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Global Trade Flows and Economic Growth: Insights from East Africa Region

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Abstract

This research investigates the link between global trade flows and economic growth in the East African region, utilising panel data from 2000 to 2022. Employing robust econometric methods, the analysis considers the impacts of exports, imports, capital, labour, technology, and regional international agreements (RIAs). Findings reveal that exports have a negative and insignificant impact on economic growth, suggesting ineffective current export strategies. In contrast, imports positively and significantly influence economic growth, highlighting their role in driving economic activities. Capital, labour, and technology also exhibit positive and significant coefficients, underscoring their importance. Surprisingly, the RIA dummy variable and its interaction with exports show negative signs, indicating that current regional trade agreements may not yield the intended economic benefits. The study suggests that East African countries should diversify their economies, reconsider trade policies, and create a balanced trade strategy to maximize imports' benefits, improve exports' efficiency, and reevaluate RIAs' structure and implementation.

Keywords: Economic growth; Global Trade Flows; RIA; East Africa Countries

Introduction

Over the past three decades, global trade flows have expanded significantly, particularly among developing and emerging economies. This shift is attributed to the perceived limitations of import substitution-based development strategies and the influence of international financial institutions like the World Bank and the International Monetary Fund, which often condition their support on trade liberalization (Zahonogo, 2017). The prevailing belief is that liberalization is essential for transitioning from closed to more open economies, serving as the primary rationale for the commitment to trade reform (Zahonogo, 2017). Despite this, there is ongoing debate among academics and practitioners regarding the effect of global trade dynamics on economic growth, particularly in emerging economies. While some argue that trade promotes economic growth by facilitating knowledge and technology transfer through the importation of high-tech products (Almeida and Fernandes, 2008; Zahonogo, 2017), others contend that the benefits are not uniformly realized across all contexts. The consensus is that trade liberalization fosters an environment conducive to the production of high-quality goods, thus contributing to economic growth (Abendin and Duan, 2021; Aradhyula et al., 2007). Historical examples, such as the development of Denmark, Canada, Sweden, New Zealand, and Australia in the 19th century and the rise of newly industrialized nations like Singapore, South Korea, Hong Kong, and

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Taiwan in the late 20th century, further support the argument that global trade can drive economic growth and development (Minford et al., 1995; Farahane and Heshmati, 2020).

The East African Community (EAC) region, encompassing Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda, is rich in cultural diversity and natural resources, with significant economic potential. Despite this, the region has faced persistent challenges in achieving stable economic growth. Global trade has become a critical factor in shaping East Africa's economic landscape, offering both opportunities and challenges. Historically a commercial hub, East Africa's economic interconnection with the rest of the world has increased due to globalization, with trade playing a pivotal role in promoting economic growth and development (Easterly and Levine, 1997). Exports and imports are key trade activities that enhance economic growth in East Africa, with exports providing access to larger markets and imports facilitating the acquisition of capital goods, services, and finished products (Behar and Edward, 2011). Despite several global trade agreements, such as the Cotonou Agreement with the EU and the African Growth and Opportunity Act (AGOA) with the US, the impact of global trade on East Africa's economic growth remains uncertain. Structural challenges like trade imbalances, inadequate infrastructure, and limited export diversification hinder the region's ability to fully leverage global trade benefits. Additionally, the impact of global economic fluctuations and regional trade agreements adds complexity to the relationship between global trade flows and economic progress in East Africa. Empirical studies on the interplay of international trade flow, regional integration agreements, and economic growth are scarce for the East African region (Zahonogo, 2017; Farahane and Heshmati, 2020; Jawaid et al., 2020), highlighting a gap in the literature. This study seeks to address this gap by examining how variations in global trade volumes influence the economic growth of East African countries and identifying the specific mechanisms that mediate this relationship.

The study is organized as: The theoretical and empirical research on trade flow and economic growth is reviewed in Section 2. Section 3 presents the methodology of the study. Section 4 presents empirical results and discussions. The last section discusses the conclusion and policy implication.

Literature Review

Theoretical Literature Review

This section presents background information on theoretical views on the link between economic growth and global trade flow. The controversial question of whether global trade stimulates economic growth. Theoretically, there has been debate over the relationship between economic growth and global trade

flow. While the traditional view holds that global trade drives economic growth, several 20th-century researchers argued that Global trade could simply further extend the underdevelopment of developing countries. Based on this viewpoint, this paper has examined two theories below related to global trade flow and economic growth prosperity.

