

Globalization and Poverty Reduction in Nigeria

¹Mohammed Hammajumba, ²Ijeoma Emele Kalu, ³Sylvester Udeorah

Institute of International Trade and Development, University of Port Harcourt, Rivers State, Nigeria

Abstract:- This study examines the influence of globalization on poverty reduction in Nigeria from 1995 to 2022. We specifically look at the impact of export concentration index (LNECI), foreign portfolio investment (LNFPI), foreign direct investment (LNFDDI), financial openness (LNFOP), trade openness (LNTOP), and poverty rate (LNPOVR). The study's data came from the World Bank and the Central Bank of Nigeria's statistical bulletins, and it was analysed using descriptive statistics, Granger causality, unit root, and the Autoregressive Distributed Lag (ARDL) tests at the 5% level of significance. The ARDL F-Bounds test, which disproves the long-run form, is required since the unit root test demonstrates that the variables were integrated at level and first difference. For LNPOVR, the short-run ARDL test reveals that LNPOVR is positive and significant, indicating that it is autoregressive. LNECI and LNFPI are negative and inconsequential to LNPOVR; LNFDDI is negative but significant to LNPOVR; LNFOP is positive but significant to LNPOVR; and LNTOP is positive and significant to LNPOVR. The result of the Granger Causality test shows the absence of directional causal-effect from LNTOP, LNFDDI, LNFOP, and LNECI to LNPOVR. However, there is the presence of uni-directional causal-effect from LNPOVR to LNFPI in Nigeria. The study concludes that globalization significantly promotes economic development in Nigeria. The study recommends that the Nigerian Investment Promotion Commission (NIPC) should continue to support favourable policies and build an environment that encourages foreign direct investment while acting as a voice for Nigeria. These steps are essential in luring international investors and establishing Nigeria as a safe investment location.

Keywords:- Concentration, Poverty, Economic Performance, FDI, Financial Openness.

I. INTRODUCTION

Despite some progress in poverty reduction in recent decades, a considerable number of individuals worldwide still endure extreme poverty. According to the World Bank (2017), the global priority of eliminating poverty is evident as there were approximately 700 million individuals living in extreme poverty (earning less than \$1.90 per day) and 300 million individuals living in extreme poverty (earning less than \$2.50 per day) in 2015. Developing nations have a higher prevalence of extreme poverty compared to the developed world. Sub-Saharan Africa, specifically, is home to over half of the global poor (World Bank, 2017). Insufficient well-being has negative consequences for

economic growth, social harmony, political stability, and individual progress (Ogunniyi et al., 2016; Upton et al., 2016). According to the World Bank (2017), it is important for developing countries to prioritise poverty reduction in their socio-political and economic research and development plans. This can be achieved through the globalisation of their economies.

Globalisation refers to the integration of economic, technological, social, cultural, and political aspects of the world into a single global society (Nduonofit & Emina, 2021). Globalisation opposes and eliminates trade restrictions. In the field of Economics, globalisation refers to the process of integrating multiple nations' economies into a single global economy. Globalization's capacity to expand current markets is influenced by technology, policy liberalisation, and transnational competition. Advancements in computer technology have facilitated the fulfilment of traders' demand for financial instruments such as swaps and futures, enabling them to enhance risk management capabilities. Containerization has significantly reduced handling and transit times in both land and sea-based shipping, accounting for over two-thirds of the overall time reduction. Policy liberalisation is a significant contributing factor. Consequently, the majority of nations have relaxed limitations on global trade and the unrestricted movement of financial resources and services. Competition is a significant driver for businesses to pursue cost reduction and productivity enhancement (UNCTAD, 2002; United Nations Development Programme, 2016).

Nigeria, along with other nations, recognised the importance of participating in globalisation by partially liberalising its economy. This was done in order to achieve its ambitious development goals. The adoption of an economic structural adjustment known as the Structural Adjustment Programme (SAP) was undertaken. Structural adjustment and global integration are closely interconnected and mutually reinforcing (Aina, 1997 as cited in Tamuno, 2006).

However, not all countries have achieved complete integration into the global community. Developed countries primarily benefit from globalisation due to their dominant position in international trade and finance, as stated by UNCTAD in 2003. If global imbalances and distortions persist, it is likely that poor and emerging nations will be negatively affected (Collier & Dollar, as cited in Onwuka & Eguavoen, 2007). Zuma (2003) contends that the global community is divided into two distinct villages due to the unequal distribution of political, economic, and military power. In one village, a privileged minority enjoys prosperity, wealth, and democratic governance, while the

majority in the other village experience poverty, alienation, marginalisation, and limited agency in shaping their future. The impact of globalisation on economic progress is often accepted without empirical validation.

Several recent studies have employed various measures to proxy for globalization in Nigeria (Dada, Adeiza, Noor, & Marina, 2022; Dada & Abanikanda, 2022; Emmanuel-Amadi & Christian, 2022; Lakia & Timothy, 2022; Wasurum & Tamunowariye, 2022; Andrew, Joseph, Barnabas, Ohwofasa, Damilola, & Olabisi, 2022; Adegbayo, Efuntade, Olugbamiye, & Efuntade, 2021; Kingsley, Toyosi, & Babatunde, 2021) such as FDI, non-FDI, trade openness, and foreign portfolio investment. However, the existing empirical literatures in Nigeria does not currently utilise financial openness and export concentration index as measures of globalisation. The present study incorporates financial openness and the export concentration index as indicators of globalisation. Moreover, most previous studies have employed GDP and the human development index as indicators of economic growth and development. This study employs the poverty rate, as defined by Seer (1979), as a measure of economic development. The aim of this study is to examine the effects of globalisation on Nigeria's economic progress between 1992 and 2022.

II. LITERATURE REVIEW

This study is based on Dunning's (1973) OLI theory and the Prebisch-Singer hypothesis.

➤ *Dunnings OLI Theory*

OLI is an acronym that represents the concepts of "ownership," "location," and "internalisation" within Dunning's (1973) eclectic theory. This theory aimed to provide an explanation for the reasons behind the utilisation of foreign production to meet demand and the preference for investment as a method of business expansion. It achieved this by integrating various existing theories of foreign direct investment (FDI) that had previously examined market imperfections, industrial organisation, industrialization, and location as separate factors. Dunning (1973) posited that industrial organisation could account for firms' competitiveness. However, he concluded that locational determinants played a significant role in the growing utilisation of foreign direct investment (FDI) for serving international markets. Dunning (1973) identified three conditions for foreign direct investment (FDI): (1) ownership of intangible assets leading to a comparative advantage, (2) direct utilisation of advantages by the firm, and (3) utilisation of advantages with factor inputs in the host country. The OLI model primarily functions as an analytical framework rather than a predictive theory for multinational corporation behaviour. Dunning (1973) highlights that one way to leverage foreign direct investment (FDI) for the purpose of expanding ownership advantages is through the utilisation of strategic alliances. These alliances allow firms to tap into technological or marketing synergies offered by companies in different countries.

