Economic growth effects of de facto and de jure trade globalization in ECOWAS

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Abstract

This paper examines the dynamics of trade globalization by analysing and comparing the economic growth effect of overall trade globalization with the growth effects of de facto and de jure trade globalization in the economic community of west African states (ECOWAS). Using fixed effects and random effects models, we separate the de facto measure of trade globalization from the de jure measure to prove that de facto trade globalization significantly and positively contributes to economic growth in ECOWAS, whereas de jure trade globalization does not. We also use pooled mean group estimates to prove that the growth effect of de facto trade globalization is significant only in the short run. By implication, relying only on the results of overall trade globalization can be misleading for policymakers, considering that the de facto and de jure measures of trade globalization yield different growth results. The findings of this study can aid policymakers within the region in identifying proper measures and tailoring trade policies to gain reasonable competitive advantage among other economic communities.

Keywords: *trade globalization, de facto, de jure, economic growth, ECOWAS*

JEL Classification: F13, F43, F62

1 INTRODUCTION

The question of how globalization benefits economic growth has been a rather controversial one in recent times as more data and empirical studies become available. While some empirical studies point towards a positive relationship between economic growth and openness (Jouini, 2015; Kim, 2011; Chang et al., 2009), others point towards an inverse relationship or sometimes no correlation at all (Ulasan, 2015; Musila & Yiheyis, 2015). This lack of conclusiveness presents the need to distinguish between de facto and de jure globalization and the need to separate financial and trade globalization within the economic dimension of globalization (Gygli et al., 2019), thus offering an opportunity to examine varying aspects of the subject in relation to economic growth.

As far as trade globalization within the Economic Community of West African States (ECOWAS) is concerned, the measure of its effects on economic growth is so far inconclusive, as most measures have focused primarily on economic globalization without distinguishing between its dimensions. What is lacking is a well-defined analysis containing a clear distinction between de facto and de jure measures of trade globalization, and their individual impact on economic growth within the community. In response to the lack of a clear distinction, this paper detaches trade globalization from financial globalization in the overall economic globalization index and examines its impact on economic growth in ECOWAS. Furthermore, the paper distinguishes between the de facto and de jure measures of trade globalization and systematically examines their unique impact on economic growth within the ECOWAS region.

To the best of our knowledge, this is the first paper to analyse the distinctive impact of de facto and de jure measures of trade globalization on economic growth in ECOWAS, with the background that de jure and de facto indicators can produce growth results that vary systematically (Quinn et al., 2011).

While de facto trade globalization emanates from actual flows and activities, de jure trade globalization is fundamentally policy-induced and therefore measures resources, policies, institutions, and conditions that facilitate the actual flows and activities (Gygli et al., 2019). By isolating and analysing the trade dimensions of globalization as well as analysing the de facto and de jure measures separately, we provide new insights, which offer a more specific representation of the role that actual flows in trade and policy-induced trade globalization play in the economic growth process in ECOWAS.

2 THEORETICAL BACKGROUND

Globalization is a broad concept within which multiple dimensions can be elaborated. These dimensions include political, economic, cultural, social, and even environmental elements. Quantifying these elements and measures of globalization has historically been a challenge. The KOF Globalization Index, in its revised format, differentiates between de jure and de facto globalization measures. This is done for all three dimensions of globalization: economic, political, and social. At the same time, the de facto and de jure measures are also calculated for the various sub-dimensions of the three listed dimensions; thus, we obtain de jure and de facto interpersonal, trade, financial, cultural, and informational globalization. The KOF globalization index is among the most comprehensive by far, as the distinction of globalization dimensions into de facto and de jure measures significantly mitigates the risk of biased results, which were hitherto caused by the combination of both measures (Martens et al., 2015). Trade globalization is a fundamental element of economic globalization that considers the proportion of production that crosses national boundaries by means of external or foreign trade. It describes the extent of increase of global commodities exchange relative to commodities exchange within the national boundaries and is driven by the decline in the cost of communication and transportation as well as the stability of hegemony (Chase-Dunn et al., 2000).

The de facto measure of trade globalization is described as the exchange of goods and services over long distances. This measure is calculated using the import and export of goods and services as a percentage of GDP. The sub-dimension is also calculated with a measure of trade partner diversity using the inverse of the average over the Herfindahl-Hirschmann index (HHI) for goods import and export to account for geographical distribution of trade linkages and invariably favours countries who trade more globally than regionally (Gygli et al., 2019).