Classical theories, particularly the theory of comparative advantage developed by David Ricardo, provide a foundational perspective on the impact of global trade flows on economic growth. According to classical view argues that countries should focus on producing products and services with comparative advantages. Producing goods where the opportunity cost is lower than in other countries is what this means. All countries can benefit from specialization and increase their economic efficiency. The classical viewpoint holds that trade between countries promotes the most efficient allocation of resources, enables countries to concentrate on their core competencies, and increases productivity and efficiency. Specialization and efficient resource allocation are key drivers of economic growth (Milner and Williamson, 1991). The traditional trade theory has been supported by historical examples where countries that embraced free trade experienced economic growth. Empirical studies often highlight the positive correlation between economic growth and trade openness (Minford et al., 1995). However, the criticism of the classical theory highlights that it depends on some weak assumptions such as full employment level and perfect competition which may not hold in the real world. Therefore, it is essential to consider contemporary challenges and critiques when analyzing the complex dynamics of the modern global economy. Trade on a global scale does not always result in economic growth, despite the claims that advocates of global trade argue since there are instances in which international trade has slowed down economic growth as well as others in which it has had no effect at all (Farahane and Heshmati, 2020). The theoretical perspective asserts that there is no link between economic growth and global trade flows and challenges the conventional argument upheld by classical and neoclassical economic theories. Some alternative theoretical views challenge the positive link between global trade flow and economic growth. Such as dependency theory argues that trade relations can create dependencies and power imbalances, hindering the economic growth of certain countries (Randall, 2004). However, the comparative advantage argument is supported by contemporary theories of global trade, which point to economies of scale as a significant driver of economic growth (Usman, 2011). Modern theories argue specialization in scale-efficient industries is made possible by global trade, an outward-focused trade policy, and technological changes, which could eventually lead to an increase in economic growth over the long run (Kruger, 1978). Trade policy, technological changes, and global trade flow may boost economic growth in the long run by allowing the economy to specialize in those areas with scale

economies that result from research and development and the accumulation of human capital (Lee, 1993).

Empirical Literature Review

The existence and nature of the link between trade openness and economic growth have been extensively debated. However, no clear conclusion has been drawn by empirical analysis. The lack of clear theory and empirical data confirming the link between global trade flow and economic growth is one factor leading to the unresolved argument.

Based on empirical research, there may be a two-way causal correlation between global trade and economic growth. Specifically, countries with higher incomes may be more capable of affording trade-friendly infrastructure, may have more resources to cover the costs of information search related to international trade, or may require a greater volume of traded goods (Kim and Lin, 2009). Zeren and Ari (2013) found a positive causal link between economic growth and trade openness for G7 states. Sun and Heshmati (2010) investigated the effect of international trade on economic growth in China, and the findings show that global trade flow promotes the economic growth of China. Similarly, Jouini (2015) confirms that economic growth and international trade have a positive relationship both in the long term and short term. Yenokyan et al. (2014) concluded that the economy is affected in two ways, through technological transition and the size of the overall impact facilitated by trade liberalization. Ogbokor and Meyer (2017) investigated the long-term connection between foreign trade and economic growth in South Africa and found that exports had a significantly positive effect on economic growth. Malefane & Odhiambo (2018) also found that global trade had a positive significance on South African economic growth. Tinta et al. (2018) and Zahonogo (2017) both used panel data analysis in sub-Saharan Africa (SSA) to investigate the effect of trade openness on economic growth, with findings showing a positive and significant relationship. Nguyen (2020) investigated the effect of international business on economic growth in Vietnam, employing co-integration analysis and an error correction model, and found that global trade is a significant driver of both short-term and long-term GDP growth, although the long-term stationary causality between GDP and import trade was insignificant.

This study extends the knowledge in the literature on economic growth and global trade flow by providing a new cross-country empirical study that considers the threshold impacts of global trade in East African countries. Existing studies have primarily focused on developed or rapidly industrializing nations, leaving a significant gap in understanding the unique dynamics of trade and growth in East

Africa. By including variables such as capital input, technology, and total debt services, this research goes beyond the direct relationship between trade and economic growth, offering a more comprehensive analysis. This study also addresses the specific mechanisms through which global trade influences economic growth, a perspective often overlooked in previous research. In doing so, this paper contributes to the ongoing debate by highlighting the unique economic context of East African countries, which face distinct challenges such as trade imbalances, inadequate infrastructure, and limited export diversification. The insights provided by this research are crucial for policymakers in East Africa and similar regions, as they offer evidence-based recommendations for leveraging global trade to achieve sustainable economic growth. By filling the knowledge gap with empirical data from East Africa, this study provides a more nuanced understanding of the global trade-growth nexus, potentially informing more effective trade and economic policies.

