Trade Openness, Foreign Direct Investment and Growth: Evidence from Ecowas Countries

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ABSTRACT

This study examines trade openness, foreign direct investment and growth in the Economic Community of West African States (ECOWAS) using data from 1990 to 2024 which was estimated with a Panel Error Correction Model (ECM) and a Panel ARDL framework as a robustness check. The analysis incorporates trade openness, foreign direct investment (FDI), and the exchange rate as key explanatory variables for GDP. The findings show strong evidence of a long-run cointegrating relationship among the variables, confirmed by a highly significant and negative error-correction term, indicating that deviations from equilibrium are corrected each period. Across both models, FDI emerges as the only variable with a statistically significant and positive impact on GDP in the short and long run, underscoring its central role in stimulating economic growth. In contrast, trade openness and exchange-rate movements show no significant influence on GDP, suggesting that their benefits remain constrained by structural bottlenecks within the region. The study therefore recommends that policy makers in ECOWAS Countries should strengthen regional investment climate to attract productive FDI by harmonising investment regulations across ECOWAS to reduce investor uncertainty and make the region function like a single investment destination, deepen implementation of the ECOWAS Common Investment Market (ECIM) to attract large-scale manufacturing, agro-processing, and energy investments and reorient trade openness toward value addition and regional production. Since trade openness is insignificant for growth, ECOWAS must shift focus from opening markets to building productive capacity by promoting regional value chains in agriculture (cocoa, cashew, shea, rice), manufacturing (pharmaceuticals, textiles), and services (finance, ICT). Finally, it must reduce non-tariff barriers (NTBs) at borders, especially delays, extortion, and lack of harmonized standards.

Keywords: Trade openness, FDI, Economic growth, Panel ECM, ECOWAS

INTRODUCTION

The nature of the relationship between FDI, trade openness and economic growth has come under scrutiny as mixed evidences have been found in the literature and there have been loud dissenting voices claiming that trade openness would only hamper growth in developing countries (Verr et al, 2022). Trade openness is the liberalization of the exchange of goods and services across borders through increased integration among countries. These countries are joined together in terms of free movement of capital and labour, and free foreign trade and finance (Igudia, 2004). However, the debate surrounding the relationship between trade openness and economic growth in developing economies is between pro-traders and anti-traders (Oluwatoyin & Folasade, 2014). ECOWAS countries should encourage more inward foreign direct investment to boost economic growth and import substitution (Yusuf and Aras, 2023).

Despite decades of economic integration efforts, the Economic Community of West African States (ECOWAS) continues to grapple with low levels of industrialization, weak infrastructure, and persistent poverty (Yusuf and Aras, 2023). Trade openness and foreign direct investment (FDI) have long been considered critical drivers of economic growth, yet their actual impact within ECOWAS countries remains ambiguous and contested.

ECOWAS countries have embraced trade liberalization and sought foreign direct investment (FDI) as strategies for economic growth. However, the outcomes remain mixed and uncertain. Trade openness is hindered by weak infrastructure, low intra-regional trade, and institutional barriers, while FDI inflows are uneven and often concentrated in extractive industries with limited technology transfer or domestic linkages. Despite these efforts, economic growth across ECOWAS remains volatile, with persistent unemployment, inequality, and poverty (Gulati et al., 2007).

It is well known that developing countries have enormous constraints in what they can bring to global trade and investment (Verr et al 2022). The export of Economic Community of Western African States (ECOWAS) is basically primary commodities this make them vulnerable to external shocks. Also, inadequate infrastructure and the small size of their domestic markets often limit their access to foreign markets (Clark, Dollar and Micco, 2004). Rising trade costs and limited access to technology and intermediate inputs for firms in developing countries constitute a barrier to entry into world markets, as well as participation in global value chains (Arvis et al, 2013). According to Verr et al (2022), there is a need to encourage more FDI inflow and trade openness to boost growth by promoting a conducive business environment and export diversification.

Existing studies provide contradictory findings, leaving policymakers without clear evidence on how trade openness and FDI truly influence growth. This creates a critical need for empirical research to clarify the tradeFDI-growth nexus in ECOWAS and guide effective policy interventions. The current study therefore seeks to investigate the effect of trade openness, foreign direct investment on economic growth in ECOWAS sub region. The rest of the research is structured thus; section two contains the literature review, methodology is presented in section three, the results are presented in section four and the conclusion and recommendations are presented in section five.