Dunning (1973) later utilised the OLI model to elucidate the changing global position of countries throughout different stages of development (Dunning 2001). The Investment Development Path (IDP) theory suggests that as a country develops, the advantages of ownership, location, and internalisation (OLI) experienced by foreign-owned firms investing in the country and domestic firms investing overseas change. The IDP application of the OLI model addressed previous criticisms by introducing a dynamic component to the model. Assuming exogenous market imperfections, as Rugman (1982) did, Dunning's eclectic theory and internalisation theory become essentially indistinguishable.

Dunning's OLI paradigm explains how firms can engage in trade and investment decisions. It suggests that firms can serve foreign markets from their home country by leveraging the location advantages of their domestic market. On the other hand, investment allows firms to benefit from the locational advantages offered by foreign countries. Traders and investors may make varying decisions based on the stage of the product. When a business identifies a potential market in a foreign country, it has the option to either establish its own operations or enter into a licencing agreement with an established local entity, instead of solely engaging in trade activities. Direct investment is typically favoured over licencing in situations where there is limited domestic competition, a highly appealing market, utilisation of advanced technology, and involvement of a large, globally active company. Foreign operations may require a licence when a host government imposes restrictions. The majority of foreign direct investment (FDI) takes place among economically advanced countries. Low labour costs in developing nations attract foreign direct investment (FDI) due to their locational advantages. Agarwal (2015) argues that ownership advantages hold greater significance than locational advantages in foreign direct investment (FDI). Therefore, the role of low wages as a factor in FDI decisions should not be exaggerated.

➤ *Prebisch-Singer Hypothesis*

Prebisch and Singer independently formulated similar theories during the late 1940s and early 1950s in the field of uneven development. These theories, commonly referred to as the Prebisch-Singer doctrine, have gained recognition. The Prebisch-Singer doctrine posits that trade will lead to increased inequalities between developed and underdeveloped countries. It suggests that the benefits of trade will be unevenly distributed, with countries that primarily export raw materials experiencing less gain compared to those exporting manufactured goods. Disparities in product and factor markets, along with the benefits derived from technical progress, collectively contribute to the adverse impact on the terms of trade for primary producers.

Singer (1984) argued that his and Prebisch's research did not challenge the validity of the doctrine of comparative advantage. Instead, their focus was on examining the fairness of the distribution of gains and the impact of specialisation on developing nations. Prebisch's (1950) theory suggests that free trade could result in developing countries experiencing deteriorating trade terms due to the lower quality of their exports. Prebisch posited that both demand and supply side factors played an equal role in the decline of trade terms for peripheral economies. Central and peripheral imports exhibit distinct income elasticities of demand on the demand side. The income elasticity of primary commodity imports in central economies is low, whereas the income elasticity of industrial imports in peripheral economies is high. As incomes in core economies increase, there is no proportional rise in demand for exports from peripheral countries. As peripheral economies experience income growth, there is a corresponding increase in demand for exports from core economies.

Moreover, exports from core economies exhibit higher demand irrespective of price, whereas exports from peripheral economies face lower demand. Consequently, peripheral economies experience substantial price reductions subsequent to output expansions. The price elasticity of exports from central economies results in their relative insensitivity to fluctuations in production costs. Technological advancements in export industries of peripheral countries result in decreased export prices and a deteriorating term of trade. Central economies benefit from technological advancements in the periphery as the terms of trade deteriorate. Peripheral countries have a slower rate of increase in factor incomes due to their higher population growth and the availability of abundant labour. A lack of core resources increases production costs and subsequently affects the prices of exported goods to the periphery. Consequently, peripheral nations are compelled to allocate greater financial resources towards the procurement of imports from central nations. Prebisch (1950) conducted experiments to support his theory. This study analysed data on the terms of trade for commodities traded in the United Kingdom between 1870 and 1938. Prebisch extended the concept of the UK terms of trade to encompass developed nations, while also associating the inverse movement of the terms of trade with underdeveloped nations.

➤ *Empirical Review*

Matar and Belazreg (2023) employ a panel-VAR methodology to investigate the interconnections among innovation, trade openness, financial development, and economic growth in a sample of 11 European countries spanning the period from 2001 to 2016. The results indicated a negative correlation between innovation and economic growth, as well as between trade and economic growth.

In his study, Coulibaly (2023) examines the influence of trade on the economic development of Sub-Saharan African nations. The estimated model utilises the Pooled Mean Group technique on a sample of 44 Sub-Saharan African countries spanning the years 1980 to 2017. Trade

has a notable and beneficial effect on per capita income in sub-Saharan Africa.

Luo and Qu (2023) utilised panel data spanning from 2000 to 2019 to construct an entropy weighted economic development indicator system. They employed both linear regression and dynamic panel threshold models to examine the impact of export trade on high-quality economic development and its underlying mechanism. The study found that export trade has a significant single-threshold effect on heterogeneous absorptive capacity, specifically when regional absorptive capacity variables (economic level, R&D intensity, and technological gap) exceed a certain threshold value. In these cases, export trade has a positive impact on high-quality economic development.

Dahmani, Mabrouki, and Ben-Youssef (2022) examine the impact of information and communication technologies (ICTs) and increased trade openness on the economic growth of Tunisia. We employed the cross-section augmented autoregressive distributed lag (CS-ARDL) model and the Dumitrescu and Hurlin Granger causality test to analyse panel data spanning from 1995 to 2018. Empirical evidence suggests a positive and enduring correlation between the utilisation of ICTs and economic growth as well as value creation in Tunisia. In addition, it is worth noting that economic growth is positively influenced by trade openness and gross fixed capital formation (GFCF).

A study conducted by Amin, Anwar, and Liu (2022) examines the influence of foreign direct investment on the economic growth of Romania during the period of 1990 to 2019. The study reveals that changes in outward foreign direct investment (OFDI) have a significant and positive influence on Romania's economic growth. Both increases and decreases in OFDI contribute to this impact, with increases having a stronger effect.