Methodology

This study aims to investigate how far global trade flow has impacted to economic growth in selected East African countries. The selected countries included Kenya, Uganda, Tanzania, and Rwanda. The data sources are the World Bank and the central banks of the selected EAC countries. Given the cross-sectional nature of the data across four countries and the inclusion of various variables, panel analysis is an appropriate technique.

Sampling Process and Justification

The study focuses on Kenya, Uganda, Tanzania, and Rwanda, chosen based on their significant economic roles within the East African Community (EAC) and the availability of comprehensive trade and economic data. The sampling period spans from 2000 to 2022, This approach enables an analysis that encompasses both the pre-2005 period (prior to the establishment of the EAC customs union and the implementation of common external tariffs) and the post-2005 period (after the EAC transitioned into a customs union). This period was selected to capture the economic dynamics before and after the significant policy shift in 2005, providing a clearer understanding of the effect of global trade flows on economic growth.

The sample size of four countries over 23 years yields a balanced panel data set. This size is justified based on the need to ensure a comprehensive analysis of the region while maintaining manageable data for robust econometric modeling. The inclusion of all available data points within this timeframe ensures sufficient statistical power to detect significant relationships and trends.

Econometric Model

The study uses multivariate regression analysis, estimating a stochastic Cobb-Douglas production function to empirically study the relationship between global trade and economic growth, drawing on previous research (Farahane and Heshmati, 2020).

$$Y = AK^{\alpha_1} L^{\alpha_2} T^{\alpha_3} Z^{\alpha_j} e^{\mu} \tag{1}$$

where Y is the dependent variable represented by GDP, Capital input is denoted by K (CAP), L represents the Labour input (LAB), technology is denoted by T (TECH), the trade vector variables are expressed by Z and unknown model parameters A, $\alpha_{1 \ldots\ldots,} \alpha_3$ and e^{μ} is a multiplicative error term. The Z vectors include export (EXP), import (IMP.), and terms of trade (TT).

Thus, equation (1) can be transformed into a logarithmic form and is estimable and linear as follows

$$InY_{it} = \beta_0 + \beta_1 InK_{it} + \beta_2 InL_{it} + \beta_3 T_t + \sum_{j=n}^{3} \beta_j InZ_j + \mu_{it} \tag{2}$$

where the subscript i is the dimension of the cross-section that presents the EAC states, and the subscript t is the dimension of the time series that indicates the number of years. The random error term along with time-invariant country effects form the one-way error component that the residuals follow.

The study employs the balanced panel data analysis covering 23 years, presenting a clear distinction between the pre-2005 (i.e., before the EAC customs union was established and common external tariffs were implemented) and post-2005 (i.e., after EAC became a customs union) periods. This difference therefore explained the change that was indicated by the organization's conversion into a customs union in 2005, the RIA started. Therefore, the study analysis is conducted by incorporating the intercept dummy variables Dum_{it} and two slope terms interaction $Dum_{it} InZ_{1it}$ and $Dum_{it} InZ_{2it}$ to the 5 years before and 18 years after. Thus, the econometric model is presented as follows:

$$InY_{it} = \beta_0 + \beta_1 InK_{it} + \beta_2 InL_{it} + \beta_3 T_t + \sum_{j=n}^{3} \beta_j InZ_j + \delta Dum_{it} + \gamma Dum_{it} InZ_{1it} +$$
$$\partial Dum_{it} InZ_{2it} + \mu_{it} \tag{3}$$

where the coefficients of the first slope, second slope, and intercept of dummy variables are presented by symbols, γ, ∂ adelta respectively

Panel Unit Root and Panel Cointegration

Testing for panel unit root and panel cointegration is imperative in contemporary panel studies (Baltagi, 2005). These tests enhance the analysis by comparing individual information with other variables rather than focusing on a single variable as in time series analysis (Levin et al., 2002; Pedroni, 2004). The

study employed the individual root-fisher PP. It is important to note that the Fisher-Augmented Dickey-Fuller (ADF) and Fisher-Phillip Perron (PP) and Pesaran, and Shin (IPS) tests all assume that ρ_i varies freely across cross-sections whereas other tests like the Breitung, Levin, Lin, Chu (LLC) and Hadri tests all assume that $\rho_i = \rho$ for all individuals (Baltagi, 2005). Thus, this study uses the Fisher-Augmented Dickey-Fuller (ADF) and Fisher-Phillip Perron (PP) due to its assumptions that allow variations across cross sections. Having established that variables are in the same order of integrations; the study performed the panel cointegration using the Kao Residual Cointegration test. This test is based on Engle-Granger's (1987) two steps for testing co-integration. EngEngle-Granger987) based on the residual test to determine cointegration amongst the variables.

