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Effects of International Remittances on Poverty Level, Inequality and Household Income in Nigeria

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Abstract: *This study examines the dynamic relationships between macroeconomic factors and household economic well-being in Nigeria, focusing on poverty persistence, income inequality, and household savings. Utilizing ARDL models, the analysis reveals that poverty in Nigeria is highly persistent, with past poverty levels strongly influencing current outcomes. The findings indicate that while foreign direct investment (FDI) has a delayed impact on reducing poverty, it tends to exacerbate income inequality by disproportionately benefiting skilled workers. In contrast, remittances significantly contribute to poverty reduction, improve income distribution, and bolster household savings, although their potential remains underutilized in the Nigerian context. These insights suggest the need for policy measures that enhance the productive use of remittances, promote financial inclusion, and strengthen social protection programs to foster inclusive economic growth.*

Keywords: international remittances, household income, poverty level, inequality, Nigeria

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INTRODUCTION

International remittances are funds that migrants send back to their home countries, typically to support their families and communities. These financial transfers can occur through formal channels like banks and money transfer services, or through informal means such as hand-carried cash. Remittances play a crucial role in the economies of many developing countries, providing a steady flow of income that supports household consumption, education, healthcare, and small business investments. In recent years, remittance earnings have become the main source of financial flow for the Nigerian economy. Remittance income as a share of developing countries Gross Domestic Product (GDP) has been continuously increasing and by 2020, this amount has reached 4.1% (WBG, 2022).

The significant contribution that remittances can make toward achieving the Sustainable Development Goals (SDGs) is evident: an estimated $6.5 trillion in international remittances is projected to be sent to developing countries between 2015 and 2030. This will involve over one billion senders and receivers. Most of the migrants who leave their home countries are economic migrants seeking better opportunities to find jobs and send remittances to about 150 million family members. This trend is especially prevalent in Nigeria, where many young people aspire to emigrate, a phenomenon popularly known as the "Japa Syndrome." Approximately 75 percent of remittance flows are directed toward essential needs such as health, education, and daily consumption. The remaining 25 percent is available for savings and investment. Remittances greatly contribute to the development of recipient countries by providing households with non-farm or non-home income, which can boost production, reduce investment constraints, and finance investments in new production and input technologies. This additional income enhances financial stability, allowing families to invest in better housing, small businesses, and community development projects, thereby fostering economic growth and social development.

According to the World Bank (2021), global remittances saw a 10 percent increase, reaching US$689 billion in 2018, with US$528 billion directed to developing countries. In 2019, remittances grew by 3.7 percent to US$715 billion, with US$549 billion going to developing nations. India, owing to its substantial diaspora and overseas expatriates, consistently holds the position as the top recipient of remittances worldwide, receiving a total of US$87 billion in 2020. Other leading recipients in 2020 included China with US$67 billion, the Philippines and Mexico each receiving US$34 billion, Egypt with US$26 billion, and Nigeria with US$25 billion (World Bank, 2021). These substantial inflows highlight the critical role remittances play in the economies of these countries, providing essential support for household consumption, education, healthcare, and investment in local businesses. India's top position reflects its extensive global workforce, which includes professionals in various sectors such as technology, healthcare, and engineering. Similarly, the significant remittances to China, the Philippines, and Mexico underscore the economic contributions of their respective diasporas, who work in diverse fields ranging from construction and domestic work to skilled trades and professional services. In Egypt and Nigeria, remittances are vital for meeting daily needs and financing development projects, thereby enhancing overall economic stability and growth.

Over the years, Nigeria has consistently stood out in terms of remittance inflows both regionally and globally. Theoretically and empirically, remittances have been recognized for their significant impact on economic growth and development. They offer opportunities for poverty reduction by increasing recipients' income and improving their standard of living (Gupta et al., 2009). In a similar vein, Iheke (2012) asserted that international remittances are crucial for reducing poverty and inequality, as well as promoting overall development. Remittances influence macroeconomic outcomes through various channels, affecting key economic indicators such as output, exchange rates, investment, and human capital (Gupta et al., 2009).

The growing trend of globalization has greatly contributed to the increasing integration of the world economy. This integration has facilitated numerous financial flows, trade in goods and services, movement of people, and various forms of technology transfers across the globe (Taiwo, 2007). In Nigeria, remittances play a pivotal role in not only supporting household consumption but also in funding education, healthcare, and entrepreneurial activities. These financial inflows help stabilize the economy, providing a buffer against economic shocks and enhancing the country's economic resilience. Additionally, the substantial remittance inflows help improve the balance of payments, support the national currency, and contribute to the country's foreign exchange reserves.