Tougem, Ze, Amowine, and Adiyoh (2022) empirically examine the effects of domestic and foreign direct investment (DI and FDI) on Cameroon's economic development between 1990 and 2018. The findings indicate a positive correlation between DI and economic growth. Moreover, the study revealed a positive correlation between foreign direct investment (FDI) and financial development.

Adegboyo, Efuntade, Olugbamiye, and Efuntade (2021) examine the relationship between trade openness and poverty in Nigeria from 1985 to 2020. The ARDL estimation technique revealed that the domestic credit to private sector and GDP ratio, electric power consumption, primary school enrollment rate, and KOF globalisation index had a detrimental effect on poverty reduction in Nigeria. Conversely, Nigeria experienced a positive correlation between GDP per capita and poverty reduction.

Kingsley, Toyosi, and Babatunde (2021) examine the influence of globalisation on the economic growth of Nigeria. The analysis indicates a direct relationship between the exchange rate, trade balance, and GDP per capita.

Idoko and Abu (2020) examined the correlation between globalisation and the economic development of Nigeria. This study utilised co-integration and ordinary least squares (OLS) techniques for data analysis. The findings suggest that foreign direct investment (FDI) plays a significant role in the process of globalisation and has a substantial impact on Nigeria's economic growth. The study suggests that Nigeria should enhance its integration into the globalised world to harness the benefits of globalisation. This can be achieved by diversifying its export base and products, and improving the business environment to attract increased external investments.

Fagbemi and Osinubi (2020) investigated the relationship between foreign direct investment (FDI) and the development of human capital in Nigeria over the period of 1981 to 2018. The research findings indicate that while the impact of foreign direct investment (FDI) on human capital is not significant over a prolonged period, it does have a significant effect in the short term. Empirical evidence suggests that there is an asymmetric link between FDI inflows and human capital development. Specifically, it has been observed that a certain threshold of FDI inflows can lead to a substantial long-term increase in human capital development. This implies that the magnitude of inward FDI plays a crucial role in the economy.

A study conducted by Aderemi, Ogunleye, Lucas, and Okoh (2020) employed the ARDL and Bounds test to analyse the correlation between globalisation and economic growth in European countries during the period of 1990 to 2018. The study's results indicate that European economies have experienced a beneficial effect from globalisation during the past four decades.

Idoko and Silas (2020) examine the correlation between globalisation and the economic development of Nigeria. The data was processed and analysed using co-integration and ordinary least squares (OLS) techniques. The study indicates a positive relationship between foreign direct investment (FDI) and Nigeria's economic development, suggesting that FDI is linked to the process of globalisation. There exists a negative correlation between trade and financial openness and Nigeria's economic development.

Odo, Agbo, and Agbaji (2020) conducted a literature review to examine the effects of globalisation on developing economies, specifically focusing on the Nigerian economy. The research findings indicate that developed economies tend to benefit more from globalisation compared to developing economies. The study recommends economic diversification and the adoption of cautious trade protectionism.

Maduka, Madichie, and Eze (2017) examine the influence of globalisation on Nigeria's economic growth through the analysis of time series data from 1970 to 2015. The study employs statistical methods, including cointegration and error correction techniques. The analysis indicates that trade openness, financial integration, and foreign direct investment have a substantial impact on Nigeria's economic growth. The study proposes effective policies to promote economic growth through globalisation.

III. METHODOLOGY

This study utilises the ex-post facto research design, a sub-category of the quasi-experimental design. Consequently, the researcher is unable to alter or manipulate the data used in this study, as it will be collected secondarily. This study utilises annual secondary data from 1992 to 2022, consisting of various globalisation indexes (financial openness, foreign direct investment, foreign portfolio investment, trade openness, and export concentration index), as well as poverty rate. The dataset includes 31 annual observations. Data were sourced from the databases of the National Bureau of Statistics (NBS), World Bank Development Indicators, and the Central Bank of Nigeria (CBN). The study utilises various statistical techniques, including unit root analysis, descriptive statistics, autoregressive distributed lag (ARDL) modelling, and Granger causality analysis, with a significance level of 5%.

Sanjo, Sende, and Mpetta (2022) argue that domestic investment, foreign direct investment, and exchange rate have a positive impact on a nation's economic performance, aligning with the model building. Based on this, the present study utilises the following model:

$$POVR = F(TOP, FDI, FOP, FPI, ECI) \dots \dots \dots 1$$

$$LNPOVR_t = \alpha_0 + \alpha_1 LN TOP_t + \alpha_2 LN FDI_t + \alpha_3 LN FPI_t + \alpha_4 LN FOP_t + \alpha_5 LN ECI_t + \epsilon_t \dots \dots \dots 2$$

➤ *A priori*: $\alpha_1 < 0, \alpha_2 < 0, \alpha_3 < 0, \alpha_4 < 0, \alpha_5 < 0$

It is expected that trade openness, foreign direct investment, financial openness, foreign portfolio investment, and export concentration index are negatively related to unemployment and poverty rates. This is because a rise in trade openness, foreign direct investment, financial openness, foreign portfolio investment, and export concentration index will cause the unemployment and poverty rates of Nigerian to decrease.

Where; POVR = Poverty rate (measure for economic development), TOP = Trade Openness, FDI = Foreign Direct Investment, FPI = Foreign Portfolio Investment, FOP= Financial Openness, ECI = Export, concentration index, ϵ = Error term or disturbance term, t = Annual time series, α_0 = Constant parameter, $\alpha_1, \alpha_2, \alpha_3, \alpha_4,$ and α_5 = Coefficient parameters, Ln = Natural logarithm of numbers.