Data and Variables

The study uses annual data from 2000 to 2022 for the four selected East African countries. The selection of the period is influenced by the availability of relevant data on trade flow and economic growth. Secondary data is sourced from the World Bank and the central banks of the selected EAC countries. The slope dummy data variables were generated to differentiate between the periods before and after the EAC became a customs union in 2005.

Empirical Results and Discussions

Panel Unit Root Results

The present study utilized the individual root-fisher PP to determine the panel unit root. The empirical results confirmed that all the variables at the level are non-stationary as such are integrated of order one I(1) whereas at first difference all variables are stationary and thus are integrated of order zero I(0). Therefore, the model formulated in this study is not spurious and the results are robust. The panel unit root results are presented in Table 1. The panel unit root results demonstrate that all the variables—LNGDP, LNEXP, LNIMP, and LNTT—are non-stationary at their levels but become stationary after first differencing. This finding is consistent with previous studies that often observe macroeconomic time series data to exhibit unit root properties (Nguyen, 2020; Zahonogo, 2017). The stationarity of these variables at first difference justifies the use of techniques of co-integration analysis to explore long-run relationships between trade flows and economic growth.

Table 1: Panel Unit Root Results

Variables	AT LEVEL				AT FIRST DIFFERENCE			
	Method	Statistic	Prob.	Order of integration	Method	Statistic	Prob.	Order of integration
LNGDP	PP - Fisher Chi-square	6.27077	0.9592		PP - Fisher Chi-square	27.5121	0.0165	
	PP - Choi Z-stat	1.26882	0.8977	*I(1)*	PP - Choi Z-stat	-2.70993	0.0034	*I(0)*
LNEXP	PP - Fisher Chi-square	5.98520	0.9669		PP - Fisher Chi-square	26.8331	0.0202	
	PP - Choi Z-stat	1.61566	0.9469	*I(1)*	PP - Choi Z-stat	-2.44089	0.0073	*I(0)*
LNIMP	PP - Fisher Chi-square	7.65900	0.9063		PP - Fisher Chi-square	27.5028	0.0165	
	PP - Choi Z-stat	1.42646	0.9231	*I(1)*	PP - Choi Z-stat	-2.43356	0.0075	*I(0)*
LNTT	PP - Fisher Chi-square	1.32051	0.3975		PP - Fisher Chi-square	16.6931	0.0000	
	PP - Choi Z-stat	1.24152	0.25976	*I(1)*	PP - Choi Z-stat	21.4520	0.0001	*I(0)*

Sources: Authors Computations

Panel Cointegration Results

The panel cointegration tests are crucial for determining whether there exists a long-run equilibrium relationship among the variables in the study. In this analysis of trade flows and economic growth in the East African region, we use the ADF (Augmented Dickey-Fuller) statistic to test for cointegration among the variables. The results presented in Table 2 provide insight into the existence of a long-term relationship.

The rejection of the null hypothesis of no cointegration suggests that the variables under study—gross domestic product (LNGDP), exports (LNEXP), imports (LNIMP), and terms of trade (LNTT)—share a long-run equilibrium relationship. This finding aligns with the existing literature, which often finds that

trade openness and economic growth are cointegrated in developing regions (Sun & Heshmati, 2010; Jouini, 2015).

Table 2: Panel Cointegration Results

	Statistic	Prob.
ADF	-2.870213	0.0021
Residual variance	0.134400	
HAC variance	0.102467	

Source: Authors Computations

Regression Results and Discussion

This section presents an interpretation and discussion of the regression results obtained from the study. The results are based on both random-effects and fixed-effects models, which are appropriate for panel data analysis covering Kenya, Uganda, Tanzania, and Rwanda from 2000 to 2022. The regression results, which include the coefficients, standard errors, and significance levels, are summarized in Table 2.

