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(AfCFTA): Between Promises and Challenges“

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ABSTRACT

P. Samuelson and W. Nordhaus have defined globalization as a process through which the world is getting increasingly integrated. This is precisely a result of a trend that dominates present-day international economic relations, namely trade liberalization which is usually perceived on the global scale. However, data suggest that there has been an increasingly growing number of low-scale agreements, mainly at the regional level to foster intra-regional trade. AfCFTA which is addressed in this thesis follows the same logic intending to create the largest integrated area in the world and operate structural changes in African economies. The thesis addresses the potential impacts of this agreement from an interdisciplinary perspective involving historical, legal, political, and theoretical analyses. The originality of the thesis is precisely to reassess predictions from relevant agencies like the World Bank by rewriting a trade theory which includes essential patterns of African trade such as informal trade and risk premia. The question to be answered, throughout this work is, therefore: what accounts theoretically for the estimates of the World Bank in terms of prospective benefits and losses from AfCFTA, how does the short-run trend look like, and which are the major challenges to its full implementation that need to be addressed?

P. Samuelson und W. Nordhaus haben die Globalisierung als einen Prozess definiert, durch den die Welt zunehmend integriert wird. Dies ist das Ergebnis eines Trends, der die heutigen internationalen Wirtschaftsbeziehungen beherrscht, nämlich der Handelsliberalisierung, die in der Regel auf globaler Ebene wahrgenommen wird. Die Daten deuten jedoch darauf hin, dass es eine wachsende Zahl von Abkommen kleineren Umfangs gibt, vor allem auf regionaler Ebene, um den intraregionalen Handel zu fördern. Die AfCFTA, mit der sich diese Arbeit befasst, folgt der gleichen Logik mit dem Ziel, den größten integrierten Raum der Welt zu schaffen und strukturelle Veränderungen in den afrikanischen Volkswirtschaften zu bewirken. Die Arbeit befasst sich mit den möglichen Auswirkungen dieses Abkommens aus einer interdisziplinären Perspektive, die historische, rechtliche, politische und theoretische Analysen umfasst. Die Originalität der Arbeit besteht gerade darin, dass sie versucht, die Vorhersagen einschlägiger Organisationen wie der Weltbank neu zu bewerten, indem sie eine neue Handelstheorie aufstellt, die wesentliche Muster des afrikanischen Handels wie den informellen Handel und Risikoprämien einbezieht. Die Frage, die in dieser Arbeit beantwortet werden soll, lautet daher: Wie lassen sich die Schätzungen der Weltbank in Bezug auf die voraussichtlichen Vorteile und Verluste aus dem AfCFTA theoretisch begründen, wie sieht der kurzfristige Trend aus, und welches sind die größten Herausforderungen, die bei seiner vollständigen Umsetzung zu bewältigen sind?

PREFACE

This thesis briefly revisits Africa's struggle for unification or integration and mainly addresses the economic and social challenges that the continent as a whole has to deal with. This includes poor global trade performance and rising poverty which are also a consequence of the continent's weak integration compared to other more integrated and rather wealthier regions such as EFTA and the EU. AfCFTA has entered into force to address those urgent issues as it is revealed in the objectives of the agreement, thereby unleashing hopes for structural economic changes, important benefits, but also prosperity for the continent upon full implementation of the treaty.

Indeed, the wealth of optimistic analyses concerning the long-run effects of the aforementioned agreement are the first ground for my interest. Viner's theory concerning trade creation and diversion is particularly helpful in this regard, as it allows a fair grasp of the World Bank's study group on AfCFTA. Other theories are useful tools to understand the role of factor endowments as well as specializations and potential comparative advantages. Ricardo is used as the theory par excellence to figure out the nature of ties that exist between Africa and the external or extra-AfCFTA world. Real-life data from EFTA as successful FTA from which Africa may learn. The choice of EFTA is also to observe possible outcomes in the short-run as this FTA has reportedly been competitive and successful in the first two years following its creation. This would help also formulate short-run impacts of AfCFTA rather than long-term ones. Trade simulations conducted between ECOWAS and SADC serve this same purpose. They look into factor endowments, productivity, and comparative advantage within a given industry which in this thesis will mainly be agriculture. The choice of this industry has to do with the high dependency of the continent on agriculture food and the Russo-Ukrainian crisis and its impact are a good illustration for that.

Agriculture is a broad industry with different individual goods some of them are cereal goods and many African states including Mali, Niger and Guinea-Bissau and highly specialised in this sector. However, the issue of competitiveness and productivity is the central focus of this thesis as it discusses directions of trade and redistributions. The heterogeneity of effects and the observation of potential fallacies (composition, causality, not holding other things constant but also not including relevant data like informal trade) are critical especially in my attempt to reassess AfCFTA's impacts through an adjusted theory for African trade that includes all the leftovers such as informal trade, security and bribery premia, but also the burden of inadequate infrastructures.

I wrote this thesis precisely, to evaluate mainstream trade theory and check its applicability to any region of the world, and in this case to Africa. My expected results are to see that trade being a universal practice, its regional specificities should be included in the theory because they were not thought during the theorizing process.

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ACRONYMS

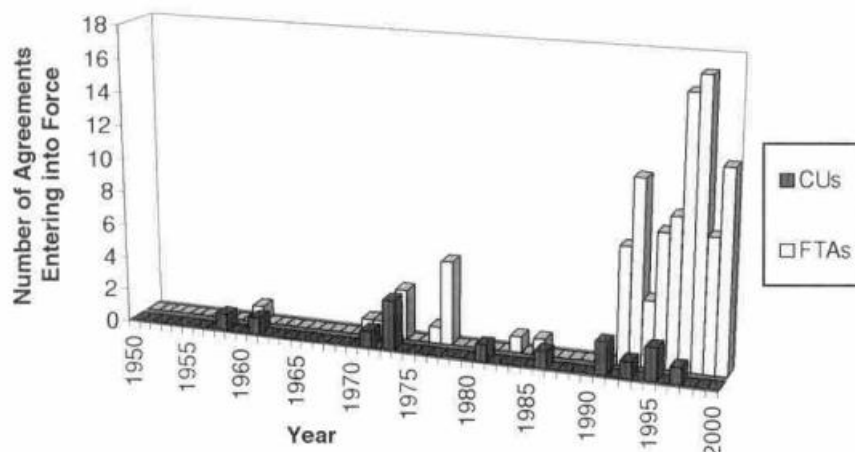
AfCFTA: African Continental Free Trade Area
FTAs: Free Trade Areas
WTO: World Trade Organization
CUs: Custom Unions
GDP: Gross Domestic Product
RECs: Regional Economic Communities
EFTA: European Free Trade Association
NTBs: Non-Tariff Barriers
AU : African Union
EU: European Union
GATT: General Agreement on Tariffs and Trade
MFN: Most Favoured Nations
UNCTAD: United Nations Conference on Trade and Development
LDCs: Least Developed Countries
NAFTA: North American Free Trade Agreement
EEC: European Economic Community
OECD: Organisation for Economic Cooperation and Development
OAU: Organisation of African Unity
TFA: Trade Facilitating Agreement
ECOWAS: Economic Community of West African States
UNIDO: United Nations Industrial Development Organisation
SADC: Southern African Development Community
AfDB: African Development Bank
GTC: Gross Trade Creation
PPF: Production Possibility Frontier
SACU: Southern African Customs Union
ECOAGRIS: ECOWAS Agriculture Regional Information System
FDI: Foreign Direct Investment
IRF: International Road Federation
ASEAN: Association of Southeast Asian Nations

INTRODUCTION

The creation of the African Continental Free Trade Area (AfCFTA) is not an innovation. It is as a result of a long-lasting trend that has been prevailing in a more and more globalising world economy for the past decades. This trend has resulted to the proliferation of Free Trade Areas across the World with the ultimate goal of achieving global free trade in the long run.

In his publication dating of the early 2000s, Daniel YUICHI KONO, professor at the University of California at Davis, was concerned with FTAs when he elaborated on their unprecedented proliferation using the following words: “*Free Trade agreements (FTAs) have proliferated in recent years.*”¹ Back then, the World Trade Organisation was counting roughly 108 FTAs and 10 Customs Unions (see figure 1). The latest WTO statistics reveal an exponential growth that led to the creation of 311 Regional Trade Areas in force with a total number of 572 notifications (most of them being in line with the provisions enshrined in Art. XXIV GATT).²

With regard to this, AfCFTA appears as one of the latest FTAs and its entry into force on May 30, 2019 is associated with many expectations including the hope that it will trigger structural changes for African economies and have an impact at both the regional and global levels.



Source: World Trade Organization

FIG. 1. Free Trade Agreements Versus Customs Unions

To begin with, almost half a billion African people do reportedly live in extreme poverty. This can be observed through the World Bank’s estimates for its baseline year 2015. In absolute numbers, 415 million people in Africa are extremely poor, as their daily purchasing power is estimated at \$1.9. One of the reasons that probably accounts for wealth and job creation as the mirror image of poverty and

¹ Daniel Yuichi Kono, “Are Free Trade Areas Good for Multilateralism? Evidence from the European Free Trade Association,” *International Studies Quarterly* 46, no. 4 (December 2002): 507–27.

² See “WTO | Regional Trade Agreements,” Wto.org, 2019, <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>.

unemployment is trade, hence the advocacy for trade as a factor for wealth and job creation. Allegedly poor African trade performances (both intra- and extra-African trade) are a central issue that is worth being addressed, as it does not only negatively affect the continental economy, it also accounts for African below-world-average GDP and real income. As the World Bank put it in words and figures (see figure 2), Africa actually “accounts for less than 3 percent of global trade and GDP, but 16,7 percent of global population.”³ Given the insignificant share of intra-African trade (estimated at less than 20 percent as per figure 3 below), Africa appears to be one of the least integrated regions with increasingly opened economies to international trade (84.6%). Given the size of African markets involving when taken together, as Odjo Traore and Zaki put it, “1.2 billion people covering 55 countries” , and its active participation in international trade, it is worth questioning the impact of such a performance both on the economic and social level when compared to other regions of the world.⁴ When considering the structural choices of the European region for instance (one that depicts a higher rate of intra-regional trade and a lower rate when it comes to extra-regional trade), shreds of evidence in terms of real incomes generated through trade can reveal a contradiction, which appears as an essential aspect to figure out the aims and potential impacts of AfCFTA.

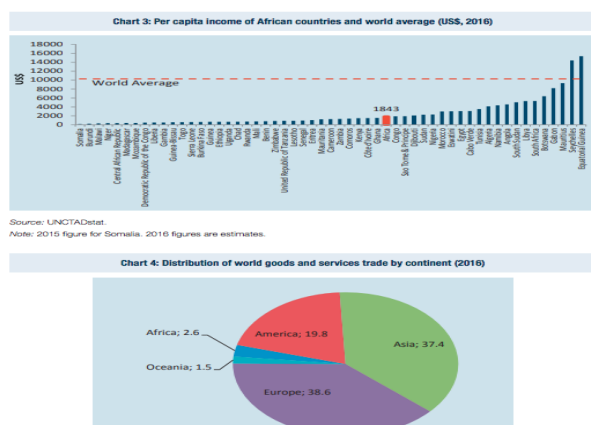


Figure 2: Share of global trade and per capita income

In 2016, the world average of per capita income in US dollars was estimated at 10,000. All but two African states were below the average, with more than half of the countries being even further down. The continental average was \$1,843. As regards the distribution of world goods and services trade, Africa had a nearly irrelevant participation that was barely close to 3%. A percentage that could help figure out why African GDP per capita is below world average.

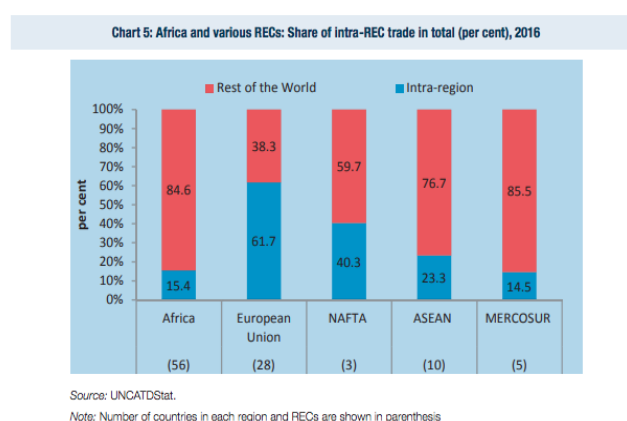


Figure 3: share of intra-regional trade by region

Before-AfCFTA African trade was tremendously external, while intra-African trade in 2016 was as low as 15.4%, thereby differing drastically from better integrated regions such as the EU and NAFTA.

There is certainly a paradox that is revealed by the relatively tiny or insignificant African share in the distribution of the world goods and services trade by continent, as assessed by the United Nations

³ World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA : Economic and Distributional Effects*. (Washington: World Bank Group, 2020), P11.

⁴ Odjo, Sunday P., Chahir Zaki, “Intra-African Trade Integration,” Ifpri.org (IFPRI book chapters, 2019), <https://www.ifpri.org/publication/intra-african-trade-integration>. 43-71

Conference on Trade and Development -UNCTAD (see Chart 4 in figure 2 above), and the overwhelming dependency of the continent on external or extra-African trade. This reinforces, especially given the European successful model, the assumption of a positive relationship between trade regionalization and better international trade performance, a ‘disputed assumption’⁵ that I would like to address in this thesis.

While the European Union appears to be the most integrated region with one of the largest trade shares in the world, the assumption appears to be problematic when it comes to the share of Asia that is less integrated than North American countries but outpaces them in terms of global trade shares. This caution is therefore important, inasmuch as it matters to look beyond national policies aiming at a mere tariff elimination (which the World Bank considers as less relevant for Africa) and analyse their real transformative impact. Trade Facilitating Measures’ potential effects are of high interest and underly an essential part of this scientific endeavour. This has precisely prompted this research in the sense that the case of the EU and EFTA (another important free trade area in Europe) would inform AfCFTA about the prospects of efficiency linked with regional integration. In numbers, this is depicted in figure 4 which presents the estimations of the World Bank as regards the share of trade in GDP for some regions. For the EU for instance, the trade-to-GDP ratio in 2020 was estimated at 85% compared to 44% in Sub-Saharan Africa, 50% in East Asia and Pacific, 46% in Latin America and the Caribbean, and 26% in North America. The share of trade in African GDP is for sure significant as it is close to the world’s average. Nevertheless, there is a paradox when it comes to considering data related to the per capita income of African countries as indicated in chart 3 of figure 2. An important aspect to note in this regard is the value of Africa’s traded goods which, I assume, is a result of the deterioration of the terms of trade. This is due to the high dependency on primary goods and the high concentration rates that hamper export growth.⁶ Therefore, it appears necessary to find ways to relieve millions of Africans from extreme and moderate poverty and AfCFTA appears to be a promising agreement that can unleash change and address several critical issues.

⁵ See Daniel Yuichi Kono, “Are Free Trade Areas Good for Multilateralism? Evidence from the European Free Trade Association,” *International Studies Quarterly* 46, no. 4 (December 2002): 507–27.

⁶ Mesut Saygılı, Ralf Peters, and United Nations Conference On Trade And Development, *Key Statistics and Trends in Regional Trade in Africa* (Geneva: United Nations, 2019). P12

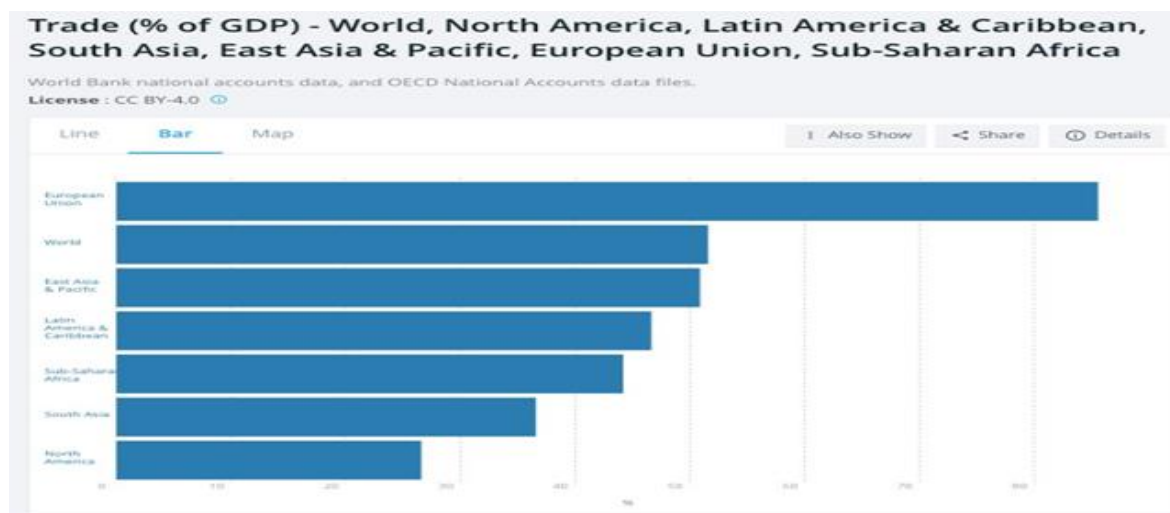


Figure 4: Trade share in GDP

Gross Domestic Product is the main tool for measuring the overall performance of a given economy. It traditionally includes four components: **government's expenditures, private consumption, investment and net exports**. Net exports refer to trade as they are the difference between exports and imports. These data from both the World Bank and OECD provides estimates of as regards the share of this component in regional GDP. The EU is the only region above the world average, with 85%. The other regions including sub-Saharan Africa lie below the world average. However, trade is an important GDP component for all these regions since the least relevant share is 26% (North America).

On the other hand, having a look at the promises connected with AfCFTA, as they are stated in the study conducted by World Bank economists, they can be interpreted as a kind of remedial means to address the previously invoked challenges, even though they certainly also allow a few peremptory remarks as regards the economic and socio-political impact of AfCFTA on African economies.

On January 13, 2020 both George BOATENG (Research Analyst at the African Center for Economic Transformation in Accra) and Ph.D. candidate Beatrice OFORIWAA made a joint statement regarding the multifaceted potential of what they consider one of the most relevant African programs in line with the AU's Agenda 2063 known under the motto "*The Africa we want*". The said program is AfCFTA, whose entry into force took place on May 30, 2019, thereby paving the way for the creation of the world's largest FTA, with roughly 54 member states. There is a wealth of benefits that have been predicted so far by the World Bank conditional to a successful and full implementation of the agreement. These potential benefits range from economic growth on the one hand to the alleviation of extreme and moderate poverty for almost 98 million African people by 2035 on the other, especially through the creation of jobs and real income gains that are expected to increase by 7 percent.⁷ These promises have particularly captured my

⁷ See Foreword in World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA : Economic and Distributional Effects*. (Washington: World Bank Group, 2020).

attention and aroused my interest in exploring the implications of the agreement further. The first expectation in connection with AfCFTA is the suppression of the so-called “*spaghetti bowl effect*” resulting from the large network of Regional Economic Communities (RECs) that prevent the smooth conduct of intraregional trade. This is a rather legal issue from which one could identify a double-edged trend. On the one hand, it provides evidence that regional integration is on the move in Africa. On the other hand, there is the issue linked with too many regulations in the form of NTBs resulting from the memberships in several RECs.

Besides, another interesting point concerns industrialization on the continent which could be fostered, as intraregional trade in manufactured goods is expected to grow upon successful implementation of AfCFTA by 2035, thereby making it theoretically possible to increase the volume of exports by almost 29%.⁴ This would lead to the alleviation of poverty and a greater integration of the continent following the Abuja Agreement (1991) to achieve a common market, as the EU managed to have. I am precisely interested in exploring the aforementioned authors’ view which is shared by numerous institutions and specialized agencies including WTO, UNCTD, and the World Bank, that AfCFTA “has the potential to create a continental free-trade zone with a combined Gross Domestic Product of USD\$3.4 trillion”⁸ and explore the macroeconomic predictions of the World Bank study group in order to grasp long-run implications and study short-run potential gains and benefits resulting from this FTA, thereby taking into account cautions formulated by both the World Bank and UNCTD concerning possible macro and microeconomic redistribution effects as well as non-tariff barriers’ distortionary effects. This will inform my ambition to reflect on both the continental overall gains on the one hand, and subregion-, country- and industry-specific gains and losses on the other hand, especially in the framework of a trade simulation between two important sub-regions in Africa, namely ECOWAS and SADC. This very specific choice is important to address my research question which I present in the following.

The three-dimensional question to be answered throughout this thesis is formulated as follows: What accounts theoretically for the estimates of the World Bank in terms of prospective benefits and losses from AfCFTA? What does the short-run trend look like? What are the major challenges to its full implementation that need to be addressed?

The first part of this question is concerned with building upon the legal and theoretical frameworks of free trade at the regional level (liberalization, NTBs, and TFA). It will be discussed in the first two chapters of this research work, one of which will stress the historical, legal and theoretical economic

⁸ George Boateng, Beatrice Oforiwa Dankyi, “The AfCFTA May Be the Last Opportunity for Africa’s Economic Transformation,” ACET, January 13, 2020, https://acetforafrica.org/media/opinion/the-afcfta-may-be-the-last-opportunity-for-africas-economic-transformation/?gclid=CjwKCAiA5t-OBhByEiwAhR-hmz5771sSTxSu2QfVTrh1_T6DwOKLjyYUu3va98F-MZJt9A-Q7VuYDxoCRicQAvD_BwE.

backgrounds. Static and dynamic theories to handle the various facets connected with trade creation and welfare gains (Viner's theory) on one hand, and on the other hand, the issue of redistributions will be explored. Predictions will be compared to EFTA's results for the sake of getting empirical pieces of evidence to justify the theory.

Furthermore, the third chapter will deal with trade simulation between ECOWAS and SADC using available data to simulate AfCFTA's impact not only in the long run as preferred by the World Bank study group, but in a relatively shorter term. This will allow to portray trends in the process of the implementation of AfCFTA in the subregions chosen for this purpose.

Trade simulation between ECOWAS and SADC will mainly rely upon factor endowment and output in a specific industry, which is agriculture and the main individual good that will be used the most is cereals. Throughout the third chapter, an attempt will also be made to provide a comprehensive reassessment of the potential effects of AfCFTA in the first 5 years by including other elements in the theory which have been ignored by the World Bank study group, like the informal trade.

The final chapter (chapter 4) of this thesis addresses the third part of the problematic as it is concerned with the remaining challenges that may harm the process of implementation of AfCFTA, i.e., legal, investment-related, and security-related challenges building on visible trends in the short run.

In a nutshell, the first part will be a continental (top-down) analysis of the economic and socio-political impact of AfCFTA building on a theoretical and comparative study with data, and the second part will be a real-time trade simulation between ECOWAS and SADC to capture gains and distributions, and the final part will come up with untold cautions.

In this thesis, I contend that the promise of AfCFTA's transformative effects is theoretically valid but incomplete, as it does not capture all aspects of intra-African trade. It is theoretically valid to assess stable systems with well-organized conventional trade such as EFTA. However, intra-African trade is more complex as it includes non-conventional trade and it's exposed to challenges not included in the predictions. As a result, I believe that it is important to make theory less ambitious by focusing on real-time trends in the short run on the one hand, and considering potential challenges on the other. This would unavoidably lead to a remodeling of the free trade theory of AfCFTA.

Both static and dynamic trade theories will be applied to the AfCFTA to understand the macro- and microeconomic implications of the agreement in the short and the long run. As AfCFTA's impact is still a mere expectation, empirical data from the EFTA's model will be used to visualize certain effects, but also to test the reliability of mainstream theory for measuring the potential of the continent's integration.

LITERATURE REVIEW

Regional trade agreements aiming at trade integration usually have legal, economic and political implications. The AfCFTA will be analyzed following this logic. To seize the economic implications of this Agreement, I will conduct a legal analysis of resolutions to be implemented in the AfCFTA's framework taking into account the goals of four major texts that I will use, namely AfCFTA itself, the Abuja treaty, the AU's Agenda 2063, and GATT/WTO law.

Both the Abuja treaty and Agenda 2063 can be seen as the forerunners of AfCFTA as they clearly state the goal to be achieved, namely the creation of an African Economic Community and a Customs Union. AfCFTA is therefore the first step towards effective continental integration, one that also led to the creation of many other FTAs, including EFTA, as this appears in the book "Europe's Free Trade Area Experiment" by Hugh Corbet and David Robertson, where they addressed among other things the role of the Free Trade Area, the first decade of EFTA's realization and the effects of EFTA on member countries. The book provides a theoretical appraisal of a region that back then was at the same stage of the economic region as Africa, but also the real impact of the agreement. The Association's experience with non-tariff barriers is also relevant to this study, as NTBs are presented in reports stemming from UNCTAD and the World Bank as the major obstacle to intra-African trade.⁹ The AfCFTA agreement is a relatively comprehensive agreement that presents its objectives and its scope. The various policy areas covered by the agreement (including trade in goods regulated by the protocol on trade in goods) as well as the implementation mechanisms are enshrined there. The leftovers are briefly captured by the World Bank study team on AfCFTA in "*The African Continental Free Trade Area. Economic and distributional Effects*", i.e., state aid, public procurement, environmental laws and labor market regulations.¹⁰

The macroeconomic effect of FTAs is well addressed in a wide literature that is particularly concerned with Trade Creation, Trade Diversion, and employment. Corden and Krauss are concerned with the opportunity of exploiting economies of scale. Substantially, Krauss believes that "*larger markets permit the exploitation of economies of scale and the adoption of more up-to-date technology*".¹¹ The World Bank also addresses trade creation through increased intracontinental trade but specifies that

⁹ See Njenga Hakeenah, "AfCFTA Gains Momentum with Trade Barriers Reporting Tool," The Exchange, January 27, 2020, <https://theexchange.africa/africa/afcfta-online-tool-trade-barriers-au-unctad-agenda-2063/#:~:text=%E2%80%9CNon-tariff%20barriers%20are%20the%20main%20obstacles%20to%20trade>.

¹⁰ See Table 0.1 Overview of policy areas covered in Africa's subregional PTAs and AfCFTA, World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA : Economic and Distributional Effects*. (Washington: World Bank Group, 2020), P2.

¹¹ Krauss, Melvyn B. "Recent Developments in Customs Union Theory: An Interpretive Survey." *Journal of Economic Literature* 10, no. 2 (1972): 413–36. <http://www.jstor.org/stable/2721464>. and W. M. Corden, "Economies of Scale and Customs Union Theory," *Journal of Political Economy* 80, no. 3, Part 1 (May 1972): 465–75, <https://doi.org/10.1086/259899>.

manufactured goods will have the most important share. The state of Africa's industrialization that would foster manufacturing exports is reported by UNIDO and can help identify which countries are more likely to benefit from intra-African trade, thus the distributional side which is also reflected by Heckscher-Ohlin's model based on factors of production. Balassa and Samuelson explain differences in prices and incomes across countries as a result of differences in productivity.¹²

¹² Patrick. K. Asea and W. Max Corden, "The Balassa-Samuelson Model: An Overview," *Review of International Economics* 2, no. 3 (October 1994): 191–200, <https://doi.org/10.1111/j.1467-9396.1994.tb00040.x>.

THEORETICAL FRAMEWORK

AfCFTA's ultimate aim is to achieve intra-African economic integration which in the end could complete and strengthen the political integration. Therefore, dealing with FTAs requires a clear understanding of the concept of “*economic integration*”, which appears to be a multifaceted concept to be approached with caution. In Złedziewska's terms, Economic integration would be considered as “*a complex notion that must be defined with care.*”¹³

The concept is thus dealt with from various perspectives including Balassa's conception of economic integration “*a process and as a state of affairs.*”¹⁴ To provide a more comprehensive assessment of AfCFTA, I adopt the two-sided definition of economic integration (EI) proposed by Pinder, Staley and Robson when combined, i.e., as a process, but also as a means.

To begin with, Pinder's definition is mainly concerned with the procedural aspect and reads that EI is “*a process towards a union, during which both the removal of discrimination between member countries and the co-ordination of economic policies have to be considered as important elements of integration.*”¹⁴ This first level is precisely an assumption that best describes the legal framework of AfCFTA as an agreement aiming at abolishing barriers and coordinating policies.

Besides, Staley (1977) and Robson (1987) believe that economic integration is a means for achieving efficiency in resource utilization. This to a certain extent, implies leveraging the AfCFTA as a means for reducing unemployment, increasing Africa's production possibility frontier including through industrialization, and alleviating poverty as some possible outcomes of AfCFTA, as predicted by the World Bank.

The notion of efficiency is in this regard the second key concept to be taken into account. Substantially, Paul Samuelson and William Nordhaus define efficiency or pareto efficiency as the “*Absence of waste, or the use of economic resources that produces the maximum level of satisfaction possible with the given inputs and technology.*”¹⁵

I will use trade theory while trying to assess the real impact of the agreement at both the economic and social levels. To do so, this requires, depending on the targeted outcome, building on two theoretical

¹³Katarzyna Śledziewska, “Theory of Economic Integration. The Revenue-Transfer Effect in a Customs Union. Extension to Free Trade Areas,” *Coin*, accessed June 10, 2022, <http://coin.wne.uw.edu.pl/sledziewska/wyklady/tei7.pdf>.

¹⁴ Bela A Balassa, *The Theory of Economic Integration (Routledge Revivals)* (Hoboken: Taylor And Francis, 2013).

¹⁵Pinder, John. “Positive Integration and Negative Integration: Some Problems of Economic Union in the EEC.” *The World Today* 24, no. 3 (1968): 88–110. <http://www.jstor.org/stable/40394094>.

categories, namely static theories on the one hand, and dynamic theories on the other hand.