IV. RESULTS AND DISCUSSIONS

➤ *Results*

Table 1 Descriptive Statistic Result

	LNPOVR	LNTOP	LNFPFI	LNFDI	LNFOPI	LNCEI
Mean	3.902236	3.590657	5.679780	12.86833	0.805811	0.969464
Median	3.972177	3.585184	6.167514	13.39116	0.733969	0.970219
Maximum	4.172848	3.975561	10.51466	15.02594	1.400478	1.529329
Minimum	3.499533	3.031099	0.015617	9.579356	0.272966	0.203973
Std. Dev.	0.176494	0.239263	2.418638	1.466820	0.241119	0.168792
Skewness	-0.476775	-0.620288	-0.415132	-0.605397	-0.371772	0.640867
Kurtosis	2.069458	3.146380	2.629907	2.352033	1.905013	3.238787
Jarque-Bera	2.292923	2.015588	1.067315	2.435930	2.262811	2.195657
Probability	0.317759	0.365023	0.586456	0.295832	0.322580	0.333595
Sum	120.9693	111.3104	176.0732	398.9181	-24.98013	-30.05338
Sum Sq. Dev.	0.934503	1.717406	175.4943	64.54687	1.744152	0.854726
Observations	31	31	31	31	31	31

Source: Eviews 10 Output

Table 1 presents the annual mean LNPOVR, which ranges from 3.499533% to 4.172848%, with a mean of 3.902236%. This suggests that a higher proportion of the Nigerian population lives on less than US \$2 per day compared to the average. The Nigerian economy has an average Long-Term Natural Output Potential (LNTOP) of 3.590657, with a low value of 3.031099 and a high value of 3.975561. This suggests that the level of trade liberalisation in the Nigerian economy is relatively moderate. The average annual value of LNFPFI is 5.679780, ranging from a minimum of 0.015617 to a maximum of 10.51466. The LNFDI has a mean annual value of 12.86833, ranging from a minimum of 9.579356 to a maximum of 15.02594. The study determined that the average LNFOPI was 0.805811, with a range spanning from 0.272966 to 1.400478. Additionally, the mean annual value of the LNCEI is 0.969464, with a maximum value of 1.529329 and a minimum value of 0.203973. This suggests that Nigeria has primarily concentrated on exporting a narrow range of commodities, despite its abundant resources.

The poverty rate, trade openness, foreign direct investment, foreign portfolio investment, financial openness, and export concentration index exhibit variations from the mean value of 0.176494%, 0.239263%, 2.418638%, 1.466820%, 0.241119%, and 0.168792%, respectively. The poverty rate, trade openness, foreign direct investment, foreign portfolio investment, and financial openness have negative skew coefficients (-0.476775, -0.620288, -0.415133, -0.605397, and -0.371772, respectively), indicating that their distributions are left-skewed. The export concentration index has a right-skewed distribution because it has positive values (0.208959 and 0.640867). The poverty rate, foreign direct investment, and financial openness exhibit a platykurtic distribution, as indicated by their coefficients of less than 3 (2.069458, 2.352033, and 1.905013, respectively). The coefficients of trade openness, foreign portfolio investment, and export concentration index indicate their mesokurtic nature, with values close to 3 (3.146380, 2.629907, and 3.238787, respectively).

The Jarque-Bera statistical test results indicate that the p-values for poverty rate, trade openness, foreign direct investment, foreign portfolio investment, financial openness, and export concentration index are 0.317759, 0.365023, 0.586456, 0.295832, 0.322580, and 0.333595, respectively. All of these p-values exceed the 5% level of significance. Therefore, it can be concluded that all of the variables exhibit a normal distribution.

Table 2 ADF Stationarity Test Variables

Variables	Level Data			First differenced data			Conclusion
	ADF Test Statistics	T-Critical at 5%	P-value	ADF Test Statistics	T-Critical at 5%	P-value	
LNPOVR	-0.713802	-2.967767	0.8278	-9.698653	-2.967767	0.0000	I(1)
LNFPFI	-0.616400	-2.991878	0.8492	-4.581371	-2.981038	0.0012	I(1)
LNFDI	-1.884997	-2.967767	0.3345	-6.858071	-2.967767	0.0000	I(1)
LNFOPI	-4.123541	-2.967767	0.0034	-	-	-	I(0)
LNCEI	-3.456565	-2.986225	0.0183	-	-	-	I(0)
LNTOP	-2.898929	-2.963972	0.0573	-6.228567	-2.967767	0.0000	I(1)

Source: Eviews 10.0 Output

Table 2 shows that among the six variables analysed in the study, two of them demonstrate stationarity at level I(0), while the remaining four exhibit stationarity at first difference I(1). This is because the p-values at each level are statistically significant ($p < 0.05$) for this study. The study utilises the ARDL F-Bound test to determine the presence of long-term form, as proposed by Persaran et al. (2001).

