
Globalization, Migration, and Economic Growth in Nigeria

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Abstract

The study aimed to empirically examine the effect of globalization and migration on Nigeria's economic growth. The study covered the period 33 years (1990 – 2022). The variables used in the study are foreign direct investment, trade openness, foreign exchange rate, remittances, and gross domestic product. The ARDL (autoregressive distributed lag) model was employed for the study and a long-run relationship was established. Findings revealed that remittance had a significantly positive effect on Nigeria's economic growth in the long run. The finding of the error correction mechanism revealed a speed of adjustment to equilibrium of 31.1%. The study suggested that the government, as a key player, should take immediate action to formulate policies that bolster and optimize the advantages of remittance inflows. This is crucial as remittances have been found to positively and significantly affect economic growth in the short and long run. These measures may encompass reducing transaction expenses, improving financial literacy among recipients, and encouraging investments to amplify the developmental effects of remittances.

Keywords: Globalization, Migration, Economic Growth, ARDL

JEL Classification: F01, F22, F43

1. Introduction

Globalization, migration, development, and human rights have emerged as key topics and obstacles dominating global discussions. Issues related to these areas are central to many conflicts in today's social, political, and economic landscapes (Asiegbu & Chukwuokolo, 2020). Globalization is characterized by the overall rise in international movements of goods, resources, technology, and financial resources, all of which are increasing at a faster pace than output. It is a phenomenon which has been embraced by all nations and shaped the global world. It has intensified in its ramifications in recent years and has begun to occur at an increased rate under the framework of the General Agreement of Tariff and Trade (GATT) and World Trade Organization (WTO) (Ajudua & Okonkwo, 2014).

There have been two distinct phases of globalization in recent economic history: the first occurred in the late 19th and early 20th centuries. At the same time, the second is continuing presently and began more than thirty years ago (Rapoport, 2016). The rate of global trade growth in both phases significantly outpaced output growth, resulting, for instance, in a tripling of the world trade/GDP ratio within a few decades" (Rapoport, 2016). It is important

to distinguish between these two globalization phases. The first phase is referred to as 'the age of mass migration,' while the current period is characterized as a phase of globalization encompassing everything except human movement. The Nigerian economy has embraced globalisation. This intensified with the implementation of the liberalisation agenda in 1986 (Ajudua, Nwokoro & Ojima, 2021).

Migration has been a longstanding phenomenon throughout human history. Its scope and intensity have expanded significantly in the era of modern globalization. For the past century, the movement of people within countries and across borders has been a fundamental aspect of livelihoods and job markets across many regions (Verter & Osakwe, 2015). Migration serves as a crucial survival strategy for impoverished families looking to broaden their income sources, but it is also common among wealthier individuals and even African elites (Black et al., 2006). Various factors drive migration, with contemporary global trends making human displacement and cross-border movement almost inevitable. The escalating challenges in economic, political, social, and environmental spheres make it increasingly challenging for individuals, particularly in economically disadvantaged regions, to sustain themselves in their traditional communities and nations (Adedokun & Karzanova, 2019). Consequently, migration is frequently viewed as a means to break free from poverty.

As highlighted by Asiegbu and Chukwuokolo (2020), a combination of factors has contributed to the rise of African migration, positioning Africa as the primary region for generating refugees worldwide. These factors include numerous conflicts that have afflicted several nations in Africa, principally in the post-Cold War era. Beyond warfare, demographic shifts and human displacement have been influenced by additional elements, such as economic crises faced by African countries. This aligns with Ajibewa's (2003) perspective, which suggests that the emergence of authoritarian and repressive regimes, political suppression, the phenomenon of brain drain, the pursuit of advancement socially and economically in different fields by professionals, the quest for foreign opportunities in education due to the breakdown of educational systems in numerous African nations, and other related factors have shaped the migration patterns of Africans. According to the International Organization for Migration (IOM), in 2020, about 21 million Africans were living in other African countries, while 19.5 million were living in countries outside of Africa (IOM, n.d.), and in Nigeria in the same year, the net migration rate was 11.42% (Knoema, n.d.).