In the 1950s and 60s, Nigerians primarily migrated abroad for academic pursuits and to acquire skills that would prepare them for significant roles in the country following its independence. However, from the 1980s onward, the primary motivations for Nigerian migration shifted to political and economic reasons. Adedokun (2003) noted a significant increase in emigration to Europe, North America, the Middle East, and South Africa starting in the 1980s, driven by economic downturns, the introduction of liberalization measures, and the rise of oppressive military regimes. This wave of emigration saw a myriad of professionals, particularly scientists, academics, and medical personnel, moving mainly to Western Europe, the United States, and the Persian Gulf States. Simultaneously, many unskilled Nigerians with limited education emigrated to work in roles such as street cleaners, security guards, taxi drivers, and factory workers (Chukwuone, Amaechi, Iyoko, Enebeli-Uzor & Okpukpara, 2007). The tempo seems to have increased over 100% considering the difficult economic situation and security condition prevalent in the country.

This migration trend reflects the broader socio-economic challenges faced by Nigeria, including limited job opportunities, inadequate public services, and political instability. The exodus of highly skilled professionals, often referred to as a "brain drain," has significant implications for the country's development. While these emigrants contribute to their host countries' economies and send remittances back home, their departure can lead to shortages of skilled labor in critical sectors such as healthcare and education in Nigeria. Conversely, the migration of unskilled laborers highlights the desperate need for employment opportunities and better living conditions within Nigeria. The remittances sent by both skilled and unskilled migrants play a crucial role in supporting their families and communities, contributing to household income, and enhancing overall economic stability.

Hnatkovska and Loayza (2003) argued that consistent inflows of remittances mitigate macroeconomic shocks, particularly output volatility, thereby promoting rapid economic growth. Additionally, Ratha et al. (2009) emphasized that international remittances play a crucial role in developing the financial sector, helping to reduce credit constraints for investment purposes, which in turn stimulates economic growth. Moreover, remittance inflows can lead to the appreciation of the recipient country's domestic currency. Acosta et al. (2007) viewed this exchange rate appreciation as growth-retarding. Ewubare and Okpoi (2018) observed mixed effects of inward and outward remittances on poverty reduction in Nigeria in the short run. They found that while inward remittances significantly reduced poverty in the short term, outward remittances did not have a notable impact. However, in the long run, inward remittances were associated with increased poverty reduction, whereas outward remittances also contributed to reducing poverty incidence. Ewubare and Okpoi (2018) further noted that the net effects of remittances on human capital, as identified in the existing literature, are mixed. On one hand, remittances are expected to boost human capital formation through investments in education, which can increase employment opportunities and subsequently reduce poverty. However, skill shortages and fall in net stock of human capital on the other hand, are the obvious negative outcomes of labour emigration in the remittance recipient countries.

It is concerning that Nigeria continues to grapple with significant challenges in addressing poverty and inequality and in stimulating the growth potential of its domestic economy, despite the substantial income remitted by its nationals abroad. The macroeconomic impacts of remittances are often measured through indicators such as economic growth, poverty reduction, and inequality. While these impacts have been extensively studied in other countries, the effects of remittances at various levels within Nigeria appear to be underexplored. This is notable given that numerous reports and empirical evidence indicate that Nigeria receives more remittances than any other country in sub-Saharan Africa. These remittances should theoretically enhance economic growth and improve socioeconomic conditions. However, the persistence of poverty and inequality suggests that the potential benefits of these inflows are not being fully realized or effectively utilized within the country. This underscores the need for a more comprehensive analysis of how remittances are being used and the barriers that prevent their optimal impact on Nigeria's economy. Addressing these issues could help in formulating better policies to harness the full potential of remittances for economic development and social equity.

Despite the substantial inflow of international remittances to Nigeria, the country continues to face significant challenges in addressing poverty and inequality. Remittances, which are financial transfers from Nigerians living abroad to their families back home, have been recognized globally for their potential to enhance household income and stimulate economic development. However, in Nigeria, the expected benefits of these financial inflows are not fully realized, as evidenced by persistent poverty levels and income disparities. This raises critical questions about the effectiveness of remittances in improving household income and overall economic well-being in the Nigerian context.

