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Unraveling the relationship between trade openness, economic growth, and financial development in Nigeria

Esther Olayinka Atoyebi[1,*], Isiaq Olasunkanmi Oseni[2], Jimoh Sina Ogede[3], Soliu Bidemi Adegboyega[4]
Olabisi Onabanjo University, Nigeria[1,2,3,4]
Corresponding e-mail: atoyebi.olayinka@oouagoiwoye.edu.ng[*]

ABSTRACT

Purpose — *This study examines the impact of trade liberalization and economic growth on financial development and suggests policies to enhance financial stability.*

Method — *The study utilizes an Autoregressive Distributed Lag Model to analyze the presence of co-movement within the context of trade openness and economic growth on financial development in Nigeria. Additionally, the technique allows for a dynamic assessment of the short and long term.*

Result — *Our findings for Nigeria spanning from 1990 to 2021 demonstrate a positive long-term relationship between trade openness and financial expansion, while economic growth has a negative short-term impact on financial expansion.*

Contribution — *This study contributes to the frontier of knowledge by uncovering the interplay among Nigeria's trade openness, economic prosperity, and financial development, which has been overlooked. Additionally, it offers insights into the specific dynamics and mechanisms operating within the Nigerian context by scrutinizing relevant economic indicators.*

Keywords: *financial development, ARDL, trade openness, economic growth*

INTRODUCTION

In recent years, Nigeria has undergone significant transformations in its trade policies, economic expansion, and financial advancement, positioning it as a leading African economy. The economic landscape of Nigeria has prominently featured trade openness, characterized by the adoption of liberalized trade policies and increased involvement in international trade. Concurrently, the nation has experienced phases of substantial economic expansion driven by diverse industries, including oil, agriculture, and services. These advancements have spurred efforts to enhance the financial industry and streamline its progress.

The importance of trade liberalization and economic expansion in promoting the advancement of financial systems among nations cannot be overstated. According to international trade theories, variations in technology, factor endowments, and economies of scale among nations are key factors that give rise to comparative advantages and influence trade patterns. Through the elimination of trade restrictions such as quotas, subsidies, and import taxes, the World Trade Organization (WTO) has made significant strides in facilitating the growth of international commerce (Verter & Osakwe, 2015).

Trade openness is often viewed as a catalyst for economic growth because it encourages competition, supports optimal resource utilization, and promotes technological advancement through knowledge spillovers and technology transfers (Yu et al., 2022). Thus, the expansion of trade has the potential to impact financial development by increasing the availability of foreign capital, fostering financial innovation, and boosting economic activities.

Furthermore, a nation's economic growth can be defined as a sustained increase in its ability to provide a broader range of economic goods to its population over an extended period. This enhanced capacity relies on technological progress and the corresponding ideological and

institutional advancements it requires (Kuznets, 1973). Openness to trade and economic development is a pivotal factor in today's globalized economy, which consequently shapes the financial landscape of nations (Levine, 1997).

To gain a deeper understanding of the dynamics and implications of trade openness, economic progress, and financial expansion in emerging nations (Shahbaz et al., 2013; Altaee & Al-Jafari, 2014; Rani & Kumar, 2018; Afolabi, 2022), it is important to note that a nation with a reasonably established, efficient, and well-regulated financial structure possesses a competitive advantage in businesses that rely on external funding. Consequently, economies with well-developed financial sectors are more likely to experience increased international commerce (Beck, 2002; Svaleryd & Vlachos, 2005; Hur et al., 2006; Ayhan Kose et al., 2009).

The debate on whether trade openness and/or economic prosperity can impact financial development in emerging nations remains unresolved. While some scholars believe in a compelling cointegration among these constructs (Yanikkaya, 2003; Santos-Paulino, 2005; Altaee & Al-Jafari, 2014; Mohamed Sghaier, 2021), another significant group of authors suggests that economic growth, trade accessibility, and financial growth evolve independently (Shahbaz et al., 2013; Uddin et al., 2014; Pham, 2015; Shahbaz et al., 2015; Borsi, 2018; Muhammad & Mohsin; Farhad & Taghizadeh-Hesary; Muhammad, 2022).