The former refers to the short-run effects of AfCFTA, especially on the production side, given the immediately available resources, the latter addresses the long-run productivity as a result of innovations (in the Schumpeterian sense, i.e., improvements in production processes), for instance through industrialization as a precondition to produce and trade more manufactured goods by 2035.

As regards static theories, Viner appears to be one of the most authoritative theorists. His theory is concerned with trade creation and trade diversion. The former explains the positive correlation between trade liberalization (for instance through regional integration) and welfare creation on the one hand, whereas the latter is about the relationship between regional integration and redistributions (in terms of imports from less efficient countries, loss in consumer surplus as well as tariff revenues). The first aspect of Viner's theory is adequate when it comes to analyzing to what extent tariff reductions would increase intra African trade. However, the second aspect does matter as well, inasmuch as AfCFTA would have an impact on individual industries concerning decreasing production costs and the exploitation of economies of scale for more competitive African countries (within individual countries), especially for trade in manufactured goods. Moreover, Viner's theory is also helpful for assessing the loss in tariff revenues. In this thesis, I add a third dimension to the redistribution assumption, which is the potential redistribution of Foreign Investment towards those African countries with more stability and better government policies, but also the possible diversion of trade benefits towards military expenses. Whalley (1996) somehow theorizes the credibility of government policies and believes that they can be improved through a binding trade integration agreement. This also belongs to the set of theories that may potentially explain what really motives countries to join FTAs or, conversely, what prevents integration. Linder (1961) and Kemp (1965) assume that per capita income matters and this is further assumed by Sakamoto (1969), who thinks that similarity in the income per capita levels is a relevant factor to achieve economic integration.

Regarding the dynamic theory, it is mainly concerned with the "hypothetical growth rate of national income achievable with the given resource use and saving ratio", as Balassa (1961) puts it. The structure of decision making in the framework of AfCFTA is revisited with the theory of fiscal federalism. According to Rao and Singh (2005), fiscal federalism serves three main functions, among which "(iii) to design suitable inter-governmental transfer schemes to fulfil the objectives of 'equity' and 'efficiency'."¹³ The theory will be useful to assess the efficiency of implementing the AfCFTA agreement (that entails externalities and the development of economies of scale) by relying upon actions taken by individual countries and regional economic communities. Does this mean that homogeneous preferences at the national and regional levels are more relevant than continental preferences?

METHODOLOGY

The legal investigation will mainly focus on the comparative legal scholarship, since comparisons will be made between the provisions and functioning of the AfCFTA and those of various other legally created entities (GATT/WTO, EFTA, NAFTA, Abuja Treaty on the creation of the African Economic Community, EU, ECOWAS, SADC, EFTA etc.). As regards the economic aspect, data collection and quantification of short-term and long term economic and distributional effects will be used. The approach will consist in applying the aforementioned standard theories (Ricardo, Heckscher-Ohlin, Viner etc.) on the one hand, and analyzing prospects and consequences (including political consequences) upon the other. Data will also be collected from various sources and computed with available tools, mainly those provided by the World Bank. Simple graphs combining supply and demand will also be used, as well as graphs to display PPFs.

Present-day and long-term growth predictions will be displayed comparatively. This implies collecting pre- and post-AfCFTA data, computing them and providing pre- and post-AfCFTA PPFs, thereby assessing the impact of barriers reductions on efficient productivity. In so doing, a linear relationship will be tested between the degree of tariff reduction and intra-Continental integration, other things held constant. However, an “error variable” needs to be added to the function that represents other external factors that may affect the outcome as assumed in mainstream theories. The error variable would include challenges such as security issues, ownership of capital and employment by foreigners etc. This variable will be presented in graphs as the “risk premium” to pay for to implement AfCFTA.

CHAP I- HISTORICAL, LEGAL, AND THEORETICAL CONSIDERATIONS FOR THE EXISTENCE OF AfCFTA

I. HISTORICAL BACKGROUND

AfCFTA is a project carried out by the African Union (AU) and any effort made to figure out the “why” and “what for” of this agreement is intrinsically associated with understanding the reason for being of the AU and its aims. In short, AfCFTA is another attempt to achieve the ultimate goal of African integration, one that has remained unachieved so far since the era of its inception which is well known as the age of Pan-African ideals, which “*created the normative framework that made the creation of the AU possible*”¹⁶. The Pan-African movement was originally a struggle to achieve independence and unity among black people across the world. This ideology was created in the 1900s amidst western colonialism and had been expressed since then in the framework of conferences held at several places including London (1900, 1919, 1921, 1923), Manchester (1945) and Accra (1958). Several figures led the movement among others W.E.B. Du Bois, Jomo Kenyatta and Kwame Nkrumah. In the second half of the 20th century, the movement was pursued by other leaders. Patrice Lumumba, Robert M. Sobukwe, and Julius Nyerere. They certainly led to the creation of the Organization of African Unity (OAU) on May 25, 1963 but failed, as Thomas Kwasi Tieku puts it, “*to lead to the establishment of strong continental institutional structures*” and this for many reasons including the “self-seeking interests of some of the ruling elites in Africa”.¹⁷ In this regard, the African Union appears to be a purely political construct, a club of the elites, that barely has an impact on the people across one of the largest and most populated continents in the world.

The path taken to integrate the continent was, when compared to other continents such as Europe, certainly one that was not appropriate, and an effort had to be made in order either to improve or complement it, or to radically try something new. As far as the European Union is concerned, failure to achieve political and military integration in the aftermath of the second world war was corrected by the economic recipe which was later on easily complemented by the political component of regional integration, thereby proving the efficacy and big margin of acceptability of the economic approach. This approach has historically proven to have gained a nearly universal acceptance, even for non-political blocs such as EFTA which was set up in 1960 by its then seven members in response to the newly created European Economic Community (EEC). EFTA presently comprises four economically important members among which are Switzerland, Iceland, Norway, and Liechtenstein. As a matter of fact, the AU

¹⁶ Tieku, Thomas Kwasi, “Explaining the Clash and Accommodation of Interests of Major Actors in the Creation of the African Union,” *African Affairs* 103, no. 411 (2004): 249–67.

¹⁷ See page 9

was perfectly aware of the advantages connected with such an approach, especially while building on the results achieved in the regions mentioned above. As a result, many programs have been attempted in order to achieve or enhance African integration through economic cooperation.

AfCFTA is thus the last born of a wide array of agreements including the Abuja treaty (1991) aiming at creating an economic community in Africa, the AU Agenda 2063 etc. This endeavour also implies bringing together the already existing Regional Economic Regions (RECs) and widening cooperation by eliminating or mitigating the spaghetti bowl effects that are created by multiple memberships. However, beyond the historical background of the creation of AfCFTA, it is critical to engage with the legal framework to capture its ontology in terms of scope and functioning.

II. AFCFTA: ITS FUNCTIONING AND SCOPE

This section is mainly concerned with the legal description of AfCFTA which encompasses the presentation of its objectives (in line with international economic law) with a special focus on GATT/WTO law; but also with African economic law building upon specific treaties including both legally binding and non-binding ones such as the 1991 Abuja treaty and the AU's Agenda 2063. Besides, the economic functioning of the AU in which RECs have been playing a major role, is worth being addressed, but also the issues they raise: the large RECs-network and the spaghetti bowl effects. The areas covered by AfCFTA as the unifying model will be briefly presented. Some issues addressed in the annexes of the agreement which undermine intra-regional trade (non-tariff barriers) are also considered.

II.1. OBJECTIVES

II.1.1. GENERAL OBJECTIVES

The objectives of the AfCFTA are contained in the preamble of the agreement as an integral part of it. These goals are to some extent a re-affirmation to commit to the fulfilment of the main goal pursued by the World Trade Organisation (WTO), which is substantially to achieve global free trade by utilising increasing liberalisation at the regional level. These goals are expressed in both the Abuja Treaty and GATT/WTO on the one hand, and reiterated in the AU's Agenda 2063 on the other, thus the following extract from Agenda 2063:

“Having regard to the aspirations of Agenda 2063 for the continental market with the free movement of persons, capital, goods and services, which are crucial for deepening economic integration...” (see also

Art 3(a)). The general objectives of AfCFTA are stated in article 3. Substantially, paragraph (a) reads that it aims to “*create a single market for goods, services, facilitated by movement of persons to deepen the economic integration of the African continent and following the Pan African Vision of “An integrated, prosperous, and peaceful Africa” enshrined in Agenda 2063.*” Other general objectives are expressed in the same article concerning the ambition to put in place a liberalised market for goods and services “through successive rounds of negotiations” (Art.3 (b)). A successful liberalisation of the African market would therefore enable the movement of both capital and the people, thereby facilitating investments based on actions taken and developments in the State Parties and RECs (Art. 3 (c)). Paragraph (d) is more concerned with the possibility of developing AfCFTA further into a “Continental Customs Union at a later stage”. This provision is particularly essential in the sense that costs associated with rules of origins that apply in the context of AfCFTA would be suppressed or at least reduced, thus facilitating the flow of goods. This point enrooted in the assumption that rules of origins could sometimes be as costly as tariffs, so that the latter could even be preferred over the former. The remaining four paragraphs (e), (f), (g), and (h) are provisions concerning expected positive externalities. First of all, AfCFTA would “*promote and attain sustainable and inclusive socio-economic development, gender equality and structural transformation of the State Parties.*” This specific provision is linked with socio-economic challenges such as high rates of extreme and moderate poverty, especially in sub-Saharan Africa, but also the inclusion of more female workers in the labour force, which would at the end of the day contribute to achieving gender equality. Gender equality is an issue been addressed both globally (through the UN system) and locally (through the AU). The AU has adopted the protocol on the African Charter on Human and Peoples’ Rights on the Rights of Women in Africa, the so-called Maputo Protocol which entered into force in 2005 and guarantees comprehensive rights to women, including economic ones.¹⁸ AfCFTA would therefore contribute to the realization of those objectives in economic terms.

Furthermore, improving and fostering the economic competitiveness of the participating states at the regional and global levels is one of the goals pursued by the agreement, which is enshrined in paragraph (f). Industrialization and the diversification of African economies could develop the regional value chain and ensure the development of the agricultural sector and food security. This can be justified based on shreds of evidence provided by some specialized agencies as regards the prevalence of food insecurity in sub-Saharan Africa, especially in 2020 where moderate food insecurity affected 36,66% of the populations and severe food insecurity concerned 29,54% of the populations.¹⁹ Industrialization would

¹⁸ Protocol on the African Charter on Human and Peoples’ Rights on the Rights of Women in Africa – Women, Peace and Security in Africa (wpshub.africa)

¹⁹ Statista, “Food Insecurity in Sub-Saharan Africa,” Statista, 2022, <https://www.statista.com/statistics/1190797/food-insecurity-in-sub-saharan-africa/#:~:text=In%202019%2C%2021.3%20percent%20of%20the%20Sub-Saharan%20Africa.>

thus increase productivity, including in the agricultural industry and curb food insecurity in sub-Saharan Africa.

Last but not least, AfCFTA would lead to the suppression of the spaghetti bowl effects that are intrinsically related to multiple and overlapping memberships. This would encourage regional and continental integration as provided in paragraph (h).

Africa is not the only region worldwide to voluntarily abide by liberal rules, as other cases can be referred to such as EFTA. There is a relationship between EFTA and WTO, since this FTA is not only registered with the WTO system but also monitored by it., especially through Article XXIV of the GATT for trade in goods and services. As it is stated by EFTA itself, “*the EFTA States see FTAs as a complement to, and not a substitute for the multilateral trading system.*” For this sake “*they build on WTO rules and commitments, thereby enhancing framework conditions for transborder economic exchange and creating added value in terms of reducing obstacles to trade and legal security.*”²⁰ The ultimate goal of EFTA is to contribute to global trade liberalization through the establishment of a FTA that a priori cover a smaller area that comprises its members. Just like AfCFTA, EFTA also has general objectives which are found in the convention establishing the European Free Trade Association (EFTA). Following this convention, there are three main objectives that appear in Article 2 of the agreement about regionalization and liberalization. The article actually reads that:

“The objectives of the Association shall be:

...(b) the free trade in goods;

(c) to progressively liberalise the free movement of persons;

(d) the progressive liberalisation of trade in services and of investment...”.

A comparative analysis of both FTAs invoked above allows for noticing not only similarities in terms of regional objectives, but also in terms of areas potentially covered by the agreement, which will lead to the exploration of the economic structure of the AU as a political entity implementing AfCFTA. This namely involves engaging critically with its ontology as the sum of individually existing RECs with individually established legal frameworks on the one hand, but also as a continental construct that aims at harmonizing the legal frameworks and merging them into a single one, commonly accepted. However, before

²⁰ EFTA, “Global Trade Relations | European Free Trade Association,” www.efta.int, n.d., <https://www.efta.int/free-trade>.

addressing this aspect, it matters as well to consider the specific objectives of AfCFTA and the main principles that shall prevail in the framework of the implementation of this agreement.

II.1.2. SPECIFIC OBJECTIVES AND PRINCIPLES

These two aspects are dealt with in Articles 4 and 5 of the agreement establishing AfCFTA. The former is related to Article 3 and purports to fulfill and realize the objectives outlined in that article. The first paragraph (a) advocates the progressive elimination of barriers to trade in goods (tariffs and non-tariff barriers), followed by the progressive liberalization of trade in services (b). My analysis will be limited to trade in goods, and predominantly to trade in agricultural goods.

This progressive elimination of barriers has been presented by the World Bank study team. It consists of three main stages of five years each (with exceptional provisions for LDCs) running from 2020 to 2035. The first 5-year period starting in 2020 shall witness the elimination of 90% of tariff lines, within the second period, an additional elimination of 7 percent of tariff lines will apply. The last period consists in suppressing the remaining 3 percent of tariff lines “that account for no more than 10 percent intra-Africa imports”. These 3 percent “could be excluded from liberalisation by the end of 2030 (2033 for LDCs).”²¹

AfCFTA also aims to promote cooperation on several areas including investment, intellectual property rights and competition policy (c); cooperation on all trade-related areas (d); and cooperation on customs matters and the implementation of trade facilitation measures (e). The judicial and administrative frameworks for dispute settlement regarding rights and obligations (f), but also for the implementation and administration of AfCFTA (g).

AfCFTA States Parties abide by the principles set out in Article 5. There are 12 principles that should underly the implementation of the agreement. AfCFTA is a member-driven body, in which RECs’ FTAs are assumed as building blocks. This is precisely in line with GATT/WTO principles that encompass special and differential treatment, reciprocity, national treatment, as well as Most-Favoured-Nation (MFN) Treatment. National treatment for instance is a principle that advocates non-discrimination or equal treatment of both local and foreign goods, whereas MFN is a principle that purports to promote fairness in the sense that granting commercial privileges to one partner should also apply to other partners. Article 4 and Article 5 of the protocol on trade in goods deal with the last two principles in the context of AfCFTA. They are in substance a reaffirmation of GATT’s principles applying at the regional level. This would theoretically mean that RECs would not play a significant role anymore, since following Article

²¹ World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA : Economic and Distributional Effects*. (Washington: World Bank Group, 2020).

19 (1) of the agreement, it is AfCFTA law that would prevail in case of conflict with sub-regional law. However, Article 19 (2) provides a nuance that strengthens sub-regional law, albeit only for a few circumstances. This article contains a provision that bears an ambiguity, thus rendering it difficult to confirm that the harmonisation effort will be effective or that RECs would rather be further strengthened. Also, given that schedules on tariff elimination would be submitted individually by State Parties as provided for in annex 1 to the protocol on trade in goods, it raises the concern of the approach. I assume that fiscal federalism would have been much more effective, since schedules would have been decided for their mere implementation by the State Parties. This is particularly relevant as it hardly assesses AfCFTA's effects difficult during each five-year period. One should as a consequence wait for the end of each term while expecting that all submitted schedules would have met the end-of-term targets invoked before. The effects for sure will be as a result of the degree of compliance with the legal provisions but also the outcome of the economic structures of the participating states.

II.2. ECONOMIC STRUCTURES OF THE PARTICIPANTS

AfCFTA is certainly, when compared to both the EU- and present-day EFTA integration processes, at its first stage in the struggle towards regional integration. Nonetheless, this does not deny a well-known reality on the continent, which is the fact that economic integration has been experienced in Africa for decades now, although on relatively smaller and segmented scales. To put it differently, there are many RECs on the Continent that do already reap the benefits of trade liberalization.

Some of the provisions mentioned in AfCFTA somehow entail the principle of subsidiarity, based on the assumption that some RECs may be better integrated or have better practices than those enshrined in this agreement. This means “Acknowledging the Regional Economic Communities (RECs) Free Trade Areas as building blocks towards the establishment of the African Continental Free Trade Area (AfCFTA)” (see Art.5 (b)). Also, it entails that sub-regional law may prevail over regional law in case of conflict with regional law (Art.19 (2), which may pose a major legal issue legal conflicts while trying to bring together several regions with formally similar, but substantially different legal provisions, and one of the main goals of AfCFTA should be to bring them together by adopting areas already covered by some regions and complementing those that are not yet addressed.

II.2.1. A BRIEF OVERVIEW OF ECONOMIC PATTERNS AND POSSIBLE TRADE MODELS

Gerald E. Scott has elaborated on the structure of the African economy in his article “Transfers, Economic Structure, and Vulnerability of the African Economy”.²² This paper dates back to the 1992s but deserves consideration for its insightful analysis, which despite the time factor remains important for present-day Africa. Scott provides what he called a “broad picture of the African economy”, even though this holistic approach is, as I will present it concerning RECs and their peculiarities, to be taken with caution. The author has identified a couple of features that characterize “the African economy” and which do somehow reflect its economic situation. These are among others weak agricultural growth and the poverty issue related to it as well as poor industrial production (Article 3 (g) of AfCFTA is concerned with both agricultural and industrial development), but also “poor export performance and a growing debt, the deterioration of social indicators, institutions and environment”. It appears that African economies do share some common patterns that have been put forward by Scott. Building exclusively on that, one would suggest that the model of trade that would take place with AfCFTA is Krugman-Helpman trade in the sense that trade will be conducted among similar countries. Nonetheless, the existence of various RECs may also suggest that each of them is somehow unique and that some slight differences may exist between the blocks.

There are currently 8 RECs on the African continent with specific characteristics: East African Community (EAC) established by article 2 of the treaty establishing the East African Community, the Common Market for East and South Africa (COMESA), the Southern African Development Community (SADC), established by the treaty of the Southern Development Community (1992) which has been amended on several occasions. Other existing RECs are the economic community of West African States (ECOWAS), the West African economic and monetary Union (WAEMU), the South African Customs Union (SACU), the economic and monetary community of central Africa (CEMAC), and the Arab Maghreb Union (UMA). To these eight RECs, one could also add the community of Sahel-Saharan states (CEN-SAD), the intergovernmental Authority on Development (IGAD). Trade between the RECs has been envisaged in the framework of a structure that foresaw an African Economic community that would trade with RECs upon the coordination of the AU. The structure of trade between the RECs is thus based on the Protocol on Relations between the RECs and the AU to which UMA is not party, thus its absence in the recapitulative table of figure 6.

Woubet Kassa and Pegdewende Nestor Sawadogo described African RECs in terms of their degree of integration or evolution, their size both economically (GDP) and demographically, but also in terms of

²² Gerald E. Scott. “Transfers, Economic Structure, and Vulnerability of the African Economy.” *The Journal of Developing Areas* 26, no. 2 (1992): 213–38. <http://www.jstor.org/stable/4192079>.

the degree of tariff liberalisation.²³ They studied the effects of RECs on trade creation and trade diversion in Africa and suggest dominant attitudes, which are portrayed in table 5 below and which can be used along with tariff schemes as indicators for the kind of trade that would emerge between RECs in Africa in the framework of AfCFTA.

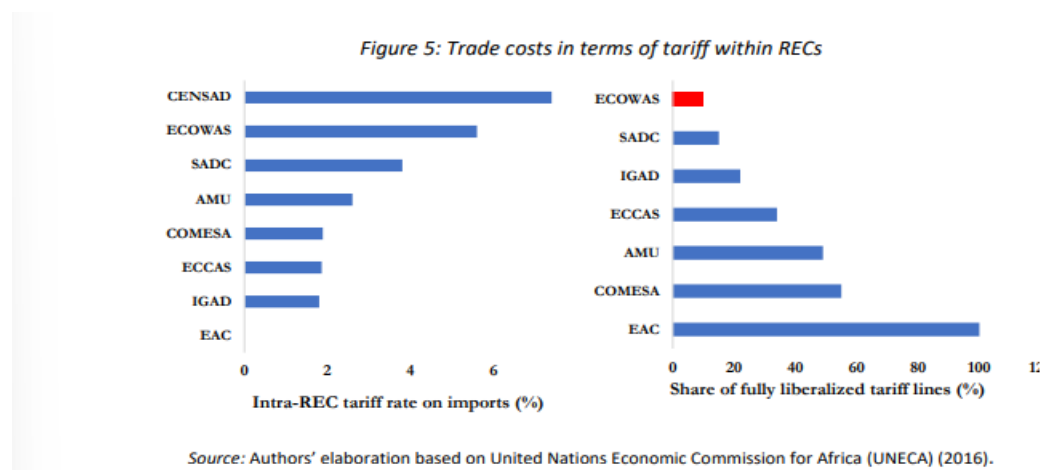


Table 5: Summary on the effects of RECs on TC and TD in Africa

RTAs	Effects	Intraregional	From imports	From exports	Dominant
SADC	TC	yes	no	Yes	TC
	TD	no	no	No	
CEN-SAD	TC	yes	no	No	TC
	TD	no	no	No	
ECOWAS	TC	no	no	No	TD
	TD	no	yes	Yes	
COMESA	TC	yes	no	No	TC
	TD	no	no	Yes	
ECCAS	TC	yes	no	Yes	TC
	TD	no	no	No	
EAC	TC	yes	no	No	TC
	TD	no	no	Yes	
IGAD	TC	yes	yes	Yes	TC
	TD	no	no	No	

Note: yes(no) indicates that there is TC or TD either within the region (intraregional), from imports (imports), from exports (exports) or not. The Dominant effect is given by adding up the significant coefficients of our three dummies variables which capture TC and TD for each REC. We discard AMU because of missing data.

As AfCFTA is mainly concerned with barriers to free trade within Africa, **figure 5** shows the economic structure of each participating REC in terms of intra-REC tariff rates on imports and fully liberalised tariff lines. There are disparities from one REC to another, with ECOWAS and SADC being among the RECs with the highest tariff rates and lowest share as regards fully liberalised tariff lines. A plausible outcome in the framework of AfCFTA would be that RECs would trade with RECs that have similar performances and structures (e.g. AMU and COMESA or ECOWAS and SADC). Another criteria for explaining possible trade between the RECs are the estimations presented in **table 5**, which computes effects of RECs on trade creation and trade diversion. The dominant effect for almost all the RECs is trade creation, which suggests that liberalising trade and fostering trade across RECs is basically possible because of the benefits. However, the partner would be chosen upon consideration of effects from imports or exports. SADC could trade with ECCAS, IGAD, EAC, COMESA, CEN-SAD. The table suggests that ECOWAS would have less incentive to trade as trade diversion is dominant. The alleged inability of ECOWAS to trade within AfCFTA will therefore be tested in chapter 3 of this thesis.

²³ Woubet Kassa and Pegdewendé Sawadogo, "Trade Creation and Trade Diversion in African RECs Drawing Lessons for AfCFTA," August 2021, <https://openknowledge.worldbank.org/bitstream/handle/10986/36226/Trade-Creation-and-Trade-Diversion-in-African-RECs-Drawing-Lessons-for-AfCFTA.pdf?sequence=1>.

II.2.2. THE SCOPE OF AfCFTA

The RECs that have been mentioned previously mainly exist based on the treaties that created them and which contain provisions as to which specific areas are covered. Figure 6 shows areas covered by the treaties not only for the RECs, but also for AfCFTA. The continental agreement covers various areas which are addressed in 03 protocols and 09 annexes, whereas the most relevant one to be dealt with is protocol 1 regarding trade in goods as provided in Article 3. This study will mainly focus on trade in goods, assumed as the most probable approach to be realised in the short run. Free trade in goods which entails free movement of goods is, I assume, more likely to take place than other aspects about free trade and regional integration including services and persons. This is not specific to Africa and can be reflected in Europe as well when reference is made to the gradual integration of the EU, but also and most importantly, to the hitherto essentially commercial connotation of EFTA which gives priority to the free movement of goods, eventually followed by the free movement of services and persons, what makes its founding treaty similar to the AfCFTA's. It is therefore important to examine the nature of measures affecting intra-regional trade in goods in Africa.

II.3. THE NATURE OF MEASURES UNDERLYING INTRA-AFRICAN TRADE

As regards the nature of measures, it is worth mentioning that these are closely connected with two main issues that are invoked in the agreement and whose relevance is repeatedly stressed in the publication by the World Bank study team on the potential long-run effects of AfCFTA. These are precisely Tariffs and Non-tariff barriers, the latter perceived as more relevant than the former when it comes to trade barriers in Africa, a conclusion shared in numerous reports by UNCTAD. These two barriers are some of many areas covered by the agreement, as can be evidenced in the picture below.

Table 2.1 Overview of policy areas covered in Africa's subregional PTAs and AfCFTA

	East African Community (EAC)	Common Market for East and South Africa (COMESA)	South African Development Community (SADC)	Economic Community of West African States (ECOWAS)	West African Economic and Monetary Union (WAEMU)	South African Customs Union (SACU)	Economic and Monetary Community of Central Africa (CEMAC)	African Continental Free Trade Area (AfCFTA)
Tariffs on manufactured goods	✓	✓	✓	✓	✓	✓	✓	✓
Tariffs on agricultural goods	✓	✓	✓	✓	✓	✓	✓	✓
Export taxes	✗	✓	✓	✗	✓	✗	✓	✓
Customs	✓	✓	✓	✓	✗	✓	✗	✓
Competition policy	✓	✓	✓	✗	✓	✓	✓	✓
State aid	✓	✓	✓	✗	✗	✗	✓	✗
Antidumping	✗	✓	✓	✓	✗	✗	✓	✓
Countervailing measures	✗	✓	✓	✗	✗	✗	✗	✓
STEs	✗	✗	✗	✗	✗	✗	✗	✓
TBTs	✓	✓	✓	✗	✗	✓	✓	✓
GATS	✓	✓	✓	✓	✓	✗	✓	✓
SPS measures	✓	✓	✓	✗	✗	✓	✓	✓
Movement of capital	✓	✓	✗	✓	✓	✗	✓	✓
Public procurement	✓	✗	✗	✗	✗	✗	✗	✗
IPRs	✓	✗	✗	✗	✗	✗	✗	✓
Investment	✓	✓	✓	✗	✗	✗	✗	✓
Environmental laws	✓	✓	✗	✓	✗	✗	✓	✗
Labor market regulations	✓	✓	✗	✗	✗	✗	✗	✗

Source: Based on Hofmann, Osnago, and Ruta (2017).

Note: ✓ = policy area covered; ✗ = policy area not covered; AfCFTA = African Continental Free Trade Area; GATS = General Agreement on Trade in Services; IPRs =

Figure 6a: Policy areas covered by AfCFTA

When compared to EFTA, similarities are noticeable, for instance regarding trade in goods, services and investment, Intellectual property rights etc. However, the comparison also allows us to realize that AfCFTA still has left-overs, which could be critical depending on the relevance of their potential impact on the conduct of intra-regional trade. EFTA appears to be a bit more integrated than AfCFTA, when taking policy areas covered as the assessment tool, since it covers two of the four areas not covered by AfCFTA.

Below you will find short summaries of the following areas covered by the EFTA Convention:

- Trade in goods
- Services and investment
- Land and air transport
- Intellectual property rights
- Government procurement
- Movement of persons, social security and mutual recognition of diplomas
- Technical barriers to trade
- Competition, public undertakings and monopolies, and state aid

Figure 6b: areas covered by EFTA²⁴

Figures 6 a and b are two landmark cases for examining policy areas covered by a free trade agreement. AfCFTA covers 14 but 4 (state aid, public procurement, environmental laws and labour market regulations) policy areas. Two of the four left-overs of AfCFTA are covered by EFTA. These are **state aid** and **government procurement**.

II.3.1. TARIFF BARRIERS AND THE PROVISIONS CONCERNED WITH THEIR SUPPRESSION

Tariff liberalization can be defined as a task that consists in eliminating duties progressively based on inter-state negotiations for concession schedules. AfCFTA agreement does precisely stress a progressive relief following a 5-year approach (10-year possibility for least developed countries). Therefore, no fixed tariff that would apply to all states has been invoked, time is rather the main tool for the implementation of this agreement, whose efficiency can be subject to discussion, thereby allowing to reflect on eventual alternatives, perhaps building on the theory of fiscal federalism in the EU-model, which requires a top-down decision making for issues implying externalities and economies of scale. Paragraph (i) of Art. 1 as well as Art. 7 of the AfCFTA agreement are concerned with tariff removal.

²⁴ EFTA, “Short Overview of the EFTA Convention | European Free Trade Association,” [www.efta.int](https://www.efta.int/legal-texts/fta-convention/detailed-overview-of-the-fta-convention), n.d., <https://www.efta.int/legal-texts/fta-convention/detailed-overview-of-the-fta-convention>.

II.3.2. NON-TARIFF BARRIERS

I understand Non-tariff barriers (NTBs) as artificial, non-financial barriers to trade. These barriers are reported to have more perverse effects on intra-African trade than tariff barriers, following the analysis of the World Bank study team. Two main articles of the AfCFTA agreement deal with these barriers. Article 12 is concerned with NTBs. Article 13 on the other hand focuses on the Rules of origin following the criteria and conditions set out in Annex 2, as well as part VIII reading that general exceptions can also be grouped in this category.