Moreover, while remittances contribute a considerable portion to Nigeria's GDP, their macroeconomic impacts are not adequately understood or harnessed. There is a lack of comprehensive analysis on how

these funds are utilized by recipient households and the extent to which they influence economic activities such as consumption, savings, investment, and human capital development. Existing studies have predominantly focused on the volume of remittances rather than their impacts on household income and economic stability. This gap in knowledge hampers the formulation of effective policies aimed at maximizing the developmental potential of remittances.

Furthermore, the socio-economic environment in Nigeria presents unique challenges that may limit the positive effects of remittances. Issues such as poor financial infrastructure, political instability, and limited access to banking services can impede the efficient transfer and utilization of remittances. Additionally, the high cost of remittance transactions reduces the actual amount received by households, diminishing their potential benefits. Understanding the barriers and facilitators in the remittance process is crucial for devising strategies that can enhance the positive impacts of remittances on household income and, by extension, on the broader Nigerian economy. This research seeks to fill these gaps by providing a detailed examination of the effects of international remittances on household income in Nigeria, using econometric and statistical tools to arrive at concise conclusion.

LITERATURE REVIEW

Trends in International Remittances in Nigeria

The trend of international remittances to Nigeria has evolved significantly over recent decades, shaped by migration patterns, economic shifts, and technological advancements. Nigeria, home to one of the world's largest diasporas, has consistently ranked among the top remittance-receiving countries in sub-Saharan Africa. In the 1980s, remittance inflows were modest, as migration was largely education-driven. However, worsening economic conditions and political instability prompted increased emigration, particularly to Europe, North America, and the Middle East, fueling a rise in remittance flows (Adedokun, 2003).

By the 1990s and early 2000s, liberalization, improved global financial systems, and the advent of more efficient communication technologies contributed to a significant surge in remittances. The emergence of formal channels like banks and money transfer operators further enhanced the ease of transactions. The World Bank estimated remittances to Nigeria at around $10 billion annually by the mid-2000s. Although the 2008 global financial crisis briefly slowed remittances, a strong rebound followed. By 2013, Nigeria received about $20.8 billion in remittances, accounting for 4.7% of its GDP (Ratha et al., 2013).

From 2015 to 2020, remittances continued to grow despite economic challenges. The Central Bank of Nigeria introduced policies to encourage formal remittance channels and implemented initiatives like the "Naira 4 Dollar" scheme. Even amid the COVID-19 pandemic in 2020, remittances remained resilient at approximately $17.2 billion (World Bank, 2021). Technological innovations mobile money, digital wallets, and blockchain have further reduced costs and improved access, especially in rural areas. These developments, along with government efforts, have reinforced remittances as a critical source of foreign exchange and household income.

Remittances have a profound impact on household income and poverty in Nigeria. They enhance financial stability, enabling families to meet essential needs like food, education, and healthcare. Households receiving remittances generally enjoy higher disposable income and improved living standards (Orozco, 2002). These funds also promote human capital development by financing education and healthcare, which boosts long-term productivity and economic growth (Adams & Page, 2005). As a poverty-alleviation tool, remittances provide a buffer against economic shocks, particularly in rural areas with limited access to formal financial systems (Gupta, Pattillo & Wagh, 2009).

Remittances can stimulate local economies by increasing demand for goods and services, which in turn fosters business growth and job creation (Ratha et al., 2013). However, the scale of impact depends on the size, frequency, and use of remittance inflows, as well as the broader economic environment (Ewubare & Okpoi, 2018). High transaction fees can reduce household gains, underscoring the need for reforms to lower costs and increase efficiency (Aggarwal, Demirgüç-Kunt & Martinez Peria, 2011). Moreover, over-reliance on remittances may discourage local enterprise, necessitating strategies to channel remittances into productive ventures (Woodruff & Zenteno, 2007).

Theoretical Framework

The New Economics of Labor Migration (NELM)

The New Economics of Labor Migration (NELM), introduced by Oded Stark and David E. Bloom in the mid-1980s, offers a nuanced perspective on migration by examining it as a collective household strategy rather than just an individual decision. This theory posits that labor migration and remittances are integral components of household risk management and income optimization strategies. NELM provides valuable insights into how international remittances impact household income, particularly in the context of Nigeria. NELM posits that households make migration decisions based on the need to manage risks and optimize income. Rather than viewing migration as a purely individual endeavor driven by personal motives, NELM emphasizes the collective strategy of households to mitigate economic uncertainties and improve overall welfare. According to Stark and Bloom (1985), migration is often a response to economic instability or insufficient income opportunities at home. By sending one or more family members abroad, households can diversify their income sources, reduce vulnerability to local economic shocks, and enhance financial stability through remittances.

