Potential for Africa Continental Free Trade Area to Increase East African Community Exports to Africa

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Bringing Rigour and Evidence to Economic Policy Making in Africa

Potential for Africa Continental Free Trade Area to Increase East African Community Exports to Africa

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Abstract

This paper provides estimates of the potential for East African Community (EAC) member countries to increase exports to the rest of Africa as the other countries reduce tariffs under the African Continental Free Trade Area (AfCFTA), using a simple approach to identify the markets (countries) and products most likely to benefit considering only growth of existing imports from the EAC. The assumption is that EAC member countries have evident export capacity in such products and markets, and that these products are unlikely to be excluded from liberalization by importing countries. The results suggest that the EAC could expand exports overall by 10-15%, largely concentrated in relatively close countries, and agriculture and resource-based products, but with basic manufactures. Relatively distant markets in North and West Africa offer reasonable potential to EAC countries, except Rwanda (concentrated on the Democratic Republic of Congo - DRC) and Tanzania (concentrated on Southern Africa). The EAC can anticipate moderate gains from AfCFTA and, by identifying the markets and products most likely to be affected, the study provides a guide to policy makers in EAC countries on sectors to target in supporting exports, including products that could target new distant markets (that include some basic manufactures). Textiles and apparel offer the best potential to engage in regional value chains.

JEL Classifications : *F10, F14, F15, O55*

Keywords: *East African Community (EAC), African Continental Free Trade Area* (AfCFTA), Tariff Reductions, intra-African Exports

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1. Introduction

The African Continental Free Trade Area (AfCFTA) is a single market comprising 55 African Union (AU) countries aiming to enhance growth by promoting the free flow of goods and services across the continent. The core element is the commitment to eliminate tariffs, currently averaging 6.1%, on trade within Africa guided by the *Protocol on Trade in Goods*, whereby countries provide a Schedule of Tariff Concessions (STC) with product details (for HS8 tariff lines) on the nature and timing of preferential market access to be granted to products originating from the other AfCFTA State Parties. The broad aim is to remove tariffs on 90% of tariff lines for non-sensitive (Category A) products over a 5 or 10-year period (with some variation across countries). A longer period is allowed for eliminating tariffs on sensitive products (that can account for 7% of tariff lines), and a small percentage of products can be excluded (tariffs maintained).

The AfCFTA is the culmination of regional integration activities in Africa intended to expand the degree of intra-African trade given the perception that Regional Trade Agreements (RTAs) in Africa have not been very successful. Comparisons at a continental level suggest that intra-regional trade is low in Africa, at 15% of total trade in 2019 compared to 46% in the Americas and 60% in Asia (Mold 2022: 11). Such comparisons are misleading because the average is biased downwards by some very large countries with very low levels of trade with Africa (especially Egypt and Nigeria), the dominance of oil and mineral exports for resource-rich countries, and the omission of informal cross-border trade for which official data are scarce (Mold, 2022). Estimates suggest the latter is over 10% of formal trade and up to 50% of formal trade for small and/or landlocked countries. Incorporating conservative estimates of informal cross-border trade, Mold (2022: 17) estimates that intra-African trade is about 40% of total trade for non-oil resource intensive and landlocked countries, and almost 30% of total trade for Africa overall. Nevertheless, there are potential further gains from greater integration.

The challenge for achieving the AfCFTA aim of expanding intra-regional trade is that export product similarities in Africa, associated with dependence on primary commodities with limited exports of manufactures, suggests that several countries have comparative advantage in similar products. Neighbouring African countries tend to export similar products, such as minerals or tropical foods and beverages. These product similarities limit intra-regional trade and is one reason why intra-African trade

is estimated at 10-15% of total African trade compared to intra-regional trade shares of around 60% (Europe), 40% (North America) and 30% for ASEAN (African Union 2022). Nevertheless, numerous specific products such as tea, coffee, plastics and textiles are traded within Africa. Identifying which destination countries and products offers the greatest potential for increased exports to rest of Africa (RoA) is facilitated by analysis at a high level of product disaggregation.

The focus of this paper is the effect of AfCFTA tariff reductions on intra-African exports of the East African Community (EAC), comprising Kenya, Tanzania, Uganda, Rwanda and Burundi (henceforth EAC5). The Democratic Republic of Congo (DRC) and South Sudan joined recently but neither is fully integrated, and they were not part of the EAC during the period covered here (with export data for 2020) and are, therefore, excluded. Specifically, the analysis addresses the potential for EAC5 to expand regional exports to the rest of Africa (RoA). These effects will depend on which products are fully liberalized (removal of tariffs) by AfCFTA partner countries, the Category A products, and which remain subject to tariffs (the excluded products). Potential export growth is estimated for existing African markets outside EAC5, focussing on the 12 largest destinations and identifying the most important products for export growth to those countries. The analysis is limited to estimates for the intensive margin and does not include potential for new products (although the focus does suggest which products could target new markets).

Following a very brief overview of literature on regional integration in Africa in the next section, Section 3 outlines intra-African and recent trade policy in EAC5 countries. Section 4 reports estimates of which markets (countries) offer the greatest opportunities; intra-African EAC5 exports are estimated to increase by 10-15% overall, in about ten different markets (except for Rwanda whose exports are almost entirely to DRC), mostly relatively close countries but including 'distant' countries in North and West Africa. Section 5 turns the focus to products; export growth to neighbouring countries includes simple manufactures, whereas agricultural products, especially tea and coffee, textiles and apparel are important for distant markets. The conclusion in Section 6 addresses the potential effect on integration into regional value chains, defined as sectors that import inputs (from anywhere) and export products to other African countries, and acknowledges that excluding products from tariff reductions undermines the potential to increase intra-regional trade and thereby reduces the benefits of AfCFTA (a similar concern arises regarding agreement on Rules of Origin, see Section 6).

2. Regional integration and intra-African trade

As of 2020, the five major RTAs in Sub-Saharan Africa were Southern African Development Community (SADC) in Southern Africa (with 16 members), Economic Community of West African States (ECOWAS) in Western Africa (15 members), Economic Community of Central African States (ECCAS) in Central Africa (11 members), Intergovernmental Authority on Development (IGAD) in the Horn of Africa (8 members) and the East African Community (EAC) in East Africa (6 members). Overlapping membership is a feature of African RTAs: examples for EAC members are Kenya, South Sudan and Uganda also in IGAD, Tanzania also in SADC and Rwanda also in ECCAS (see Turkson et al., 2023, Appendix 5). There is evidence that levels of intra-regional trade have increased despite high trade costs, similarity of production and export structures and, at least until recently, shallow integration. Turkson et al. (2023), estimating the effect of RTAs on intra-African trade for 43 SSA countries over 1960 to 2015, find evidence for increased bilateral trade between members in SADC, EAC and ECOWAS (see also Turkson, 2015). Mold (2022: 13) shows that levels of intra-regional trade for 2016-2020 are higher for SADC (21%), IGAD (20%) and EAC (18%) than for MERCOSUR (12%) and CARICOM (13%), although other RTAs in Africa tend to be below 10% and all are below ASEAN (23%).

Broader and deeper integration in Africa under AfCFTA is seen as addressing the limitations of regional RTAs to provide greater gains for the continent. Most existing studies evaluating the potential gains from liberalization under AfCFTA are based on computable general equilibrium (CGE) models (see ECA 2020, Table 3.1). The results vary according to the features of the model and extent of the reforms included but suggest that eliminating tariffs alone would generate gains less than one per cent of GDP. Also, liberalizing non-tariff barriers (NTBs) would increase gains to as much as 2% of GDP, and including trade facilitation measures to reduce trade costs could double the gains (World Bank 2020, Section 3 and Appendix D).