De jure trade globalization, on the other hand, is described as policies that aid and stimulate the flow of cross-border trade. The KOF globalization index measures this sub-dimension with variables on trade regulations, tariff rates, free trade agreements (FTAs – being the number of bilateral and multilateral free trade agreements), and trade taxes. The trade regulation component of this measure accounts for both compliance costs of exporting and other non-tariff barriers of trade, while the trade taxes component is comprised of income taxes on foreign trade as a percentage of total national income per country (Gygli et al., 2019).

ECOWAS is among the largest of the eight recognised Regional Economic Communities (RECs) in Africa, comprising of 15 member states geographically located in the west of the continent. The ECOWAS project was established in 1975, with one of its major pillars being the creation of a single and large trading bloc by means of effective economic cooperation. Thus, by its inception, ECOWAS sought to achieve a region without borders that can bring the

various national macroeconomic policies into harmony and stimulate the private sector in an effort to achieve sound economic integration. Consequently, trade promotion naturally became a key component of its objectives.

When compared to other similar economic integrations, trade flows in ECOWAS are low because trade is majorly focused on the agricultural and mining sectors (the extractive and raw materials sectors). Additionally, low industrialization is prevalent in most of the member states, which also limits the exports of value-added commodities (Osabuohien et al., 2019). All in all, ECOWAS has made strides to improve its trade flows, but the efforts leave much room for improvement. There is new evidence that if the economies of ECOWAS become more digitalised, trade is more likely to improve. This evidence points to the vital role that technology and digitalisation can play in enhancing trade flows in the region (Abendin et al., 2022).

The correlation between trade and growth has been on the radar of current and past economic literature, with different conclusions obtained by different analytical methods. As far as observable macroeconomic variables and their corresponding effects are concerned, some studies have concluded that trade has a positive and significant effect on income while acknowledging country-specific variations (Adjei & Kajurová 2021; Frankel & Romer 1999). Trade is also seen as a major driver of macroeconomic goals and long-term development in developing countries (Okenna & Adesanya, 2020).

Solow's neoclassical growth model indicating long-run economic growth of technological advancement as exogenous has served as the basis for modern economic growth theory but has also been critiqued by authors like Sala-i-Martin (1996) with their endogenous growth model, which invariably posits a positive relationship between trade openness and economic growth while accounting for human capital accumulation (HCA) and the spillover of knowledge (Fatima et al., 2020). Concomitantly, the Export-led Growth Hypothesis (ELGH) postulates that economic growth is achieved with the growth of exports as a major determinant. In this sense, this growth theory emphasises the importance of economies opening up and boosting international trade. In view of the many conflicting research outcomes of trade openness effect on economic growth, Fatima et al. (2020) examined the same while accounting for HCA and concluded on a non-linear pattern between trade and growth. They further expound on the possibility of trade to negatively impact growth in countries with low HCA and vice versa, making trade and HCA complimentary. This means that when HCA levels are high, the growth effects of trade openness may be high. This is certainly a relevant discovery given the current trend of fluctuating and uneven global growth.

In a study published by the Central Bank of Nigeria, Arodoye and Iyoha (2014) employed a VAR model on quarterly time-series ranging from 1981 to 2010 in an effort to investigate the linkage between trade and economic growth. Their findings point to a long-run and stable relationship between trade and growth, and the result of their variance decomposition suggests innovations in international trade as a major cause of variation in Nigeria's economic growth. Accordingly, they recommend expansionary trade policies as a catalyst to the country's economic growth. In a similar study, Bakar and Afolabi (2017) found a long-run relationship between trade volume and economic growth and a bidirectional causality between FDI inflow and growth, which is also an obvious outcome of globalization.

Citing commodity dependence and the insufficient value-added exports in ECOWAS, Amaghionyeodiwe et al. (2014) examined the effect of export composition and diversification on GDP per capita and GDP growth in ECOWAS and found manufacturing value-added and export diversification to have a significant positive impact on income growth per capita. The

implications of their findings suggests that the content of exports matters as much as the volume of exports, implying that regions with diversified exports tend to experience higher growth rates.

