industrialization. However, these very favorable economic conditions were unlikely to be long-lasting, as the international market price for raw materials was bound to come back to its previous levels at some point. Once this reversal occurred in 2013, the significant growth rates that had earned the nickname 'African Miracle' had unfortunately deflated back to its 2% level. The ones hit the hardest were the oil-exporters and those whose government revenue had been dependent on rawmaterial rents for so long. The other countries that had more diversified export baskets found themselves somewhat protected from this shock. Those that had managed to invest in industries to either manufacture new goods or improve the quality of products that they already exported, had built up a stronger resilience to shocks that would otherwise destabilize their economic trajectories. Although this is far from being history's only case in which export diversification protected an economy from adverse market conditions, it has surely reinvigorated its importance in the African continent.

Having a diversified export basket is a characteristic trait of high-income countries today. It is industrialization that enabled advanced economies to start manufacturing a wide range of goods, whose production processes are enough to fuel sustainable economic growth. The production of these goods generally requires all sorts of input factors and stimulates competitivity, leading to higher value-added creation, economies of scale and productivity increases, all essential determinants of economic growth. It is for this reason that renowned economists like Dani Rodrik and Rodrigo Hausmann advocate for export diversification for emerging economies, rather than specialization at early stages of development. It is only by building industrial facilities capable of absorbing most of the rural and unemployed youth that developing countries can ensure durable and inclusive growth. Therefore, the aim should be on getting this process started for sub-Saharan Africa.

For the African Union –a continental body implemented in 2002 consisting of the 55 African states– the best way forward is to strengthen the African trade bloc. Two points are specifically relevant. First, that intra-regional trade in Africa (merchandise that is imported from and exported to other African countries) is very low compared to other regions. In 2018, only 20% of exported

products from African countries ended up in other African countries, with the remaining 80% reaching non-African markets. In the same year, intra-regional trade was well above 50% for Europe, Asia and America, attesting to Africa's comparatively low level of interdependence. Second, it would appear that the 20% of trade that is intra-African has a higher export diversity than the 80% ending up in other continents. Specifically, manufactured goods (*e.g.* chemicals, machinery, textiles) occupy a larger portion of exported goods, albeit minerals, stones and agricultural products maintaining their primary importance. Given that intra-African trade displays higher export diversification, the people in charge predict that an increase in the former should lead to an increase in the latter. In other words, if improvements in interdependence between African countries is realized, industrialization and economic growth will probably follow.

To achieve this objective, the African Union's predecessor (the Organization of African Unity) had set in motion in 1963 a century-long timeline of cooperation on various fronts known as "Agenda 2063". The issues tackled span a variety of dimensions: from peacekeeping efforts and easier mobility of its peoples to trade liberalization, the organization aims to reach higher levels of integration than ever before. The first step in increasing integration was the establishment of Regional Economic Communities (RECs), of which eight exist today¹. The gist of the strategy was that by eliminating tariffs on traded goods among member countries, trading costs were bound to decrease, thus facilitating increases in regional trade (Anderson *et al*, 2004). Progress since their implementation has been slow and irregular across RECs, and the fact that most African countries have overlapping memberships with more than one community has created organizational and financial issues. To address these problems, the African Union has decided to pass to the second stage of economic integration, a continent-wide trade liberalization agreement: the AfCFTA.

The African Continental Free Trade Agreement (AfCFTA), signed by every country in the continent and scheduled to begin the 1st of July 2020, will eliminate tariffs on 90% of all traded goods among African countries. It does so in hopes of connecting national markets, incentivizing cross-border technological transfers and exploiting regional advantages, thus creating an environment of African collaboration vital for integration. Economic reports and academic papers have already mostly praised this initiative, stating that its mechanisms will increase intra-regional trade in more than 50% by 2022 (UNECA, 2018; UNCTAD, 2019). However, various issues need to be contemplated to ensure the AfCFTA's success, as trade liberalization might not be enough. Although eliminating tariffs to reduce trade costs might be a necessary condition to increase intra-regional trade, that does not make it a sufficient one. For one, the estimations of intra-African trade gains cited by these economic reports stem from a study that is a decade old and specifies certain conditions that are not likely to be met. Second, trade costs are determined by factors other than

¹ Although eight are officially recognized by the African Union, more than a dozen exist.

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tariffs, such as transport, transaction and contract enforcement costs. This means that tackling only one of these costs might not suffice to make the Agenda 2063 a reality. It is therefore to better understand the AfCFTA that this thesis looks at how the RECs have fared in strengthening the trade block.

These considerations lead us to the following research question that will be dealt with in this work: In light of the successes and failures of Regional Trade Agreements from the 1990s until today, and the recent ratification of the AfCFTA, *what do sub-Saharan African countries stand to gain, in terms of export diversification, from increasing intra-regional trade*? Since the best way to critically evaluate whether the upcoming AfCFTA can achieve these goals or not is to analyze whether past attempts have succeeded or failed, this work also focuses on answering the following sub-question: Have African economies shown signs of export diversification after having joined the RECs? Finally, if the African Union aims to increase intra-regional trade, it is under the premise that interdependence will spur industrialization and export diversification, both factors that have led developed countries to sustainable economic growth in the past. If intra-regional trade is enhanced without an increase in the quality of traded goods, then its benefits on economic growth might be overstated. For this reason, a second sub question arises as to *under what conditions could increases in intra-regional trade lead to sustainable economic growth*? To answer these questions, we will focus on three African countries (Ghana, Kenya and Uganda) and three RECs (COMESA, EAC and ECOWAS).

Due to the considerable number of factors that could be analyzed when attempting to provide answers to these questions, it is essential to delineate a conceptual framework that clearly states what issues will be tackled and how the research question(s) will be answered. First, in order to evaluate if Ghana, Kenya and Uganda have diversified their exports under membership of various RECs, we use the Economic Complexity Index (Hidalgo and Hausmann, 2009). A proven predictor of economic growth, an increase in this index would signal subsequent economic growth, while a stagnation or decline would show that the RECs have not managed to increase the quality of exported goods.

Second, we assess whether there has been structural transformation in these economies during the period in which RECs have been implemented. The reallocation of inputs from the traditional sector (*e.g.* agriculture) to more productive ones (*e.g.* manufacturing or high-end services) is something that most advanced economies today have gone through. Numerous studies have tied this process to economic growth, spurred by increases in productivity, better jobs and higher wages (Fisher, 1939; Rodrik, 2013; McMillan *et al*, 2017). It is by developing industrial capacity that economies can produce new goods and create value-addition, consequently paving the road for export diversification.

We shall eventually look at whether RECs have facilitated these countries' participation in regional supply chains. In the current context of production fragmentation across borders, countries specialize in the manufacturing of intermediate goods rather than complete goods. Studies have related participation in these chains to economic growth, as increased participation leads to knowledge spillovers and different types of upgrading in production processes, thus increasing competitivity and developing industrial capacity (Gereffi *et al*, 2011; IMF, 2015). By doing so, economies are able to increase export diversification: as manufacturing and processing capacities are stimulated, new goods can be produced domestically to be sold in foreign markets.

Although there are empirical studies that estimate causality between intra-African trade and its numerous determinants (see gravity models of Akpan, 2014; Karamuriro, 2015; Afesorgbor, 2017; Berahab and Ali, 2019), econometrics' practical constraints and model specification issues do not allow for a comprehensive study in which several matters can be addressed simultaneously. With regards to qualitative reports linking liberalization and intra-regional trade with export diversification and economic growth in Africa, many rely on outdated studies while others choose to focus on individual countries, leaving aside assessments at the continental scale. The present work aims to contributing to fill this gap by providing some insights on the research question at hand, using relevant case studies to pinpoint continental trends. Furthermore, the optimism surrounding the signing of the AfCFTA, and the numerous positive outcomes that it is slated to generate, is not something unique to this generation. As we will later see, there have been previous attempts to stimulate trade integration at the continental level, with most projects getting lost to endless negotiation procedures. This thesis aims to contribute to this discussion by providing a review of the successes, failures and unforeseen obstacles of the current RECs on increased trade integration. Specifically, we look at whether one of their main objectives -to increase intraregional trade- has been accomplished, and if African countries have exhibited export diversification and structural transformation. A qualitative work looking into the effects of RECs on this could shed some light on the feasibility of the AfCFTA's implementation and on whether its main mechanisms can lead to the materialization of its aspirations.

This work is structured as follows. In Section I we describe trade in sub Saharan Africa from 1990 until today, paying particular attention to its composition. After linking the concepts of export diversification, trade liberalization and economic growth, we provide a historical description of the regional economic communities that the African Union has implemented. We conclude this section by presenting the countries –Ghana, Kenya and Uganda– and RECs –COMESA, EAC and ECOWAS– studied in this work, and why this choice maximizes external validity. In Section II we delve into our case studies and examine whether these three countries have diversified their exports in the recent decades, and if they have shown signs of structural transformation and

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industrialization. Section III focuses on whether RECs have set in motion mechanisms that facilitate the emergence of regional supply chains. This section closes with a discussion on four big interrogations with regards to future African economic development and challenges that the AfCFTA will have to address. Lastly, we provide conclusive remarks in which we answer the overarching questions, state the policy implications and limitations of this work and propose some opportunities for further research.

Section I – Intra-regional trade and trade liberalization in Sub-Saharan Africa

I.I - Trade in sub-Saharan Africa

The nature and relevance of African trade

Trade in the African continent can be described via three 'stylized' facts. First, the relevance of African trade in merchandise, whether it be exports to or imports from, is very low compared to other continents. As illustrated in Figure 1 below, African trade as a share of global trade is significantly lower than that of Europe, America and Asia, never surpassing the 3.4% maximum reached in 2012. Only Oceania, a continent arguably remote from the rest of the world and comprised of 40 countries less than Africa, lies below the African continent.

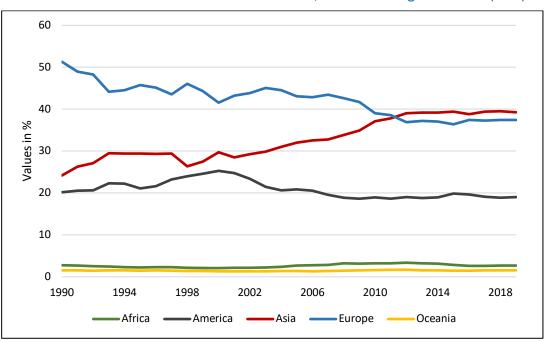


FIGURE 1 – Continental trade of merchandise, as a share of global trade (in %)

Source: Author's calculations using data from UNCTADstat.

Note: The figure displays the share that each continent has in global trade, from 1990 to 2019. The variable is constructed as an average of the share of imports and the share of exports.

A second stylized fact refers to the low trade volumes that countries in this continent exchange among themselves. A trait characterizing international merchandise flows, is that trade volumes are larger among countries that are geographically close to each other (Krugman and Obstfeld, 2003). As shown in Figure 2 below, intra-European trade in 2018 was above 65%, intra-Asian trade stood at 60% and intra-American trade at 55%. It might therefore come as a surprise to learn that intra-African trade was considerably lower that same year (15%), and that despite it being a

bit higher for the sub-Saharan region (18%), it still remains three times smaller than the other continents².

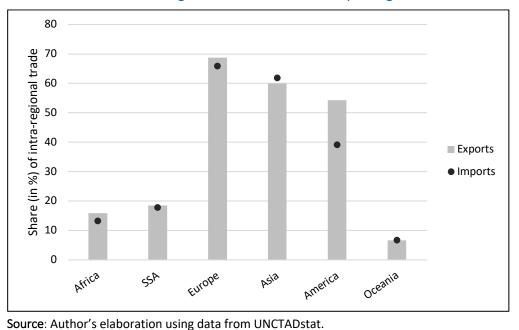


FIGURE 2 – Intra-regional merchandise trade per region in 2018

Notes: The figure displays, for each continent, the share of traded merchandise (all products) that is intra-regional. North America and South America are considered as a unique continent since trade integration between these two continents is very high.

A third stylized fact characterizing African trade has to do with the nature, or *quality*, of goods that is traded continentally compared to that with non-African countries. Specifically, the composition of exported goods from African countries to non-African countries is largely comprised of mineral products (*e.g.* petroleum oils), precious stones (*e.g.* diamonds, gold) and unwrought metals (*e.g.* copper, iron). On the other hand, intra-African exports, meaning exports from an African country that ends up in another African country, tends to be more diversified and includes higher quality goods (*e.g.* chemicals, machinery, electrical components). This difference can be perceived in Figure 3 below, which contrasts the 2014-2016 average composition of exported African products that ended up in African markets with those that reached non-African markets.

² Oceania's very low values can be explained by its relative closeness to Asian countries, with which it significantly trades.

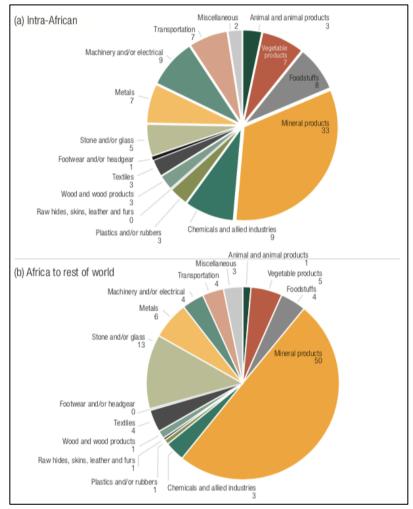


FIGURE 3 – Composition of African exports (in %): 2014-2016 average

Source: UNCTAD (2019)

Note: The figure displays the percentual composition of African exports as a 2014-2016 average. Panel (a) shows this composition for intra-African trade while panel (b) displays it for African exports to the rest of the world. The division of product categories follows a HS 4-digit level classification.

Throughout this work, what is meant by higher *quality* of goods, is goods whose production process generates higher value-addition, generally provides better job prospects and delivers higher revenue to the country exporting them. The higher diversity in the composition of intra-African trade compared to *extra*-African trade (*i.e.* exports from African countries that end up in non-African countries), has led policymakers to consider the following prediction: if intra-regional trade is composed of higher quality goods –whose production includes numerous benefits– it should be possible to enhance the benefits stemming from this diversification by increasing it. This suggestion resonates with studies that show that the enhancement of intra-African trade would also

facilitate the spread of knowledge, technological spillovers and learning of efficient production processes (Lin and Monga, 2013) (Arizala *et al*, 2019). But what exactly are these benefits that can emanate from diversifying the export basket? And, if it can ensure sustainable economic growth, throughout which mechanisms can it exert its effect?

Export diversification and economic growth

Benefits stemming from export diversification are numerous and have long been catalogued in the literature³. For one, a more diverse export basket shields economies from price fluctuations that could drastically reduce export revenues. Particularly, manufacturing goods have a stronger price resilience than agricultural goods, with the latter's international market price being generally much more volatile⁴ (AfDB/OECD/UNDP, p. 82, 2017). Second, countries that expand their exports beyond a limited number of products also strengthen their terms of trade (Hummels et al, 2005) (Arezki et al, 2014). A final aspect particularly relevant for the African region, is that export diversification leads away from problems related to natural resource exploitation. Large rents from natural resources such as petroleum oil tend to stimulate corruption by mainly benefitting small pockets of elites in developing countries, eroding democratic institutions and impeding production diversification (Sachs and Warner, 2001). It is also commonly related to the amplification of conflicts, as interest groups fight for ownership of the resource rather than redistribute its gains (Ross, 2006). This rent-seeking behavior, which Rodrik (2008) catalogues as an institutional problem that manifests in corruption and regulatory capture, appears as a significant obstacle to development for African economies whose exports remain concentrated around high-valued primary products such as precious stones (e.g. Guinea, Sierra Leone) and fossil fuels (e.g. Angola, Congo, Nigeria).

