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African Continental Free Trade Agreement Effect on Investment in the Manufacturing Sector of Africa

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Abstract

The African Continental Free Trade Area (AfCFTA) is touted as the seminal project of the African Union (AU)'s development vision and policy roadmap for the continent's inclusive growth, integration and sustainable development trajectory, known as Agenda 2063 (AfCFTA, 2021). This pact has a coverage of 55 countries with a population of 1.3 billion people across the continent and a potential gross domestic product of approximately US$3.4 trillion [1]. Therefore, when viewed from the number of participating countries, it constitutes the largest free trade area since the advent of the World Trade Organization (WTO). . The AfCFTA aims to promote intra-African trade by reducing tariffs among member states, eliminating non-tariff barriers, reviewing policy constraints, enhancing trade facilitation, and introducing regulatory measures to improve and increase Africa's output in World trade (AfCFTA, 2022). In the first two sections of the paper, we highlight some important structures of trade in Africa. Since long-term economic growth requires an increase in the capital stock, we study foreign direct investment(FDI) flows into Africa in Section 3. In Section 4, we apply a computable general equilibrium (CGE) model to quantify the effects of the AfCFTA on investment, GDP growth, and welfare in Africa and the rest of the world (RoW). The findings show that the intra-regional investment in the African Continent is small. The productive sectors of the African economies are mainly powered by investments flowing from outside Africa with limited evidence on how trade effects, including institutional capabilities are developed and sustained by African economies. Applying the latest version of the CGE model GTAP, we quantify substantial positive welfare effects for Africa as a result of eliminating intra-African import tariffs. These welfare improvements are mainly driven by terms-of-trade and employment effects with manufacturing playing a pivotal role. The paper concludes that for the AfCFTA to yield positive welfare effects, Africa requires a harmonised and homogeneous industrial policy framework that facilitates the restructuring of economies from the mining and export of minerals and metals to domestic beneficiation, which requires special human capital factors including, relevant skills, institutional capabilities, infrastructure and technology.

Keywords: Africa Continental Free Trade Agreement (AfCFTA), Intra-Africa Trade, Investment Flows, Manufacturing Sector, Multinational Corporation Investments, Extractive Industry, Institutional Capabilities, Human Capital.

Introduction

According to the AfCFTA (2022), the agreement's general objectives are to increase output in Africa's services, natural resources and manufacturing sectors to help African countries diversify their exports and to accelerate and sustain growth and attract foreign direct investment. The Manufacturing sector is considered to be the backbone of development, and thus if it can be strengthened, it is assumed that it has trade creation effects that would lead to the modernisation of African economies. The AfCFTA creates a single market for goods and services aimed at entrenching Africa's economic integration in line with the Pan African vision of "an integrated, prosperous and peaceful Africa" stated in Agenda 2063. It can be assumed that both producers and consumers in the AfCFTA countries will experience

economic changes that are attributable to free trade. This paper seeks to analyse and assess whether firms that are involved in the manufacturing industry are likely to be affected favourably or adversely by the AfCFTA. According to Viner, trade diversion lowers welfare while trade creation enhances welfare [2]. Against this background, the paper's objective is to problematize the question of whether the Africa Continental Free Trade Agreement (AfCFTA) will have an effect on investment inflows into the manufacturing sector in South Africa, using current trade data gathered from World Investment Report of 2022, and from the 2023 IMF World Economic Outlook.