Iyoha and Okim (2017) also investigated the effects of trade on growth among the ECOWAS member states, with their findings revealing trade as having a positive and significant impact on growth among the ECOWAS member states. This confirms the hypothesis that trade induces growth. It also supports the theory that open economies tend to gain more from trade, and that international trade, which is a direct result of the globalization process, often makes up a significant portion of GDP in a manner that is valuable for growth of profit, as vital parts of the economy are stimulated (Adjei & Kajurová, 2021; Surugiu & Surugiu, 2015).

While such studies measure trade and trade openness against economic growth, they do not accurately capture the full dynamics of trade globalization. Consequently, these literature lack specifics of the actual elements within trade openness that contribute to growth. De facto trade globalization represents actual trade flows and activities, while de jure trade globalization is the element that is policy-induced, such that it is primarily characterised by policies and plans that facilitate or enhance international trade. The need to examine these two measures individually and concurrently is vital in today's world economy where policy measures are not always successfully implemented, resulting in disparities in actual flows and intended policy outcomes.

3 RESEARCH OBJECTIVE, METHODOLOGY AND DATA

The main objective of this study is to evaluate the distinct effects that de facto trade globalization (actual trade flows and activities) and de jure trade globalization (trade policy-induced globalization) have on economic growth in the ECOWAS countries. Essentially, this study seeks to break down trade globalization into its de facto and de jure measures in order to understand which of those two measures have an actual impact on economic growth. To achieve this objective, we employ data from the KOF globalization index, which accounts for several aspects of the trade dimension that are often omitted in existing studies. Based on the stated objective, we attempt to answer the following research questions:

- Research question 1: Does overall trade globalization significantly affect economic growth in ECOWAS?
- Research question 2: How does de facto trade globalization affect economic growth in ECOWAS?
- Research question 3: How does de jure trade globalization affect economic growth in ECOWAS?

By reason of the lack of comprehensive data, we omit Cabo Verde, Guinea, Guinea Bissau, Liberia, and Sierra Leone from the sample of ECOWAS countries. This omission is because of too many missing values in the dataset of multiple variables for these countries. It becomes a necessary step to avoid bias in the dataset and subsequent forecasting. The remaining 10 ECOWAS countries sampled for the analysis are Benin, Burkina Faso, Cote d'Ivoire, The Gambia, Ghana, Mali, Niger, Nigeria, Senegal, and Togo.

The data for the empirical analyses involves GDP per capita growth as the main proxy for economic growth, representing the response variable. Overall trade globalization, de facto and de jure trade globalization are used as the main explanatory variables. These variables are obtained from the KOF Globalization Index (Gygli et al., 2019). We fittingly employ other

control variables such as inflation, financial development, and terms of trade index, respectively. Table 1 further elaborates all the variables used.

Tab. 1 – Definition of variables. Source: own research

VARIABLE	ABBREVIATION	DEFINITION	UNIT
Gross Domestic Product per capita growth	GDP	GDP* / Midyear Population *based on constant local currency	Annual Percentage
De Facto Trade Globalization	DFTG	Trade in goods + Trade in Services + Trade Partner Diversity	Index
De Jure Trade Globalization	DJTG	Trade Regulations + Trade Taxes + Tariffs + Trade Agreements	Index
Overall Trade Globalization	OTG	x̄ (Average of De facto Trade Globalization + De Jure Trade Globalization)	Index
Inflation	INF	% Δ cost of acquiring a basket of goods and services for the average consumer	Consumer prices (annual %)
Financial Development	FD	Aggregate of Financial Institutions Index + Financial Markets Index	Index
Terms of Trade Index	TTI	Ratio (Export Unit Value Index: Import Unit Value Index)	Index

3.1 Econometric Modelling

Various data transformation and econometric modelling techniques are employed to analyse the obtained data in an effort to achieve the objective of the study. To achieve stationarity, we differenced the variables DFTG, DJTG, FD, and TTI. We specifically estimate fixed effects (FE) and random effects (RE) models to evaluate the growth effects of the independent variables.

The fixed effects model in its basic form is given as:

$$y_{it} = \alpha + x_{it}\beta + v_i + \epsilon_{it} \tag{1}$$

for $t = 1\ldots\text{T}$ and $i = 1\ldots\text{N}$, with the Ti being the actual observed periods and v_i being the fixed effects to be estimated (StataCorp, 2021). From eqn. (1), we derive the following FE transformation for our models:

$$y_{it} = \alpha_0 + \alpha_1 X1_{it} + \alpha_2 X2_{it} + \cdots + \alpha_n Xn_{it} + \epsilon_{it} \tag{2}$$

Where y_{it} is GDP per capita growth rate for country i in period t; α_0 represents the constant and ϵ_{it} represents the error term. Additionally, $\alpha_1 \dots \alpha_n$ represent the coefficients to be estimated alongside the vectors of the independent variables $X1_{it} \dots Xn_{it}$.

