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The Effect of Framework Economic Partnership Agreement on East Africa Community Countries' Trade with the European Union

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Abstract

Economic Partnership Agreements (EPAs) are trade and development agreements between the European Union (EU) and African, Caribbean and Pacific (ACP) countries. The main objective of EPAs is to promote trade and sustainable development among the regions. This paper gives early ex-post empirical evidence analysis on the impact of provisionally applied EPAs on two-way trade flows between the East African Countries and the EU. The study examines the effect of the Framework Economic Partnership Agreement on East African Community trade with the EU for the period of twenty-eight (28) years from 1990 to 2018. The analysis was carried out to estimate the effect of the interim EPA on EAC trade with the EU using the Gravity model approach. The estimation is conducted using the fixed effects model. The findings show that the Gross Domestic Product of East African countries has a positive and significant relationship with trade flows between East African and EU countries. Interim EPAs are found to be negative and insignificant on East African Countries - EU trade flows. The study concludes that when combined across all economic sectors, temporarily implemented EPAs have not, on average, affected East African Countries -EU trade flows.

Keywords: Gravity model approach, Economic Partnership Agreement, EAC, EU

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Introduction

Growth in world trade is the result of both technological developments and concerted efforts to reduce trade barriers (IMF, 2011). The miraculous growth and economic development of the East Asian countries is the natural result of their liberal trade, outward-looking, and market-oriented policies (Wade, 1992). While expanding export markets is widely accepted as beneficial, increases in imports can be seen as threatening, replacing domestic production with goods and services from abroad (Amoah and Loloh, 2009).

In small open economies like that of the East Africa Community (EAC), countries' external trade is an integral component of the nation's growth and development agenda. In the ever-evolving landscape of global trade, international agreements and partnerships play a pivotal role in shaping the economic destiny of nations and regions. The EAC, a regional intergovernmental organisation comprising Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda, has been a prominent player in the dynamic trade relations between African nations and the European Union (EU). In this context, the Framework Economic Partnership Agreement (FEPA) between the EAC and the EU stands as a critical milestone in their collaborative efforts to facilitate commerce and foster economic growth (McIntyre, 2005). Consequently, foreign trade promotion has been central to all EAC government policies (Meredith and McIntyre, 2005). Hence, at the end of 2007, the EAC countries comprising Burundi, Kenya, Rwanda, Tanzania and Uganda, by then entered into an inter-regional interim or the FEPA with the EU counterparts. Under the agreement, goods traded among the parties will be accorded favourable treatment relative to those originating outside the region regardless of their membership status with the World Trade Organization (WTO) (Domician, 2018).

Economic theories and empirical studies show that trade liberalization across borders of participating members in a regional trade arrangement may increase intra-regional and external trade. This may be a result of increased competition, capital flows and larger markets for local producers. A well-designed trade agreement increases competition among domestic firms and promotes productive efficiency gains. This improves the quality and quantity of inputs and goods available to the economies (Grossman and Helpman, 1990).

However, scholars argue that trade agreements may have trade-diverting effects away to non-member countries and it is difficult to assess whether such trade creation will outweigh trade diversion effects (Clausing, 2001). As part of the 2000 Cotonou Partnership Agreement, the EU and 79 African, Caribbean and Pacific (ACP) countries agreed to negotiate free trade agreements (FTAs), which are known as Economic Partnership Agreements (EPAs) (Brandi et al., 2017; Keijzer and Bartels, 2017). The EPAs seek promises to liberalise trade reciprocally to make trade relations between the EU and the ACP nations WTO compatible, in contrast to the unilateral trade privileges offered by the EU to ACP countries under the Lomé Conventions until the end of 2007 (Domician, 2018.