César Hidalgo and Ricardo Hausmann are one of many economists that have stressed the importance in developing countries diversifying their exports, arguing that no developed economy only specializes in a few commodities. Quite the contrary actually, they tend to have the most diversified export baskets in the world. Hidalgo and Hausmann developed the ECI, an indicator of economic complexity (more on this in Section II) which indicates, for each country in a point in time, exactly how rich the quality of the exported goods is. They find a positive correlation between a nation's income level, and the quality of exported goods, providing us with convincing arguments for this index's validity as a predictor of economic growth (Hidalgo and Hausmann, 2009). Another influential economist that has provided considerable arguments for this theory, is

³ See Appendix 1 for a brief theoretical and historical background on the comparative advantage theory and the contribution of the structuralist approach on how developing countries can gain from production specialization and trade.

⁴ This is because export revenue of agricultural goods can decrease due to sudden weather fluctuations or increases in supply from major producers.

Dani Rodrik. Along with others, he developed an economic indicator known as EXPY that measures the quality of countries' export basket. They find that countries exporting goods that exhibit higher productivity levels experience higher economic growth (Hausmann *et al*, 2007).

There would therefore seem to be a correlation between the quality of goods that a country exports, and the economic growth that it experiences. How does this connect with export diversification? If we were to look at the historical development of diversification for advanced economies, there would seem to be a common trend. Countries start with low income levels with a mostly agrarian economy, and only later develop manufacturing capabilities and industrial capacity. These are used to produce more complex goods generating higher value-addition⁵, leading to increased export revenue. In sum, the path to export diversification does entail, to some extent, an increase in the quality of exported goods. This positive correlation is illustrated below in Figure 4 which displays, for 42 African countries, the relationship between export quality and export diversification. Specifically, nations with higher export diversification tend to have stronger export quality.

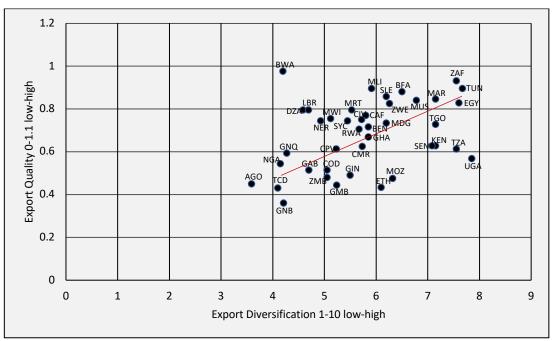


FIGURE 4 – Positive relationship between export diversification and export quality: Africa in 2014

Source: Author's elaboration using data from Songwe (2019).

Note: Within Africa, more diversified exporters rank higher in the export quality index. For details on country abbreviations, see Appendix 1. The export quality index is calculated using trade data (Henn *et al*, 2013) and the export diversification index is calculated as a Theil index (Cadot *et al*, 2011)⁶.

⁵ Value-added can be defined as the difference between the price of a product and the cost of creating it.

⁶ For visualization purposes, values for the latter have been inversed, meaning that higher values indicate higher diversification.

I.II - Trade liberalization and interdependence: the path for sustainable economic growth in the region?

Regional Economic Communities: Africa's main instrument of integration

Before going into detail with regards to what can be (and what has been) done to increase intraregional trade in Sub-Saharan Africa (henceforth SSA), it is necessary to consider the possibility that it already is at its optimal level. It could be the case, for instance, that comparative advantages are very similar in the region as a whole, or that certain goods can simply not be provided by any African nation due to their natural endowments being alike. Under this scenario, further reducing trading costs via liberalization may not lead to the expected results of increasing intra-African trade, as it is not in the countries' best interests. However, this does not seem to be the case for the continent. As Bah (2017) argues for the case of the Economic Community of West African States (hereafter ECOWAS) – a regional political and economic union comprised of fifteen countries– member countries dispose of complementary comparative advantages. Looking at the revealed comparative advantage (hereafter RCA) - an index measuring for which product(s) a country holds a relative advantage or disadvantage in production- of ECOWAS nations, the author finds that they have RCAs in mineral fuels, a large variety of foodstuffs and crude materials. In addition, the RCA in these products differs from country to country, meaning that it would be possible to exploit regional complementarities and achieve interdependence through trade. Scholars also argue that the wide array of geographic idiosyncrasies (e.g. humid forests, arid plains, savannas and plains) spanning the African continent allows for exploitation of varied natural endowments and can pave the way for different diversification paths, thus making the objective of interdependence not only feasible, but recommended (Buor, 2019).

It was not until the 1950s, when the wave of independence from European colonial powers began, that African integration truly started. This radical period marked the resurgence and recreation of centuries-old pan-Africanist ideals, with influential political figures like Kwame Nkrumah and Haile Selassie advocating African unity in what had become a new era devoid of colonial supremacy. It was during this time that the first continental institution was born: the Organization of African Unity. Established in 1963 and tasked with preserving the sovereignty of its member states, it has since evolved into the African Union (hereafter AU). Founded in 2001, the AU has expanded the role that its predecessor had held, tackling issues that span a variety of dimensions. From the preservation of peace and democracy, to scientific and technological cooperation, it also aims to sustain economic growth for all African states. In an attempt to achieve economic interdependence and come one step closer to realizing the dream of pan-Africanism, the 1991 Abuja Treaty created the African Economic Community (hereafter AEC). This AU branch holds an immense responsibility, as its goal is to increase economic integration by establishing free trade

areas and customs unions⁷. The AEC has set a timeline to achieve these goals called "Agenda 2063", in hopes of reaching continental integration in time to commemorate 100 years of the process' genesis. It is in this context that the regional economic communities were devised.

Although the first attempts at regional integration occurred during the 1910s, with the creation of the South African Customs Union in 1910 and the East African Community in 1919, the former was formed by European powers rather than sovereign African nations, and the latter collapsed in 1977. It was not until the 1970s that regional blocs started to appear, a process that accelerated during the 1990s (see Table 1 below)⁸. To date, there exist fourteen RECs, of which the African Union recognizes only eight⁹. Despite significant and rapid advances in African regional integration, these RECs have faced hurdles slowing down the process of economic continental integration¹⁰. For one, the pace and success of economic integration has not been equal across RECs. While some have struggled in creating customs unions (i.e. liberalizing internal trade and imposing common external tariffs), others have already created common markets, which include the free movement of goods provided by a customs union plus the free movement of labour and capital among member states (Buor, 2019). Secondly, as Mengistu (2015) argues, "the multiplicity of regional economic groupings has become recognized as a serious constraint for the effective integration of the continent". By including countries in more than one REC, the overlap of interests has braked rather than accelerated continental integration. Finally, the fact that countries with significant income differences in the same REC have to comply with identical liberalization rules poses problems to regional integration. Does it make sense for a country with well-established industrial capabilities like South Africa to expose their domestic firms to regional competition to the same extent than a country like Namibia, whose GDP is twenty-five times smaller? It is in this intricate web of regional integration schemes that the Agenda 2063 has initiated its next step towards continental economic integration: the establishment of the African Continental Free Trade Agreement.

⁷ It also aims to unite all domestic markets into a single continental one, create a common African currency and culminate with the formation of an African federation.

⁸ See Appendix 2 for abbreviations of each Regional Economic Community.

⁹ These include the Arab Maghreb Union (AMU), the Community of Sahel Saharan States (CEN-SAD), the Common Market for Eastern and Southern Africa (COMESA) the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD) and the Southern African Development Community (SADC).

¹⁰ Motives for the creation of these RECs are not solely economic in nature. Surveys have shown that reasons for their creation were 39% economic, 31% political, 16% geographic, 8% cultural and 6% historical (UNECA/AUC, 2012). This explains why RECs like ECOWAS and IGAD also dispose of common security forces, that the EAC is aiming at creating a political federation of eastern African states, and others like ECCAS and CEN-SAD have made progress in facilitating the regional movement of peoples.

West Africa	1960s	1980s	1990s
Lagos Plan		In 1975 - Economic Community of West African States (ECOWAS)	In 1993- revised ECOWAS Treaty
	In 1966 - Customs Union of West African States (UDEAO)	In 1973- West Africa Economic Community (CEAO) and West African Monetary Union (UMOA)	In 1994 - West African Economic and Monetary Union (WAEMU)
Central Africa	1		
Lagos Plan		In 1983 Economic Community of Central African States (ECCAS)/ (CEEAC)	
	In 1964 - Economic and Customs Union of Central Africa (UDEAC) & In 1961- Bank of the Central African States (BEAC)		In 1994 - Economic and Monetary Union of Central Africa (CEMAC)
Southern and	Eastern Africa		
Lagos Plan		In 1981 - Preferential Trade Area (PTA)	In 1993- Common Market for Eastern and Southern Africa (COMESA) & In 1993 - Cross Border Initiative (CBI)
	Originally in 1889, and then 1969 -		
	Southern African Customs Union (SACU) and Common Monetary Area (CMA)		
		In 1980 - Southern African Development Coordination Conference (SADCC)	In 1992 Southern African Development Community (SADC)
	In 1967- East African Community I (EAC)		In 1999 - East African Community II (EAC)
		In 1986 - Intergovernmental Authority on Drought and Development (IGADD)	In 1996 - Intergovernmental Authority on Development (IGAD)

TABLE 1 – A timeline of African regional integration: 1960s-1990s

Source: McCarthy (1996).

The African Continental Free Trade Agreement

The wheels of continental economic integration started turning after the signing of the Lagos Plan of Action in 1980¹¹. After decades of REC implementation, in 2012 in Addis Ababa, Ethiopia, political leaders finally established a timeline for the creation of an African continental free trade area (AfCFTA). Six years later in the Rwandan capital Kigali, the AfCFTA was signed by forty-four of the AU's fifty-five members, and as of 2020 all but Eritrea had integrated the agreement. The AfCFTA is set to become the largest free trade area in the world, joining the likes of ASEAN, MERCOSUR and NAFTA¹². The reason for the AfCFTA receiving such widespread attention, is that through its liberalization process intra-African exports is estimated to increase between 40% and 50% by 2040 (UNECA, 2018). So, what are the mechanisms it will put in place and what problems will it try to solve?

First, the AfCFTA is set to remove tariffs on 90% of exchanged merchandise among every African country by 2045 and will enter into force July 1st 2020¹³. Particularly important is that its architects recognize the significant income disparities among African countries and the unequal degree of

¹¹ Brokered by the AU, its plan is to minimize dependency on Western resources by enhancing intra-African trade and exploiting its own resources. The argument was that achieving economic sovereignty was the next step after having gained independence from former colonists.

¹² These are the Association of East Asian Nations (ASEAN), Latin America's Common Market of the South (MERCOSUR) and the North American Free Trade Agreement (NAFTA).

¹³ This work is not adjusted by the Coronavirus crisis. Due to the impact that this worldwide pandemic has on the mobility of goods and peoples, the implementation of the AfCFTA might be delayed.

reliance that they have with regards to tariff-related governmental revenues. Said differently, while some richer countries can afford to wait some years for the positive effects of stronger integration to kick in, the poorer ones may be overwhelmed by the immediate revenue loss. To address this concern, the AfCFTA has planned to eliminate tariffs on 90% of all goods progressively: by 2025 for developing countries and 2030 for the Least Developed Countries (hereafter LDCs)¹⁴. The reason for the AfCFTA reaching full continental liberalization only in 2045, is that a handful of countries are given until that year to fully comply with tariff elimination (Osoro, 2019).

Second, the AfCFTA aims to preserve the currently existing RECs, choosing to harmonize common external tariffs across the board. Although the establishment of a common external tariff reduces trade costs among member countries, it also makes it relatively more costly to trade with non-members, including African nations. For instance, for a traded good in ECOWAS to qualify for tariff preferences it needs to be produced by a firm that is at least 51% owned by a member country. Thus, foreign investment and trade with neighboring non-ECOWAS countries (*e.g.* Ivory Coast, Senegal) end up being discouraged (Buor, 2019). In this regard, the continent-wide removal of tariffs on 90% of African goods should resolve this issue.

Finally, the AfCFTA will establish 'Rules of Origin' to be enforced at the continental level. These serve as a geographical tracing of a merchandise's production, detailing where it was manufactured. By providing goods with a "passport", rules of origin are crucial in coordinating which countries and firms participate in the production of each good, something crucial for regional supply chains. In turn, this should enable African economies to increase export diversification as well as be a source of employment for the rural youth (UNCTAD, 2019). The problem with current RECs with regards to this issue is that the different rules that each one applies tends to thwart integration rather than encourage it. Indeed, the obscure web of differing laws that countries have to comply with increases transaction costs and thickens the administrative burden of trade (Ndomo, 2009).

"The transition phase to the Continental Free Trade Area alone could generate welfare gains of \$16.1 billion and boost intra-African trade by 33 per cent" reads a sentence in the first paragraph of an UNCTAD (2019) report on the AfCFTA. This assessment is based on a 2012 academic study in which the authors evaluate the effect of a continental-level liberalization on intra-regional trade and real wages (Mevel and Karingi, 2012). However, these predictions are considerably outdated, for two reasons. First, the authors base their simulations on the implementation of the AfCFTA in 2019, while it has yet to enter into force as of 2020. Second, they assume two complementary

¹⁴ The remaining 10% of goods are categorized as 'sensitive' ones, meaning that countries will either liberalize them further down the road, or totally exclude them from the liberalization scheme. With regards to these sensitive products, developing countries have until 2030 and LDCs until 2033 to eliminate tariffs.

policies: that customs procedures are twice more efficient than in 2010, and that there is a 50% reduction in the time that merchandise spends at African ports. Due to the outdated economic study from which these predictions originate, it is necessary to provide an updated discussion on exactly what the AfCFTA could achieve. Repeating the target of the AfCFTA today using estimates from a decade ago only puts further pressure on the timeline African countries have to achieve these goals and can damage the reputation and legitimacy of this project.

Given the multidimensional nature of the issue we will review, a qualitative report is better suited than an econometric model for several reasons. First, it is less constraining in the issues that can be tackled, meaning that no variables will need to be discarded for fears of simultaneous causality issues or problems of model specification. Second, since the aim of this work is to answer the research question by providing a historical overview, we do not wish to estimate causality between variables, but simply look at whether the key pieces have been moving in the correct direction to achieve stronger integration. Finally, there already exist numerous econometric studies that relate export diversification with intra-African trade (see Afesorgbor, 2017; Berahab and Ali, 2019; Egbon, 2019). What is lacking, however, is an updated review of why intra-African trade is still so low even three decades after RECs' existence, and how a continental free trade area could help. Since looking into how the fourteen RECs have fared in reaching their objectives for all African countries would be too extensive, we focus our review on some case studies. Specifically, we shall look at three African countries -Ghana, Kenya and Uganda-, and three RECs, namely COMESA, EAC and ECOWAS. In the following section we lay out the reasons that determined our choice, explaining how a detailed look into how RECs have affected these countries' export diversification, intra-regional trade and economic growth will give some insight regarding the role of the AfCFTA going forward.