Nigeria, the most populous black nation in Africa, has maintained strong performance over the last decade, with an average annual economic growth of 3.2% (IMF, 2022). As a developing economy with a substantial population and favorable demography, Nigeria holds promise for robust fiscal progress. However, with this steady economic advancement, the nation must address the challenges faced by its financial system and reduce the costs associated with obtaining information, enforcing contracts, and conducting transactions. This should lead to the emergence of financial contracts, markets, and intermediaries.

Additionally, Nigeria's export performance has raised concerns. Unlike many other oil-producing nations, Nigeria has struggled to diversify its export market, resulting in the dominance of the oil sector in nearly all merchandise exports and accounting for over 70% of overall foreign revenues.

Unlike previous studies that have primarily focused on short-term or contemporaneous causal relationships, the current study contends that understanding the sustained impact over a longer period can provide insights into the dynamics of financial development and the role of trade and economic growth in shaping it. Therefore, examining both the short- and long-term impacts of trade openness and economic growth on Nigeria's financial development is crucial.

By addressing two significant knowledge gaps, this study contributes to the body of knowledge. The research begins by examining trade openness and its impact on financial and economic development. Exploring how trade openness influences financial development and economic progress can offer insights beneficial for nations pursuing sustainable development. Consequently, given the history of financial crises and the uncertainty surrounding trade policies, risks to recorded economic growth performance are evident.

The performance of Nigeria's exports has also raised concerns. Unlike many other oil-producing nations worldwide, Nigeria has struggled to diversify its export market. This has led to the dominance of the oil sector in nearly all merchandise exports, contributing to more than 70% of its overall foreign revenues. This highlights some of the key challenges Nigeria faces.

Through an evaluation of the connections between trade openness, economic growth, and financial development in Nigeria, this study aims to provide a framework for policymakers. Achieving this goal requires a comprehensive analysis of the Nigerian economy from 1990 to 2021. The ARDL estimator is employed to account for endogeneity and heteroscedasticity. The subsequent sections form the rest of the paper. Section 2 presents the research methodology. The third section focuses on presenting results and discussions. Section 4 provides policy implications and concludes the study.

METHOD

Data

This study utilizes Annual Time Series data from 1990 to 2021 in Nigeria. The choice of Nigeria is based on the intention to narrow the focus to the most densely populated black nation in Africa, which also happens to be the largest economy on the continent, and on the accessibility of reliable data.

Trade openness is measured by dividing the total of imports and exports by GDP (denoted as TRDOP). This ratio has been considered the simplest and most popular indicator of trade openness (see King & Levine, 1993; Murinde & Eng, 1994; Siddiki, 2002). We introduced GDP per capita growth (annual %), denoted as RGDPP, as used in Kaidi et al., (2019); Nasir et al., (2019); Steenblik et al., (2012), to estimate economic growth in the country. Financial Development was proxied by Domestic credit to the private sector, denoted as DCP, as employed in Rani & Kumar (2018) and Afolabi (2022). Interest rate is denoted as INT, and exchange rate is denoted as EXCH, serving as control variables. Data on Domestic credit to the private sector, Real GDP, and exchange rate were transformed into natural logarithms to achieve stationarity in variance. Table 1 contains descriptions and sources of the variables used in the study.

