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**Globalisation and East Africa:
To What Extent is East Africa Globalised?**

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1.0 INTRODUCTION

It is argued in the literature that Africa is marginalised in global trade. An indicator used to back this argument is based on data on African trade as a percentage of world trade. The indicator is calculated for several years back and it is compared to more recent years. Using this index, it has been found that the proportion of Africa's exports and imports in world trade is marginal, and the proportion has been declining over time. For example, Ng and Yeats (2000, p.10) note,

In the early 1950s, sub-Saharan Africa accounted for about 3.1 percent of world exports (2.9 for imports), but by the early 1990s this share fell to 1.0 percent (1.1 percent for imports). To put these numbers in proper perspective, if sub-Saharan Africa maintained its 1950s global trade share the region's total exports would now be \$65 billion higher than current levels.

The purpose of this paper is to re-examine the extent of marginalisation by using a new index, proposed in section 2 of the paper. Other indices are also used, namely, the relative importance of East Africa in global trade (section 2), FDI inflows (section 3), and foreign aid (section 4), to highlight other dimensions through which East Africa is globalised. I further examine, in section 5, the evolution of the structure of East African exports and compare it to other regions. This is because the extent that a country gains from exports depends on, among other things, the structure of its exports. Finally, in section 6, I run a regression to try to explain the determinants of trade participation.

2.0 RELATIVE IMPORTANCE IN GLOBAL TRADE

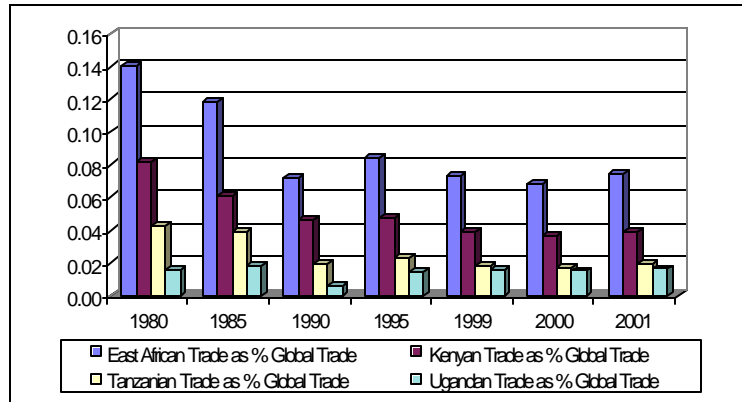
The extent to which countries trade with one another is one of the indicators of the extent to which they are globalised. A popular measure that is used to gauge the extent to which African countries are trading with the rest of the world (an indicator of globalisation) is the percentage of exports and imports in world exports and imports. A percentage is calculated, and a declining trend is noted, and a conclusion is made that Africa is marginalized in global trade, or its links with the global economy are declining.

Some researchers have discussed some domestic and international factors responsible for Africa's dismal performance in the global market, especially in its inability to increase its export share. Some of these factors are; high international transports costs, restrictive trade policies, and lack of access to some international markets (Amjadi and Yeats, 1995). The implications of the declining share of African trade in global trade on income accruing to African countries are very obvious; poor trade performance has been a key determinant of the low growth rate and limits resources available to devote to key social services and to poverty alleviation.

In this section, an indicator that is normally used to see the extent to which East Africa is engaging in global trade is used, after which a new indicator is suggested. East Africa's participation in global trade shows that in the 1980s, East Africa's trade as a percentage of global trade declined. But from the beginning of the 1990s to the mid 1990s, the percentage increased. This period marked the time when trade liberalisation measures were being pursued consistently. However, after the mid 1990s, the percentage again declined (Figure A).

The interesting thing about the fall in the percentage of East Africa's trade with the world is that in the late 1990s when extensive trade reforms were undertaken in all the three countries, East Africa's participation declined, compared to the 1980s. This suggests that in the late 1990s, restrictive trade policies in East Africa were not a major factor constraining East Africa's participation in global trade. The answer must lie in other factors.

Figure A: East Africa's Role in Global Trade, 1980-2000



Source: WTO, International Trade Statistics 2001.

Although the percentage of East African trade in global trade is a good indicator of the extent to which East Africa participates in global trade, it does not account for East Africa's relative position with regards to its share in global population. An appropriate indicator would be one that takes account of the fact that some countries are more populous, or might have high value natural resources than others, and hence they are more likely to produce more for the international market. This implies that one needs to discount for such factors to arrive at an appropriate indicator for evaluating whether or not a particular country or region is marginalized in global trade. As a beginning, I propose an index, referred to as the trade participation index (TPI). The TPI is calculated as follows;

$$\langle 1 \rangle \quad TPI_i = \frac{\frac{TT_i}{GT}}{\frac{P_i}{GP}}$$

where the numerator is the trade share for each country, calculated as total trade of country i (TT_i) divided by total global trade (GT). The denominator is the population share, which is calculated as the total population for country i (P_i) divided by total global population (GP). If a country's trade share is less than its population share, then its TPI would be less than 1. However, if its trade share is greater than its population share, then its TPI would be greater than 1. Thus, a country with a TPI that is less than 1 is marginalized in global trade. I

calculate the TPI for 1999, and the results for a selected number of countries are given in Table 1.