I.III - A case study: Ghana, Kenya and Uganda

Why look at these economies? Motivation and external validity

Before explaining why we chose these countries, it is important to clarify why others have been discarded. First, we exclude north African countries from the sample because they have stronger trade ties with European markets than the average African country, making increasing the share of intra-African trade a minor objective. Second, we discard islands and other remote territories (*e.g.* Madagascar, Mauritius, Comoros) as the generalization of results would not be possible. Third, we exclude states having experienced wars in the most recent decades (*e.g.* Congo, Rwanda, Sudan), as country-specific border issues would have surely had a negative impact on intra-African trade. Fourth, countries that export mostly minerals and high-valued stones to non-African *and*

African countries are not selected as referent countries (*e.g.* Equatorial Guinea, Sierra Leone) as they are of little interest for this study¹⁵. Finally, certain nations are excluded due to idiosyncrasies that would compromise the external validity of the study, such as the richest countries in SSA (*e.g.* Nigeria, South Africa) and those having experienced the fastest economic growth rates in the world (*e.g.* Ethiopia).

One of the three SSA economies in our sample is Ghana. Home to thirty million people, it is among the region's economies that has displayed the strongest and more stable economic growth in the past decades (see Table 2). Historically also known as the Gold Coast, it is rich in gold, petroleum and natural gas. This makes it a very interesting nation to analyze when focusing in export diversification and internal trade; African countries are known for having problems with export diversification due to the more profitable natural resources that they possess. Observing whether Ghana has managed to invest in manufacturing capabilities despite being a resource-rich nation, could provide some insight on other African countries that live a similar reality. Furthermore, Ghana is one of the world's leading cocoa producers, making an evaluation on whether it has diversified exports of this crop (derivative products) useful for understanding how African countries could start erecting manufacturing facilities around one (or several) crops, potentially initiating the industrialization process.

	GDP (in billions) of constant 2010 USD)	Population (in millions)	2008-2018 average annual GDP growth (in %)
GHANA	53.8	29.7	6.86
KENYA	61.8	51.4	5.15
UGANDA	30.3	42.7	5.73
Regional average (SSA)	37.3	22.5	3.74

TABLE 2 – GDP and population of Ghana, Kenya and Uganda

Source: World Development Indicators.

Note: The table displays, for Ghana, Kenya and Uganda, GDP and population in 2018 (the most recent year from the WDI dataset) and the average annual GDP growth rate in the most recent decade (2008-2018). GDP values are in constant 2010 US\$. The final row displays the regional average (Sub-Saharan Africa) for all three variables.

The second SSA country analyzed in this work is Kenya. Despite having had an erratic GDP growth pattern in the past three decades (see Figure 5), Kenya is expected to become a future African growth hub. Thus, it is of interest to observe whether it has diversified its export basket by including manufactured goods, and to analyze how its trade flows with African nations has evolved through the years. Furthermore, Kenya is the export powerhouse of the Eastern African Community and generally maintains a trade surplus with other SSA countries. Along with the fact

¹⁵ This is because the AfCFTA's objective of increasing intra-African trade is motivated by the fact that traded goods are more diversified in intra-African trade than extra-African trade.

that various surrounding member states like Uganda depend on product imports from Kenya, makes it a crucial actor in achieving interdependence. Therefore, by examining Kenya, our results could be indicative for other African economies central in their imminent region like Nigeria or South Africa. In addition, it belongs to more than three RECs, making it an African economy very much invested in the AU economic integration process. Finally, Kenya seems like a viable candidate for being at the center of supply chain development in the region, further enriching its inclusion in this study.

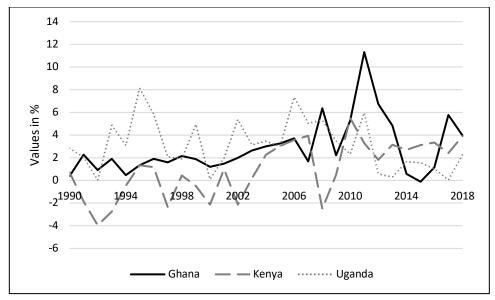


FIGURE 5 – GDP per capita annual growth (in %) for Ghana, Kenya and Uganda: 1990-2018

This brings us to the final state examined: Uganda. This country significantly contrasts with Ghana and Kenya, as it is a small landlocked economy with a large dependence on neighboring larger African countries. Despite this, it has experienced one of the highest GDP growth in the region during the past decade, growing at an astounding average of 5.73% per year. Uganda is a deeply rural country and has one of the lowest urbanization rates in the continent, resulting in the persistence of subsistence agriculture. SSA has quite a lot of countries whose economy display similar trends, which is why including it in the study enriches external validity. Another reason behind its inclusion in this study, is the interest in examining it alongside Kenya, as both are border countries and have membership in common RECs (EAC, COMESA, IGAD). Having tried to increase integration for more than a century, Kenya and Uganda are key historic players in the continent's objective of interdependence. The significance of including two geographically

Source: World Development Indicators.

Note: The figure displays the GDP per capita annual growth (in %) of Ghana, Kenya and Uganda between 1990 and 2018.

adjacent countries thus lies in the insight that can be obtained on how RECs have fared in increasing both the quantity and quality of traded goods among members.

An introduction to COMESA, EAC and ECOWAS

The three countries that will be analyzed in the following sections belong to five of the eight RECs recognized by the AU. Ghana is part of two RECs (CEN-SAD and ECOWAS), Uganda is a member of three (COMESA, EAC and IGAD) and Kenya belongs to four of them (CEN-SAD, COMESA, EAC and IGAD). However, we exclude CEN-SAD because it includes many north African countries in its membership and IGAD because of the multiplicity of its objectives that makes economic integration a goal among many others¹⁶. Of the three RECs analyzed throughout this work, the Economic Community of West African States (ECOWAS) is the oldest. Signed in 1975, it is comprised of fifteen member states. ECOWAS is included in our study since it is one of the most successful attempts at creating a supranational institutional architecture aimed at increasing regional integration. Its objectives are to foster economic cooperation and strengthen the trade block between member states by promoting intra-regional trade. Furthermore, it has managed to go far in its liberalization process by establishing a common customs union between member states: an import levy stands for all imported goods from non-ECOWAS nations. Finally, its economic relevance as compared to other RECs –it holds a higher GDP per capita than any other– makes its consideration very adequate for this work.

The second REC that we analyze is the Common Market for Eastern and Southern Africa (COMESA). Signed in 1994, this REC is the successor of a pre-existing free trade agreement that materialized in 1981. As in the previous case, the aim of COMESA is to increase regional integration by creating a common customs union, a task that has not been fulfilled to this day. The main reason for this is the overlap in REC membership of many countries. However, there have been significant advances brought forth by COMESA that stimulate intra-regional trade and export diversification: it has a court of justice that protects its members against unfair export practices like dumping¹⁷; disposes of the COMESA Competition Commission tasked with raising cross border investments; and has a virtual trade network which provides real time information on products' location, reducing the cost of doing business¹⁸. A primary reason for including COMESA in this study is the interesting contradiction between two factors: the nonexistence of a

¹⁶ The Intergovernmental Authority on Development (IGAD) also serves as an intergovernmental military intervention force, which is out of this work's scope.

¹⁷ The trade practice known as 'dumping' occurs when a country exports a good at a price that is lower than its domestic market. It has been characterized as an unfair trade practice and uncompetitive, as it affects the competitivity of the domestic firms of the importing country.

¹⁸ The Virtual Trade Facilitation System (CVTFS) integrates all customs and trade related documentation involved in COMESA trade.

customs union –key in increasing trade among members– and the successful implementation of numerous policies that increase competitivity and facilitate cross-border trade. Furthermore, the fact that COMESA is the African REC that holds the largest portion of the continent's population (46%), adds to the external validity of our study. Finally, its membership stretches the entirety of the continent (from Egypt in the north to Zimbabwe in the south), making it adequate for a study on the prospects of continental integration.

The third REC taken into account is the Eastern African Community (EAC), comprised of six member states. Signed in 2000 and operational as of 2005, its objective is also to increase both trade and export diversification among member countries. It has installed "one-stop" border posts that reduces transaction costs and has attributed free visas to students moving between member states. As is the case with the two previous RECs, the EAC has had various impediments to its integration plans. It failed to form a monetary union (targeted for 2012), which resulted in it being completely removed from the agenda, and the formalization of the customs union has not yet been completed, with Kenya still having to pay tariffs when exporting its goods to Tanzania and Uganda. Various reasons motivate the EAC's inclusion in this study. For one, it is the second oldest REC in Africa. Despite collapsing in 1977 before relaunching in 2005, the century-old history of EAC regional integration contrasts with the more recent COMESA and ECOWAS. In addition, four EAC member states are landlocked¹⁹, making increased interdependence essential for accessing coastlines. Since more than one in four African countries do not have individual access to a coast, this further justifies its inclusion as a case study.

Summing up, we have linked the concepts of export diversification, liberalization and intraregional trade, and the positive effect that these have on economic growth. We have seen that, due to the composition of intra-African trade being more diversified than extra-African trade, an increase in the former could lead to more export diversification and economic growth. To achieve this goal, the African Union has planned a timeline of tariff elimination set to reach complete liberalization by 2063. The first step being the implementation of regional free trade areas –a process that has accelerated during the 1990s– the AU has already set in motion plans for a continental economic zone. Known as the AfCFTA, it aims to continue the pan-African dream of economic interdependence by increasing both the quantity and quality of traded goods. In the following section, we look at whether there has been an increase in export diversification for Ghana, Kenya and Uganda under the membership of COMESA, EAC and ECOWAS. We also see whether these countries have developed the manufacturing capabilities needed to diversify exports, and whether its economy has shown signs of industrialization.

¹⁹ These include Burundi, Rwanda, South Sudan and Uganda.

Section II – Export Diversification and Structural Transformation

II.I – Intra-regional trade and export diversification: Ghana, Kenya and Uganda Intra-REC trade: COMESA, EAC and ECOWAS

Due to the nature of their objective of enhancing intra-regional trade, the first thing that we should look at is whether these three RECs have managed to boost trade among its member countries. It is important to be reminded that ECOWAS has been active since 1975, COMESA since 2000 and the EAC since 2005. Table 3 below displays both the share of exports and imports of intra-REC trade between 1995 and 2018. There are three main takeaways. First, in 1995 the EAC clearly shows stronger integration than the other two RECs, even before its implementation. This is because a previous version of the EAC had been enacted before collapsing in 1977, mostly due to the period of political instability and conflicts that erupted during Idi Amin's Ugandan dictatorship between 1971 and 1979.

Values represent %	SHARE OF EXPORTS THAT END UP IN COUNTRIES % MEMBERS OF THE SAME REC			RTS THAT COME FF BERS OF THE SAM		
	COMESA	EAC	ECOWAS	COMESA	EAC	ECOWAS
1995	6.36	17.50	9.43	4.65	10.54	8.40
2001	6.52	17.33	9.65	5.76	11.40	11.28
2007	5.99	17.88	8.38	5.80	7.79	10.27
2013	9.16	19.66	9.31	6.30	7.42	11.24
2018	10.49	20.37	8.22	5.86	7.91	8.75

TABLE 3 – Intra-REC trade in sub-Saharan Africa: 1995-2018

Source: UNCTADstat.

Note: The table displays, for the COMESA, EAC and ECOWAS Regional Economic Communities, the share of exports and imports that have been intra-REC between 1995 and 2018.

Second, it would appear that COMESA is the REC that has achieved the largest increase in intra-REC trade, with exports and imports increasing 65% and 26% between 1995-2018, respectively. This resonates with Karamuriro's (2015) study, in which he finds, using an augmented gravity model²⁰, that positive factors contributing to these increases are GDP size of the trading countries, quality of trade infrastructure, common language and common border. However, COMESA has never reached EAC's 20% value of intra-REC trade, probably because it still does not have an operational customs union. As argued in Section I, doing so would incentivize trade among common members, as products originating from non-member countries would become relatively

²⁰ The gravity model applied to international trade theory was introduced by Tinbergen (1962), in which bilateral trade volumes between two countries are predicted to be a positive function of these countries' GDP and a negative function of the trading costs. It is called the Gravity model because it is derived from Newton's law in which the force of attraction between two objects is positively influenced by their size and negatively influenced by the distance between them. In Tinbergen's model, GDP would represent size and trading costs, distance.

more expensive. Looking at ECOWAS, it has not seen the increases in trade integration that the two other RECs have. The share of exports that end up in member countries has actually declined a couple of percentage points in 2018, from 9.5% in 1995.

Since ECOWAS in its current form was implemented twenty years before the period we analyze, and COMESA was the successor of a free trade agreement dating back to 1981, it is expected that changes in trade shares be less intense than more recent RECs like the EAC. Buor (2019) states that trade among ECOWAS countries before its implementation was low due to a variety of factors, ranging from poor intra-regional transport networks and low industrial development, to non-elimination of tariffs and francophone-anglophone conflicts. Between the early 1980s and 1995 however, intra-ECOWAS trade had approximately increased three-fold, reaching 9.5% for exports and 8.4% for imports, as illustrated in Table 3. This is in line with Ajayi's (2005) findings which state that by participating in ECOWAS, intra-REC trade had considerably increased.

Finally, when contrasting exports with imports, the story of intra-REC trade is complexified. Excepting ECOWAS, imports from member countries are significantly lower than exports: in 2018 the share of COMESA's imports was a bit less than half its share of exports, this difference being more than half for the EAC. It is interesting that this gap has widened throughout the period. As shown in Figure 6, Ghana, Kenya and Uganda have been net importers of goods for the past thirty years, suggesting that they have not only imported more products and services than they have exported, but also that they have been importing these goods from non-member countries²¹.

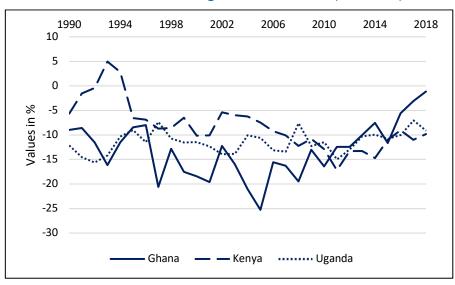


FIGURE 6 – Balance on goods and services (% of GDP)

Source: Author's elaboration using World Development Indicators.

²¹ See Appendix 3 for details at the country level.

To better understand why REC's results in increasing trade among members have been mixed, it is necessary to look at what has been happening at a larger scale. In what follows, we compare intra-African trade with extra-African trade, to observe whether the former has increased under the RECs' existence.

Intra-African and Extra-African trade between 1995 and 2017

In what follows, we first look at both the export destinations and import sources of Ghana, Kenya and Uganda, between 1995 and 2017, contrasting trade with African and non-African countries. Later, we describe the nature of the traded goods, and how this has evolved throughout the period. Finally, we conclude as to whether, under the RECs, intra-regional trade has increased and if it has been accompanied by export diversification. We do this to confirm whether the AfCFTA's architects' premise –that trade among African countries consists of higher quality and more diverse goods than trade with non-African countries– is the case for Ghana, Kenya and Uganda.

Figure 7 displays the share of Ghanaian, Kenyan and Ugandan export destination per continent, between 1995 and 2017. If we look at panel A, we can see that at the start of the period it is European markets that were the main recipient of Ghanaian goods. The importance of this continent relative to others however has dropped, going from around 70% of exports in 1995 to 28% in 2017. This drop has mostly been in favor of Asia, which has passed from purchasing 15% of its goods in 1995 to 48% in 2017, with China playing a major role: no less than 10% of Ghanaian exports have gone to China since 2013. If we look at Kenya, Europe's role throughout the period is similar. Despite receiving 50% of Kenyan goods in 1995, its importance has also dwindled in favor of Asian markets. Interestingly, since 1997 it is Pakistan rather than China, which has been the main recipient of Kenyan exports. In Panel C, we can see that the trend of declining European markets' relevance is even more important for Uganda. Indeed, it has passed from receiving an impressive 90% of Ugandan exports in 1995 to obtaining its lowest value of 21.5% in 2017. The Asian trend is repeated, purchasing 25% of total Ugandan exports in 2017. A final comment with regards to African exports ending up in non-African countries, refers to the minor role that the American continent holds. Specifically, throughout the period it has never purchased more than 10% of exported products from either of the three countries.