Migration, whether within a country or across international borders, holds significant importance for national economies worldwide (Adedokun & Karzanova, 2019). Various studies on international migration have highlighted the prominent influence of economic factors on individuals' choices to migrate to different countries (ILO, 2010; Adedokun & Karzanova, 2019; Asiegbu & Chukwuokolo, 2020). Additionally, Lanati & Thiele (2023) noted that the trend of young people migrating is largely driven by seeking better opportunities for education and employment. Literature indicates that developing nations are more actively involved in international migration compared to developed countries (Bhardwaj & Sharma, 2023; Lanati & Thiele, 2023).

The relationship between migration and economic growth manifests in various interconnected ways. Migration has been instrumental in driving poverty alleviation,

bolstering national security, fostering political stability, and curbing unemployment in numerous sending nations like Nigeria (Nwajiuba, 2005). The movement of people across borders yields substantial economic benefits for the migrants themselves, initially and subsequently, for both the countries of origin and destination. In 2022, India led the way with remittances totaling \$111.2, followed by Mexico (\$61.1 billion), China (\$50 billion), the Philippines (\$38 billion), Pakistan (\$29.9 billion), while Nigeria is in 8th position (\$20.1 billion) (Buchholz, 2023). Furthermore, Nwodom et al. (2021) highlighted that a significant portion of remittances is utilized at the grassroots level for purposes such as investing in businesses and human capital, supporting families, funding weddings, contributing to charitable organizations, paying tithes in churches and participating in festive celebrations.

This study aims to empirically examine the effect of globalization and migration on the economic growth of Nigeria. The perception of the movement of skilled and affluent individuals from Nigeria and other African countries is often viewed in a negative light. Concerns have been raised about the long-standing issue of the 'brain drain' of African professionals on the continent. However, there is a gradual emergence of understanding in certain quarters regarding the potentially beneficial impact that migration can have on development, as well as the opportunities for leveraging the Nigerian Diaspora in combating poverty.

Moreover, the interconnected nature of globalization, migration, and economic growth carries significant implications for developing nations like Nigeria. It is essential for policymakers, researchers, and stakeholders to comprehend the relationship among these elements to devise effective strategies for sustainable development. Nigeria, being a key African economy, is grappling with the impacts of globalization and migration, which can both positively and negatively affect its economic progress. By delving into the dynamics of these factors, valuable insights can be gleaned on how Nigeria can utilize the advantages of globalization and migration to stimulate economic growth while addressing challenges such as brain drain and economic disparities.

2. Literature Review

Theoretical Review

Renowned economists have developed a lot of economic theories to explain the concept of migration and economic growth as well as globalization. Two theories (the neoclassical and hyper-globalist) are adopted in the present study to explain the concept of globalization and migration as it relates to economic growth.

The Neoclassical Theory proposed by Todaro (1969) and contributed to by Harris & Todaro (1970) attempts to describe the interplay between economic growth and migration from the viewpoint of individual decision-making based on rational choices and optimizing behaviour. The theory suggests that individuals migrate in response to wage differentials between their home country and potential destination, seeking to maximize their earnings and improve their overall economic well-being. According to the theory, human capital factors, like education and skills, are the important determinants of migration decisions. Those who are more likely to migrate to countries that offer better opportunities for utilizing their skills and earning higher wages are the ones who have higher levels of human capital.

According to this viewpoint, the less developed countries, basically the home countries of the migrants, tend to grow faster through the remittances by the migrants. The remittances help to increase the income levels and standards of living for the families of migrants, which create a positive ripple effect on the overall economic growth of the receiving country through the local businesses and investment activities by the families of the migrants.

The hyper-globalist theory credited to Rodrik (2011) advances that economic integration and interdependence across countries have reached a level where national boundaries are becoming increasingly irrelevant. The theory proposes that the forces of globalization, such as international trade, investment, and information flows, are so pervasive and powerful that they are reshaping the world into a single global system without significant impediments from national governments or institutions. Hyper-globalists posit that a fully integrated global economy allows for more efficient allocation of resources, increased competition, and greater access to markets for businesses. This can result in increased levels of economic growth and prosperity for countries that actively participated in the global economy.