Table 1: Trade Participation Indices for Selected Countries, 1999

LATIN AMERICA		AFRICA		ASIA		WESTERN EUROPE	
Argentina	0.7	Algeria	0.4	Bangladesh	0.1	Austria	8.5
Bahamas	5.3	Botswana	1.6	China	0.1	Denmark	9.1
Bolivia	0.2	Cameroon	0.1	Hong Kong	27.5	Finland	7.4
Brazil	0.3	Cote d'Ivoire	0.2	India	0.0	France	5.2
Chile	1.1	Egypt	0.2	Indonesia	0.2	Germany	6.4
Colombia	0.3	Kenya	0.1	Japan	3.0	Greece	2.0
Costa Rica	1.9	Malawi	0.1	Korea	2.9	Ireland	16.2
Cuba	0.3	Mauritius	1.6	Malaysia	3.4	Italy	4.0
Ecuador	0.3	Morocco	0.3	Pakistan	0.1	Netherlands	12.8
El Salvador	0.4	Namibia	1.0	Philippines	0.5	Norway	9.2
Guatemala	0.3	Nigeria	0.1	Singapore	29.7	Portugal	3.3
Honduras	0.3	Senegal	0.1	Sri Lanka	0.3	Spain	3.4
Jamaica	0.7	South Africa	0.7	Thailand	0.9	Sweden	9.0
Mexico	1.5	Tanzania	0.0	Viet Nam	0.2	Switzerland	11.7
Nicaragua	0.3	Uganda	0.0			United Kingdom	5.1
Paraguay	0.3	Zambia	0.1				
Peru	0.3	Zimbabwe	0.2				
Trinidad & Tobago	1.9						
Uruguay	0.9						
Venezuela	0.8						

Source: Own calculation from TIPS Data.

From Table 1, it can be seen that in the sample of countries in Latin America, only 5 out of 20 countries have a TPI that is greater than 1. The country with the highest TPI is The Bahamas. In Africa, only 3 out of 17 countries have a TPI that is greater than 1, with Botswana having the highest TPI. In Asia, 5 out of 14 countries have a TPI that is greater than 1, with Singapore leading the group. Lastly, in Western Europe, all the countries in the sample have a TPI that is greater than 1. Ireland leads the group in Western Europe, while Greece has the lowest TPI.

What factors explain the TPI ranking? To explore this question, a simple econometric model is estimated to see what explains the variation in TPI, and whether it can be related to the export structure of the countries in the sample. The estimation is reported in section 5.

3.0 FDI INFLOWS

Another aspect characterising globalisation is the increase in the flow of financial resources, and the liberalisation of financial markets. There are two extreme views regarding the effect of FDI flows to developing countries.

The first view, which is hostile to FDI, is based on the radical school. It sees FDI flows as a continuation of colonialism, with the big multinational corporations being seen as merely extracting super profits from developing countries, and plundering the wealth of these countries. Proponents of this view argue that when multinational corporations (MNCs) establish industries in developing countries, they often violate environmental regulations, and exploit the local labour resources by underpaying and overworking them. MNCs are thus seen as instruments of domination, not development (Hill, 2000). The policy implication from this school of thought is that the MNCs are not welcome, and hence governments should restrict their involvement in their national economies. This position was one motivation for the policies of those African countries, which, after independence, implemented nationalisation programmes.

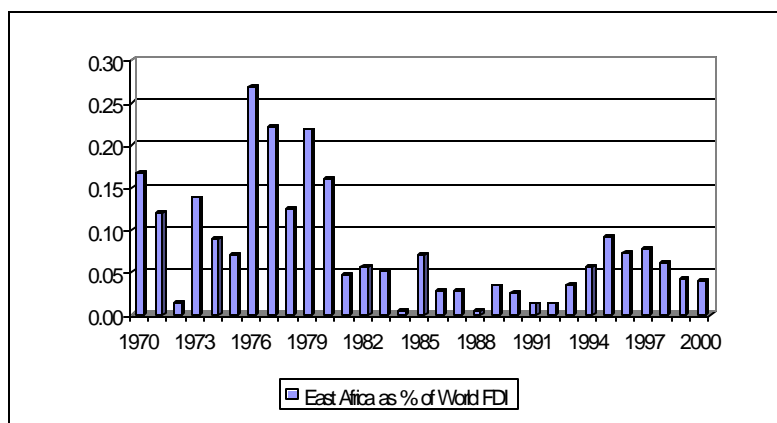
The other view is the free market view, which sees FDI flows to developing countries as instruments for allocating production to the most efficient locations (Hill, 2000). FDI inflows are seen as benefiting the recipient countries in several ways, including creating employment for local people, and enhancing technological change through technology transfer. Thus the policy implication from the second school of thought is that governments in developing countries should create an enabling environment to encourage more FDI flows. The international financial institutions (IFIs), who among other things, call for the privatisation of previously state-owned firms, share this view.