Trade Problem in Africa

Trade is not only an instrument for development, but is also a motive behind cooperation among countries. This was recognised by the forefathers of Africa in 1963 when they called for cooperation to further the economic development of the African continent. This call culminated, albeit 60 years later, in the establishment of the Africa Continental Free Trade Agreement (AfCFTA), an intra-Africa trading instrument launched in Kigali in 2018. The key purpose of the instrument is to create a single continental market for goods and services with free movement of business people and investments, includes seven Protocols (1) Protocol on Trade in Goods with commitments to progressively liberate continental trade by eliminating tariffs, removing non-tariff measures (NTMs), and improving trade facilitation, which currently leaves intra-regional trade unattractive, costly, and risky (2) Protocol on Trade in Services; (3) Protocol on Rules and Procedures on Settlement of Disputes; (4) Protocol on Competition Policy; (5) Protocol on Intellectual Property; (6) Protocol on Investment; (7) protocol on Digital Trade, Women and Youth in trade [3]. With its resource wealth, and a combined GDP value of $3.4 trillion, Africa is underperforming in intra-regional trade [4]. Africa's intra-regional trade percentage of total trade is less than 18 percent, while in Europe and Asia, intra-regional trade is up to 67and 70 percent, respectively (UNCTAD, 2019). The Africa trade problem is also evident in the share of exports and imports. For instance, in 2019, Africa accounted for 2.5 and 5.3 percent of exports and imports [5]. The trade problem in Africa is attributed to trade regime adjustment costs, infrastructure, heterogeneous levels of income and development, and capacity constraints which may interfere with the full potential of the agreement (Ajibo, 2019: 873). The African Union (2021) is of the view that Africa's full potential will be determined in part by the continent's ability to restructure its trade, imports and exports, which are currently under-diversified and heavily reliant on primary commodities. The rationale for AfCFTA's intentions becomes clear in the light of the investment data presented in the next section of this paper.

Trade Structure in Africa: Data and Interpretations

There seems to be a consensus that non-tariff measures distort trade. In Africa where there are serious infrastructure deficits, technical barriers to trade (TBF) have a negative effect on trade. When analysing Direction of Trade statistics (DOTS) , it becomes apparent that African countries seem to have an aversion towards trading with each other , hence the low intra African trade. We have drawn up tables of the dominant and key countries in each economic region. The table below depicts the global value of merchandise exports and imports disaggregated according to each country's trading partners.

Table 1: Direction of trade statistics (U$billion)

Country	2019	2020	2021	2022
South Africa	96,286	78,471	106,567	128,229
Egypt	79,301	73,962	98,123	100,427
Nigeria	47,884	43,783	59,419	65,175
Kenya	18,792	18,284	24,384	25,634
Congo DR	8,080	8,129	10,080	14,265

Source: IMF World Economic Outlook 2023

The direction of trade indicates that most countries were negatively impacted by the Covid 19 virus but recovered in 2021. South Africa and Egypt are the dominant countries in Africa that are involved in international trade as symbolised by their values of imports and exports of merchandise in the above table. South Africa was severely impacted with a 18.5% drop in trade but bounced back with a 35,8% increase in 2021. Nigeria also experienced a 35.7% recovery after the Covid but only a marginal decline during Covid.. The Democratic Republic of Congo continued to grow despite Covid while Kenya experienced only a slight decline. The biggest single trading partner of these dominant African countries is China as depicted in Table 2 below.

Table 2: Trade Statistics with Mainland China

Country	2019	2020	2021	2022
SouthAfrica	16,560	15,259	21,131	24,223
Nigeria	16,634	16,809	22,628	22,435
Egypt	12,217	13,643	18,282	17,198
Kenya	4,984	5,415	6,741	8,301
CongoDR	2,077	2,014	2,758	5,128

Source: IMF World Economic Outlook 2023

Most countries continue to increase their trade with China, with Nigeria showing a particularly strong growth in 2021 and briefly overtaking South Africa in terms of trade with China. It is apparent that most African countries have adopted a 'look East' stance in their terms of trade and are steadily increasing their trade with China.

Table 3: Trade with the European Union

COUNTRY	2019	2020	2021	2022
SouthAfrica	25,631	20,109	26,045	27,212
Egypt	21,280	20,757	25,449	21,652
Nigeria	13,049	10,529	13,172	19,327
Kenya	1,814	2,148	2,238	2,102
CongoDR	1,146	1,045	1,203	1,550

Source: IMF World Economic Outlook 2023

The European Union is the most important trading bloc to Egypt and South Africa, with Nigeria showing strong growth of 46,7% in 2022. This is quite spectacular for a country which is now the biggest economy in Africa. Nigeria is increasing its trade with the European Union at a faster pace than all the key African countries.