Table 1. Description of variables

Abbreviation	Description	Source
DCP	Financial Development	World Development Indicator, (WDI)
TRDOP	Trade Openness	World Development Indicator, (WDI)
RGDP	Economic growth	World Development Indicator, (WDI)
EXCH	Exchange Rate	World Development Indicator (WDI)
INT	Interest Rate Spread	World Development Indicator, (WDI)

Source: authors' compilations (2023)

Model

The model for the effect of trade openness, and economic growth on financial development is as stated:

$$\mathrm{DCP} = \mathrm{F(TRDOP, RGDP, EXCH, INT)} \ldots\ldots\ldots\ldots(1)$$

RGDP represents the real gross domestic product (a proxy for economic growth), while financial development is proxied by domestic credit to the private sector (% of GDP). In the model, β0 is the constant term, and β1 through β4 are the coefficients. εt1 represents the error term. TRDOP represents trade openness (imports + exports / GDP), GDP is the annual GDP per capita growth (%), EXCH is the exchange rate, and INT is the interest rate spread.

The empirical strategy employed here involves estimating the baseline equation using the Autoregressive Distributed Lag (ARDL) method. ARDL models have been widely utilized in the field of econometrics for a considerable period. They have gained popularity in recent years as a means of examining co-movement relationships. Two seminal contributions in this regard are from Pesaran & Shin (1998) and Pesaran et al. (2001). These researchers argue that ARDL models are particularly advantageous due to their ability to handle cointegration with inherent robustness against the misspecification of integration orders for relevant variables. The dynamic relationship is specified as follows:

$$DCP_t = \beta_0 + \beta_1 TRDOP_t + \beta_2 RGDP_t + \beta_3 EXCH_t + \beta_4 INT_t + \varepsilon t_1 \ldots\ldots(2)$$

Empirical strategy

The study aimed to explore the dynamic interactions between trade openness and economic growth on financial development in Nigeria. Descriptive statistics were employed to present, characterize, and summarize the data in a meaningful manner. Furthermore, the study aimed to assess whether the data followed a normal distribution by examining their means and Jarque-Bera values. The citation by Gujarati and Porter (2009) is included. Next, we proceed with the estimation of unit root tests to determine the stationarity of the variables. The Augmented Dickey-Fuller (ADF) and Phillips-Perron tests were utilized to conduct the stationarity analysis. The unit root tests for time series rely on estimations of:

$$\Delta Y_t = \alpha_i + \eta y_{t-1} + \delta_t + \sum_{k=1}^{k_i} \theta_i^{(k)} \Delta y_{t-k} + \varepsilon_t$$

$$\varepsilon_t \sim idN(0, \theta_\varepsilon^2) = 1,2, \ldots \ldots . N, t = 1,2 \ldots \ldots T \ldots\ldots\ldots\ldots (3)$$

The variable y_t represents the observed y value for N entities over T periods, while the operator Δ denotes the difference. The unit root test entails the formulation of a null hypothesis, denoted as H_0 : ρ_i=0 ∀i, and an alternative hypothesis, denoted as H_A : ρ_i=ρ<0 ∀i. Subsequently, we undertake the Autoregressive Distributed Lag (ARDL) estimation technique to incorporate the variables' cointegration.

RESULT AND DISCUSSION

Pre-estimation results

Table 2 presents the results of the descriptive statistics. The findings suggest that the mean and median values of all variables fall within the range of their minimum and maximum values. This indicates a strong likelihood of normal distribution for all variables: financial development, trade openness, economic growth, exchange rate, and interest rate spread. The Jarque-Bera statistics support the inference that the series adhere to a normal distribution, as evidenced by the lack of statistical significance at the 5% level for all p-values. Thus, this validates the alternative hypothesis that each variable conforms to a normal distribution.

Table 2. Descriptive statistics

Variables/Stat.	DOM_CRED	LTRDOP	GDP	EXC	INTRS
Mean	10.105	-6.5737	4.37E+13	135.26	7.5613
Median	9.3700	-6.6080	4.00E+13	128.93	7.4037
Maximum	19.603	-5.5623	7.34E+13	358.81	11.064
Minimum	4.9480	-7.9397	2.17E+13	8.0382	3.2683
Std. Dev.	3.4724	0.5743	1.98E+13	101.32	1.6436
Skewness	0.9365	-0.2984	0.255262	0.6225	-0.0456
Kurtosis	3.7369	2.7548	1.436638	2.5645	3.4397
Jarque-Bera	5.4020	0.5552	3.606316	2.3199	0.2689
Probability	0.0671	0.7575	0.164778	0.3135	0.8741
Observations	32	32	32	32	32