A middle position would be to derive lessons from both schools of thought. Possibly the optimal strategy for developing countries would be a pragmatic approach. Completely auctioning off all companies, including utilities to foreign private companies is going too far with privatisation. At the same time, not instituting government bodies to monitor the operations of the private companies so that issues of environmental destruction can be handled is reckless. So, while some privatisation is necessary, responsible governments ought

to have regulatory bodies to monitor the operations of the foreign private companies. In other words, governments should “pursue policies designed to maximise the national benefits and minimise the national costs of FDI” (Hill, 2000).

Figure B shows the inflow of FDI to East Africa. One can clearly see that the average inflow of FDI between 1970 and 1980 was much higher than throughout the 1980s. Although it picked up in the 1990s, the average level was still lower than that obtaining in the 1970s. Throughout the period shown, the percentage of FDI to East Africa is less than 1. Thus, if one were to gauge the extent of globalisation through the amount of FDI inflows, we can say that East Africa was more globalised in the 1970s than in the 1980s and 1990s.

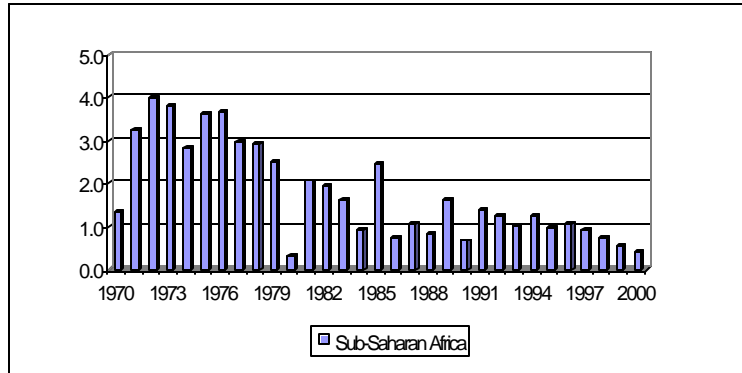
Figure B: FDI Inflows to East Africa as % of World FDI



Source: Own calculation from UNCTAD data.

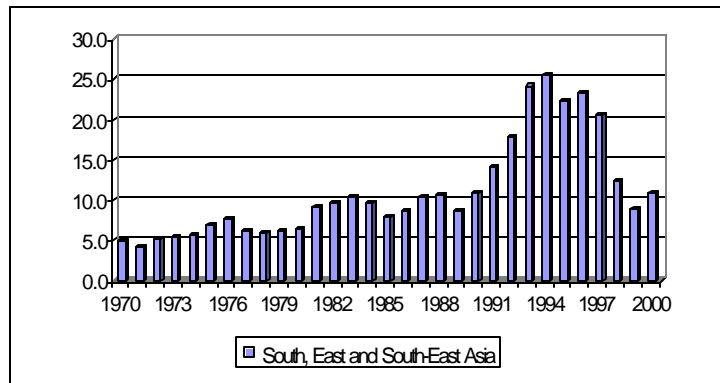
How do FDI flows to East African countries compare to sub-Saharan Africa, and to other regions in the world? In Figure C, FDI inflows to the rest of sub-Saharan Africa as a percentage of World FDI have been declining steadily, while to Asia and Latin America and the Caribbean (LAC) (Figure D and Figure E), FDI inflows increased throughout most of the 1990s, although there was a slight fall from the late 1990s to 2000. In terms of magnitude, sub-Saharan’s highest percentage of FDI is 4% in 1972, while Asia’s highest is 25% in 1994, while for LAC, it is 16% in 1974.

Figure C: FDI Inflows in Sub-Saharan Africa as % of World FDI



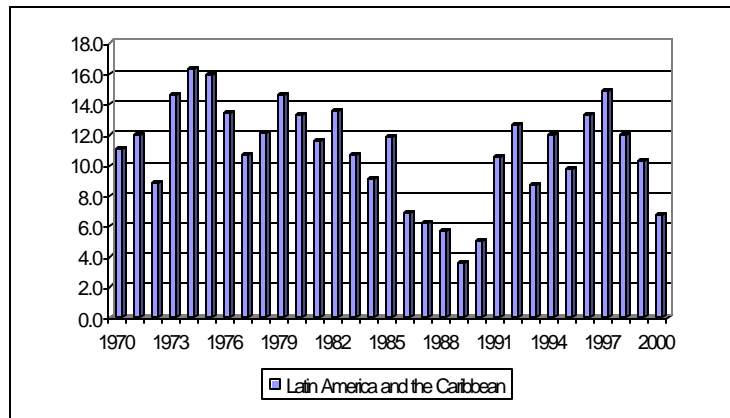
Source: Own calculation from UNCTAD data.

Figure D: FDI Inflows in South, East and South-East Asia as % of World FDI



Source: Own calculation from UNCTAD data.