Table 4: Trade with the United States

Country	2019	2020	2021	2022
Egypt	5,485	4,759	5,848	6,552
SouthAfrica	5,333	4,454	5,479	6,514
Nigeria	3,178	2,788	3,887	3,375
Kenya	0,391	0,370	0,561	0,599
CongoDR	0,105	0,102	0,113	0,179

Source : IMF World Economic Outlook 2023

Trade between the African States and the United States of America has remained stagnant over the past four years with only a marginal growth by Egypt and South Africa from 2021 to 2022. The share of trade between these countries and the United States is less than a quarter of the trade they do with China. This indicates a historical reversal in trading patterns . Trade with the United States remains healthy but given the size of the American economy, there is room for a significant increase. The trade picture rapidly diminishes when we turn to intra -Africa trade. The African countries seem to have a small incentive towards trading with one another, which is all the more important to look at the likely trade creation and trade diversion effects of the AfCFTA Table 5 below depicts the same key countries' trade with Egypt, the second largest economy in Africa.

Table 5: Trade Directions Statistics Egypt (US$ Billion)

Country	2019	2020	2021	2022
South Africa	0.086	0,074	0,125	0,088
Nigeria	0,132	0,102	0,147	0,105
Kenya	0.348	0,350	0,368	0,328
Congo DRC	0,016	0,014	0,014	0.016

Source: IMF World Economic Outlook 2023

Kenya is the most dominant trading partner with Egypt and reached $368 million in 2021 in terms of imports from and exports to Egypt .Nigeria is the second biggest trading partner with Egypt , with South Africa a distant third. While I will not show a table of the direction of trade with Nigeria , only South Africa can claim to have any meaningful trade with Nigeria having traded merchandise valued at $3,839 billion in 2019, which has since remained stagnant at $2,3b in the years 2020 through 2022. There is bizarrely no trade data available from Egypt on Nigeria, so the Nigerian figures above have been used as a corresponding statistic on the direction of Trade between Egypt and Nigeria. DRC $3.6m and Kenya a paltry $1.6m. Table 6 below shows that the Democratic Republic of the Congo, representing Central Africa does more trade with South Africa and eclipses all three of Egypt , Kenya and Nigeria when it comes to trading with its Southern neighbor.

Table 6: Trade Direction with South Africa ($billion)

Country	2019	2020	2021	2022
CongoDR	1,057	0,780	1,077	1,440
Kenya	0,787	0,459	0,424	0,535
Egypt	0,083	0,073	0,96	0,102
Nigeria	0,447	0,406	0,521	0,470

Source : IMF World Economic Outlook 2023

South Africa on the other hand recorded a GDP in 2020 of $302 billion, which is 0.27% of the world economy [6]. The drivers for competitiveness in the South Africa economy are the cost and availability of labour and materials , innovation, energy costs, physical infrastructure , the supplier network, economic , trade financial and tax system, government investment in manufacturing and local market attractiveness. The South African terms of trade for exports are dominated by the following com-

modities: (1) Gold, (2) Platinum, (3) Diamonds; (4) Crude oil, (4) Coal, (5) Petroleum, (6) Mining Ores, (7) Iron and Steel, amongst others. These commodities are exported to China which accounts for 10,6% of South African Exports, the USA 7,4%, Germany 7,4%, India 6,8% and Japan 5,6%. These are the top 5 countries to whom South Africa Exports (SARS trade data March 23, 2023).