Empirical Review

Adeseye (2021) conducted a study on the impact of migrants' remittances on economic growth in Nigeria. The research focused on remittance inflows as the dependent variable, with gross domestic product, inflation, imports, and exports as independent variables. The method of analysis used was the multiple linear regressions. The findings of the study revealed a significant relationship between remittances and gross domestic product, exports, and imports in Nigeria. However, inflation was found to have no significant correlation with remittances. As a result, the study recommended that policymakers implement effective monetary and fiscal policies to enhance the remittance channel, support aid flows, and attract foreign direct investment as part of a growth strategy.

Kingsley, Toyosi, and Babatunde (2021) in their study investigated the influence of globalization on the Nigerian economy. Variables such as foreign direct investment (FDI), exchange rates, external debt, and balance of payments were used for economic growth. The Ordinary Least Squares (OLS) method was employed, and findings indicated a direct correlation between exchange rates and balance of trade with gross domestic product per capita (GDPPC). At the same time, external debt exhibited an inverse relationship with GDPPC. The study suggested that the federal government should enhance its FDI policies to foster an increase in gross domestic product per capita.

Lupoiu and Raceanu (2019) investigate the economic advantages of migration by highlighting the impact of remittances on a country's economic progress. They view remittances as an external source of significant and steady funds that contribute to the economic advancement of a nation. The study utilized panel data regression, and the results indicated a favorable relationship between globalization and remittances, as well as a positive impact of remittances on gross domestic product (GDP). They concluded that remittances play a beneficial role in a country's economy and that their growth coincided with the increasing trend of globalization, making them greatly influenced by the current era.

George-Anokwuru (2018) examined the impact of globalization on economic growth in Nigeria, spanning the years 1981 to 2016. The research focused on examining the relationship between imports, exports, foreign direct investment, and Gross Domestic Product (GDP). To analyze the data, the study utilized bounds co-integration tests and the Short and Long Run Dynamics Autoregressive Distributed Lag (ARDL) test. The results from both the short and long-run models revealed that imports had a negative correlation with GDP, although they still significantly influenced economic growth. On the other hand, exports exhibited a positive and significant impact on GDP. The study recommended that Nigerian authorities should develop and implement strategies to reduce the level of imports into the country.

Maduka and Madichie (2017) investigated the influence of globalization on economic growth in Nigeria. Their study employed the econometric method of cointegration and error correction mechanism using the ARDL model to analyze the impact of trade openness, foreign direct investment, and financial integration—key components of globalization—on economic growth in Nigeria. Utilizing annual time series secondary data spanning from 1970 to 2015, their findings indicated that trade openness, foreign direct investment, and financial integration all positively contributed to economic growth in Nigeria.

Verter and Osakwe (2015) conducted a study focusing on the macroeconomic implications of key indicators of economic globalization on the Nigerian economy from 1980 to 2012. The study's findings revealed that Foreign Direct Investment (FDI) and migrants' remittances have a positive relationship with economic performance. The study recommended that policymakers in Nigeria should focus on establishing robust legislation and credible institutional frameworks.

Omolade, Morakinyo, and Ifeacho (2013) conducted a study exploring the connection between globalization and economic development in Nigeria. Utilizing Johansen cointegration and Granger causality tests, the research revealed an inverse relationship between trade openness and economic development in Nigeria. The findings suggested a unidirectional causal flow from economic development to globalization rather than the other way around. This observation implied that Nigeria's trade partners, particularly those in developed nations, were benefiting more than the country itself.

3. Methodology

This study used secondary data covering 23 years (1990-2022) obtained from the World Bank database. The variables used in the study were economic growth proxied by GDP, foreign direct investment (FDI), trade openness (TOP), foreign exchange rate (EXR), and migrants' remittances which proxied for migration. The model autoregressive distributed lag (ARDL) employed by Maduka and Madichie (2017) and George-Anokwuru (2018) was adopted in the present study since the variables were integrated of order zero and one. The model is specified as shown below:

$$\Delta \log GDP_t = \beta_0 + \sum_{i=1}^n \beta_1 \Delta \log EXR_{t-i} + \sum_{i=1}^n \beta_2 \Delta \log TOP_{t-i} + \sum_{i=1}^n \beta_3 \Delta \log Remittances_{t-i} + \sum_{i=1}^n \beta_4 \Delta \log FDI_{t-i} + \theta_1 \log EXR_{t-i} + \theta_2 \log TOP_{t-i} + \theta_3 \log Remittances_{t-i} + \theta_4 \log FDI_{t-i} + \varepsilon_t \dots\dots\dots 1$$