Figure E: FDI Inflows in Latin America and the Caribbean as % World FDI



Source: Own calculation from UNCTAD data.

A number of reasons are advanced as to why most of Africa has failed to attract substantial amounts of FDI inflows. These reasons include unattractive business climate, bureaucratic obstacles, corruption, military conflicts, and unstable political regimes (UNCTAD, 1999; Morisset, 2000). This paper does not set out to discuss these issues in detail.

4.0 THE EXTENT OF AID DEPENDENCY

Van Arkadie (2002) has argued that

...the only sense in which there was increased “globalisation” since the 1960’s has been through the build up in dependence on foreign aid, particularly during the 1970s (p.9).

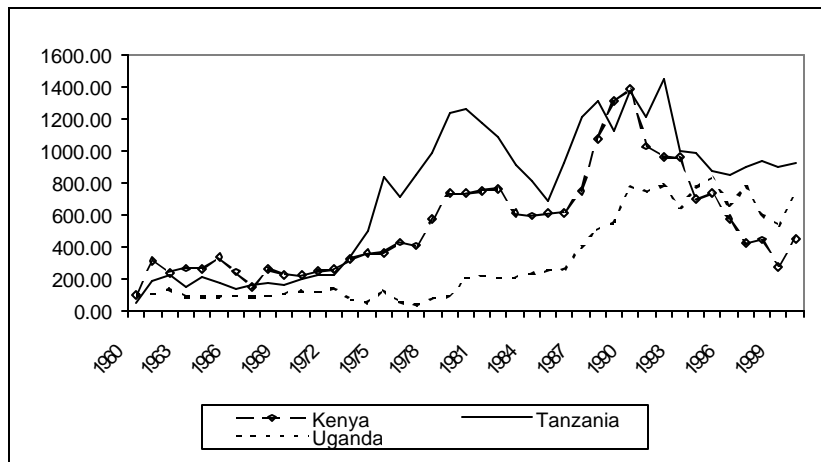
Arguing from a critical point of view, he bemoans the extent to which aid has become ineffective in promoting growth, but instead has focussed on satisfying pro-aid lobbies in donor countries, which press for democracy, gender and environmental issues. Van Arkadie also argues that aid has eroded the extent to which governments are capable to take initiatives, resulting in “development programmes” that originate, are financed, and are designed by donor agencies. Aid has also affected macroeconomic policies, through creating an overvalued exchange rate. The last and serious effect of aid is its effect on incentives for the educated, as it affects the functioning of institutions, and the ability to be innovative and aspire for excellence. Van Arkadie illustrates the extent to which aid dependency has become pervasive in the following manner,

Be it acquiring a grant, launching an “NGO” to attract donor support, acquiring jobs in donor funded project units, or simply attending courses, workshops and seminars, aid has become an important source of income for the educated elite, particularly in light of the decline in real incomes from government and parastatal employment (p.24).

Figure F shows real ODA and official aid for the three East African countries. Notable from the figure is the increase in aid flows throughout the 1970s up to the early 1980s. Although there is a sharp decrease in aid flows for Tanzania from the early 1980s to the mid 1980s, the general trend for all the three countries is an increase in aid flows from the 1960s to the early 1990s. From the early 1990s, aid flows started decreasing, with Kenya having the sharpest fall. The decrease in the flow of aid to Kenya is linked to the political situation there, which over time has made the donors unhappy, affecting the flow of aid to that country. This contrasts sharply with Tanzania’s remarkable and favourable position with the donors.

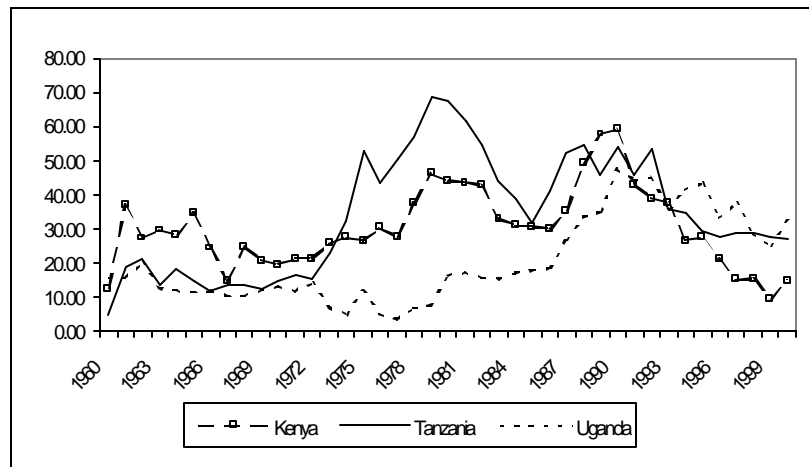
In terms of real aid per capita (see Figure G), Kenya's declining aid inflows are reflected there too. In 1999, Kenya's real aid per capita had reached its all time low. It would be interesting to investigate the developmental impact of such dwindling flows of aid, compared to Tanzania's favourable position with donors. In per capita terms, Tanzania and Uganda have experienced a gradual decrease, although the trend has not been as sharp as in the case of Kenya.