The top 5 countries that South Africa imports from are China 20,4%, Germany 8,4%, United States 8%, India 7% and the UAE 3,9%. Key commodities that are imported are: (1) electrical equipment, (2) crude oil, (3) petroleum, coking coal, (3) cellphones, (4) electronics, (5) Catalytic converters, (6) computer equipment; (7) vehicle components, (8)Vehicles and accessories. Manufacturing contributed 20% of South African GDP in 1994 (time series data from Stats SA) but now (2021) accounts for only 14% of GDP. Motor vehicle parts and accessories represent the largest export growth subsector. The key issue that has led to a drop in the South African manufacturing sector is unreliable power supply from Eskom. A strong manufacturing sector influences infrastructure development, job creation, is a significant contributor to GDP and creates a clear path towards economic prosperity (Deloitte, 2016) There is an argument that labour costs in South Africa have increased at a faster rate than is the case with its global peers , and there has not been a commensurate increase in labour productivity, which impacts negatively on the manufacturing sector as its success is predicated on cheap labour. Key trends in manufacturing have seen a convergence of digital (AI) and physical elements of manufacturing thus ushering in an era of advanced manufacturing technologies which improve competitiveness. Most nations and companies are striving to adopt the next technological frontier to raise their economic efficiency and wellbeing. A competitive manufacturing sector drives advanced manufacturing capabilities. In most advanced economies, technology intensive features dominate the global manufacturing landscape and appear to be a strong path to achieve and or sustain manufacturing competitiveness (Deloitte, 2016 Global Manufacturing competitiveness Index). Six nations namely China, India, USA, Germany, South Korea and Japan collectively account for 60% of the world's Manufacturing GDP (Deloitte, 2016). Global Manufacturers rank talent as the most critical driver of manufacturing competitiveness, while containing costs and increasing productivity to boost profits remains critical, alongside building a strong network and ecosystem of suppliers.

Characterization of Investment Flows into the Manufacturing Sector in Africa

According to the 2022 World Investment Report (UNCTAD, 2022), the largest proportion of the investment in Africa goes to the primary sector, followed by Services.

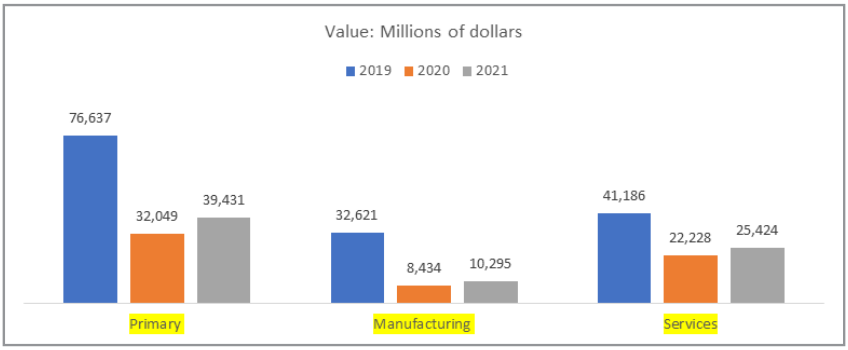

Figure 1.1: FDI flowing into different sectors in Africa
Source: Adapted from the UNCTAD, 2022 World Investment Report

There is enough evidence to show that AfCFTA's full potential will be determined by the continent's ability to restructure its manufacturing sector which is currently under-diversified, as pointed out earlier [7]. Manufacturing was hit hard during the Covid pandemic of 2020-2022 and has been slow to recover. South Africa represents the Continent's largest share of Manufacturing Output and the share of Investment inflows has been reducing , largely driven by the uncertain supply of Electricity. Multinational corporations are largely attracted by the primary sector in Africa. Figure 1.2 shows the sectors where investments had flown and top in the list is the energy and gas sectors followed by information technology, with the highest growth rate being in the basic metals and metal products (largely dominated by mining ores)

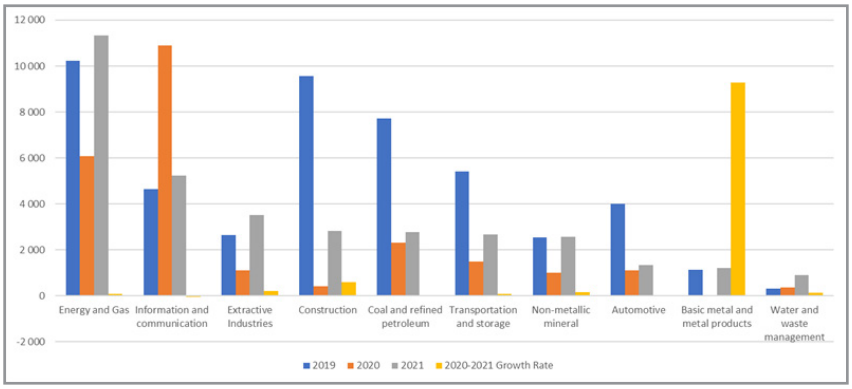

Figure 1.2: Investment flow to top ten industries in Africa (Millions of Dollars)
Source: UNCTAD 2022, World Investment Report