The decline of the European market's importance has been, to a certain extent, beneficial for intra-African trade: it increased for Ghana from 3% in 1995 to 13% in 2017 (maximum of 33% in 2012), oscillated for Kenya between 28% (1996) and 44% (2014) and drastically increased from 1% in 1995 to an astounding 50% in 2017 for Uganda. As predicted by the gravity model, increases in intra-African trade has mostly been with neighboring countries. Ghana's exports to African countries has never been above 5% except for Togo (with whom it shares a border) and South

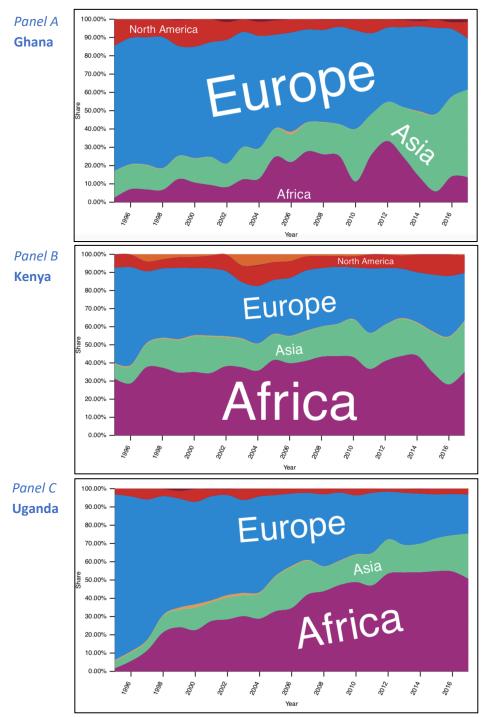


FIGURE 7 – African export destinations per continent (in %)

Note: The figures display the share of the value of exports to each continent between 1995 and 2017. Panels A, B and C illustrate this for Ghana, Kenya and Uganda, respectively. The graph depicts the following continents: south America (dark red), north America (light red), Europe (blue), Oceania (orange), Asia (green) and Africa (purple).

Source: Atlas of Economic Complexity.

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Africa (the richest economy in the region). The top two export destinations of Kenyan goods in the African continent are also two neighboring countries: Uganda received between a quarter and a third of total Kenyan exports during the period and Tanzania purchased between 12% and 25%. Uganda also shares a border with the main African recipients of its exports, which are (in decreasing order of importance) Kenya, South Sudan, Rwanda and the Democratic Republic of Congo.

Having looked at export destinations of the three economies, Figure 8 below displays the share of import sources by continent, for the same period. For the three countries it is clear that they have been replacing European imports with Asian ones. Initial Ghanaian suppliers like the UK, Germany and France were substituted by Japan and China. The latter's importance is increasingly felt since 2007, when Chinese imports represented a massive 39% of total imports from Asia, a figure that has since increased to a whopping 61% in 2017. The story is similar for Kenya, with Europe's share decreasing 30 percentage points to reach 14.4% in 2017, mostly in favor of Asia's increase to 66% for the same year. Like in Ghana's case, Kenya also significantly imports from China (25% in 2017), followed by India and Japan. The story is no different for Uganda, as 62% of total imported goods originated from Asian countries in 2017, and the main player being China since 2011. Overall, it would seem that the increasing importance of imports from Asia throughout the period could pose complications for intra-African trade, an issue that we examine in Section III's discussion.

As can clearly be seen by contrasting Figures 7 and 8, the relatively optimistic trends of enhancing intra-African trade when looking at exports is not reiterated for imports. In 2017, imports from African countries (as a share of total imports) for Ghana, Kenya and Uganda were 9%, 12% and 20%, respectively, all lower values than exports to African countries. Even the small and landlocked Uganda – which had achieved amazing integration with its continent in the exports department- does not seem to rely as much on African countries. With regards to import sources from African countries two patterns emerge, the first being the relevance of neighboring countries. Ivory Coast is one of the main African providers for Ghana, while Kenya and Uganda rely both on themselves and Tanzania. This shows the motivation behind regional integration, as African economies like Ghana, Kenya and Uganda seem to trade mostly with bordering countries. The second pattern refers to the importance of sub-Saharan Africa's most developed and industrialized economy: South Africa. In 2017, the share of African imports that came from South Africa equaled 22% for Ghana and Uganda, and 30% for Kenya. The fact that the distant South Africa (for our three economies) is as relevant a trading partner than neighboring countries, is probably due to its high degree of export diversification, as we will see in the later sub-section. In this case, it would seem that product diversification is what enables South Africa to reach other African countries

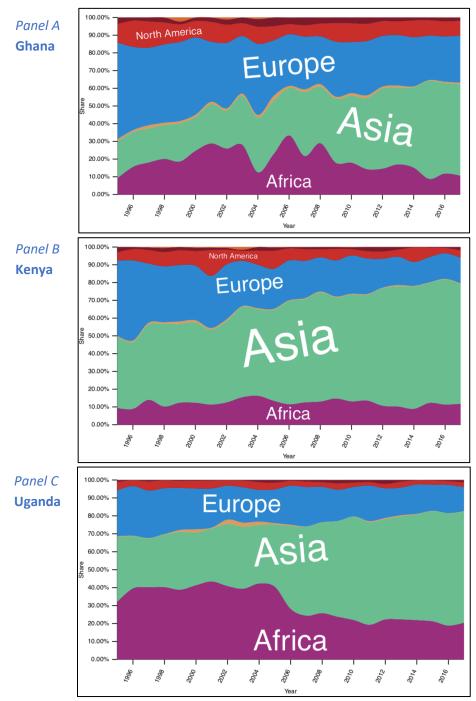


FIGURE 8 – African import origins per continent (in %)

Note: The figures display the share of the value of imports from each continent between 1995 and 2017. Panels A, B and C illustrate this for Ghana, Kenya and Uganda, respectively. The graph depicts the following continents: south America (dark red), north America (light red), Europe (blue), Oceania (orange), Asia (green) and Africa (purple).

Source: Atlas of Economic Complexity

halfway across the continent, thus making African trade integration at the continental level a reality. A final comment can be made with regards to Ghanaian imports from Nigeria, which represented around 50% of total imports from African countries during the commodity-boom (2000-2013). The fact that during this time 95% of imported Nigerian goods were petroleum oils, shows how Ghana's increased reliance on African imports was actually inflated by energy dependency, and not spurred by integration and increased diversified trade among African nations.

Composition of trade and trade diversification

After having compared the shares of intra-African trade with extra-African trade for Ghana, Kenya and Uganda during the period, we now describe the composition of that trade to observe whether one consists of more diversified products than the other. Starting with Ghana, exports to both non-African *and* African countries had a low level of diversification, thus running contrary to the central argument motivating the AfCFTA's implementation: that intra-regional trade is more diversified. With regards to exports to non-African countries, they have in large part consisted in stones and minerals, specifically manganese, gold and crude petroleum oils. This is very similar to what Ghana exports to other African economies: as displayed in Table 4.A below, apart from 75% of its exports to its top trading partner being in chemicals, 93% of exported products to South Africa was gold and 65% of exported products to Togo were minerals.

If we contrast Ghana's case with Kenya, the latter has a higher degree of export diversification when looking at what it sells to other African countries, especially for its top two trading partners (see Table 4.B). Leaving minerals aside, the most important product categories of exported goods have been agriculture –around 20-30%– followed by chemicals at 20-23% and metals at 9-14%. Agricultural goods are still the top exported products, but to a much lesser extent than what Kenya exports to non-African countries: they represent 90% of exports to European markets and to Pakistan, a significant Asian market for Kenyan goods. These exported agricultural goods are also quite diversified, including tea (biggest export to Pakistan), cut flowers, legumes and a large variety of fruits.

Share of each product category in total exports to that country (values		Top Export destination	2nd Export Destination	3rd Export Destination
represent	percentages)	Burkina Faso	South Africa	Тодо
	AGRICULTURE	10.46	0.88	13.41
	CHEMICALS	74.73	0.05	13.32
RS	MINERALS	7.57	5.38	65.71
PRODUCT SECTORS	STONE	0.49	93.38	0.49
SEC	METALS	2.91	0.06	5.54
JCT	VEHICLES	0.22	0.03	0.07
nao	TEXTILES	1.48	0.07	1.26
PR	MACHINERY	1.9	0.12	0.08
	ELECTRONICS	0.23	0.02	0.1
	OTHERS	0.01	0.01	0.02
-	that country as a share of rts to African countries (%)	28.74	28.38	11.39
Export val of USD)	ue to that country (millions	491	484	194

TABLE 4.A – Composition of Ghanaian exports to top three 2017 African trading partners

Source: Author's elaboration using data from the Atlas of Economic Complexity.

Note: The table displays, for Ghana in 2017, the % of each product category as a share of total exports to a trading partner. The two last rows display the % of exports to that country as a share of total exports to African countries, and the total value of exports to that country (in millions of USD), respectively. Tables 4.B and 4.C display the same information for Kenya and Uganda.

TABLE 4.B – Composition of Kenyan exports to top three 2017 African trading partners

total expo	each product category in rts to that country (values	Top Export destination	2nd Export Destination	3rd Export Destination
represent	percentages)	Uganda	Tanzania	Egypt
	AGRICULTURE	31.53	22.61	94.27
	CHEMICALS	23.09	33.13	0.04
RS	MINERALS	18.13	6.87	0.04
PRODUCT SECTORS	STONE	1.45	1.69	0.06
SEC	METALS	11.16	9.48	4.57
DCT	VEHICLES	4.35	5.84	0
IDO	TEXTILES	4.36	6.18	0.93
PR	MACHINERY	4.05	7.05	0.06
	ELECTRONICS	1.86	6.82	0.02
	OTHERS	0.02	0.33	0.01
	that country as a share of rts to African countries (%)	26.32	12.15	11.02
Export valu of USD)	ue to that country (millions	598	276	250

Surprisingly, it is the poorest of the three countries that exhibits higher export diversification to non-African countries: while agricultural goods are varied (coffee, tea, fish fillets, cocoa beans), Uganda also exports gold and electronics. If we look at what it exports to African countries, agriculture clearly dominates. As displayed in Table 4.C, exports from this sector in 2017 represented 98% of total sold products to Sudan, 77% for Kenya and 71% for South Sudan²². For other African markets, such as D.R. of Congo and Rwanda, goods purchased from Uganda are more diversified. Despite agriculture still dominating, its importance relative to other sectors shrinks, as metals, chemicals and minerals take a more prominent role.

total expo	each product category in rts to that country (values	Top Export destination	2nd Export Destination	3rd Export Destination
represent	percentages)	Кепуа	South Sudan	Congo (D.R.)
	AGRICULTURE	77.48	71.2	48.49
	CHEMICALS	1.3	5.6	6.5
RS	MINERALS	8.47	1.78	15.32
PRODUCT SECTORS	STONE	0.25	0.26	0.13
SE	METALS	1.3	3.87	13.7
UCT	VEHICLES	0.74	11.38	5.14
IDO	TEXTILES	1.45	2.95	8.25
PR	MACHINERY	1.9	1.25	2.05
	ELECTRONICS	0.67	1.71	0.4
	OTHERS	6.45	0	0.02
	that country as a share of rts to African countries (%)	36.78	18.78	12.86
Export values of USD)	ue to that country (millions	542	277	190

TABLE 4.C – Composition of Ugandan exports to top three 2017 African trading partners

The fact that Ghana, Kenya and Uganda have been increasingly importing goods from Asian countries could complicate the AfCFTA's objective of interdependence: if African countries can get cheaper manufactured goods from other continents, how are they to increase export diversification towards these higher quality products? This trend seems to have been accelerating in the past decades. For instance, Ghanaian imports from China have increased 67-fold between 1995 and 2017 (from 72 million USD to 4.8 billion USD). Imports for our three case studies from China are very diversified, ranging from industrial & electrical machinery to chemicals, textiles

²² Notable goods from this sector that end up in other African markets include tea, beer, palm oil, sugarcane & sucrose, unmanufactured tobacco, corn and milk, among many others.

and vehicles. Overall, these are goods whose production process creates a lot of value added and generates large export revenues for industrialized countries like China.

If we compare this to what Ghana, Kenya and Uganda import from African countries, it also appears to be less diversified and excluding product categories like heavy and electrical machinery²³. A crucial observation is that only imports from South Africa are very diversified. As displayed in Table 5 below –which shows the share of each imported product category from South Africa in 2017– vehicles, machinery and electronics (in Ghana's case) hold particular importance. What is even more impressive, is that South Africa is the top African import source for Kenya and the second for Ghana and Uganda. The fact that only the most advanced economy in the region can sell these higher quality goods and reach countries that are geographically distant demonstrates how important industrialization is for increased integration.

exports	ach product category in total to South Africa (values percentages)	GHANA	KENYA	UGANDA
	AGRICULTURE	14.51	21.51	11.76
	CHEMICALS	18.85	15.39	15.12
RS	MINERALS	1.75	7.24	3.18
PRODUCT SECTORS	STONE	0.75	0.4	0.4
SEC	METALS	10.37	29.14	34.99
DCT	VEHICLES	19.67	12.61	11.66
ΠΟΟ	TEXTILES	3.91	2.28	2.49
PR	MACHINERY	18.22	8.86	17.94
	ELECTRONICS	11.92	2.39	2.45
	OTHERS	0.05	0.18	0.01
•	om South Africa as a share of rts from African countries (%)	22.07	29.65	22
Import v (millions o	alue from South Africa f USD)	357	666	235

TABLE 4 – Composition of Ghanaian, Kenyan and Ugandan 2017 imports from South Africa

Source: Author's elaboration using data from the Atlas of Economic Complexity.

Note: The table displays –for Ghana, Kenya and Uganda in 2017– the % of each product category as a share of total imports from South Africa. The two last rows display the % of imports from South Africa as a share of total imports from African countries, and the total import value from South Africa (in millions of USD), respectively.

²³ See Appendix 4 for details on country-level imports from top African trading partners.

Until now, we have focused on the composition of trade in goods, leaving services aside. Due to the lack of data on bilateral trade in services, we cannot compare intra-African with extra-African export in services. However, since data on overall country exports of services is available, it is possible to observe the importance of this sector relative to agriculture and manufacturing, and also pinpoint what sub-sectors in services are most present in Ghana, Kenya and Uganda's exports. Figure 9 illustrates, for four years between 1995 and 2017, the share of each service sub-sector – namely travel & tourism, ICT, transport and insurance & finance– as a percentage of total exports, along with the total value above each bar.

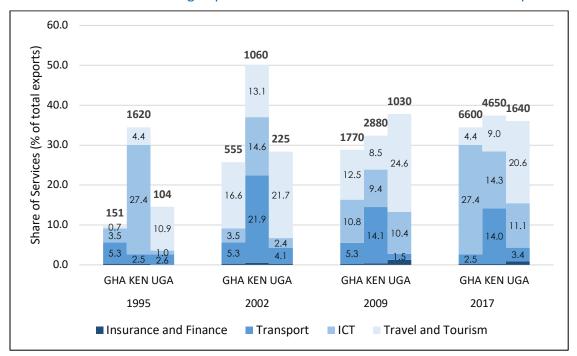


FIGURE 9 – The increasing importance of low-end services in sub-Saharan exports

Source: Author's elaboration using data from Atlas of Economic Complexity *Note*: the figure displays, for Ghana (GHA), Kenya (KEN) and Uganda (UGA), the share of services (% of total exports) for the years 1995, 2002, 2009 and 2017. Values in bold at the top of each bar show the total export value of service exports for that year (in millions of USD). The numbers inside the stacked chart represent the share of each type of service sub-sector, as a % of total exports. The four sub-sectors include Insurance & Finance, Transport, ICT and Travel & Tourism.