Figure F: Net ODA and Official Aid (US\$ million, 1995 Prices)



Source: World Bank, World Development Indicators 2001 CD-ROM.

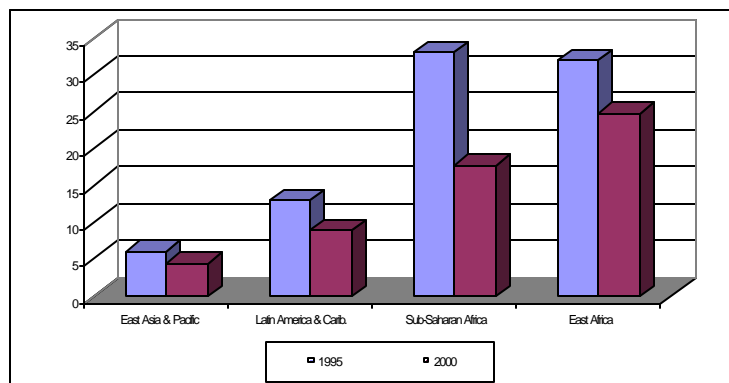
Figure G: Real Aid Per Capita (US\$)



Source: World Bank, World Development Indicators 2001 CD-ROM.

Compared to other regions, Figure H shows that East Africa gets more aid per capita than Asia and Latin America and Caribbean. The amount of aid per capita in East Africa and in sub-Saharan Africa in general cannot help but make one wonder why such high levels of aid per capita have not helped to alleviate the high levels of poverty prevalent in these countries. A wide literature exists on why aid has been ineffective and the debate still rages on (Boone, 1996; Burnside and Dollar, 1997; Dollar, 2001; Roland-Holst and Tarp, 2002). Some of the reasons aid has been ineffective that have been identified are; corruption, lack of transparency of most African governments, poor polices, and sheer mismanagement of resources. The debate has more recently focused on the concept of good governance, in a bid to make governments be more accountable and transparent.

Figure H: Real Aid per Capita (US\$), 1995 and 2000



Source: World Bank, World Development Indicators 2001 CD-ROM.

5.0 EVOLUTION OF STRUCTURE OF EXPORTS¹

The last aspect of globalisation is not really an indicator, but rather a means to check the extent to which countries have benefited from increasing their exports and transforming their export structures to take advantage of demand conditions in the international markets. The structure of exports influences the extent to which a country benefits from trade. For example, while the price of primary products tends to stagnate or go down, the market for manufactured goods tends to expand. The structure of exports is one determinant of the nature of a country's globalisation, and whether a country benefits from the process of globalisation. East African countries could benefit from globalisation through boosting their exports, which could be furthered by changing the composition of the products they export, from primary to high value manufactured goods. Thus, for East Africa, it is possible to check the extent to which the countries have benefited from globalisation by charting the evolution of their export structure.

In order to see the evolution in the export structure in East Africa, I use the main products exported by the three East African countries for the year 2000. Trade data provided by TIPS² at the six-digit level is used. Such a disaggregated level helps to see the specific products and the level of processing, which would not normally be seen by a broad level such as one-digit. In order to define what a "main" product is, it was decided that products whose export value exceeded US\$1,000,000 would be considered as main products, and also whose share in world exports was at least 1 percent or greater. Table 2 summarises the findings from the main products exported in 2000.

Table 2: Agricultural and Processed Products in East Africa's Exports, 2000

Product Group	Agricultural Products in Total Products			Processed Agricultural Products		
	(%)			(%)		
	Kenya	Tanzania	Uganda	Kenya	Tanzania	Uganda
Agricultural	50	58	72	41	29	23

Source: Own calculation from TIPS data, Official website.

¹ This section draws on Mkenda (2002).

² TIPS, (Trade and Industrial Policy Strategies), is an independent non-profit research institution based in South Africa. It obtained its data from the United Nations COMTRADE data set.

Starting with Kenya, Table 2 shows that 50 percent of the products exported are agricultural. Of the agricultural products 41 percent of them are processed. The other products that are exported by Kenya are fish and mineral substances. Tanzania's export structure is not very different from that of Kenya. Of all the main products, 58 percent of them are agricultural, and of the agricultural products, a mere 29 percent of them are processed. Fish and minerals are the other products exported by Tanzania. Uganda's percentage of agricultural products in its exports is quite high. Of the main products exported, 72 percent are agricultural, and of the agricultural products, only 23 percent of them are processed. Just like Kenya and Tanzania, Uganda's other products include minerals and fish.

In terms of specific products, coffee is by far the leading export product in the three East African countries. It has the highest value in Uganda's exports, and the second highest value in both Kenyan and Tanzanian exports. The export structure presented is not very different from the one found by Ng and Yeats (2002) for 1999 data. The difference is that their analysis was based on SITC codes at the four-digit level. The Ng and Yeats (2002) findings are reproduced in Table 3.