Despite the ambiguity regarding the benefits, it is expected that the EAC-EU EPAs will create more trade than diverting away from the two regions. It can be hypothesised that the EAC is likely to increase its exports following granting duty-free quota-free (DFQF) access for all its goods and services (including those not covered under the Cotonou Agreement) to the EU market. It is of interest to investigate the implications of the EAC countries by negotiating, signing, implementing and evaluating full EPAs on the trade performance in the short, medium and long run. The gravity model approach has assumed great prominence in explaining the trade pattern in emerging economy countries, especially in Latin America and Asia, as the model provides a practical framework for evaluating the changing pattern in international trade and growing intra-developing economy countries' trade.

The overall objectives of EPAs are to: contribute to economic growth and development; promote regional integration, economic cooperation, and good governance in EAC; promote gradual integration of EAC into the world economies; foster the structural transformation of EAC economies; improve EAC capacity in trade policy and trade-related issues; establish and implement an effective, predictable and transparent regional regulatory framework for trade and investment in EAC; and strengthen the existing relations between EAC and EU based on solidarity and mutual interest.

The FEPA represents a comprehensive trade framework designed to enhance market access, promote sustainable development and support the economic

ambitions of EAC countries within their trade relations with the EU. While the objectives of the agreement are laudable, the actual effects and outcomes of the FEPA on trade dynamics between the EAC countries and the EU remain a subject of significant academic and policy interest.

Therefore, this study seeks to delve into the multifaceted dimensions of the FEPA and its influence on the trade relationships between the EAC member states and the EU by using of Gravity Model Approach. The study provides a comprehensive analysis of the agreement's impact, both positive and negative, on various aspects of the trade, including export patterns, market diversification, economic development and social well-being within the EAC region. The study has different contributions to the literature. First, it contributes to the body of knowledge by adducing new insights into the determinants of bilateral trade between the EAC region and the EU. Second, it delineates knowledge gaps on bilateral trade in the EAC and proffers conclusive and persuasive empirical evidence on the same. Third, it utilises an empirical estimation procedure that integrates spatial and temporal approaches for the first time in the EAC region. Fourth, the study anticipates providing valuable insights and policy recommendations to assist decision-makers in both the EAC and the EU in making informed choices and adjustments to the FEPA to enhance the welfare and economic prospects of the EAC countries. Finally, it makes use of the most extensive dataset to date, covering a span of 28 years from 1990 to 2018.

The rest of the paper is organised as follows: section two reviews the theoretical and empirical studies that have been used to explain the pattern of EPAs among regions while section three discusses the methodology, data, and variables used in this study. Section four presents and discusses the empirical findings whereas section five draws conclusions and policy implications.

Literature Review

Theoretical Literature Review

The analysis of this study is done using the Gravity model developed by Tinbergen (1962) which is based on Viner's model (1950) to examine the trade (creation and diversion), economic and welfare effects of the regional integration arrangements. Over several years, the gravity model approach has been the workhorse of empirical studies since its first application to analyse the

determinants of bilateral trade flows by its pioneers. The gravity model studies have been extensively used to highlight the importance of analysing the determinants of bilateral trade flows (Tinbergen 1962; Pöyhönen 1963). The gravity approach of trade specifies that the trade volume between nations is proportional to their sizes of economies or income and is inversely related to the geographical distance between the nations.

Tinbergen (1962) and Pöyhönen (1963) first employed the gravity model approach to examine and evaluate international trade flows. Eita (2007) later applied the gravity model to evaluate migration and other social flows in terms of the gravitational forces of human interaction. A theoretical basis for gravity models using the Armington assumption where goods are differentiated by country of origin was first developed by Anderson (1979). Employing the gravity model approach to trade was initially criticised as lacking a basis and foundation from trade theory although it exhibited high statistical explanatory power (Matyas et al. 2000). Scholars also argued that the gravity model did not incorporate models of international trade such as the Heckscher-Ohlin (H-O) model and comparative advantage of Ricardo as the basis for trade (UNCTAD 2012). Linder's hypothesis (1961) challenged Heckscher-Ohlin's theory explaining that it ignored demand-related factors which are essential in explaining patterns of international trade. Linder's hypothesis prediction is that most trade should occur between countries with similar demand structures and a similar level of economic development. The hypothesis is demand-side oriented, which contrasts with the supply-side-oriented classical theories of international trade.