The random effect (RE) model is estimated as:

$$\alpha_i \sim iid\left(0, \alpha_\alpha^2\right)$$

$$GDP_{it} = \alpha + \Delta x_{it}^1 \beta + \alpha_1 + u_{it}$$

$$u_{it} \sim iid\left(0, \alpha_u^2\right)$$

(3)

Where α_i is considered homoscedastic and does not alter with time as it backs the correlation between the variables and the year and country parameters. α is the overall mean, iid represents identically distributed variables, βs are the coefficients of the estimated independent variables, and u_{it} is the error term.

The study also employs a Hausman test to choose between the FE and the RE models in terms of consistency and taking into consideration which of the two models is correctly specified. The null hypothesis of the Hausman test suggests that the RE model is preferred and appropriate while the alternate hypothesis suggests that the FE model is preferred.
The Hausman specification test is given as:

$$H = (\beta_x - \beta_y)'(V_x - V_y)^{-1}(\beta_x - \beta_y)$$

(4)

Where β_x represents the consistent estimator's vector coefficient, β_y represents the efficient estimator's vector coefficient, V_x represents the consistent estimator's covariance matrix, and V_y represents the efficient estimator's covariance matrix. The result of equation (4) is a χ^2 statistic, which is compared to the Prob $> \chi^2$ to ascertain whether or not to reject the null hypothesis.

As a measure of robustness, we additionally evaluate the short- and long-term effects of both DFTG and DJTG on economic growth. To achieve this, the Pooled Mean Group (PMG) (Pesaran et al., 1999) estimator is employed. The PMG model is used to estimate heterogenous panels with a large number of groups and a large number of time-series by averaging and pooling, allowing for the short-run coefficients and the intercepts as well as the error variances to differ across groups, and at the same time allowing coefficients that are identical in the long-run without assuming short-run parameters that are homogenous (Blackburne & Frank, 2007; Zahonogo, 2018). The PMG method yields results that are less sensitive to outlier estimates.

We estimate the model as follows:

$$\Delta y_{it} = \emptyset_i\left(y_{i,t-1} - \theta_{0i} - \sum_{j=1}^{k} \tilde{\theta}_p X_{i,t-1}^p - \tilde{\delta}_1 X_{i,t-1} - \tilde{\delta}_2 X_{i,t-1}^2\right) - \sum_{j=1}^{k} \beta_{pi} \Delta X_{it}^p -$$

$$\gamma_{1i} \Delta X_{it} - \gamma_{2i} \Delta X_{it}^2 + \epsilon_{it}$$

(5)

Where:

$\emptyset_i$ is the term representing the error-correcting speed of adjustment, which is expected to be negative and significant to show a long-run relationship. β_{pi}, γ_{1i}, and γ_{2i} show the responsiveness in the short-run while θ_p, $\tilde{\delta}_1$, and $\tilde{\delta}_2$ show the responsiveness in the long-run. ϵ_{it} is the error term as usual, X is the vector of control variables to be estimated, and Δy_{it} is the independent variable of GDP per capita growth rate as a proxy for economic growth.

4 RESULTS AND DISCUSSION

The results are presented on the basis of the research questions previously listed to form a systematic and holistic picture of the overall and specific effects of trade globalization on economic growth in ECOWAS. Thus, we firstly provide the analysis of the overall trade globalization effects, followed by the analysis of the de facto effect and finally the de jure effects.

4.1 Does Overall Trade Globalization Significantly Affect Economic Growth in ECOWAS?

Table 2 below presents the results of FE and RE model 1. It also presents the results of the Hausman specification test, which shows the value of chi2 with 4 degrees of freedom to be 3.70 and the prob>chi2 as 0.4479. Consequently, the null hypothesis is not rejected, given that the p-value is greater than α (0.05). Therefore, the random effect model is the most consistent from the output in Table 2 and will be considered as the basis for further discussion.