Table 3 shows that in 1999, all the three East African countries' main exports included coffee, fish and cut flowers, and most of their export products were agricultural-based. Besides the three products that they all shared, there are others that were shared by two countries. For example, Tanzania and Uganda both exported raw cotton, Kenya and Uganda both exported other vegetables, and Tanzania and Kenya both exported tea. In general, the three East African countries export similar products. This may reflect a similarity in natural endowments.

Table 3: Major Exports of East African Countries, 1999

KENYA		TANZANIA		UGANDA	
	EXPORT SHARE (%)		EXPORT SHARE (%)		EXPORT SHARE (%)
Tea	28.8	Edible Nuts	21.6	Coffee Beans	71.1
Coffee Beans	13.8	Coffee Beans	17.1	Fish Fillets Frozen	4.7
Cut Flowers	10.6	Tobacco Stripped	9.4	Raw Cotton	3.9
Other Vegetables	8.4	Fish Fillet Frozen	6.6	Tobacco Stripped	3.5
Prepared Fruits, nes	3.8	Raw Cotton	4.4	Fish Fillet Fresh	3.2
Fish Fillets Frozen	3.1	Precious Stones	4.4	Cut Flowers	2.3
Prepared Vegetables, nes	1.8	Tea	2.6	Tobacco Not Stripped	1.4

KENYA		TANZANIA		UGANDA	
	EXPORT SHARE (%)		EXPORT SHARE (%)		EXPORT SHARE (%)
Metallic Salts	1.6	Cut Flowers	2.3	Non-monetary Gold	1
Fresh Fruit, nes	1.4	Sesame Seeds	2.3	Bovine Hides	0.7
Other Outer Garments	1.4	Crustaceans	2.3	Other Vegetables	0.7

Note: nes – not elsewhere specified.

Source: Ng and Yeats (2002).

For comparison with other regions, some selected Asian and Latin American countries are examined. Table 4 and Table 5 give the five leading products exported by some selected Asian and Latin American countries respectively. Table 4 shows that in four out of the five Asian countries in the sample, their leading products are manufactured products consisting of machines, and parts and components. The only exception is Indonesia, whose leading products are natural gas, oil and some minerals. Thailand also combines some machines, parts and components with sea products (shrimps and prawns), while Korea also exports gas oils.

In Latin America (Table 5), the countries in the sample are mixed. On one hand, Argentina and Venezuela both have oil among the five leading products that they export, but Argentina also exports some agricultural products, while Venezuela also exports some minerals. Chile's leading export product is copper, and it also exports some natural resource products (wood, grapes and wines). Costa Rica's leading products are parts and components, and some agricultural products (bananas, coffee, pineapples). Brazil's leading export products are aircrafts, some agricultural products (soya beans, coffee) and iron ores. In general, although some Latin American countries also export some agricultural products and natural resource products, they also process them. They also export some manufactured goods, and parts and components. In a study by Wood and Mayer (2001), which had far more countries in the sample than this study, they found that Latin American countries had on average, more processed primary products (about 20 percent) and manufactured products (about 30 percent) in their exports compared to sub-Saharan Africa, which had about 10 percent of both processed primary products and manufactured goods in their exports. This is also borne out in our sample, although it has fewer countries.

Table 4: Five Leading Products Exported by Selected Asian Countries, 2000

PRODUCT AND COUNTRY	Value in US\$ thousand	Share in world exports, %	Ranking in world exports
Singapore			
Storage units, whether or not presented with the rest of a system	12,641,651	24	1
Monolithic integrated circuits, nes	12,278,971	24	1
Parts & accessories of automatic data processing machines & units thereof	10,701,085	8	5
Monolithic integrated circuits, digital	9,115,756	6	6
Hybrid integrated circuits	5,316,269	36	1
Malaysia			
Monolithic integrated circuits, digital	10,896,769	7	5
Parts & accessories of automatic data processing machines & units thereof	10,870,454	8	4
Monolithic integrated circuits, nes	7,459,414	15	2
Storage units, whether or not presented with the rest of a system	5,968,635	12	2
Input or output units, whether or not presented with the rest of a system etc	3,223,578	6	8
Korea			
Monolithic integrated circuits, digital	19,571,056	13	3
Parts & accessories of automatic data processing machines & units thereof	9,950,885	7	6
Automobiles w reciprocating piston engine displacing > 1500 cc to 3000 cc	7,155,201	5	6
Transmission apparatus, for radio telephone incorporating reception apparatus	5,667,147	9	4
Gas oils - bunker oil, No.1 furnace, motor dies el	4,914,993	22	1
Indonesia			
Natural gas, liquefied	6,235,554	32	1
Petroleum oils and oils obtained from bituminous minerals, crude	6,090,055	2	18
Copper ores and concentrates	1,620,980	25	2
Plywood, at least 1 outer ply of tropical woods (ply's <6 mm)	1,501,021	57	1
Bituminous coal, whether or not pulverised but not agglomerated	1,218,543	8	5
Thailand			
Storage units, whether or not presented with the rest of a system	3,365,778	6	6
Parts & accessories of automatic data processing machines & units thereof	3,116,251	2	13
Input or output units, whether or not	2,573,886	5	10

PRODUCT AND COUNTRY	Value in US\$ thousand	Share in world exports, %	Ranking in world exports
presented with the rest of a system etc			
Monolithic integrated circuits, digital	2,364,871	2	15
Shrimps and prawns, frozen, in shell or not, including boiled in shell	1,547,350	18	1

Note: nes – not elsewhere specified.