Although not addressing AfCFTA, Balistreri, Tarr and Yonezuma (2015) provide CGE analysis of deep integration for the EAC (Kenya, Tanzania, Rwanda, Uganda) and for Tripartite-Africa regions (EAC, COMESA and SADC), incorporating preferential liberalization of trade, non-tariff barriers and services, and reduced trade costs through trade facilitation. All regions gain from liberalization but to a varying extent for different types of reform (e.g., liberalization of services is especially beneficial for Kenya) and tariff reforms alone provide negligible welfare gains. All the four EAC

countries gain from deep integration within the EAC alone, but the welfare gains are greater if liberalization is within the full Tripartite (indicative of AfCFTA), a low of 1.8% of consumption for Rwanda and a high of 2.9% of consumption for Kenya (Balistreri et al., 2015: 694).

In a comprehensive study, World Bank (2020) reports the results using a CGE model with 21 sectors (including 10 for services), industry employment and wages by gender, and linked to household surveys for micro-simulation. Tariff liberalization alone would only increase income by 0.2% overall (estimates are similar for EAC countries) and intra-regional trade would increase by less than 1% (World Bank, 2020: 45). Eliminating NTBs and implementing trade facilitation is required to deliver full benefits, an overall income gain from full implementation of 7% of 2014 values by 2035, with an increase in intra-African exports by 80% (World Bank, 2020: 4). The Economic Commission for Africa (ECA, 2018) also used a CGE model and estimated that full tariff liberalization could increase intra-African trade by 40% by 2040.

The ECA (2020) estimates the effects of complete liberalization for Eastern Africa (a much broader definition than EAC), with a partial equilibrium approach using the WITS-SMART model and CGE calibrated for 2014. In the partial equilibrium model for the EAC countries, the estimated percentage increases in exports (EAC, 2020, Table 4.2: 49) range from over 20% for Rwanda and Uganda to 10% for Kenya (and negligible for Burundi), while the increase in imports (EAC, 2020 Table 4.3: 51) range from 5% for Kenya to 1% for Tanzania and Burundi. The differences arise because EAC has relatively low tariffs (and no tariffs on intra-regional trade). Therefore, the imports response is limited,[3] but benefits from exporting to other African countries that have relatively high tariffs (Ethiopian imports, for example, increase by 21%). Over half the additional exports for eastern Africa overall (not only EAC) are to DRC, almost 20% to Zambia and 14% to South Africa. The GTAP simulations are qualitatively similar; exports to Africa from Eastern Africa increase by 16%, on average, with the largest increases for light manufacturing, textiles and clothing, and processed food.

Existing studies provide small but positive gains from tariff liberalization alone, less than one per cent of GDP and an increase in intra-African trade of less than 20% (estimates vary considerably). While CGE methods are valuable for estimating benefits for Africa overall and at a sector or country level, and for incorporating non-tariff measures, they are not the most appropriate to identify specific products and markets of importance to individual countries, with the greatest potential to enhance intra-African trade. Partial equilibrium approaches are suitable for disaggregated analysis, such as assessing the importance of excluding sensitive products in regional liberalization (Morrissey and Zgovu, 2011) and to identify products with the best potential for increased exports (Section 5 below).

3. EAC trade in Africa

The East African Community (EAC) came into force on 7 July 2000, comprising Kenya, Tanzania and Uganda (Burundi and Rwanda joined later; South Sudan joined by 2019 and DRC only joined in 2022) and established a Common External Tariff (CET) in January 2005. The founding members had implemented significant trade reforms between the early 1990s and early 2000s prior to establishing the EAC (Jones and Morrissey, 2008). In Kenya, which initially had the highest average tariff (35%), the mean unweighted tariff was reduced by two-thirds to 18%; the mean tariff in Tanzania fell by less than a fifth, from 20% to 16%; and in Uganda, which had the lowest tariffs by 1994 (17%), the mean tariff was further reduced by almost a half to 9%. These trade policy reforms were largely technocratic (concertina reforms) as recommended by the World Bank – significant reductions in the highest tariffs and reducing the mean and dispersion of tariffs across the board reductions and rationalization of rates (Jones et al., 2011). Despite this broadly technocratic pattern of reform, Jones et al. (2011) find some evidence of political economy influences in Tanzania, where initially high tariffs were reduced by less, preserving the relative protection of favoured sectors (in the same vein, Tanzania is often the strongest proponent of excluded products in AfCFTA), and Kenya where some textiles sectors had especially high tariffs (consistent with protecting local manufacturing). In Kenya and Tanzania, larger industries appeared to benefit from higher tariffs.

Table 3.1: EAC member's trade with Africa (% shares 2012-2018)

	Kenya	Tanzania	Uganda	Rwanda	Burundi
Africa X					
2012-17	40	32	54	43	17
2018	33	36	48	28	18
Africa M					
2012-17	10	12	21	35	36
2018	12	13	23	32	32

Notes: Reports percentage share of AfCFTA countries in total exports and imports for each EAC member. The decline for Rwanda in 2018 is not explained in ECA (2020) and the average African share in exports was 32% over 2006-2011.
Source: Economic Commission for Africa (2020), Table 2.2 (p14).

Thus, when the EAC was formed, Kenya and Tanzania had comparable mean tariffs, albeit with differences in composition, and Uganda had lower tariffs. The CET provided a simplified structure, increasing Uganda's tariffs but reducing those of Kenya and Tanzania, with almost all lines zero-rated or at rates of 10% or 25% and a very small number of tariff lines at rates of 50% or more; 25% was the modal rate applying to 40% of tariff lines (WTO, 2007: 17). Higher tariffs applied where there was domestic production to protect, notably agriculture products and some textiles and fabrics, with rates ranging from 35% to 100% (WTO, 2019: 6).[4] Although the EAC did boost regional trade in the 2000s, the share of intra-EAC trade in total trade declined between 2012 and 2017 for all members except Uganda (WTO, 2019: 46). Intra-EAC trade accounted for 11% of total EAC trade in 2019, a decline from the peak over 2012-14 due to reduced intra-regional exports by Kenya and, especially Tanzania (ECA, 2020: 16-17). Intra-EAC exports are most important for Kenya, Rwanda and Uganda, at almost 20% or more of total exports, although intra-EAC trade is greatest for Burundi, Rwanda and Uganda, at over 15% of total trade (EAC, 2020, Appendix Table A1).

Despite the stalled growth of intra-EAC trade, trade with the rest of Africa is significant for the EAC5. Table 3.1 shows the trends to 2018; although there was a decline since 2012, Africa accounts for over a third of exports for all members except Burundi (and Rwanda by 2018) and for a third of imports for Rwanda and Burundi, less than a quarter for Uganda but just over 10% for Kenya and Tanzania. While manufactures and foods were the largest shares of intra-African EAC5 exports, food and agricultural raw materials, ores and metals accounted for more than three-quarters of exports to the rest of the world (ROW) by 2018 (ECA, 2020: 15). There is potential for export growth under AfCFTA liberalization because, although average tariffs faced by EAC exports to Africa are 6%, light manufactures and processed foods face higher tariffs and some African countries impose much higher tariffs – for example, over 20% on processed foods, light manufactures and garments in Ethiopia (ECA, 2020, Table 2.4, p18).

4. AfCFTA impact on EAC exports – which countries?

As the focus is to identify which markets (countries) and products have the greatest potential for AfCFTA to increase EAC exports to Africa, a disaggregated product-country approach is adopted. Rather than using data on EAC exports, which are limited with many missing values and do not include tariffs faced in different RoA markets, we use partner data on imports from EAC5 with the applicable tariffs. The implicit assumption is that existing exports indicate that the EAC5 are competitive suppliers and/or the products are unlikely to be excluded from tariff reductions by the partner.[5] Furthermore, as the EAC5 are already exporting to the markets, they are succeeding despite the high costs of intra-African trade. Given data limitations, estimates are for the intensive margin (increases in current exports) and do not include any potential new export products that may arise.