Tab. 2 – Model 1: Results of fixed and random effects. Source: own research

Variable	FE Model	RE Model
GDP	Coefficient (P-value)	Coefficient (P-value)
Constant	1.1169*** (0.000)	0.9213*** (0.000)
D.OTG	0.1172** (0.050)	0.1195** (0.048)
INF	-0.0548*** (0.003)	-0.0297* (0.056)
D.FD	37.5694** (0.028)	43.1296** (0.012)
D.TTI	0.0303* (0.084)	0.0326* (0.066)
Diagnostics:	R^2 0.0419	R^2 0.0477
	F(4, 366) 5.77	Wald chi2(4) 19.15
	Prob > F 0.0002	Prob > chi(2) 0.0007
Hausman Test:	Chi2(4) 3.70	Prob > chi2 0.4479

The findings in model 1 (Tab. 2) reveal that overall trade globalization has a significant and positive relationship with economic growth within the countries of ECOWAS. It is crucial to mention that, for decades, many authors have simply used the trade openness indicator as a proxy for trade globalization, mainly due to the foregoing lack of a more comprehensive measure. Consequently, our results are in line with the findings of Chang et al. (2009), who

revealed that trade openness can have an enhanced effect on economic growth if other complementary measures are put in place, such as the development of public and educational infrastructure, effective governance, and inflation stability, among others. Having established that trade openness can stimulate economic growth, they also argue that the effects vary significantly among countries and mostly depending on the structure of the economy itself as well as the governing institutions. This train of thought is in line with Edwards (1993), Helleiner (1986), and Kohli and Singh (1989), who postulate that there is a minimum threshold of development required for an economy to fully realise the benefits of export promotion or trade for that matter. Other studies suggest that the acceleration of international trade can contribute to growth by expediting the transfer of technology and knowledge through trading activities (export and import) of high-tech commodities from technologically advanced countries (Baldwin et al., 2005; Almeida & Fernades, 2008; Zahonogo, 2018). These findings provide direct evidence of the positive growth effects of overall trade globalization and are in line with the findings of this study. All in all, while trade promotion and openness generally aid the growth of economies, there are evidently other underlying factors that also come into play.

Following the aforementioned claim, we also find that inflation has a negative correlation with economic growth in ECOWAS countries. This suggests that inflation stability is a crucial element in the economic growth process, and it attests to the findings of Kasidi and Mwakanemela (2013) and Akinsola and Odhiambo (2017), who also provide immense evidence supporting the negative relationship between growth and inflation. Some authors have even attempted to put forth a threshold beyond which inflation will have a negative effect on endogenous growth (Khan & Senhadji, 2001; Gylfasson & Herbertsson, 2001; Gillman & Kejak, 2005). The underlying principle is that all of these authors agree on the negative impact that inflation has on economic growth, consistent with the results of this study.

Additionally, the findings of this study reveal a positive relationship between financial development and economic growth in ECOWAS countries. While this makes economic sense, it is also imperative to highlight that financial development yields growth mainly based on its efficiency rather than the sheer size of investment as highlighted by De Gregorio and Guidotti (1995). Moreover, a robust financial system is a necessary condition for economic growth, but it is not sufficient as the only condition, given that other real sector variables such as trade and terms of trade play a significant role in achieving a steady growth of the economies of developing nations. In that regard, Hassan et al. (2011) argue the same and establish a positive correlation between financial development and economic growth in developing countries by estimating panel regressions and variance decompositions of yearly per capita GDP growth rates. The synopsis here is that bolstering the ECOWAS financial sector can generate accelerated economic growth within the member states.

We also found terms of trade index to be positively correlated with economic growth, suggesting that a positive terms of trade index realised by a proportionate increase in export prices greater than import prices will generate more revenue, given that more imports can be purchased for the same amount of exports, thus fostering economic growth. To summarise, the findings of model 1 suggests that an increase in overall trade globalization, coupled with an increase in financial development and improvement in the terms of trade, will improve economic growth in ECOWAS countries, while growth will increase in response to a decrease in inflation within the region.

4.2 How Does De Facto Trade Globalization Affect Economic Growth in ECOWAS?

The de facto aspect of trade globalization considers actual activities and actual trade flows. By distinction, this measure does not include policy or regulatory aspects of the index but is a culminating index consisting of trade in goods, trade in services, and trade partner diversity.
The results for model 2 are captured in Table 3, which also includes the Hausman test. Based on the result of the Hausman test, the RE model is considered as the appropriate model from Table 3 and will be the basis for further discussion. Table 4 then presents the pooled mean group (PMG) estimates capturing the long- and short-run effects.