LITERATURE REVIEW

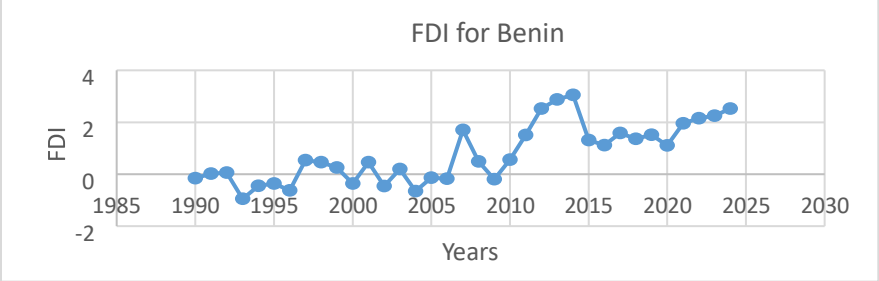
Conceptual Review

Foreign Direct Investment

FDI is regarded as one of the main tools for enhancing a nation's economic system, particularly in developing nations. It is the process through which citizens of one nation come into possession of assets to dominate the production, distribution, and other operations of a company in another nation (Kojima, 2010). MNCs that use diverse spillover effects on the host nations are mostly responsible for this (Hailu, 2010). The most common kind of spillover is the transfer of technology that directly supports the expansion of the productive capital stock, technical advancement, the transfer of management skills, and access to direct markets. FDI makes it possible for nations with limited access to capital, to increase their physical capital, create jobs, increase production capacity, improve the managerial and technical skills of their labour forces, and integrate their domestic economies into the globalized world (Hailu, 2010).

FDI is often grouped to separate the operational perspective of the investing nation from that of the invested country. From the standpoint of the investing nation, FDI is divided into three categories: horizontal, vertical, and conglomerate. From the standpoint of the receiving nation, it is divided into three categories: increasing exports via FDI, substituting imports, and government-initiated FDI (Pazienza, 2014).