For simplicity, tariff elimination on all exported products is assumed and estimates ignore the phasing of tariff reductions (including that tariffs will be reduced last on sensitive products); one could interpret the estimates as for feasible export growth by 2035. Obviously, if products are excluded from tariff reduction, the potential export gains will not be realized.[6] The potential increase in exports is estimated with a simple approach using imports of the RoA country (*j*) from the EAC country (*i*) to estimate $\Delta X^i = \text{Sj } \Delta M^{ji}$ where:

$$\Delta M^{ji} = \left(\frac{t}{1+t}\right).\eta_M^d.M_0^{ji} \quad (1)$$

where *t* is *j*'s tariff on imports from EAC country *i*, and (*t*/1+*t*) represents the relative price change; η_M^d is the price elasticity of demand for imports, and M_0^{ji} is the pre-AfCFTA value of imports from EAC country *i*. The estimate of the increase in imports in response to a price reduction is taken as the estimate of the increase in EAC5 exports as tariffs are eliminated. Three alternative elasticities (*h*) are used: unit elasticity (*h* = 1.0) and elastic demand (*h* = 1.5) for all products, and variable elasticities at the HS2 level taken from Hertel (1997) – Appendix Table A7 provides a list of the HS2 products and 'Hertel' elasticities (*h* = H).

Estimation is based on the matched tariffs and import data from the Tariff and Trade Analysis option in WITS, as this gives the broadest coverage with tariff rates, carried out at the HS6 product level and then aggregated, to HS2 and for each market. The 12 RoA countries that import the most from EAC countries are included

in the analyses, providing good coverage and probably accounting for 90% or more of EAC exports to RoA. Some important EAC export markets–specifically South Sudan, Sudan and Somalia–are omitted due to missing data on tariffs. Although South Sudan and DRC have joined EAC, they are yet to start implementing EAC trade protocols and they are not analysed as members. However, as the DRC is a very important export market for the EAC5, it is included as an RoA export market in the analysis.

The values for Kenya, Tanzania and Uganda of imports from (exports to) the 12 RoA countries and the average weighted tariff faced are listed in Table 2. While the same 12 RoA countries are used for each EAC country, their importance as export markets differs as can be seen by the ranking by value of imports (mostly for 2020). Note that alternative data sources provide differing values for imports, and this can create anomalies; for example, TRAINS (WITS) reports Zambia as Tanzania's largest export market in RoA, whereas COMTRADE reports South Africa as the largest (which seems more plausible).[7] This implies the quantitative estimates of the increase in value of exports should be treated with caution. This limitation is mitigated by the focus on the countries with the greatest potential for the EAC5 and on the percentage increase in exports (based on the product composition and tariffs faced). While most markets are in southern and eastern Africa, Egypt (especially for Kenya) and Morocco (especially for Uganda) are important, as are Ghana (especially for Tanzania) and Nigeria.

Table 4.1: EAC 'Big 3' member's major African export markets (2020)

Kenya			**Tanzania**			**Uganda**		
	M$m	**Tariff**		**M$m**	**Tariff**		**M$m**	**Tariff**
Egypt (2018)	288.2	*19.9*	Zambia (2020)	147.3	*14.8*	D.R. Congo (2020)	63.5	*12.8*
Zambia (2020)	92.9	*14.8*	D.R. Congo (2020)	81.7	*12.6*	South Africa (2020)	39.6	*10.0*
Ethiopia (2020)	47.2	*19.0*	South Africa (2020)	55.3	*11.9*	Morocco (2020)	18.5	*24.3*
Mauritius (2021)	44.0	*3.2*	Malawi (2020)	39.8	*16.3*	Zambia (2020)	11.0	*14.1*
D.R. Congo (2020)	40.5	*12.4*	Zimbabwe (2020)	23.6	*21.6*	Egypt (2018)	7.6	*20.5*
South Africa (2020)	39.7	*11.7*	Ghana (2019)	13.4	*13.3*	Nigeria (2020)	3.5	*15.0*
Malawi (2020)	39.0	*12.7*	Mozambique (2020)	13.3	*10.5*	Mauritius (2021)	3.0	*1.2*
Nigeria (2020)	37.8	*14.1*	Nigeria (2020)	9.6	*13.4*	Malawi (2020)	1.9	*13.9*
Ghana (2019)	16.0	*15.5*	Morocco (2020)	8.5	*10.1*	Ethiopia (2020)	1.7	*20.2*

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Table 4.1 Continued

Kenya			Tanzania			Uganda		
	M$m	Tariff		M$m	Tariff		M$m	Tariff
Morocco (2020)	10.7	*16.9*	Egypt (2018)	4.7	*17.4*	Mozambique (2020)	1.4	*13.7*
Mozambique (2020)	7.8	*9.7*	Ethiopia (2020)	3.8	*24.5*	Zimbabwe (2020)	0.5	*13.9*
Zimbabwe (2020)	6.2	*20.4*	Mauritius (2021)	0.14	*0.0*	Ghana (2019)	0.4	*15.5*
Total	**669.8**		**Total**	**401.3**		**Total**	**152.7**	

Notes: Reports major African export countries (with year for data) for each EAC member ranked in order of the value of imports in US$ millions (M$m) with the average applied tariff for the products imported (these are reported as weighted averages in TRAINS although the weights are not specified).
Source: Derived from the Tariff and Trade Analysis option in WITS.

Table 4.2 shows that Egypt and Morocco are relatively important for Burundi, despite a very low value of exports, while the situation is very different for Rwanda where 99% of African exports are to the DRC (the DRC accounts for over a third of total Rwandan exports over 2019-22, and the only African countries with shares over 1% are EAC members). Except for Rwanda, there are products EAC5 can export to African countries that are far away from the region despite what are likely to be high transport costs (and relatively high tariffs).

Table 4.2: Rwanda and Burundi major African export markets (2020)

Rwanda			Burundi		
	M$'000	Tariff		M$'000	Tariff
D.R. Congo (2020)	370,759.8	12.9	South Africa (2020)	518.6	6.3
Ghana (2019)	2261.4	13.1	Egypt (2018)	305.3	50.0
Morocco (2020)	649.6	5.0	D.R. Congo (2020)	238.6	14.1
South Africa (2020)	417.4	12.3	Morocco (2020)	219.3	17.5
Egypt (2018)	380.6	5.6	Zambia (2020)	188.3	16.4
Zambia (2020)	221.6	6.3	Nigeria (2020)	50.8	8.8
Ethiopia (2020)	136.7	15.0	Malawi (2020)	17.9	25.0
Mozambique (2020)	90.8	10.2	Ghana (2019)	9.6	12.5
Malawi (2020)	69.9	18.7	Ethiopia (2020)	9.4	24.0
Mauritius (2021)	27.7	2.9	Mozambique (2020)	0.7	12.5
Zimbabwe (2020)	12.3	15.7	Mauritius (2021)	0.3	7.0
Nigeria (2020)	0		Zimbabwe (2020)	0	
Total	**375,027.8**		**Total**	**1,559.0**	

Notes and Sources: As for Table 4.1.

Tables 4.2 and 4.3 provide estimates of the increase in exports of each EAC country to each RoA country, ranked in order of the increase in export values and share of increase (for *h* = H), with percentage increase for alternative import demand elasticity values (*h* = H, 1.0, 1.5). Negligible or zero increase in exports (given very low/zero initial tariffs) are not reported. The ranking of countries in terms of the increase in exports differs from the ranking by initial import values because applied tariff rates differ (and the average masks variation across the products covered). Thus, for example, for Kenya, the potential increase in exports is greatest to Zambia with Egypt in second place, although the top five places are largely preserved for Tanzania (Ghana falls in importance). For Uganda, DRC retains top place, but South Africa falls while Egypt rises in importance. The export ranking is preserved in the change in exports ranking for Rwanda (almost entirely DRC) and Burundi, except that exports to South Africa do not increase (no tariffs). The increase in exports is in proportion to the elasticity assumption for *h*=1.5 and *h* =1.0 but may be within or outside this range for *h*=H as the variation includes HS2 with inelastic demand and elasticities above 1.5.