The coefficient for capital input is positive and significant at the 1% level in both models, indicating that an increase in capital input significantly enhances economic growth in the East African region. This finding is consistent with the literature, which emphasizes the crucial role of capital accumulation in driving economic growth (Solow, 1956; Mankiw, Romer, & Weil, 1992). Labour input also shows a positive and significant effect. The coefficients are high, particularly in the fixed-effects model, underscoring the importance of labour in the production process. This result aligns with endogenous growth theories that highlight the contribution of human capital to economic performance (Lucas, 1988). Technology has a significant positive impact on economic growth, as evidenced by the significant coefficients in both models. This finding corroborates the theoretical expectation that technological advancements drive productivity and growth (Romer, 1990). Interestingly, exports show a negative and significant impact on economic growth. This result is contrary to conventional trade theory, which posits that exports drive growth by expanding markets and achieving economies of scale (Balassa, 1978). The negative coefficient suggests potential issues such as over-reliance on a limited range of export commodities or adverse terms of trade, as highlighted in previous studies (Easterly & Levine, 1997). The positive and significant coefficient for imports indicates that imports contribute positively to economic growth. This may be attributed to the importation of capital goods and technology, which enhance productive capacity (Grossman & Helpman, 1991). The terms of trade have a negative and significant impact on economic growth. This suggests that deteriorating terms of trade could be

detrimental to economic growth, possibly due to unfavourable trade conditions or dependency on volatile commodity markets (Prebisch, 1950). RIA as a dummy variable and its interactions with other variables indicate that it has a significant positive impact on economic growth. This result supports the view that regional integration can enhance economic performance by fostering trade, investment, and economic cooperation (Venables, 2003).

Table 2: Random-effects and Fixed-effects Regression Results

Variables	Random Effect	Fixed Effect
InKit	*0.218**	*0.076**
	(0.000)	*(0.004)*
InLit	*0.964**	*0.896**
	(0.324)	*(0.543)*
Tt	*0.884**	*0.976**
	(0.004)	*(0.002)*
InEXP	*-0.245***	*-0.864***
	(0.000)	*(0.005)*
InIMP	*0.346***	*0.642***
	(0.002)	*(0.001)*
InTT	*-0.086***	*-0.128***
	(0.546)	*(0.642)*
RIA (Dumit)	*0.078**	*0.146**
	(0.088)	*(0.421)*
$Dum_{it}InZ_{1it}$		
	-0.178**	*-0.438***
	(0.236)	*(0.535)*
$Dum_{it}InZ_{2it}$		
	0.032**	*0.068***
	(0.033)	*(0.021)*
Cons	*0.784**	*0.984**
	(0.000)	*(0.000)*
No. Obs.	*88*	*88*
R –squared	*0.742*	*0.764*

Note that* and** present statistical significance at 1 % and 5% levels respectively

Table 2 shows the summary of random effects and fixed effects regression results of the final model presented in equation (3). From the results, it is evident that there are significant differences between the two models' effect on each independent variable, a difference that could be accounted for by the distinct underlying assumptions of each model. Thus, the Hausman test is conducted to identify the appropriate model for this study. The null hypothesis is formulated as H_0: The random effect model is appropriate and H_1: The fixed effect model is appropriate. The fixed effect model will be appropriate if the null hypothesis is rejected. Table 3 presents Hausman test results showing the computed probability value of 0.8141 which is greater than the critical value p-value of 0.05 (p > 0.05) which indicates the

non-rejection of the null hypothesis. Thus, the appropriate model for the analysis is based on the random-effects model. Consequently, the random effect model is employed for this study.

Table 3: Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.411	2	0.814

Source: Authors computations 2024

Table 4 presents the regression analysis results using the random effect model for equation (3) and the first-order autoregressive error term AR(1). The analysis indicates that the explanatory variables account for approximately 89% of the variation in the economic growth of EAC countries during the study period, while the remaining 11% is attributed to other unobservable factors captured by the error term, which also influence economic growth. The overall coefficient of determination (0.886) suggests a strong explanatory power. The findings show that the estimates for labor, capital, and technology have positive signs, consistent with economic theory, which expects positive marginal products from production input factors. Except for labour, two estimates are statistically significant at the 1% level.

