International Journal of Economics, Business and Social Science Research

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

DO REGIONAL ECONOMIC DISPARITIES PROMOTE REGIONAL VALUE CHAINS? A CASE STUDY OF EAST AFRICA COMMUNITY MEMBER STATES

ERASTUS KAINGA & Dr. SAMUEL MUTHOGA
Kenyatta University, Kenya
Erastus Kainga https://orcid.org/0009-0007-1637-3265
Samuel Muthoga https://orcid.org/0000-0003-4001-5760

ABSTRACT

Economic differences impact regional value chain expansion. This study aims to examine how regional economic disparities (RED) affect the development of food and beverage value chains (RVCs) in the East Africa Community's (EAC) manufacturing sector. The dynamics of regional value chain promotion in EAC's manufacturing sector are examined using the New Economic Geography (NEG) model. Utilizing secondary data from five member states and the variables; taxes, labor, incomes of executives and laborers, intra- and extra-regional trade, and gross value added. To answer the research questions, regression analysis was used to shed light on (i) the effect of regional economic disparities on the promotion of regional value chains and (ii) the effect of prices on regional value chains. The results indicate that whereas laborers' pay and taxes have a negative and substantial impact on the promotion of RVCs, disparities have a positive and significant impact on price, intra- and extra-regional trade, executive salaries, and overall promotion of RVCs. This study will help EAC member states maximize their industrialization, economic development, and export performance. The results show that workers need to keep learning new skills to be competitive in the rapidly evolving industrial sector. The manufacturer's adoption of modern technology and its industrial location are also significant variables. Wages ultimately determine output, and countries with higher worker wages typically have higher levels of intraregional trade. For this reason, protectionist policies must be used for EAC states to increase intraregional trade.

Keywords: Trade diversion, Regional value chains, Regional economic disparities, Intra and extra-regional trade, Price volatility

1.0 INTRODUCTION

Regional value chains enable producers and service providers to experience the benefit of access to raw materials, economies of scale in production, expanded market opportunities, and technological and skills transfer. They connect lead firms and suppliers within a single world region (Pasquali, Godfrey, & Nadvi, 2020). Therefore, they are an essential step towards greater integration into the global economy (Daly, Abdulsam, & Gereffi, 2016). African countries need help sustaining exports for more prolonged periods; only one in every ten-export relationship survives beyond the third year (Kowalski, Gonzalez, Ragoussis, & Ugarte, 2015).

In the East Africa Community (EAC), as in other Regional Economic Communities (RECs), trade is crucial for economic development, and REC member states participation in global value chains. However, the effects of COVID-19, supply-side challenges, and the prevalence

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

of non-tariff barriers (NTBs) cause a decline in intra-regional exports. In 2020, intra-regional trade in the region, including EAC, declined by 11%, dropping from US$ 10.9 billion in 2019 to US$ 9.7 billion (Mwangi, 2021). Some of the regional value chain challenges identified included increased costs throughout the supply chain, differences in levels of industrialization, and the emergence of newer markets.

Researchers found that economic disparities continue to affect intra-African trade, and the top 15 countries that are required to prioritize intra-African trade and logistics to realize growth are EAC countries (United Nations Economic Commission for Africa, 2022). By using data from the World Bank, the United Nations Industrial Development Organization (UNIDO), the COMTRADE database kept by the United Nations Statistics Division (UNSD), the International Trade Center (ITC), the National Bureau of Statistics for each state, and United Nations Conference on Trade and Development (UNCTAD), the study will identify regional economic disparities effects on the promotion of regional value chains.

Heading 1: The Promotion of Regional Value Chain

Regional value chains can be described as trade in intermediate goods between firms in a single region. The East African region, whose countries share the same geographical location, is such an example. According to Grover & Lall, (2021), trade in parts represents global value chains. Slim et al., (2018) described all activities involved in the production chain of a commodity from design to market entry as a final product makes for the value chain. In essence, a regional value chain involves the trade of intermediate inputs of goods or services from inception to production. This paper will, in addition, cover trade between suppliers and lead firms while excluding final product consumers. By 2025 revenue from agro-processing in Africa will increase by 122 billion dollars, and therefore, there is a great potential for job creation and manufacturing within African nations (Signe' & Johnson, 2018). The key to fully taking advantage of global value chain competitiveness is intra-regional trade in intermediate inputs, promoting integration, and using comparative advantages that can result in increased competitiveness for African states to achieve this goal by 2025. According to Slim et.al., (2018), if two economies experience rapid growth, their mutual trade also experiences notable expansion. This underscores the importance of country-specific knowledge in their comparative advantages.