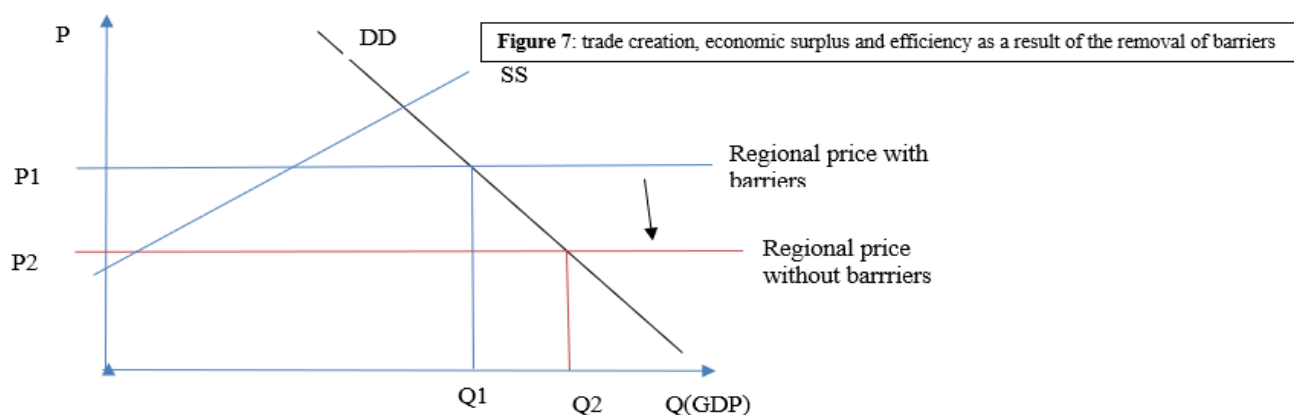
Data regarding NTB measures will be collected and their impact assessed compared to the one caused by tariffs, particularly in the third chapter of the present work. These barriers will be illustrated in times of AfCFTA implementation through some active complaints collected on the platform provided by AfCFTA for raising violations of the agreement by member states. This aspect seeks to make the agreement legally binding on member states upon entry into force through judicial instruments. Some other FTAs have foreseen the inclusion of instruments to deal with cases of violation of treaties or conventions. One could use the example of Europe to illustrate the judicial settings. A landmark case in the history of European integration that is usually convoked is “*the Reinheitsgebot case*”. In the EFTA area, the Restamark case (Case E-1/94), which will be referred to in the fourth chapter of this research, is also worth being mentioned when taking into account the report for the hearing by the EFTA court. Besides the legal framework of AfCFTA which has already been explored and whose shortcomings are addressed in chapter 4, the economic benefits are of interest as well and the section that follows is concerned with the continental benefits of the agreement, resting upon a purely theoretical approach of the benefits of free trade and using predictive shreds of evidence from the World Bank study team and real data evidences from EFTA.

CHAP II- AFCFTA AND ITS EFFECTS: BETWEEN TRADE CREATION AND TRADE DIVERSION

I- AFCFTA AND TRADE CREATION

I.1. CONCEPTUAL ANALYSIS AND GRAPHICAL APPLICATION

One of the natural effects of trade liberalization, including through the formation of free trade areas is undoubtedly the fact that it favours trade or, to put it in Viner's terms, it leads to "trade creation". In his article entitled "*The effect of the EEC and EFTA on European Trade: a temporal cross-section analysis*", Norman D. Aitken refers to Bela Balassa's definition of Gross Trade Creation (GTC) as the "total increase in trade among members of a trading community brought about through integration, regardless of whether the additional trade replaces domestic production or whether it replaces non-member exports."²⁵ Balassa's understanding of trade creation is in line with Viner's conception and can be complemented with trade diversion (especially in terms of inefficient imports). Trade creation can be internal (intra-regional) and external (extra-regional). Expectations formulated about AfCFTA are mainly linked to international trade creation as the agreement is expected to boost intra-African trade which so far has proved to be very low, when holding the share of informal trade constant. In the foreword of its publication "*The African Continental Free Trade Area: economic and distributional effects*" the World Bank study team states that "*AfCFTA would significantly boost African trade, particularly intraregional trade in manufacturing.*" Percentagewise, exports within the continent are expected to increase by more than 81 percent upon full implementation of the agreement. The logic behind trade creation is precisely one according to which, costs are minimised for exporters or importers when barriers are lifted, making products to flow smoothly as a result of their competitiveness rather than protective measures as can be illustrated in the figure below.



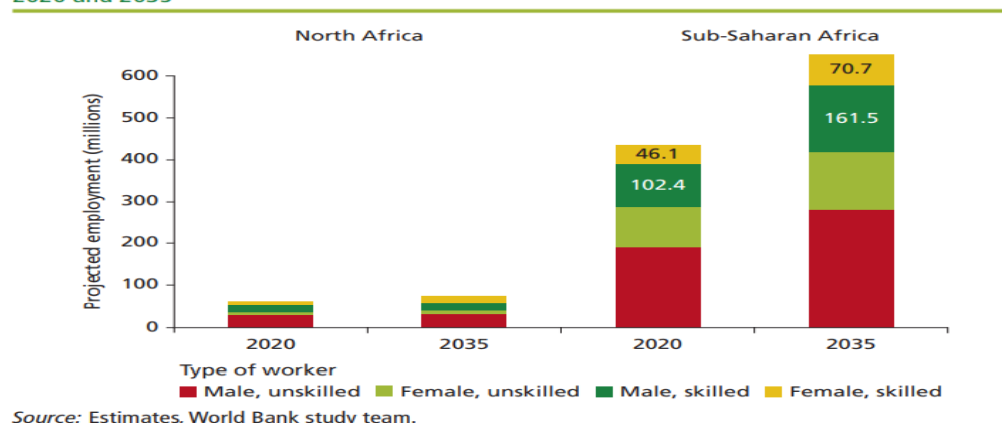
²⁵ Aitken, Norman D. "The Effect of the EEC and EFTA on European Trade: A Temporal Cross-Section Analysis." *The American Economic Review* 63, no. 5 (1973): 881–92. <http://www.jstor.org/stable/1813911>.

It appears the immediate effect of trade creation is the global increase in regional output and consumption as a result of lower barriers which entail lower costs of production and higher demand certainly due to both demand elasticity to price and the booming demography on the demand as the population is also one of the hidden forces capable to shift the demand curve.

I.2. TRADE CREATION AND HIGHER EMPLOYMENT RATES IN AFRICA

Trade creation would therefore have an impact beyond the scope of a mere production boost and more exports. It will create jobs and boost the demand for factors of production, knowing that the demand for factors of production is a derivative of the demand for goods or services, i.e., the higher the demand for goods or services, the higher the demand for inputs used to produce those goods. As a result, many people will witness changes in their living standards and both extreme and moderate poverty rates will be reduced. This is precisely the point made by the World Bank study team concerning the social impact of AfCFTA. Substantially, the authors mention the fact that employment will increase as trade creation also create jobs, at least for industries with a comparative advantage (see figure 4.2. below). This figure shows a huge impact on employment by gender and skills. An important point is precisely the distribution of this positive impact across two main parts of the continent, i.e., between North Africa and Sub-Saharan Africa. The fact that Sub-Saharan Africa would benefit more will justify the choice of a trade simulation between ECOWAS and SADC as two important regions from that part of the continent in the next section. This definition of trade creation and the pertaining positive impacts does also hold true when it comes to some well-integrated regions such as the European Union and EFTA.

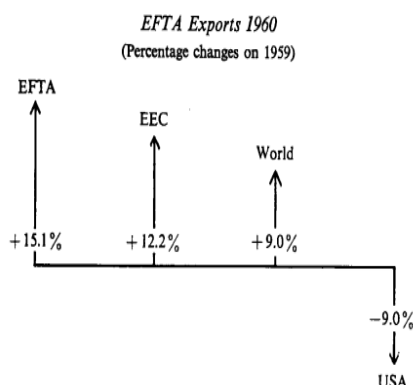
Figure 4.2 Projected employment by gender and skill: North Africa and Sub-Saharan Africa, 2020 and 2035



According to the World Bank study team, total employment growth between 2020 and 2035 is estimated at 224,7 million extra employed people across Africa, with 11,7 million in North Africa and 213 million in sub-Saharan Africa. Annual employment growth rates for each region are respectively 1.12 percent (North Africa) and 2.7 percent (sub-Saharan Africa). I suggest that the real effect of these promising rates would depend on the rates of population growth. According to an article by *The Economist*, published in March 2020 with the Title “*Africa’s population will double by 2050*”, sub-Saharan population is growing at a yearly rate of about 2,7 percent, which is just the equivalent of expected employment growth rate. This therefore means that trade creation under AfCFTA would have virtually no real impact as regards the increase in employment.

Expansion in Intra-EFTA Trade

In 1960 exports of EFTA countries to their partners increased relatively more than exports to other trading areas. Exports to the United States actually declined, especially in the second half of the year. The favourable trend in intra-EFTA trade continued in the first quarter of 1961.



The growth of intra-EFTA trade from 1959 to 1960 amounted to about \$460 million or about 15 per cent. This is much more than the increase between 1958 and 1959, when it was only 7 per cent. In the case of some Member countries the rise in exports to other EFTA countries was remarkable. Portugal increased its sales in other EFTA markets by 31 per cent. Austria's exports to her partners went up by almost 25 per cent and Norway increased hers by 22 per cent. Even in those countries which registered the smallest increases in intra-EFTA trade, namely Denmark and the United Kingdom, exports went up by 12 per cent and 10 per cent respectively.

Trade expanded more in the first half of the year than in the second and the rate of growth decreased further in the first quarter of 1961. The rate of increase in exports over the corresponding period a year earlier declined from about 17 per cent in the first six months of 1960 to just

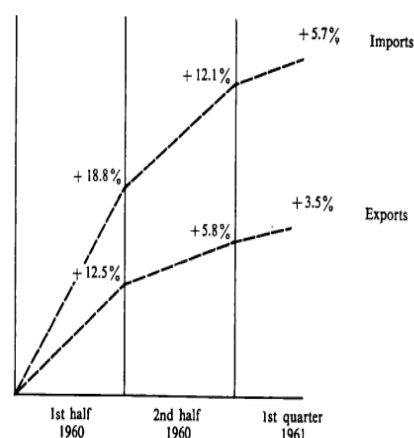
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(a)

Expansion in EFTA's Total Trade

Trade expanded more in the first half of the year than in the second; it continued to increase also in the first quarter of 1961 but the rate of growth slowed down. While total exports in the first half of 1960 were up by 12.5 per cent as compared with the corresponding period of 1959, they increased by only about 6 per cent in the second half 1960 compared with the second half of 1959 and by 3.5 per cent in the first quarter of 1961 compared with the first quarter of the previous year. Total imports show a similar trend, but as the expanding EFTA economies required raw materials and capital goods in larger quantities from outside the Area, the rate of expansion of imports was higher than that of exports. The rate of growth of imports decreased from +18.8 per cent in the first half of 1960, to +12.1 per cent in the second half and was still +5.7 per cent in the first quarter of 1961.

This development reflects to a certain degree the trend in industrial production, which also continued to rise in the first months of 1961, but more slowly than last year. However, since only export demand weakened and domestic demand continued buoyant, foreign trade and industrial output did not move entirely in step. The slowing down of the rate of expansion of trade was not confined to EFTA but was common to all Western European countries.



28

(b)

TABLE 6: PERCENTAGE CHANGES IN EFTA TRADE

(First quarter of 1961 on the same period a year earlier)

Country	Total Trade		Intra-EFTA Trade	
	Exports	Imports	Exports	Imports
Austria	+ 8.2	+14.2	+21.6	+ 2.7
Denmark	+ 2.5	— 0.7	+ 1.2	+ 5.3
Norway	+ 2.6	+ 8.2	+ 8.6	+ 8.6
Portugal	+ 9.5	+27.9	+36.1	+46.6
Sweden	+ 3.8	— 1.6	+14.0	+ 6.5
Switzerland	+11.9	+29.3	+19.2	+23.4
United Kingdom	+ 1.7	+ 2.7	+ 3.2	+10.7
EFTA	+ 3.5	+ 5.7	+ 8.6*	+ 9.9*

* The discrepancy in the two figures is due to time-lags in the recording of exports and imports and also to differences in the methods of compilation used in the various countries.

(c)

Figure 8 (a, b and c): early-stage EFTA's trade creation effect in 1960.²⁶

This figure shows a double effect of trade creation for EFTA's States Parties in two ways: internal trade creation (+15.1%) and external trade creation (i.e., trade with non-EFTA countries). EFTA's annual report for the year 1960 provides data concerning trade growth which suggests an increase in output and consumption. Both imports and exports grew for the then members. However, exports to the American market which back then was the biggest market in the world declined by 9%. This is what Kassa and Sawadogo have considered as trade diversion in terms of exports. AfCFTA countries can therefore be expected to achieve a similar performance in the short-run, although not at the same pace.

²⁶ See page 30, Aitken, Norman D, "The Effect of the EEC and EFTA on European Trade: A Temporal Cross-Section Analysis," *The American Economic Review* 63, no. 5 (1973): 881–92.

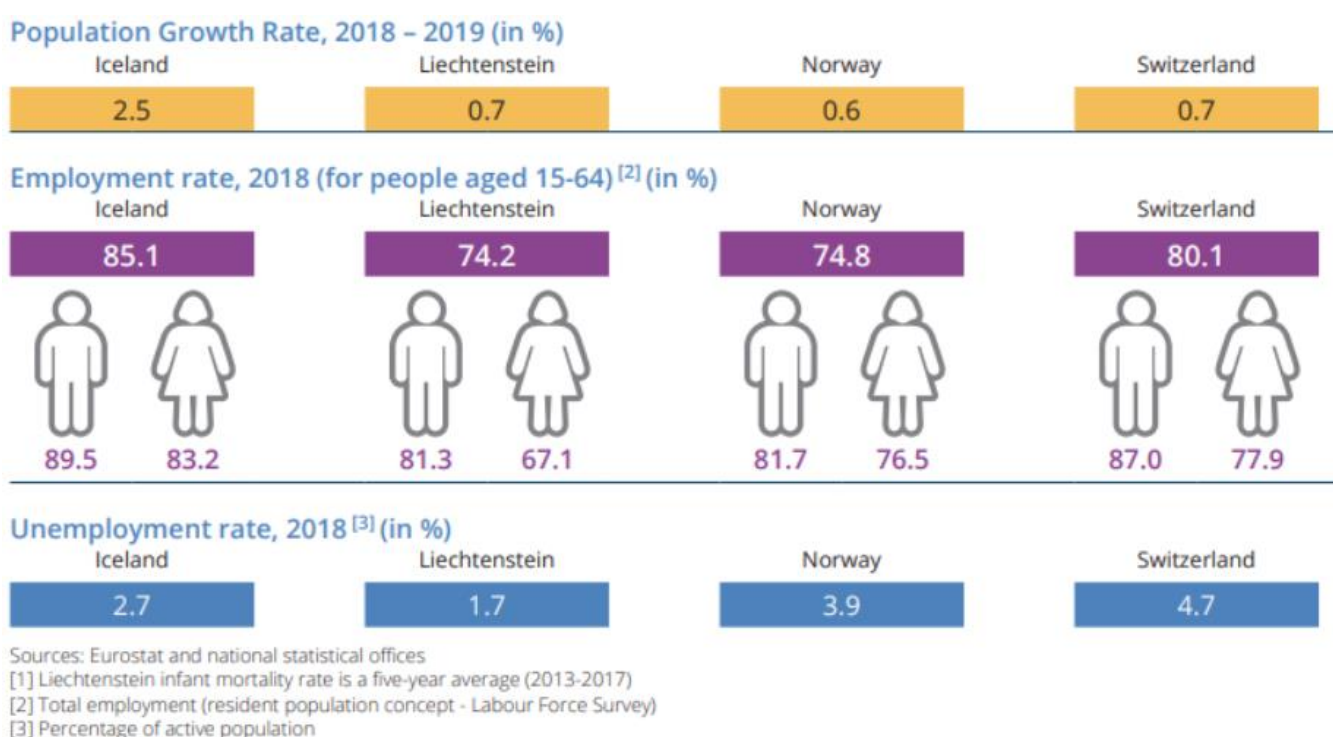


Figure 9: Social impact of EFTA in terms of jobs creation

The annual growth rate of employment for the remaining EFTA states is 3,25 % on average (higher than AfCFTA's expected rates. Iceland's rate taken individually is equivalent to sub-Saharan AfCFTA's average and Liechtenstein's almost to North African states. With an average annual population growth rate of 1,12%, the social surplus in terms of jobs creation is more evident with EFTA than with AfCFTA.

II- TRADE DIVERSION IN EXPORTS

Theoretically, trade diversion in Viner's conception means a selective import of goods based on membership in a FTA or CU and not on competitiveness or efficiency. To put it differently, it implies import preferences from inefficiently producing members of the union, thereby hindering imports from more competitive non-members. The European Union is usually referred to as the landmark case in this regard. In the case of AfCFTA, I do assume that trade diversion would apply as well, despite AfCFTA not being a custom union. Unlike the aforementioned distortionary trade diversion, I assume that AfCFTA will be a victim of greater trade diversion in terms of exports if tariffs of external partners are kept untouched. Despite a potentially higher production as a result of internally created trade, and the pertaining competitiveness which could lower the costs and increase the competitiveness of African states compared to external partners, access to extra-AfCFTA such as the EU for instance will require rounds of negotiations. This means that AfCFTA will have multilateral implications which will raise other challenges in the long run. Daniel Yuichi Kono analyses them starting with a discussion of two main approaches, i.e., static welfare effects and dynamic ones. Addressing the

question of trade liberalization also means discussing its implications in the short run and the long run. The author believes that the static approach is closely related to the marginal principle, since it “asks an economic question: do the economic benefits of FTAs outweigh the costs?” The other approach “asks a political-economic question: do FTAs [...] create long-term political obstacles to multilateral trade liberalization?”²⁷ Considering the table below with EFTA data regarding imports and exports both internally and externally, one could conclude that this long-run outcome has a positive multilateral effect on EFTA’s trade balance, which in 2017 was in surplus for the whole FTA at various levels of trade (sub-regional, regional, global). Taken individually, almost none of the member states of EFTA would have been consistently better off. However, once taken as a whole, EFTA appears to be more competitive than its partners as a result of the external trade creation.

EFTA’s Balance of Trade with the World

	Billion U.S. \$		Exports as a Percentage of Imports	
	1960	1961	1960	1961
Austria	—0.30	—0.28	79.1	81.0
Denmark	—0.33	—0.35	81.5	81.2
Norway	—0.58	—0.69	60.2	57.6
Portugal	—0.22	—0.32	59.9	49.7
Sweden	—0.31	—0.18	89.2	93.7
Switzerland	—0.35	—0.65	84.3	75.8
United Kingdom	—2.46	—1.56	80.7	87.3
EFTA	—4.55	—4.04	80.3	82.9

Figure 10 a: EFTA’s balance of trade with the world for the period 1961-1962

²⁷ See page 510 Daniel Yuichi Kono, “Are Free Trade Areas Good for Multilateralism? Evidence from the European Free Trade Association,” *International Studies Quarterly* 46, no. 4 (December 2002): 507–27, <https://doi.org/10.1111/1468-2478.00243>.

Table 1: EFTA States' trade in goods. Values in million euros, 2017

Trade values in million Euro ¹⁾	World		EU 28		EFTA FTAs ²⁾	
	Import	Export	Import	Export	Import	Export
Iceland	5 947.1	4 297.7	3 154.7	3 162.9	607.2	153.4
Liechtenstein	1 794.7	3 034.6	1 409.5	1 764.3	59.8	431.7
Norway	73 266.2	90 413.4	43 087.4	72 673.6	9 065.0	5 811.1
Switzerland	238 777.3	265 550.1	140 589.3	120 279.5	31 874.7	46 220.4
EFTA total	319 785.3	363 295.8	188 241.0	197 880.3	41 606.7	52 616.7

1) Includes trade in gold

Source: Eurostat (Comext) and Statistics Norway

2) Bilateral free trade agreements not included

Figure 10b: EFTA's balance of trade in 2017

These figures (**10 a** and **b**) have been retrieved from EFTA's annual report between 1961-1962 on the one hand, and from Eurostat (Comext) and Statistics Norway's 2017 report upon the other. They basically show the evolution of the FTA as regards its trade performance both regionally and globally speaking. In the first or oldest report, EFTA appears as a net importer, even with Great Britain as an important member. But this result was the short-run effect. The long-run effect depicted in figure 10b shows that EFTA has become a net exporter, both locally and globally. This could be an incentive for AfCFTA States parties which could experience negative static effects, but positive dynamic effects. To put it differently, AfCFTA could certainly have a more internal effect in the short run and a long-run effect similar to that of EFTA upon full implementation of the agreement.

Having considered potential structures and potential effects on a wider scale (regional level) concerning trade creation, the socio-economic benefits connected with it, as well as trade diversions and trade balance, the next chapter will be concerned with trade simulation within the framework of AfCFTA between two important RECs in Africa: ECOWAS and SADC.

CHAPIII- INTER-SUB-REGIONAL TRADE SIMULATION BETWEEN SADC AND ECOWAS

I- AFCFTA AND THE MARGINAL PRINCIPLE

What can be taken as a watershed for the full implementation of the AfCFTA's agreement is certainly the governments' consideration of the marginal principle. More explicitly, as P. Samuelson and William Nordhaus put it, the marginal principle "*means that people will maximize their incomes or profits or satisfactions by counting only on the marginal costs and marginal benefits of a decision.*"²⁸ This principle is one that should inform decision-making. If the potential gains from AfCFTA have been well portrayed, few efforts have been made by economists to assess the costs associated with the implementation of this agreement, or the magnitude of relative losses by country or industry. The contradiction between optimistic predictions from the World Bank (stressing the benefits) and the obvious initial reluctance from many African countries to ratify the agreement (considering potential losses) is evidence of the necessity to recall the marginal principle. This scenario is depicted in **figure 1.1** of the introductory part of the World Bank's publication, concerned with AfCFTA membership by the status of ratification in the period between October 2019 and 2020.²⁹ Nigeria as Africa's first economy was concerned about the threat of abundant import flows from non-AfCFTA countries into its markets, which was a major factor that justified its reluctance back then. Rules of origins had to be clarified to reassure Nigeria. Regardless, it was also evidenced that the ECOWAS- and SADC-countries were among the first to ratify the agreement. Therefore, the reasons for their enthusiasm can be better explored by considering AfCFTA's effects on their economies on a simulation basis. Special attention will be paid to possible distributional effects in terms of trade and factor revenues.

Considering gains and distributions in terms of trade and factor revenues within the framework of AfCFTA is a complex task that will require embracing a couple of theories including Heckscher- Ohlin's theory, although with caution. This entails for instance not understanding Heckscher-Ohlin trade between partners (ECOWAS and SADC in this simulation) as a mere, simplistic assumption that trade patterns are determined by differences in factor endowments, as this could be a biased assumption given the big similarities that are assumed to exist between African economies.

Instead, it requires a step-by-step approach, applying the four main dimensions associated with Heckscher-Ohlin's theory to available data in both regions under consideration (ECOWAS and SADC) and critically analysing the outcomes. Complementary theories are thought to provide additional

²⁸ Paul Anthony Samuelson and William D Nordhaus, *Economics* (Boston (Mass.); Bull Ridge (Ill.): Mcgraw-Hill, 2005). P183.

²⁹ See fig. 1.1 in World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA: Economic and Distributional Effects*. (Washington: World Bank Group, 2020).

assumptions, especially as to specialization patterns (Ricardo) and external (non-regional and non-factor related) trade on the one hand, as well as explanations for trade between similar economies with similar factor endowments (non-Heckscher-Ohlin trade) upon the other.

This task will be structured in three main but interdependent subtasks. At first, a description of the economies, especially in terms of specialization with two major variables to be observed, namely national and sectoral outputs and factor endowments in both regions. Describing the economic structures on the one hand would enable to capture the relationship between inputs, outputs, and revenues. Furthermore, as a result of the interaction of both variables, the prevailing trade flows or directions (intra- and extra-regional) will be explored. Other explanatory grounds will be enquired about while dealing with extra-regional trade beyond the mainstream Ricardian framework. Wallerstein's World systems theory will be briefly relied upon for describing and understanding each region's role in global trade. As a last resort, a three-dimensional trade simulation applying AfCFTA's recommendations for lifting (1) tariff barriers, (2) Non-Tariff Barriers, and (3) the implementation of the Trade Facilitating Agreement (TFA) will be conducted, whereby their economic, social and political effects will be assessed too. These effects will be split into potential gains on the one hand and potential losses or redistributions on the other, thus the centrality of Heckscher-Ohlin theorems.

II- COMPARATIVE DESCRIPTION OF THE TWO REGIONAL ECONOMIC COMMUNITIES (RECS)

II.1. CONCEPTUAL CLEARANCE AND CAUTION

Out of the huge wealth of economic concepts, one that certainly matters a lot among others is *productivity*, which was precisely addressed by P. Samuelson and W. Nordhaus (2009). Both authors define it as the ratio of output to inputs, thus the relevance of our two variables invoked previously. Dealing with the productivity of both RECs (ECWOAS and SADC) therefore requires to have a look into data that depict the composition of GDPs in the region under consideration, but also their inputs which are the mirror image of their real-time production possibility Frontier.

To start with, it matters in this endeavour, to clear the fallacy of composition from the outset. This concept, as approached by P. Samuelson and W. Nordhaus (2009) is a cautionary principle for economic analysis and interpretation, which means that what holds for the group does automatically hold for individual entities that constitute the group. Thus, data collected on the regional level do have regional relevance and could vary from one country to another. To illustrate the fallacy of composition, one could use the African Development Bank's report (AfDB) on West Africa entitled "*West Africa Economic Outlook 2019*".

While addressing the macroeconomic performance of the region, the AfDB mentions that “*West African 15 economies are diverse across many dimensions of development, and the region is home to some of the continent’s least developed countries.*”³⁰ As a consequence, country-level analyses will be used where applicable for reasons of simplification, precision and consistency both for ECOWAS and SADC. Also, for this analytical endeavour, reference shall be made to different periods depending on the availability of data, whereby the period before 2018 as the pre-covid year would be preferred to mitigate the distortionary effects of the pandemic on the real-time economic performances. Various data sets regarding specialisations and economic performances will be used. Real-time analysis means for this thesis, an analysis based on concrete available data.

II.2. OVERALL ECONOMIC PERFORMANCE AND SECTORAL DISTRIBUTIONS

II.2.1. OVERALL OUTPUT COMPARISON: ECOWAS-SADC

An overview of pre-COVID economic performances of ECOWAS as displayed by the figures 11 a, b, and c below enables two main remarks. First of all, ECOWAS output amounts when computed to approximately US\$ 1.482.756.000 for the 15 economies in terms of Purchasing Power Parity. In numbers, Nigeria is revealed as the most productive country, thereby outpacing any other member state taken individually. Based on data provided by online *Countryeconomy.com*, the average GDP per capita in ECOWAS is roughly US\$ 1.721 (see **figure 11 c**).³¹ This output is far below the performance of EFTA’s four member states in the year 2016 (see **figure 11 h**). Such a discrepancy does for sure apply to Southern Africa as well, as part of Sub-Saharan Africa, whose GDP per capita in the year 2018 was US\$ 2081. In the same year, average GDP per capita for the whole sub-Saharan Africa area was according to *Macrotrends* US\$ 1599.³² SADC is above average, whereas ECOWAS is below average, this first inter-regional difference could allow formulating the hypothesis according to which ECOWAS would export more to SADC, if, as a result of a higher GDP per capita, the marginal propensity to import would be relevant in SADC. Besides, a huge discrepancy within the ECOWAS block is increasingly visible when it comes to the least productive countries such as Cabo Verde and Guinea-Bissau. However, taken together, sub-regional output appears as one of the most relevant across the African continent, led by Nigerian performance.

GDP per current US\$, sector and Capita for ECOWAS, SADC and EFTA

³⁰ African Development Bank, “Macroeconomic Performance and Prospects Regional Integration and Structural Transformation in West Africa,” *AfDB*, 2019, https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2019AEO/REO_2019_-_West_africa.pdf, P5.

³¹ Countryeconomy, “ECOWAS - Economic Community of West African States 2019,” *countryeconomy.com*, 2019, <https://countryeconomy.com/countries/groups/economic-community-west-african-states>.

³² Macrotrends, “Sub-Saharan Africa GDP per Capita 1960-2021,” *www.macrotrends.net*, n.d., <https://www.macrotrends.net/countries/SSF/sub-saharan-africa/gdp-per-capita>.