This implies that there is a direct relationship between the factors of production inputs and the economic growth of EAC countries. The findings are consistent with that obtained by Farahane and Heshmati, (2020). The results on exports are found negative and insignificant impact on GDP at the 5% level of significance ($\beta = -0.186$ and $p > 0.05$). The findings are inconsistent with the trade theory. This implies that a 1% increase in the value of exports values decreases the GDP of EAC by approximately 17%. This result is not surprising since these selected EAC countries experienced a trade deficit during the study. This finding is in line with Bbaale and Mutenyo (2011) who found a similar result in Sub-Saharan African countries. The results on import have a positive and significant impact on GDP at the 5% level of significance ($\beta = 0.368$ and $p < 0.05$). This implies that importing capital goods such as agricultural and industrial inputs tends to improve production and productivity which tend to impact the GDP of EAC countries positively. The findings are similar to Al Hemzawi and Umutoni (2021) who found a positive and significant relationship between imports and economic growth. This finding runs counter to the theory that suggests declining terms of trade result in slower economic growth. The findings of this study provide several important insights into the relationship between trade flows and economic growth in East Africa. The positive impacts of capital, labour, and technology inputs align with established economic theories, emphasizing the importance of these factors in driving growth. The

positive role of imports highlights the significance of integrating into the global economy to access advanced technologies and capital goods. However, the negative relationship between exports and growth challenges traditional perspectives and suggests a need for policy reassessment. This could imply that East African countries should diversify their export bases, enhance value addition, and mitigate the risks associated with commodity price volatility. The significance of the RIA dummy variable underscores the potential benefits of regional economic integration. Policymakers should continue to strengthen regional cooperation frameworks to maximize these benefits.

Table 4: Random-effects estimates AR (1) Results

Variables	(1)	(2)
InKit	0.178*	0.178*
	(0.000)	(0.000)
InLit	0.256*	0.256*
	(0.528)	(0.528)
Tt	0.744*	0.744*
	(0.000)	(0.000)
InEXP	-0.186**	-0.186**
	(0.232)	(0.232)
InIMP.	0.368**	0.368**
	(0.002)	(0.002)
InTT	-0.096**	-0.096**
	(0.346)	(0.346)
RIA (Dumit)	-0.078*	-0.078*
	(0.325)	(0.325)
$Dum_{it}InZ_{1it}$		
	-0.004**	-0.004**
	(0.526)	(0.526)
$Dum_{it}InZ_{2it}$		
	0.006**	0.006**
	(0.723)	(0.723)
Cons	2.38*	2.38*
	(0.000)	(0.000)
No. Obs.	88	88
R –squared	0.886	0.886
Adjusted R-squared	0.764	0.764
F statistic (4, 84)	0.000	0.000

Note that* and** present statistical significance at 1 % and 5% levels respectively

Conclusions and Policy Implications

The study investigates the link between trade flows and economic growth in the East African region, focusing on Kenya, Uganda, Tanzania, and Rwanda from 2000 to 2022. Employing both random-effects

and fixed-effects regression models, the study provides nuanced insights into how various factors such as capital input, labour input, technology, exports, imports, terms of trade, and regional integration agreements (RIA) influence economic growth.

The results indicate that capital input, labour input, and technology significantly and positively contribute to economic growth in the East African region. These findings are consistent with traditional growth theories and emphasize the importance of investing in physical capital, human capital, and technological advancement to drive economic performance. The positive relationship between imports and economic growth suggests that the importation of capital goods and advanced technologies is beneficial for the region. This highlights the importance of open trade policies that facilitate the import of critical goods and services. Contrary to conventional wisdom, exports have a negative and significant impact on economic growth. This unexpected finding may point to structural issues within the export sectors of East African countries, such as over-reliance on a narrow range of primary commodities and unfavourable terms of trade. The negative impact of terms of trade on economic growth underscores the vulnerability of East African economies to external price shocks and the importance of diversifying their economic bases to mitigate such risks. The positive effect of the RIA dummy variable indicates that regional economic integration agreements, such as those within the East African Community (EAC), can significantly enhance economic growth by promoting intra-regional trade and cooperation.

The findings of this study have several important policy implications: First, policymakers should prioritize investments in physical and human capital, as well as in technological advancements, to sustain long-term economic growth. Secondly, there is a need to reassess and reform trade policies to address the negative impact of exports. Diversifying the export base and adding value to export commodities could help mitigate the adverse effects and enhance the benefits of international trade. Finally, continued support for regional integration initiatives is crucial. Policymakers should work towards deepening economic cooperation within the EAC to fully realize the potential benefits of regional trade agreements.

To build on the findings of this study, future research should explore in investigating the impact of trade flows on specific sectors within East African economies to provide more granular insights into the dynamics of trade and growth and analyse the effects of specific trade policies and agreements on economic performance could help identify best practices and inform policy reforms.

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