Slim et.al., (2018) identified that integrating production processes for developing countries allows them to leverage their comparative advantages. In this context, East Africa Community (EAC) member states must identify their specializations and enhance their comparative advantages by promoting regional trade in intermediate inputs which will later lead to competition in global value chains. This approach not only extends export relationships beyond the third year but also creates potential for job creation and manufacturing. According to the Regional Enterprise Competitiveness and Access to Markets Programme (RECAMP) fact sheet (2022), there are three specific competitive advantages for COMESA member states which also cover the five countries in our research, agro-processing, horticulture, and leather and leather products. Therefore, the author will primarily focus on agro-processing, specifically within the food and beverages sector. This targeted approach aims to increase intra-regional trade and economic development, by showing the importance of specialization in regional and global value chains competitiveness.

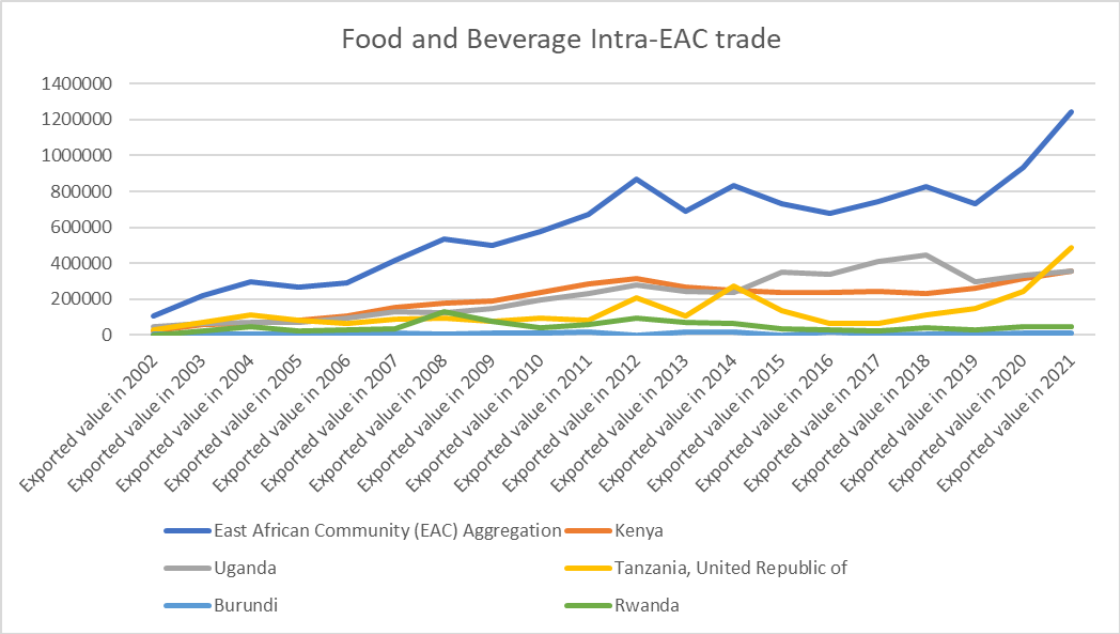
Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

Heading 2: Regional Economic Disparities: Food and Beverages Trade in the EAC

The study will make use of data collected from the International Trade Centre (ITC) and come up with food and beverage totals as calculated by the author below.

Figure 1. Country-specific imports for food and beverages imported from EAC states. Calculations by the author from International Trade Centre data source.



From the above data, intra-regional trade in the food and beverage sector showed that since 2002, there has been a steady upward trajectory in trade. However, an interruption was experienced between 2012 and 2016, marked by fluctuating trade volumes as a result of external shocks and political issues experienced during this period. After this uncertainty, trade resumed an upward trend. Uganda emerged as a leading exporter, followed by Kenya, Tanzania, Rwanda, and Burundi. In 2020, Tanzania's food and beverage exports to EAC increased significantly, showing a dynamic shift in intra-regional trade patterns. Following, the study will compare intra-regional trade to world imports by EAC states to find out which regions EAC trade with most, this is between the world and EAC.

The study will look at the nations among the five of interest importing most from outside EAC states and which ones' trade more within. By this, the study will be able to predict how the promotion of regional value chains can be affected by prices and other economic disparities. This is according to the maximum utility theory that the author assumes a country would trade with another because it gets value for money. This theory states that consumers and manufacturers want to achieve the highest level of satisfaction from their economic decisions (Team, 2022). From the above data, EAC's imports from the world increased consistently up to 2012 when they slightly dropped and continued dropping until 2016. In those four years, there was no generalized system of preference claims to European states for example. After 2016's decrease in imports, there was a significant increase in imports which was followed by a drop in the year 2017-2018. From then onward, imports were increasing from the world;