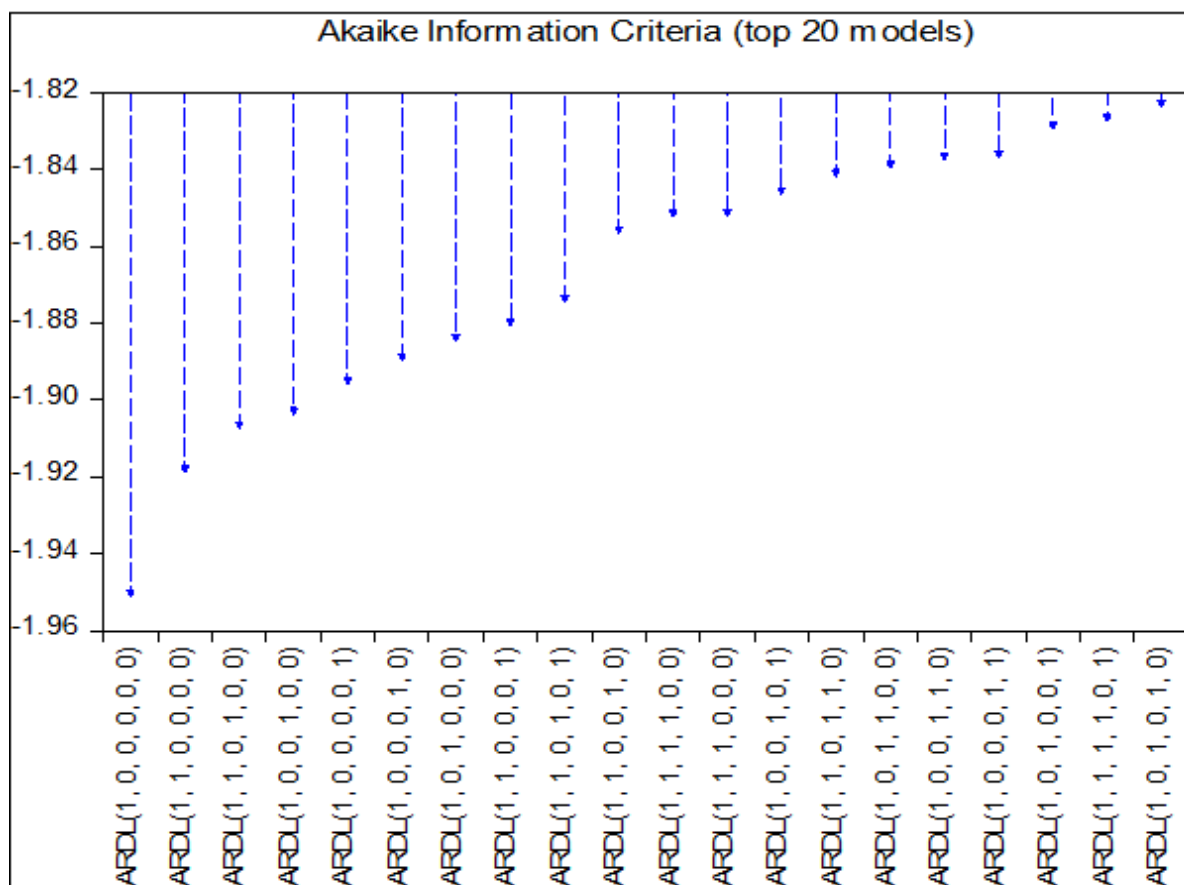


Fig 1 Plausible Model for Poverty Rate
Source: Eviews 10 Output

Fig 1 shows that the AIC value reaches its minimum at -1.96, indicating that the ARDL (1, 0, 0, 0, 0, 0) model is the most suitable. The bracket notation represents the lag order of six variables: LNPOVR, LNTOP, LNFPI, LNFDI, LNPOP, and LNECI. This lag order is determined by the lag selection regression. The analysis suggests that the most likely configuration for the dynamic linkages under investigation is a model that includes only one lag of the poverty rate. There are no lags of trade openness, foreign portfolio investment, foreign direct investment, financial openness, and export concentration index in this model.

Table 3 ARDL Bound Test of Co-integration

ARDL Long Run Form and Bounds Test				
Dependent Variable: D(LNPOVR)				
Selected Model: ARDL(1, 0, 0, 0, 0, 0)				
F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	2.104206	10%	2.26	3.35
k		5%	2.62	3.79
		2.5%	2.96	4.18
		1%	3.41	4.68
t-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
t-statistic	-3.310356	10%	-2.57	-3.86
		5%	-2.86	-4.19
		2.5%	-3.13	-4.46
		1%	-3.43	-4.79

Source: Eviews 10 Output

The decision criterion requires that the alternative hypothesis can only be considered valid if the absolute value of the F-statistics critical value for co-integration, based on I(0) and I(1), is greater than the F-statistic value. To accept the alternate hypothesis, the critical value of the T-statistics for co-integration must be greater than the absolute value of the T-statistic, for both I(0) and I(1). The null hypothesis assumes that there is no co-integration between the variables. At a significance level of 5%, an F-statistics value of 2.104206 was observed. The value is below the respective

bounds of 2.62 and 3.79 for I(0) and I(1). At a 5% significance level, the T-statistic value of -3.310356 exceeds the lower bound value of -2.86 for the I(0) condition but is lower than the upper bound value of -4.19 for the I(1) condition. Therefore, the null hypothesis, which suggests that there is no co-integrating relationship between the explanatory and explained variables, is supported, while the alternative hypothesis is rejected. Only the short-term analysis is considered in this study.

Table 4 Short-run Estimation Results

Dependent Variable: LNPOVR				
Method: ARDL				
Dynamic regressors (1 lag, automatic): LNTOP LNFPI LNFDI LNFOP				
LNECI				
Fixed regressors: C				
Number of models evaluated: 32				
Selected Model: ARDL(1, 0, 0, 0, 0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNPOVR(-1)	0.412772	0.177391	2.326901	0.0291
LNTOP	0.192618	0.080386	2.396154	0.0251
LNFPI	-0.006160	0.009579	-0.643094	0.5265
LNFDI	-0.049549	0.019892	-2.490915	0.0204
LNFOP	0.014268	0.071768	0.198805	0.8442
LNECI	-0.021159	0.096712	-0.218787	0.8287
C	2.260245	0.840619	2.688786	0.0131
R-squared	0.826939	Mean dependent var		3.896619
Adjusted R-squared	0.781793	S.D. dependent var		0.176671
S.E. of regression	0.082528	Akaike info criterion		-1.950404
Sum squared resid	0.156649	Schwarz criterion		-1.623458
Log likelihood	36.25607	Hannan-Quinn criter.		-1.845811
F-statistic	18.31688	Durbin-Watson stat		2.257534
Prob(F-statistic)	0.000000			

Source: Eviews 10 Output

Table 4 exhibits that the poverty rate's one-lag value is both statistically significant (0.0291) and positively correlated (0.412772), suggesting that the poverty rate is autoregressive. It can be inferred that the poverty rate in Nigeria for the present year can be estimated based on the poverty rate of the preceding year. A marginal increase in the poverty rate of the current year would lead to a corresponding 0.412772% increase in the poverty rate in the subsequent period. The coefficient value for trade openness is 0.192618 and it is statistically significant (0.0251) to poverty rate. The findings suggest that a rise in trade openness by one unit is associated with an increase in poverty rate by 0.192618 units. The impact of foreign portfolio investment on poverty rate is statistically insignificant ($p=0.5265$) and negative in direction ($\beta=-0.006160$). This indicates that a rise of one unit in foreign portfolio investment will result in a reduction of poverty rate by 0.006160 units. The poverty rate exhibits a significant negative correlation (-0.049549) with the coefficient of foreign direct investment, which is also substantial (0.0204). This implies that a 1% increase in foreign direct investment would result in a corresponding reduction of 0.049549% in the poverty rate. The findings indicate that financial openness exhibits a positive coefficient of 0.014268,

however, it is deemed statistically insignificant with a p-value of 0.8442 in its association with poverty rate. The findings indicate that a unitary increment in financial openness results in a 0.014268 unit increase in the poverty rate. The export concentration index exhibits a negative value of -0.021159 and it is deemed insignificant with a p-value of 0.8287 when compared to the poverty rate. The aforementioned finding indicates that there exists a negative relationship between the export concentration index and poverty rate, whereby an increase of one unit in the former results in a decrease of 0.021159 units in the latter.

The Adjusted R-squared value indicates that the explanatory variables, namely trade openness, foreign portfolio investment, foreign direct investment, financial openness, and export concentration index, account for roughly 78.2% of the variability observed in the poverty rate. The remaining 21.8% of the variability is attributed to factors that are not accounted for in this particular model. The F-statistic in a regression model serves as an indicator of the overall significance of the model. The regression model exhibits statistical significance as a whole, as evidenced by the F-statistics p-value of 0.000000. Additionally, the independent variables demonstrate

statistical significance in relation to the dependent variable. The Durbin-Watson statistic provides evidence of the presence of first-order autocorrelation in the variable. The

Durbin-Watson statistic of 2.257534 indicates the absence of serial correlation in the model.