Trend Analysis of Foreign Direct Investment for Selected ECOWAS Countries



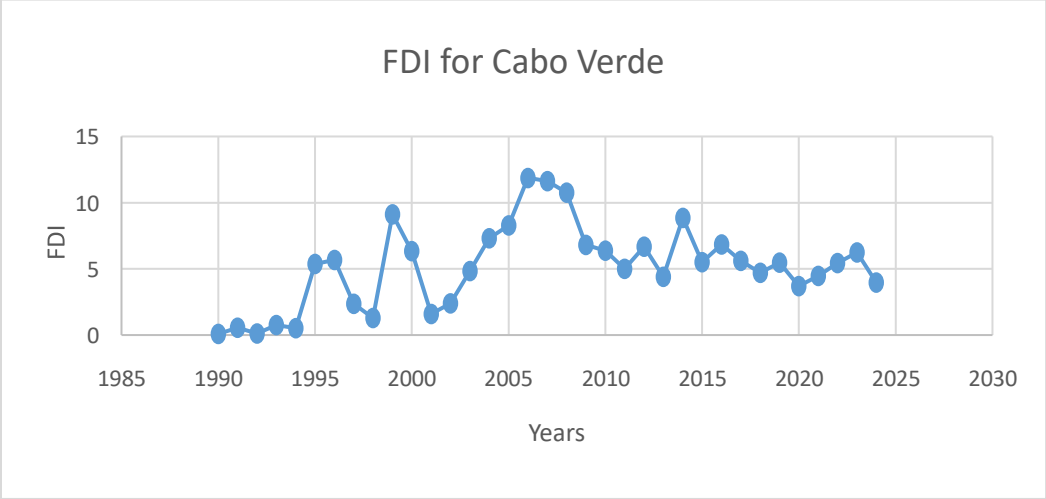


Figure 1b: FDI for Cabo Verde

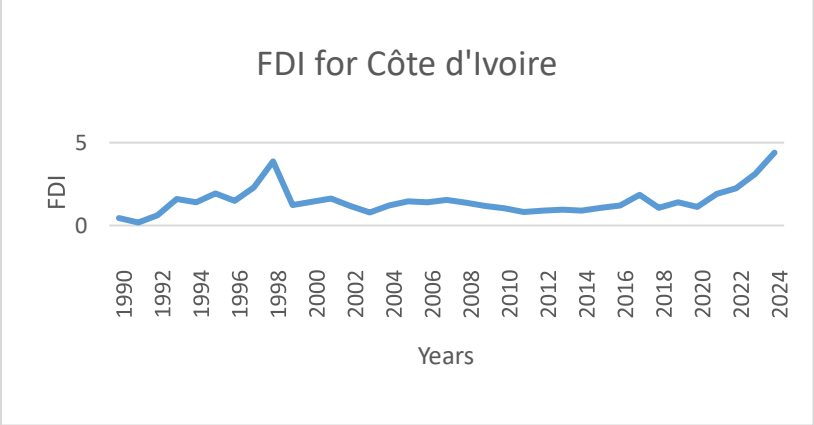


Figure 1c: FDI for Cote d' Ivoire

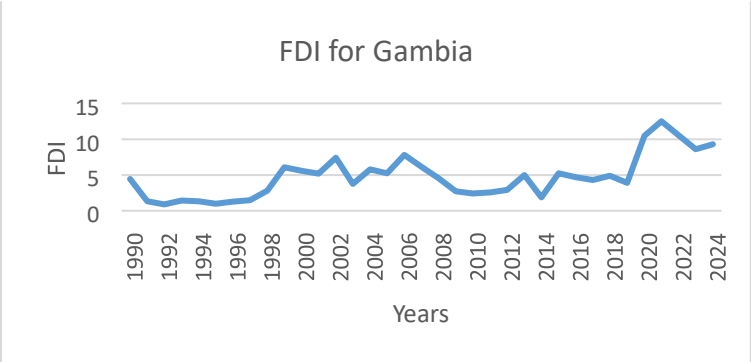


Figure 1d: FDI for Gambia

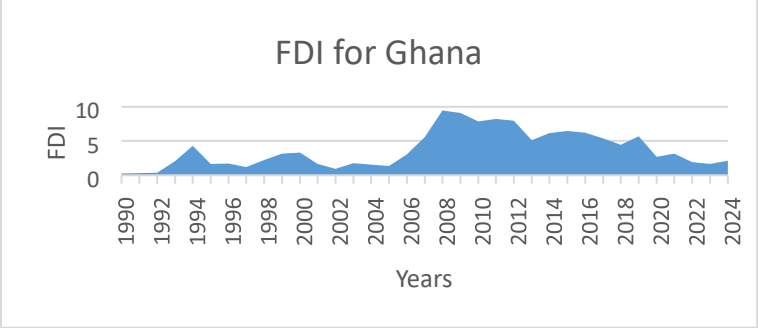


Figure 1e: FDI for Ghana

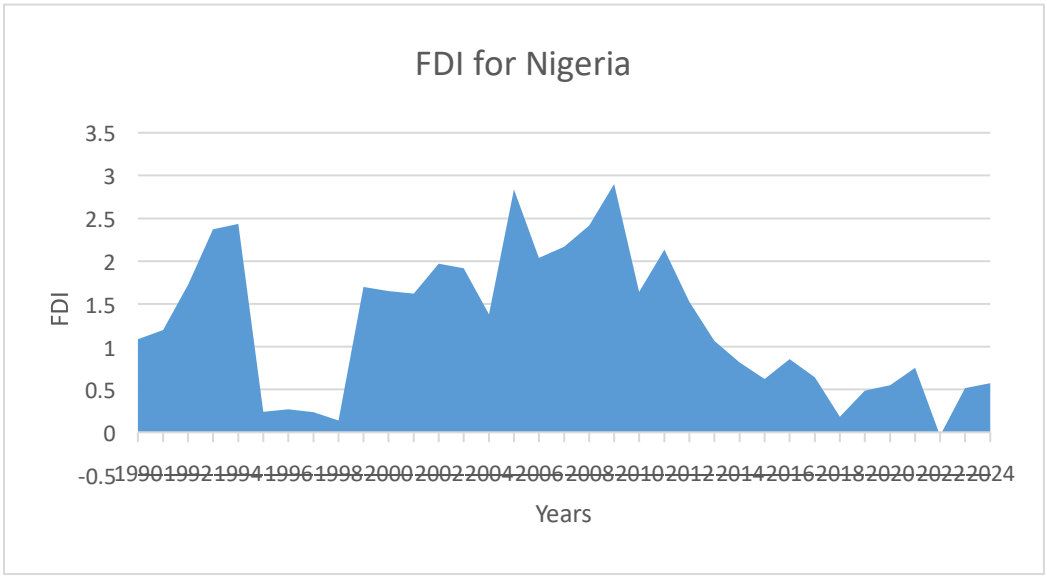


Figure 1f: FDI for Nigeria Trade Openness

For a country to draw foreign direct investment, its level of internal trade openness is important (Adi et al, 2015). The ratio of imports plus exports to gross domestic product is used to measure trade openness. A more open economy indicates a more liberalized and open economic and trading system (Nwonye et al, 2020). Trade openness thus hurts FDI inflows. Trade openness, according to Dondashe and Phiri (2018), can help a nation draw in foreign direct investment. According to Owusu (2017), trade liberalization has little influence on the inflows of foreign direct investment. It was discovered that a business-friendly climate is more effective at attracting FDI.