Dixit and Stiglitz's (1977) model of monopolistic competition argues that a consumer's utility is positively related to a variety of manufactured products and each variety is produced subject to the increasing returns to scale that results when an element of fixed costs is added to labour cost that is proportional to outputs. This argument, however, does not hold anymore since there has been some advancement in empirical studies and literature.

Linnemann (1966) justified the application of the gravity model approach by suggesting that it is a reduced form of a four-equation partial equilibrium model of input demand and export supply with prices excluded. However, this was later

found to be inconsistent with the multiplicative form of the partial equilibrium model. The gravity model of trade has been applied in many empirical studies aimed at evaluating the bilateral flows of trade and the effects of regional trading arrangements on trade. The basic gravity model is expressed as follows:

$$Trp = \frac{\alpha(Y_r Y_p)^{\beta 1}}{(Dist_{rp})^{\beta 2}} \quad (1)$$

The variables are employed as follows: r ≠ p; Trp shows total merchandise between countries r and p; Yr is the country's national income; Yp is the country's p national income; Distrp is the distance between countries r and p's commercial centres; β1 is expected to be positive; Y, a country's income, is expected to be positive since a high Y means a higher ability to produce and export; Distance is another determinant of bilateral trade between countries r and p; and β2 is expected to be negative since it is a coefficient of transport costs, which are a resistant factor to trade.

Empirical Studies

There has been some discussion of the non-reciprocal schemes' implications on beneficiaries' exports in the literature (Ornelas, 2016). The majority of more recent studies show that they had a favourable impact on exports from developing countries to the EU, with an Explicit Business Agreement (EBA) scheme's impact being stronger than the Generalised System of Preferences [(GSP) programme (Gil-Pareja et al., 2014; Cicera et al., 2016; Gradeva and Martnez-Zarzoso, 2016)]. Using 92 countries, Baxter and Kouparitsas (2006) examined the factors influencing international trade and found that bilateral factor endowments were robust determinants of trade, and the higher the trade, the more equal the endowments across the two countries. Bilateral trade was indicated to be lower if two countries had similar industrial structures and shared the same level of development. The study also found that bilateral trade and fixed exchange rates were positively related. Similar results were found by Achey (2006) who applied the gravity model for a 5-year sub-period between 1970 and 2000 in 14 countries to examine the factors influencing trade flow volumes between various countries in the world. However, his findings indicated that the geographical distance had a negative impact on the volume of trade while common currency, GDP, GDP per capita, common official language, common

frontier and common colonial past had a positive impact on the volume of bilateral trade.

De Groot et al. (2004) found similar results when investigating the impact of institutions on trade flows using a gravity model by incorporating determinants such as trade policy, common history, geographical proximity and language. Rahman (2004) found similar results in evaluating Bangladesh's trade flows with its trading partners using panel data estimation methods with the application of a generalised gravity model approach. The findings indicated that the trade of Bangladesh was positively determined by its size of economies, openness of trade and per capita GDP differential of trading countries.

In their study, Filippini and Molini (2003) employed the gravity model framework to examine trade dynamics between emerging East Asian countries and specific developed economies. Their findings revealed that all coefficient signs were in alignment with the underlying model assumptions, underscoring the robustness of the approach in explaining trade patterns. Rahman (2009) explored Australia's global trade potential with its 57 trading partners for the period of 1972-2006 and found that Australia's bilateral trade is affected positively by income, openness of trading partners, common language and free trade agreement. These findings were supported by Ekanayake et al. (2010), Tripathi and Leitao (2013) and Karambakuwa et al. (2015).