Services in Kenya have been an important source of export revenue since the beginning of the period (1.62 billion USD in 1995), with its 50% share of total exports contrasting with Ghana (10%) and Uganda (15%). For the three countries, service exports have become a multi-billion-dollar enterprise, representing more than a third of all export value in 2017. However, this increase has mostly been in low-end services. In other words, services that are characterized by low-paying wages and few possibilities for spillovers in other industries. This is clearly shown in Figure 9,

with services like transport and travel & tourism holding considerable shares, while insurance & finance barely make an appearance. What is interesting is the considerable share that ICTs hold, representing 80% of all exported services for Ghana in 2017 and a third for Kenya and Uganda. Whether this is a low-end service insourced by multinationals to exploit sub-Saharan Africa's lower wages that will lead to a development trap, or it is an invaluable source of knowledge spillovers, foreign direct investment and integration in global supply chains, is something that requires further research²⁴.

Now that we have observed the nature of trade, we need to look at whether these countries have exhibited export diversification during these decades or not. A way of estimating a country's export diversification is to measure the knowledge intensity the products it exports. For instance, studies show that countries with higher income export goods with higher knowledge intensity, meaning that these goods' confection requires specialized machinery with a trained workforce to run them. The Observatory of Economic complexity (Simoes and Hidalgo, 2011) provides us with such an indicator: the Economic Complexity Index (hereafter ECI). There are two advantages in looking at this indicator. First, since an economy's degree of knowledge complexity is determined by the nature of exported products, further export diversification should directly translate into an increase in this variable's value for the economies in question. Second, it has been recognized as being a relevant economic measure in predicting labor productivity and economic growth (Hidalgo and Hausmann, 2009): as the variety and complexity of produced goods increases, the opportunity for spillovers enabling the development of new industries is enhanced.

Figure 10 displays the ECI for Ghana, Kenya and Uganda between 1990 and 2017. The fact that Ghanaian exports to its top three African partners were not diversified in 2017, is reflected in this graph, with its 2017 ECI value being lower than in 1990. This shows how Ghanaian exports to African countries is still mostly comprised of natural resources like gold and petroleum oil. Kenya's case seems to be more successful in diversifying the nature of exported products. This is reflected in Figure 10, with Kenya's ECI increasing in 50% in a couple of decades, despite a rather worrying trend reversal since 2014. With regards to Uganda, the ECI and increasing export diversification is quite impressive, especially given its low levels of GDP per capita (Hausmann *et al*, 2014). Despite a rather decreasing trend in its ECI, it has increased since 2009, allowing it to rank above both Ghana and Kenya.

²⁴ See discussion in Section III.

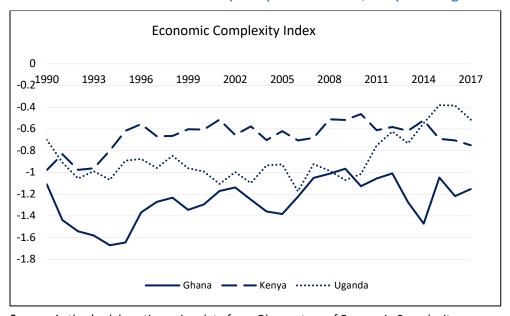


FIGURE 10 – The Economic Complexity Index: Ghana, Kenya and Uganda

Source: Author's elaboration using data from Observatory of Economic Complexity. *Note*: The figure displays, for Ghana, Kenya and Uganda, the Economic Complexity Index between 1990 and 2017. The lower the index, the lower the overall complexity of a country's total exports. An increase in this indicator therefore suggests, albeit not directly signifying, a diversification of the export basket. Since data for Uganda is only available since 2015, we have extrapolated data from the Zambia for values between 1990 and 2017. This country is chosen for two reasons. First, of all the sub-Saharan countries it is the closest to Uganda in the ECI ranking between 2015-2017. Second, GDP and GDP per capita (both in constant 2010 US\$ and taken from World Bank data) correlate at the high levels of 0.99 and 0.94, respectively. This limitation is included in the conclusion of this work.

Overall, trade integration in the African continent has been very unequal for the past 3 decades. While intra-African exports for Kenya and Uganda have, on average, increased throughout the period, it has been declining for Ghana, with most exported goods ending up in Asian markets. When looking at imports, the integration story becomes even bleaker. All three countries import a wide variety of goods from Asian economies, especially China, a potential problem for the AfCFTA's objective of increasing intra-African trade. If specific areas in manufacturing in which African economies will not have to compete with Asian economies are not clearly identified, and productivity not improved, only increasing liberalization may either lead to disappointing results or trade diversion²⁵. Also, if industrialized South Africa is taken out of the equation, heavy industries such as vehicles and machinery disappear from intra-African trade.

²⁵ Trade diversion is a situation in which tariff agreements cause imports to shift from low-cost countries to higher cost countries. It is considered harmful as it does not clearly reflect each economy's comparative advantage, thus not providing the correct incentives for increasing productivity.

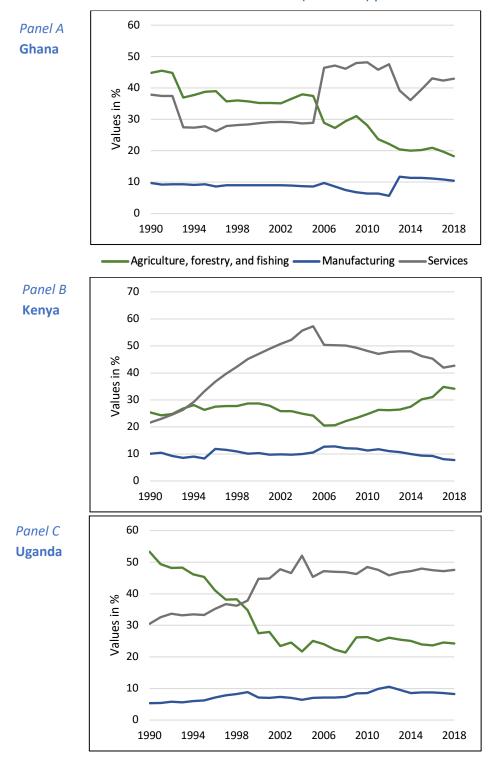
II.II - Structural Transformation

One of the objectives of the African RECs is to develop the manufacturing and industrial sectors of its members, as it is clearly a pre-requisite in diversifying the export basket. A way of increasing this variety of goods, is by relocating factors of production (*e.g.* labor, capital) to sectors that are more productive (*i.e.* manufacturing or services). This reallocation process is known as structural transformation (Fisher, 1939). Due to the small size of domestic markets because of low incomes, the feasibility of crucial development strategies such as structural transformation is limited. In this context, increased economic integration appears as a promising option for driving product demand, as well as more varied goods. In what follows, we analyze whether Ghana, Kenya and Uganda have experienced structural transformation by observing the relative importance of each of the three sectors in GDP and at how the distribution of employment across these three sectors has evolved.

Figure 11 displays for the three countries, value added as a percentage of GDP of the three main production sectors of an economy, namely agriculture, manufacturing and services²⁶. The clear takeaway from the three panels is the considerable importance of the service sector. Here, three different patterns emerge. For Ghana there does not seem to be an increasing trend of the sector throughout the period: the share of services fluctuates between 30% and 50%, registering both considerable dips in 2003 and 2014 and an abrupt surge in 2006. In the case of Kenya, two periods can be discerned: the share of services steadily increased from around 20% in 1990 to 57% in 2006, before decreasing to 43% in 2018. Uganda's service share has steadily increased for the whole period, rising from 30% to 48%. With regards to agriculture, Ghana and Uganda display similarly decreasing trends: despite its value added representing around half of GDP in 1990, in 2018 these values had gone down to a fifth and a quarter, respectively. In contrast to these two countries, Kenya has seen a resurgence of agriculture after reaching its lowest point in 2006, representing around a third of GDP in 2018.

Where the three countries coincide however, is in the small role that manufacturing plays. For the whole period, the share of this sector barely surpasses the 10% level. If we compare this to the overall industrial sector depicted in Figure 12 –which includes manufacturing along with mining, construction and utilities– the value remains small for Kenya, reaching a 20% peak in 2006. Uganda's trend is overall increasing until 2006, where the peak value of 20% is reached before decreasing for the rest of the period. In Ghana's case, the value has not gone below 25% since 2012, attesting to the importance of its mining sector. When putting all of these pieces together it is clear that, if there has been structural transformation during these three decades, it has not been in favor of the manufacturing sector. It would seem that, excluding Kenya, there could have been

²⁶ As expressed in the conclusion, these figures do not account for the informal sector.





Note: The figures display the share of value added (as % of GDP) for each one of the three production sectors, between 1990 and 2018. Panels A, B and C illustrate this for Ghana, Kenya and Uganda, respectively.

Source: WDI from the World Bank.

a reallocation of resources from agriculture to the service sector since 1990. To complete the picture, it is necessary to see what has happened with employment in these sectors throughout the period.



FIGURE 12 – Value added (% of GDP) of Industry (includes construction and mining)

Source: WDI from the World Bank.

Figure 13 displays, for the same period, the distribution of employment along these three sectors²⁷. Once more, the three countries display dissimilar trends. Until 2006, Ghana's distribution of the labor force in the three sectors was relatively stable, with more than half of it in agriculture, followed by 30% in services and 15% in industries. Since then however, one can distinctly observe a dip in agriculture in favor of the service sector, with the former starting a decreasing trend that equaled 30% in 2019 and the latter following an almost symmetrically opposed expansion to reach 49% in that same year. In Uganda, the situation is similar for the whole period, with agriculture, services and industry holding approximately 70%, 20% and 10% of the labor force, respectively. Kenya's situation once more, shows important shifts in trends. Between 1991 and 1999, the share of employment in agriculture and services both display very modest increases of 1.5 and 2 percentage points, respectively. Between 1999 and 2005, however, while agricultural employment increased from 45% to 61%, services reverted its trend. Since that year, trends have reversed for both sectors, with the 6-percentage point decrease in the primary sector having been in favor of the tertiary sector.

²⁷ The World bank does not provide employment data for the manufacturing sector, which is why we look at the industrial sector. Since manufacturing is included in the industrial sector, and the employment share for the industrial one is still low, the conclusion remains the same: there has not been an absorption of the rural labor supply by the manufacturing or industrial sectors.

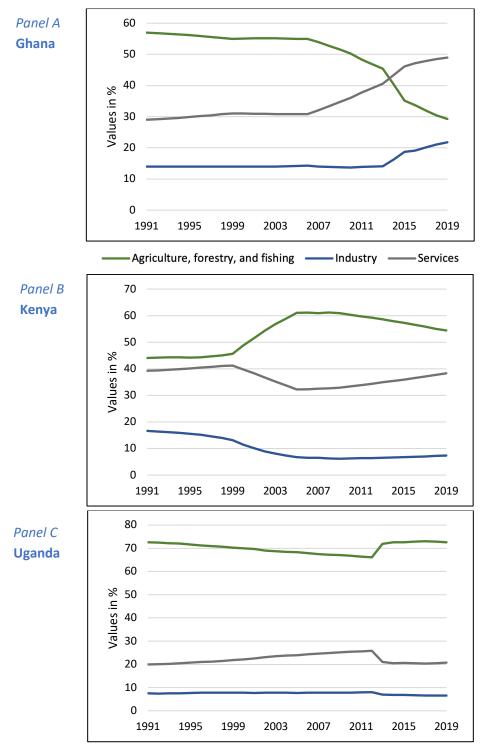


FIGURE 13 – Employment per sector (% of total employment)

Source: WDI from the World Bank.

Note: The figures display the share of sector employment (as % of total employment) for each of the three production sectors, between 1991 and 2019. Panels A, B and C illustrate this for Ghana, Kenya and Uganda, respectively.

What is interesting to see in Kenya's case is that agriculture's value-added share in GDP has increased since 2004 despite a decline in employment. This might point to increasing productivity within the sector, a characteristic of structural transformation: as employment is reallocated to more productive sectors, productivity improvements allow agricultural output to keep on increasing. However, it has been in favor of the service sector and not the manufacturing one, whose output and employment has either decreased or stagnated. This is what Rodrik (2016) calls premature deindustrialization. He stresses the potential dangers of an economy experiencing this, as developing manufacturing capabilities is considered to be a developing economy's best option for sustainable economic growth. For one, building or upgrading agroprocessing facilities enables these economies to export refined agricultural products with higher value added and increased export revenue, rather than export crude goods to be processed elsewhere. Furthermore, this is a way to generate spillovers in other manufacturing sectors, opening up more productive possibilities for the future (Hidalgo and Hausmann, 2009). Finally, it is a sector capable of employing the youth, decreasing unemployment and making economic growth more inclusive, *i.e.* stimulating economic growth whilst reducing poverty and providing a more equal distribution of gains (Andersson & Axelsson, pp.246-247, 2016). Rodrik (2013) has also provided empirical evidence supporting that the manufacturing sector -contrary to economies as a whole- exhibits unconditional convergence in labor productivity 28, meaning that countries starting with initially low levels of labor productivity subsequently experience stronger growth.

With regards to Ghana and Uganda, they do not seem to have started the structural transformation process. While agricultural value added as a share of GDP has been decreasing throughout the period for both countries, the employment share has declined for Ghana and stagnated for Uganda. Like Kenya, the importance of services in GDP relative to other sectors has increased during these decades, to the point where it has been the biggest sector for more than a decade. As Geiger *et al* (2019) explain for Ghana, most of the labor leaving agriculture has been geared towards insulated low-productivity service jobs like wholesale and retail trade. Furthermore, the service sector's contribution to economic growth has not stemmed from productivity increases, but has been due to scale effects, *i.e.* expansion of the sector.

To recap, it would appear that the RECs that these three countries have been members of has not stimulated production diversification nor fomented the structural transformation that these economies drastically need. Kenya's economy has shown signs of premature deindustrialization, as structural transformation (*i.e.* reallocation of labor) has been towards services. In Ghana's case, its growth trajectory can be characterized by discontinuous periods of economic growth with little evidence of structural transformation (McMillan *et al*, 2017). Uganda's surge of services' share in

²⁸ See Appendix 5 for figure.

GDP has not been followed by an increase in employment, showing that this sector is incapable of absorbing large labor masses coming from rural areas. Therefore, even if intra-regional trade has been increasing for some of these countries –Uganda, for instance– the fact that structural transformation and export diversification in exports has been limited, unfortunately provides evidence against one of the AfCFTA's main arguments: that due to the higher composition of manufactured goods in intra-regional trade as compared to extraregional trade, increasing it will lead to stimulation of the manufacturing sector.

Section III – The AfCFTA in sub-Saharan Africa: opportunities and challenges

III.I - Regional Supply Chains in Ghana, Kenya and Uganda

In the current globalized world, the manufacturing of goods tends to be fragmented across borders. In other words, it has become more profitable for firms to outsource tasks to different countries across the globe than produce it in its totality in a single location. This new reality provides novel opportunities for the development of manufacturing facilities in emerging economies, as countries need only develop facilities for the production of intermediate goods (Baldwin, p. 257, 2016). By drastically reducing the costs of production processes, countries can specialize in the production of inputs and increase their participation in global trade. Furthermore, studies tie participation in these supply chains to knowledge spillovers, access to higher-quality inputs, foreign direct investments and upgrading in production processes, consequently increasing competitivity and developing industrial capacity (Gereffi *et al*, 2011; IMF, 2015). By doing so, economies are able to increase export diversification: as manufacturing and processing capacities are stimulated, new goods can be produced and sold in foreign markets. It is for these reasons that RECs like COMESA, EAC and ECOWAS have made efforts in increasing cooperation among member countries, so as to either join existing global supply chains, or create their own regional ones.