Where EXR is the exchange rate, GDP is the gross domestic product, which is a proxy for economic growth, FDI is the foreign direct investment, TOP is trade openness, and remittance is the migrants' remittances. Δ is the difference operator, β_0 is the constant, $\beta_0 - \beta_4$ are the coefficients of the short-run relationships, $\theta_1 - \theta_4$ are the coefficients of the long-run relationship and ε_t is the random error term. Before fitting the proposed model to the data, a unit root test was first carried out using the Augmented Dickey-Fuller test. The test was carried out under the null hypothesis that a unit root is present in a time series sample, with the alternative that a unit root is not present.

4. Result

The trend analysis of the variables in Figure 1 shows a fluctuating pattern in trade openness (TOP), with a minimum value of \$16.35B in 2020 and a maximum of \$53.28B recorded in 2011. GDP had an upward trend from 1990 to 1994 and dropped in 2000. Then, it increased again to \$574.15B in 2014 before dropping again. The exchange rate recorded an upward trend throughout the period of the study. Remittances also showed an upward trend till 2018 and a decline in 2019. The highest remittance of \$24.31B was recorded in 2018. FDI shows a fluctuating pattern throughout the study. This indicates that the inflow of foreign capital into the country experiences variations over the period of the study. This could be as a result of changes in investors' confidence, economic conditions, and even global factors, as opined by Kingsley et al. (2021).

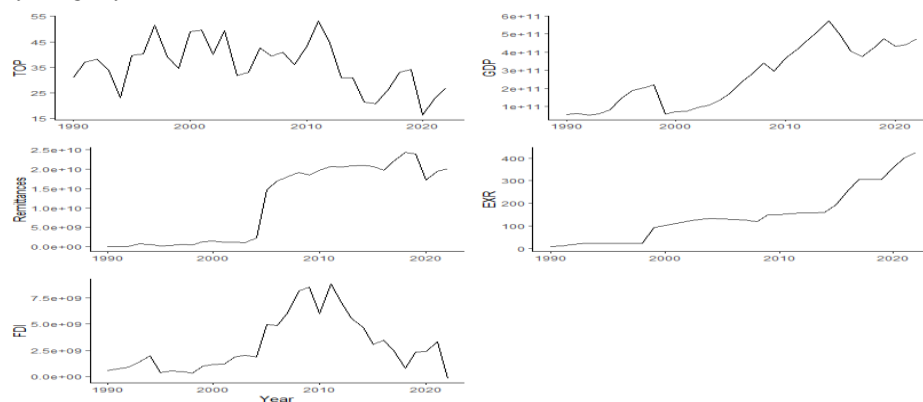


Figure 1: Trend Analysis of the Variables used in the Study

Table 1 shows the unit root test results of the variables used in the study. The result of the Augmented Dickey-Fuller (ADF) test shows that the GDP, exchange rate, foreign direct investment, and trade openness are integrated of order one $I(1)$, that is, they are stationary at the first difference, while remittances is integrated of order zero $I(0)$, that is, stationary at levels. This $I(1)$ and $I(0)$ stationarity level informed the choice of the ARDL model. The ARDL bounds (cointegration) test was performed to ascertain if a long-run relationship exists (Table 2). The null hypothesis was that no long-run relationship exists. The result gave the F-statistic of 10.448, greater than the $I(1)$ bound value of 4.01 at a 5% significance level. This led to the rejection of the null hypothesis of no long-run relationship. The

establishment of a cointegration (long-run relationship) informed the estimation of the long-run coefficients of the regression parameters (Verter & Osakwe, 2015; Nkoro & Uko, 2016).