Table 4.3: Estimated increase in EAC exports to RoA ('Big' 3)

Exporter	Destination	Values			Percentage Change		
		M$m	DX$'000 (*H*)	Share (*H*)	*h* = *H*	*h* =1.0	*h* =1.5
Kenya	Ethiopia	47.2	9,064.5	18.81	19.2	14.7	22.0
	Zambia	92.9	8,791.0	18.25	9.5	8.7	13.0
	Egypt	288.2	8,021.3	16.65	2.8	2.6	3.9
	D.R. Congo	40.5	6,121.7	12.71	15.1	10.4	15.6
	Malawi	39.0	5,456.8	11.33	14.0	13.2	19.7
	Nigeria	37.8	3,433.8	7.13	9.1	7.0	10.5
	South Africa	39.7	2,168.2	4.50	5.5	5.4	8.2
	Zimbabwe	6.2	2,132.3	4.43	34.4	23.4	35.1
	Ghana	16.0	1,453.2	3.02	9.1	7.4	11.1
	Mozambique	7.8	796.1	1.65	10.2	7.4	11.0
	Morocco	10.7	376.6	0.78	3.5	3.0	4.5
	Mauritius	44.0	361.3	0.75	0.8	0.7	1.1

continued next page

Table 4.3 continued

Exporter	Destination	Values			Percentage Change		
		M$m	DX$'000 (*H*)	Share (*H*)	*h* = *H*	*h* =1.0	*h* =1.5
Tanzania	Zambia	147.4	26,632.6	40.85	18.1	13.5	20.2
	South Africa	55.3	9,598.0	14.72	17.4	9.9	14.8
	Malawi	39.8	9,142.9	14.02	23.0	15.2	22.8
	D.R. Congo	81.7	8,262.4	12.67	10.1	7.6	11.4
	Zimbabwe	23.6	6,183.7	9.49	26.2	17.0	25.5
	Mozambique	13.3	1,479.6	2.27	11.1	6.7	10.1
	Ethiopia	3.8	1,320.4	2.03	35.0	18.4	27.6
	Nigeria	9.6	939.9	1.44	9.8	6.6	10.0
	Morocco	8.5	745.9	1.14	8.8	7.7	11.5
	Ghana	13.4	711.0	1.09	5.3	3.0	4.4
	Egypt	4.7	175.0	0.27	3.7	3.0	4.5
Uganda	D.R. Congo	63.5	8,189.2	64.55	12.9	10.5	15.7
	Morocco	18.5	1,883.1	14.84	10.2	9.0	13.6
	Egypt	7.6	828.0	6.53	10.8	8.7	13.0
	Nigeria	3.5	650.1	5.12	18.8	12.6	18.9
	Zambia	11.0	391.0	3.08	3.5	1.9	2.9
	South Africa	39.6	362.2	2.86	0.9	0.7	1.1
	Ethiopia	1.7	144.3	1.14	8.3	11.1	16.7
	Ghana	0.4	78.0	0.61	19.9	13.8	20.6
	Malawi	1.9	75.9	0.60	3.9	5.6	8.4
	Zimbabwe	0.5	53.6	0.42	10.8	7.4	11.1
	Mozambique	1.4	30.6	0.24	2.1	1.3	1.9

Notes: Reports for each EAC member partner, ranked in order of the increase in exports (US$ '000s) and share for the Hertel import elasticities (*H*), with initial value of imports (US$ millions) and percentage increases for all three values of the elasticities (*h*). Negligible values for Mauritius for Tanzania and Uganda omitted (low values and negligible tariffs and therefore no increase).
Source: Authors' calculations from WITS data.

Table 4.4: Estimated increase in Burundi and Rwanda exports to RoA

Exporter	Destination	Values			Percentage Change		
		M$m	DX$'000 (H)	Share (*H*)	*h* = *H*	*h* =1.0	*h* =1.5
Rwanda	Congo, D.R.	370.760	41,878.8	99.305	11.3	10.2	15.4
	Ghana	2.261	189.8	0.450	8.4	11.1	16.7
	Morocco	0.650	51.7	0.123	8.0	7.1	10.6
	Mozambique	0.091	15.4	0.037	17.0	7.0	10.4
	Malawi	0.070	11.8	0.028	16.9	8.8	13.2
	Egypt	0.381	10.0	0.024	2.6	2.3	3.4
	Zambia	0.222	8.2	0.019	3.7	1.5	2.3
	Ethiopia	0.137	5.3	0.013	3.8	4.9	7.4
	Zimbabwe	0.012	0.9	0.002	7.5	5.2	7.8
	Mauritius	0.028	0.5	0.001	1.7	1.3	2.0
	South Africa	0.417	0.0	0.0	0.0	0.0	0.0
Burundi	Egypt	0.305	139.5	52.05	45.7	28.6	42.9
	Zambia	0.188	49.6	18.51	26.3	12.0	17.9
	Congo, D.R.	0.239	37.5	13.99	15.7	10.8	16.3
	Morocco	0.219	28.0	10.45	12.8	11.0	16.4
	Malawi	0.018	4.7	1.75	26.0	20.0	30.0
	Ethiopia	0.009	3.7	1.38	39.3	22.6	33.9
	Nigeria	0.051	2.5	0.93	4.9	4.8	7.2
	Ghana	0.010	2.2	0.82	23.1	14.2	21.3
	South Africa	0.519	0.4	0.15	0.1	0.0	0.0
	Mozambique	0.001	0.1	0.04	11.0	6.7	10.1

Notes and Source: As for Table 4.3. Negligible values for Nigeria for Rwanda, Mauritius and Zimbabwe for Burundi, are omitted.

Total Kenyan exports may increase by 6-9% (7% for H) or US$ 40-60 million, a narrow range; exports to five countries account for over 10% of the increase – Ethiopia, Zambia, Egypt, DRC and Malawi – and the differences for elasticities are small and equally likely to be higher or lower for H. It is notable that although Egypt accounts for 43% of exports, it only accounts for about 18% of the increase, implying a product composition with relatively inelastic demand. Total Tanzanian exports may increase by 11-17% (16% for H) or US$ 45-68 million, and exports to four countries account for over 10% of the increase – Zambia (over 40%), South Africa, Malawi and DRC. Ugandan exports could increase by 7-10% (8% for H) or US$ 10-15 million; exports to only two countries account for over 10% of the increase – DRC (over 60%) and Morocco. The increase in Rwandan exports is almost entirely to DRC (Ghana is the only other market with an increase above US$ 100,000), with a potential overall increase of 10-15% (11% for H), or US$ 38-47 million. Exports from Burundi could increase by 11-17% (17% for H) or US$

169,000-268,000; exports to four countries account for over 10% of the increase – Egypt (over 50%), Zambia, DRC and Morocco – the value of RoA exports is low but distant markets are relatively important.

Overall, EAC5 exports to RoA could increase by about 10%, within the range 5% to 20% and probably less than 15%. While most of the increase is to relatively close countries, in Southern Africa or Ethiopia, four distant markets are reasonably important (except for Rwanda which is very concentrated on DRC). The importance of Egypt, Ghana, Morocco and Nigeria shows that EAC5 can export across Africa, which increases the ability to gain from AfCFTA. The next section identifies which products are exported, especially to distant markets.

5. AfCFTA Impact on EAC Exports – Which Products?

Policy makers are interested in predictions of export increases but are likely to be even more concerned with knowing which products that are currently exported have the greatest potential for growth. As a rule, the closer the market the wider the range of export products – the EAC, for example, can anticipate increased exports to DRC and Zambia in several export product groups. Of more interest is the products exported to distant markets in North or West Africa (Egypt, Morocco, Nigeria and Ghana), shown in Tables 9-13 for the EAC countries separately. Although this analysis cannot address new export products, if a country is exporting to relatively distant markets (with higher trade costs than neighbours) it may be able to export to other (new) distant markets – if Morocco is a market could the products be exported to Algeria or Tunisia? In some markets, products accounting for the largest share of initial imports experience a relatively low percentage increase because demand is inelastic, although they may still provide a significant increase in the value of exports. The highest percentage increase in export potential is often for products with low initial shares, reflecting differential tariff rates and elasticities, although they may account for a low share of the total increase. There is considerable variation in the range of products traded between the various partners; even if exports of agricultural products, textiles and apparel dominate, various light manufactures are significant (especially for Kenya and Tanzania).