Table 5 Result of Granger Causality Test

Pairwise Granger Causality Tests			
Sample: 1992 2022			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
LNTOPI does not Granger Cause LNPOVR	29	3.01738	0.0678
LNPOVR does not Granger Cause LNTOPI		0.97183	0.3928
LNFIPI does not Granger Cause LNPOVR	29	0.05488	0.9467
LNPOVR does not Granger Cause LNFIPI		4.73276	0.0185
LNFDI does not Granger Cause LNPOVR	29	1.76430	0.1928
LNPOVR does not Granger Cause LNFDI		0.79772	0.4619
LNFOPI does not Granger Cause LNPOVR	29	1.91067	0.1698
LNPOVR does not Granger Cause LNFOPI		0.79521	0.4630
LNNECI does not Granger Cause LNPOVR	29	1.12356	0.3416
LNPOVR does not Granger Cause LNNECI		0.05942	0.9424

Source: Eviews 10 Output

Table 5 presents the outcome of the Granger Causality test, indicating that a unidirectional causal relationship flowing from LNPOVR to LNFIPI in Nigeria. The reason for this phenomenon is that a significant proportion of the capital invested in the Nigerian stock exchange, in the guise of portfolio investment, does not have a direct impact on the country's economic growth trajectory. This is due to the fact that the proprietors of these funds retain the prerogative to withdraw their investments at any given time. However, no directional flowing from LNFDI, LNFOPI, LNNECI, and LNTOPI to LNMR and vice versa.

➤ *Post Estimation Tests*

Table 6 Test for Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.505354	Prob. F(2,21)	0.2558
Obs*R-squared	5.132681	Prob. Chi-Square(2)	0.0768

Source: Eviews 10 Output

Table 6 demonstrates that the p-value of 0.2558 is greater than the 5% level of significance, showing that serial correlation does not exist in the model.

Table 7 Test for Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.938646	Prob. F(6,23)	0.4868
Obs*R-squared	5.900983	Prob. Chi-Square(6)	0.4344
Scaled explained SS	3.681115	Prob. Chi-Square(6)	0.7197

Source: E-views 10 Output

Table 7 demonstrates that the p-value of 0.4868 is greater than the 5% level of significance, showing that heteroskedasticity does not exist in the model.

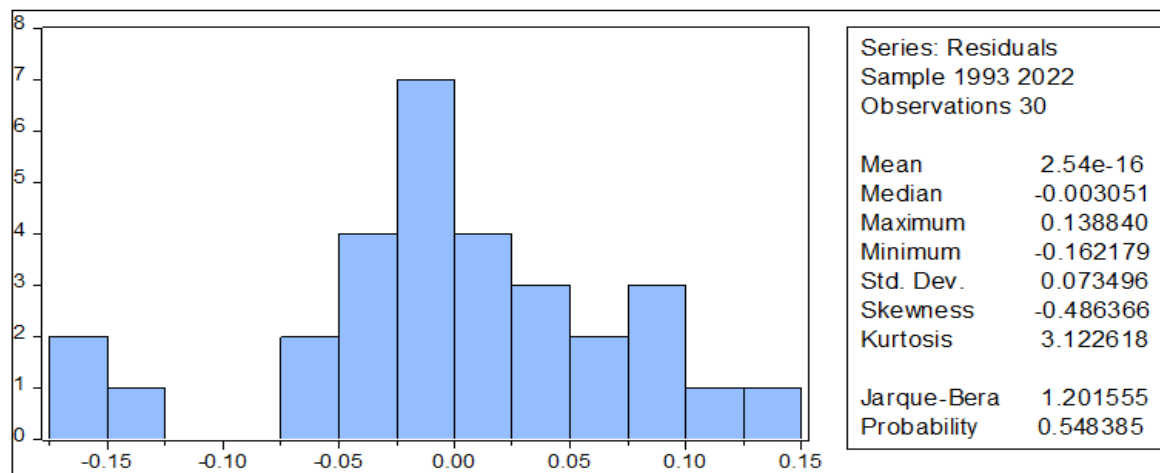


Fig 2 Histogram and Normality Test

Source: E-views 10 Output

The null hypothesis asserts that the distribution is uniformly distributed if the p-value is not significant and is bigger than the selected level of significance of 5%. As a result, the null hypothesis that the distribution is normally distributed is accepted because the p-value of the Jarque-Bera (0.548385) is above the 5% significance level. In addition, the histogram is bell-shaped.

V. DISCUSSION OF FINDINGS

There is a positive and statistically significant relationship between trade openness and the poverty rate in Nigeria. This implies that an increase in trade openness could lead to a rise in the poverty rate in Nigeria. This suggests that the opening of Nigeria's border to the global market is not beneficial for its economy, as imports appear to exceed exports. The limited extent of globalisation in the Nigerian economy has impeded the long-term sustainability of foreign investment. On the other hand, a decline in the poverty rate may cause a decrease in the population's production of goods and services, measured in monetary value. This could potentially lead to shifts in import and export patterns. The statement aligns with the findings of several studies conducted by Hussein, Khalif, Warsame, and Barre (2023), Mtar and Belazreg (2023), Rahman, Zhang, and Musa (2023), Ze, et al. (2023), and Khurshid, et al. (2023), indicating that trade liberalisation positively affects economic growth. However, this finding contradicts previous research conducted by Tongurai and Vithessonthi (2023), Lali, Daei-Karimzadeh, and Karimi (2023), and Suryandaru (2023), which indicates that trade openness has a detrimental effect on economic performance.

Foreign portfolio investment has been found to have a negligible and adverse effect on the poverty rate in Nigeria. The proposition suggests that higher levels of foreign portfolio investment in Nigeria lead to a modest decrease in the poverty rate. A considerable proportion of portfolio investments in the Nigeria stock exchange does not directly contribute to the country's overall economic development. This is because fund owners have the option to repatriate their funds at any time. This claim aligns with the research conducted by Tongurai and Vithessonthi (2023), Coulibaly

(2023), Luo and Qu (2023), Lali, Daei-Karimzadeh, and Karimi (2023), and Suryandaru (2023), all of whom have found evidence indicating that foreign investment has a detrimental effect on economic performance. However, the findings of Hussein et al. (2023), Rahman et al. (2023), Ze et al. (2023), and Khurshid et al. (2023) contradict this view, as they have found evidence suggesting that foreign investment has a beneficial effect on economic performance.