	2018
Nigeria	397,190,484,464.3
Ghana	67,299,280,679.6
Sierra Leone	4,085,114,794.2
Cote d'Ivoire	58,011,466,450.9
Togo	7,112,200,725.0
Burkina Faso	15,890,065,019.8
Benin	14,262,407,011.5
Guinea	11,857,030,336.5
Senegal	23,116,699,808.2
Mali	17,070,866,299.1
Gambia, The	1,670,670,668.6
Niger	12,808,660,528.1
Liberia	3,422,754,800.0
Cabo Verde	1,966,503,222.8
Guinea-Bissau	1,504,630,121.0

Created from: World Development Indicators
Series : GDP (current US\$)

Figure 11a: GDP in ECOWAS per current US\$

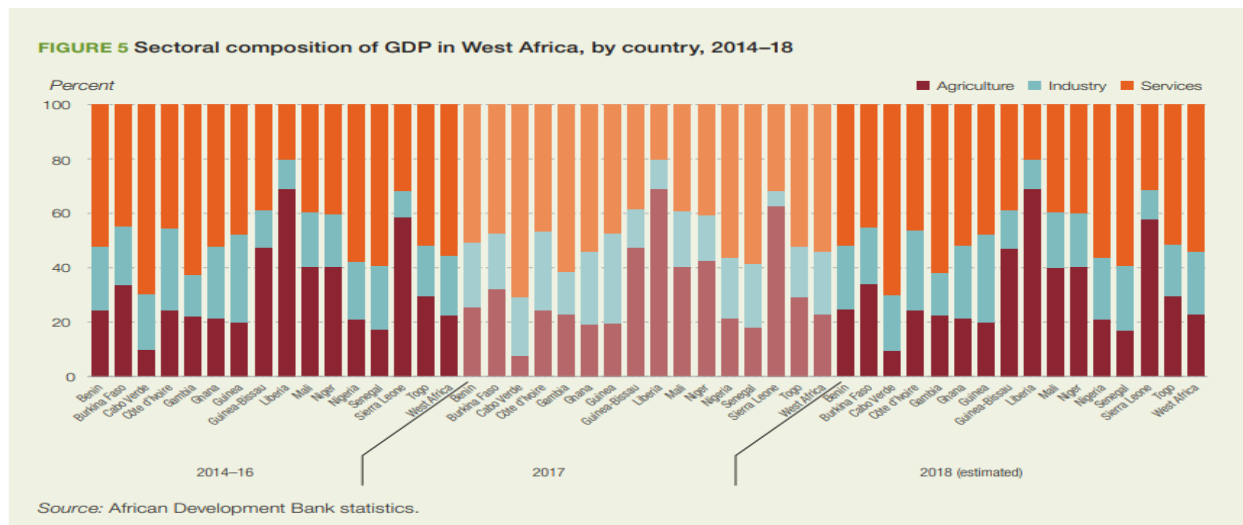


Figure 11b: GDP distribution across sectors in ECOWAS

Economic Community of West African States							
Countries	Population	Annual GDP	GDP per capita	HDI	Debt (\$M)	Debt (%GDP)	Deficit (%GDP)
Benin [+]	12,123,198	\$15,674M	\$1,293	0.545	8,835	50.62%	-5.80%
Burkina Faso [+]	20,903,278	\$17,378M	\$831	0.452	8,088	46.54%	-5.70%
Cape Verde [+]	555,988	\$1,707M	\$3,070	0.665	2,711	158.82%	-9.11%
Ghana [+]	31,072,945	\$68,532M	\$2,206	0.611	41,685	61.98%	-6.79%
Guinea [+]	13,132,792	\$15,681M	\$1,194	0.477	6,914	39.26%	-1.49%
Guinea-Bissau [+]	1,967,998	\$1,432M	\$728	0.480	1,170	79.35%	-9.95%
Ivory Coast [+]	26,378,275	\$61,349M	\$2,326	0.538	28,893	47.03%	-5.57%
Liberia [+]	5,057,677	\$3,201M	\$633	0.480	1,771	58.32%	-3.84%
Mali [+]	20,250,834	\$17,465M	\$862	0.434	7,038	40.73%	-1.68%
Niger [+]	24,206,636	\$13,758M	\$568	0.394	6,188	44.98%	-5.34%
Nigeria [+]	206,139,587	\$429,423M	\$2,083	0.539	148,091	34.49%	-5.66%
Senegal [+]	16,744,000	\$24,644M	\$1,472	0.512	16,969	69.17%	-6.41%
Sierra Leone [+]	7,976,985	\$4,059M	\$509	0.452	3,098	76.33%	-5.76%
The Gambia [+]	2,416,664	\$1,828M	\$756	0.496	1,554	85.03%	-2.15%
Togo [+]	8,285,000	\$7,586M	\$916	0.515	4,573	60.28%	-6.88%
~ TOTAL: ECOWAS	397,211,857	\$683,718M	\$1,721		287,579	41.81%	

Figure 11c: GDP in ECOWAS per Capita

Table 2: Gross Domestic Product in SADC at Current Market Prices, (US \$ million), 2008-2018

SADC Member States	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	88 539	70 415	83 799	111 943	128 138	136 725	145 668	116 164	101 124	122 121	107 970
Botswana	10 945	10 267	12 787	15 438	14 420	14 902	16 251	14 421	15 662	17 486	18 596
Comoros	524	531	906	1 022	1 016	1 116	1 148	988	1 021	1 082	1 241
DRC	19 144	16 004	21 567	25 841	29 308	32 686	35 909	37 918	37 135	37 981	47 228
Eswatini	3 279	3 612	4 436	4 821	4 830	4 587	4 440	4 023	3 815	4 440	4 362
Lesotho	1 867	1 886	2 384	2 787	2 727	2 553	2 616	2 463	2 305	2 592	2 519
Madagascar	9 413	8 544	9 983	11 552	11 579	12 424	12 523	10 371	11 805	13 177	13 904
Malawi	5 322	6 185	6 960	8 003	5 721	5 290	5 918	6 431	5 310	6 348	7 197
Mauritius	9 984	9 135	10 002	11 517	11 669	12 122	12 804	11 671	12 127	13 146	14 129
Mozambique	11 557	11 242	10 456	13 135	15 343	16 123	17 327	15 457	10 902	12 647	14 428
Namibia	8 346	8 954	10 911	12 602	13 032	12 659	12 848	11 725	11 293	13 579	14 446
Seychelles	969	849	970	1 019	1 060	1 328	1 343	1 377	1 428	1 503	1 589
South Africa	287 100	297 217	375 298	416 878	396 811	366 837	351 047	317 638	296 333	349 630	368 398
Tanzania	27 389	28 574	31 704	34 452	39 643	45 668	49 969	47 522	49 763	53 281	57 347
Zambia	17 909	15 329	20 266	23 461	25 528	28 076	27 163	21 274	21 031	25 590	25 177
Zimbabwe	6 451	8 157	12 042	14 102	17 115	19 091	19 495	19 963	20 549	22 041	22 790
SADC region	508 737	496 902	614 470	708 572	717 940	712 186	716 470	639 406	601 602	696 643	721 321

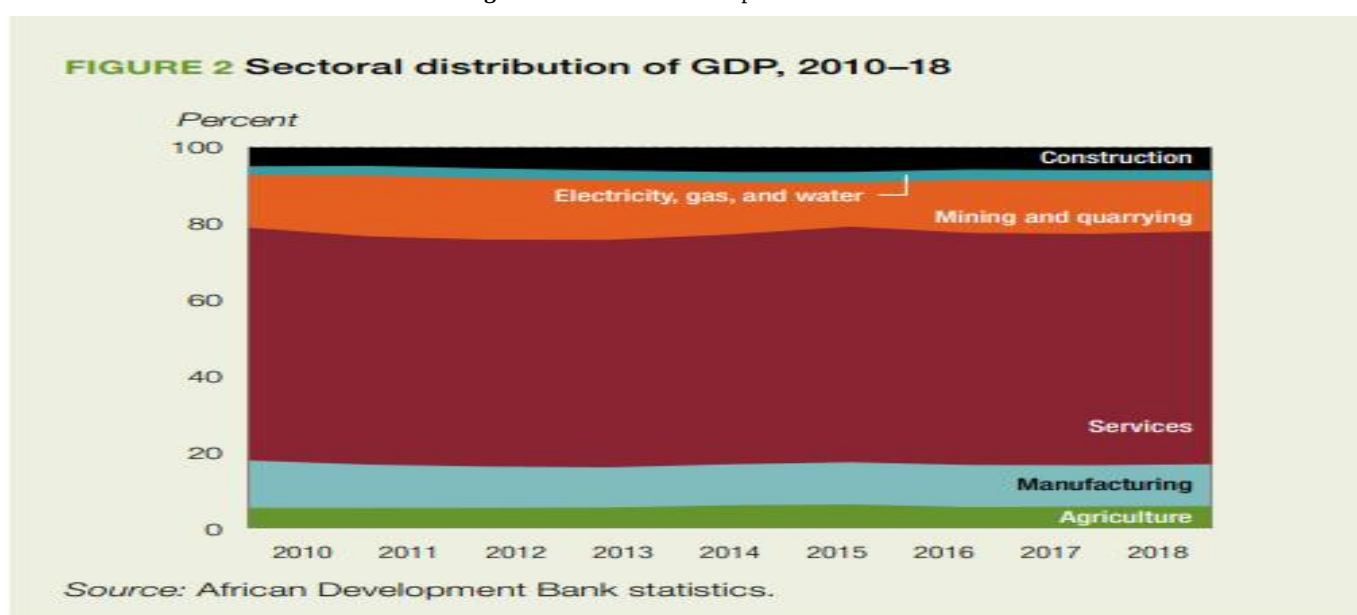
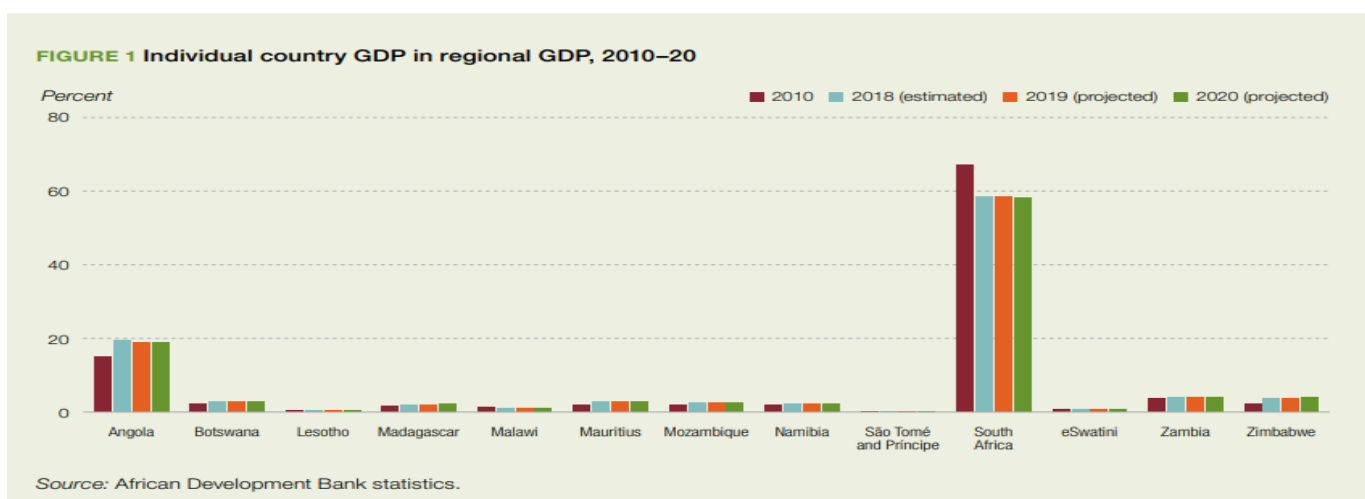
Figure 11 d: GDP in SADC per current US\$**Figure 11 e: GDP distribution across sectors in SADC****Figure 11 f: Share of regional trade in SADC**

Table 4: Per Capita Gross Domestic Product at Current Prices, (US \$ per head), 2008-2018

SADC Member States	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angola	4 127	3 186	3 675	4 757	5 275	5 452	5 624	4 354	3 677	4 306	3 691
Botswana	5 716	5 263	6 433	7 624	6 990	7 093	7 537	6 570	7 024	7 758	8 124
Comoros	798	789	1 313	1 445	1 403	1 504	1 513	1 272	1 283	1 330	1 492
DRC	281	227	296	343	377	406	432	446	427	428	515
Eswatini	3 177	3 460	4 205	4 518	4 472	4 197	4 014	3 595	3 370	4 062	3 764
Lesotho	991	1 000	1 260	1 469	1 435	1 338	1 365	1 280	1 187	1 327	1 154
Madagascar	494	436	496	558	545	569	558	450	499	542	529
Malawi	407	457	499	556	385	345	374	394	315	365	410
Mauritius	8 026	7 325	8 001	9 199	9 290	9 629	10 154	9 241	9 602	10 392	11 160
Mozambique	545	516	466	570	647	662	692	601	413	453	518
Namibia	3 944	4 155	4 969	5 631	5 713	5 447	5 424	4 857	4 592	5 733	5 985
Seychelles	11 405	9 761	11 020	11 736	12 147	14 923	14 700	14 745	15 078	15 658	16 378
South Africa	5 838	5 953	7 399	8 087	7 571	6 885	6 481	5 769	5 297	6 151	6 382
Tanzania	673	682	734	774	882	985	1 045	963	977	1 014	1 058
Zambia	1 457	1 214	1 548	1 710	1 805	1 923	1 808	1 375	1 320	1 560	1 491
Zimbabwe	532	667	976	1 106	1 310	1 428	1 428	1 432	1 445	1 518	1 535
SADC region	1 912	1 819	2 189	2 454	2 427	2 341	2 291	1 996	1 833	2 068	2 081

Figure 11 g: GDP per capita in SADC

World leaders in wealth creation

The average value added, or wealth creation, per inhabitant in all the EFTA States is among the highest in the world.

Gross domestic product (GDP) per capita, 2016

Country	GDP per capita, US dollars in current nominal US dollars		GDP per capita, US dollar, PPP (purchasing power parity)
	Value	World ranking	
Liechtenstein*	165 262	:	132 166
Switzerland	79 888	2	63 889
Norway	70 868	4	58 790
Iceland	59 765	6	50 104

Source: World Bank except where indicated

* Data from the Office of Statistics Liechtenstein. Liechtenstein's GDP per capita is influenced by the high number of cross-border workers (54 %) who contribute to GDP while not being Liechtenstein residents

: Data not available

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Figure 11 h: GDP per Capita EFTA (2016)³³

On the other hand, SADC macroeconomic performances appear to be higher as per reports provided by SADC (see **figures 11 d, e, f, g**).³⁴ SADC region is made up of 16 member states, almost the same size as ECOWAS (16), and it is driven by South Africa as the biggest economy and market with its output competing with Nigeria's. Both regions do therefore host the two best performing economies of the continent, thus the interest in simulating trade between them. This task requires looking also beyond the sphere of aggregate data. In other words, sectoral specializations should be examined as well to figure out possible or evident comparative advantages between the two blocs.

³³ EFTA, "Key Characteristics of the EFTA Economies," n.d., <https://www.efta.int/sites/default/files/publications/fact-sheets/General-EFTA-fact-sheets/efas-free-trade-relations-facts-sept-2018.pdf>.

³⁴ Southern African Development Community, "SADC Selected Economic and Social Indicators, 2018," SADC, 2018, https://www.sadc.int/files/6215/6630/2592/SADC_Selected_Indicators_2018.pdf.

II.2.2. SECTORAL SPECIALISATIONS

The global views provided before in figures 11 portray three relevant sectors that reflect the structure of all modern economies, namely *agriculture*, *industry*, and *services*. So, dependency on these sectors is not specific to these African regions only. It is true for other regions as well, an example being EFTA as our referring case study from the developed world's side. Substantially, as per a report by EFTA headquarters, “EFTA FTAs cover trade in industrial products (including fish) and agricultural products.” These broad categories can be further segmented into individual industries or firms which will therefore make the difference, as this can be viewed in the graphs (figure 12) that are found below concerning EFTA's GDP and dominant sectors. The same study will be conducted regarding ECOWAS and SADC, which for sure will reveal not only sectoral similarities, but also intra-sectoral differences (slight between the two African regions and critical as compared to EFTA). For ECOWAS, two sectors have the biggest share in regional GDP, these are on average, agriculture and services. The relevance of the industrial sector varies from one country to another.

To use the vocabulary from the game theory, the following table can be considered to reflect not only the dominant strategies or sectors in each country's economy but also their estimated share in the national output.

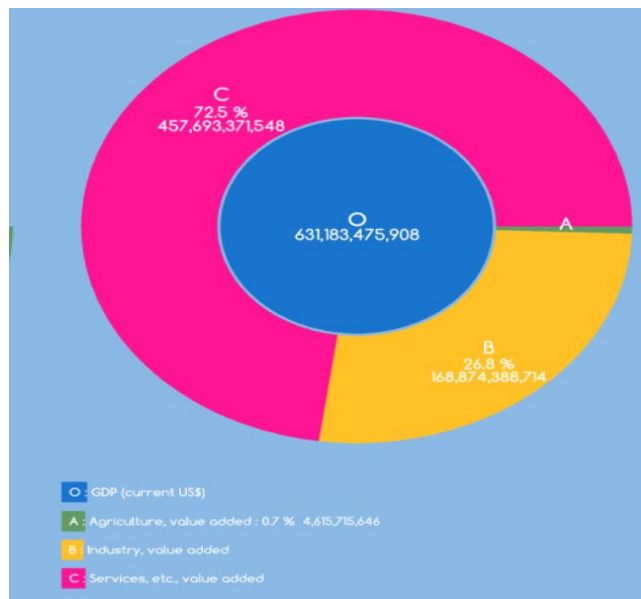


Figure 12 a : Dominant sectors of GDP: Switzerland³⁵

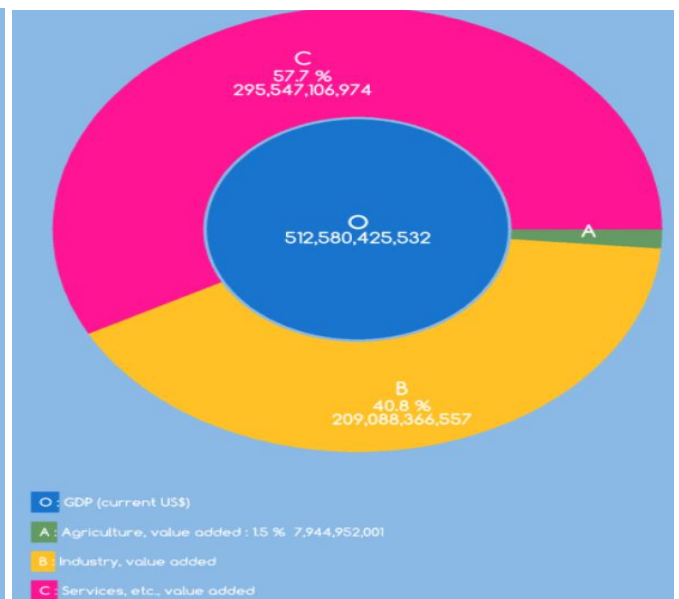


Figure 12 b: Dominant sectors of GDP: Norway³⁶

³⁵ Macroeconomy Meter, “Switzerland : GDP Composition Breakdown,” MECOMeter - Macro Economy Meter, accessed June 9, 2022, <http://mecometer.com/infographic/switzerland/gdp-composition-breakdown/>.

³⁶ Macroeconomy Meter, “Norway : GDP Composition Breakdown,” MECOMeter - Macro Economy Meter, accessed June 9, 2022, <http://mecometer.com/infographic/norway/gdp-composition-breakdown/#:~:text=Norway%20%3A%20GDP%20Composition%20Breakdown%20%20%20.>

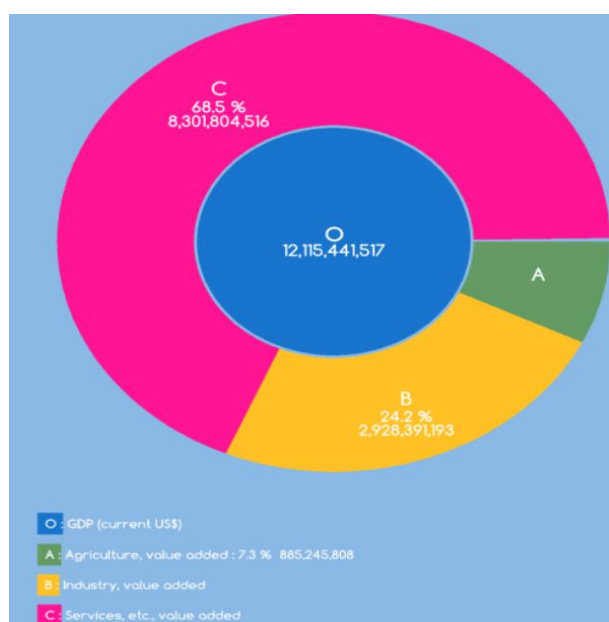


Figure 12 c: Dominant sectors of GDP: Iceland³⁷

These graphs mainly present sectors or industries that are relevant in three EFTA-countries' overall output. The overall output or GDP of each country is found in the blue circular area in the middle. The general trend in EFTA is a remarkable specialisation in services, then industry, with the agricultural sector being the least important. This is precisely different for many sub-Saharan countries including ECOWAS and SADC countries, where agriculture appears to be extremely relevant even though specialisations are not as similar as they are in EFTA. In such a scenario where economies are remarkably similar (EFTA case), Helpman-Krugman trade model would apply. Intra-EFTA trade is therefore Helpman-Krugman trade. But what about ECOWAS and SADC?

Data contained in **figure 13** allows us to notice that out of the 15 economies that aggregate into the ECOWAS economy, 12 have a dominant specialization in, or dependency on services with different shares ranging from 30 to 70% of GDP. This sector also dominates at the regional level with an average share of almost 55% of regional GDP. Mali and Niger have co-dominant sectors, which are agriculture and services. The least relevant sector at the national level is industry. However, at the regional level, the industry is almost as important as agriculture with approximately 23% of GDP. The relatively tiny industrial sector in ECOWAS comprises following manufactured production which is still low due to the high rate of specialization in the production and exportation of non-processed raw material, as was noticed by Mr. Kalilou Traore, Ecowas commissioner for industry and private sector promotion during the “*public hearing of European parliament’s committee on international trade, parliament hearing on Africa*” dated July 2016. As manufacturing is expected to be the most rewarding sector upon full AfCFTA implementation, the industrial potential of ECOWAS, as well as measures taken to fill the gap, if any, relatively to Southern Africa will be explored in the next sections. Building on the World Bank’s study about potential macroeconomic benefits from AfCFTA, manufacturing (industry) will be the most profitable sector. Taking into account the data mentioned previously, it can be assumed that regional AfCFTA benefits in terms of manufacturing for ECOWAS will be proportional to their share in GDP, i.e., roughly 23%. The last sector which is at the same time the most important one for ECOWAS is services. The World Bank study team on AfCFTA briefly presents services as encompassing recreational and the

³⁷ Macroeconomy Meter, “Iceland : GDP Composition Breakdown,” MECOMeter - Macro Economy Meter, accessed June 9, 2022, <http://mecometer.com/infographic/iceland/gdp-composition-breakdown/>.

like, insurance, real estate, trade and finances. They capture other services (road and rail transport services, water transport services, communications services etc) in an illustrative figure³⁸. Services provided by the study team are applicable on the continental level, so these will be kept for SADC as well, so that only its share in GDP will be checked.

Coming to SADC, its industrial sector is not to be seen as a homogeneous bloc, since the level of industrial development varies from one country to another, especially when considering South Africa as Africa's most industrialized country. This said, an overview of regional output and its sectoral distribution in the SADC region allows us to notice the following outcome. As per **figure 11 e**, dependency on agricultural output amounted in 2018 to less than 10% (higher dependency in ECOWAS), services to roughly 60% (similar to ECOWAS with approximately 50-55%), industrial manufacturing to 13% and construction, electricity, gas, water, mining and quarrying to 20%.³⁹ Having these figures in mind, and drawing upon the predictions of the World Bank study team regarding the impact of AfCFTA on the individual sectors by 2035 (output increase in natural resources and services by 1.7 percent, in manufacturing by 1.2 percent, but output decline by 0.5 percent at the continental level)⁴⁰. Regarding the contracting sector, which is agriculture, it is assumed that some regions such as the North African countries will divert their agricultural inputs into other sectors such as industry. Such an outcome could certainly also apply to South Africa, which is assumed to be self-sufficient in agricultural foods. Back in the 1992s, Johan van Zyl and Johann Kirsten were precisely concerned with South Africa's goal which was to achieve food security.⁴¹ However, the outcome may differ in other countries from ECOWAS and SADC depending on the relevance of individual industries as well as the degree of inputs specialization. To investigate the underlying factors, a microeconomic study of industry-level PPFs will be conducted, and where applicable, an analysis of the production costs which will be determinant for understanding the direction of trade in both regions. Thus, it is important to look into the various sectors and explore the different industries that they comprise. National and regional demand will be assessed for each industry for matching with supply and for an estimate of needs (imports) or wealth creation (local surpluses for exportation).

Regional dominant	Agriculture (0-30%)	Services (0-30%)	Industry	Dominant sector

³⁸ See pages 26 and 28 in World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA : Economic and Distributional Effects*. (Washington: World Bank Group, 2020).

³⁹ African Development Bank, "Southern Africa Outlook, Macroeconomic Performance and Prospects Regional Integration and Private Sector Development," 2019, https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2019AEO/REO_2019_-_Southern_africa.pdf.

⁴⁰ See page 5 in World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA: Economic and Distributional Effects*. (Washington: World Bank Group, 2020).

⁴¹ <https://ageconsearch.umn.edu/record/267534/files/agrekon-31-04-007.pdf>

sector				
	Nigeria; Benin; Cabo Verde; Cote D'Ivoire; Gambia; Ghana; Guinea; Senegal; Togo; Burkina Faso	Sierra-Leonne; Liberia		
	30-45%	30-45%		
	Guinea-Bissau; Mali; Niger	Mali; Niger; Guinea- Bissau; Burkina Faso		3*A; 3*S;
	45-70%	45-70%		
S	Sierra-Leonne; Liberia	Togo; Senegal; Nigeria; Guinea; Gambia; Ghana; Cabo Verde; Benin; Cote D'Ivoire		2*A; 9*S

Figure 13: GDP dominant sectors in ECOWAS

A: Agriculture

S: services

3*A; 3*S: 3 Ecowas countries have similar rates of specialisation in agriculture and services. They therefore have co-dominant sectors in GDP. These are Guinea-Bissau; Mali; and Niger.

2*A; 9*S: 2 ECOWAS countries (Sierra-Leonne and Liberia) and 9 extra countries (not including Mali, Niger, and Guinea-Bissau) are specialised in services, thereby producing a total of 12 countries whose dominant sector is services.

II.3. MICROECONOMIC ANALYSIS OF PRODUCTION IN BOTH ECOWAS AND SADC

II.3.1. AGRICULTURAL INDUSTRIES: CEREALS MARKET ANALYSIS AS CASE STUDY

Agriculture is a critical sector for Africa. Amidst the ongoing Russo-Ukrainian crisis and the blockade of cereals exports partly due to Russia but also partly due to the boomerang effects of western sanctions on Russia, the vulnerability of the continent has been exposed, as the whole continent depends on wheat imports from both Russia and Ukraine. Some ECOWAS countries such as Benin do even import 100% percent of wheat from these conflicting countries. The alert given by the United Nations concerning an impending famine disaster in the world, and precisely in Africa as a result of the war, raises the debate

about African agricultural production and food security. Whether AfCFTA could put an end to such a dependency is subject to the outcome of a trade simulation in agriculture between ECOWAS and SADC which is undertaken in this chapter.

Agriculture targets food security to meet an exponentially growing demand as demand for food is positively related to population growth. Production therefore needs to be efficient, whereby efficiency means, theoretically, the best use of available resources or factors of production to produce the maximum amount of goods to satisfy the needs of the population. The main industry this section will be focusing on is therefore (because of its timely relevance to the continent) cereals production and the main individual good will be rice as one of the most consumed agricultural goods in both ECOWAS and SADC.

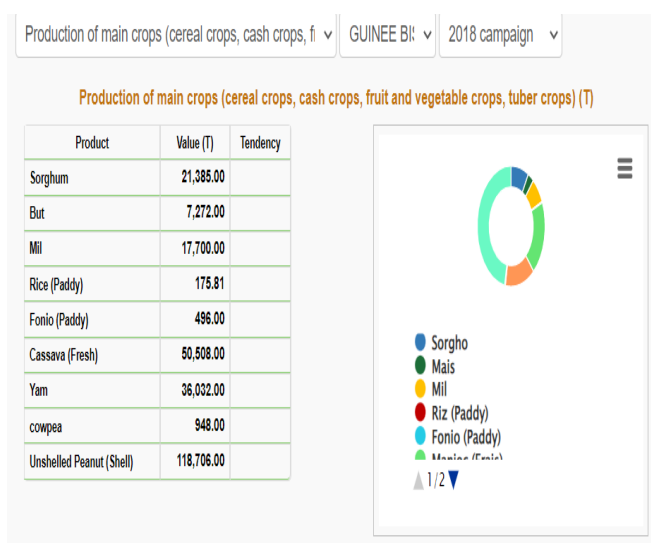
As regards the former, Ecowas is pursuing a goal similar to the one South Africa had set in the 1992s which is particularly concerned with food security and regional reserves for West Africa. As a result, an integrated system to capture real-time data has been put in place to facilitate information sharing on the agricultural sector, namely “ECOAGRIS” which aims at creating a common agricultural policy and establishing a regional food reserve. Considering data provided by ECOAGRIS on agricultural productions, the main products cultivated in the three most specialised countries presented previously (Mali, Guinea-Bissau, Burkina Faso) are among others: Mil, rice, Fonio, But, Sorghum, Cassava, Yam, Cowpea, unshelled peanut. These can be spotted in **figure 14**. Other productions from other countries (Ivory Coast, Nigeria, Ghana among others) can be added to the list such as cotton seeds, cashew nuts, cocoa beans, green coffee, cotton fibre, and Hevea.