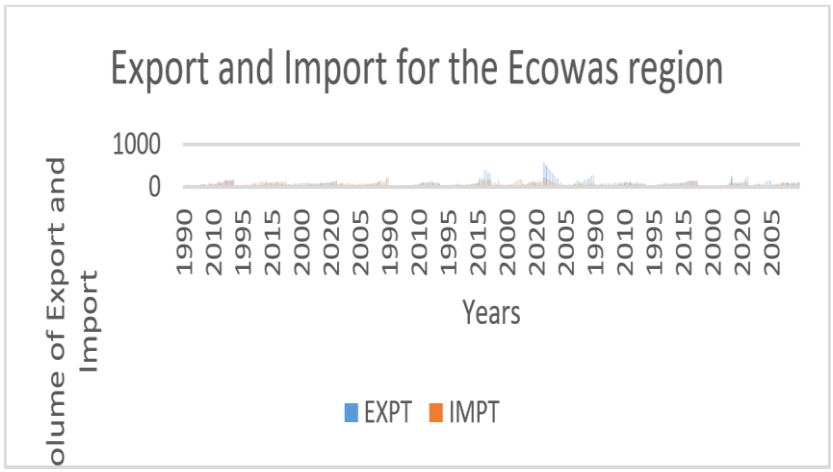


Figure 2: Trade Openness

Economic Growth

Economic growth is the increase in the production of goods and services in an economy over time, usually measured by real GDP. It is driven by factors such as investment in capital, technological progress, skilled labor, and efficient resource use. Growth brings benefits like higher living standards, more jobs, and greater government revenue, but it also poses challenges such as income inequality, inflation, and environmental impact. Sustainable and inclusive growth is essential to balance prosperity with long-term stability.

Increased economic growth indicates the potential for progress and presents opportunities for business Adi, Wobilor, and Adimani (2015). According to Dondashe and Phiri (2018), Onodugo et al (2018) the gross domestic product and foreign direct investment have a positive and significant association. Equally, Ebiringa and Emeh

(2013) contend that GDP has a long-term beneficial impact on flows of foreign investment. Also, Wasseja and Mwenda (2015) discovered GDP as a key factor in determining inflows of investment from abroad.

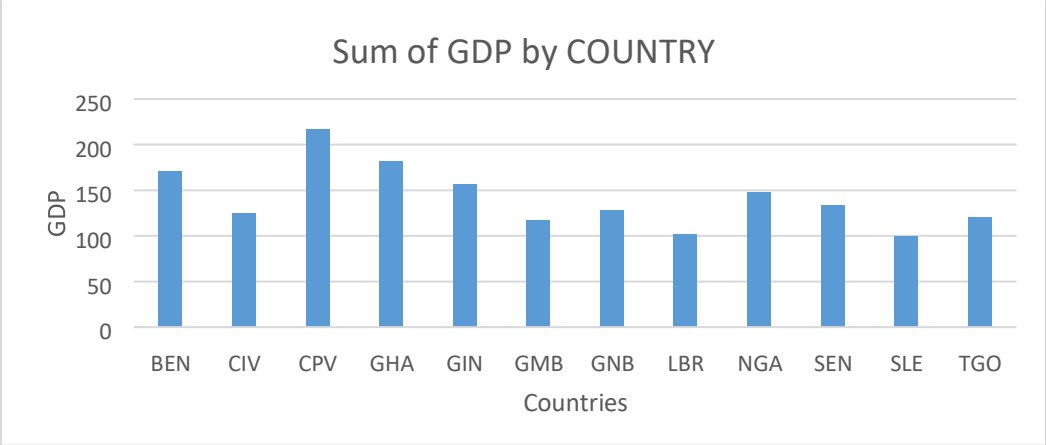


Figure 3: Economic Growth

THEORETICAL FRAMEWORK

The study employed Solow-Swan neo-classical growth model that was introduced by Solow (1956) and Swan (1956). The essence of the Solow-Swan neoclassical growth theory is that the potential rate of growth of output which represents the equilibrium and 'natural' rates of growth-is determined exogenously by the rate of growth of the labor force and technological progress. The focus of the theory is on the reconciliation of the actual and natural rates of growth. It is a simple structure of a well-behaved production function, investment-saving relation, and a labor growth function. In Solow's model, the growth process follows a balanced growth path. According to Solow (1956), output per worker along the balanced growth path is determined by technology, investment rate and the population growth rate and that growth in output and in the volume of international trade are closely related. However, Solow had emphasized the importance of technological change in the long-term economic growth rate but what determines technological progress was left unanswered and assumed to be exogenous (Barro & Sala-i-Martin, 2004).

EMPIRICAL REVIEW

Yusuf and Aras (2023) investigated how foreign direct investment affects international trade in the ECOWAS region. Using Autogressive Distributed Lag (ARDL) bounds testing approach to co integration. According to the findings, foreign direct investment significantly impacts international trade flow, export volume, and exchange rate in ECOWAS countries. In contrast, population growth, import volume, and GDP (Gross Domestic Product) hurt the trade-to-GDP ratio.