Foreign direct investment (FDI) has a statistically significant and negative impact on the poverty rate in Nigeria. This implies that a rise in foreign direct investment in Nigeria would lead to a significant decline in the poverty rate of the country. The infusion of extra funds into the Nigerian economy is anticipated to create job opportunities, thus alleviating the negative effects of poverty and fostering economic growth. This finding aligns with previous research conducted by Tongurai and Vithessonthi (2023), Matar and Belazreg (2023), Luo and Qu (2023), Lali, Daei-Karimzadeh, and Karimi (2023), and Suryandaru (2023), indicating that foreign investment has a detrimental effect on economic performance. However, the studies conducted by Hussein, Khalif, Warsame, and Barre (2023), Ze, et al. (2023), and Khurshid, et al. (2023) suggest that foreign investment has a beneficial effect on economic performance.

The relationship between the promotion of financial openness in Nigeria and the poverty rate is not statistically significant, despite the observed increase in financial openness. This implies that an increase in financial openness in the Nigerian economy will lead to a rise in the poverty rate in Nigeria. This suggests that Nigerian financial institutions face intense competition in the global financial market. The study suggests that the insufficient progress of the financial sector in terms of the range, complexity, and diversity of products and services available in the market is responsible for this. This statement is consistent with the findings of several studies conducted by Hussein, Khalif, Warsame, and Barre (2023), Mtar and Belazreg (2023), Rahman, Zhang, and Musa (2023), Ze, et al. (2023), and Khurshid, et al. (2023), which suggest that financial liberalisation promotes economic growth. However, this finding contradicts the conclusions made by Tongurai and

Vithessonthi (2023), Coulibaly (2023), Luo and Qu (2023), Lali, Daei-Karimzadeh, and Karimi (2023), and Suryandaru (2023), who contend that financial openness has a detrimental effect on economic performance.

The results suggest that there is no meaningful correlation between the export concentration index and poverty rate in Nigeria, as the coefficient is both negative and statistically insignificant. The study's results indicate that an increase in Nigeria's export concentration index has a limited effect on poverty alleviation in the country. Nigeria's high dependence on a narrow selection of export commodities, primarily primary goods, is the main factor contributing to this phenomenon. These commodities are inadequate in effectively reducing the unemployment rate. This issue concerns the implementation of high excise duties and additional fees that are commonly associated with the export of goods and services in Nigeria. These measures have been found to discourage such export activities.

VI. CONCLUSIONS AND RECOMMENDATIONS

This study analysed the effects of economic globalisation on Nigeria's economic development from 1992 to 2022. The data collected at a 95% confidence interval was analysed using several statistical methods, such as descriptive statistics, unit root test, ARDL framework, and Granger Causality test. The study found that foreign direct investment and trade openness are key factors of economic globalization as they significantly influence Nigeria economic progress. These findings align with Dunning's (1973) OLI theory and the Prebisch-Singer hypothesis. Thus, the desirability of foreign direct investment in Nigeria can be attributed to its lower level of development and the prevalence of uneven trade between Nigeria and its trading partners. Also, these findings are in line with the studies conducted by Tongurai and Vithessonthi (2023), Matar and Belazreg (2023), Coulibaly (2023), Luo and Qu (2023), Lali, Daei-Karimzadeh, and Karimi (2023), and Suryandaru (2023).

The study's findings on economic globalisation and economic development in Nigeria led to the formulation of the following recommendations:

- The NIPC should sustain its efforts in promoting favourable policies and creating an enabling environment for foreign direct investment, while also serving as a representative entity for Nigeria. These steps are crucial for attracting international investors and positioning Nigeria as a secure investment destination.
- In order to enhance foreign direct investment, the Nigerian federal government should take such as infrastructure improvement, security promotion, skilled workforce development, exchange rate stabilisation, and fostering strong international relationships as these will help in attracting foreign direct investment.
- Financial institutions in Nigeria should expand their product offerings in the global market to promote economic growth.

REFERENCES

- [1]. Adegboyo, O. S., Efuntade, O. O., Olugbamiye, D. O., & Efuntade, A. O. (2021). Trade openness and poverty reduction in Nigeria. *EuroEconomica*, 2(40), 211-220.
- [2]. Aderemi, T. A., Ogunleye, A. G., Lucas, B. O., & Okoh, J. I. (2020). Globalization and economic growth: Evidence from European countries. *European Financial and Accounting Journal*, 15(1), 67-82.
- [3]. Agrawal, G. (2015) Foreign direct investment and economic growth in BRICS economies: A panel data analysis. *Journal of Economics Business and Management*, 3, 421-424.
- [4]. Amin, A., Anwar, S., & Liu, X. H. (2022). Outward foreign direct investment and economic growth in Romania: Evidence from non-linear ARDL approach. *International Journal of Finance & Economics*, 27(1), 665-677.
- [5]. Andrew, O.A., Joseph, A.I., Barnabas, O., Ohwofasa, B., Damilola, E., & Olabisi, P. (2022). Exchange rate, foreign direct investment and economic growth nexus in Nigeria. *International Journal of English Literature and Social Sciences*. 1(7), 304-312.
- [6]. Coulibaly, R. G. (2023). International trade and economic growth: The role of institutional factors and ethnic diversity in sub-Saharan Africa. *International Journal of Finance & Economics*, 28(1), 355-371.
- [7]. Dada, J. T., & Abanikanda, E. O. (2022). The moderating effect of institutions in foreign direct investment led growth hypothesis in Nigeria. *Economic Change and Restructuring*, 55(2), 903-929.
- [8]. Dada, J. T., Adeiza, A., Noor, A. I., & Marina, A. (2022). Investigating the link between economic growth, financial development, urbanization, natural resources, human capital, trade openness and ecological footprint: evidence from Nigeria. *Journal of Bioeconomics*, 1-27.
- [9]. Dahmani, M., Mabrouki, M., & Ben Youssef, A. (2022). ICT, trade openness and economic growth in Tunisia: what is going wrong?. *Economic Change and Restructuring*, 55(4), 2317-2336.
- [10]. Dunning, J. H. (1973). The Determinants of International Production Oxford Economic Papers. *New Series*, 25(3), 289-336.
- [11]. Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: past, present and future. *International journal of the economics of business*, 8(2), 173-190.
- [12]. Fagbemi, F., & Osinubi, T. T. (2020). Leveraging foreign direct investment for sustainability: An approach to sustainable human development in Nigeria. *Resources, Environment and Sustainability*, 2(20), 1-11.
- [13]. Hussein, H. A., Khalif, M. A., Warsame, A. A., & Barre, G. M. (2023). The Impact of Trade Openness on Economic Growth in Somalia. *Planning*, 18(1), 327-333.
- [14]. Idoko, C. U., & Abu, S. I. (2020). Globalization and Economic Development in Nigeria. *Sumerians Journal of Economics and Finance*, 10(10), 1-15.