Table 5.1 reports the HS2 products accounting for 2.5% or more of the increase in exports, with the main markets for each EAC country (see also Tables A2-A6). Kenya has the most diversified product range of exports, and 14 HS2 products contribute more than 2.5% of the increase (tea is the most important). Fats and oils is the only HS2 product where only one market (Zambia) is dominant, and the distant markets are important for five HS2 products, even if tea is by far the most important. Distant markets are also important for Uganda where coffee (Morocco) and tobacco (Egypt and Nigeria) account for almost 30% of the export growth – DRC is the other major market. Although the level of exports is low, distant markets are also important for Burundi, especially apparel to Egypt (over half of export growth) and coffee to Morocco. Although Rwanda exports a relatively wide range of HS2 products (Table 12), almost all are to DRC (and include re-exports and second-hand items). Tanzania exports a range of products but is concentrated on close countries, especially Zambia and Zimbabwe.

Table 5.1: EAC5 export increases, main products and main markets

Country	Product (HS2)	Markets
Kenya	Tea, Tobacco, Vegetable Textile Fibres, Paper, Soaps	**Egypt, Nigeria, Ghana, Morocco**
	Soaps, Electrical, Iron and Steel, Plastics, Fats and Oils, Aluminium, Mechanical, Textiles Worn, Feathers	Ethiopia, Zambia, DRC, Malawi, South Africa, Zimbabwe
Tanzania	Glass and Glassware, Mineral Fuels, Salt and Stone, Textiles Worn, Iron and Steel, Apparel Knitted, Soaps, Tobacco, Optical, Cosmetics	Zambia, South Africa, Malawi, DRC, Zimbabwe
Uganda	Coffee, Tobacco	**Morocco, Egypt, Nigeria**
	Salt and Stone, Iron and Steel	DRC, Zambia
Rwanda	Mineral Fuels, Milling Products, Cereals, Electrical, Fats and Oils, Iron and Steel, Textiles Worn, Soaps, Vehicles, Footwear, Furniture, Salt and Stone	DRC
Burundi	Apparel not Knitted, Coffee, Furniture	**Egypt, Morocco, Ghana**
	Electrical, Tobacco, Milling Products, Soaps, Furniture	Zambia, DRC

Notes: Only reports products that account for at least 2.5% and nearby markets that account for over 4% of the estimated increase in exports, separately for the **distant** markets (in **bold**) and closer (regional) markets. Products and markets listed in order of importance.
Source: Authors' estimates, detail in Appendix Tables A2-A6

Morrissey and Zgovu (2024, Tables 14-16) provide more detail on products that account for an increase in exports of at least US$100,000 to distant markets for the three big EAC countries – the only relevant product for Rwanda is insecticides to Ghana (exports could increase by US$ 186,400, 8.3%); for Burundi the only product is tracksuits and swimwear to Egypt (exports could increase by US$ 138,800, 45.7%). Kenya exports a diverse range of products to all four distant markets, although most of the increase is in tea to Egypt and Nigeria. In value terms, the important products for which exports increase by more than US$ 0.5 million are paper and fruits to Egypt, jute and tobacco to Nigeria. Textile fibres are important exports to Ghana (also tea and polishes) and Morocco (also seeds), which could link to a regional value chain. In general, products with the highest export shares have the lowest percentage growth (even if the values are the highest) due to relatively low tariffs, whereas products with the highest percentage growth, as tariffs are relatively high, tend to be low shares of current exports. Coffee is Tanzania's major export to Morocco, but the potential for growth is modest in percentage terms (10%); cordage and raw hides are the most important exports to Nigeria, while yarn, glass containers and machine tools are important to Ghana. Ugandan exports are concentrated in coffee to Morocco and tobacco to Egypt and Nigeria; aluminium sheets to Nigeria are the only other important export.

6. Conclusions: Expansion of intra-African EAC trade

This paper provides estimates of the potential for the EAC to increase exports as countries in the rest of Africa reduce tariffs under AfCFTA, covering the EAC5 countries – Burundi, Kenya, Rwanda, Tanzania and Uganda. The DRC joined very recently and is therefore treated as an export market (increased exports to DRC are benefits of it becoming a member rather than AfCFTA). South Sudan also joined recently but is omitted due to lack of data. Analysis of export growth is restricted to products that are imported (pre-AfCFTA) from the EAC5 as this shows export capacity in the products to African markets (it is assumed that these products are unlikely to be excluded from liberalization by importing countries). A simple approach to estimation is used that only requires data on the initial value of imports (EAC5 exports), the tariffs applied by the importing country (to derive the price reduction) and a value for the (import) demand elasticity (alternative values are considered). This choice is guided by the desire for highly disaggregated analysis so that the markets (countries) and products with the largest increase in potential exports (in value terms) can be identified for each EAC country.

Three main conclusions emerge. First, there are opportunities to expand exports overall by 10-15%, largely concentrated in relatively close countries and agriculture and resource-based products: EAC5 countries export a diverse range of products to Africa and to about ten different markets (except that DRC accounts for almost all Rwandan exports to Africa), including distant countries in North and West Africa. Second, export growth potential is mostly in markets near the EAC; this is almost exclusively the case for Rwanda (DRC) and Tanzania, but distant markets are significant for the other EAC5 countries. Export growth to neighbouring countries includes a range of simple manufactures, such as metal products, apparel and soaps. Kenya exports machinery and electrical equipment (so do Rwanda and Burundi but these may be re-exports). Kenya and Tanzania export worn textiles, whereas Rwanda and Tanzania export fuels (may be re-exports). While agricultural products, especially tea and coffee, dominate export growth to distant markets, textiles and apparel are important for Kenya and Burundi. Furthermore, products that are currently relatively low share of exports to a partner can offer opportunities for high percentage increases.

Third, while HS2 products are a suitable disaggregation to present results, there can be significant differences between the products within a HS2 code (exports are often specific HS4 products). This is especially important for simple manufactures

exported to distant markets, such as optical equipment and lighting from Kenya to Nigeria, or glass and machine tools from Tanzania to Ghana, and furniture from Burundi to Morocco and Ghana. The potential to export these products to new African markets is not incorporated in the estimates, but the products are identified. As Kenya exports optical equipment and Uganda exports aluminium sheets to Nigeria, they may be able to diversify to Ghana and elsewhere in West Africa (similarly for Tanzanian exports of glass and machine tools to Ghana). There should also be potential to expand the major exports, such as Kenyan tea to North African markets other than Egypt, or Tanzanian and Ugandan coffee to countries other than Morocco.

Previous work indicates that products suitable for building value chains are most likely to be concentrated in textiles (with potential growth for Kenya in Ghana and Morocco, and Tanzania in Ghana) and apparel (Burundi in Egypt, Tanzania in neighbouring markets). There is evidence for this in Tanzania. For example, Boys and Andreoni (2024) study the importance of national, regional (RVC) and global (GVC) value chains for product, process and market upgrading in the Tanzanian textiles and garments sector (mostly using local cotton). Firms engaged in RVCs (exporting to Kenya and South Africa) benefit most because of the ability for vertical integration into textile manufacturing and diversification into higher-value activities, whereas GVCs are the least beneficial because they limit firms to low-value activities (such as apparel assembly), although they have higher revenue potential. Preferential market access improves participation in RVCs and vertical integration. Saha et al. (2024) highlight the importance of access to imported machinery and inputs (capturing engagement in GVCs) for technology upgrading to increase production capacity and ability of Tanzanian textiles and apparel firms to integrate with value chains and move into higher value-added products. Cumbersome customs procedures are a significant constraint to importing inputs and, therefore, AfCFTA would facilitate imports that can be sourced regionally in addition to supporting export growth.