Verr et al (2022) examined the impact of trade openness and FDI on economic growth, with panel data spanning the period from 1994 to 2019 estimated with the Autoregressive Distributed Lag (ARDL) technique. The ARDL results of Trade share (TS) showed that in the long run FDI will increase growth, while TS has negative and insignificant effects on economic growth. The Composites Trade Share (CTS) model indicated that FDI and CTS will increase growth. In the short run, FDI has positive effects on growth in Senegal, Cabo Verde, Liberia and Gambia and negative effect on growth in Benin, Ghana and Nigeria. The TS and CTS have positive effect on growth in Benin and Ghana, but negative effect in Senegal, Cabo Verde and Liberia. FDI and trade openness have positive effects on growth in the long-run, but the effect varies across ECOWAS countries in the short run.

Oloyede et al (2021) investigated the relationship among trade openness and macroeconomic outlook of Africa's regional economic communities (RECs), focusing on the Economic Community of West African States (ECOWAS) and Southern African Development Community (SADC). The study applies the Pooled OLS, Fixed and Random Effects techniques of estimation. The datasets are classified into three segments for comparative analysis, comprising the total, ECOWAS, and SADC datasets. The results show a positive but insignificant nexus

between economic growth rate and trade openness in both the combined simulated ECOWAS and SADC and the individual REC.

Ijirshar (2019) assessed the impact of trade openness on economic growth among ECOWAS countries using secondary data from 1975 to 2017. The study uses non-stationary heterogeneous dynamic panel models through the application of Pooled Mean Group (PMG) and Mean Group (MG) estimators since time dimension was more than cross-sections. Results showed that trade openness has positive effects on growth in ECOWAS countries in the long-run but mixed effects in the short-run.

Iyoha and Okim (2017) analyzed the impact of trade on economic growth on ECOWAS member countries using panel data from 1990 to 2013. Using four estimators; pooled OLS, Fixed effects model, Random effects model, and dynamic panel regression model although dynamic panel data estimator was preferred to handle the problem of endogeneity, they found that exports, exchange rate and investment were significant determinants of per capita real income growth and that exports were consistently positively related to growth, suggesting that trade has a significant positive impact on economic growth in ECOWAS member countries.

METHODOLOGY

The expost facto research design was employed for the study. This research seeks to examine the impact of trade openness and foreign direct investment on economic growth in ECOWAS. The study covers the period of 44 years (1980 to 2023). The data for this study were obtained from the secondary sources and they are sourced from World Development Indicators (WDI). These data include trade openness, gross domestic product per capita and exchange rate. This study was carried out on twelve (12) ECOWAS countries which includes; Benin, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria, Senegal, Sierra Leone and Togo.

The model estimation follows that of Ijirshar (2019), Verr (2022) and Oloyede et al. (2021) with some modification.

$$GDP = f(TOP, FDI, EXR) \quad (1)$$

The model is re-written in its econometrics form as:

$$GDP_{it} = \alpha_{0it} + \alpha_1 TOP_{it} + \alpha_2 FDI_{it} + \alpha_3 EXR_{it} + \mu_{it} \quad (2)$$

Where;

GDP is gross domestic product which is a proxy for economic growth, TOP is trade openness, FDI is foreign direct investment and EXR is exchange rate. α_1-α_3, are the parameters to be estimated, *i* is cross section, *t* time and μ is the stochastic error term.

RESULTS AND DISCUSSION

The descriptive statistics is presented in table 4.1. It showed the features of the data used for the study. From the table it can be observed that the mean and standard deviation of the variables are 4.04 percent, 8.27 percent for gross domestic product, 9.96 percent and 574.2 percent for trade openness, foreign direct investment is 4.09 percent and 11.62 percent respectively while exchange rate is 658.3 and 1636.7 respectively. From the result we observed that the deviation from their respective mean is not much implying that there are not affected by extreme values. All the variables have a positive skewness except for trade openness. This might be as a result of the over dependence of import or a low level of export as is characterized by most developing countries. All the variables employed in the study are leptokurtic in feature due to their very high kurtosis values which are clearly greater than 3.