Source: TIPS Website.

The Wood and Mayer (2001) study also undertook some cross-country econometric analysis to explain the variation among countries in their share of manufactured exports. They found that the variation could be attributed to the natural resource endowments and level of human resource development of the countries. That is, Africa's export structure, consisting mainly of a low ratio of both manufactured to primary products, and processed to unprocessed primary goods is explained by a combination of low skills per worker that is prevalent in Africa, and abundant natural resources.

Table 5: Five Leading Products Exported by Selected Latin American Countries, 2000

PRODUCT AND COUNTRY	Value in US\$ thousand	Share in world exports, %	Ranking in world exports
Argentina			
Petroleum oils and oils obtained from bituminous minerals, crude	2,844,015	1	25
Soya-bean oil-cake & other solid residues, whether or not ground or pellet	2,170,353	33	1
Wheat nes and meslin	1,216,712	10	5
Maize (corn) nes	975,569	12	4
Soya-bean oil crude, whether or not degummed	906,547	52	1
Brazil			
Aircraft nes of an unladen weight > 2,000 kg but not exceeding 15,000 kg	2,786,061	20	3
Soya beans	2,187,879	24	2
Iron ores & concentrates, other than roasted iron pyrites, non-agglomerated	1,852,908	30	2
Soya-bean oil-cake & other solid residues, whether or not ground or pellet	1,652,620	25	2
Coffee, not roasted, not decaffeinated	1,559,536	19	1
Chile			
Copper cathodes and sections of cathodes unwrought	4,406,491	40	1

PRODUCT AND COUNTRY	Value in US\$ thousand	Share in world exports, %	Ranking in world exports
Copper ores and concentrates	2,393,662	37	1
Chemical wood pulp, soda or sulphate, coniferous, semi-bleached or bleached, nes	743,430	8	3
Grapes, fresh	523,545	22	1
Grape wines nes, including fort & grape must, unfermented	498,984	5	5
Costa Rica			
Parts & accessories of automatic data processing machines & units thereof	1,627,083	1	18
Bananas including plantains, fresh or dried	553,202	13	3
Coffee, not roasted, not decaffeinated	273,974	3	9
Needles, catheters, cannulae and the like, nes	170,942	3	8
Pineapples, fresh or dried	121,550	30	1
Venezuela			
Petroleum oils and oils obtained from bituminous minerals, crude	18,238,016	5	6
Petroleum oils and products nes	8,226,871	51	1
Aluminium unwrought, not alloyed	451,043	4	6
Ferrous products obtained by direct reduction of iron ore, nes	267,547	54	1
Aluminium unwrought, alloyed	173,213	2	17

Note: nes – not elsewhere specified.

Source: TIPS Website.

6.0 THE DETERMINANTS OF TRADE PARTICIPATION

As indicated earlier, it would be interesting to relate the proposed index of trade participation to the structure of trade by running a simple model. The model tries to identify the main determinants of trade participation, and seeks to explain the variation among countries in the TPI as a result of GDP per capita, net inflows of foreign direct investment as a percentage of GDP, the percentage of high technology exports in total exports, and agricultural value added as a percentage of GDP. The model was estimated using a cross-country regression, as follows;

$$\langle 2 \rangle \quad TPI_i = b_0 + b_1 YPC_i + b_2 FDI_i + b_3 HTE_i + b_4 AGVA_i + m_i$$

where TPI_i is as defined in equation 1, YPC is GDP per capita, FDI is foreign direct investment, HTE is high technology exports and $AGVA$ is agricultural value added, and m is the error term. The subscript, i , identifies the country, and all the variables were converted to logarithms. In the model, the percentage of high technology exports in total exports was chosen to proxy the level of human resource development, given the many gaps in the data on secondary and tertiary enrolment. Table 6 gives the descriptive statistics for the data. The data relates to 1999, and it covers 57 countries.