However, Anderson and Van Wincoop (2003) indicated that gravity model estimation could greatly improve by incorporating multilateral resistance measures such as trade barriers. The study found that measuring multilateral resistance employing remoteness variables based on measures of distance did not capture border effects hence it was much better to consider the effect of trade barriers on prices in solving the gravity model. The same findings of Anderson and Van Wincoop (2003) were found by Feenstra (2004) in his study by the inclusion of country-specific fixed effects with a little loss in efficiency. However, Feenstra's approach does not allow for multilateral resistance to be calculated explicitly which is one of the weaknesses of this approach. To overcome this weakness, Baier and Bergstrand (2007) came up with a different way, which gives results consistent with Anderson and Van Wincoop (2003) and allows for multilateral resistance terms to be solved.

The majority of studies have been conducted to investigate the effects of the FTAs around the globe. Some studies found FTAs to have trade creation or trade diversion effects or both depending on the specific characteristics of the FTA in question. In general, studies indicate that a well-designed FTA can result in trade creation whereby imports from non-FTA member economies are replaced by efficient domestic suppliers in the region. To summarise the key findings from the previously reviewed literature, let us get back to the original question: What are the possible justifications for the EAC countries' support or opposition to trade liberalisation with the EU? Several reasons are presented by trade theories and the discussions surrounding the effects of trade liberalisation and EPAs, especially on economic development. Based on this, a theory is developed to explain why the trade preferences of the EAC members varied. According to a recent analysis of the export flows from the EAC countries, each of them has a competitive advantage across a range of industries and product categories (Chingarande et al, 2013). Therefore, to compete in international markets and benefit from the export of goods they produce at a comparative advantage, all EAC countries should seek free trade agreements, according to classical trade theory and post-Washington consensus perspectives.

To the best knowledge of the authors, no study has been conducted to analyse the effect of the interim EPAs between EAC and EU trade using a gravity model approach. This study contributes to a better understanding of the consequences of trade agreements between regions with diverse economic structures and objectives. It is essential to evaluate whether the FEPA has fulfilled its intended purposes and whether there are areas that require adjustment or improvement. Therefore, this study analyses the impact of a framework for the EPA on EAC trade with the EU by employing the gravity model approach.

Methodology

Bilateral trade modeling has been developed and used over the last 40 years (Kepaptsoglou et al., 2010). They argue that the gravity model is well known by researchers and has been extensively applied for analysing trade policy implications because of its explanatory power and considerable empirical robustness. However, in his criticism of the gravity model, Bergstrad (1985) argues that despite the consistently high statistical explanatory power of the gravity models, its use for predictive purposes has been inhibited owing to an

absence of strong theoretical foundations. Traditionally, the Ordinary Least Squares (OLS) method has been used as a technique for estimating the coefficients of the gravity model approach specification in its log-linear form. In analysing and evaluating policies still, OLS is applied. Researchers have indicated methodological and modeling flaws in the development of gravity models using OLS (Siliverstovs and Schumacher, 2008). Peridy (2005) applied a variety of modeling methods (OLS, random effects fixed effects, GMM, ABB and HTM) and came up with several comments by comparing their results. Similarly, Arellano and Bond (1991) advocate for the application of the GMM technique for the estimation of dynamic panel models or panel models with predetermined rather than exogenous right-hand variables. The traditional gravity model has been criticised in that it only employs income and distance to model transport costs. The model follows the general expression of the linear augmented gravity model by Achey (2006) as follows:

$$InT_{rpt} = \alpha + \beta_1 InY_{rpt} + \beta_2 InZ_{rpt} + \beta_3 V_{rpt} + \beta_4 W_{rpt} \quad (2)$$

The variables are employed as follows: T_{rpt} is the total merchandise trade for country r to country p during year t; Y_{rpt} shows a vector of variables, Gross Domestic Product and population that change over time for trade partners' r and p during year t; Z_{rpt} indicates a vector of variables that are constant over time but change with trading partners–they include weighted distance measured in kilometers between countries and the surface area of partner countries expressed in square kilometers; V_{rpt} indicates a vector of dummy variables that change over time and also change according to the trading partners–for example, a value of 1 if countries r and p belong to the same regional community in year t or 0 when otherwise; and W_{rpt} indicates dummy variables specific to partner countries r and p but are not time-dependent–for example, language = 1 when both countries have a common official language or 0 when otherwise.