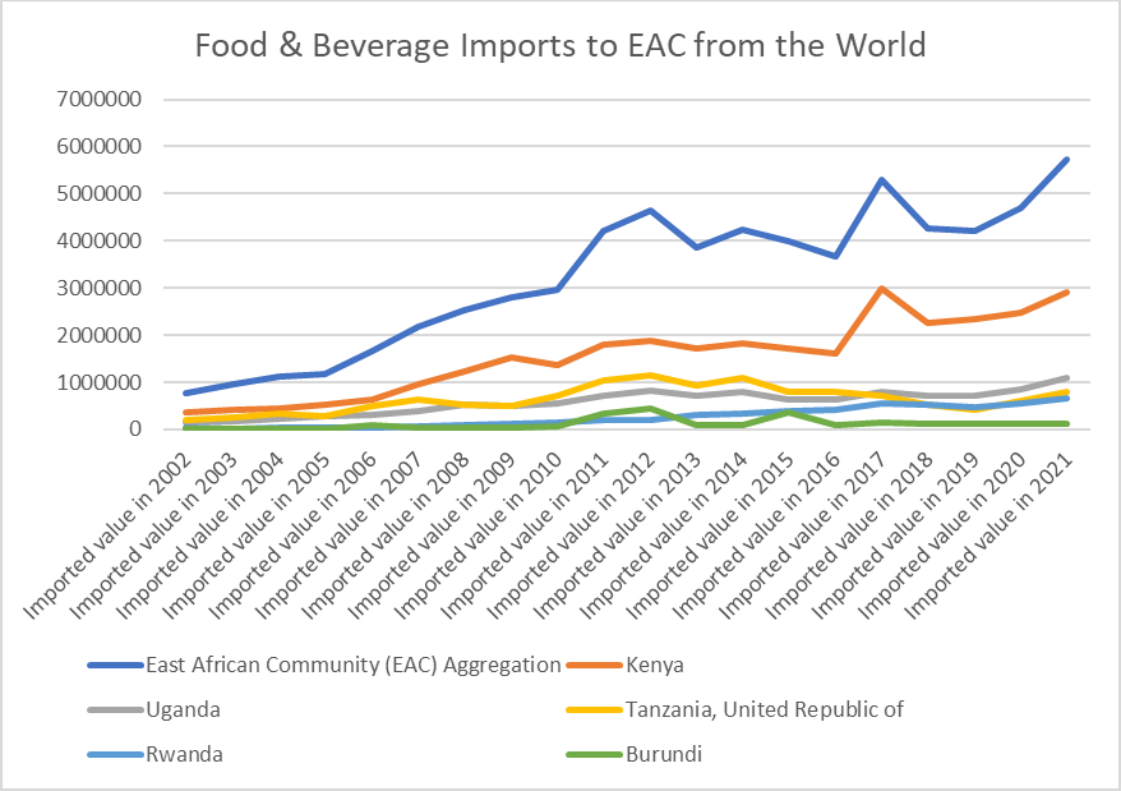
Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

Kenya imported more from the world far above the other states followed by Tanzania, Uganda, Rwanda, and Burundi respectively.

To assess further why there seems to be trade diversion in the region, the researcher will collect food and beverage data on exports from EAC to the world. From this, the author seeks to find out why most EAC states divert trade.

Figure 2. Food and Beverage imports from the world to EAC. Calculations by the author from International Trade Centre data source.



From the below data, among EAC states, Kenya exports to the global market more, with export volumes significantly surpassing those of all other EAC states. Tanzania and Uganda are the next leading exporters, followed by Rwanda and Burundi. A more comprehensive examination of this data reveals a striking trend. Kenya's exports of food and beverage exceeded the combined totals of Uganda, Tanzania, and Burundi between 2001 and 2021. The difference is proof of trade diversion within the EAC because the volumes of exports to the world are greater than within. So the researcher is interested to see why these changes. Is it price or economic disparities that makes the difference?

Heading 3: regional economic communities and integration.