Descriptive Statistics

	GDP	TOP	FDI	EXR
Mean	4.041219	9.967948	4.098641	658.3272
Median	4.399998	27.98837	1.713126	272.2648
Maximum	106.2798	2990.983	103.3374	10638.23
Minimum	-51.03086	-10772.98	-82.89210	0.032616
Std. Dev.	8.270769	574.2024	11.61770	1636.686
Skewness	3.089034	-15.42794	3.659118	4.507508
Kurtosis	65.17615	300.0278	39.81269	23.35787
Observations	420	420	420	420

Source: Author's computation with E-views 12

Unit Root Test

Unit Root Test at Levels			
Variables	LLU Test Statistic	P-Value	**Remark**
TOP	-18.8465	0.0000	Stationary
FDI	4.46732	0.0000	Stationary
EXR	6.20099	1.0000	Non-Stationary
GDP	-12.7864	0.0000	Stationary
Unit Root Test at First Difference			
EXR	-2.38912	0.0084	Stationary

Source: Author's computation with E-views 12

The Levin, Liu and Chu (LLU) unit root test is presented in table 4.2 revealed that three of the variables; trade openness, foreign direct investment and gross domestic product are integrated at order zero, this is because their p-values are smaller than the 5% significance level established for this investigation. On the other hand, exchange rate is integrated at order one. The variables are therefore of mixed integration that is at level I(0) and order one, I(1). We therefore proceed with the panel cointegration test.

Cointegration Test

Alternative hypothesis: common AR coefs. (within-dimension)					
				Weighted	

		Statistic	Prob.	Statistic	Prob.
Panel v-Statistic		-1.858547	0.9685	-3.461576	0.9997
Panel rho-Statistic		-2.316075	0.0103	-4.252762	0.0000
Panel PP-Statistic		-6.963100	0.0000	-12.34306	0.0000
Panel ADF-Statistic		-4.657212	0.0000	-8.151089	0.0000
Alternative hypothesis: individual AR coefs. (between-dimension)					
		Statistic	Prob.		
Group rho-Statistic		-3.386012	0.0004		
Group PP-Statistic		-16.76798	0.0000		
Group ADF-Statistic		-10.11463	0.0000		

Source: Author's computation with E-views 12

The cointegration test result is presented in table 4.3, the different cointegration test used showed that there is cointegration among the variables of the study as their probability value is less than the 0.05 level of significance. The null hypothesis of no cointegration among the variables is therefore rejected. As a result, the study applies the Panel Error Correction Model and also the Panel Autoregressive distributed lag (Panel ARDL) technique for robustness test.

Panel Error Correction Model

Dependent Variable: D(GDP)				
Method: Panel Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.191803	0.350207	0.547684	0.5842
D(TOP)	3.34E-05	0.000413	0.080906	0.9356
D(FDI)	0.253495	0.028611	8.860026	0.0000
D(EXR)	-0.000534	0.002058	-0.259695	0.7952

ECM(-1)	-0.686931	0.042504	-16.16163	0.0000
Root MSE	6.897975	R-squared		0.425483
Mean dependent var	0.191200	Adjusted R-squar	ed	0.419781
S.D. dependent var	9.111777	S.E. of regression		6.940635
Akaike info criterion	6.724843	Sum squared resid		19413.48
Schwarz criterion	6.774000	Log likelihood		-1366.868
Hannan-Quinn criter.	6.744295	F-statistic		74.61472
Durbin-Watson stat	2.052709	Prob(F-statistic)		0.000000

Source: Author's computation with E-views 12

The Panel ECM results reveal that the error-correction term is negative and highly significant confirming the presence of a stable long-run equilibrium relationship among economic growth, trade openness, foreign direct investment and exchange rate. The coefficient indicates that approximately 69 percent of any disequilibrium from the previous period is corrected within the current period, implying a rapid and robust adjustment toward long-run equilibrium. In the short run, only FDI exerts a significant positive impact on GDP, while trade openness and the exchange rate do not produce immediate effects. In summary, the ECM results validate the existence of long-run cointegration and show that the system adjusts quickly back to equilibrium after a shock.

Panel ARDL Model

Dependent Variable: D(GDP)				
Method: ARDL				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
	Long Run Equation			

TOP	0.000131	0.002000	0.065404	0.9479
FDI	0.297912	0.089928	3.312804	0.0010
EXR	0.000166	0.000103	1.601394	0.1103
	Short Run Equation			
COINTEQ01	-0.727919	0.093764	-7.763305	0.0000
D(TOP)	-0.002183	0.006727	-0.324497	0.7458
D(TOP(-1))	-0.001669	0.002640	-0.632115	0.5278
D(FDI)	0.112278	0.170358	0.659074	0.5103
D(FDI(-1))	-0.163154	0.115396	-1.413863	0.1584
D(EXR)	-0.182865	0.218177	-0.838151	0.4026
D(EXR(-1))	0.171928	0.188506	0.912057	0.3624
C	2.166117	0.306855	7.059088	0.0000
Root MSE	6.329576	Mean dependent var		0.138338
S.D. dependent var	9.038336	S.E. of regressio	n	7.240136
Akaike info criterion	5.441416	Sum squared res	id	16826.68
Schwarz criterion	6.393762	Log likelihood		-1043.697
Hannan-Quinn criter.	5.817826			