Table 1: Unit Root Test

Variable	Test Statistic	5% critical value	level
GDP	-4.9008	-2.9604	I(1)
EXR	-5.2439	-2.9604	I(1)
FDI	-6.8025	-2.9640	I(1)
Remittance	-3.0892	-2.9571	I(0)
TOP	-5.5369	-2.6940	I(1)

Source: Authors' Computation

Table 2: ARDL Bounds Test (ARDL Cointegration Test)

Null Hypothesis: No long-run relationships exist			
F-statistic	10 Bound	I0 Bound	I1 Bound
10%	2.45	3.52	4
5%	2.86	4.01	
2.5%	3.25	4.49	
1%	3.74	5.06	

Source: Authors' Computation

The result in Table 3 shows both the short-run with ECM and the long-run coefficient. The result shows that remittance has a significant positive effect on GDP ($B = 0.241$, $p < 0.05$). This finding is in line with Lupoiu and Raceanu (2019), who reported a significant positive effect of remittances on GDP in their study. The effects of FDI, TOP, and exchange rate are not significant in the short run. The error correction mechanism (ECM) value of -0.311 (the adjustment term) with $p < 0.05$ implies that the reversion to long-run equilibrium is at the adjustment speed of 31.1%. This means that 31.1% of the disequilibrium in the previous period is being adjusted for in the current period. This speed of adjustment is not far from the 33% obtained by Kingsley et al. (2021), who also adopted the ARDL model in their study of the effect of globalization on economic growth. The long-run model's result shows a significant long-run relationship between remittance and GDP ($B = 0.774$, $p < 0.05$). The FDI, TOP, and exchange rate are related to the GDP in the long run.

The positive effect of remittances on GDP indicates that international money transferred by Nigerians abroad plays a substantial role in shaping the economic performance of the country. Remittance, which is money sent by Nigerian migrants working abroad, acts as a buffer during economic shocks (e.g., natural disasters and recessions) and also provides stability to recipient households (Nwodom et al., 2021).

Table 3: ARDL Cointegrating and Long Run Form

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LREMIT)	0.241083	0.098308	2.452329	0.0215
D(LEXR)	-0.215521	0.112158	-1.921585	0.0661
D(LFDI)	-0.090513	0.094003	-0.962872	0.3448
D(LTOP)	0.075199	0.195544	0.384564	0.7038
CoIntEq(-1)	-0.311460	0.126268	-2.466648	0.0208
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LREMIT	0.774043	0.251899	3.072834	0.0051
LEXR	-0.691969	0.406985	-1.700234	0.1015
LFDI	-0.290609	0.278735	-1.042600	0.3071
LTOP	0.241441	0.658050	0.366905	0.7168
C	17.645522	4.967991	3.551843	0.0015

Source: Authors' Computation

Model Diagnostic Check

The residual diagnostic check was done to check for both serial correlation and heteroscedasticity. The result of the serial correlation test was done using the Breusch-Godfrey Serial Correlation LM test, which tests the hypothesis that no serial correlation is present in the residual. The result gives the LM test probability value of 0.7705, meaning that the null hypothesis of no serial correlation cannot be rejected. The Breusch-Pagan-Godfrey heteroscedasticity test has a probability value of 0.7671, which implies that there is no presence of heteroskedasticity in the residual.

5. Conclusion and Recommendation

This study investigated the impact of globalization and migration on Nigeria's economic growth. One of the key findings of this study is the significant effect of remittances on the GDP of Nigeria. This implies that remittances, which are funds sent home by Nigerians living abroad, have played a crucial role in boosting economic growth in Nigeria. It is safe to conclude that remittances is a significant tool for the financial development of families and the nation at large, especially in developing countries, which Nigeria is among. Apart from the welfare of the immediate families of immigrants, remittances can support investment in infrastructure, education, health, etc. for the benefit of everyone if utilized effectively.

Due to the significant relationship between remittances and GDP over both the short and long run, it is imperative for the government to formulate policies that bolster and optimize the advantages of remittance inflows. These measures may encompass reducing transaction expenses, improving financial literacy among recipients, and encouraging investments to amplify the developmental effects of remittances.

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