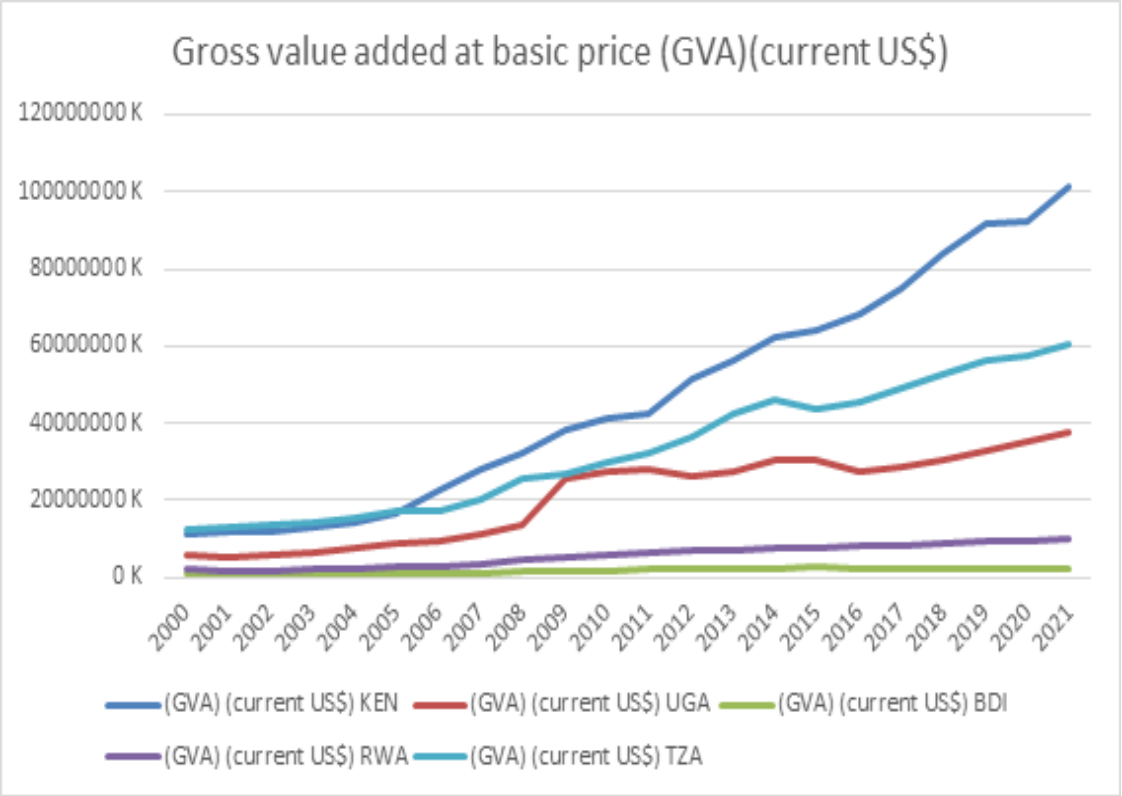
For supranational integration schemes to realize their potential for success, many prerequisite conditions must be fulfilled by the member states, and among them is the minimization of regional economic disparities (Villaverde & Maza, 2009). Nonetheless, these regional economic disparities have not been clearly defined due to the multifaceted nature of the term

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

'disparity'. In the context of this paper, regional economic disparities will be defined as the variations in economic capabilities among economies within EAC. This classification is important in setting a clear starting point for providing solutions to economic disparities in regional economic communities, especially EAC. To represent the promotion of regional value chains, causes for gross value added (GVA) data will be the indicator because they cover trade among firms and suppliers excluding final product consumers. Gross Value Added gives a picture of the state of the economic activity from the producer's or suppliers' side (Strategy, n.d.). GVA data may be more accurate as it includes government transfers to individuals or organizations or between governments and indirect taxation, in this case, those involved in agro-processing, and distribution to suppliers.

Figure 3. Gross value added from the World Bank's world development indicators



Above is GVA data for EAC states over the period 2001 to 2021 from the World Bank indicators in current United States dollars. The acronym KEN, and TZA represents Kenya and Tanzania. Uganda as UGA, Rwanda as RWA, and lastly Burundi as BDI. Kenya's GVA grew consistently from 2000 to 2001 shooting significantly between 2005 and 2006, between 2011 and 2012, 2017 and 2018, and between 2020 and 2021. Tanzania's GVA dropped between 2000 and 2001 and increased from 2002 through to 2016 when it dropped again from the previous year. Between 2007 and 2008 the increase was significantly high as well as between 2020 and 2021.

In Rwanda, between 2000 and 2002 the GVA dropped then rose in 2003 and continued increasing until 2020 when it dropped slightly from the previous year 2019, and then rose again in 2021. Uganda's dropped between 2000 and 2001 then rose in 2002 continually. Between

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

2008 and 2009, the GVA shot up significantly and continued rising until 2012 when it dropped slightly then rose again up until 2016 when the nation experienced a significant decline but then rose again in the following year until our final year 2021. Burundi experienced an increase in the GVA between 2000 and 2001 followed by a decrease in the GVA for two consecutive years; 2002 and 2003. After the year, the nation's GVA increased significantly between 2004 and 2005 then continued increasing until 2015 when a significant decline followed the country's GVA in gross value added continually declining until 2019 when the following year the nation experienced an increase until 2021.

Among the five countries, Kenya is the only state that has not experienced a decrease in gross value added since 2000. Burundi is the nation with the most consecutive declines reaching up to four years consecutively, followed by Rwanda which had two. Uganda and Tanzania did not have consecutive years of GVA dropping.

Heading 4: the problem.

East African Community's intra-regional trade has been disenchantingly low even after the failure of the states to reach a complete monetary union by 2015. Moreover, compared to other developing regional blocks like Asia and Latin America, intra-regional trade is still at a low of 9% while the other are 45% and 18%, respectively (Slany, 2017). With very little intra-regional trade happening and African economies being too small to negotiate with powerful trading blocs, the need to attain full integration remains an essential goal for the region to compete globally in value chains. Economists have tested and published that intra-regional trade could back up employment and assist countries to grow their economies as well. However, in EAC, the little intra-regional trade happening is also faced with challenges in export prices.