*** ** and * represents 10%, 5%, and 1% respectively

Source: processed data (2023)

Test of multicollinearity

A correlation matrix was calculated to evaluate the presence of multicollinearity among the predictor variables (trade openness, economic growth, exchange rate, and interest rate spread). Table 3 displays the correlation matrices. The analysis indicates the absence of significant correlations between the variables, thus ensuring the reliability of the results.

Table 3. Correlation matrix

Variables	DOM_CRED	LTRDOP	GDP	EXC	INTRS
DOM_CRED	1				
LTRDOP	0.603	1			
GDP	0.648	0.612	1		
EXC	0.516	0.447	0.902	1	
INTRS	0.052	0.104	0.170	0.157	1

Source: authors' compilation (2023)

Table 3 displays the results of the correlation matrix, showing positive correlation coefficients among the variables. The absence of multicollinearity among the variables can be inferred from the correlation coefficients being below 0.95, as indicated by Baltagi, Bun, & Sarafidis (2015) and Wooldridge (2007). The correlation between trade openness and domestic credit to the private sector is positive, with a coefficient of 0.6035. GDP per capita is positively correlated with domestic credit to the private sector (0.6480) and the exchange rate (0.5169). The interest rate spread shows a positive correlation with domestic credit to the private sector (0.052).

Unit root test

The results of the ADF and PP confirmatory tests are presented in Table 4.

Table 4. Unit root test

Variables	Intercept		Trend & intercept		Intercept		Trend & Intercept	
	ADF	PP	ADF	PP	ADF	PP	ADF	PP
DOM-CRE	-2.680***	1.901	-3.572***	-1.958	-4.894**	-5.215**	-4.903**	-6.054**
LTRDOP	-2.716***	-2.698***	-3.342***	-3.266***	-5.223**	-10.724**	-5.245**	-17.727**
LEXC	-1.871	-1.964	-2.234	-2.264	-5.064**	-5.065**	-5.152**	-5.255**
INT	-3.974**	-3.869**	-3.906**	-3.711**	-6.368**	10.264**	-6.312**	-11.113
GDP	-3.706*	-3.829**	-3.620**	-3.750**	-9.072	-17.817	-8.916**	-20.590**

***, **, and * represents 10%, 5%, and 1% respectively

Source: authors' compilation (2023)

The results indicate that the variables exhibit stationarity at both levels and in the first difference, except for the exchange rate variable, which only shows stationarity in the first difference. The empirical results revealed both the nonstationary characteristics of the variables and the

covariance structure of the analyzed dataset. We utilize an Autoregressive Distributed Lag (ARDL) model to estimate the associations among the variables of interest. The choice of the estimation strategy is crucial in this study, as it aligns with the observed patterns in the data.

Lag selection criteria

Determining a suitable lag duration for each underlying variable in the ARDL model is crucial for achieving Gaussian error terms. The selection of the optimal lag length is accomplished by relying on the Schwartz information criteria. This involves finding the lag length value that minimizes the Information Criterion, specifically, the Schwartz criterion (SC), while ensuring the absence of autocorrelation. The optimal lag lengths are provided in Table 5. The optimal lag length can be identified by examining the results presented in Table 5, which indicate that a lag length of one minimizes the Schwarz criterion (SC). After determining the optimal lag length, we conduct a test to establish the presence of a long-term relationship between the variables.