Source: Author's computation with E-views 12

The panel ARDL model presented in table 4.5, serves as a robustness check and confirms a clear long-run relationship between GDP and its determinants. The results shows that FDI is the only variable with a significant long-run effect on GDP, with a positive coefficient of 0.298, indicating that higher FDI inflows consistently raise long-run output in the ECOWAS region. This supports growth theories that link foreign investment to capital accumulation, productivity gains insignificant long-run effects, suggesting that structural weaknesses such as low export diversification and currency volatility limit their contribution to long-term growth within the ECOWAS region., and technology transfer. In contrast, trade openness and the exchange rate have

In the short run, none of the variables significantly affect GDP, but the error-correction term (ECM) is strongly significant, showing that about 73 perecnt of deviations from equilibrium are corrected each year. This confirms a stable long-run relationship and reinforces the reliability of the findings. Overall, the robustness check indicates that long-run GDP growth in the panel is driven primarily by FDI, while trade openness and exchange-rate movements matter little without broader structural reforms. Policymakers within the ECOWAS region should therefore prioritize strategies that attract and retain FDI, supported by macroeconomic stability and improved institutional and regulatory frameworks.

Diagnostic Test

Table 4.6: Cross Section Dependence Test

Residual Cross-Section Dependence Test			
Null hypothesis: No cross-section dependence (correlation) in residuals			
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	73.94349	66	0.2349
Pesaran scaled LM	0.691392		0.4893
Pesaran CD	4.395537		0.0000

Source: Author's computation with E-views 12

The result of the cross-sectional dependence test is presented in table 4.6. From the result two of the test; Breusch-Pagan LM and the Pesaran scaled LM have a p-value greater than 0.05. Given the panel dimensions where N = 12 and T = 35, the appropriate tests are the Breusch-Pagan LM and the Pesaran scaled LM tests. Both fail to reject the null hypothesis of no cross-section dependence since the p-values are greater than 0.23 and pvalue greater than 0.48 respectively, indicating that residuals are not cross-sectionally correlated. Although the Pesaran CD test is significant, it is not reliable for small-N panels and should not be used as the primary diagnostic.

CONCLUSION AND RECOMMENDATIONS

This study examined trade openness, foreign direct investment and growth in the Economic Community of West African States (ECOWAS) using a Panel Error Correction Model (ECM) and as a robustness test, a Panel ARDL approach. Both empirical strategies produced a clear and consistent outcome which shows that foreign direct investment (FDI) is the only variable with a significant impact on economic growth in both the short run and the long run. The Panel ECM indicates the presence of a stable long-run relationship among economic growth, trade openness, FDI and the exchange rate, supported by the strongly significant and negative error correction coefficient. This coefficient shows a rapid adjustment process of any deviation from long-run equilibrium

corrected within one period. Despite this stability, trade openness and the exchange rate do not exhibit any meaningful influence on economic growth in either the short or long run.

The robustness check using a Panel ARDL model confirms these findings. FDI consistently demonstrates a strong and statistically significant long-run effect on economic growth, while trade openness and exchange-rate movements remain insignificant. Short-run dynamics also mirror this pattern. FDI maintains its significance, whereas the other variables show weak or negligible effects. In summary, the results suggest that economic growth in ECOWAS countries is driven primarily by foreign direct investment, with limited direct contributions from trade liberalization or exchange rate adjustments unless complemented by broader structural reforms.

The study therefore recommends that policy makers in ECOWAS Countries should strengthen regional investment climate to attract productive FDI by harmonising investment regulations across ECOWAS to reduce investor uncertainty and make the region function like a single investment destination. Deepen implementation of the ECOWAS Common Investment Market (ECIM) to attract large-scale manufacturing, agro-processing, and energy investments. Reorient trade openness toward value addition and regional production. Since trade openness is insignificant for growth, ECOWAS must shift focus from opening markets to building productive capacity by promote regional value chains in agriculture (cocoa, cashew, shea, rice), manufacturing (pharmaceuticals, textiles), and services (finance, ICT). Reduce non-tariff barriers (NTBs) at borders, especially delays, extortion, and lack of harmonized standards.