- [15]. Idoko, C. U., & Silas, I.A. (2020). Globalization and economic development in Nigeria. *Sumerianz Journal of Economics and Finance*, 1(6), 1-9.
- [16]. Khurshid, N., Egbe, E. C., Fiaz, A., & Sheraz, A. (2023). Globalization and Economic Stability: An Insight from the Rocket and Feather Hypothesis in Pakistan. *Sustainability*, 15(2), 1611.
- [17]. Kingsley I., Toyosi A. N., & Babatunde, A.J. (2021). Globalization and economic growth in Nigeria. *International Journal of Economics, Commerce and Management United Kingdom*, 9(1), 172-185.
- [18]. Lakia, N. N., & Timothy, K. K. (2022). Trade Openness and Solid Mineral Sub-Sector Growth in Nigeria. *International Journal of Development and Economic Sustainability*, 10(4), 26-36.
- [19]. Lali, M., Daei-Karimzadeh, S., & Karimi, F. (2023). Effect of world trade centrality indicators on economic growth: the approach of weighted complex networks (Case study: chosen countries of Asia and CIS). *Economic Growth and Development Research*.
- [20]. Luo, H., & Qu, X. (2023). Export Trade, Absorptive Capacity, and High-Quality Economic Development in China. *Systems*, 11(2), 54.
- [21]. Maduka, A., Madichie, C., & Eze, E. (2017). Globalization and Economic Growth: Evidence from Nigeria. *International Journal of Social Science and Economic Research*, 2(8), 1-12.
- [22]. Mtar, K., & Belazreg, W. (2023). On the nexus of innovation, trade openness, financial development and economic growth in European countries: New perspective from a GMM panel VAR approach. *International Journal of Finance & Economics*, 28(1), 766-791.
- [23]. Nduonofit, L. O., & Emina, W. U. (2021). *Globalization and economic development*. NOUN Press.
- [24]. Odo, O.O., Agbo, I. & Agbaji, B. (2020). Globalization and Developing Economy: Evidence from Nigeria. *Journal of Financial Risk Management*, 9(4), 24-32.
- [25]. Odo, O.O., Agbo, I. & Agbaji, B. (2020). Globalization and Developing Economy: Evidence from Nigeria. *Journal of Financial Risk Management*, 9(4), 24-32.
- [26]. Ogunniyi, A., Olagunju, K., Kabir, S. K., & Adeyemi, O. (2016). Social crisis, terrorism and food poverty dynamics: evidence from Northern Nigeria. *International Journal of Economics and Financial Issues*, 6(4), 1865-1872.
- [27]. Onwuka, E. C., & Eguavoen, A. (2007). Globalization and economic development: The Nigerian experience. *KamlaRaj Journal of Social Sciences*, 14(1), 45-51.
- [28]. Prebisch, R. (1950). The economic development of Latin America and its principal problems. *Economic Bulletin for Latin America*, 7(1), 385-421.
- [29]. Rahman, P., Zhang, Z., & Musa, M. (2023). Do technological innovation, foreign investment, trade and human capital have a symmetric effect on economic growth? Novel dynamic ARDL simulation study on Bangladesh. *Economic Change and Restructuring*, 1-40.
- [30]. Rugman, A. M. (1985). Internalization is still a general theory of foreign direct investment. *Weltwirtschaftliches Archiv*, 121(3), 570-575.
- [31]. Sanjo, G. J., Sende, N. H. B., & Mpeti, I. F. (2022). Effect of Trade Openness and Real Exchange Rate on Economic Growth in Tanzania. *Journal of Economics, Management and Trade*, 28(7), 47-64.
- [32]. Seers, D. (1979). The Birth, Life and Death of Development Economics: (Revisiting a Manchester Conference). *Development and Change*, 10(4), 707-719.
- [33]. Singer, H. (1984). US foreign investment in underdeveloped areas: The distribution of gains between investing and borrowing countries', *American Economic Review*, 40(2), 473-485.
- [34]. Suryandaru, R. A. (2023). The Relationship Between Public Debt, Trade Openness, and Economic Growth in Indonesia: Symmetric and Asymmetric Analysis. *Thailand and The World Economy*, 41(1), 35-60.
- [35]. Tamuno, S. O. (2006). *Globalization: A new concept for an old world order*. Harey Publications Coy.
- [36]. Tongurai, J., & Vithessonthi, C. (2023). Financial openness and financial market development. *Journal of Multinational Financial Management*, 100782.
- [37]. Tougem, T. O., Ze, T., Amowine, N., & Adiyoh, I. S. (2022). Domestic investment, foreign direct investment, and economic growth in Sub-Saharan Africa: A case of industrial investment in Cameroon. *Journal of Industrial Integration and Management*, 7(03), 435-454.
- [38]. UNCTAD (2002). *World investment report 2002: Transnational corporations and export competitiveness*. Geneva: United Nations.
- [39]. UNCTAD (2003). *Trade and development report 2003: Capital accumulation, growth and structural change*. Geneva: United Nations.
- [40]. United Nations Conference on Trade and Development. (2016). Export concentration and export diversification indices. <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx>
- [41]. Upton, J. B., Cissé, J. D., & Barrett, C. B. (2016). Food security as resilience: reconciling definition and measurement. *Agricultural economics*, 47(S1), 135-147.
- [42]. Wasurum, E., & Tamunowariye, C. (2022). External trade, financial development, and economic growth in Nigeria. *International Journal of Innovative Social Sciences & Humanities Research*, 10(2), 62-72.
- [43]. World Bank (2017). *Annual World Bank's report on ending extreme*. Washington: World Bank.
- [44]. Ze, F., Yu, W., Ali, A., Hishan, S. S., Muda, I., & Khudoykulov, K. (2023). Influence of natural resources, ICT, and financial globalization on economic growth: Evidence from G10 countries. *Resources Policy*, 81, 103254.
- [45]. Zuma, N. D. (2003). NEPAD's Peer Review Mechanism. Available Online at http://www.sarpn.org.za/_documents/d0000564/index.php.