Figure 1.3 shows that while the largest proportion of the investment went to the COMESA region in 2016, most investment flows were directed to the SADC region in 2021. Even though the total value of investment declined over a three-year period from 2019 – 2021, investment in the power sector has seen exponential growth, with the Power sector and the Water, Sanitation and Hygiene exhibiting growth rates of by 282% and 145% respectively (UNCTAD, 2022). The renewable energy sector has grown by 60% over the three year period (2019-2021), and the transport services sector by 46%. Interestingly, investment in the food and agricultural sector has dropped by 45% (UNCTAD, 2022) . As Figure 1.3 shows, the largest proportion of investments flowing into Africa were from Europe and the UK in 2016 and in 2020. South Africa, a country in Africa, has been a key investor into the rest of the African continent. Investment from China into Africa has been growing substantially in the past ten years. According to the China-Africa Research Initiative done by Johns Hopkins University (2021), it is estimated that Chinese Financiers signed 1,141 loan commitments worth US$153 Billion between 2009 and 2020.

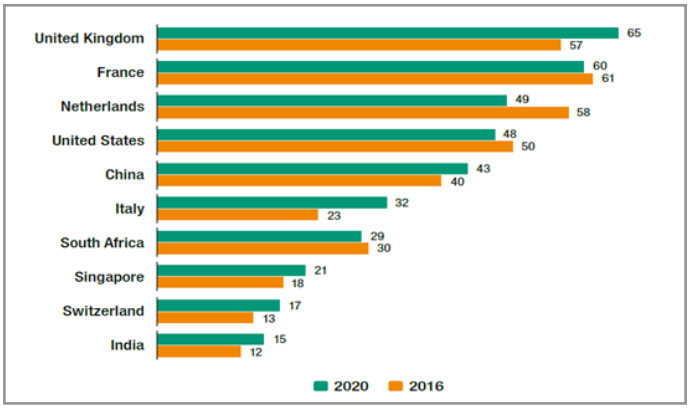

Figure 1.3: Africa's top ten investor economies by FDI stock in 2016 and 2020 (Billions of dollars)
Source: UNCTAD 2022, World Investment Report

There is a dearth of research that analyses the welfare effects of the AfCFTA on the manufacturing sector. The empirical evidence on the welfare effects that accrue from transnational investment relies on trade policies, and on trade instruments that improve trade facilitation as the source of enhancement to welfare [8]. Several studies have confirmed a positive impact of TNC capital inflow on the balance of payments [9, 10]. Notwithstanding the positive spinoffs there are divergent views on how multinational investment inflows impact on the welfare of a country. In particular, South Africa provides investment incentives to certain sectors, for example, the automobile manufacturers , yet there does not appear to be a concomitant improvement or increase in production units / productivity, nor has local content deepened, or employment improved (Kaplan, 2019). Blomström and Kokko argue that investment inflows from foreign MNEs may contribute to inequality, if the initial human capital capacity does not match the technology requirements of foreign companies investing in a host country [11]. According to Albertin et al a significant proportion of the global mining production of chromium, cobalt, manganese, platinum, gem diamonds and titanium comes from Africa [12, 13]. In their paper, Albertin et al. highlight the fact that in most resources-intensive sub-Saharan countries, mining exports represent 50% or more of total exports on average; and that the mining sector is the main source of foreign direct investment inflows in the region. Figure 1.4 illustrates investment flows from third party intermediary jurisdictions (investment hubs) as a percentage of total FDI. point out that 45% of FDI inflows into African countries comes via investment hubs, and the African countries are "estimated to be losing about $600 million per year" as a result of profit shifting.