Due to the variety of resource endowments present in sub-Saharan Africa and numerous comparative advantages to exploit, continental interdependence via trade is not a farfetched concept. The drastic variation in development levels across the continent does have downsides to wanting to eliminate tariffs but can constitute a plus when coveting the development of regional supply chains²⁹. Countries with higher GDP and more productive facilities like Kenya can find themselves at the center of a good's production, outsourcing tasks to less advanced countries like Uganda. We have seen in Section II that neither of the three countries have shown signs of structural transformation towards manufacturing, with export revenue mostly stemming from lowend services, agricultural products and mined natural resources. For this reason, policymakers and scholars have recommended erecting manufacturing facilities that revolve around these two last sectors, choosing to exploit comparative advantages rather than invest in completely new industries such as electronics or machinery. In what follows, we look into four examples of how RECs have aided (or not) in increasing Ghanaian, Kenyan and Ugandan participation in regional supply chains, each one showing an aspect of what these countries could stand to gain in terms of interdependence and export diversification. Specifically, we look at cocoa for Ghana, textiles and tea in Kenya, tea and petroleum oil in Uganda³⁰.

²⁹ See Section III's discussion.

³⁰ See Appendix 6 for another interesting case: palm oil in Uganda.

Cocoa: Ghana

The ECOWAS region is responsible for 70% of world cocoa production, a crop that substantially contributes to these countries' export revenues (Ofori-Boateng *et al*, 2015). As cocoa is Ghana's top agricultural export, it is of interest to see how this industry has evolved since the 1990s and whether a value chain has emerged around this crop. Since the second half of the 2000s, Ghana's productivity in the production of cocoa beans has considerably increased, surpassing Nigeria's in 2006 and Indonesia's in 2011 (Obasaju *et al*, 2016). Focusing on the impact that platforms placed by ECOWAS has had on intra-regional value chains between Ghana and other member countries, the authors find that ECOWAS has failed to provide the necessary tools for facilitating the solidification of this value chain. Specifically, access to telecommunications and business & regulatory environment have not reached levels needed to strengthen linkages among cocoa beans value chain participants. However, this does not mean that opportunities for regional specialization lack: while Ghana could specialize in cocoa production, Nigeria would handle storage and processing, leaving Benin (for example) to brand and distribute the final product.

In another study analyzing the impact that tariff reduction on intermediate goods has had on ECOWAS members between 2000-2015, Obasaju *et al* (2018) find no statistically significant impact on intra-REC trade. Since intra-REC exports of intermediate goods is expected to be lower with high tariffs, a reduction in these costs should provide incentives that generate the opposite effect (Gonzalez, 2012). This leads the authors to conclude that these are not low enough to stimulate trade in raw materials and intermediate products among member countries. Consequently, ECOWAS has seemingly failed in achieving a level of liberalization strong enough as to stimulate the appearance of regional supply chains. If the AfCFTA is able to tackle this issue and improve on existing ECOWAS platforms,³¹ then essential crops to the region like cocoa could serve as a gateway to building manufacturing facilities and pave the way for further export diversification.

Textiles: Kenya

Although some African countries were visible players in textile exports during the second half of the 20th century, it has generally petered out in favor of Asian countries which have taken ahold of most market opportunities (Baffes, 2009). Kenya, however, still remains an important player in this industry: in 2017, around 4% of exported merchandise were apparel (340 million USD) headed for the USA. At the regional level, both COMESA and EAC are important export destinations for Kenyan apparel –especially Uganda, Tanzania and Sudan– as their purchases equal more than half

³¹ Organisms that ECOWAS has created for providing funds for essential crops and increasing productivity include the ECOWAS Agricultural Policy, the ECOWAS Bank for Investment and Development and the ECOWAS Trade Liberalization Scheme.

what is sent to the USA (Ikiara and Ndirangu, pp. 49-50, 2003). Due to the history of textile production in SSA, and current Kenyan manufacturing capacity, this industry could seem like a profitable prospect for developing regional supply chains.

However, there are problems that can complicate the proliferation of African supply chains: in all three EAC countries that export textiles (Kenya, Uganda and Rwanda) the most productive and capital-intensive textile facilities are foreign owned³². This poses a problem with the AfCFTA's rules of origin clause, as it will have to consider whether these goods, produced by foreign firms in African countries, will have to face tariffs in intra-African trade or not. A second problem refers to the lack of African countries' bargaining power when negotiating with more powerful nations. In 2016, the EAC planned to increase tariffs on imports of used clothing from the USA, arguing that it would spur local industry in garment production. Merely months after doing so however, the USA threatened to start a trade war, causing Kenya and Uganda to return tariffs to previous levels (Wolff, 2020). In this context, a continental-level integration as proposed by the AfCFTA could provide African producers with a domestic market large enough to offset sales to the USA, increasing bargaining power with foreign nations and potentially enabling the appearance of apparel supply chains.

Tea: Kenya and Uganda

Tea growing is conceived as a promising strategy to decrease poverty by providing employment possibilities to people in rural areas: in 2010 for Uganda, the sector employed sixty thousand farmers and was a source of indirect income for half a million people (BoU, 2011). As any crop however, without quality improvements or research on new products, value-addition remains limited³³. Therefore, it is essential to continuously develop the industry by finding more efficient farming practices, creating branding and exploring new tea varieties. Since a tea supply chain is already in place between Kenya and Uganda, we use this example to look at an essential form of regional collaboration in supply chains: knowledge sharing. The Tea Research Institute of East Africa (hereafter TRIEA), created in 1951 to provide Kenya with tea research, was crucial in placing this country at the forefront of world tea production (Munyambonera *et al*, 2014)³⁴. At the end of the 1950s, TRIEA's range was extended to neighboring countries Tanzania and Uganda, in the aim of propagating knowledge on this crop in the East African region. Financed via levies on

³² In Kenya specifically, the textile manufacturers are mainly Asian owned.

³³ Even if the tea export value increased from 50 million USD in 2006 to 71 million USD in 2017, its export share actually declined in more than 30 percentage points.

³⁴ When the EAC collapsed in 1977, it stripped Uganda and Tanzania of TRIEA derived knowledge, isolating them from much-needed research on tea. Idi Amin's dictatorship in Uganda (1971-1979) was the final nail in the coffin marking this community's demise, reducing to rubble what had been until then the posterchild of African integration (Mugomba, 1978).

tea profits for the three EAC countries, the institute was a successful example of increased regional cooperation, providing cross-border knowledge spillovers (Kangasniemi, p. 90, 2002).

When analyzing tea production across EAC countries, disparities in efficiency and management are observed. For instance, Ugandan processing facilities are unevenly distributed across the country, making it complicated and costly to access for certain growing areas. The country also lacks a clear and centralized regulatory framework tasked with spreading key information, coordinating actions along the supply chain and regulating competition. With regards to productivity, Uganda only uses 10% of 200,000 hectares of arable land with optimal conditions for tea production (Munyambonera *et al*, 2014). On the other hand, Kenya has made considerable improvements in production, processing, packaging and branding. Kenyan tea is mostly produced by organized smallholder farmers, which are supported by strong institutions like the Tea Board of Kenya and the Kenya Tea Development Authority that present them with key information on technology and farming practices (Adong, 2014) (Amde *et al*, 2009). Vast improvements in the quality of the crop also distinguish Kenya from Uganda and Tanzania, as farmers have been experimenting with new forms of tea (*e.g.* green tea and tea extracts) and planting high yielding clonal types of tea³⁵ (Mwaura and Muku, 2008).

What about the roles that each country should play in this regional value chain? Contrary to Uganda and Tanzania, Kenya complies with international sanitary standards along the supply chain, and its tea is considered a high-quality product across the globe. Thus, Kenya can now participate in more supply chains and benefit from access to higher-quality inputs and the assimilation of more efficient techniques that can enhance their competitivity (Farole and Winkler, p. 167, 2014). Along with better articulated institutions and proven branding capacity, this makes Kenya the best suited candidate for leading the supply chain. The fact that Kenya exports more tea than the other countries is however also because it mixes some of its tea with raw Tanzanian and Ugandan blends, branding and re-exporting it as Kenyan tea (Munyambonera et al, 2014). If the AfCFTA aims to improve regional value chains in crops essential for export revenue and employment like tea, then it must make efforts in stimulating cooperation among these countries, rather than letting Kenya reap most of the profits. The cross-border TRIEA experience showed that regional collaboration and exploitation of each countries' resources is possible: if stronger revenues are obtained due to more efficient farming practices, then pooled financing at the regional level could create economies of scale. By working together and setting clear specialization in the production of different types of teas and derived products, Kenya, Uganda and Tanzania could sell their products at a higher price in foreign markets, ameliorating their prospects for sustainable economic growth.

³⁵ Clonal tea refers to leaves being harvested from very specific cultivars, leading to increased quality in the product.

Petroleum oil: Uganda

Much like agribusiness and textiles, petroleum oil is a very promising sector for spurring industrialization and higher value-addition for the African continent. Between 2008 and 2013, Ghana and Uganda received 6.3 and 7.4 billion USD in FDI in the energy sector (*e.g.* oil, gas), respectively (World Bank, 2014). Scholars have argued that further development of this sector could be a way to initiate the process of structural transformation: by stimulating natural resource-based industrialization, export baskets will be diversified, facilitating the establishment of regional value chains. Since many countries in Africa dispose of petroleum oils, a volatile yet enormous source of income, this last part is dedicated to why developing this sector in a rural country like Uganda could help diversify the export basket in the long-term.

Due to the recent discovery of considerable oil reserves, Uganda is slated to enter an oil boom in the near future. Despite the high revenues that oil exports could generate, there are numerous experiences, accompanied by a plethora of literature, that provide evidence for dangers that this could bring on an economy. An oil boom could lead to a Dutch Disease³⁶, inefficient specialization in oil, corruption and political instability due to rent-seeking. However, if well managed, oil revenues may be a great source of income that could promote a sustainable diversification strategy. When considering which is the best path for Uganda to follow in the diversification of its export basket, Hausmann et al (2014) consider the tradeoff between creating more jobs and creating better jobs; while the former would absorb the large and young labor force coming from rural areas, the latter would increase real wages and value addition. The strategy of emphasizing efforts on industries in the more immediate current set of capabilities is dubbed parsimonious transformation, while targeting investments in more sophisticated industries is named strategic bet. The former includes focusing efforts in agrochemicals and food processing, while the latter consists in more complex industries that will be in great demand in the context of an oil boom, such as construction materials and transportation services. This second option, however, consists in producing goods that are expensive to export, particularly for a landlocked country such as Uganda, making trade costs a considerable hurdle. Exporting these goods might only be possible if the foreign markets are geographically close, like East African countries for instance.

By decreasing tariffs on traded goods, the AfCFTA's policies will result in a decrease in trade costs, making African markets more accessible. If the AfCFTA also facilitates private-public partnerships tasked with building industries, governments could focus on solving other bottlenecks to trade that require massive investments and coordination at the national level. Uganda could use the additional oil revenues to improve roads, water and power supply, access to capital and

 $^{^{36}}$ The 'Dutch disease' is a situation in which significant revenues and investment due to a natural-resource boom leads to an appreciation in the local currency with respect to other ones (negatively impacting competitiveness) and a decline in the other sectors of an economy (*e.g.* agriculture or manufacturing).

imported inputs for instance; overall, investments that increase the tradable sector's productivity and intra-African trade.

All things considered, we have seen that the vast variety of natural endowments and agricultural products that Ghana, Kenya and Uganda possess, provides them with many possibilities for interdependence and development of regional supply chains. While these can be articulated around agrarian products like cocoa for Ghana or tea for Uganda and Kenya, they can also materialize in petroleum oils. If efforts in developing these supply chains and enhancing both the scale and productivity of these nascent industries are successful at the regional level, it will open the door for further cooperation at the continental scale. By enabling economies of scale, knowledge sharing and stimulating specialization in intermediate input production, profitable businesses that provide employment and higher wages will be more likely to emerge, and economic growth to ensue. If the AfCFTA designs a clear set of rules of origin that strikes a balance between incentivizing indigenous production capabilities whilst allowing the use of non-African cheap intermediate inputs to kickstart this process, it might be able to achieve what RECs like COMESA, EAC and ECOWAS have started: increasing both the quantity and quality of intra-regional trade.

III.II - Discussion: Challenges and bottlenecks

The objective of this last section is to provide a discussion and final reflection on what we think are some of the main concerns going forward for regional integration in sub-Saharan Africa. Based on what has been seen with regards to export diversification, intra-regional trade and prospects for sustainable economic growth throughout this work, we identify four big issues that the implementors of the AfCFTA should bear in mind for the future. We first examine how the differing dependence on tariff revenue of African countries could impact the AfCFTA's plan of eliminating 90% of tariffs on traded goods among African countries: as government revenue from tariff removal will decrease, short-term losses from liberalization are to be expected. The second issue refers to how the multiple memberships in RECs and bilateral trade agreements with non-African nations could affect the scope and effectiveness of continental integration. We next ask ourselves how the increased relevance of Asian markets could poise challenges to increasing intra-regional trade. Finally, we tackle the continental-wide trend of increased importance of the service sector in detriment of the manufacturing sector, and if this could steer African economies towards a development trap or not.

Different level of dependence on tariff revenues

African governments' dependence on tariff revenue significantly differs across the continent, with poorer countries relying more on this income than their richer counterparts. Although tariff removal has been associated with economic growth and increases in real wages (Mevel and Karingi, 2012), these benefits can take years to materialize. The costs of liberalizing (*i.e.* loss of tariff income) however, appear immediately after tariff removal comes into force. Thus, the costs of these integration projects are constantly on policymakers' minds, namely how their economy is to be affected by decreased revenue from tariffs, how open borders could impact their domestic firms' competitiveness or whether some members are slated to gain more from the agreement than others. Although African integration efforts are regional, the assessment of 'benefits versus losses' remains an issue unique to each nation.

One of the biggest concerns characterizing this debate, is how the decline in government revenue will affect national development policies. In the case of Uganda for instance, Hausmann *et al* (2014) recommend the government to prioritize investments in infrastructure to ensure sustainable economic growth, something that might be considerably slowed down if national revenues decline. Furthermore, this income loss would be incurred by countries characterized by low domestic tax revenues due to some of the highest rates of informality in the world (Karamuriro, 2015). Additionally, due to the consequent pressure that this would exert on the balance of payments, the more fragile African economies would be more exposed by economic liberalization (Jebuni, 1997).

Following this line of thought, some empirical studies have also analyzed whether regional integration in the long-term help countries equally, or whether some gain more than others. Estimating the effect of the EAC, SADC and COMESA implementation on economic growth, Kamau (2010) finds that the poorer countries have been falling behind. Using panel data for countries in the COMESA region from 1980 to 2002, Carmignani (2006) also provides evidence for unequal gains stemming from regional integration, with the lowest per capita income countries falling behind. Even if the AfCFTA's architects argue that their initiative of continental integration will stimulate industrial capacity and export diversification, if it will lead to poorer countries being exploited by other African nations and lag in economic growth, its sustainability in the long run is doubtful. For this reason, some of the mechanisms put in place by the AfCFTA include countryspecific schedules of progressive liberalization that can span over a decade; the possibility of more exposed economies to select some nationally produced goods (considered vital for that economy) that are to be exempted from tariff removal; and rules of origin to further enhance participation of domestic producers rather than foreign-owned companies that could exploit national resources. All in all, it is a lot of moving parts subject to country-specific conditions, in a continent already troubled by many forms of uncertainty.