Table 6: Summary Statistics and Correlation Matrix

SUMMARY STATISTICS					
VARIABLE	OBS.	MEAN	STD. DEV	MIN	MAX
TPI	57	-0.123	7.782	-3.219	3.391
YPC	57	8.204	1.611	5.223	10.728
FDI	54	2.112	1.213	-1.427	4.111
HTE	55	2.031	1.267	-2.303	3.830
AGVA	55	0.724	1.511	-4.605	3.203
Correlation Matrix					
	TPI	YPC	FDI	HTE	AGVA
TPI	1.000				
YPC	0.944	1.000			
FDI	0.3097	0.2495	1.000		
HTE	0.541	0.473	0.2330	1.000	
AGVA	-0.876	-0.875	-0.273	-0.437	1.000

Table 7 gives the regression results. It shows that three of the explanatory variables are significant. The results show that the variation in a country's TPI is well explained by the level of income per capita; the higher the level of income, the more a country is likely to participate in global trade. Although FDI also positively explains the variation of TPI, its coefficient is not significant. The percentage of high technology products in exports as a proxy for human resource development also strongly explains the variation in TPI; a country that has a higher level of human resource development represented by its higher percentage of high technology exports in its total exports is likely to participate more in global trade. The implication is that investing in human capital is a step towards reducing marginalisation. The last variable, agricultural value added as a percentage of GDP explains the variation in TPI in a negative manner; the higher the percentage of agricultural value added in GDP, the lower is a country's ability to participate in global trade. This simple model has rendered support to research findings on Africa's inability to increase its exports of manufactured goods. The basic problem being, a lack of investment in human resources, and reliance on exporting raw agricultural products given its relatively abundant land and low skilled labour (see Wood and Mayer, 2001). Needless to say, these results are tentative. It would be interesting to run this regression with an actual index of human capital rather than a proxy.

Table 7: Regression Results

CONSTANT	-0.259 (-5.95)
YPC	0.770 (7.71)***
FDI	0.063 (1.19)
HTE	0.152 (2.18)**
AGVA	-0.286 (-2.09)**
N	50
F(4,45)	119.92
R-squared	0.91
Adj. R-squared	0.90

*Note: The dependent variable is TPI. The figures in parentheses are t-statistics. ***Significant at 1%; **Significant at 5%.*

Some researchers have put forward some theories to explain Africa's poor performance in manufactured exports. Specifically, Collier has been quoted as attributing Africa's comparative disadvantage to high transactions costs due to a poor policy environment (Elbadawi, 1998). Others have attributed Africa's poor export performance to high transport

costs. According to UNCTAD (1999), sub-Saharan's freight costs as a percentage of *cif* import values are 5 percentage points higher than the average for all developing countries, and more than 10 percentage points higher in landlocked African countries (p.4). Such high transport costs faced by African countries affect their competitiveness in the global market in that they represent a large part of the final cost of products that are exported, hence making the possibility of pricing themselves out of export markets a reality (see also Amjadi and Yeats, 1995). As for manufactured exports, if the import content of the products is large, the high transport costs inflate the prices of imports that go into producing the products (UNCTAD, 1999). Once again, this makes the final cost of the exports uncompetitive.

The issue of transport costs and the constraints it imposes on exports can be illustrated by some research findings on Uganda. Research by Morrissey (2000) found that although Uganda implemented a sustained programme of economic reforms in the 1990s, with trade liberalisation as a central feature of the reforms, the value of its exports only grew for gold rather than for its principal export products due to non-policy obstacles to trade. That is, although taxes on exports have been abolished and import tariffs have been reduced, non-policy obstacles remain in form of high transport costs. The high transport costs arise because Uganda is landlocked, and are exacerbated by the poor quality of roads and rail networks, and long delays at customs check points and at ports. The high transport costs are an implicit tax on exports. Morrissey (2000) found that natural protection on domestic sales arising from transport costs was equivalent to an average of a 48 percent tax in 1994, while implicit export tax-cum-transport costs reached 100 percent for manufactured foods, 40 percent for food products, 25 percent for coffee, cotton and tea, and 20 percent for fish. It is evident that high transport costs constrain exports, and it partly explains why manufactured exports have responded slowly to trade liberalisation. The obvious implication is that investment in infrastructure is one of the necessary steps for stemming the tide of marginalisation.

7.0 CONCLUSION

In this paper, I have examined the extent to which East Africa is globalised by presenting some standard ways in which the level of globalisation is measured. That is, the extent of participation in global trade, the level of inflows of resources through FDI and aid, and the evolution of East Africa's trade structure. I further proposed a new index of globalisation, which assesses the level of participation in global trade by taking into account a country's total trade, and also its population. This measure is referred to as the trade participation index (TPI). The proposed index, as well as FDI inflows, indicates that East Africa is marginalized. The inflow of aid, however, indicates that East Africa is not so marginalised. But aid is not the most desirable mechanism of globalising. Trade is the best, provided that the structure of exports is such that it contains a high quantity of manufactured goods relative to primary goods. The paper finds that East Africa, unlike East Asia and Latin America, exports more primary goods than processed goods. There is thus a need for East African countries to process more of their products if they are to maximise benefits from trade.

In a simple regression model, it was found that low human capital explains the heavy reliance on exporting primary goods. It is also known from other research findings that poor infrastructure increases transport costs and makes East African exports less competitive. The policy implications from the paper are obvious; there is a need to invest both in human capital and infrastructure development.

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