REFERENCES

1. Adi, A. A., Wobilor, A., K. & Adimani, W., E. (2015) The Determinant of Foreign Direct Investment and Its Effect on Economic Growth: Evidence from Nigeria. Journal of Economics and Sustainable Development, 6, 17-25.
2. Barro, R.J. & X. Sala-i-Martin (2004). Economic growth (2nd ed.), Cambridge: MIT Press.
3. Clark, X., Dollar, D., & Micco, A. (2004). Port efficiency, maritime transport costs and bilateral trade. Journal of Development Economics, 75(2), 417-450.
4. Dondashe, N. & Phiri, A. (2018). Determinants of FDI in South Africa: Do Macroeconomic Variables Metter? Munich Personal RePEc Archive (MPRA) Paper No. 83636.
5. Ebiringa, O., T. & Emeh, Y. (2013). Determinants of Foreign Direct Investment Inflow: A Focus on Nigeria. European Journal of Business and Management, 5, 41-52.
6. Gulati, A., Minot, N., Delgado, C., & Bora, S. (2007). Growth in high-value agriculture in Asia and the emergence of vertical links with farmers', in J.F.M. Swinnen (ed.), Global supply chains, standards& poor:
7. Hailu, Z. A. (2010). Demand side factors affecting the inflow of foreign direct investment to African countries: does capital market matter? International Journal of Business and Management, 5(5), 104.
8. Igudia, P. (2004). Globalization and economic development: Nigeria's experience and prospects, globalization and Africa's economic development, Ibadan: Nigerian Economic Society, 347-375.
9. Ijirshar, V., U. (2019). Impact of Trade Openness on Economic Growth among ECOWAS Countries: 1975-2017. CBN Journal of Applied Statistics, 10(1), 75-96.
10. Iyoha, M., & Okim, A. (2017). The impact of trade on economic growth in ECOWAS member countries: evidence from panel data. CBN Journal of Applied Statistics, 8(1), 23-49.
11. Kojima, K. (2010). Direct Foreign Investment: A Japanese Model of Multi-National Business Operations (Vol. 10). Routledge.
12. Nwonye, N. G., Anowor, O. F., Uzomba, P. C., Abu, A., Chikwendu, N. F., Ojiogu, M. C. & Edeh, C. C. (2020). Financial Intermediation and Economic Performance in Nigeria: An ARDL Approach. International Journal of Advanced Science and Technology, 29(7),8353-8361.
13. Oloyede, B. M., Osabuohien, E., S. & Ejemeyovwi, J., O. (2021). Trade openness and economic growth in Africa's regional economic communities: empirical evidence from ECOWAS and SADC, Heliyon, 7(5), e06996. https://doi.org/10.1016/j.heliyon.2021.e06996.
14. Oluwatoyin, M. A., & Folasade, A. B. (2014). Trade openness, institutions and economic growth in subSaharan Africa (SSA). Developing Country Studies, 4(8), 1-14.

15. Onodugo, V. A., Anowor, O. F., & Ofoegbu, G. N. (2018). The effectiveness of monetary policy -in tackling inflation in emerging economy. Opción (Universidad del Zulia, Venezuela), 34(14), 314-355.
16. Owusu, M. (2017). The Determinants of Foreign Direct Investment Inflows in Ghana. Kwame Nkrumah University of Science and Technology, Kumasi.
17. Pazienza, P. (2014). The relationship between FDI and the natural environment: Facts, evidence and prospects. Springer Science & Business Media
18. Raghutla.C.(2020).”The Effect of Trade Openness on Economic Growth: Some Empirical Evidence from Emerging Market Economies. Journal of Political Economy. 20 (3)
19. Sahoo. M.,& Sethi N.(2023)” An Empirical Insight into the Financial Globalisation – Growth Nexus via Trade Openness: Evidence from Selected South Asian Countries. Global Business Review. (24)2. 317 - 334
20. Solow, R. M. (1956). A contribution to the theory of economic growth. Quarterly Journal of Economics Oxford Journals, 70(1), 65-94.
21. Swan, T. W. (1956). Economic growth and capital accumulation. Economic Record. Wiley, 32(2), 334361.
22. Verr, J. B., Danladi, J., D. & Vincent, A., A. (2022). The Analysis of Trade Openness, Foreign Direct Investment and Economic Growth Ineconomic Community of West African Countries (Ecowas). American Journal of Multidisciplinary Research & Development (AJMRD), 4(1), 36-45.
23. Wasseja, M., M. & Mwenda, S., N. (2015). Analysis of the Determinants of Foreign Direct Investment in Kenya. Journal of Multidisciplinary Scientific Research, 3, 16-26.
24. Yusuf, I., & Aras, O. N. (2023). The impact of foreign direct investment on international trade in the ECOWAS Region. Journal of Management, Economics, and Industrial Organization, 7(2), 61-76. http://doi.org/10.31039/jomeino.2023.7.2.4

Conflict of Interest

There is no conflict of interest financial or otherwise declared among the authors in the course of writing this research

Ethical Approval

Ethical approval and standard were obtained for this research involving human subjects and animals