The price of imports from the world in comparison with export prices from EAC to other EAC states is wanting as member states continue to prefer buying from outside the region to within even while sharing equal tariffs. This slows down the formation of monetary unions and ultimately, a political federation in the region because countries prefer having their own goals to creating regional goals and agendas. The high prices of goods from the region and little intra-regional trade affect traders, manufacturers, distributors, and the states by denying the enlargement of markets and opportunities to manufacturers to increase production and realize specialization too. Regional integration promises these benefits to businesses and consumers: relieving the constraints posed by small, segmented national markets, benefits of risk sharing, and regional comparative advantage (AAMP Policy Briefing, 2008). Solving these problems by assessing the effect of regional economic disparities on the promotion of regional value chains remains an unexplored area with lots of uncertainty. It is against this background that the below research questions arise.

2.0 METHOD

To find the effect of regional economic disparities, our independent variable on the promotion of regional value chains, dependent variables; value addition, technical innovation, employment in manufacturing, exports, and imports, the study will eliminate errors caused by the lack of data by introducing random errors in our measurements (Huntington-Klein, 2021). Through randomization, other extraneous variables, as identified from our literature, including quality of institutions, border rules, and country regulations, will be eliminated by the control

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

groups that will be introduced. The data on study variables will be collected over some time from five countries in EAC. The study will adopt a causal or explanatory research design. The purpose of conducting a causal research design is to determine the degree and type of cause-and-effect connections. Causal research is performed to evaluate the effects of particular modifications on established standards, different procedures, and so on (Iacus, King & Porro, 2019). The main emphasis of causal studies is to scrutinize a particular circumstance or issue and clarify the correlations between different variables.

Heading 1: theoretical framework

The theoretical framework anchors on the new economic geography model described by (Bode & Mutl, 2013).

$$\ln w_r = \frac{1}{\sigma}\ln \mu + \frac{1}{\sigma}\ln[\sum_{s=1}^{R} T_{sr}^{1-\sigma} g_s^{\sigma-1}(w_s L_s^M + L_s^A)].....$$

Where u_rt is the annual deviation of the logged wage rate in region r at time t, w_rx is that bilateral spatial. w̃ is the equilibrium wage rates, (L^M)̃ represents the equilibrium manufacturing employment and L^A the exogenous agricultural employment while T represents the bilateral interregional transport costs, σ is the substitution elasticity, μ the expenditure share for the manufacturing good.

Heading 2: empirical model specification

The study shall estimate data for five EAC countries for the period 2000-2022. Annual data according to Ohtake (2022) implies evaluating the NEG model using short-term responses to local wage shocks. Bode (2013) asserts that a sample period of 16 years is long enough to limit the effect of outliers therefore, data for 22 years will be enough. The empirical model on the effect of regional economic disparities and price on the promotion of regional value chains is specified as follows:

$$\ln GVA_r = \frac{1}{\sigma}\ln Trade + \frac{1}{\sigma}\ln \sum_{s=1}^{R} Infr\ Dvp_{sr}^{1-\sigma} + \ln Tax_s^{\sigma-1} + \ln(Nom.Income) + \varepsilon_t$$

Where GVA captures the EAC region gross value added, Trade is the value of intra and extra-regional trade with EAC and the world, InfrDvp captures value addition, factory activities such as labor both of executives and non-executives. Tax is the average tax rate for food and beverages while the Nom.Income is the total income of workers in manufacturing and agriculture.

Heading 3: data analysis

The data will be regressed to establish first openness for trade in the region then test the performance of intra-regional trade and determine export diversification then measure wages to determine the difference in prices of goods. After the determination of the three tests, this study will be able to determine how regional economic disparities affect the promotion of regional value chains by observing how trading in regional value chains has been affected over a while then make conclusions on the drivers of trade in value chains in EAC.

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

3.0 RESULTS

Intra-regional and extra-regional trade is shown by the amount of trade in dollars from countries within East Africa to represent intra and countries outside the EAC to represent extra-regional trade. Each state's GVA will represent the economic disparities in the regions while the promoters of regional value chains will be the amount of extra and intra-regional trade, wage rates for executives, and the total income for workers in manufacturing sectors in East Africa, the total number of workers in manufacturing and country-specific taxations for value-added goods.

Table 1. Descriptive Statistics Results for East African Community as computed by the author from STATA 15 with data from ITC, WDI, and Bureau of Statistics

Variable	Observations	Mean	Std. Deviation	Minimum	Maximum
Import Values from EAC	115	17490.831	43099.177	0	240000
Import Values from the World	115	205068.88	243028.41	1300	1111324
Export Value from EAC to World	115	34609.504	64050.398	1	403000
Employees in Manufacturing as % of Total	115	5.749	2.042	2.26	11.57
Value added as % of GDP	115	19.626	4.74	10.599	29.4
Executive Salaries in Manufacturing	115	1422.556	666.691	533.915	3926.1
Total income for workers in Manufacturing	115	648.469	373.713	120.035	1690.5
Country Specific Taxation	115	11.801	2.35	7	16.678
Gross Value Added	115	2.165e+10	2.288e+10	7.251e+08	1.013e+11