On the other hand, the cereal balance sheet and production (see **figure 15**) published in 2019 in SADC’s “*Synthesis report on the state of food and nutrition security and vulnerability in Southern Africa*”⁴² provides data about this industry within SADC, especially regarding supply and demand which will be addressed later on. As per the aforementioned report, it appears that “Maize accounts for 80% of cereal production in Southern Africa. Other important cereals are wheat, sorghum millets and rice.”⁴³ The first remark that could be formulated at this stage is that eventual trade in cereals between SADC and ECOWAS would be intra-industrial trade as both regions produce almost the same goods, although not to the same extent. However, the question that can be raised is to what extent and at what costs? This question will be answered using balance sheets with data on supply performance and demand on the one hand. On the other hand, a graph will enable us to figure out how both forces of supply and demand interplay.

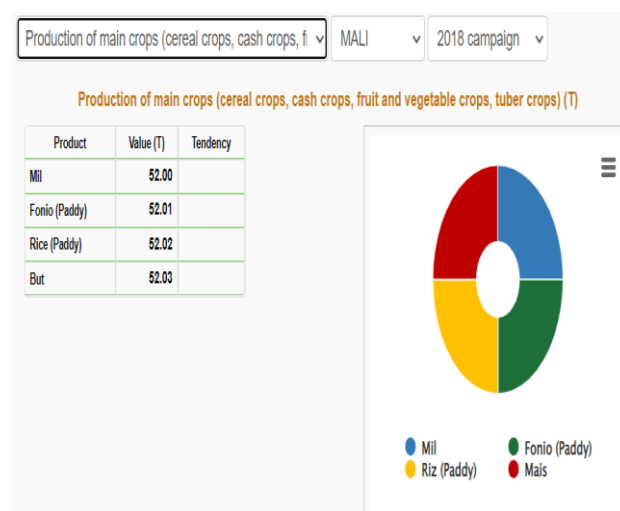
Figure 14: Cereals production by the most agriculturally specialised ECOWAS countries

⁴² SADC, “Synthesis Report on the State of Food and Nutrition Security and Vulnerability in Southern Africa,” 2019.

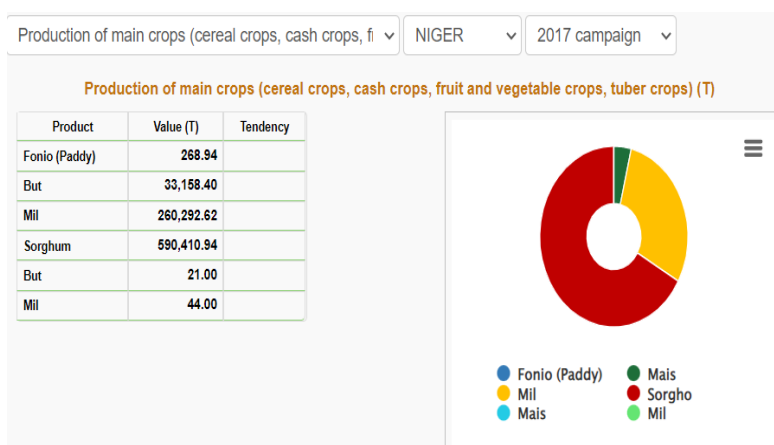
⁴³ See section “Food production and livelihoods” on page 10.



(a) Guinea-Bissau



(b) Mali



(c) Niger

Table 2: Cereal balance sheet and production

	2019/20 Marketing Year Cereal Balance Sheet			Production (Harvest Year)		
	Required	Available	Deficit / Surplus	2018	2019	% change
	('000 tons)	('000 tons)	('000 tons)	('000 tons)	('000 tons)	2018 vs 2019
Angola	4,879	3,748	-1,132	3,609	3,570	-1.07
Botswana	300	37,756	-262	66	5.4	-91.83
DR Congo					3,200	
Eswatini	167.88	96.77	-71	112	95.3	-14.99
Lesotho	375.07	87.83	-287	75	37.5	-50.27
Madagascar						
Malawi				3,027	2,700	-10.81
Mozambique				3,174		
Namibia	351.2	200.5	-151	153	71.5	-53.24
South Africa	15,524	19,607	4,083	18,701	15,137	-19.06
Tanzania	8,754	9,007	253	9,386	9,008	-4.03
Zambia	3,155	2,841	-314	2,598	2,217	-14.66
Zimbabwe	2,204	1,443	-761	1,994	1,443	-27.64
SADC	35,710	37,069	1,359	42,895	37,485	

Source: Respective Member States, SADC

Figure 15: Cereals production in SADC

II.3.1.1. LOCAL DEMAND FOR AND SUPPLY OF AGRICULTURAL GOODS (CEREALS)

II.3.1.1.1. RICE AND OTHER CEREALS IN ECOWAS

FAO economists Aziz Elbheri, Jonathan Kaminski and their peers have published supply and demand patterns for selected agricultural goods in West Africa, in chapter 1 entitled “*West Africa staple food systems: An overview of trends and indicators of demand, supply, and trade*”, among which cereals and rice as an example out of this category.

First, the demand for agricultural goods in West Africa depends on various factors. These are mostly consumers’ location (rural or urban), as well as population rates and preferences. Using the example of rice, it appears, as the authors put it, that “*Rice demand has been rising at a sustained pace since the 1960s and has been mostly satisfied through imports. Rice consumption in West Africa grew from an average of 1.3 million MT in the 1960s to nearly 6 million MT in the 1990s and almost 10 million by 2006.*”⁴⁴ The reasons invoked for this increase are income growth and urbanization. As the trend is expected to be maintained and real income to be raised through AfCFTA, higher demand for rice will therefore remain. Taken as a region, the GDP per capita of ECOWAS almost corresponds to that of SADC (when South Africa is excluded), whereas individual considerations give a comparative advantage to some southern states such as Namibia, South Africa and Botswana. As consumption in general is income-elastic, one could assume that higher gains in terms of real wages in SADC with a marginal propensity to import assumed to be relevant would attract food production from ECOWAS, holding other factors (technology, preferences and self-sufficiency in food) constant. This would also apply the other way around to ECOWAS.

Concerning this, the World Bank study team on AfCFTA was particularly concerned with the case of Ivory Coast as one of the biggest winners in terms of higher income increase, thus keeping the game open. Table 1 below from a study by Yuan Zhou and John Staatz⁴⁵ displays expenditures elasticities for agricultural goods in West Africa. The expenditure elasticity of demand is defined as the percentage change in quantity demanded of a given good X per the percentage change in consumer expenditure. In the JRC Technical Reports by the European Commission on “*Income Elasticities of Food Demand in Africa*”⁴⁶, the authors assert that “*Generally, the income elasticity of food demand (i.e. the percentage change in food consumption in response to a 1% change in income) is positive but smaller than 1, i.e. spending on food increases less than proportionally with total expenditures.*” Following this logic of the

⁴⁴ Aziz ELBEHRI, Jonathan KAMINSKI, Suffyan KOROMA, Massimo IAFRATE, and Marwan BENALI, “*West Africa Staple Food Systems: An Overview of Trends and Indicators of Demand, Supply, and Trade*,” 2013. P7.

⁴⁵ Yuan Zhou and John Staatz, “Projected Demand and Supply for Various Foods in West Africa: Implications for Investments and Food Policy,” *Food Policy* 61 (May 2016): 198–212, <https://doi.org/10.1016/j.foodpol.2016.04.002>.

⁴⁶ See Patricia Melo et al., “Income Elasticities of Food Demand in Africa: A Meta-Analysis,” 2015, <https://core.ac.uk/download/pdf/38631917.pdf>.

European commission, food demand is therefore assumed to be inelastic. In the same vein, reference is made to the link between elastic food demand and poverty, a concept that is central in the World Bank team's analysis of the impact of AfCTA, especially as the poverty rate in Africa is estimated at "415 million people living in extreme poverty (57 percent of global total)"⁴⁷. As a result, EU Commission's researchers have further stated that *"For poor people, food makes up an important share of household spending. However, as people get richer, they tend to allocate proportionally more of that additional income to non-food items, reducing the share they spend on food. As a result, even though total spending on food increases, the share of total income devoted to food declines, also known as Engel's Law."* Given the fact that ECOWAS counts more countries listed as least developed countries than SADC does, and assuming like the World Bank that AfCFTA would generate higher income, it is important to have a look into this industry in statistical terms.

Rice like some other cereals appear to be goods with a relatively elastic demand especially in the rural area, and a relatively inelastic demand in the urban areas, which implies that the size of the population in both areas is decisive for capturing demand patterns, especially as far as the slope of the curve is concerned. This assumption strengthens the thesis by the aforementioned FAO economists.

Y. Zhou, J. Staatz/Food Policy 61 (2016) 198–212

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Table 1

Expenditure elasticities of demand for food products, by country and place of residence. Source: Tayondyandé and Yade (2012) as reported in Hollinger and Staatz (2015), for countries other than Nigeria. Authors' estimates for Nigeria based on 2012/13 LSMS data.

Product	Burkina Faso		Côte d'Ivoire		Ghana		Mali		Niger		Nigeria ^a		Senegal		Togo	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Rice	0.9	1.4	0.4	0.7	1.25	1.17	0.5	1.2	0.8	1.4	0.77	0.92	0.6	0.9	0.8	1.2
Wheat products	1.5	1.7	1	1.2	1.11	1.24	1.3	0.8	1.7	1.5	0.97	1.28	0.7	1.1	1.2	2
Maize	0.4	0.7	0	0.5	0.74	0.81	0.4	0.5	0.8	1.3	0.68	0.58			0.2	0.7
Millet and sorghum	−0.2	0.6				0.19	0.2	0.5	0.5	0.9	0.84	0.44	0.5	0.9	0.5	0.6
Cassava			0.5	0.7	0.98	1.65					0.49	0.85			0.7	1.1
Yam			0.6	0.5	1.27	2.19					0.79	1.22			1	1.4
Banana-plantains			0.6	0.7	0.37	1.31										
Beans/cowpeas									0.6	1.1	^b	^b			0.5	1
Pulses							0.7	1.1			0.76	0.87				
Fruits and vegetables	0.9	1	0.8	0.9	0.94	1.31	0.7	0.7	1	1.3	0.78	0.87	1	1.4	1	1.1
Oils and oilseeds	0.9	1.1	0.6	0.7	0.51	0.88	0.7	0.9	1.1	1.2	0.67	0.71	0.6	1	0.8	1
Meat	1.4	1.5	1	1.2	1.16	1.46	1	1.3	1.3	1.3	1.48	1.62	1.3	2.4	1.3	1.6
Fish and seafood	0.9	1.2	0.7	0.8	0.99	0.89	0.6	0.9	0.9	1	0.66	1.08	1	0.9	1	1.2
Dairy products	1.5	1.3	1.3	1.4	1.34	0.51	1.1	1.3	1.2	0.9	1.41	1.42	1.1	2.1	1.7	2.1
Sugar							0.6	0.8			0.94	0.89	0.6	1		
Beverages and stimulants	1	1.1	1.3	1.3	1.81	1.61			1.1	1.4	1.34	1.78			1.3	1.1
Outside dining			3.2	4.3							1.10	1.18			1.6	1.3
Other food products	0.7	1	1.2	1.5	1.67	1.37	0.8	0.9	1	1.1			1	0.9	0.9	0.9

^a For Nigeria, expenditure elasticities of demand were estimated in more disaggregated form for the following products.

Figures shown in this table are weighted averages means of the individual items (with the weights corresponding to individual items' budget shares), but in expenditure projections reported later in paper, individual disaggregated elasticities were used and resulting amounts for each individual item were aggregated to get total amounts of these "aggregated" commodities:

- Millet and sorghum – each estimated separately.
- Cassava: gari and "other cassava" estimated separately.
- Meat: separate estimates for beef, mutton and goat, poultry and other meat.
- Beverages: separate estimates for alcoholic and non-alcoholic beverages.

^b Not included in authors' estimates.

⁴⁷ World Bank, *AFRICAN CONTINENTAL FREE TRADE AREA: Economic and Distributional Effects*. (Washington: World Bank Group, 2020). P. 57.

Table 1 provides an overview of expenditure elasticities of demand for food products in the ECOWAS sub-region by taking two main criteria into account: **country** of and **place of residence** of the consumer. The goods that are represented are agricultural goods, which have different elasticities across countries and places. The same outcome is true for cereal products whose elasticities also vary including within countries, depending also on specific goods. For example, rice is elastic in the rural areas of Burkina Faso, Ghana, Mali, Niger, and Togo, whereas it is inelastic in Cote d'Ivoire, Nigeria and Senegal. Wheat, is an elastic good in almost all those countries, which could also explain the threat which the war in Russia represents for them. Maize, Millet and Sorghum, Cassava, Yam, Banana, beans are mainly inelastic goods. These data would suggest the following hypothesis. Given the ability of South Africa to produce wheat, **higher incomes and expenditures in food in ECOWAS would generate higher exports of wheat from SADC.**

II.3.1.1.2. MATCHING SUPPLY AND DEMAND

For the sake of ensuring consistency, cereal production will be considered instead of any individual cereal good. Quantities will be matched based on data provided by the FAO in the table below.

Country	Good	Local average production (2015-2019) in tonnes (t)	Local demand (t)	Local deficit/surplus (t)	Percentage of imports
Nigeria	Cereals	27344	34544	-7200	20
Cote D'Ivoire	Cereals	3232	5182	-1950	37,63
Niger	Cereals	5739	6219	-480	7,71
Guinea-Bissau	Cereals	221	366	-145	39,61
Mali	Cereals	9822	10362	-540	5,211
Ghana	Cereals	3331	4831	-1500	31
Sierra Leone	Cereals	1300	1700	-400	23,5
Liberia	Cereals	269	749	-480	64
Senegal	Cereals	2720	4820	-2100	43,56
Togo	Cereals	1326	1596	-270	16,96
Sub-total	Cereals	55304	70369	-15065	21,40

Figure 16 a: Local production of cereals and foreign imports in ECOWAS between 2015 and 2019

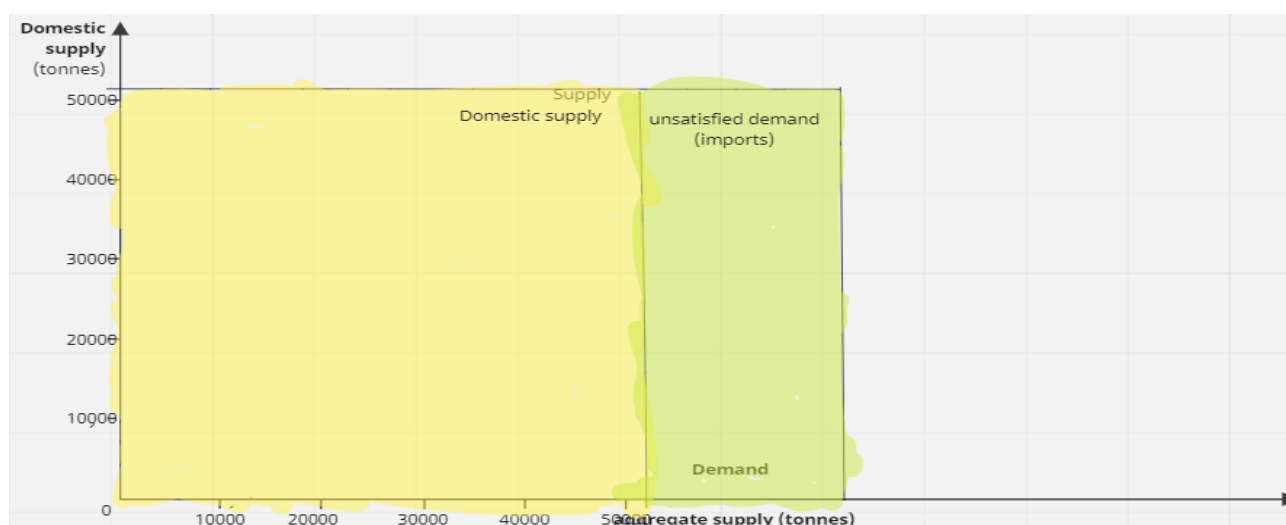


Figure 16 b: Pure domestic vs aggregate supply of cereals in ECOWAS

This graph shows two different types of satisfying demand for cereals in ECOWAS. The yellow area is aggregate domestic supply (i.e. without import), the green area is the share of cereals imported, and both the yellow and green areas are the total supply (including imports) to meet total local or regional demand.

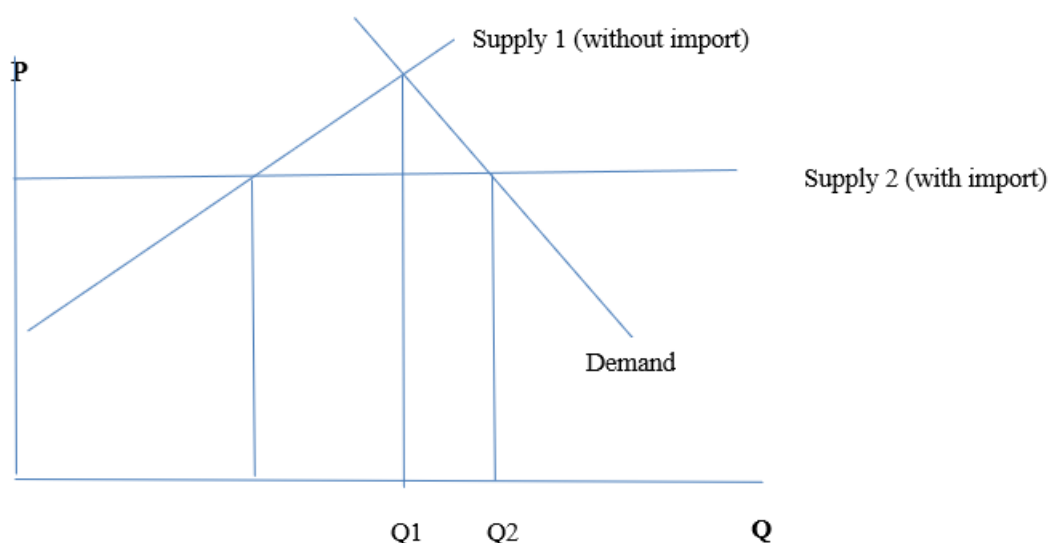


Figure 16 c: Matching supply and demand for cereals in ECOWAS

Graph 16 c reveals the interplay between the two forces that governs all economics: supply and demand. There are two supply possibilities. In the first case, there is a market failure, due to the fact that shortages in terms of supply could allow few producers to affect the price, which is not common in the market of food, which P. Samuelson and William Nordhaus assumed to be perfectly competitive, meaning that producers are price takers. In the second case, import from outside produces a double effect: it covers the gap by increase the production and corrects the market failure by rendering perfectly elastic, i.e., producers just take the price.

The analysis that can be made from the figures above is that the ECOWAS region as a whole (five countries missing) does import roughly 22 percent of its cereals. The deficit is therefore covered through imports. As sub-regional deficit is reflected for cereals, this entails the hypothesis following which, either there is extra-Ecowas trade in cereals accounting for at least 22 percent, or their production is inside the

production possibility frontier. These results are reflected in the graphs above. As regards the possibility of trade in this sector with SADC, I will suggest that the shortage in supply that was evidenced in the graphs could be covered by SADC in case there is a relative surplus in terms of cereals production in this region. This assumption will be tested in the next section.

II.3.1.1.3. RICE AND CEREALS IN SADC

Building on the balance sheet provided by SADC, one can note a difference in terms of output when it comes to cereals in the SADC region. Unlike ECOWAS, the region is, taken globally, relatively self-sufficient, visibly thanks to the huge contribution of South Africa which records surpluses amounting to roughly 4.083 tons, thereby clearing other member states' slight deficits to enable an average regional surplus of about 1.359 tons in the period between 2019 and 2020. For the sake of avoiding external influences that may mislead the analysis, the pandemic effect on declining spending is assumed to be irrelevant. The graphs presented above for ECOWAS would therefore be the mirror image of those of SADC. At a first glance, considering deficits on the one side and surpluses on the other, one can conclude that a zero-tariff trade in agricultural goods and more precisely in cereals would certainly push production surpluses from SADC towards ECOWAS where imports are unavoidable to meet the needs. Before looking into real-time trade patterns in agricultural goods with cereals as the case study in both regions, understanding the factors underlying those outcomes (deficit and surplus) in terms of PPFs is of the utmost importance. The next section will analyze the PPFs by industry, followed by an analysis of trade patterns in both ECOWAS and SADC in AfCFTA's times.

II.3.2. ECOWAS PPF FOR AGRICULTURAL OR CEREALS PRODUCTION VS SADC PPF

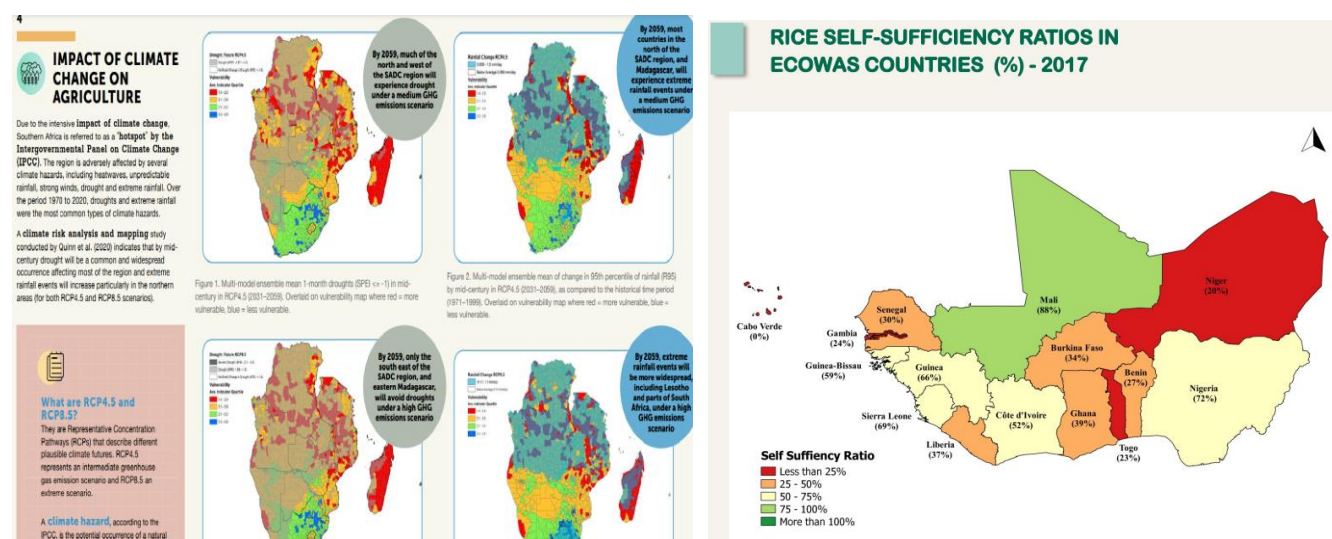
Assessing the PPFs of ECOWAS and SADC for agricultural productions is closely related to an evaluation of each region's endowment with three main factors, namely land (fixed factor), labour and technology level (variable factors).

The PPF is defined by P. Samuelson and W. Nordhaus as the maximum amount of goods that can be produced with a given number of available inputs and the state of technological development. In this section, the individual industry that will be considered is rice.

In line with the ECOWAS rice factbook 2019, "*West Africa has the highest rice cultivated land area in Africa and evidently, none of ECOWAS Member States is self-sufficient in the rice sector*"⁴⁸. Building upon the self-sufficiency ratios provided in **figure 17a**, the paradox in terms of land exploitation rate and productivity is visible since, unlike SADC, none of the ECOWAS countries is self-sufficient despite

⁴⁸ See page 11 of ECOWAS Commission - Directorate of Agriculture and Rural Development, "THE ECOWAS RICE FACTBOOK 2019 (1st Edition)," 2019.

having the highest rate of cultivated land area (see **figure 17 b and c**). Some factors bound with land (including “*inadequate land irrigation leading to highly volatile productivity levels, as well as outputs hampered by the inability to mitigate the impact of weeds, insects and birds*”) are invoked beside the probably most decisive factor which is “*Low levels of farming technologies, mostly rudimentary for subsistence*”. SADC is not better off concerning production constraints associated with land and environmental conditions, as the region is increasingly exposed to challenges stemming from climate change as appears in the figure below.⁴⁹ In an article published in 2018 by PESA (a south African think tank for political economy) entitled “*Landreform und ländliche Transformation in SADC*”, the arable land of SADC is estimated at 25% of its land mass, whereby only 6% is cultivated.⁵⁰ This proves that the inefficient use of arable land makes agricultural production in this area to be inside its PP. South African cereal productivity per hectare of land is above the world’s average, despite the country’s endowment in arable land estimated at 10% of the land mass. The second SADC most productive country (Tanzania) is almost at the same level as the ECOWAS most productive ones which are Nigeria and Mali. As per principle, the higher the productivity of cereals per acre or hectare of land (holding labour and technology constant) the more competitive one country would be for trade. A similar scenario is noticeable within the EFTA bloc in Europe (see adapted graphic below).⁵¹ However, as land only cannot produce cereals, other factors are needed to be added to land such as labour and technology (including machinery and fertilizers and chemicals).



⁴⁹ See page 4 of the SADC Information Brief

⁵⁰ PESA, “Land Reform and Rural Transformation in SADC,” <https://politicaleconomy.org.za/2018/05/land-reform-and-rural-transformation-in-sadc/>, May 4, 2018, <https://politicaleconomy.org.za/2018/05/land-reform-and-rural-transformation-in-sadc/>.

⁵¹ World Bank, “Cereal Yield (Kg per Hectare) - World, South Africa, Tanzania, Nigeria, Mali, Switzerland, Iceland | Data,” [data.worldbank.org](https://data.worldbank.org/indicator/AG.YLD.CREL.KG?end=2018&locations=1W-ZA-TZ-NG-ML-CH-IS&start=2018&view=bar), accessed June 10, 2022, <https://data.worldbank.org/indicator/AG.YLD.CREL.KG?end=2018&locations=1W-ZA-TZ-NG-ML-CH-IS&start=2018&view=bar>.