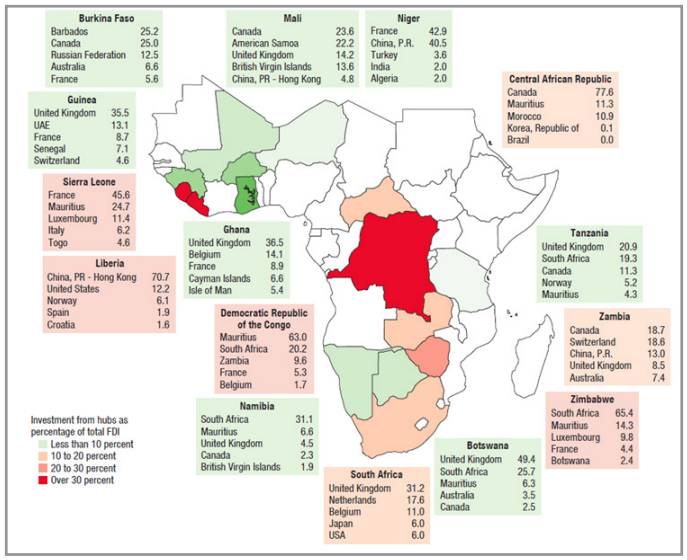

Figure 1.4: Sources of Revenue inflows in Extractive Industry in SubSaharan Africa
Source: Albertin, G., Yontcheva, B., Devlin, D., Devine, H., Gerard, M., Jankulov Suljagic, I., Thakoor, V., Beer, S., (2021)

CGE Modelling of Investment, GDP Growth, and Welfare

Having studied the FDI flows into Africa, we turn next to analysing the effects of the AfCFTA on macroeconomic aggregates in Africa with a special focus on investment as the driver of economic growth and welfare. We apply the CGE model of the Global Trade Analysis Project (GTAP) to simulate the complete elimination of intra-African import tariffs. Our analysis is based on the latest GTAP data version 11 (see Corong et al. and uses the model version 7 [14, 15]. GTAP 11 includes 160 countries or regions, 65 sectors, and 8 factors of production. To quantify the macroeconomic effects of the AfCFTA, we aggregate the data to the two regions of Africa and the rest of the world (RoW), to the 4 sectors of agriculture (including fishing and forestry), mining and extraction, manufacturing; and services, and 4 factors of production (land, natural resources, labour, and capital).

In the default setting of the model, labour employment is exogenous and the real wage rate is endogenous. To allow for employment effects, we swap the socalled closure condition to an alternative setting where the real wage rate is exogenous and employment is endogenous. We simulate the trade-policy measures of the AfCFTA by setting all intra-African import tariffs to zero and leaving all other tariff rates unchanged. We expect that the elimination of import tariffs will generate positive, output, employment and welfare effects in Africa and that investment in physical capital will increase in Africa. This, in turn, will propel Africa onto a higher growth tranjectory with higher income and reduced poverty.

Table 7 shows the simulated impacts of AfCFTA on GDP and its expenditure components in Africa and the RoW. In the new equilibrium, African GDP will be higher by 0.67% compared with the equilibrium before the elimination of import tariffs within Africa. In absolute numbers, this is an increase of US$ 15.8 billion. In Africa, imports will increase by 1.88% and exports by 0.86%. The African pre-AfCFTA trade balance deficit of US$ 72.2 billion will worsen by another US$ 7.4 billion. It is interesting to see that African investment expenditure will increase by 1.73% and this is larger than the percentage increases of consumption and government expenditure. However, the rest of the world will not benefit from the African tariff reductions. RoW GDP will slightly decrease by 0.03% and, with the exception of exports, all components of RoW GDP will slightly decrease, too.

Table 7: AfCFTA Effects on GDP and its Components [%]

Expenditure	Consumption	Investment	Government	Exports	Imports	GDP
Africa	0.74	1.73	0.78	0.86	1.88	0.67
Rest of World	-0.03	-0.05	-0.03	0.01	-0.03	-0.03

The increase in investment in Africa and its decrease in RoW will ultimately affect capital stocks in both regions. In Africa, the AfCFTA will induce an increase of the capital stock by US$ 24.4 billion, or 0.3%, whereas in the rest of the world, the capital stock will be reduced by US$ 50.0 billion.

The expansion of output in Africa and its slight contraction in RoW will go along with overall price changes. According to our GTAP simulations the price index of GDP will increase by a modest 0.39% in Africa. In RoW, the price level decreases but the change is negliable.