Table 5. Lag length selection

Lag Length	SC
1	77.09148*
2	78.05121

***, **, and * represent 10%, 5%, and 1% respectively

Source: authors' compilation (2023)

Bounds test

This study utilizes the bound-testing procedure proposed by Pesaran et al. (2001) to examine the presence of long-term relationships among the variables. The F-test is employed to evaluate the assumption of no cointegration among the variables, comparing it to the hypothesis of cointegration, represented as:

H_0: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$, i.e., there is no cointegration among the variables

H_1: $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq 0$, that is, there is cointegration among the variables

Table 6. Bound test result

F-Statistics	1%		5%		10%	
5.7529	Lower bound	Upper bound	Lower bound	Upper bound	Lower bound	Upper bound
	3.29	4.37	2.56	3.49	2.2	3.09

***, **, and * represent 10%, 5%, and 1% respectively

Source: processed data (2023)

Based on the results of the Bound Test, as presented in Table 6, it is recommended to compare the computed F-statistic with Pesaran's critical values at conventional significance levels. According to observations by Narayan (2005), Pesaran et al.'s (2001) critical values are not suitable for small sample sizes due to their derivation from the assumption of large sample availability. Narayan (2005) provided critical values for sample sizes ranging from 30 to 80 observations. The observed values fall within the intervals of 2.2 to 3.09 at a 10% significance level, 2.56 to 3.49 at a 5% significance level, and 3.29 to 4.37 at a 1% significance level.

The null hypothesis was accepted based on an F-statistic of 5.7529, which exceeded both the lower and upper critical values. This leads to the conclusion that all variables in the model exhibit co-movements in the long term within Nigeria.

Estimation results

The findings regarding the relationship between trade openness, economic growth, and financial development in Nigeria are presented in Tables 7 and 8. Table 7 demonstrates that the explanatory variables of the model account for 61.6% of the variation in the dependent variable over an extended period. The remaining 38.4% of the variation is attributed to factors outside the model. The statistical significance of the model is confirmed by the F-statistic (51.89) at a significance level of 5%. The statistical analysis reveals a negative issue of serial correlation in the model, as evidenced by the Durbin-Watson statistic of 2.669, which falls outside the acceptable range of 1.5 to 2.5 established by prior research (Dufour & Dagenais, 1985; Durbin, 1960).

The findings suggest that over an extended period, the extent of trade liberalization has a positive and statistically significant impact at a 5% significance level. This indicates that an increase in trade openness by a certain percentage will lead to a corresponding 5.676 percent increase in financial development in Nigeria. Furthermore, GDP per capita exhibits a negative and statistically significant correlation at the 10% level. This implies that a rise in GDP per capita by a certain percentage will result in a reduction of 0.368 percent in financial development within the Nigerian economy. The statistical analysis also reveals that both the exchange rate and the interest rate have negative and insignificant effects.

Table 7. ARDL long-run estimate on the relationship between trade openness, economic growth and financial development in Nigeria

Dependent variable: DCP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TRDOP	5.676802	1.502475	3.778300**	0.0010
RGDP	-0.368254	0.206376	-1.784383***	0.0882
EXC	-0.001860	0.007608	-0.244503	0.8091
INT	-0.919621	0.550639	-1.670098	0.1091
C	55.56866	12.94384	4.293057**	0.0003
R-squared	0.655746			
Adjusted R-squared	0.616024			
Durbin-Watson stat	2.669931			
F-statistic(Prob)	51.89			

Source: authors' compilation (2023)

Table 8. ARDL long-run estimate on the relationship between trade openness, economic growth and financial development in Nigeria