The estimated gains from AfCFTA are modest for the EAC, but plausible and provide conservative expectations for policy makers. One reason for the modest effects is that only tariff reductions for existing (pre-AfCFTA) export products (or imports for the EAC) are considered. Other measures, such as reducing non-tariff barriers and implementing trade facilitation measures, will increase the potential gains and reduce trade costs. Agreeing a common set of Rules of Origin (RoO) is fundamental for AfCFTA implementation. As de Melo et al. (2021) note, if a product-specific rule (PSR) is not defined for any of the more than 5,300 HS6 tariff codes, it is impossible to determine if the product is eligible for preferential treatment. Without agreed RoO, AfCFTA tariff reductions cannot be applied. While agreement has been reached on the various regime-wide rules (RWRs), PSRs have not been agreed for almost a fifth of HS6-level tariff lines (mostly in foodstuffs, automobiles, textiles and apparel, sectors where tariff protection is high). Furthermore, those that have been agreed tend to be relatively restrictive and inflexible. Cumbersome or imprecise RoO impose high costs and in

extreme cases some products may not be eligible for reduced or zero tariffs. Clear and comprehensive RoO are essential to ensure all products traded between members are included in AfCFTA implementation to achieve the potential for expanding intra-African trade.

The EAC can anticipate moderate gains from AfCFTA and, by identifying the markets and products most likely to be affected, the study provides a guide to analysts and policy makers in EAC5 countries on sectors to study in more detail. For example, with access to Customs data, one could identify which firms are exporting products with growth potential, especially to distant markets. Interviewing such firms to understand their experience, constraints and strategies would inform policy interventions to promote intra-African exports. Few of the products with significant export potential are evidently a part of value chains; many are final products that probably source most inputs locally, such as tea, coffee, foodstuffs and basic processed metals. Some exports, especially textiles and apparel, will have potential for at least regional value chains.

Notes

1. Oliver Morrissey is Professor of Development Economics and Director of CREDIT in the School of Economics at the University of Nottingham (oliver.morrissey@nottingham.ac.uk). Evious Zgovu is an Associate CREDIT Research Fellow and independent researcher (ezzgovu@yahoo.com).

2. The authors acknowledge support from AERC under grant RC23514. This is a short version of Morrissey and Zgovu (2024), developed during three workshops for the AERC Value Chain Development, Trade and Economic Transformation in Africa Phase II project. The authors are grateful to the project team, especially Jaime de Melo, and workshop participants for comments on earlier drafts. We are also grateful to staff in the EAC Secretariat and COMESA Secretariat for providing information and answering queries at an early stage.

3. Morrissey and Zgovu (2024, Appendix A) estimate that under AfCFTA, imports of Kenya, Tanzania and Uganda would increase by around 10%. The increased imports only have a small effect displacing intra-EAC trade (products traded within the EAC tend to have high tariffs and low imports and are likely to be excluded from tariff reductions). Therefore, the welfare effect of the consumption gain from increased imports at lower prices is positive. Once trade diversion is included, the welfare effect is negative except for Uganda (in all cases negligible relative to GDP).

4. Member states also have tariff lines that deviate from CET rates, in addition to the sensitive products. Rauschendorfer and Twum (2021) show that the use of deviations has increased significantly since 2009, most frequently to increase tariff protection for domestic producers since 2016 for Kenya, Tanzania and Uganda, whereas Rwanda tends to reduce tariffs.

5. If all regions in Africa had submitted their AfCFTA Schedule of Tariffs with the list of sensitive and excluded products, it would be possible in principle to identify existing intra-African export products for which tariffs will not be reduced. These schedules were not available for all EAC5 export markets.

6. It is reasonable to assume that products excluded from liberalization are currently subject to relatively high tariffs (and are likely to be classified as sensitive); average tariffs on excluded products (Category B&C) are almost 30% in EAC (and 25% for ECOWAS) compared to just over 10% for Category A products in EAC and ECOWAS (de Melo and Soleder, 2024, Table 4, p13).

7. Tanzania's key RoA export markets in COMTRADE has South Africa almost 20 times greater than Zambia (and DRC in second is about three times greater). However, in most cases COMTRADE is broadly consistent with WITS: Egypt is a leading market for Kenya while Morocco ranks high for Uganda. It is also evident that the omitted countries (South Sudan, Sudan and Somalia) are major markets for Kenya and, except for Somalia, also for Uganda (they are less important for Tanzania).

References

African Union. 2022. *BIAT – Boosting intra-African trade* https://au.int/en/ti/biat/about Accessed 7 December 2022.

Balistreri, E.J., D.G. Tarr and H. Yonezuma. 2015. "Deep integration in Eastern and Southern Africa: What are the stakes?" *Journal of African Economies*, 24(5): 677–706.

Boys, J. and A. Andreoni. 2024. "Upgrading and multi-scalar industrial policy in the Tanzanian textiles and apparel sector value chain". Chapter 3 in O. Morrissey, J. Semboja and M. Were (Eds), *Sustaining Tanzania's economic development: A firm and household perspective*. Oxford: Oxford University Press, UNU-WIDER Studies in Development Economics.

de Melo, J., D. Kniahin, J. Gourdon and M. Mimouni. 2021. Harmonizing Rules of Origin for the African Continental Free Trade Area. Economic Research Forum Policy Portal, https://theforum.erf.org.eg/2021/06/22/harmonising-rules-origin-african-continental-free-trade-area/

de Melo, J. and J.M. Soleder. 2024. Approximating the effects of AfCFTA tariff reductions on CO2 emissions. Paper for the AERC collaborative research project Value Chain Development, Trade and Economic Transformation in Africa Phase II.

Economic Commission for Africa (ECA). 2018. An empirical assessment of the African Continental Free Trade Area modalities on goods. https://archive.uneca.org/sites/default/files/PublicationFiles/brief_assessment_of_afcfta_modalities_eng_nov18.pdf Accessed 7 December 2022.

Economic Commission for Africa (ECA). 2020. Creating a unified regional market: Towards the implementation of the African Continental Free Trade Area in East Africa. Kigali: United Nations Economic Commission for Africa and TradeMark East Africa.

Hertel, T. 1997. *Global trade analysis: Modelling and applications*. Cambridge, UK: Cambridge University Press.

Jones, C. and O. Morrissey. 2008. "Missed opportunities: The WTO trade policy review for the East African Community". *The World Economy Global Trade Policy 2008*, 31(9): 1409–1432.

Jones, C., O. Morrissey and D. Nelson. 2011. "Did the World Bank drive tariff reforms in Eastern Africa?" *World Development*, 39 (3): 324–335.

Mold, A. 2022. Economic significance of intra-African trade: Getting the narrative right. Africa Growth Initiative at Brookings: Brookings Global Working Paper #44, https://www.brookings.edu/articles/the-economic-significance-of-intra-african-trade-getting-the-narrative-right/

Morrissey, O. and E. Zgovu. 2011. "The impact of EPAs on ACP imports and welfare". Chapter 3 in O. Morrissey (Ed), *Assessing prospective trade policy: Methods applied to EU-ACP Economic Partnership Agreements*. London: Routledge.

Morrissey, O. and E. Zgovu. 2024. Implications of AfCFTA tariff reductions for EAC exports to Africa. CREDIT Research Paper 24/03 (www.nottingham.ac.uk/economics/credit).

Rauschendorfer, J. and A. Twum. 2021. "The unmaking of a Customs Union". *World Trade Review*, 21(1): 59-70, https://doi.org/10.1017/S1474745621000367

Saha, A., A. Bueno Rezende de Castro, M. Carreras and D. Guariso. 2024. "Trade, technology and local linkages in the Tanzanian textiles and garments sector. Chapter 4 in O. Morrissey, J. Semboja and M. Were (Eds), *Sustaining Tanzania's economic development: A firm and household perspective,* Oxford: Oxford University Press, UNU-WIDER Studies in Development Economics.