As we argued above, it would be beneficial for African countries to change their economic structure and reduce the relative importance of mining and extraction in favour of manufacturing and services. A switch to manufacturing would boost value added not only in absolute but also in relative terms and the service sector, being labour intensive, can create jobs and reduce both unemployment and poverty. Our GTAP simulations confirm that the implementation of AfCFTA trade measures would indeed lead to the desired change of the sector structure in Africa. As Table 8 reports, Africa would see a 0.26% increase of manufacturing output and service output would go up by 0.42% whereas the output in the mining and extraction sector would contract by 0.33%. Somewhat surprisingly, agriculture would see an increase in output as well. By contrast, RoW output in manufacturing and services will decrease marginally. In general, the AfCFTA will have relatively small impacts on RoW. Some mining and extraction will move from Africa to the rest of the world. Agriculture is the only sector in which output will expand in both parts of the world.

Table 8: Changes in the Sectoral Composition of Output [%]

Region	Agriculture	Mining & Extraction	Manufacturing	Services
Africa	0.07	-0.33	0.26	0.42
Rest of World	0.01	0.03	-0.01	-0.01

The core aim of the GTAP model is to quantify the welfare effects of economic policy measures. Welfare is measured through a utility function. GTAP employs the Constant Difference of Elasticities (CDE) function which has an implicit functional form relating utility, prices and expenditure:

$$\sum_{i=1}^{n} \beta_i u^{\varepsilon_i(1-\alpha_i)} \left(\frac{P_i}{Y}\right)^{1-\alpha_i} = 1$$

where u is utility, P_i is the price of good i and Y is total expenditure. The CDE has three parameters: The substitution parameter α_i (denoted by SUBPAR in GTAP), the expansion parameter ε_i (INCPAR), and the distribution parameter β_i. This utility function allows income elasticities of demand to be different from 1, i.e. being non-homothetic, and budget shares can be flexible with respect to prices and income.

GTAP's welfare metric is equivalent variation (EV) which is defined as the change of income required to attain the post-intervention utility at pre-intervention prices.

Table 9: Welfare Effects (EV) of the AfCFTA [US$ million]

EV	Allocative Efficiency	Endowment	Term of Trade	I-S Terms of Trade	Total
Africa	1306	5321	1536	199	8362
Rest of World	-3042	-3965	-1539	-200	-8746
Total	-1737	1356	-3	0	-384

As Table 9 shows, Africa will clearly benefit from the AfCFTA and RoW will be worse off since the total welfare effect is positive for Africa but negative for RoW. When the total effects are decomposed into their four elements, there is also uniformity in signs within the two regions. All elements are positive for Africa and all are negative for RoW. An improvement in allocative efficiency is as expected for Africa because, in general, abandoning tariffs or taxes will remove the excess burden of taxation. It is somewhat surprising, however, that allocative efficiency will worsen in RoW and that this negative effect is stronger than the positive effect in Africa. Therefore, on balance, global allocative efficiency will decrease indicating that trade diversion is larger than trade creation. To a large extend, the negative effect on allocative efficiency in RoW is explained by labour market adjustments [16-30].

There is a strong and positive endowment effect in Africa because the swap of the closure condition for both regions fixes the real wage but enables employment to vary. Evidently, the positive endowment effect in Africa is stronger than the negative effect in RoW so that, globally, there is a positive net effect. The (commodity) terms of trade (tot) are defined as the ratio of export prices to import prices. Since the export prices of one region are the import prices of the other region, the tot-effects will cancel at the global level. Africa will see improvements in its tot and RoW will experience worsening tot.

Table 10: Sectoral Decomposition of Terms-of-Trade Effects [US$ million]

Region	Agriculture	Mining & Extraction	Manufacturing	Services	Total
Africa	193	176	688	478	1536
Rest of World	-195	-180	-682	-483	-1539

Sectoral decompositions of tot effects are reported in Table 10. In Africa, all four sectors of the economy see an improvement in their tot. By far the largest gain is in the manufacturing sector. This is an encouraging sign because it indicates that global demand for African manufacturing products will increase. This is exactly the sectoral shift that Africa is envisioning. The tot improvements are also strong in the service sector and this is good news for African labour markets. The sectoral tot effects for RoW are more or less the mirror effects of the effects in Africa but, of course, with negative signs [31-43].