Dependent variable: DCP

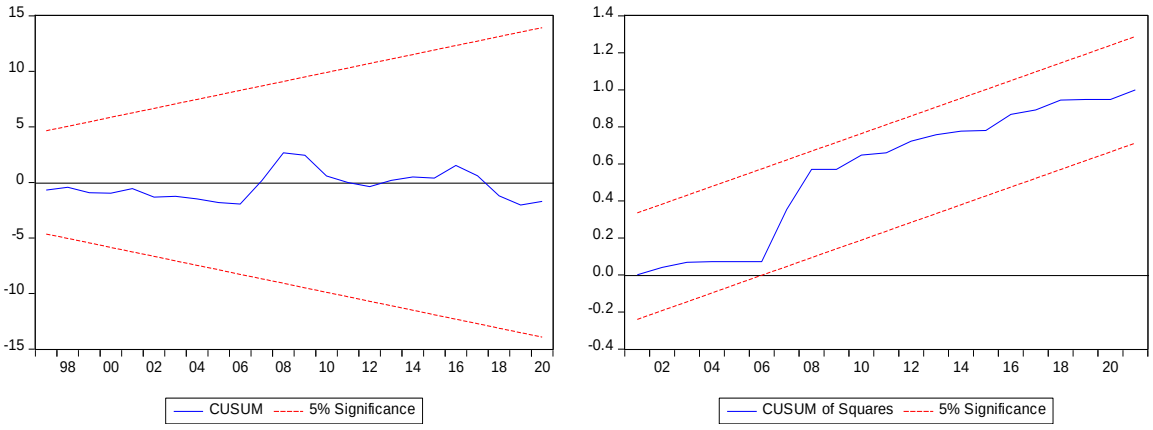
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DCP(-1))	0.390307	0.123734	3.154396	0.0048
D(TRDOP)	1.213707	0.833257	1.456581	0.1600
D(RGDP)	-5.52E-1	1.40E-13	-3.95282	0.0007

ECM(-1)*	-0.4926	0.07403	-6.65468	0.0000

Source: authors' compilation (2023)

Additionally, Table 8 presents the short-run interconnections between financial development, trade openness, and economic growth in Nigeria. The findings suggest that, over a limited period, a positive association exists between trade openness and financial development in Nigeria, albeit not statistically significant at a 5% level of significance. Furthermore, it's noteworthy that economic growth exhibits a negative and statistically significant correlation at a significance level of 5%. This implies that an increase in economic growth will result in a reduction of 5.52 percent in financial development. Moreover, the coefficient of the error correction term is negative and statistically significant at 5%. This indicates that the disequilibrium within the economic system in Nigeria would be restored to the equilibrium level at -0.492% (-49.26). This further implies the presence of one-way Granger causality among the variables of interest in Nigeria.

Figure 1. CUSUM and CUSUM of square stability test



Source: authors' compilation (2023)

The results shown in Figure 1 indicate that both the CUSUM and the CUSUM of Squares lines fall within the critical bounds of 5 percent significance, suggesting that the model exhibits structural stability.

Discussion

Trade openness and financial development

The results indicate that increased trade openness has a positive effect on the growth of the financial industry in Nigeria, both in the short and long term. In the short run, a unit increase in trade openness is associated with a 1.213 unit rise in financial development. This implies that greater international trade and trade liberalization have an immediate positive impact on Nigeria's finance industry. In the long term, trade openness has an even more significant effect on financial development, with a substantial 5.676 increase in financial development correlated with each unit increase in trade openness. The positive coefficient of trade openness suggests that as Nigeria expands its international trade, it opens up opportunities for economic growth and development, subsequently invigorating the financial sector. This beneficial effect can be attributed to several ways in which trade openness positively influences financial growth,

including increased access to external funding, knowledge transfer, and improved resource allocation efficiency. This finding aligns with previous studies by Asiama, J., & Mobolaji (2011), Mbulawa (2015), and Abeka, Gatsi, Appiah, et al. (2022), all of which emphasize the significant impact of trade openness on financial growth.

The findings also support the finance-trade-growth nexus theory, which posits that trade openness and financial development complement each other to foster economic growth. Trade openness spurs economic activity and investment opportunities, necessitating a robust banking sector to effectively mobilize and allocate resources. The results demonstrate that increased trade openness stimulates financial growth, establishing a positive feedback loop linking trade, finance, and economic expansion in Nigeria. Additionally, the results align with the financial liberalization theory, illustrating that expanding international trade promotes financial development. However, based on the results, trade openness exposes domestic financial institutions to international competition, resulting in enhanced efficiency, innovation, and risk management practices. The study contends that as financial institutions become more competitive and robust, they are better equipped to serve the funding needs of households and businesses, contributing to global financial development.