The East African Community has few employees in the food manufacturing industry averaging 5.75% among the countries reviewed and the maximum and minimum are 11.57% and 2.26% respectively. Over the study period, taxation percentages for value-added goods were 11.8% while the highest tax rate was 16.69%, and the minimum at 7%. The EAC member states also trade more with states outside the regional economic community as the average value of exports in USD from EAC to the world was USD 34,609.5 while the maximum value over the study period was USD 403,000 while the minimum was USD 1. The states further import more than they export to the World as the value of imports averaged USD 205068.88 and the minimum and maximum value of imports were USD 1300 and USD 1,111,324 whereas trade between EAC states averaged USD 17,590.83 and the maximum value traded within was USD 240,000 which is slightly above the average value imported from the world. The percentage of value-added goods as a share of GDP averaged 19.62% while the maximum was 29.4% and 10.6% was the minimum. Executive salaries in the manufacturing sector average pay was USD 1422.556 while the maximum pay was USD 3926.1. Laborers in manufacturing workers on the

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

other hand earned an average of USD 648.469 and the minimum and maximum pay for the workers were USD 120.035 and USD 1690.5 respectively.

It is clear from the average of means below that Kenya trades with EAC states more than all the other countries in EAC while Burundi trades least. Looking at EAC countries' average means for imports from EAC, Kenya seemed to import more from the world followed by Tanzania. In finding out which state exported more to the World from EAC, Tanzania emerged as the highest exporter followed by Uganda which had an average of 7.37% of laborers working in industries which was highest followed by Kenya then Rwanda. Value added as a share of GDP showed that Uganda was highest followed by Tanzania then Kenya. Executives in the manufacturing industry were paid the highest in Kenya followed by Uganda similarly laborers in manufacturing are paid higher in Kenya than in Uganda and Rwanda. The states with high taxes on average were Kenya followed by Burundi, Rwanda had the highest gross value added followed by Kenya on average. See the below-average means.

Heading 1: stationarity test results.

Data analysis that contains non-stationary series may lead to spurious results. To avoid this econometric challenge, the study adopted the Levin-Lin-Chu unit-root test, and the results are presented in Table 2.

Table 2. Unit-root test

Variable	P-Value	P-Value (1st Difference)
Imports from EAC to EAC	0.1542	0.0000
Imports from the World to EAC	0.2017	0.0000
Exports from EAC to the World	0.5915	0.0000
Employees in manufacturing	0.0006	
Value added as a share of GDP	0.0139	
Executive Salaries in Manufacturing	0.0000	
Workers in Manufacturing	0.0022	
Taxation	0.0002	
Gross Value Added	1.0000	0.0033

The p-value of the natural log of imports from EAC to EAC countries is greater than 0.05 therefore, the variable is not stationary differentiation. After the first differentiation the p-value becomes <0.05 therefore, the panel is stationary at first differentiation. The p-value for imports from the world to EAC was also greater than 0.05 hence not stationary. After the first differentiation, the panel was stationary at 0.0000. The p-value for the variable on exports from EAC to the world was also greater than 0.05% and after the first differentiation, the panel became stationary. The natural logs of the other variables; percentage of employees in manufacturing, value-added as a percentage share of GDP, salaries for both executives and laborers, and taxation were stationary as shown above because the p-values were less than 0.05 hence stationary. The p-value for the natural log for gross value added was above 0.05 hence not stationary but after the first differentiation the data is stationary.

Heading 2: cointegration test.

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

The Pedroni test for cointegration was applied to determine the long-run relationship between variables due to the variables that were found to be stationary at the first difference. The study sought to find out if there existed a co-integration relationship between gross value added and the variables intra-regional trade, extra-regional trade, infrastructural development shown by percent of value addition share, wages in manufacturing, amount of labor, and taxation in the five EAC states. The p-values for all the variables were less than 0.05 showing cointegration and therefore, a long-run relationship.

Pedroni Test	**P-value**
Modified Phillips-Perron t	0.0058
Phillips-Perron t	0.0089
Augmented Dickey-Fuller t	0.0065

Heading 3: hausman test.

Hausman test was run to determine if the random effects or fixed effects model is the most appropriate for testing the relationship between dependent and independent variables.

Descriptive statistics	
	Coef.
Chi-square test value	3.221
P-value	.864

Heading 4: granger causality

To answer the first research question on the effect of regional economic disparities on the promotion of regional value chains, a Granger causality test was carried out.

Null Hypothesis	**Dependent Variable**	**P-value**	**Test**
Intra-regional trade does not promote GVA growth	Growth of GVA per capita	0.0000 0.0000	Z-bar Z-bar tilde
Extra-regional imports do not promote GVA growth	Growth of GVA per capita	0.3330 0.3459	Z-bar Z-bar tilde
Exports to the world do not promote GVA growth	Growth of GVA per capita	0.0000 0.0005	Z-bar Z-bar tilde
The number of employees in manufacturing does not promote GVA growth	Growth of GVA per capita	0.1398 0.2918	Z-bar Z-bar tilde
Salary paid to industry executives does not promote value addition	Growth of GVA per capita	0.3738 0.3797	Z-bar Z-bar tilde
Other employees in industry incomes do not promote value-addition	Growth of GVA per capita	0.0046 0.0306	Z-bar Z-bar tilde
Country taxes do not promote production in industries	Growth of GVA per capita	0.4601 0.4501	Z-bar Z-bar tilde

Key: The null hypothesis is rejected when the p-value is less than 0.05 and the alternative is adopted and the opposite is true.