The last welfare components in Table 9 are the investment-savings (I-S) terms of trade. The I-S tot are intertemporal analogues to the commoditiy tot referred to earlier. The I-S tot are defined as the ratio of the price of domestically produced capital goods to the price of international savings. Ceteris paribus, an increase in the numerator is welfare increasing but an increase in the price of international savings reduces welfare. Table 9 shows that Africa will benefit from favourable changes in the I-S tot but there is a matching loss in welfare for RoW.

Discussion and Conclusion

We point out in this paper that transnational corporations (TNCs) bring to host countries investments which often facilitate transfer of technology and managerial skills from the source country to host country. We also highlighted Blomström and Kokko's (2003) argument that there a mismatch in that technological capabilities could increase income inequality, as foreign investors introduce new technology in the host country. Blomström and Kokko's (2003) contentions may well have to be confirmed or disconfirmed with evidence from developing countries. That notwithstanding, the African continent has attracted multinational corporation investment with its largest deposits of Gold, Platinum, Palladium, Manganese, Diamonds and Chromium. However, there seem to be limited institutional capabilities transferred across borders to secure positive welfare effects. What is less known in current literature is how deepening regional integration under the Africa Continental Free Trade Agreement is going to shape the nature and quantum of transnational investment in the productive sectors of African economies, in particular the manufacturing sector.

What is known, which exposes the paradox in how multinational entities have invested in Africa is the positive multiplier effects of the investments against the decline in corporate income tax. Multinational entities are responsible for about 50% of foreign direct investment in Sub-Saharan Africa (Investment Policy Monitor, 2022; Albertin et al, 2021). According to the 2022 Investor Monitor Report (UNCTAD, 2022), the tax competition to promote investment has led to a substantial reduction of worldwide corporate income tax from 40 per cent in 1980 to 23 per cent in 2021. A paper co-authored by a team of experts from the IM provides further evidence that as much as multinational enterprises mobilise substantial investments and resources into extractive manufacturing industries across Sub-Saharan Africa, revenue from these entities is reduced by lowering tax burdens and by international profit shifting. This begs the question of how much is Africa gaining, and losing from the investments made by transnational entities in Africa? An important question to ask is whether trade liberalisation envisaged in the AfCFTA will yield the welfare effects anticipated by the AfCFTA?

We apply the CME model and database 11 of GTAP to quantify the welfare effects of the AfCFTA for the African continent and the rest of the world. The simulation results are very encouraging for Africa. Comparative-statics analysis shows that African GDP

growth rates will be boosted and there will be a strong increase in investment spending. This, in turn, leads to a larger capital stock. The sectors benefitting most are manufacturing and services whereas the sector of mining and extraction will shrink. This is good news because it is the intention of African countries to move away from low value-added production towards high value-added (manufacturing) and employment creating (services) sectors. We can quantify a very substiantial welfare gain from AfCFTA for Africa that is mainly caused by favourable tot effects, especially in the manufacturing sector, and an increase of employment as reflected in larger labour endowment.

The paper concludes that for the AfCFTA to yield positive welfare effects, African countries require a harmonised and homogeneous industrial policy framework that facilitates the restructuring of economies from the mining and export of minerals and metals to domestic beneficiation. This requires special human capital factors including, relevant skills, institutional capabilities, infrastructure and technology. Africa needs to focus on manufacturing for export purposes into the continent in order to improve intra-Africa trade. A focus on manufacturing will create jobs on a sustainable basis and improve the living standards of the people as Africa improves its terms of trade by increasing its industrial output. An assessment into each region's competitive advantage, matched by the demand of manufactured merchandise in other regions is a necessary step into creating industrial policy which will lead to trade patterns that generate positive welfare effects as a result of the coming into being of the AfCFTA. Africa's industrialisation can yield a positive pattern on the growth and improvement of its intra regional trade by focusing on investments into the manufacturing process, especially led by a cognitive knowledge of each region's competitive advantage.

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