Turkson, F.E. 2015. "Integration and regional trade in sub-Saharan Africa". Chapter 11 in O. Morrissey, R.A. Lopez, and K. Sharma (Eds), *Handbook on trade and development.* Cheltenham: Edward Elgar.

Turkson, F.E., A. Oduro, P. Baffour and P. Quartey. 2023. "Regional integration and non-tariff barriers to intra-Sub-Saharan Africa trade". *The World Economy*, 46, 396–414 https://doi.org/10.1111/twec.13365.

World Bank. 2020. The African Continental Free Trade Area: Economic and distributional effects, Washington, DC: World Bank https://openknowledge.worldbank.org/server/api/core/bitstreams/ef1aa41f-60de-5bd2-a63e-75f2c3ff0f43/content.

WTO. 2007. Trade policy review for East African Community 2006, Geneva: Bernan Associates for World Trade Organization.

WTO. 2019. Trade policy review East African Community: Report by the Secretariat, Geneva: World Trade Organization, Trade Policy Review Body, WT/TPR/S/384.

Appendix: Additional tables

Table A1 shows the declining importance of intra-EAC trade between 2012 and 2017 for all members except Uganda, and significant differences across countries in shares and patterns. Intra-EAC trade is less than 10% of total trade for Kenya and Tanzania because EAC imports are a small share of total imports. Exports are significant for Kenya, but the shares are relatively low for Tanzania and Burundi.

Table A1: Intra-EAC trade shares (%), 2012 and 2017

Intra-EAC	Kenya	Tanzania	Uganda	Rwanda	Burundi
Exports					
2012	26.1	12.3	24.6	29.4	13.5
2017	19.3	10.9	28.5	18.5	7.7
Imports					
2012	2.2	5.8	10.7	24.3	19.9
2017	3.5	3.4	10.0	20.3	19.1
Total Trade					
2012	8.8	7.9	14.6	25.3	18.4
2017	7.6	6.1	16.3	19.7	17.3

Source: WTO (2019), Table A1.1 (p46)

Notes: Reports intra-EAC trade as percentage share of exports, imports and total trade for each EAC member. Source only goes to 2017. For all countries except Tanzania and Uganda, intra-EAC export shares were lower in 2017 than in 2011. Kenya was the only country that increased intra-EAC import shares by 2017 compared to 2011.

Table A2: Kenya increase exports HS2 products with main markets

HS2	Short title	Value	Share	Markets
09	Tea	8,085.4	16.78	**Egypt** (72%), **Nigeria** (16%), **Ghana** (4%)
15	Fats and oils	2,209.7	4.59	Zambia (56%)
24	Tobacco	1,622.5	3.37	**Nigeria** (32%), **Egypt** (24%)
34	Soap, etc	3,505.8	7.28	Malawi (42%), Ghana (4%)
39	Plastics	2,508.2	5.21	Ethiopia (42%), Zambia (35%)
48	Paper	1,975.5	4.10	**Egypt** (32%)
53	Veg textile fibres	1,202.6	2.50	**Nigeria** (55%), **Ghana** (34%), **Morocco** (11%)
63	Textiles; worn; etc	1,456.8	3.02	Zambia (45%), Ethiopia (25%)
67	Feathers etc	1,378.2	2.86	Ethiopia (49%), Zimbabwe (29%)
72	Iron and steel	1,365.5	2.83	DRC (81%), Ethiopia (17%)
73	Iron, steel articles	1,349.8	2.80	DRC (48%), Ethiopia (31%), Zambia (10%)
76	Aluminium	1,939.4	4.03	Ethiopia (50%), Zambia (14), DRC (10%)
84	Mechanical	1,947.9	4.04	Zambia (56%), Ethiopia (22%), DRC (8%)
85	Electrical	2,748.4	5.70	Zimbabwe (37%), Ethiopia (14%)

Source: Authors' estimates
Notes: Only reports products that account for at least 2.5% of the estimated increase in exports. Markets in **bold** are the **distant** markets that account for over 4% of the increase in exports and the main other markets. Ghana and Nigeria each account for about 3% of HS85 increase for Kenya.

Table A3: Tanzania increase exports HS2 products with main markets

HS2	Short title	Value	Share	Markets
24	Tobacco	2,830.7	4.34	Zimbabwe (48%), S. Africa (15%), DRC (14%)
25	Salt; stone; etc	6,391.0	9.80	DRC (94%)
27	Mineral fuels; etc	7,007.5	10.75	Zambia (97%)
33	Cosmetic or toilet	1,640.2	2.52	Zambia (50%), DRC (15%), Moz. (15%)
34	Soap; etc	4,030.7	6.18	Malawi (97%)
61	Apparel knitted	4,445.2	6.82	South Africa (99%)
63	Textiles; worn; etc	5,944.8	9.12	Zambia (54%), Zimbabwe (35%)
70	Glass and glassware	7,667.6	11.76	Zambia (28%), Zim. (25%), Ethiopia (12%)
72	Iron and steel	5,484.9	8.41	Zambia (96%)
90	Optical, medical etc	2,130.7	3.27	South Africa (96%)

Notes and Sources: As for Table A2

Table A4: Uganda increase exports HS2 products with main markets

HS2	Short title	Value	Share	Markets
09	Coffee, tea, spices	1,891.8	14.91	**Morocco** (99%)
24	Tobacco	1,617.1	12.75	**Egypt** (49%), **Nigeria** (30%)
25	Salt; stone; etc	3,274.4	25.81	DRC (100%)
72	Iron & steel	890.0	7.02	DRC (100%)
73	Iron, steel articles	707.2	5.57	DRC (99%)

Notes and Sources: As for Table A2

Table A5: Rwanda increase exports HS2 products with main markets

HS2	Short title	Value	Share	Markets
10	Cereals	3,371.5	7.99	DRC (100%)
11	Milling products	3,510.6	8.32	DRC (100%)
15	Fats and oils	3,057.6	7.25	DRC (100%)
25	Salt; stone; etc	1,036.7	2.46	DRC (100%)
27	Mineral fuels, etc	7,566.8	17.94	DRC (100%)
34	Soap, etc	2,266.4	5.37	DRC (100%)
63	Textiles; worn etc	2,370.6	5.62	DRC (~100%)
64	Footwear	1,196.8	2.84	DRC (100%)
72	Iron and steel	2,925.6	6.94	DRC (100%)
85	Electrical machinery	3,145.5	7.46	DRC (99%)
87	Vehicles	1,322.6	3.14	DRC (99%)
94	Furniture; etc	1,114.1	2.64	DRC (~100%)

Notes and Sources: As for Table A2. In some cases, these products are likely to be re-exports (HS27; 35% of HS85 comprises batteries HS6506 and the next most important products are telephones and monitors; some 75% of HS87 is motor cars) or second hand (about 90% of HS63 is worn clothing HS6309).

Table A6: Burundi increase exports HS2 products with main markets

HS2	Short title	Value	Share	Markets
09	Coffee, tea, spices	18.6	6.94	**Morocco** (100%)
11	Milling products	10.4	3.88	DRC (100%)
24	Tobacco	10.9	4.07	Zambia + Malawi (100%)
34	Soap, etc	6.0	2.24	DRC (100%)
62	Apparel not knitted	140.7	52.50	**Egypt** (99%)
85	Electrical machinery	44.3	16.53	Zambia (97%)
94	Furniture; etc	16.4	6.12	**Morocco** (57%), DRC (17%), **Ghana** (7%)