Tab. 3 – Model 2: Results of Fixed and Random Effects. Source: own research

Variable	FE Model	RE Model
GDP	Coefficient (P-value)	Coefficient (P-value)
Constant	1.1237*** (0.000)	0.9075*** (0.000)
D.DFTG	0.0545* (0.080)	0.0567* (0.073)
INF	-0.0544*** (0.003)	-0.0267* (0.081)
D.FD	36.4672** (0.033)	42.5244** (0.013)
D.TTI	0.0308* (0.080)	0.0335* (0.060)
Diagnostics:	R^2 0.0573	R^2 0.0514
	$F_{(4, 366)}$ 5.56	Wald chi2(4) 18.09
	Prob > F 0.0002	Prob > chi(2) 0.0012
Hausman Test:	Chi2(4) 3.86	Prob > chi2 0.4259

Tab. 4 - PMG Estimates for model 2 (DFTG). Source: own research

Variable	Short run	Long run
	Coeff (P-value)	Coeff (P-value)
Constant	0.5524 (0.912)	0.5524 (0.912)
D.DFTG	0.1460*** (0.008)	0.0105 (0.747)
Diagnostics	R^2 0.40	$F_{(105,275)}$ = 3.98 P>F = 0.000

The results of model 2 (Tab. 3) specify a positive statistically significant relationship between de facto trade globalization and economic growth. This implies that more trade in goods and services and a more diverse trade partnership as well as more diversified export portfolios will improve economic growth within ECOWAS. These findings are in line with the numerous studies that establish a positive relationship between trade openness and growth, as the proxies used in these studies essentially characterise actual trade flows, thus indirectly describing de

facto trade globalization although not explicitly mentioned as such (Baldwin et al., 2005; Almeida & Fernades, 2008; Jouini, 2015; Zahonogo, 2018).

This established positive effect is, however, only valid in the short run, as can be seen from the PMG estimates in Table 4. There is no long-run statistically significant effect established. Essentially, while de facto trade globalisation yields positive growth results, those effects are only visible in the short term. This is a worrying revelation, but also one that prompts the question of why and what is to be done. One argument is that if the growth effects of de facto trade globalization is significantly positive in the short run, then it has the potential to be considerably positive also in the long run. This would then imply a number of actions to be taken, such as increasing trade flows or improving the dynamics of trade flows or both. The real challenge would be to identify what actions or measures would yield such long-run effects and how and in what order to implement these actions specifically within the context of ECOWAS. Another argument could also be the primary nature of exports within the region. While it is evident that several milestones have been achieved in the past two decades to improve the value of commodity exports in ECOWAS, it is still clear that a large proportion of the exports that flow outside of the region are largely primary or raw material-based when compared to the proportion of value-added commodity exports. Raw material exports are necessary but only yield such results as can be seen in the short term. Consequently, we argue that with a systematic improvement in the structure of ECOWAS exports, the growth effects of de facto globalization can potentially perpetuate in the long run. This also underscores the need for improved innovation and industrialization to achieve a sustained level of value-added production and export.

Equally significant is the role that financial development and terms of trade play in economic growth in the region. Similar to model 1, the findings in model 2 also reveal a positive statistically significant association between these two variables and economic growth, thus suggesting that improved terms of trade and well-developed financial markets and institutions tend to have positive effects on economic growth.

This assertion is no surprise, as there is ample evidence that in general, developing financial markets and promoting financial market integrations can be a major contributor of economic growth (Giannetti et al., 2002; Wong & Zhou, 2011). This is more so because when financial markets are developed, there is a higher tendency to achieve efficiency in resource allocation, thereby driving financial innovation across the market. This will then lead to credit accessibility and affordability – an element that improves economic growth when properly managed. While Ahmed (2016) found a negative relationship between financial integration and economic growth, he nonetheless proves that financial integration can have a positive effect on economic growth when the depth of the economy's domestic financial system is augmented. By this, the need for strong domestic financial markets in ECOWAS cannot be overlooked, as private capital flows are known to promote economic growth only in the presence of strong financial markets. In the same regard, Agbloyor et al. (2014) found that in order to change the negative effects of private capital flows into positive effects, a developed financial market is a necessary condition given that financial intermediaries aid the economic growth process by performing functions such as the reduction of information asymmetry and improving asset tradability and liquidity in the economy.