Model Specification

Econometric analysis is based on the gravity trade model in keeping with the substantial body of literature on the ex-post evaluation of (international) trade policies. In its simplest form, the gravity equation defines bilateral trade as a function of the GDPs of trading partners and their proximity to one another.

The study baseline model specification is given by the following, considering an increased gravity equation:

$$In(T_{ijt}) = \alpha_0 + \beta_1 EPA_{ijt-1} + \pi_{ij} + \delta_{it} + \varepsilon_{it} + \varepsilon_{ijt} \quad (3)$$

The variables are employed as follows: In (T_{ijt}) represents the natural logarithm of either country's i' imports or exports expressed in current $ from/to the East Africa countries (j) in year t, α0 is a constant and ε_{ijt} is the error term.

This study analyses the gravity model in log-linear form using goods exports and imports functions. It used panel datasets for the period of twenty-eight (28) years from 1990 to 2018 to analyse the trade effects of the EAC-EU EPAs on the five EAC member states, namely Burundi, Kenya, Rwanda, Tanzania and Uganda. This form of the model allows for the interpretation of coefficients as elasticity, except for dummy variables, which are not expressed in log form. According to Gelman and Hill (2007), the coefficients on the natural log scale are directly interpretable as approximate proportional differences. Bilateral trade flows between countries are explained by their economic sizes (GDP), per capita GDP, and real GDP growth destination economic region j, impedance variables between economic regions i and j, such as the existence of other FTA arrangements, CPI, terms of trade indexes, trade openness and distance to the rest of the major trading partners.

The study applied the mass variables which are included in most gravity model specifications to represent demand and supply. The model, following Martinez-Zarzoso and Nowak-Lehmann (2003) is specified as follows:

$$InTF_{rpt} = \alpha + \beta_1 In(GDP_{rt}) + \beta_2 In((GDP_{pt}) + \beta_3 In(RGDP)_{rt} + \beta_4 (InDist_{rpt}) + \beta_5 (InterimEPA_{rpt}) + u_{rpt} \quad (4)$$

Variables for Analysis

Trade flows (TF_{rpt}) represent the trade flows of the country r with country p in year t, for example, Tanzania and France's bilateral trade flows in the year t. It is a sum of imports and exports. Most of the empirical studies on the gravity model approach employed the bilateral trade flow as the dependent variable (Rahman, 2004). This study examines how total trade flows (TTF) are influenced by explanatory variables. GDP_{rt} indicates the measure of a country's capacity to

produce goods and services for local and foreign markets and indicates the range of goods and services available for export. GDP is measured in nominal terms expressed in US dollars. Its coefficients are expected to be positive as income positively affects trade flows. It is an indicator of the size of a country in the model and measures the trading capacity of a country. GDP is predicted to positively affect the bilateral trade. Gross Domestic Product (GDP_{pt}) is an indicator of the capacity to consume locally produced and imported goods for the country p. Distance ($Dist_{rpt}$) indicates a proxy for transportation costs and all other trade costs between partners; it is measured in kilometres. The transportation costs are cheaper if countries are close to one another. It is expected to be negative since it is a resistance factor. Real Gross Domestic Product Growth ($RGDP_{rt}$) is an inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year. Interim EPAs (Interim EPA_{rpt}) indicate a dummy variable capturing trade between the EU and EAC that signed EPAs. It captures the trade impact of interim EPAs on the bilateral trade between the EU and the EAC with EPAs. The variable takes the value of 1 if both trading partners are members of the interim EPAs and 0 when otherwise. The coefficient can be negative or positive.

Data Sources and Selection of Regression Model

The data for analysis were obtained from the World Bank database, the International Monetary Fund's International Financial Statistics (IMF-IFS), Direction of Trade Statistics (DOTS), the European Union database, the WTO trade statistics, the EAC database, UNCTAD and COMTRADE.