The "Spaghetti Bowl" problem

The African continent is no newcomer when it comes to the establishment of RECs. All of these regional communities differ with respect to many aspects, ranging from membership size to implemented mechanisms like customs unions, common currencies and preferential tariffs. The existence of numerous RECs has led most African countries to be members of more than one, in some cases reaching even three (see Figure 14 below). To characterize this overlap in REC membership, Bhagwati (1995) came up with the term "Spaghetti bowl", referring to the entanglement of interests and mechanisms of each community. The fact that countries belong to several RECs provide African national leaders with more leverage with respect to shaping future integration efforts towards their interests, and also weaken their full commitment to a particular one (Buor, 2019).

One of the ways in which regional integration can negatively impact continental integration is, by definition, by excluding other African countries when enacting their policies. An example of this is the West African Monetary Zone (WAMZ) initiative of creating a common currency, the *Eco*, for its members. Although this could facilitate transactions between member countries by working in the same currency, certain policies that could be beneficial for them –such as devaluating their currency to increase export competitiveness– could be at the cost of making exports relatively more expensive for other non-member African countries.

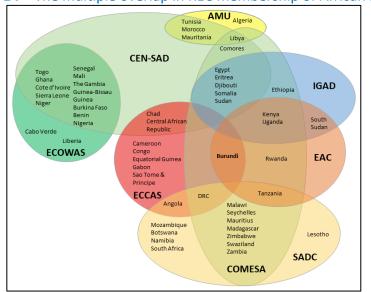


FIGURE 14 – The multiple overlap in REC membership of African nations

Source: Capon (2020).

Note: The figure shows the membership of every African country to the eight RECs recognized by the African Union, namely AMU, CEN-SAD, COMESA, EAC, ECCAS, ECOWAS, IGAD and SADC.

Another problem refers simply to the feasibility of uniting various already existing communities under a single liberalization scheme. Although the AfCFTA is the first attempt to achieve complete African integration, it is not the first one to try to merge RECs. The Tripartite Free Trade Area (TFTA), in talks since 2010 and signed in 2015, aims to harmonize and unite COMESA, EAC and SADC. Until today however, it has yet to enter into force, with progress being slow. The fact that negotiations for the TFTA are still very much ongoing, and that it has been hard to reach consensus among three out of eight RECs begs the following questions: is it possible to implement the TFTA with the enactment date of the AfCFTA nearing, or will it lead to an even larger spaghetti bowl? Or, is it possible to continue with the AfCFTA without having these three very large RECs successfully reach consensus in what has now become more than a decade of negotiations?

The issues mentioned above are merely a part of the spaghetti bowl problem, as we have only mentioned issues within the African continent. What about engagements of African countries with non-African countries? Ghana for instance, has an Economic Partnership Agreement with the EU that was supposed to start the liberalization process in 2020. This deal would provide European countries with duty-free access to the totality of Ghana's exports and will partially liberalise Ghanaian imports from the EU. The latter could lead to complications when it comes to increasing the diversity of intra-regional trade, as it would expose African countries to increased competitiveness from European firms. Farole and Winkler (2014) have also expressed worry at the increasing presence of non-African firms in Ghana and Kenya, whose massive investments in agribusiness facilities have been with the objective to access European and Asian markets, rather than African ones. For the overflowing wave of optimism that the AfCFTA designers are currently riding to materialize in a successful attempt at continental integration, rather than crumble under the weight of lost legitimacy, it is essential that it clearly state why it is irreplaceable and complementary to RECs rather than just being another 'spaghetti'.

Asian competitiveness: the importance of China

For the AfCFTA to reach its goal of increasing intra-regional trade as a whole, it also has to stimulate increases in imports stemming from other African countries. As seen in Section II however, the increasing importance of Asian markets in the purchase of a wide variety of manufactured goods, might pose a problem with regards to achieving this goal. Why should African countries purchase more expensive manufactured goods from other African countries, if they can get it cheaper from other markets? In the case of Uganda for example, not only did total imports from Africa represent a low 20% in 2017 –with Asia holding a staggering 61.9%– it has been decreasing since 1995. Competing with Asian firms will prove to be an arduous task, as the nature of imported products significantly varies with each country. Imports from India and Japan display clear specialization paths costly to replicate: 50% of imports from India are chemicals (half

are medicaments) and Japanese products tend to be heavy industry (*e.g.* flat-rolled iron, construction and transport vehicles).

The biggest threat to increased intra-regional and diversified trade, however, is China. When looking at what Uganda imports from this country, we can see that it is very diversified, making exploitable opportunities harder to be found. In 2017, 39% of imports were electronics, 18% were textiles and tied at 12% were machinery and chemicals. Faced with these options, it might be hard to believe that lowering trade costs between African countries will be enough to increase the diversity of Ugandan imports from its continent. The importance of China in this regard can also be felt when looking at the amount of FDI directed towards African countries. This is particularly noticeable for Ghana, which has seen an increase in FDI net inflows as a percentage of GDP from 1.5% of in 2005, to 9.5% in 2008 (World Bank, 2014). Along with the unprecedented investment scale of the Chinese "Belt and Road Initiative", which includes infrastructure development in more than sixty countries, African countries will likely increase their dependence on Chinese imports and maybe even intensify exports towards them. In this context, it is crucial for the AfCFTA to consider how it could either circumvent this potential threat to increased integration or use it to its advantage. For instance, by achieving continental integration and negotiating with China as a unified continent rather than each country individually, bargaining power would be stronger. Consequently, instead of becoming China's source of cheap labor and natural resources, African countries could have more to gain in terms of knowledge spillovers, network creation and technological transfers.

The increasing importance of services: towards a development trap?

We have seen the increasing importance of the service sector in export revenues for Ghana, Kenya and Uganda. This trend is not something solely reserved for these three countries however, as a general pattern would seem to emerge across SSA as a whole. While East Asian countries' pattern of structural transformation consisted in the reallocation of inputs from the traditional agricultural sector to the more productive manufacturing sector, SSA countries have instead been shifting resources to the service sector (Bhorat *et al*, 2017). As stressed, there has been growing concern with regards to this premature deindustrialization. For one, these countries miss the immense employment possibilities and higher real wages that the manufacturing sector provided for the East Asian economies. The reason as to why this process has been identified as crucial for developing countries, is that rising wages spur the emergence of a middle class and consolidate domestic markets by increasing demand for an increasing variety of goods. Secondly, the increased relevance of the tertiary sector has not been in high-end services but rather in low-paying and insulated ones. These jobs are characterized by stagnating productivity levels and little possibility for forward linkages (*i.e.* when investments in a particular project leads to investments in

subsequent stages of production), limiting the possibilities of scale economies and labor absorption. The fact that these jobs are not able to absorb large quantities of rural workers once agricultural productivity is attained is troubling for countries like Uganda which have very high dependency ratios, *i.e.* ratio of non-working age population to working age population (Hausmann *et al*, 2014). These realities have led scholars to predict African countries to be heading towards a development trap.

However, we think that the discussion surrounding this issue of development trap versus sustainable economic growth does not delve into enough detail. More attention should be paid to the potential connections that these service jobs could provide between African workers and the firms that they work for. Are these services poised to increase network creation between African workers and international firms, or not? Could these initially low-end and low-paying service jobs with little possibility of spillover in other sectors, potentially lead to higher responsibility delegation and rises in global value chains? The relevance of this sector does not have to be a substitute to industrial policy stimulating the manufacturing sector, but rather a complementary strategy. While the manufacturing sector would be better suited to accommodate the more immediate issues such as high unemployment and low export diversification, the preservation of these low-end services could in the long run lead to business opportunities.

A potentially important factor in determining this would be the evolution of the quality of the service jobs that African countries undertake and the conditions that they impose on international firms. In this respect, further regional integration could lead to higher attractiveness for foreign firms and continental liberalization could signal further enhancements in competitiveness. In sum, if all efforts are concentrated in merely enhancing the scale of services without attempting to improve job quality in the sector, leaving the development of the manufacturing sector aside, then all arrows would point towards a development trap. If, however, careful planning is undergone to increase African participation in more high-end service provision and create networks that spur exchanges between African workers and these multinationals, whilst simultaneously developing industrial capacity to handle the more immediate issues, it could lead to sustainable economic growth. It would seem that where it all depends is on whether national governments and regional communities treat these two options as substitutes or complements.

Conclusion

Final remarks and Policy implications

Conclusion and answer to research question

The aim of this work was to answer the following question: what do sub-Saharan African countries stand to gain with respect to export diversification, from increasing intra-regional trade? Since intra-African trade is comprised of higher quality goods and consists in a more diversified export basket than goods traded with non-African countries, and higher values of the latter are associated to industrialization and sustainable economic growth, African countries stand to increase export diversification by enhancing intra-African trade. To do so, the AU has decided to tackle one of the most important determinants explaining international trade flows: trading costs. Specifically, it has implemented regional economic communities tasked with reducing trade costs by eliminating tariffs on traded goods among member countries. These efforts are all part of the Agenda 2063, in which the next step is to harmonize regional mechanisms and strengthen the trade bloc via the AfCFTA.

It would not be possible to provide a complete answer to the research question without considering the two sub-questions looked at in this work. We have asked ourselves whether a) African economies had shown signs of export diversification after having joined the RECs, and b) under what conditions could increases in intra-regional trade lead to sustainable economic growth. To answer these questions, we have taken a historical and qualitative approach in which we analyzed three countries (Ghana, Kenya and Uganda) and three RECs (COMESA, EAC and ECOWAS). We first observed that the results of increasing intra-REC trade have been mixed: it has on average increased for COMESA, stagnated for the EAC and declined for ECOWAS. We have used the Economic Complexity Index, that estimates the quality of a country's production capabilities based on what it exports and found that Kenya had been more successful than Ghana in increasing the quality of exported goods, with Uganda ranking higher than predicted for its GDP per capita value. We have also seen that structural transformation, the process of reallocating production inputs that signals future export diversification, has not begun for neither of the three countries. Actually, it is low-end services that have most increased in relative importance. Both of these findings show that RECs do not seem to have been particularly successful in increasing export diversification nor stimulating the structural transformation that these economies require to export higher quality goods in the future.

Intra-regional trade can lead to sustainable economic growth if it foments the building of production capabilities needed to export goods with higher value added, access the benefits of industrial production (*e.g.* economies of scale, knowledge spillovers) and provide quality jobs. Unfortunately, this does not seem to be the case for Ghana, Kenya and Uganda, even a couple of

decades after the entering into force of RECs. However, this does not mean that there has not been increased cooperation and projects among members. It is for this reason that we have also provided some of these examples and diversification opportunities when looking at regional supply chains for several products. Taking the cases of cocoa, textiles, tea, and petroleum oil, we have seen that cooperation among members has emerged, but not without complications: RECs have facilitated intermediate input sourcing from fellow African countries but not enough for it to make an impact; regional research programs for crop development have materialized but have generally been unstable or unfair; and cooperation for common tariffs being imposed on imported textiles from non-African countries have occurred, but haven't lasted long.

All in all, although RECs have started the integration process, they have stumbled in many ways. The AU should consider harmonizing and maintaining the currently established institutions rather than add new elements. It is only through transparency and better organization that the continent will be able to increase both intra-African trade and export diversification. The way in which the AU goes forward with the AfCFTA will have important ramifications on future economic growth. Higher economic growth could be reached by upgrading and exploiting current comparative advantages, generating more value addition and increasing export revenue. Sustainable economic growth could be realized by diversifying the export basket, leading to more predictable export revenues that are less prone to price shocks. Inclusive economic growth could be obtained if export quality increases and includes manufactured products, as the creation of better jobs would lead to higher wages and economic spillovers within and across industries. In what follows, we present some policy ideas in line with these concerns.

Policy implications

If one thing is clear, is that to diversify exports it is necessary for the AfCFTA and currently existing RECs to plan some form of regional-level industrialization. By establishing clear rules of origin and harmonizing customs unions across the board, African countries could determine *who* produces *what*. If regional supply chain coordination is established from the get-go, then targeted industrialization could be more beneficial, as countries would specialize in a stage of a good's production rather than its totality. Furthermore, the increase in services should not be at the expense of the manufacturing sector. Although some countries (*e.g.* India) have developed a large service sector capable of generating economic growth, this could become a development trap. Prioritizing manufacturing capabilities for agrarian processing for instance could open the door for future opportunities in the sector.

The AfCFTA should also act as a continental coordinator for supranational projects. One of the main issues when attempting to increase intra-regional trade has not been the lack of initiatives,

but rather how inefficient they have been: transport costs remain high and tariff reduction schedules are seldom respected. To address this issue, Kamau (2010) proposes that a "proper monitoring mechanism, perhaps similar to the European Union's Single Market Scoreboard" be adopted. Improvements in transparency and visibility would facilitate planning and progress assessment, facilitating the completion of long-term projects. Another issue that requires regional cooperation is the fight against corruption. By installing joint border posts and reinforcing efforts to reduce corruption by border officials, trade would be cheaper, more efficient and formal. A third issue in which continental coordination should be involved is people's mobility. Since progress has been very irregular across RECs, the AfCFTA should carefully review what has and hasn't worked. Facilitating labor mobility across borders would have positive effects on integration: if laborers work in different African countries it could lead to network creation and regional supply chains, as well as human capital accumulation for the continent as a whole.

An issue that could not be tackled in this work, but whose importance remains central when determining international trade flows, is infrastructure. In this regard, the AU should concentrate financing in intra-regional projects, so as to further decrease trade costs. The African continent is known for being the continent that most lacks infrastructure capable of overcoming tough terrain (UNCTAD, pp. 42-43, 2018). Numerous studies state how this affects intra-African trade flows: while Efobi and Osabuohien (2016) find that ECOWAS members' manufacturing exports and competitiveness are negatively impacted by poor infrastructure, Akpan (2014) estimates a 4.97% increase in intra-ECOWAS trade if roads' quality were improved to South African standards. This issue is particularly relevant for landlocked economies like Uganda. For instance, Kamau (2010) finds that being landlocked has a negative and statistically significant impact on economic growth for African countries in COMESA, SADC and EAC³⁷. Nonetheless, when including indicators of economic integration (establishment of RECs) and trade openness (lowering of tariffs), the landlocked effect becomes insignificant, suggesting that its negative effect on economic growth is diminished when regional integration is amplified³⁸.

Limitations of this study and further research

Limitations of this study

Like any economic study, there are limitations to this work. Whether it is complications that were encountered or issues that weren't addressed, it is important to specify what these were. With regards to the latter, we only studied three countries out of 54 that signed the AfCFTA, as well as

³⁷ The Southern African Development Community (SADC) is one of the eight RECs recognized by the African Union. Created in 1992, it is comprised of 16 member countries including Angola, Botswana and South Africa to name a few.

³⁸ For an example on a REC infrastructure project, see Appendix 7 where we look at the ECOWAS rail.

three African RECs. Although country selection was done to increase external validity, the conclusions should serve as insight on some of the main challenges that RECs have encountered when attempting to achieve their objectives, and how the AU should proceed. Furthermore, this work touches on only some cases on regional collaboration. Although a country-specific analysis would deliver a more thorough understanding of an economy, it would not have allowed for a continent-wide reflection on the developments of intra-African trade. In addition, we do not provide any causality between the variables discussed, but rather try to find trends through time.