Considering that the financial systems in the region are still relatively underdeveloped, the findings of this study underscore the increasing need for a sustainable environment that is conducive to financial advancement and attractive to financial investments from both foreign

and domestic sources. The region has made some progress in the past three decades. However, there is still much advancement needed especially in the area of strengthening the credibility of the national or central banks. By making such progress in the financial markets, economic growth will be fostered in the process (Agbloyor et al., 2014).

Inflation is shown in model 2 to have a negative statistically significant effect on economic growth. As previously discussed, a number of studies have also identified that inflation slows or negatively affects economic growth (Gylfasson & Herbertsson, 2001; Barro, 2013; Kasidi & Mwakanemela, 2013; Akinsola & Odhiambo, 2017). Taking these findings into consideration, it has become crucial, now more than ever, for monetary policy in ECOWAS to be geared towards achieving low and stable inflation while sustaining that stability. This is imperative especially because, in the longer term, the negative inflation effects on growth can pose subsequent significant effects on the standard of living and essentially reduce the propensity to invest, thus affecting trade flows and other vital aspects of the economy.

4.3 How Does De Jure Trade Globalization Affect Economic Growth In ECOWAS?

Unlike de facto trade globalization, which measures actual flows such as trade in goods and services, the de jure trade globalization measure takes into consideration the policies and prevailing conditions that then enable the actual trade flows (Haelg, 2020). This implies tariffs and other regulations and agreements that affect trade flows and activities. Trade in West Africa has seen reforms over the years, most of which have been neo-liberal. The natural question that follows is how effective these policies have been in the implementation phase. Table 5 presents the results of the FE and RE estimates for model 3, including the Hausman test, for which the null hypothesis is rejected. This makes RE model 3 the model of preference, which will be the basis for further discussion. Table 6 then presents the PMG estimates, which characterize the short- and long-run growth effects of DJTG.

Tab. 5 – Model 3: Results of fixed and random effects. Source: own research

Variable	FE Model	RE Model
GDP	Coefficient (P-value)	Coefficient (P-value)
Constant	1.0921*** (0.000)	0.9519*** (0.002)
D.DJTG	0.0584 (0.492)	0.0539 (0.528)
INF	-0.0513*** (0.006)	-0.0332** (0.042)
D.FD	39.0883** (0.023)	43.0901** (0.012)
D.TTI	0.0303* (0.086)	0.0319* (0.072)
Diagnostics:	R^2 0.0506	R^2 0.0483
	F(4, 366) 4.88	Wald chi2(4) 16.43
	Prob > F 0.0008	Prob > chi(2) 0.0025
Hausman Test:	Chi2(4) 2.15	Prob > chi2 0.7078

Tab. 6 - PMG Estimates for model 3 (DJTG). Source: own research

Variable	Short run	Long run
	Coeff (P-value)	Coeff (P-value)
Constant	1.4793 (0.735)	1.4793 (0.735)
D.DJTG	0.1182 (0.137)	-0.0061 (0.937)
Diagnostics	R^2 0.42	F(105,275) = 3.64 P>F = 0.000

Similar to the previous two models, the results in model 3 (Tab. 5) also prove empirically that financial development and terms of trade index have a positive statistically significant relationship with economic growth in ECOWAS, while a negative association is established between the inflation variable and growth. These findings have been discussed in the previous two sections.

The striking discovery in model 3 is the finding that de jure trade globalization has no statistically significant relationship with economic growth, neither in the short- nor long-run (Tables 5 & 6). Similar to the findings of Kose et al. (2009), we argue that this conclusion is founded on the premise of policies that look good on paper but have no direct bearing in practice, as they prove ineffective and sometimes do not even get to the implementation stage at all (Kose et al., 2009). In reviewing that premise, it is imperative to acknowledge that downward changes in global demand can be a more important determinant of trade performance than trade policy changes in relatively small developing nations. High export performance responds to higher global demand, and low trade performance cannot always be strictly attributed to differences in trade policies or poor trade policies (Singer & Gray, 1988). That notwithstanding, the West has constantly looked to the countries of ECOWAS as major producers of important raw materials, so the need for exports from the region has been paramount. Consequently, it is essential to examine trade policies and policy reforms of the region in an attempt to understand how they contribute to growth.