Economic growth and financial development

The coefficients, which are -5.52E-1 in the short run and -0.368254 in the long run, indicate that as economic growth increases, so does financial development. However, the findings suggest that higher rates of economic growth are associated with lower rates of financial development in Nigeria. This implies that despite experiencing economic expansion, the financial sector may not have grown at the same rate or to the same extent. The findings may indicate a relative lag or inefficiency in the financial sector's ability to support and promote economic growth through effective financial intermediation, lending access, and other financial services.

The findings align with the work of Adeniyi, Oyinlola, Omisakin et al. (2015), who assert a negative relationship between financial development and economic growth. However, our finding conflicts with those of Osuji and Chugbo (2012), Nwosu and Metu (2015), and Afolabi (2022), who argue that financial development is an effective tool for ensuring the growth of the Nigerian economy. Consequently, efforts should be directed towards reducing financial debt in Nigeria.

The results support the theory that the inverse relationship between financial development and economic growth signifies inefficiencies in financial intermediation, which may pose challenges for the financial sector in effectively mobilizing and allocating financial resources to profitable investment opportunities. The outcome also demonstrates that in countries where financial markets are heavily regulated, managed, or susceptible to government intervention, economic advancement might not translate into a commensurate degree of financial development. Government rules and policies that restrict activity in financial markets can impede the efficient use of funds, thereby negatively impacting both financial development and economic growth.

CONCLUSION

This paper investigates the relationship between trade openness, economic growth, and financial development, with a focus on Nigeria. Unlike previous studies, this study employs an Autoregressive Distributed Lag Model to assess the short- and long-term effects of trade openness and economic growth on the evolution of Nigeria's financial system from 1990 to 2021.

According to the findings, trade openness has a positive impact on the expansion of Nigeria's financial sector in both the short and long term. This implies that fostering global commerce and liberalizing existing trade has an immediate positive influence on Nigeria's financial sector. Additionally, the results reveal a negative correlation between financial development and

economic growth, indicating that financial development in Nigeria does not always result from economic advancement.

However, the report underscores the necessity of policies that support global trade and trade liberalization, highlighting the importance of trade openness for Nigeria's financial industry development. The growth of Nigeria's financial sector has been positively influenced by trade openness, suggesting that boosting trade liberalization can aid economic diversification. By opening up to foreign commerce, Nigeria can reduce its reliance on oil exports and promote the growth of other sectors, fostering a more robust and balanced economy.

The report also recommends that policymakers focus on implementing financial sector reforms to enhance trade finance, expand credit access, strengthen regulatory frameworks, and improve financial infrastructure. These changes would facilitate the integration of the financial sector with global trade and support its expansion. Additionally, the negative link between economic growth and financial development suggests that despite overall economic progress, growth's benefits might not be translating into increased access to financial services for a broader population. Addressing the issue of limited financial inclusion is crucial, necessitating policies to improve access to financial services for marginalized communities. This could involve initiatives such as extending financial institutions into rural areas, promoting digital financial services, and supporting programs to enhance financial literacy.

Furthermore, the adverse impact of economic growth on financial development implies that the financial industry may not effectively mobilize and distribute resources for profitable projects. Policymakers should consider supporting the expansion of diverse financial institutions, such as non-bank financial entities, venture capital firms, and microfinance organizations, to stimulate economic growth. This approach can encourage entrepreneurship and offer alternative forms of financing for small and medium-sized businesses (SMEs).

For future research, it would be beneficial to examine the sector-specific effects of trade openness on the financial industry or explore how various sectors like manufacturing, agriculture, or services interact with trade openness and financial development. Given the scope of this study's focus on the relationship between trade openness, economic growth, and financial development in Nigeria, such investigations could provide insights into sectoral dynamics and offer policy recommendations.

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