With regards to data, there have been shortcomings. When looking at the ECI, because data for Uganda is only available since 2015, values for 1990-2014 are extrapolated from the Zambia. Although it is the best possible option given correlation calculations with regards to GDP and GDP per capita it remains an approximation. It is also important to mention the very probable underestimation of intra-regional trade values, due to the high levels of informality in African countries. Therefore, intra-REC trade might have increased more throughout the period if informal activities were to be included.

Further research

As closing remarks, there are various areas that require further research to better understand the current state (and future) of African trade. First, with regards to how increasing intra-African trade would stimulate export diversification. Since the value of intra-regional exports is much smaller than that of exports to other continents (about 4 times smaller), it might be possible that the difference in manufactured goods as a share of total exports be a scale effect. In other words, it might be easier to achieve more equal agriculture-to-manufactured ratios at lower values of trade than higher ones. It could also be that the high share of traded manufactured goods among African countries is due to a couple of higher income developing economies exporting most of them.

Another area that requires further data collection is the nature of service exports and its long-term implications on economic growth. In 2017 for instance, the value was 15% for Zimbabwe, 23% for Sudan, 30% for Cameroon, 35% for Ghana, 36% for Uganda, 42% for Kenya and Tanzania and 62% for Ethiopia. However, this data is misleading. For example, exports in "ICT services" could, at first glance, indicate that these countries have achieved a high enough level of human capital in this sector to have a service-led economic growth, capable of absorbing large masses of unemployed youth from rural areas. Unfortunately, major data sources such as the World Bank Database or the Atlas of Economic Complexity do not offer a high level of disaggregation on what these services consist of. It is improbable that countries like Ghana, whose share in total exports of electronics and machinery do not even reach 0.5%, could have managed to acquire the knowhow to export high-valued ICT services to the rest of the world. Provision of data in the trade of

intermediate goods has drastically been enriched in recent years –like the WIOD database (Timmer *et al*, 2015) and the OECD WIOTs³⁹– but since international trade in services is more complicated to capture, data is still lacking.

Since integration efforts have accelerated during the 1990s, a lot has been occurring in the African continent. With the AfCFTA's planned implementation in July 2020, this decade is bound to be instrumental in determining whether Africa can strengthen its trade block or not. Although eliminating trade tariffs cannot hurt intra-regional trade, it does not mean that it will automatically increase it. Complementary policies fomenting structural transformation, improvements in trade-related infrastructure and facilitation of regional supply chain formation should accompany trade liberalization to enhance its effect. Although the success in increasing intra-regional trade might be uncertain, one thing is clear: it would be wise to closely follow developments in African economic integration during the following years.

³⁹ OECD World Input-Output Tables.

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APPENDIX

A.1 – The comparative advantage theory and the structuralist approach

To understand why policymakers and scholars today recommend developing countries to diversify their export basket, it is useful to provide some theoretical background on the debates which have led to this assessment. One of the most renowned theories in the field of international trade is the concept of comparative advantage. Introduced by David Ricardo in the early 19th century, it stipulates that production specialization in goods in which an economy holds the relative advantage in input factors (e.g. labor and capital) leads to higher levels of well-being. Said differently, an economy will be better off by specializing in the production of a particular set of goods and exchanging them in a free market for others, than producing all goods under autarky. What determines which economy produces what, is the cost of opportunity that each country has in producing said goods⁴⁰.

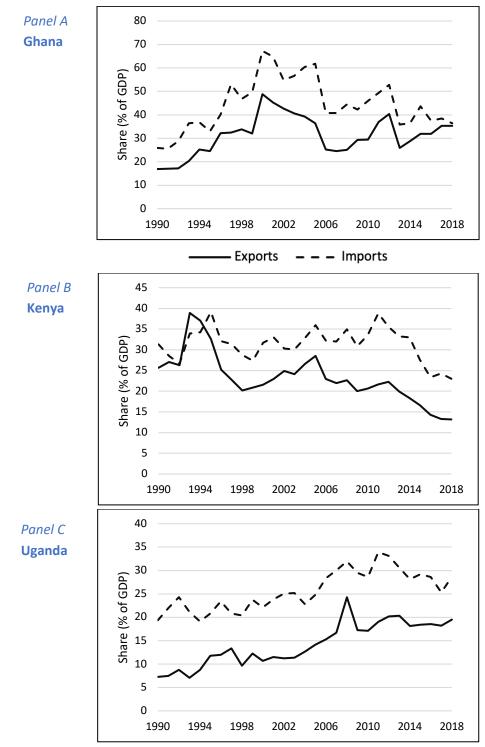
By proving that free trade and production specialization is in every nation's interest, no matter the initial endowments of each economy, David Ricardo unknowingly provided a sound theoretical backbone to any effort aimed at liberalizing trade. However, between the 1930s and 1950s, the structuralist branch in economics stated that this had led developing countries to specialize in agricultural products in detriment of developing a manufacturing sector, generating stronger income disparities between the labor-intensive south and the capital-intensive north (see Prebisch and Cabañas, 1949; Singer, 1950; Furtado, 1970). It is important to state that these economists did not disagree with the comparative advantage theory but claimed that for developing countries to fully gain from this specialization, some form of industrialization and export diversification was necessary. They argued that specialization in primary products could only lead to higher valueadded creation and knowledge accumulation if manufacturing facilities were erected. This led many developing countries all around the globe to opt for import substitution industrialization (ISI) policies, more akin to autarkic policies than free trade and specialization⁴¹.

⁴⁰ As an example to better grasp the meaning of this idea, let us imagine a scenario of a capital-abundant country like the U.S.A., a labor-abundant country like Nigeria, and the possibility to produce both a capital-intensive good like computers and a labor-intensive good like corn. Suppose now that the U.S.A. were to specialize in only producing computers whilst Nigeria did the same for corn, rather than both countries producing both goods separately. Under this scenario, for both countries to dispose of computers and corn, Nigeria would need to export corn to the U.S.A. and purchase computers from the latter, while the U.S.A would be inclined to do the opposite, *i.e.* sell computers to Nigeria and import corn. The comparative advantage theorem implies that both the USA and Nigeria would be better off by specializing and trading than producing both goods under autarky. ⁴¹ Structuralist economists like Raúl Prebisch and Celso Furtado pushed for ISI policies as a means to initiate the

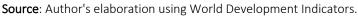
industrialization process, and not to close borders on trade.

A.2 – African country abbreviations

Country Abbreviation	Country		
AGO	Angola		
BEN	Benin		
BFA	Burkina Faso		
BWA	Botswana		
CAF	Central African Republic		
CIV	Ivory Coast		
CMR	Cameroon		
COD	Democratic Republic of Congo		
CPV	Cabo Verde		
DZA	Algeria		
EGY	Egypt		
ETH	Ethiopia		
GAB	Gabon		
GHA	Ghana		
GIN	Guinea		
GMB	Gambia		
GNB	Guinea-Bissau		
GNQ	Equatorial Guinea		
KEN	Kenya		
LBR	Liberia		
MAR	Morocco		
MDG	Madagascar		
MLI	Mali		
MOZ	Mozambique		
MRT	Mauritania		
MUS	Mauritius		
MWI	Malawi		
NER	Niger		
NGA	Nigeria		
RWA	Rwanda		
SEN	Senegal		
SLE	Sierra Leone		
SYC	Seychelles		
TCD	Chad		
TGO	Togo		
TUN	Tunisia		
TZA	United Republic of Tanzania		
UGA	Uganda		
ZAF	South Africa		
ZMB	Zambia		
ZWE	Zimbabwe		



A.3 – Exports and imports (% of gdp) of goods and services: 1995-2017



Note: Straight lines represent exports of goods and services (% of GDP) and dotted lines illustrate imports of goods and services (% of GDP). Panels A, B and C illustrate this for Ghana, Kenya and Uganda, respectively.

A.4 – Top three African import sources in 2017 for Ghana, Kenya and Uganda

Share of each product category in total imports from that country (values represent percentages)		Top Import Source	2nd Import Source	3rd Import Source
		lvory Coast	South Africa	Nigeria
	AGRICULTURE	17.19	14.51	27.63
PRODUCT SECTORS	CHEMICALS	42.66	18.85	7.35
	MINERALS	19.7	1.75	51.65
	STONE	0.11	0.75	2.19
	METALS	2.93	10.37	2.67
	VEHICLES	5.64	19.67	1.7
	TEXTILES	5.36	3.91	4.09
	MACHINERY	5.86	18.22	0.82
	ELECTRONICS	0.56	11.92	0.72
	OTHERS	0	0.05	1.18
Imports from that country as a share of total imports from African countries (%)		29.09	22.07	14.79
Import va (millions o	alue from that country f USD)	471	357	239

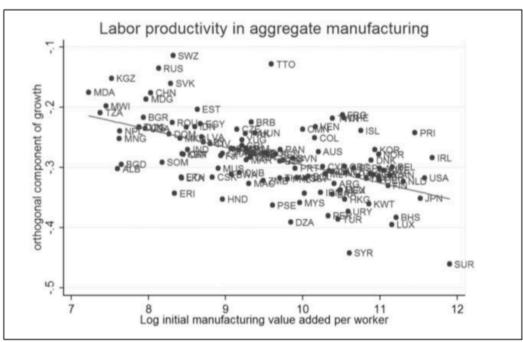
TABLE A.4.A – COMPOSITION OF GHANAIAN IMPORTS FROMTOP THREE AFRICAN TRADING PARTNERS

TABLE A.4.B – COMPOSITION OF KENYAN IMPORTS FROMTOP THREE AFRICAN TRADING PARTNERS

total imp	each product category in orts from that country present percentages)	Top Export destination South Africa	2nd Export Destination Uganda	3rd Export Destination Egypt
CHEN MINE STON STON MET, VEHI TEXT MAC ELEC	AGRICULTURE	21.51	77.48	41.95
	CHEMICALS	15.39	1.3	24.63
	MINERALS	7.24	8.47	4.27
	STONE	0.4	0.25	5.75
	METALS	29.14	1.3	7.57
	VEHICLES	12.61	0.74	0.31
	TEXTILES	2.28	1.45	2.96
	MACHINERY	8.86	1.9	0.66
	ELECTRONICS	2.39	0.67	6.48
	OTHERS	0.18	6.44	5.42
Imports fro of total countries (om that country as a share imports from African %)	29.65	24.13	13.76
Import va (millions of	alue from that country f USD)	666	542	309

Share of each product category in total imports from that country (values represent percentages)		Top Export destination	2nd Export Destination	3rd Export Destination
		Кепуа	South Africa	Tanzania
	AGRICULTURE	31.53	11.76	59.35
	CHEMICALS	23.09	15.12	4.58
RS	MINERALS	18.13	3.18	5.03
010	STONE	1.45	0.4	7.93
SE	METALS	11.16	34.99	6.13
PRODUCT SECTORS	VEHICLES	4.35	11.66	0.68
	TEXTILES	4.36	2.49	10.72
	MACHINERY	4.05	17.94	4.99
	ELECTRONICS	1.86	2.45	0.23
	OTHERS	0.02	0.01	0.36
Imports from that country as a share of total imports from African countries (%)		55.86	22	8.46
Import value from that country (millions of USD)		598	235	90.6

TABLE A.4.C – COMPOSITION OF UGANDAN IMPORTS FROMTOP THREE AFRICAN TRADING PARTNERS



A.5 – Unconditional convergence in aggregate manufacturing

Source: Rodrik (2012)

Note: The graph shows that lower initial levels of manufacturing productivity (measured as value added per worker) are positively related with higher growth rates in labor productivity.

A.6 – Palm oil in Uganda

In 2017, the 3rd biggest Ugandan import (4.16% of total imports) was palm oil. At the continental level, African countries were responsible for purchasing 17% of total world palm oil exports in 2017⁴². In other words, there exists a very high demand for this edible oil in the African continent. Despite African countries like Uganda producing it however, most imports come from non-African countries, particularly Indonesia and Malaysia. Policymakers have not failed in detecting this production opportunity, with EAC founders having added edible oils to the list of sensitive products. What this means is that tariffs on palm oil imported from non-EAC members increased from 25% to 40% in 2020. This decision is likely to spur investment and production in the palm oil agroindustry, so that regional supply can meet the high demand.

The importance of this crop for deeply rural economies like Uganda cannot be stressed enough, especially since it is slated to increase the importance of "nucleus farming". This is key for the development of supply chains, as it creates connections between producers and buyers: after agreeing on a fixed quantity (and quality) of product delivery, cooperatives of smallholder farmers have to meet the demand. This process is already in place in Uganda, with thousands of farmers producing palm oil in Kalangala island before shipping it to be processed and bottled in the mainland (Fowler and Rauschendorfer, 2019). In this venture, economies of scale are critical, as the main challenge is to achieve sufficient and continuous production so as to keep the processing mills running and meet African demand. In this matter, farmer cooperatives appear as an efficient way to balance productivity attainment and poverty relief: by sharing knowledge and avoiding competition among farmers, cooperatives can focus on increasing productivity (Kamto et al, 2019). Furthermore, the formation of these farmer cooperatives also reduces transaction costs with companies, potentially facilitating deals with other African firms and forming regional supply chains. If the AfCFTA provides support in areas that national governments cannot, such as facilitate cross-border collaboration and research in more "green friendly" farming practices for instance, palm oil production is a promising avenue for developing manufacturing capacity that could later be extended to other industries, increasing export diversification.

⁴² In 2017, 7% of total world palm oil exports were purchased by only five African countries. These are (from biggest to smallest): Egypt, Kenya, Benin, Tanzania and South Africa.

A.7 – The ECOWAS rail

The ECOWAS rail is a project tasked with constructing a unified railway network to reduce transport costs and provide landlocked countries with an indirect access to the sea. Until today unfortunately, the project has been characterized by slow advances, expensive investments and inefficient coordination among member countries. Significant segments of the railway "network" have unreliable physical infrastructure (*e.g.* rail quality, rolling stock) and obsolete technologies that complicate signalization and operability rather than facilitate it (Bayane *et al*, 2020). As illustrated in Figure A.7 below, which exhibits the various track widths for ECOWAS members as of 2019, there is a significant lack of compatibility between track size between countries. As a result, it is hard to imagine this project having significant effects on transport costs and integration. There also appears to be an unambiguous division of track width determined by past colonial ties: while anglophone countries like Ghana, Nigeria and Sierra Leone operate with 1067 mm, francophone nations like Senegal, Mali and Ivory Coast opt for 1000 mm, further dividing the region rather than uniting it.

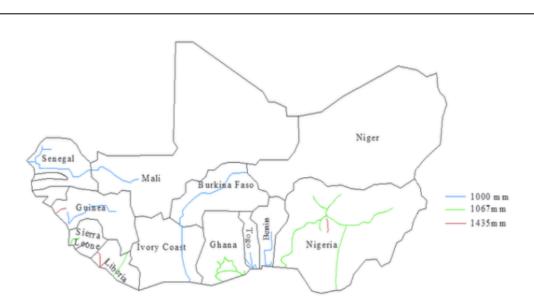


FIGURE A.7 – HIGH TRANSPORT COSTS DUE TO INCOMPATIBLE TRAIN TRACK WIDTH IN ECOWAS COUNTRIES

Source: Figure taken from Bayane *et al* (2020).

Note: The figure displays the differential in track gauges (the spacing between the rails on a railway track) inside the COMESA region. Apart for a couple of cases of increased connectivity (Senegal with Mali and Ivory Coast with Burkina Faso), it is clear that there are still vast improvements to be made in regional transport integration.