Since the 1980s, many ECOWAS nations have embarked on major policy reforms and trade liberalisation regimes. Ghana and Nigeria, for example, liberalised import licensing and introduced uniform and liberalised tariffs for imports. Like in many other ECOWAS countries, the significant reforms undertaken were mostly geared towards imports and genuinely executed with the expectation of achieving some level of macroeconomic stability. That notwithstanding, West Africa is still seen as one of the least regionally competitive areas in Africa when compared to the other regions (Emeka, 2020). The fundamental implication is that West Africa still lags behind with its institutions and policies that contribute to productivity. This is a major reason why de facto trade globalization has not had a positive economic growth effect thus far. Although competitiveness is identified as positively impacted by international trade (Rusu & Roman, 2018), trade flows are equally determined and enhanced by policies and institutions. The deduced linkage is therefore clear – effective institutional practices and policies that enhance trade lead to improved national and regional competitiveness, which then advances economic growth. The reverse also holds true, as is evident from the findings of this study. In essence, while trade policy in itself is not the ultimate stand-alone solution for making countries rich, it does provide the enabling atmosphere to promote regional competitiveness and growth. This is achieved as effective trade policies that open up the economy by easing trade activities and the burden of trade tariffs can attract other economic boosters such as FDI inflows, which altogether can enhance economic growth (Cantah et al., 2018).

In general, trade reforms have been proven to have a positive effect on economic growth, although these positive impacts are heterogenous with country-specific variations (Irwin, 2019). Given these country-specific differences, it is essential for ECOWAS countries to review trade reforms in a strategic approach as to structure their trade taxes, regulations and tariffs in a manner that yields increased competitiveness for their individual economies. Torres and Seters (2016) describe the regional agreements within ECOWAS as ambitious but lacking proper implementation. They argue that although ECOWAS has a longstanding and deep-rooted commitment to removing impediments of free trade, there are still obstacles limiting this goal of free trade. They also cite factors like insufficient capacity of member states to follow through on the implementation of regional agreements and the lack of effective monitoring mechanisms to ensure that trade policies are implemented.

We argue that de jure trade globalization has not contributed significantly to economic growth in the region because of the lack of proper implementation of trade policies resulting in stagnated competitiveness. The implication of this is that drafted policies that are ineffectively implemented or not implemented at all do not translate into actual trade flows that result in any trade gains. Thus, the de jure elements remain as policies on paper with no real implementation that can result in the facilitation of actual trade flows leading to growth.

5 CONCLUSION
While the growth effects of economic globalization have been studied too often, we find that there is no real study that disentangles the various dimensions of economic globalization to understand the real impacts and dynamics in Africa as a whole and its economic communities. Consequently, we separated the trade dimension of economic globalization thanks to data from the KOF globalization index and established its growth effects in ECOWAS. We have proven that overall trade globalization indeed contributes positively to economic growth. When taken as a whole, this result can, however, be misleading for policymakers, especially considering that overall trade globalization is comprised of two distinct measures: de facto and de jure.

By separating the de facto measure of trade globalization from the de jure measure, we proved that de facto trade globalization significantly and positively contributes to economic growth in ECOWAS, whereas de jure trade globalization does not. More so, the growth effect of de facto trade globalization is significantly positive in the short-run and not the long-run. The implication is that, while overall trade globalization can be seen as growth inducing, it is only its de facto measure that produces such growth. This knowledge is evident only by detaching the two measures and analysing them separately. Without separating the two measures, only the effect of the overall dimension is analysed, which does not offer any more details as to which of the measures within the overall trade globalization dimension is effectively growth inducing. This can then lead to improper policy targets with a wrong focus, as it breeds the tendency of shifting focus to improving actual flows, whereas the focus should rather be on policy implementation.

We have also established that the growth effect of trade globalization is enhanced when supplemented by well-developed financial markets and improved terms of trade as well as stabilized inflation. This accentuates the increasing need for policymakers in ECOWAS to revisit and re-evaluate trade policies and other supplementary policies that enhance growth in the region. Thus, a better de jure framework with effective implementation is needed at national and regional levels, with the aim of enhancing regional competitiveness towards achieving sustainable economic growth levels and appropriately cashing in on the gains from trade. The result of this research is eye-opening and can serve as a guide to policymakers in ECOWAS

when evaluating trade performance and openness in general as a means to enhancing national and regional competitiveness and achieving sustained levels of economic growth.

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