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

Intra-regional trade can predict the growth of GVA, this is because the p-value is less than 0.05 hence the alternative hypothesis is adopted. Trade with countries outside EAC evidenced the p-values to be greater than 0.05 hence the null hypothesis is adopted. Looking at exports from EAC to the world, the p-value was less than 0.05 hence the null hypothesis is rejected and the alternative adopted, therefore, exports to the world granger-causes GVA. On the other side, the number of employees in manufacturing, salaries for executives and taxes do not granger cause promotion of regional value chains because their p-values were greater than 0.05. The salaries paid to other employees not executives had their p-value less than 0.05 hence the alternative hypothesis is adopted and the null is rejected.

Heading 5: fixed effects versus random effects

lnGVA	Coef.	St.Err.	t-value	p-value	[95%Conf	Interval]	Sig
LnIEAC	.062	.022	2.84	.004	.019	.105	***
lnIWorld	.241	.051	4.70	0	.141	.341	***
lnEEAC	.112	.023	4.87	0	.067	.157	***
lnemployees	.091	.156	0.58	.561	-.216	.397	
lnExecsalary	1.572	.327	4.81	0	.932	2.212	***
lnworkerincome	-.413	.166	-2.48	-.013	-.738	-.087	**
lnTaxation	-.552	.248	-2.23	.026	-1.039	-0.66	**
Constant	11.569	1.105	10.47	0	9.402	13.735	***

Mean dependent var	23.099	SD dependent var	1.337
Overall r-squared	0.915	Number of obs	115
Chi-square	1146.961	Prob > chi2	0.000
R-squared within	0.750	R-squared between	0.963

***p<.01, **p<.05,*p<.1

To answer the second objective, the effect of consumer prices on regional value chain promotion, results for random effects analysis were used. The results showed that natural logs for intra-regional trade have a positive and significant coefficient at a 90% level (β=0.062, p=0.004). This implies that a one-unit increase in imports within EAC member states will translate to a 0.062 increase in GVA. For imports from the world into EAC, the analysis evidenced that the variable has a positive and significant coefficient at 90% confidence (β=0.241, p=0). This means that an increase in imports from countries outside EAC will cause a 0.241 growth in the gross value added. Further, the natural log for exports from EAC into the world showed a positive and significant correlation with the growth of gross value added because the variable had a coefficient of 0.112 and a p-value of 0 which was significant meaning that an increase in exports by 0.112 would cause an increase in the gross value added by the same unit.

The number of employees working in the manufacturing sector was not significant although it had a positive coefficient of 0.091. Still, the p-value was greater than 0.05 hence insignificant. The pay executives receive has a positive and significant coefficient at a 90% confidence level (β=1.572, p=0). This implies that an increase in salary for executives by one unit will cause a 1.572 increase in GVA. The coefficient for lnworkersincome was negative and significant at a

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

95% confidence level (β=-0.413, p=0.013). This means that a one-unit change in a worker's income will generate a 0.413 decrease in GVA. The coefficient for lnTaxation was negative and significant at a 95% confidence level (β=-0.552, p=0.026). This implies a unit change in taxing will generate a 0.552 decrease in GVA.

4.0 DISCUSSION

The new economic geography model in the theoretical study showed that agriculture and manufacturing can be used for analysis to fulfill the study objectives. The study, therefore, analyzed the independent variables to find out how regional economic disparities affect the promotion of regional value chains and determine the effect of consumer prices on regional value chain promotion within EAC. The first objective of the study was to show how economic disparities affect regional value chains. To determine this, the study employed the random effects test on regression and it was found that trade both intra-regional and international had significant and positive contributions to regional value chains, similar to executive salaries. The number of employees working in a sector was not significant while the salaries they receive and taxes had negative and significant effects on regional value chains.

The second objective of determining how consumer prices affected the promotion of regional value chains was determined by assessing the countries' exporting more than the others and having more employees. According to Krugman (1991), the wage rate will tend to be higher in the larger markets, and the regions with larger populations will face a lower price for manufactured goods. This was consistent with our study because the gross value added was affected negatively by wages while the number of employees was not significant.

5.0 CONCLUSION

Regional economic disparities can play an important role in promoting regional value chains. the study has established that indeed economic disparities affect regional value chain promotion. Intra-regional trade, extra-regional trade, and executive salaries in the manufacturing sector have positive and significant effects on the promotion of regional value chains. The study concludes that laborer salaries and taxation have a negative and significant effect on the promotion of regional value chains.