The study used unbalanced panel data. Two types of regression models can be employed for unbalanced panel data, namely the random effect model (REM) and the fixed effect model (FEM). The Hausman test determines whether to employ the fixed or random effect approach by testing the following null hypothesis:

Ho: Ho: Difference in coefficients is not systematic.
H1: Ho: Difference in coefficients is systematic.

The FEM should be used if the null hypothesis is rejected. The results are shown in Table 1, which shows that the p-value is 0.003. This means that the study

rejects the null hypothesis that the difference in random and fixed coefficients is not systematic at all levels of significance. The FEM is an efficient estimator of the data and it is therefore adopted. The Hausman test results indicate that the FEM is appropriate for this study compared to the REM (Table 1).

Table 1: Hausman Test

Chi2(10)	56.778
Prob>Chi2	0.003

Source: Authors' Computation

Empirical Results

Results of the Multicollinearity Test

The study used the Variance Inflation Factor (VIF) to test the multicollinearity of the explanatory variables. If VIF is greater than 10, it indicates that there is a multicollinearity problem (Gujarati, 2007). The results in Table 2 show that VIF is less than 10, indicating no presence of a multicollinearity problem.

Table 2: Summary Results of Multicollinearity (VIF)

Variables	VFI	1/VIF
GDP_{rt}	1.18	0.841396
GDP_{pt}	1.58	0.675739
$RGDP_{rt}$	1.28	0.562453
$Dist_{rpt}$	1.32	0.621145
EPA_{rpt}	1.20	0.665009
Mean VIF	1.29	

Source: Authors' Computation

Regression Results and Discussion

Regression analysis for the EAC-EU function was carried out the results are shown in Table 3. The results demonstrate that the model is accurately specified, as evidenced by a high goodness of fit, with an adjusted R-squared value of 0.7865 and a statistically significant F-value of 0.000.

Table 3 shows the findings of estimating the benchmark regression models, including country-fixed effects in the regressions. As shown in Table 3, a large part of the trade inflows between East African Countries and the EU could be

explained by several drives including GDP, EPA, geographical and economic distance, and interaction in the export, import and bilateral trade flows between the EU and EAC.

The results of the regressions show that the GDP of East African Countries has a positive and significant relationship with the trade flows ($\beta = 0.2835$ and $p < 0.05$), while the results of EPAs indicate that EPAs have a negative and insignificant impact ($\beta = -0.13338$ and $p > 0.05$). The findings further indicate that, when combined across all economic sectors, temporarily implemented EPAs have not, on average, affected EAC-EU trade flows. This implies that an increase in the GDP of the EAC would lead to an increase in trade flow between East African Countries and the EU. However, the interim EPAs have reduced trade flows between the EU and East African countries. The results do not come as a surprise as East African Countries have already benefited from extensive tariff advantages in the EU market during the pre-EPAs era. Because of this, the EPAs improvements to market access are, if they exist at all, quite slight.

The findings suggest that the openness of East African economies to international trade should be associated with growth, which is in line with other empirical studies (Achey, 2006; Karambakuwa et al, 2015). They found that GDP has a positive impact on the volume of bilateral trade. The results show that the GDP of EU countries has a positive relationship but it is insignificant in determining trade floors between the two trade blocks ($\beta = 0.2529$ and $p > 0.05$). Furthermore, real GDP in East African countries has a negative and significant impact on the trade flow ($\beta = -2.841$ and $p < 0.05$). The coefficient of a variable is negative indicating that over time EAC's exports to the EU decreased as found in non-EU markets hence suggesting trade diversion. The findings are consistent with Ekanayake et al. (2010) who found a negative and significant relationship between real GDP and trade flows.