Figure 17 a: Impact of climate change in SADC and Self-sufficiency ratios in rice for ECOWAS countries

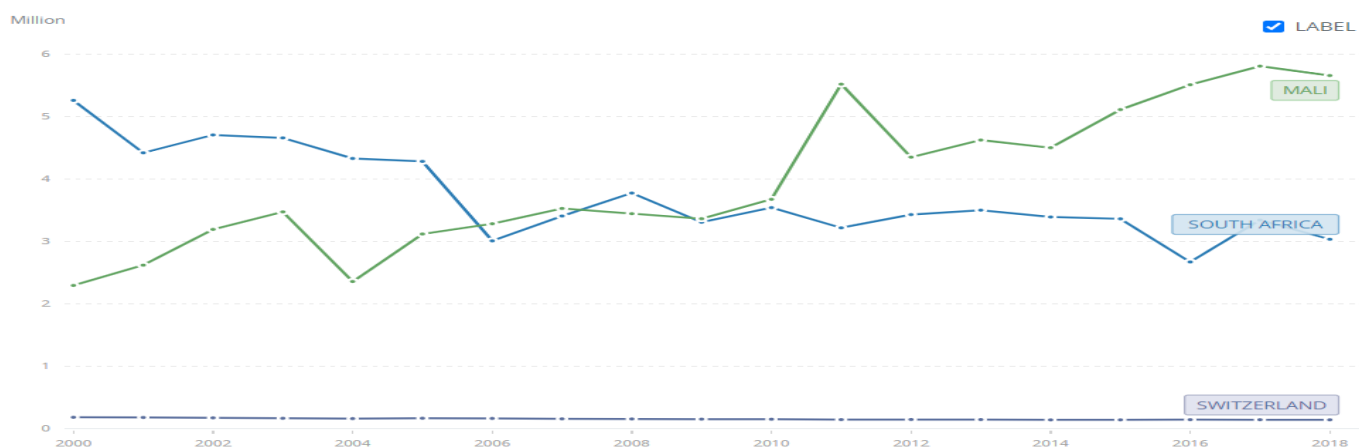


Figure 17 b: Land under cereal production (hectares)

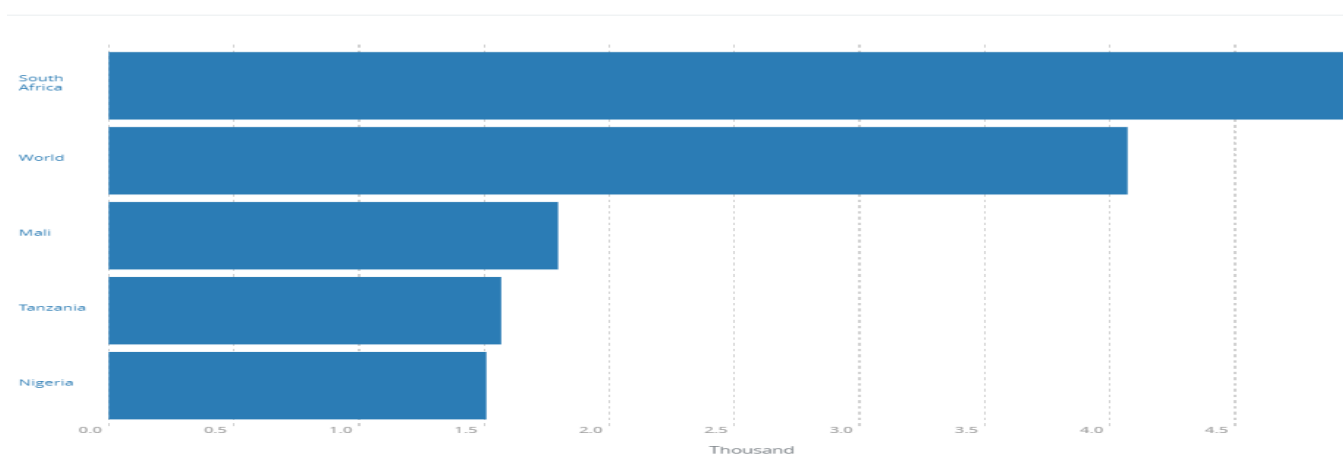


Figure 17 c: hectare of land cultivated

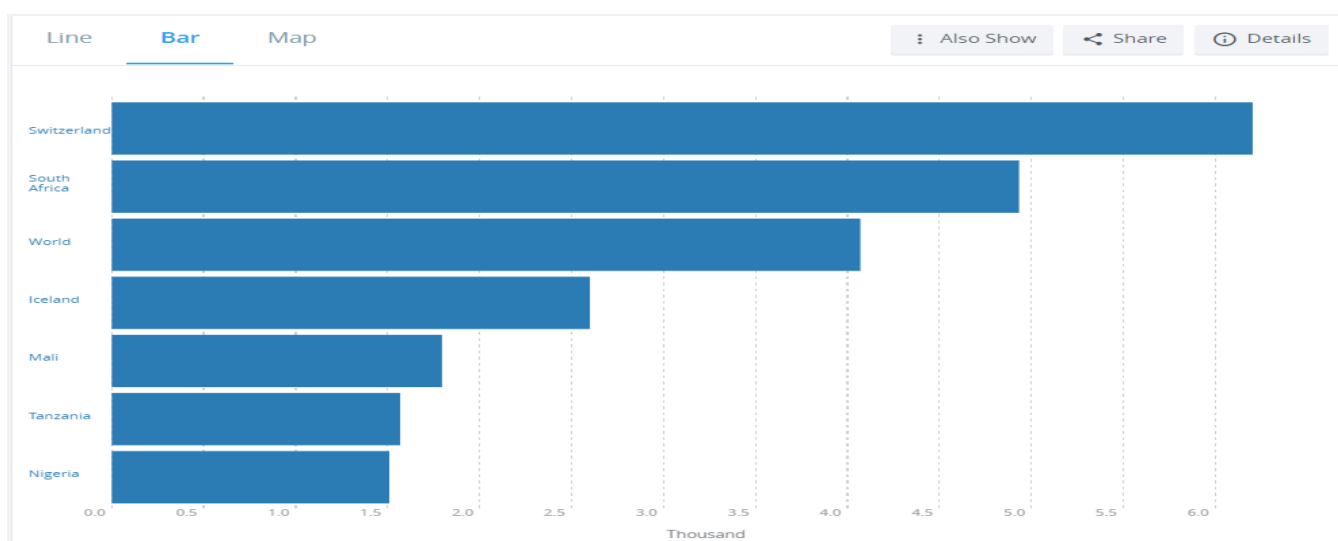


Figure 17 d: Cereal yield (kg per hectare)

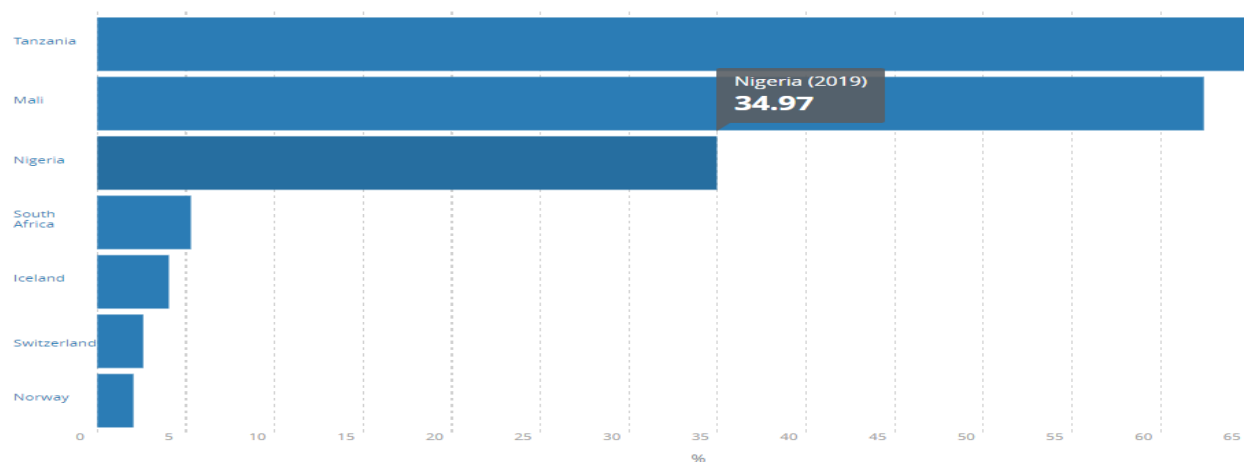


Figure 17 e: Percentage of employment in agriculture⁵²

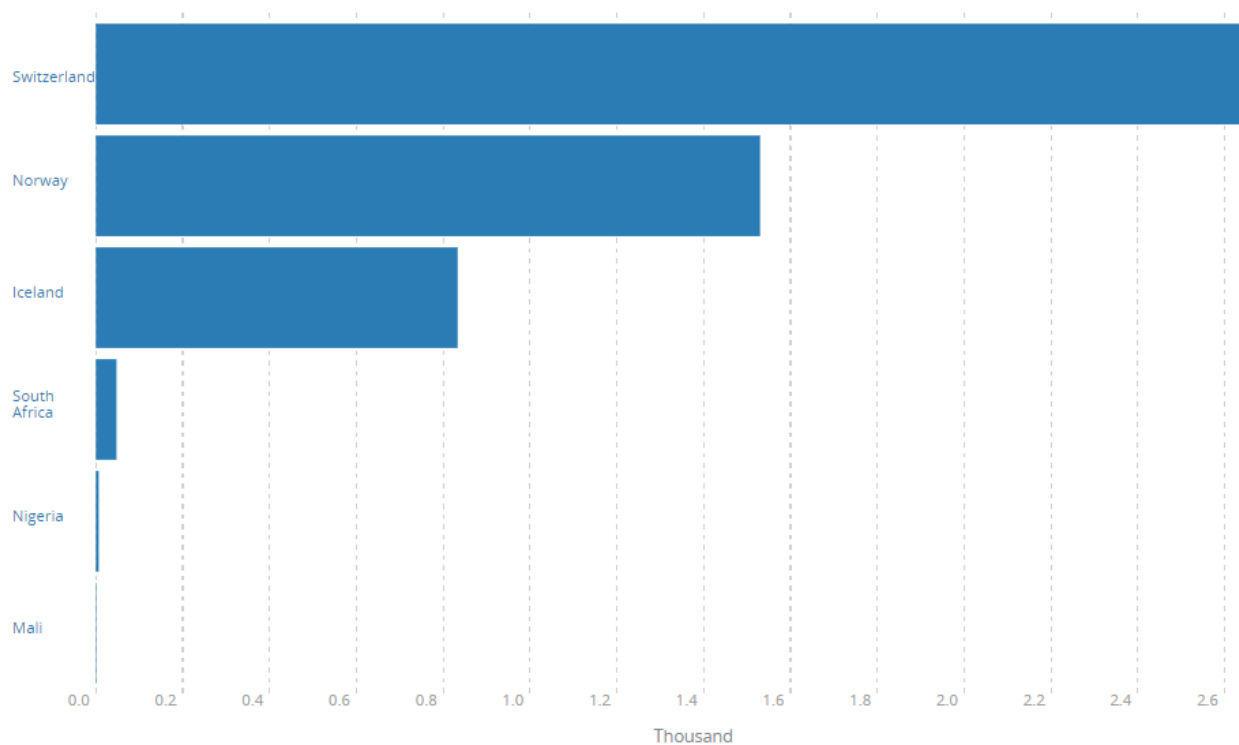


Figure 17 f: Agricultural machinery (capital and technology)⁵³

Labour contribution should also be considered. Self-sufficiency in cereals production could certainly be higher in case more of the untapped land potential would be made use of, thus giving more advantages to

⁵² World Bank, “Employment in Agriculture (% of Total Employment) (Modeled ILO Estimate) - South Africa, Mali, Switzerland, Norway, Liechtenstein, Iceland, Nigeria, Tanzania | Data,” data.worldbank.org, accessed June 10, 2022, <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS?end=2019&locations=ZA-ML-CH-NO-LI-IS-NG-TZ&start=2019&view=bar>.

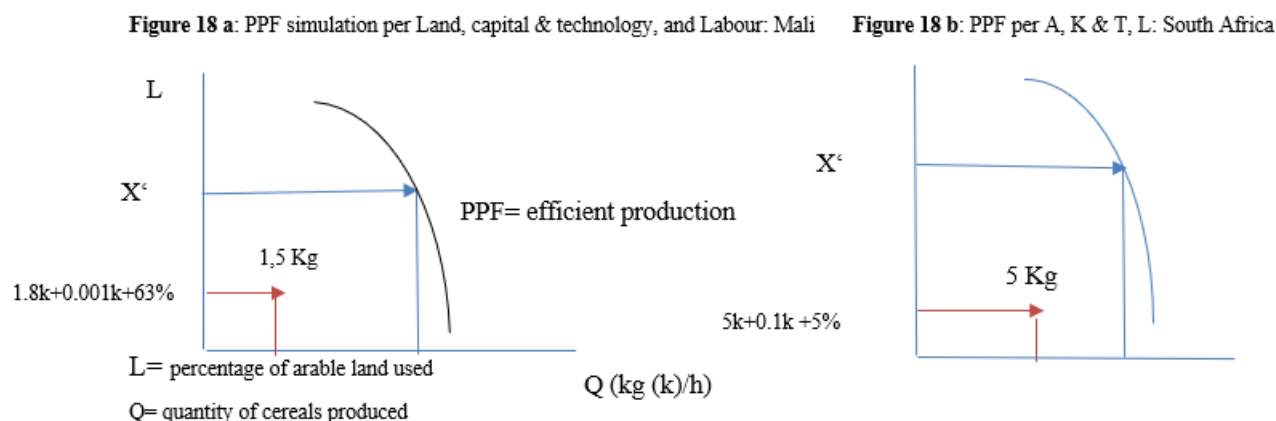
⁵³ World Bank, “Agricultural Machinery, Tractors per 100 Sq. Km of Arable Land - South Africa, Mali, Switzerland, Norway, Liechtenstein, Iceland, Nigeria | Data,” data.worldbank.org, accessed June 10, 2022, <https://data.worldbank.org/indicator/AG.LND.TRAC.ZS?end=2004&locations=ZA-ML-CH-NO-LI-IS-NG&start=2004&view=bar>.

SADC compared to ECOWAS. The labour force is certainly a decisive factor in agriculture. The figure below actually confirms this as it depicts a paradox between three countries from three different regions (ECOWAS, SADC, and EFTA), whereby efficiency seems to be positively related to a lesser use of land (compare **figures 17 b** and **d**). One could therefore rightly question the validity of the productive efficiency rule (PPF) which requires to use of as many resources as available to yield the maximum output. Labour could therefore make a difference as it is the main factor to use other factors in the process of production.

Above all, agriculture is the main source of employment both in ECOWAS and SADC. For SADC, it was stated in the *“Information Brief: Agriculture in the SADC region Under climate change”* by Amanda Gosling et al. that *“In Southern Africa, agriculture is credited for 65% of regional employment and 73% of employment of economically active women.”*⁵⁴. The World Bank study team does also stress the relevance of agriculture in terms of employment in Africa in general, and sub-Saharan Africa in particular. So this overview is true for both ECOWAS and SADC. Let’s have a look at the rate of employment in agriculture for selected countries in both regions, plus EFTA as an extra-African region of reference. To do so, let us consider **figure 17 e**. As per data from the World Bank provided in that graph, a higher rate of employment in agriculture is mainly associated with poor countries from both regions except South Africa, whose rate is rather close to EFTA countries’ rates. Based on the outputs mentioned in **17 d**, it appears that higher use of land and labour is not the best combination to yield higher output. Alternatively, labour quality (skilled or unskilled) could be the reason for this outcome. However, this differentiation could be negligible, thus the relevance of the third factor group, namely capital and technology.

P. Samuelson and W. Nordhaus (2009) believe that technology is the most important factor to shift the PPF rightward. **Figure 17 f** presents the level of technical capital endowment for the most productive countries in cereals from SADC, ECOWAS, plus EFTA. Unlike, the trend observed with land and labour, the more productive countries are those that possess the highest amount of capital and technology. The specific case of South Africa fits this assumption as it is the most industrialised country in Africa. The most plausible outcome is therefore, that poor ECOWAS and SADC countries should increase their endowment in capital, technology and skilled labour to be both individually and as a bloc as productive and competitive as South Africa and EFTA’s countries when it comes to cereals production for instance. Could trade under AfCFTA favour or rather hinder actions in this way? My take is that both scenarios are possible depending on the one hand on investment incentives that would be created by AfCFTA as well as possible cost minimisation resulting from tariffs reduction, NTBs elimination, the implementation of the trade facilitation agreement, and a possible reconversion of South-African resources into new sectors

(manufactures for instance). On the other hand, other factors such as imports revenues from external partners, income redistributions, but also investment diversions could hinder the expected trend.



Figures 18 a and b are PPFs of the two relatively self-sufficient countries in cereals from both ECOWAS and SADC. These are Mali and South Africa. The inputs combined are those presented in figures 17, namely Land (A) per thousands of hectares, machineries (per thousand of tractors), and Labour in percent. These two countries have different combinations of inputs (A-K/T-L) which yield different quantities of goods. Mali uses less land and machineries and more human resources than South Africa but produces less: only 1500kg cereals per hectare compared to 5000kg per hectare.

One could therefore formulate three assumptions: Mali is a victim of the rule of diminishing marginal returns as it accumulates labour on small portions of land in which case more land has to be cultivated in order to increase productivity; Malian labour is unskilled; or machinery and technology is the most decisive input which gives South Africa a comparative advantage. It appears that this input is tremendously important if one refers to EFTA countries. **Figure 17 b** shows that Switzerland uses very little land and very few human resources for cereal production. But it accumulates machinery and technology, thus its rank as the best performer as per figure 17d. X^* represents the efficient endowment of resources.

III. TRADE PATTERNS IN ECOWAS AND SADC

In this section, the main trade partners of both regions will be presented both at a regional and global scales. The reasons for those patterns (competitiveness, regional and consumption preferences, cost-related factors) will be explored as well. The main industry which is agriculture will still be considered is.

III.1. OUTLINING TRADE DIRECTIONS WITHIN THE RECs AND FORECASTING INTER-REGIONAL TRADE PATTERNS

One other major reason that justifies the choice of SDAC and ECOWAS is legally determined. It was to avoid legal overlaps between these RECs as this characterizes most African RECs. This is commonly known as the spaghetti bowl effect (see overlaps map). It implies intra-regional trade among the members of the same region and hinders trade through tariffs and other kinds of barriers, which AfCFTA aims to lift.

As regards ECOWAS, there is a share of intraregional trade that is possible through certain treaties including the ECOWAS revised treaty. Its article 3 purports the establishment of an economic union in

the region through the promotion of co-operation and integration. As a logical outcome of a custom union, there should be a common external tariff for some categories of goods. The individual good to be used as an example to illustrate this is tariff on imports of rice from outside ECOWAS which are still not harmonized (as each country continues to set its own tariffs).

The average tariff on rice in the region amounts to 35% after ECOWAS CET (CET+VAT) (see **figure 19** below), which could mitigate the effects of external competitiveness on local or regional output and employment. In graphical terms, tariffs would to a given extent align world prices with local prices and protect local producers, even though consumers would be worst off (see application **graph 20**).

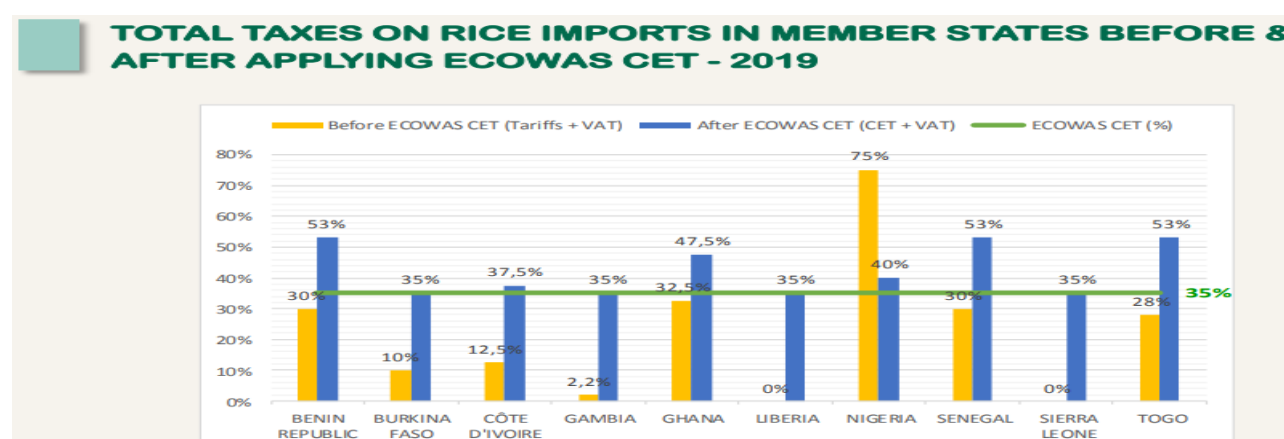
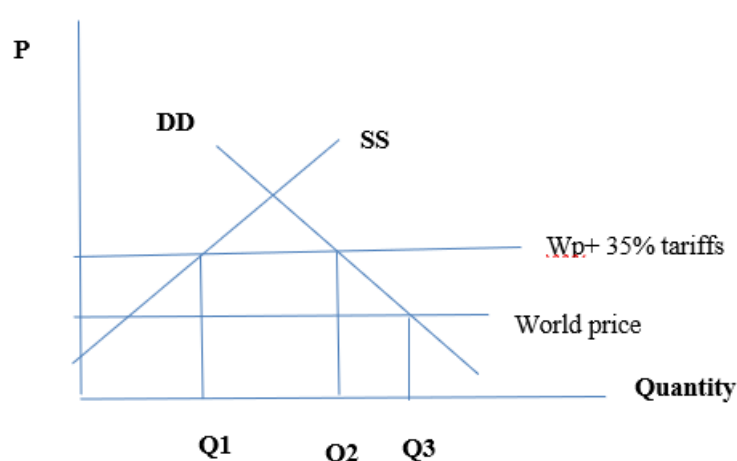


Figure 19: Tariffs on rice imports within ECOWAS in 2019

II.2. GRAPGHICAL APPLICATION

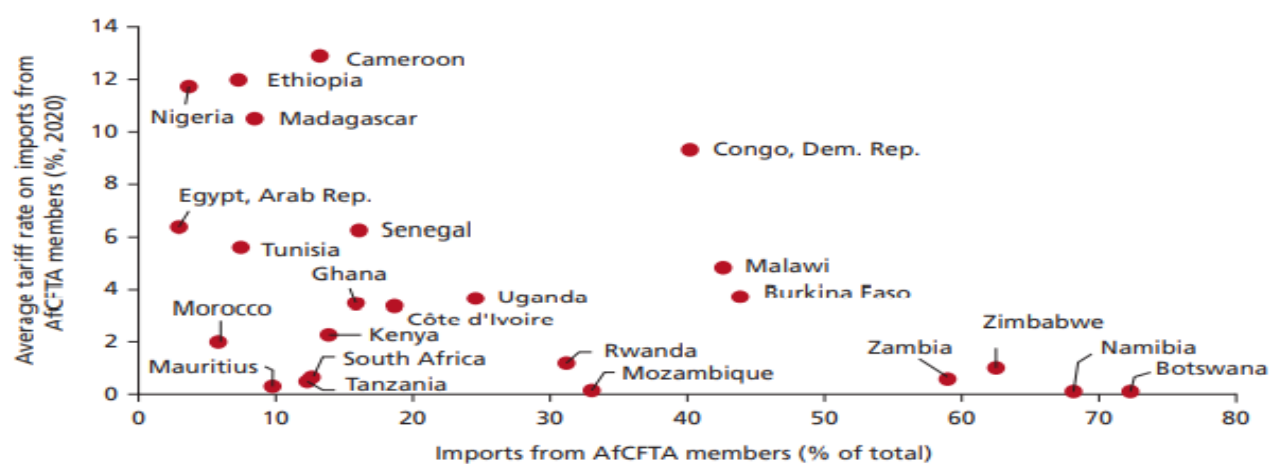


Graph 20: Tariffs on rice import and their distortionary effects

At $W_p + 35\%$ tariff effects could be regionally mitigated and trade within the bloc encouraged. Extending such a tariff to the whole cereals industry would for sure render the aforementioned SADC surpluses (due to self-sufficiency) less competitive and thus less tradable towards ECOWAS. These tariffs as previously

mentioned can be applied to various goods. The World Bank's study team on AfCFTA has listed countries with the highest tariffs as well as their impact on the degree of trade flows within and across RECs (see World Bank's **figure 4.1** on the next page). Compared to SADC members, ECOWAS members do have relatively higher tariffs (as is reflected in the graphic above) which prevents them from importing from other AfCFTA members including, for this case study, SADC which has on average the lowest tariffs (close-to-zero tariffs within SACU). One could therefore formulate the assumption according to which, SADC is both legally and in practice better prepared for AfCFTA reforms than ECOWAS.

Figure 4.3 Share of imports and average tariffs imposed on AfCFTA imports



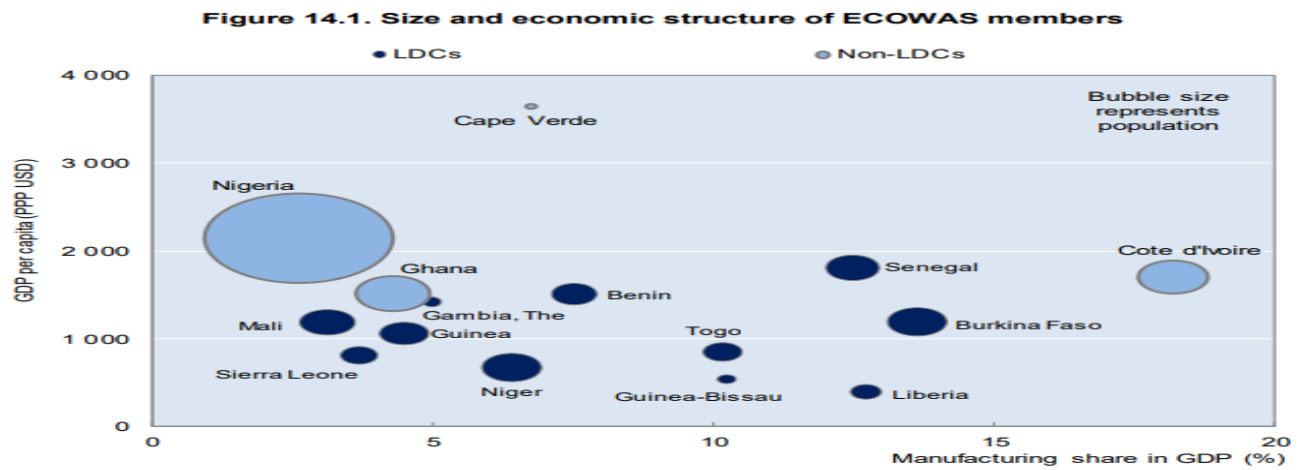
Source: Estimates, World Bank study team.

Note: Trade weights are based on benchmark trade flows in 2014 GTAP database. AfCFTA = African Continental Free Trade Area; GTAP = Global Trade Analysis Project.

The mirror image of external tariffs is internal liberalisation and intra-regional trade. Considering trade within ECOWAS requires to considering and noticing various similarities between members of the bloc regarding the level of development, and other aspects which have been discussed earlier, namely factor endowments, industries of specialization, as well as their relevance rate in GDP.

Concerning the first aspect, one could rely upon a statement by Erik von Uexkull from the International Labour Organization, “*With the exceptions of Cape Verde, Nigeria, Ghana, and Cote d’Ivoire, all ECOWAS members are classified as Least Developed Countries.*”⁵⁵ **Figure 14.1** below is the graphical expression of this statement by Uexkull.

⁵⁵ Erik von Uexkull, “Policy Priorities for International Trade and Jobs. Regional Trade and Employment in ECOWAS,” 2012.



Theoretically, Heckscher-Ohlin theory could be applied to the REC to explain trade flows within ECOWAS between LDCs and Non-LDCs and Krugman-Helpmann would apply to trade between those countries with a similar level of development. This also holds for inter-regional trade between ECOWAS and SADC. To what extent is this true for both RECsd?

As Ronald W. Jones addresses it in his “*Heckscher-Ohlin Trade Theory*”, the strict validity of the assumptions is closely dependent on differences in factors endowments between two trading partners that however, need to share similarities in three main sectors. First of all, they need to share the same level of technological development. As per the **graphic 21 a** below, showing the value in millions of US\$ of total exports in high-technology in ECOWAS, it appears that members do have different technological endowments which to a certain extent is also in line with their development, especially about their productivity. The Gambia not being as technologically advanced as Cote d’Ivoire, Ghana, or Nigeria could, even in case it has a higher labour force, face what W. Jones calls “*factor intensity reversals*”. This is precisely what the Heckscher Ohlin theorem tries to rule out, as it would otherwise render the identification of advantages in terms of factor endowments difficult. To put it differently, having for instance more labour could be balanced by another country that uses either more capital or conducts a joint production, thus combining several factors of production instead of relying upon a single one, what would further undermine the applicability of Heckscher-Ohlin theory.

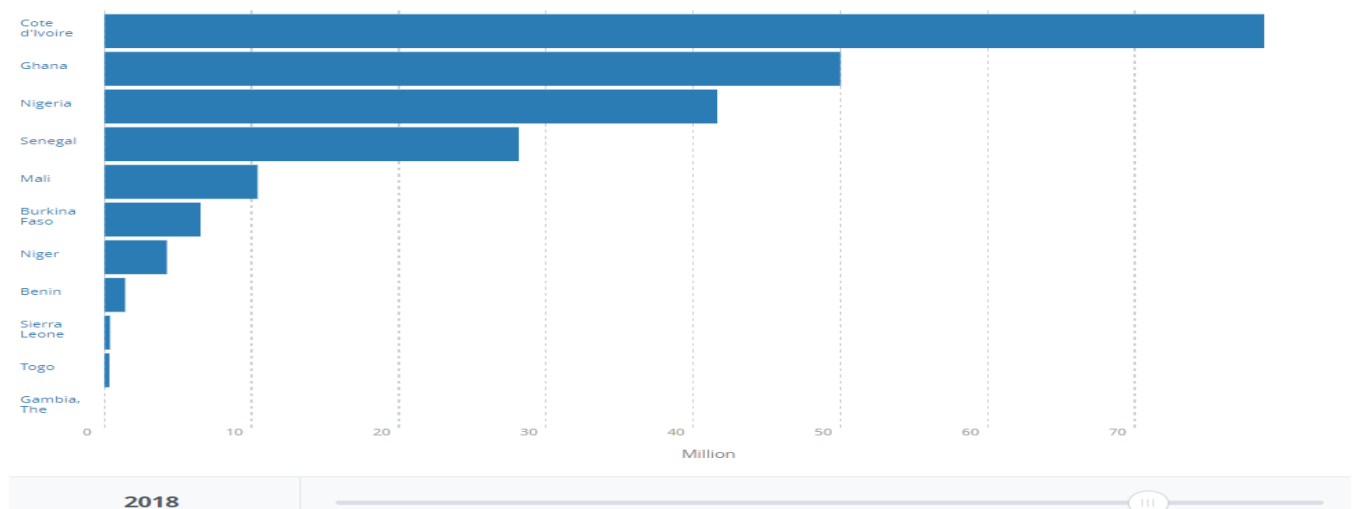


Figure 21 a: High-technology exports (current US\$) for ECOWAS countries⁵⁶

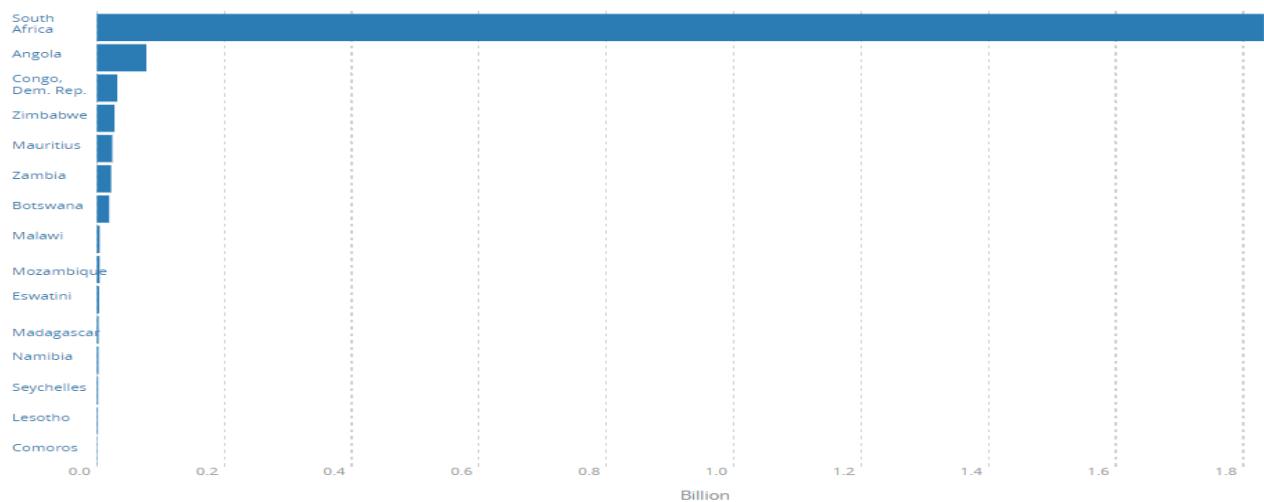


Figure 21 b: High-technology exports (current US\$) for SADC countries⁵⁷

⁵⁶ World Bank, “High-Technology Exports (Current US\$) - Nigeria, Senegal, Cote d’Ivoire, Togo, Mali, Niger, Burkina Faso, Sierra Leone, Liberia, Guinea, Guinea-Bissau, Benin, Gambia, The, Ghana | Data,” data.worldbank.org, accessed June 10, 2022, <https://data.worldbank.org/indicator/TX.VAL.TECH.CD?end=2018&locations=NG-SN-CI-TG-ML-NE-BF-SL-LR-GN-GW-BJ-GM-GH&start=2018&view=bar>.