On the first objective, therefore, the study found that regional economic disparities have a relationship with the promotion of regional value chains. EAC member states have a significant relationship with intra-regional trade in agricultural and manufactured cereal products. Regarding extra-regional trade was observed to produce more outputs than intra-regional trade for EAC which was also consistent with other studies. This may be due to inefficient production caused by inadequate technology and skills. This was also observed by looking at countries' salaries paid to the executives. Their salaries had a positive relationship and also a significant one with regional value chains. This is more likely due to the skills they have acquired and the motivation received from their salary. Their competence gives them expert influence, therefore, making it easy for their employees to produce more. Other employees' pay had a negative and significant relationship with the promotion of regional value chains. This could be because the industries may be diverting equipment and maintenance money to increase salaries. The number of employees had no significant relationship with the promotion of regional value chains probably because some work can be performed by equipment. Taxation had a negative

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

and significant effect on regional value chain promotion because manufacturing firms are taxed from when they acquire raw materials from farmers to the time they produce and even at selling.

In the second objective, price has a positive and significant relationship with the promotion of regional value chains. This is observed by the states EAC countries traded more with and where workers received more pay. The countries in EAC that traded more with the world had paid their employees higher salaries on average and this could mean they prefer trading with outside EAC states nations because they acquire products at cheaper prices than EAC and also the consumers who are workers, can buy less.

According to this study, it is prudent for EAC countries will start focusing on increasing intra-regional trade as well as extra-regional trade for agricultural products and value-added products. Because of their different soils, and weather patterns, EAC states can produce according to their soil abilities for sustainable food security. Competitive advantage will be achieved and also because of this, these countries can determine to trade between themselves in intermediary inputs and with countries outside EAC with finished products.

EAC states can also instead of trading with outside EAC states in agricultural produce, improve infrastructures, harmonize border laws and customs by setting up committees of state representatives with experts in regional integration, law, and economics then trade within EAC in the raw materials. To improve farming in these produces, because it was evident in the study that employee numbers were not significant, can trade with states outside EAC in the necessary technologies for manufacturing and farming.

It is important to also improve employee skills according to the needs of the countries. For example, through social education, communities can be trained on the needed skills within the nation, and young people are offered scholarships by in-need organizations for them to study in vocational training colleges for those technical skills they need and offer them employment after completion. This will drive production through elimination because unnecessary skills will be reduced to as low as practicable.

Other sustainable energies like solar can also be used in manufacturing as well and electricity prices reduced through the introduction of competitors by encouraging foreign direct investments (FDIs) in these sectors within EAC. Lastly, the nations within EAC should begin taxing manufacturing firms at production and not from the point of acquiring inputs, by this the study showed that if producers are taxed for example, the farmers while acquiring farm inputs and not consumers when buying from farmers. Then manufacturers should be taxed at sale and given subsidies at the production level.

REFERENCES

1. AAMP Policy Briefing. (2008). Trade in Food staples: Promoting Price Stability and Food security through intra-regional trade. Lusaka: COMESA (Common Markets for Eastern and Southern Africa).
2. Bode, E., & Mutl, J. (2013). Testing Nonlinear New Economic Geography Models.
3. Bode, E., & Mutl, J. (2013). Testing Nonlinear New Economic Geography Models.

Volume: 02, Issue: 06 November - December 2024

ISSN 3048-8125

4. Juillion, P. (2023, January 11). What is new economic geography literature? . Retrieved from Studybuff: https://studybuff.com/what-is-new-economic-geography-literature/#:~:text=Krugman%20defined%20the%20New%20Economic%20Geography%20as%20the,Who%20is%20the%20father%20of%20new%20economic%20geography%3F
5. Karagu, M. S. (2012). Effects of regional financial integration on economic growth and intra-regional trade of East African Community member countries. Kenyatta University Thesis, 163.
6. Keen, S., & Mazzone, A. (2023). Market Business News. Retrieved from what is neo-classical economics? : https://marketbusinessnews.com/financial-glossary/neo-classical-economics/
7. Kowalski, P., Gonzalez, J. L., Ragoussis , A., & Ugarte , C. (2015). Participation of Developing Countries in Global Value Chains. OECD Publishing.
8. Kumar, R. (2011). Research Methodology. London: SAGE Publications Ltd.
9. Kummritz, V., & Quast , B. (2016). Global Value Chains in Low and Middle Income Countries. Centre for Trade and Economic Integration.
10. Mao, Z. (2021). Global Value Chains and Economic Growth: A Non-linear Analysis. Singapore Economic Review.
11. Masahisa, F. (2011). Thunen and the New Economic Geography. The Research Institute of Economy, Trade and Industry.
12. Minot, Nicholas;. (2013). How volatile are African Food prices?. International Food Policy Research Institute.
13. Rekiso , Z. S. (2019). Rethinking Regional Economic Integration in Africa as if Industrialization Mattered.
14. Team, C. (2022, December 4). Utility Maximization. Retrieved from Corporate Finance Institute: https://corporatefinanceinstitute.com/resources/economics/utilitymaximization