The results show that geographical distance has a negative and significant impact on the volume of trade flows between the EU and East African Countries ($\beta = -0.1224$ and $p < 0.05$). This implies that the economic distance between the EU and EAC has a significant negative influence on the given countries' bilateral trade inflows. This indicates that when two countries are far from each other, transaction and transport costs are expected to be high and then the trade volume decreases. The findings of this study are consistent with Achey (2006)

who found that geographical distance had a negative impact on the volume of the trade flow.

Table 3: Regression Results with the Dependent Variable Being the Total Trade Flow

Variables	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
GDP EAC	0.2835	0.1062**	4.53	0.001	-0.0396	0.4067
GDP EU	0.2529	0.2972**	1.61	0.466	0.4185	1.6673
RGDP	-2.841	0.6085**	-4.49	0.000	- 1.4531	4.0098
EPA	-0.1338	0.0207**	-1.46	0.684	-0.1772	0.0903
Dist.	-0.1224	0.5084**	-3.48	0.002	0.412	1.5674
cons	245.69	38.45	6.39	0.000	164.90	326.49

Source: Authors' Computation

Notes: (5.2317) = 131.57 *** p<0.01) - statistical significance at 1% level Prob > F= 0.0000 ** p<0.05 - statistical significance at 5% level: R^2: within = 0.7865 : between = 0.3280 Overall = .2089

Conclusion

The study analyses the impact of the FEPA on EAC trade with the EU. A set of two equations was estimated for each member state of EAC: export and import gravity models. The fixed effect model was used in the estimation for the period from 1990 to 2018. The study concludes that the factor that positively determines trade flows between the EU countries and the EAC is the GDP of the EAC. The implementation of EPAs between the EU and certain EAC members leads to a decrease in their trade volumes.

Given the fact that the interim EPAs have similarities with the impending comprehensive EPAs, which EU and African countries are currently negotiating for, the conclusion is that the comprehensive EPAs would also reduce the trade flow between the trading blocks. The trade diversion effect is evident as all the exports and imports among EAC member states and the EU decreased with time, which implies that EAC countries were trading less during the interim EPAs compared with the trade before FEPA.

The study further concludes that EAC countries would record low economic benefits and trade diversion effects by signing full EPAs. The EAC was found

to trade more with non-EU countries even with the implementation of the interim EPAs in 2007. This suggests the existence of non-tariff and non-quantitative restrictions, such as high sanitary and phytosanitary standards instituted by the EU, supply constraints, low productivity in EAC, low production capacities in the EAC, logistical challenges in connecting the two markets, the existence of EPAs with other competing blocs, low investments in the EAC and lack of trade facilitation measures.

The findings of this study are useful in the formulation of policy at the country and regional levels. First, the GDP of EAC countries contributes to the increased trade volume. Thus, countries in the EAC should concentrate on areas of a comparative advantage to improve economic growth and GDP. Second, countries from the EAC and the EU need to revise the provisions of the EPAs, which are similar to the provisions of the interim EPAs. This study shows that there are inherent problems with the design of the interim EPAs. Therefore, before the adoption of the comprehensive EPAs, there is a need to redraft the provisions or abandon them altogether and come up with a new agreement. Third, EAC countries need to take precautionary measures in engaging the EU for negotiations as the about-to-be-concluded and consequentially signed full economic partnership agreement may turn out to be a one-sided and win-lose arrangement in favour of the EU. With the advanced technology, industrialisation, abundant skilled labour force, high productivity, production efficiency and high investments in the EU countries, the EAC economies may find themselves as net importers, attracting stiff competition for their locally produced goods, low government revenue and de-industrialise as their markets will be flooded with cheaper imports originating in EU. Fourth, there is a need for EAC countries to conduct adequate preparations including carrying out in-depth analyses and simulations of any international or regional trade policy instruments before signing agreements.

This study is limited as there is an argument that the gravity model lacks a strong theoretical foundation. However, the model remains useful in the analysis of international trade flows and free trade agreements. Further research can examine the bilateral trade relations that the EAC has with other countries such as India or China and find out whether or not such relations have more benefits than the bilateral relations with the EU.

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