⁵⁷ World Bank, “High-Technology Exports (Current US\$) - South Africa, Tanzania, Angola, Botswana, Congo, Dem. Rep., Eswatini, Comoros, Mozambique, Malawi, Madagascar, Zimbabwe, Zambia, Mauritius, Namibia, Seychelles, Lesotho | Data,” data.worldbank.org, accessed June 10, 2022, <https://data.worldbank.org/indicator/TX.VAL.TECH.CD?end=2019&locations=ZA-TZ-AO-BW-CD-SZ-KM-MZ-MW-MG-ZW-ZM-MU-NA-SC-LS&start=2019&view=bar>.

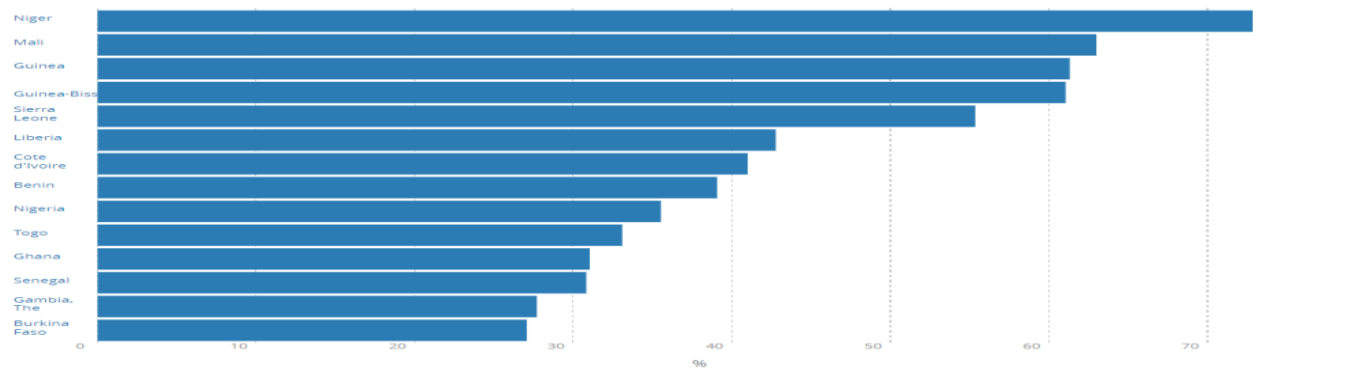


Figure 21 c: Employment in agriculture (% of total employment) for ECOWAS⁵⁸

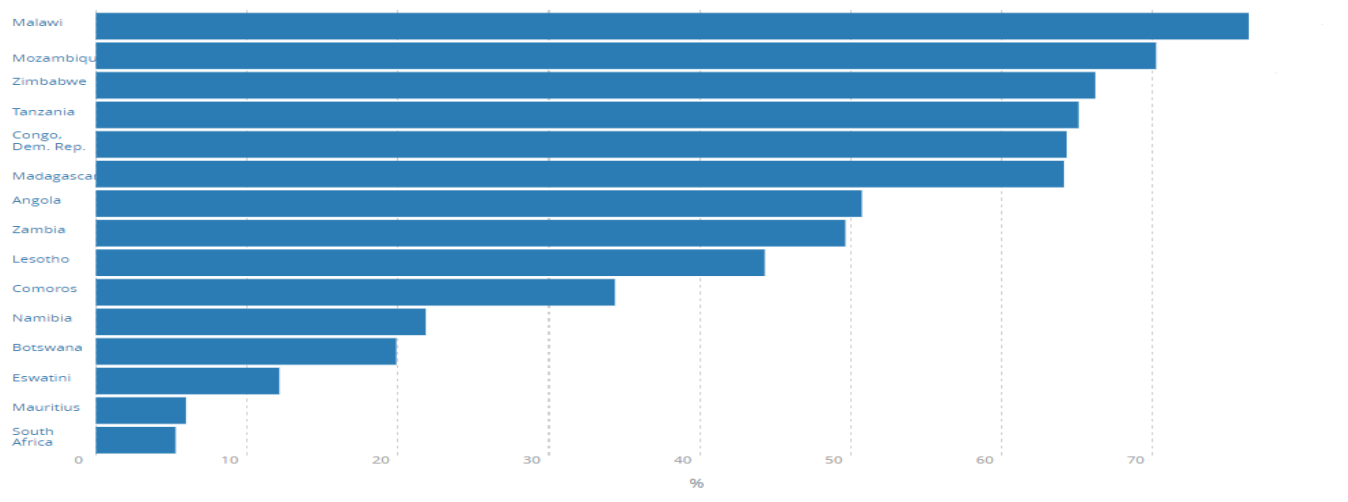


Figure 21 d: Employment in agriculture (% of total employment) within SADC⁵⁹

To the extent that technological similarities should be ensured, which is not the case at the regional level, this implies theoretically, that labour endowments should be equalized to meet the theoretical requirements. Following this logic, the graphs **21c** and **d** presenting labour intensity in the agricultural industry for instance show that it applies to the least technologically developed members. Applying Heckscher-Ohlin strictly would require that the scale of trade or the number of actors be harmonized based on how well they meet the requirements. In other words, this leads to what W. Jones calls “dimensionality(...) requiring a small number of factors and commodities or matching number of both”.⁶⁰

⁵⁸ World Bank, “Employment in Agriculture (% of Total Employment) (Modeled ILO Estimate) - Nigeria, Senegal, Cote d’Ivoire, Togo, Mali, Niger, Burkina Faso, Sierra Leone, Liberia, Guinea, Guinea-Bissau, Benin, Gambia, The, Ghana | Data,” data.worldbank.org, accessed June 10, 2022, <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS?end=2018&locations=NG-SN-CI-TG-ML-NE-BF-SL-LR-GN-GW-BJ-GM-GH&start=2018&view=bar>.

⁵⁹ World Bank, “Employment in Agriculture (% of Total Employment) (Modeled ILO Estimate) - South Africa, Tanzania, Angola, Botswana, Congo, Dem. Rep., Eswatini, Comoros, Mozambique, Malawi, Madagascar, Zimbabwe, Zambia, Mauritius, Namibia, Seychelles, Lesotho | Data,” data.worldbank.org, accessed June 10, 2022, <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS?end=2019&locations=ZA-TZ-AO-BW-CD-SZ-KM-MZ-MW-MG-ZW-ZM-MU-NA-SC-LS&start=2019&view=bar>.

⁶⁰ See page 11, W. Jones

The author further states that “*International trade theory generally, and Heckscher-Ohlin trade theory in particular, has frequently been criticized for its restriction to the low dimensionality represented by two commodities, two factors, and two countries...the 2 x 2 x 2 versions*”.⁶¹ Given the wide array of commodities that are included in the agricultural sector, and the fact that ECOWAS and SADC have at least 15 members, intra-regional trade following Heckscher-Ohlin would be difficult to capture. Therefore, one plausible assumption would be that trade would mainly flow by pairing for instance those countries that have a similar technological level of development but differences in labour (e.g. Togo and Sierra Leone), or the other way around (e.g. Ghana and Senegal). But what do real-life data tell us about the situation in the region? The **figure 22** on the next page portrays big informal flows of agricultural products towards and from visible centres which are among others Senegal, Cote d’Ivoire, Ghana, and Nigeria. This is a real-time picture of a zero-tariff trade and serves as a forecast of what the situation is going to be by the full implementation of AfCFTA in the agricultural sector. This proves that higher dimensions of Heckscher-Ohlin theory do lead to a nearly similar outcome in terms of the direction of trade leading to an income equalisation in the individual industries concerned by trade. In this case, the big winners would be those members that are not only highly specialised in agriculture, but also have higher land and labour endowments, thereby implying the negligible differences in terms of technological development in the region, or their diversion into industrial output rather than agriculture. This assumption can be justified building on the fact that Nigeria, Cote d’Ivoire, Ghana, and Senegal use less than 45% of their labour force in the agricultural sector (see **figure 21 c**).

In distributional terms within ECOWAS, the losers of trade liberalisation would be from those countries as well. However, they would win in trade beyond the agricultural sector, as they are more specialised in services and industry than agriculture. Other factors that also determine trade flows are consumer-based preferences (similar preferences are expected in the Heckscher-Ohlin theorem). This is not the case, especially as demand varies, but also because ECOWAS members do even import from extra-AfCFTA trade partners.

This Heckscher-Ohlin theory holds for both ECOWAS and SADC, with South Africa biasing the outcome as the country is not only quasi self-sufficient in food production, but it is also the main exporter of agricultural products (including cereals) to SADC members. This is first of all possible through its technological comparative advantage (see **figure 21 b**), but also through its very low tariffs (close to zero as per **figure 4.3**) applying to intra SADC trade. However, the Heckscher-Ohlin trade would be valid for other members to such an extent that a large amount of them is at similar levels of technological development and endowment in labour varies. If each country’s trade balance towards South Africa reflects deficits and dependency on imports in food (cereals for instance) from South Africa, the scenario

⁶¹ See Higher Dimensions, page 6

could change in case of AfCFTA's implementation. As manufacturing is expected to benefit the most due to higher demand for manufactured goods, South Africa could redistribute its labour force more efficiently by specialising more in industrial output and importing from other members, which through an increase in skilled workers and investments in capital and technology for agricultural production could become more competitive than South Africa.

The interesting point is therefore what the result would be between ECOWAS and SADC in the framework for AfCFTA. First, one should have a look into the nature of both regions' extra-regional trade. Is it with AfCFTA or non-AfCFTA members? In case the latter would prevail, why and how could AfCFTA change the trend and encourage trade between SADC and ECOWAS?



Figure 22: Informal flows of agricultural goods within ECOWAS⁶²

III.2. EXTRA-REGIONAL TRADE

To begin with, I assume that African RECs including SADC and ECOWAS do mainly trade with non-African partners when it comes to trading beyond their sub-regional borders. This is precisely confirmed in the study conducted by the World Bank study team, where intra-African trade appears to be as low as 16%. There are undoubtedly several reasons that help understand extra-regional trade flows as well as their obstacles. These are among others domestic specialisation or regional, productivity and competitiveness, consumer-related preferences, tariffs, non-tariff barriers, and even the lack of a trade facilitation policy.

Concerning the cereals industry, Aziz Elbheri and Jonathan Kaminski assert that the west African rice market, for instance, is not only heterogeneous, but preferences do also vary across markets and countries. The aspect of African preferences which leads to external trade will be examined in the next sections.

⁶² ECO ICBT, "ECO ICBT – ECOWAS Informal Cross Border Trade," ECOWAS informal cross border trade, accessed June 10, 2022, <http://www.eco-icbt.org/>.

III.2.1. SPECIALISATIONS IN NATURAL RESOURCES

As mentioned in the previous sections, the majority of SADC and ECOWAS members have similar economic structures as they are specialized in quasi-identical economic sectors which are linked with natural resources. To name a few, one could cite small-scale agriculture, and the extraction and commercialization of natural resources as the main sources of revenues, which do not also secure their economies in cyclical times because of shocks in demand and supply as has been evidenced during the COVID-19 pandemic, but also in current times with the Russo-Ukrainian crisis. Sanctions against Russia have raised energy prices but also restricted exports of wheat to the rest of the world. Energy and wheat being essential inputs, African economies are thus exposed to the negative impacts of this crisis. On May 9, 2022, Nigerian airlines suspended their activity as a result of sky-rocketing fuel prices and expensive flights. On June 3, 2022, Macky Sall, President of Senegal and Chairman of the African Union went to Russia to negotiate measures that would ease the export of wheat and fertilizers from Russia and Ukraine to Africa. The consequence for this type of specialisation outwards dependency because of the import of goods that are not sufficiently produced (at least at a relatively lower cost in Ricardian terms) locally. Comparative advantage is therefore of utmost importance to figure out the directions of trade for both regions.

III.2.1.1. GEO-POLITICAL FRAMING OF THESE SPECIALISATIONS

Economic specializations in natural resources is a piece of quasi-continental evidence, which many internationalists and political economists have been criticizing since the existence of the “*world systems*”, a concept coined by Wallerstein to describe the world as a system in which specific economic roles are assigned to specific areas which constitute three main economic entities known under the categories “*developed world*”, “*developing world*”, and “*third or least developed world*”⁶³. University professor John K. Cox briefly elaborates on Wallerstein’s theory premises and implications in a paper published in the international social science review.⁶⁴ In that short paper, he summarizes a collection of essays “*Immanuel Wallerstein and the problem of the World*” by Palumbo-Liu, David, Bruce Robbins and Nirvana Tanoukhi, which is a critique of Wallerstein’s world-systems analysis. The author stresses the interconnection between a country’s level of economic development and its role in the economic system when he states that “*According to Wallerstein, this world system has been developing since the sixteenth century, and the level of economic development can be explained by understanding each country's place and role in the world economic system [...] For example, all countries sell their products and services on the world market and buy products and services from one another. However, this is not a market of equal*

⁶³ See the World Bank classification

⁶⁴ <https://web-p-ebsohost-com.uaccess.univie.ac.at/ehost/pdfviewer/pdfviewer?vid=8&sid=0ca203de-833e-4fd6-b17b-94d9f49d59a0%40redis>

partners.” Wallerstein put forward the argument following which the world economic system is controlled by the West (core countries, mainly industrialized and developed) that manipulates the peripheral countries (poor, not industrialized, partly agricultural) that are mostly found in Africa, Asia, and Latin America. The systems aim to maintain western domination and hegemony which can be reflected in the deteriorating terms of trade between the “South” and the “North”. Two figures (23 a and b) presenting the main export and import partners for the two biggest economies in SADC and ECOWAS do certainly confirm the rule for Nigeria (peripheral country) and South Africa (semi-peripheral country), which also raises the complexity of the task when it comes to the connection of African countries with the external world due to the heterogeneity of the continent.

Top 10 Export Countries

Country	Export USD\$
India	\$8,263,326,714
Spain	\$5,318,787,951
Netherlands	\$4,868,323,887
Ghana	\$4,002,937,642
France	\$3,550,036,600
South Africa	\$3,150,259,900
United States	\$2,822,001,613
Italy	\$2,128,111,262
China	\$1,665,029,549
Indonesia	\$1,478,760,517

Top 10 Import Countries

Country	Import USD\$
China	\$12,060,017,952
India	\$5,702,665,011
United States	\$4,678,026,150
Netherlands	\$3,492,702,118
Belgium	\$2,375,789,319
Eswatini	\$1,555,988,658
Germany	\$1,456,668,191
United Kingdom	\$1,344,666,347
United Arab Emirates	\$1,198,904,288
South Korea	\$1,014,286,241

Figure 23 a: Nigeria’s top 10 trade partners for exports and imports⁶⁵

Top 10 Export Countries

Country	Export USD\$
China	\$9,595,419,511
Germany	\$7,160,374,974
United States	\$6,261,591,539
United Kingdom	\$4,685,564,119
Japan	\$4,298,922,506
India	\$4,032,171,741
Botswana	\$3,942,385,497
Mozambique	\$3,651,764,206
Namibia	\$3,545,636,204
Netherlands	\$2,930,141,238

Top 10 Import Countries

Country	Import USD\$
China	\$16,264,728,003
Germany	\$8,692,057,259
United States	\$5,782,974,352
India	\$4,323,031,822
Saudi Arabia	\$3,655,924,581
Nigeria	\$3,639,278,851
United Kingdom	\$2,937,543,831
Japan	\$2,802,557,848
Thailand	\$2,663,313,305
Italy	\$2,230,267,606

Figure 23 b: South Africa’s top 10 trade partners for exports and imports⁶⁶

From these statements one assumption can emerge, i.e., economic development of African states in

⁶⁵ Global edge, “Nigeria: Trade Statistics,” [globaledge.msu.edu](https://globaledge.msu.edu/countries/nigeria/tradestats), n.d., <https://globaledge.msu.edu/countries/nigeria/tradestats>.

⁶⁶ Global Edge, “South Africa: Trade Statistics,” [globaledge.msu.edu](https://globaledge.msu.edu/countries/south-africa/tradestats), n.d., <https://globaledge.msu.edu/countries/south-africa/tradestats>.

general and SADC and ECOWAS states in particular would not be induced by intra-African trade (assumed to be less important than extra-regional trade), since changes are made in the world market dominated by the West, where most African states are suffering from inequalities and are overwhelmed by exports from the North. Whether AfCFTA could prove this assumption right or wrong is subject to the analysis of extra-regional trade in the following sections.

III.3. RICARDIAN TRADE

Trade between ECOWAS-countries and their partners obeys the Ricardian principle of comparative advantage. There is evidence of an important specialization in natural resources which represent the main source of trade revenue. In exchange, manufactured goods are imported from more industrialized or developed countries. This is well visible in fig. () which portrays agriculture and services as the major components of GDP. In this section, I address the overall trade ties with the external world. Understanding this requires analysis beyond the agricultural industry.

The Ecowas Trade information system (ECOTIS) has provided data about the main destinations of the ECOWAS total exports, as well as the main products sectors exported by ECOWAS.

Trade with the rest of the world accounts for 59%, India 16%, Switzerland 10%, China 8%, and Spain 7%. The total value (US\$ millions) is 2393,601. The shares of the EU and the US are contained in the first group (rest of the world). According to ECOWAS, *“Europe accounts for about 28% of ECOWAS exports with 23% for the EU. The Americas account for 40%, 34% for the Free Trade Association (NAFTA) 24 involving the United States, Canada and Mexico.”*⁶⁷ These gains are then unevenly distributed among the member states depending on their individual contributions to exports.

The main products sectors exported by ECOWAS are mineral products (mineral fuels, mineral oils and products of their distillation, bituminous substances, and mineral waxes) which represent about half of the total exports. Besides, there are natural or cultured pearls, stones and precious metals with an estimated value of US\$ 25,643,018 million. This sector is particularly rewarding for some countries such as Guinea and Mali. The third goods category is cocoa and cocoa preparations, tobacco and manufactured tobacco substitutes, mostly interesting for cocoa juggernauts such as Ivory Coast and Ghana. Vegetable products also belong to this category. The least relevant categories include rubber and associated articles (plastics for instance), textiles, animal products, machinery and electrical equipment, as well as products of the chemical, raw hides and skins etc.

⁶⁷ ECOWAS, “Import and Export | Economic Community of West African States(ECOWAS),” ECOWAS, accessed June 10, 2022, <https://ecoslate.github.io/doing-business-in-ecowas/import-and-export/index.htm>.

These sectors are following the Ricardian logic those that reflect a comparative advantage for ECOWAS. To put it differently, there are trade sectors in which ECOWAS is more competitive as goods are produced at a relatively lower cost. Given the direction of exports, the nature of resources endowments, and the specialization of the ECOWAS economy, there can be assumed that intra-African trade will depend on several factors that should ultimately create needs similar to those of the industrialized countries on the continent. The southern part of Africa that appears not only as a hub to one of the most integrated RECs (South African Development Community -SADC) is certainly a good fit when taking into account the industrial potential of some states such as South Africa as the most industrialized African country. The question to be addressed is therefore whether a reduction of trade barriers through AfCFTA could foster trade between two allegedly different regions. If yes, what would be the outcome in terms of gains and distributions? To answer this question, import preferences will be analyzed in both regions to explore match possibilities in terms of needs but also trade possibilities as a result of advantages from AfCFTA. For this simulation, one region's imports will be taken as the other's potential exports and vice versa and the effects will be observed.

III.4. PREFERENCES

III.4.1. TASTES: AGRICULTURAL SECTOR

FAO economists have referred to the heterogeneity of preferences when it comes to imports of cereals within the ECOWAS sub-region. This specific case can be taken as an example, where “*5 percent broken non-aromatic Thai rice dominates but aromatic jasmine Thai rice has gained market share, representing over 20 percent of rice imports in recent years.*” Thailand thus appears to be a major trade partner based on “taste”, which following Heckscher-Ohlin's theory belongs to the basic conditions (in addition to the factor endowment) that would determine trade flow. For the specific case of Ghana, taste does matter, which diverts trade from other member states of ECOWAS.

However, intra-regional trade also takes place because of tariffs, which are beneficial to a couple of countries among which Mali. In the *ECOWAS Fact Book*⁶⁸ published by *GrowAfrica*, Mali is assumed to be on its way towards self-sufficiency in terms of rice production for instance. Taking into account the benefits in agriculture as predicted by the World Bank team, Mali which is already exporting its cereals to Senegal and France would achieve higher productivity and, if productive inputs have been improved, gain access to more African markets. Intra-Ecowas trade in cereals in particular or food in general is mainly Krugman-Helpman trade, as it takes place between countries with similar agricultural industries and needs. However, this intra-regional trade represents a small share of overall trade in ECOWAS-countries' GDPs. If tastes and preferences can divert trade towards non-African partners, other factors do

⁶⁸ GrowAfrica, “ECOWAS Rice Factbook | Grow Africa,” [www.growafrica.com](http://www.growafrica.com/resources/ecowas-rice-factbook), accessed June 10, 2022, <http://www.growafrica.com/resources/ecowas-rice-factbook>.

encourage the trend such as non-tariff barriers and bureaucratic obstacles which are also the expression of national or regional preferences.

III.4.2. PREFERENCE FOR TARIFF REVENUES FROM TRADE

Another reason that could explain extraverted trade towards more developed countries and lesser incentives to intra-African trade are revenues from tariffs on imports for government, but also the reliance upon foreign investments. The figures below show the share of tariff revenues in national GDPs for some states in ECOWAS, SADC and EFTA. According to the World Bank study team, tariff revenues do not matter that much when it comes to intra-African trade and should not be a major hurdle to trade between SADC and ECOWAS countries, since losses would be negligible in the short run and gains would increase in the long run.

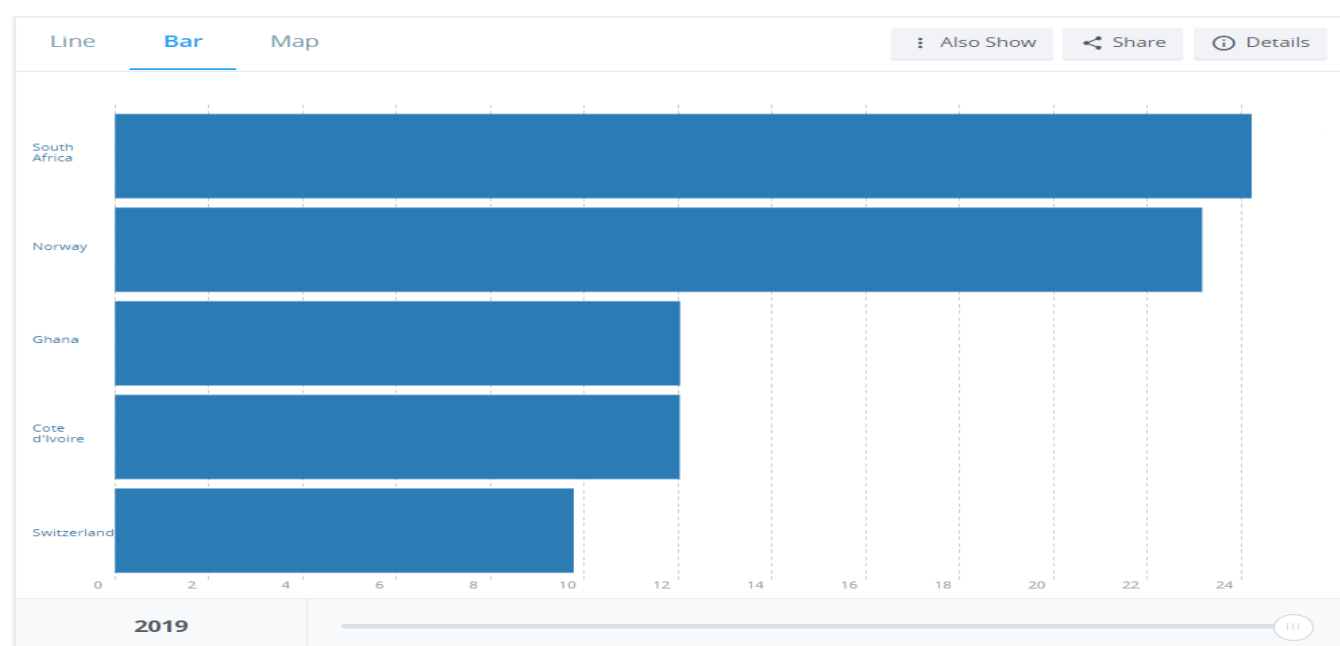


Figure 24: Tax revenue (% of GDP)

This graph is as a result of a random selection of countries from three areas: ECOWAS (Ghana and Cote d'Ivoire), SADC (South Africa), EFTA (Switzerland and Norway). Results are diverse within each bloc, which is a proof that the states enjoy rights of sovereignty for setting tariffs unilaterally. South Africa benefits as its tariffs for the year 2019 accounted for almost a quarter of its GDP. Norway also takes advantage from its tariffs financially. Ghana and Cote d'Ivoire get 12% of their GDP from tariffs, Switzerland gets 10%. In the framework of trade between SADC and ECOWAS on a zero-tariff base, external (tariff-based) imports would be internalised as a result of trade creation and tariff revenues would be lost. The big loser in this game would be South Africa. However, tariff losses will be linked with industry-based comparative advantage. In the agricultural sector, and more precisely in the cereal industry, South Africa and SADC would be better off and ECOWAS would be worsen.

III.4.2. PREFERENCES FOR NON-TARIFF BARRIERS

Some policies are unlikely to encourage free trade in Africa. They include Phytosanitary measures which have been universally invoked, but also and more importantly for Africa, bureaucratic obstacles. The former is allowed by both GATT/WTO and AfCFTA law to protect consumers.

III.4.2.1. BUREAUCRATIC OBSTACLES

Reference to article 5 (Annex III) of the 1996's SADC protocol on trade allows us to realize the efforts made by members to soften the bureaucratic requirements that may be time-consuming and therefore render intra-regional trade difficult. Substantially, the article reads that “Member States undertake to initiate trade facilitation programs”. This mainly purports to achieve eight main goals, among others:

- “(a) reducing the cost of documents and the reduction of paper work required in respect of trade between;
- (b) ensuring that the nature and volume of information required in respect of trade within the community does not adversely affect the economic development of, or trade among, the Member states;
- (c) adopting common standards of trade procedures within the community where international standards do not suit the conditions prevailing among Member states;
- (d) ensuring adequate coordination between trade and transport facilitation within the community;
- (f) collecting and disseminating information on international development regarding trade facilitation;”

Having a look at trade flows both within SADC and with the extra-regional partners, one could assume that barriers are still high partly because of the spaghetti bowl effect that also generates a set of rules of origins that require providing a huge amount of documentation, making the whole process as costly as when tariffs apply, since it extends trade time and leads to complaints (see **figures 1, 2, and 25**). These complaints are namely collected online through the AfCFTA Non-tariff barrier reporting, monitoring and eliminating mechanism and the main ECOWAS and SADC that are concerned so far are Senegal, Niger, Benin, The Gambia, and the United Republic of Tanzania (see the **figure 25** below). The World Bank study team's conclusion that AfCFTA would be a means to harmonize regulations in Africa can still be countered by shreds of evidence on the ground.

Since the main trade barriers can be lifted through a trade facilitation policy (so the World Bank experts), it is important to explore what the absence of such a measure does imply in terms of costs to trade. To do so, I will resort to David Hummels and Georg Schaur's conception of time as a trade barrier. In the abstract of their article, they state that their "*estimates are useful for assessing the economic impact of policies that raise or lower time to trade such as security screening of cargo, port infrastructure investment, or streamlined customs procedures.*"⁷⁰ They use the example of two transportation means (air and ocean shipping) and assess the costs resulting from lengthy shipping times (ocean) and the willingness of firms to pay more (for air shipping) to avoid these costs. These costs are for instance depreciation of shipped goods (lengthy times and spoilage risks) or "rapid technological obsolescence for goods such as consumer electronics", and forecast errors because of demand uncertainty.

A "mismatch between the product characteristics on offer and those desired by consumers" can be the consequence of lengthy shipping. Days of delay can therefore translate into prices equivalent to tariffs so paying for tariffs would be preferable. Melo and Sorgho (2019) think that better trade facilitation policies would contribute to reducing a long time in customs, thus the relevance of article 5 (annex III) of the 1996 SADC protocol. Those reductions in time are then translated into ad valorem equivalents of barriers while referring to the methodology of Hummels and Schaur (2012).