Notes and Sources: As for Table A2

Table A7: Full list of HS2 products with 'Hertel' import demand elasticities

HS2	Definition	Short title	*h = H*
01	Animals; live	Animals live	0.4
02	Meat and edible meat offal	Meat and offal	0.6
03	Fish and crustaceans, molluscs and other aquatic invertebrates	Fish; etc	1.15
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	Dairy, eggs; etc	1.05
05	Animal originated products; not elsewhere specified or included	Animal nes	1.1
06	Trees and other plants, live; bulbs, roots and the like; cut flowers and ornamental foliage	Trees, plants, flowers	1.125
07	Vegetables and certain roots and tubers; edible	Vegetables; etc	1.15
08	Fruit and nuts, edible; peel of citrus fruit or melons	Fruit and nuts	1.15
09	Coffee, tea, mate and spices	Coffee, tea, spices	1.15
10	Cereals	Cereals	1.15
11	Products of the milling industry; malt, starches, inulin, wheat gluten	Milling products	1.15
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit, industrial or medicinal plants; straw and fodder	Oil seeds; etc	0.6
13	Lac; gums, resins and other vegetable saps and extracts	Gums, resins; etc	0.75
14	Vegetable plaiting materials; vegetable products not elsewhere specified	Veg products nes	0.4
15	Animal or vegetable fats and oils and their cleavage products; prepared animal fats; animal or vegetable waxes	Fats and oils	0.75
16	Meat, fish or crustaceans, molluscs or other aquatic invertebrates; preparations thereof	Meat, fish; etc prep	1.1
17	Sugars and sugar confectionery	Sugars; etc	1.1
18	Cocoa and cocoa preparations	Cocoa and preparations	0.7
19	Preparations of cereals, flour, starch or milk; pastrycooks' products	Prep cereals; etc	0.4
20	Preparations of vegetables, fruit, nuts or other parts of plants	Prep vegetables; etc	1.6
21	Miscellaneous edible preparations	Misc edible	1.3
22	Beverages, spirits and vinegar	Beverages	1.25
23	Food industries, residues and wastes thereof; prepared animal fodder	Food residues	1.3
24	Tobacco and manufactured tobacco substitutes	Tobacco	0.8
25	Salt; sulphur; earths, stone; plastering materials, lime and cement	Salt; stone; etc	0.4
26	Ores, slag and ash	Ores	0.4
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	Mineral fuels; etc	0.75

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Table A7 Continued

HS2	Definition	Short title	h = H
28	Inorganic chemicals; organic and inorganic compounds of precious metals; of rare earth metals, of radio-active elements and of isotopes	Inorganic chemicals	0.75
29	Organic chemicals	Organic chemicals	1.65
30	Pharmaceutical products	Pharmaceuticals	1.65
31	Fertilizers	Fertilizers	1.65
32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter; paints, varnishes; putty, other mastics; inks	Tanning, dyeing; etc	1.65
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	Cosmetic or toilet	1.65
34	Soap, organic surface-active agents; washing, lubricating, polishing or scouring preparations; artificial or prepared waxes, candles and similar articles, modelling pastes, dental waxes and dental preparations with a basis of plaster	Soap; etc	1.65
35	Albuminoidal substances; modified starches; glues; enzymes	Modified starches; etc	0.75
36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations	Explosives; etc	0.75
37	Photographic or cinematographic goods	Photographic; etc	0.75
38	Chemical products n.e.c.	Chemical products	1.1
39	Plastics and articles thereof	Plastics	1.1
40	Rubber and articles thereof	Rubber	1.125
41	Raw hides and skins (other than furskins) and leather	Hides and leather	1.125
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	Articles of leather; etc	1.125
43	Furskins and artificial fur; manufactures thereof	Furskins and furs	1.125
44	Wood and articles of wood; wood charcoal	Wood	1.125
45	Cork and articles of cork	Cork	0.75
46	Manufactures of straw, esparto or other plaiting materials; basketware and wickerwork	Manufactures of straw; etc	0.75
47	Pulp of wood or other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard	Pulp; etc	1.65
48	Paper and paperboard; articles of paper pulp, of paper or paperboard	Paper	1.65
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans	Printing products	1.65

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Table A7 Continued

HS2	Definition	Short title	h = H
50	Silk	Silk	1.4
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	Wool; etc	1.65
52	Cotton	Cotton	1.65
53	Vegetable textile fibres; paper yarn and woven fabrics of paper yarn	Veg textile fibres	1.65
54	Man-made filaments; strip and the like of man-made textile materials	Man-made textiles	1.6
55	Man-made staple fibres	Man-made fibres	1.6
56	Wadding, felt and nonwovens, special yarns; twine, cordage, ropes and cables and articles thereof	Nonwovens; etc	1.65
57	Carpets and other textile floor coverings	Carpets; etc	1.65
58	Fabrics; special woven fabrics, tufted textile fabrics, lace, tapestries, trimmings, embroidery	Fabrics woven; etc	1.625
59	Textile fabrics; impregnated, coated, covered or laminated; textile articles of a kind suitable for industrial use	Textile fabrics; etc	1.6
60	Fabrics; knitted or crocheted	Fabrics knitted	1.3
61	Apparel and clothing accessories; knitted or crocheted	Apparel knitted	1.4
62	Apparel and clothing accessories; not knitted or crocheted	Apparel not knitted	1.4
63	Textiles, made up articles; sets; worn clothing and worn textile articles; rags	Textiles; worn; etc	2.25
64	Footwear; gaiters and the like; parts of such articles	Footwear	2
65	Headgear and parts thereof	Headgear	2
66	Umbrellas, sun umbrellas, walking-sticks, seat sticks, whips, riding crops; and parts thereof	Umbrellas; etc	2.375
67	Feathers and down, prepared; and articles made of feather or of down; artificial flowers; articles of human hair	Feathers; etc	2.375
68	Stone, plaster, cement, asbestos, mica or similar materials; articles thereof	Stone, cement; etc	2
69	Ceramic products	Ceramic products	3.25
70	Glass and glassware	Glass and glassware	2.25
71	Natural, cultured pearls; precious, semi-precious stones; precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	Natural, precious; etc	3.25
72	Iron and steel	Iron and steel	3.25
73	Iron or steel articles	Iron, steel articles	3.25
74	Copper and articles thereof	Copper and articles	2.25

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Table A7 Continued

HS2	Definition	Short title	h = H
75	Nickel and articles thereof	Nickel and articles	2.75
76	Aluminium and articles thereof	Aluminium and articles	2.25
78	Lead and articles thereof	Lead and articles	2.25
79	Zinc and articles thereof	Zinc and articles	1.4
80	Tin; articles thereof	Tin and articles	2
81	Metals; n.e.c., cermets and articles thereof	Metals; nes	2.5
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof, of base metal	Tools; etc	2.5
83	Metal; miscellaneous products of base metal	Products base metal	2
84	Machinery and mechanical appliances, nuclear reactors, boilers; parts thereof	Mechanical	2
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers, parts and accessories of such articles	Electrical machinery	2.5
86	Railway, tramway locomotives, rolling stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signalling equipment of all kinds	Railway etc	1.25
87	Vehicles; other than railway or tramway rolling stock, and parts and accessories thereof	Vehicles	2.5
88	Aircraft, spacecraft and parts thereof	Aircraft	2.5
89	Ships, boats and floating structures	Ships, boats	2.5
90	Optical, photographic, cinematographic, measuring, checking, medical or surgical instruments and apparatus; parts and accessories	Optical, medical etc	2.5
91	Clocks and watches and parts thereof	Clocks & watches	1.25
92	Musical instruments; parts and accessories of such articles	Musical	1.25
93	Arms and ammunition; parts and accessories thereof	Arms	1.25
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, n.e.c.; illuminated signs, illuminated nameplates and the like; prefabricated buildings	Furniture; etc	2.5
95	Toys, games and sports requisites; parts and accessories thereof	Toys, sports etc	0.4
96	Miscellaneous manufactured articles	Misc manufactured	0.6
97	Works of art; collectors' pieces and antiques	Art & antiques	1.15

Notes: Elasticities taken from Hertel (1997) where available, otherwise estimated

Mission

To strengthen local capacity for conducting independent,
rigorous inquiry into the problems facing the management of economies in sub-Saharan Africa.

The mission rests on two basic premises: that development is more likely to occur where there is sustained sound management of the economy, and that such management is more likely to happen where there is an active, well-informed group of locally based professional economists to conduct policy-relevant research.

Bringing Rigour and Evidence to Economic Policy Making in Africa

- Improve quality.
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