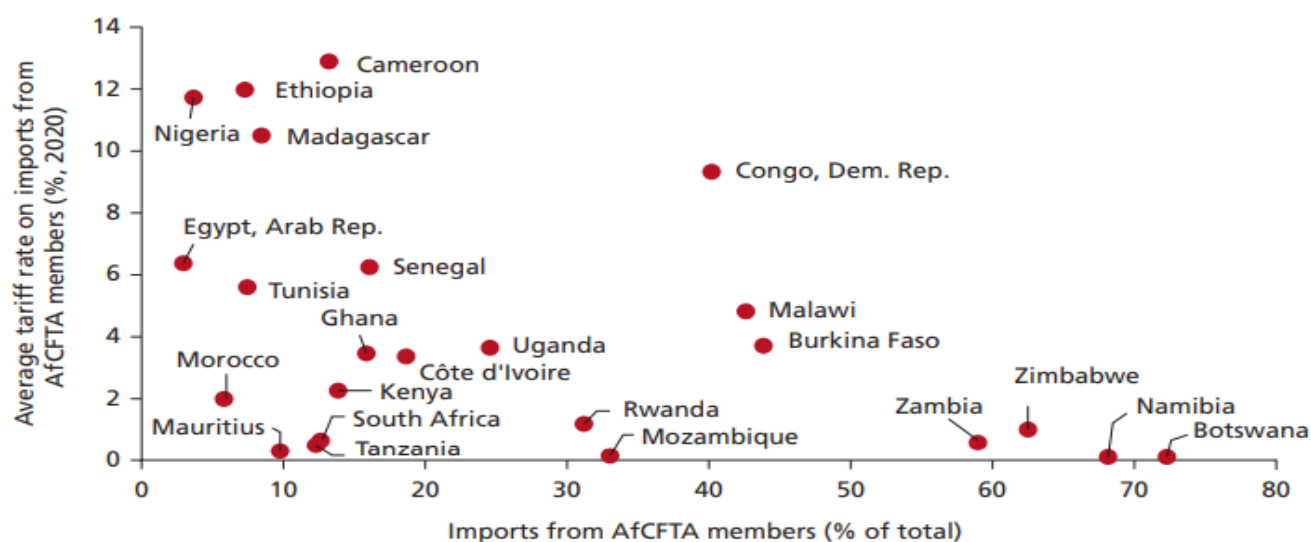
Whether Hummels and Schaur's theory perfectly fits the reality in Africa is subject to a debate, since road transportation of goods remains the dominant mode for many landlocked states such as Mali (consider the impact of ECOWAS embargo on Mali following the military coup) in ECOWAS and Botswana and Zambia in SADC. This usually implies extra costs even for informal importers and exporters not only for bribery at the borders, but also many checkpoints on roads, which would allow assuming that informal trade is as costly as formal trade because bribery is another kind of tariff. As a logical result, "*In parallel with the ETLS and CET, the ECOWAS Commission has launched a series of trade facilitation measures supporting these schemes, particularly in the road transport sector. While these include a range of policies and programs, this study focuses on two that generated a lot of attention: the Axle Road Harmonization policy (2012) and the Joint Border Posts program (2003).*"⁷¹ So I would complete this theory with another mode of transportation that is relevant for intra-African trade, i.e., road transportation. Given that tariffs do matter less for intra-African trade and NTBs, and since TFAs are much more critical, I will apply each stage to a trade simulation between ECOWAS and SADC and assess their respective

⁷⁰ See page 1, David Hummels, Georg Schaur, and National Bureau, *Time as a Trade Barrier* (Cambridge, Ma: National Bureau Of Economic Research, 2012).

⁷¹ Karim Karaki and Elke Verhaeghe, "Understanding ECOWAS Trade Policy and Trade Facilitation Advancing Economic Integration One Hurdle at a Time," accessed January 27, 2021, <https://ecdpm.org/wp-content/uploads/ECOWAS-Trade-Background-Paper-PEDRO-Political-Economy-Dynamics-Regional-Organisations-Africa-ECDPM-2017.pdf> p.7

impacts at a given stage. **Figure 4.3** below will be used as a reference for estimations.

Figure 4.3 Share of imports and average tariffs imposed on AfCFTA imports



Source: Estimates, World Bank study team.

IV. TARIFF REDUCTIONS

IV.1. IMPORTS AND EXPORTS

Following the provisions of AfCFTA, 90 percent of tariffs are supposed to be lifted by 2025, tariffs on excluded goods being maintained and least developed countries being allowed to keep their tariffs and reduce them progressively within a 10-year period.

THE SHORT RUN

Building on **figure 4.3**, the following analysis can be made. In the short run, since factors of production need time to be increased or improved, one could rely on static theories to predict that reducing tariffs would mainly increase imports from regions with an already established comparative advantage. This means that many West African states with very high tariffs such as Cote d'Ivoire, Ghana, Nigeria, and Burkina Faso would import more goods (e.g. Cereals) from SADC since their high tariffs render trade more costly and imported goods less competitive. Many manufactured goods would also flow from South Africa westwards. However, LDCs from ECOWAS can keep their taxes high, but still benefit from a nearly tariff-free SADC market. The losers in the short run may therefore be Nigeria that has been protecting its cereals industry with tariffs and could be overwhelmed by South-African exports. Within ECOWAS, developing countries would import cereals, manufactured goods and technology from South-African while LDCs could be protected. Unlike the assumption by the World Bank study team which neglect the relevance of tariffs for intra-African trade, adding informal trade which for some countries such as Uganda accounts for more than 60 percent of exports, would raise tariffs due to the risk or bribery

premium to pay to cross the border. If the premium is as high as official tariffs, then tariffs would be 60 percent more relevant (in this case for Uganda) and lifting them would unleash the enthusiasm of risk-averse traders and imports would be much higher than predictions.

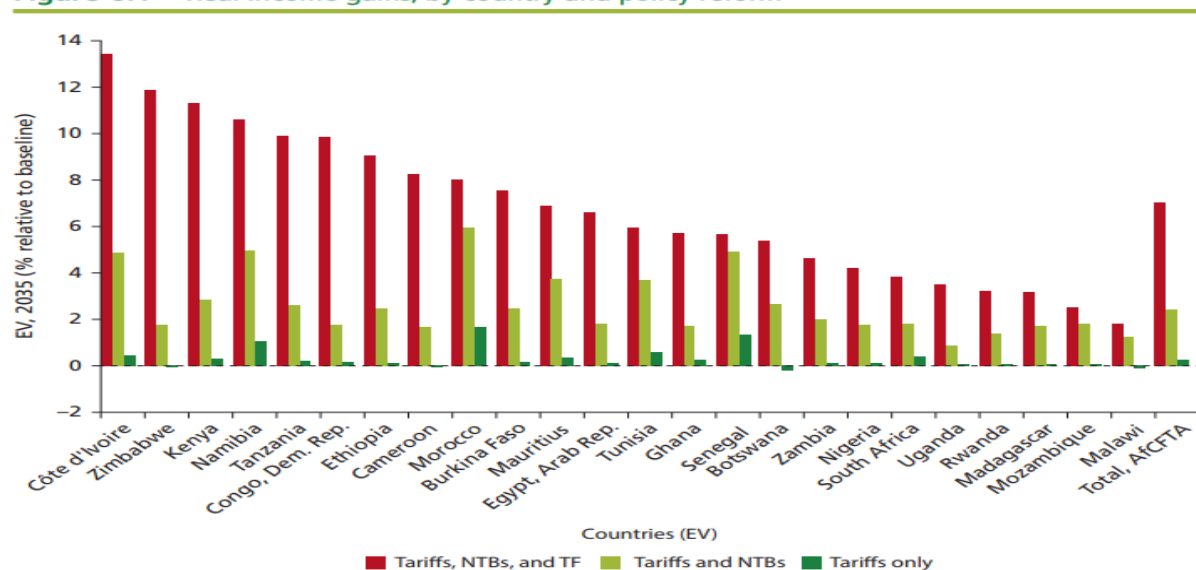
IN THE LONG-RUN

The long-run predictions are more dynamic predictions that would include improvements in terms of factors of production on both sides and more benefits for ECOWAS countries. In the agricultural sector, removing tariffs on chocolate would encourage Cocoa producers such as Ghana and Cote d'Ivoire to process their raw materials and run for \$US 108 million of South African imported chocolate (2020),⁷² as South Africa is applying a 15,9% tariff on imports of chocolate from abroad. Mali and Burkina Faso could acquire more capital and technology to enhance their agricultural output, as South Africa is expected to specialize further in manufacturing. The long-run effect of tariff reductions would therefore be that of capital accumulation to shift the PPFs.

REAL INCOME GAINS

Globally speaking, gains from tariff liberalization amount to about 0.2 percent according to the World Bank study team. Having a look at the figure below allows us to see that income gains from tariff reduction would be tiny. However, adding small-scale cross-border trade and removing the risk premium would increase the exporters' revenues and reduce the importers' gains. But this varies across countries. Gains are therefore unevenly distributed with Cote d'Ivoire and Senegal as some of the winners on the ECOWAS side, and Namibia, South Africa on SADC, Malawi is the country that benefits the least (see **figure O.1** below).

⁷² <https://oec.world/en/profile/bilateral-product/chocolate/reporter/zaf?redirect=true>

Figure O.1 Real income gains, by country and policy reform

Source: Estimates, World Bank study team.

V. NTBs AND TFAs

The world Bank study team states that “*Constraints to African trade are largely attributable to the high costs of that trade.*” As a result, the gains would come from the reduction in NTBs and the implementation of the TFA. These gains would be proportional to the relevance these barriers have in hindering intra-African trade. This is politically determined and would request policy harmonisation, which is precisely the aim of AfCFTA. Lifting NTBs and implementing the Trade facilitation agreement, this would drastically raise incomes for almost all African states in the long term, assuming that PPFs will have been shifted outwards as a result of improvements in productive inputs through investment and technology acquisition. Many African states are aware of the necessity to acquire technology in order to boost their productivity and competitiveness especially in manufacturing. Many programs and projects have been introduced at the continental level to address this issue such as the cooperation between the African Union or specific RECs (including ECOWAS) and UNIDO in the framework of the implementation of the IDDA3 program which aims at fostering industrialization in Africa and boosting supply chains.

The high incomes presented above could also be the outcome of trade diversion from the external partners mentioned previously to the internal partners. For example, if Ghana and Cote d’Ivoire acquire better technology, process their cocoa locally as a result of improved labour skills, and produce chocolate, this could result to big losses from EFTA member state Switzerland as demand could shift to Cote d’Ivoire. Such diversions would have a positive impact on African economies as they would increase their participation in global trade, curb the ongoing process of deterioration of the terms of trade and solve the

problem raised in the introductory part of this work, i.e., low output per capita.

SOCIO-POLITICAL IMPACT

One of the main issues that many RECs within Africa have been struggling with since the creation of the African Union is undoubtedly the existence of huge barriers to the free circulation of people. In the SADC region for instance, xenophobia against other African workers (from Nigeria for instance) was witnessed in South Africa, the main complaint being that jobs are being stolen by foreigners. Income equalizations that could result from ECOWAS-SADC trade would harmonize living standards, change the perception of free movement of the people and lead to higher integration of the continent.

MULTILATERAL IMPACT

Redirecting trade towards Africa would also, as already mentioned, entail losses in terms of tariff revenues from external trade. On the other hand, it raises the issue of who will be owning capital and reaping the benefits. Are the main beneficiaries going to be Africans or foreigners? These points will be addressed in the next section regarding challenges to the implementation of AfCFTA from a multilateral perspective. Are foreign juggernauts eager to see the emergence of the African market?

CHAP IV- CHALLENGES TO BE ADDRESSED

The point that will guide this chapter's analysis is that there are many left-overs which need to be included and which will also allow the construction of a more comprehensive and specific free trade theory for Africa. These left-overs are observed at different levels of analysis and encompass various sectors: analytical, economic, infrastructural, and legal frameworks.

IV.1. ANALYTICAL CHALLENGES: INCLUDING INFORMAL TRADE

Many estimations of potential long-run effects of AfCFTA are based on analyses that exclusively consider formal trade. This is precisely the approach chosen by the World Bank study team which designed predictions by focusing only on formal trade. I assume that this perspective is subject to caution and works better for FTAs that a more developed and endowed with sophisticated technical means to capture all trade. Whilst European borders are more or less controlled by governments, Africa is a huge continent with porous borders. The porosity of its borders constitutes a ground for the conduct of informal trade. The question to be answered is, therefore: how important is informal trade in Africa and to what extent would its inclusion lead to a re-assessment of the World Bank's projections?

First of all, one should start with a comparison of available data concerning formal trade on the one hand, and informal trade on the other. As already mentioned in previous sections, intra-African formal trade accounts for roughly 16% of African trade. An assessment published in September 2018 by Joachim Jarreau, Cristina Mitaritonna, and Sami Bensassi suggest that *"Informal trade is difficult to measure. Most studies have relied on estimates based on partial surveys, or on accounting exercises. They concluded that a substantial share of Africa's regional trade was informal, on the order of 30% to 40%."*⁷³ If these estimations are considered, then it appears that informal trade is more relevant than formal trade. Combining formal with informal trade would provide a new estimation of intra-African trade which would be **56%**. Coming back to **figure 3** in the introductory section of this thesis, one could change the rankings. Africa would therefore be the second most integrated economy in the world just behind the EU. This helps answer a question raised in the introduction regarding the benefits of higher trade integration. A plausible answer would be that AfCFTA would not benefit that much as it would rather make 40% of informal trade formal, whose effects do already exist. The predicted effects should be adjusted accordingly, i.e., they should concern 44% of barriers to be lifted, not 84%.

⁷³ Cristina Mitaritonna, Joachim Jarreau, and Sami Bensassi, "Lifting the Lid on the Black Box of Informal Trade in Africa," The Conversation, September 24, 2018, <https://theconversation.com/lifting-the-lid-on-the-black-box-of-informal-trade-in-africa-102867#:~:text=Informal%20trade%20is%20difficult%20to%20measure.%20Most%20studies.>

However, this paradox between high integration and few impacts may suggest other flaws to be taken into account, either informal trade's estimations by the three aforementioned authors are inaccurate, or informal trade is also subject to informal tariffs.

Concerning the aspect of data accuracy, one could rely upon other results published by the UN Economic Commission for Africa (UNECA). They suggest that informal cross-border trade “is estimated to be between 7 and 16 percent of the formal intra-African trade flows.”⁷⁴ This reduces the degree of integration drastically to approximately 32%, which is still an important rate. My partial conclusion would therefore be that intra-African trade is theoretically estimated to be between 32% and 56%.

The second aspect to be addressed concerns the real impact of a higher African integration, which despite the inclusion of informal trade seems to be irrelevant. My hypothesis is that informal trade also faces informal tariffs, which are of various types the main one being bribery on control and customs agents to pass goods through the borders.

Transparency International, the Anti-corruption Resource Centre and the CHR. Michelsen Institute have published a “*Literature review on corruption at ports and border points in Southern Africa*”.⁷⁵ The authors Marie Chêne and Robin Hoddes investigate the impact of corruption on two levels: on Southern Africa's ports and border hubs, but also and more importantly on regional trade and SME businesses. While elaborating on the first articulation of their publication, namely “*Forms and impact of corruption in ports and borders*” they first of all describes the difficult working conditions of customs officials and the porosity of Southern African borders. In such a scenario where supervision is difficult, “*opportunities for corruption abound*.”⁷⁶ They found out that corruption involves different actors including customs officials who have discretionary power of decisions and border guards. They also noted two main types of corruption: collusive (both officials and private agents agree) and coercive corruption (imposed by customs officials). They conclude that corruption has a “*detrimental impact on shipping costs, intraregional trade, internal exports, revenue collection and the country's general business environment*.” More interestingly, an empirical study into corruption in ports by Sequeira Djankov reveals three main consequences. First of all, firms would avoid the most corrupt ports. Second, bribes affect government revenue negatively. Third, they create a congestion effect for those trying to avoid them and constitute a distortionary tax. My second partial conclusion on the real impact of informal trade would therefore be that it does exist but it is not a zero-tariff trade as there is a bribery premium to be paid. Formalizing this trade would thus have an impact, since the bribery premium will be removed.

⁷⁴ ECA, “Data of Informal Trade Is Key in Accurate Monitoring of Intra-African Trade Says Karingi of ECA | United Nations Economic Commission for Africa,” [www.uneca.org](https://www.uneca.org/stories/data-of-informal-trade-is-key-in-accurate-monitoring-of-intra-african-trade-says-karingi-of), April 21, 2022, <https://www.uneca.org/stories/data-of-informal-trade-is-key-in-accurate-monitoring-of-intra-african-trade-says-karingi-of>.

⁷⁵ Marie Chêne, “Literature Review on Corruption at Ports and Border Points in Southern Africa,” July 15, 2013.

⁷⁶ Ferreira, Engelschack, and Mayville 2007

IV.2. DISCUSSING THE SECURITY PREMIUM

Besides the bribery premium, I assume that there is also a security premium to be taken into account when discussing the benefits from AfCFTA for Africa in general, but also for relatively risky areas such as ECOWAS which is a hub to many countries that are facing serious challenges: political instability (three coups have taken place within a year in Mali, Burkina Faso, and Guinea), but also security challenges (the region has been permanently targeted by Jihadist attacks which have undermined any economic activity in certain areas such as North Mali and Niger). These difficult for sure also apply to many other African states. The point that should be raised is the fact that there is widespread enthusiasm regarding potential flaws of Foreign Direct Investments towards Africa, which needs to be corrected for the failure of composition that is inherent to it.

To start with, investors are mostly risk-averse. They would therefore try to avoid unsecured or politically unstable areas to make sure that their investments are safe. Figure 26 a below presents African areas that are facing insecurity. Southern and Northern Africa appear to be relatively stable and secure. Coming back to a scenario of trade simulation between ECOWAS and SADC, SADC would certainly have a comparative advantage in terms of foreign direct investments which would flow toward the South. Figure 26 b provides a graphical analysis of two case studies. They simulate the distribution of FDIs based on the country risk premium rates of Nigeria (5,44%) and South Africa (2,97%).⁷⁷ I assume that even without trade barriers as a result of AfCFTA, these risk premia would act like tariffs as follows.



Figure 26 a: Insecurity and conflict areas in Africa⁷⁸

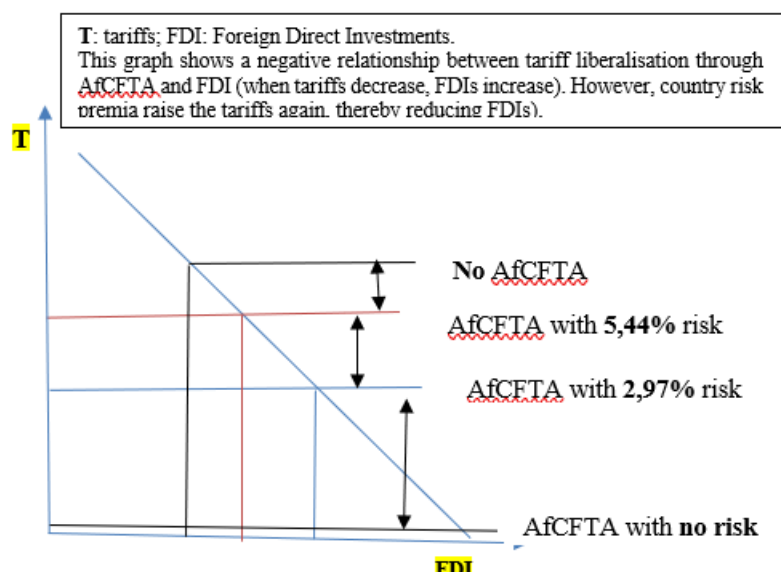


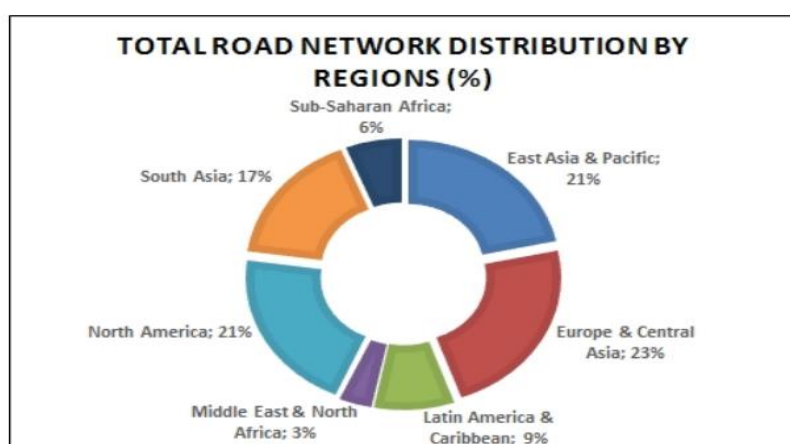
Figure 26 b: Relationship between tariffs, country risk premia and FDIs

⁷⁷ Aswath Damodaran, "Country Default Spreads and Risk Premiums," Nyu.edu, 2021, https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html.

⁷⁸ THE COLI, "Famine in Nigeria, South Sudan and Yemen; Drought in Kenya, Ethiopia, Somalia, and Yemen," Sports, Hip Hop & Piff - The Coli, 2017, <https://www.thecoli.com/threads/famine-in-nigeria-south-sudan-and-yemen-drought-in-kenya-ethiopia-somalia-and-yemen.514854/page-3>.

IV.3. INFRASTRUCTURAL CONSIDERATIONS

One of the main corollaries associated with the aforementioned security issue is precisely the fact that insecurity would also prevent the smooth circulation of goods across the continent, which so far have been mainly shipped by road. Estimations suggest that about 90 percent of Senegal's shipments of goods are done by road. This leads to the question if, holding the insecurity variable constant, the level of infrastructural development in Africa would meet the predicted boost in terms of imports and exports. **Figure 27** from the International Road Federation (IRF) suggests that only 6% of total network distribution by regions is found in Africa which represents 17% of global land mass. The IRF established a relationship between poor roads and infrastructure in the region and the difficulty for businesses and individuals to deliver goods and services easily. Thus, infrastructures need to be improved. However, my take is that maritime infrastructures should be put in place as it is more efficient to transport goods by sea than by road.



Source: IRF WRS 2018, latest year of available data for countries

Figure 27: Road network distribution by regions⁷⁹

IV.4. LEGAL ISSUES

AfCFTA has been established through a treaty that contains legal provisions of which some have been explored earlier. The main goal of the treaty is to encourage trade liberalization within the continent. Nevertheless, some provisions could be problematic and render the full implementation of AfCFTA difficult. The first legal issues is Article 19 (2) which tacitly strengthens RECS rather than dismantling them smoothly to achieve an harmonisation of rules. Strengthening RECs would not help to get rid of the spaghetti bowl effects that are linked to the existence of several RECs on the continent. Different rules would therefore apply and be maintained across the continent. The treaty is also ambiguous enough. Article 13 of the protocol on trade in goods provides on the one hand a principle of non-discrimination

⁷⁹ IRF, "Road Networks," World Road Statistics, August 10, 2020, <https://worldroadstatistics.org/road-networks/>.

against goods originating in any of the State Parties conditional to the fulfilment of certain criteria enshrined in Annex 2. On the other hand, other provisions could be used by states to arbitrarily block imports from others. **Figure 25** which has been presented previously could illustrate this scenario. Part VI of the protocol concerning product standards and regulations is precisely problematic as it provides a couple of articles that are potentially detrimental to free trade, knowing that many African economies are still backward in terms of product quality. Sanitary and phytosanitary measures (Article 22) could be rightly or abusively used by states. Article 24 reads that infant industries may also be protected. Given that many African states are overwhelmed with infant industries, this provision could be a scapegoat for protectionism.

Judicial provisions are therefore essential for monitoring the implementation process but also for dispute settlement. Article 20 of AfCFTA deals with the dispute settlement mechanism. Judicial issues marked the process of economic integration around the world, some landmark cases being from Europe. One could elaborate on the *Rheinheitsgebot* for the EU dispute but also the *Restamark* case for EFTA.

In the *Reinheitsgebot* Case 178/84 *Commission v Germany*, German rules regarding goods quality were disputed, especially as they prohibited the use of the label “Bier” for fermented beverages that did not use certain ingredients. Another measure was the absolute prohibition of using additives. While Germany used Article 36 to justify that prohibition, the commission argued under today’s Article 36 TFEU that the measures were illegal. Germany claimed consumer protection but the measures according to the court were not proportionate. AfCFTA’s provisions regarding product standards could lead to similar disputes. Last but not least, the case *Ravintoloitsijain Liiton Kustannus Oy Restamark* (E-1/94) which was referred to EFTA’s court for Advisory Opinion is illustrative for AfCFTA, since Article 11 of the protocol on trade in services deals with monopolies and exclusive service suppliers, which was the central issue for *Restamark*. Finnish company *Restamark* back then ordered alcoholic beverages from other EEA member states including Italy and Germany to be sold in Finland where the monopoly was legally held by *Oy Alko Ab* (Alcohol Company), which was restricting imports into Finland. The EC Court of Justice has consistently referred to Article 30 EC which prohibits measures that have an effect equivalent to quantitative restrictions. The measure was therefore perceived as discriminatory.

CONCLUSION

Africa has been struggling for decades since the post-independence period in the 1960s to achieve its integration. The struggle has mainly relied on Pan-African ideals of unity. The existence of the African Union which has replaced the then Organisation of African Unity (OAU) since 2002 can act as proof that the efforts made have resulted into a concrete achievement which is an institution that is headquartered in Addis Ababa. The African Union as a pan-African institution has specific goals that guide its policies. These are primarily the political and socio-economic goals. Of the two components of AU's endeavours, political unity of Africa is the most concrete achievement one could factually refer to when discussing Africa's integration. One would therefore rightly question the socio-economic side of integration based on paradoxical evidences which have been invoked in the introductory part of the present work.

It is a fact that Africa is one of the largest and most populous continents all over the world with huge reserves of natural resources, fertile soils, and a very young population. Facts do also teach us that this continent is a hub for LDCs with the lowest GDPs per capita in the world when compared to regions that are better off such as the EU and EFTA in Europe. A comparative study conducted for several economically integrated regions (EU, ASEAN, NAFTA) has led to the hypothesis that economic integration rather than a mere political union is the modern key to prosperity. Europe is the most integrated region in the world also performs. The same is true for EFTA which exclusively pursues economic goals. After considering intra-African formal trade performance which is extremely low, I partially concluded that regional trade determines performance in international trade and thus development. This was the main finding for the justification of the adoption and entry into force of AfCFTA as one of the latest FTAs among countless existing ones. However, the agreement is an innovation in terms of its scale and scope (policy areas covered), but at the same time it can be seen as a backward project if one takes into account the numerous RECs that do already exist in Africa some of them have already developed into CUs such as SACU and WAEMU. The relevance of the agreement is precisely the fact that it would help eliminate the spaghetti bowl effects that are associated with these RECs and increase intra-African trade to tackle the issues mentioned above. This endeavour is in line not only with GATT/WTO law but also with other projects aiming to integrate Africa economically such as the Abuja treaty and the AU's Agenda 2063.

Long-run predictions made by the World Bank study team on AfCFTA concerning macroeconomic and microeconomic benefits and losses upon full implementation of the agreement by 2035 can certainly be justified using mainstream international trade theory, especially as regards trade creation and diversions, but also as regards productivity. Viner's theory is therefore essential to figure out the potential long-term impact of AfCFTA. EFTA's macroeconomic performance has been a piece evidence that AfCFTA would benefit, even though not as much as this is enthusiastically projected by the World Bank. Analyses at a

lower scale and trade simulation between ECOWAS and SADC did not only help grasp peculiarities, similarities and differences within and between the two areas, but they also allowed to construct hypotheses regarding trade directions, benefits and potential distributions especially for trade in the agricultural sector and more precisely in cereal products. Different variables will determine winners and losers in the short run for this specific industry such as level of income, and factor endowment. SADC appears to have a comparative advantage in the short run which could change in the long run with investment and industrialization in West Africa.

Heckscher-Ohlin's theorem and the Ricardian principle of comparative advantage are two theories that helped understand economic structures in the two regions as well as the reasons underlying the reliance on external trade. These are among others specializations in natural resources, the relevance of tariff revenues in GDPs, but also geo-political configurations of what Wallerstein calls the "world systems". Despite the insightful study by the World Bank, the mainstream theory appears to be limited when it comes to Africa as it works best with formal trade, which explains the choice of the World Bank study team not to include informal trade in their analysis. This renders the analysis incomplete given the fact that informal trade in Africa is estimated between 16 and 40%. The adjusted level of economic integration in Africa including informal trade lies between 32% and 56%. Moreover, its rather sterile impact can be explained by the distortionary effect of bribery which acts as a sort of tariff on informal trade. The analytical framework of trade in Africa should therefore be corrected for accuracy. This also holds for the potential diversion effects for the expected flow of FDIs which is conditional to stability and a lower country risk premium for foreign investors. Southern Africa has a comparative advantage in this regard. Other challenges have to be addressed. They encompass the legal framework of AfCFTA with provisions that may either strengthen RECs further or allow states to abusively restrain trade. On the other hand, the question of infrastructures remains critical given the dependency of African trade on road transportation and the necessity to improve and diversify infrastructures to facilitate trade. My point is that maritime transportation should also be developed.

AfCFTA is undoubtedly an agreement that is allowing Africa to experiment with another kind of integration that has proved successful elsewhere, namely economic integration. The final aim is to achieve a more integrated Africa in which goods, capital, labour and citizens could move freely. Even if only one of these four pillars is achieved instead of all, AfCFTA will have not been useless and it would have given an incentive to deal with other sectors gradually, just as was the case of the EU. AfCFTA is therefore, I assume, not a panacea to African economic problems, it is a promising project that needs concrete actions and policies for its full implementation.

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"On my honour as a student of the Diplomatic Academy of Vienna, I submit this work in good faith and pledge that I have neither given nor received unauthorized assistance on it."