In Nigeria, international remittances play a crucial role in the economic strategies of many households. As Stark and Bloom (1985) argue, remittances provide a safety net against economic fluctuations and contribute to household income diversification. Nigerian households with members working abroad receive remittances that can significantly boost their financial resources. This influx of funds helps to smooth consumption patterns, mitigate the impact of local economic volatility, and improve overall household welfare.

Remittances from abroad enable Nigerian families to meet immediate needs such as healthcare, education, and housing, which they might otherwise struggle to afford. For instance, research by Ratha et al. (2011) highlights that remittances contribute to poverty reduction by providing additional income that can be allocated to essential services and investments. This is particularly important in Nigeria, where economic instability and high poverty rates can severely impact household livelihoods. Moreover, NELM suggests that remittances can be used strategically for investment purposes. Nigerian households often invest remittances in productive assets, such as small businesses or agricultural ventures, thereby generating additional income and fostering economic development. As noted by Adams and Page (2005), remittances can enhance economic opportunities by funding entrepreneurial activities and improving access to capital. This investment potential is crucial for enhancing household income and contributing to local economic growth in Nigeria.

However, NELM also acknowledges that the effectiveness of remittances in improving household income depends on various factors, including the amount of remittances received, the economic environment in the recipient country, and the household's ability to utilize these funds effectively. In Nigeria, while remittances have positive effects on household income and poverty reduction, challenges such as high transaction costs and limited access to financial services can affect the overall impact (World Bank, 2020).

Empirical studies support the relevance of NELM in understanding the impact of remittances on Nigerian households. For example, research by Ager and Adeel (2019) indicates that remittances contribute significantly to household income and poverty alleviation in Nigeria. Their findings align with NELM's view that remittances are a strategic tool for managing economic risks and enhancing financial stability. The New Economics of Labor Migration (NELM) provides a valuable framework for analyzing the impact of international remittances on household income in Nigeria. By viewing migration and remittances as household strategies for managing risk and optimizing income, NELM highlights the critical role of remittances in improving financial stability, supporting investments, and contributing to overall economic development. This perspective underscores the importance of leveraging remittances effectively to enhance household welfare and drive positive economic outcomes in Nigeria.

Empirical Review

An empirical literature review on the impact of international remittances on household income in Nigeria reveals the evolving understanding and findings from various studies over time. This chronological review outlines key research contributions, their methodologies, findings, and implications for understanding how international remittances affect household income in Nigeria.

Early Research and Initial Findings

In the early 2000s, research on international remittances in Nigeria began to emerge, focusing primarily on the role of remittances in poverty alleviation and household welfare. Early studies established foundational insights into the relationship between remittances and household income.

Adedokun (2003) investigated the impact of remittances on poverty reduction in Nigeria, noting that remittances had a significant positive effect on household income. Adedokun's study highlighted that remittances helped households to smooth consumption and meet basic needs, thus playing a role in poverty alleviation. The research used household survey data to assess the direct effects of remittances on income levels and found that remittances contributed to improved living standards for recipient households. Orozco (2003) explored the broader impact of remittances on household income and economic development in Nigeria. The study found that remittances were used primarily for consumption purposes, including education and healthcare, which contributed to improved household welfare. However, Orozco also pointed out that while remittances provided immediate financial relief, their impact on long-term economic development was less clear.

Mid-2000s Developments and Increased Focus

As the importance of remittances continued to grow, research began to delve deeper into specific aspects such as investment, financial inclusion, and poverty dynamics. Adams and Page (2005) conducted a comprehensive study on remittances and their impact on poverty in developing countries, including Nigeria. They found that remittances had a statistically significant effect on reducing poverty, as they increased household income and improved living standards. Their research indicated that remittances were an essential tool for poverty reduction, although the extent of their impact varied across different regions and household types. Ratha (2006) expanded on earlier work by examining the role of remittances in economic development and financial sector growth. His study highlighted that remittances not only increased household income but also contributed to financial sector development by increasing demand for banking services and financial products. Ratha emphasized that the positive effects of remittances could be amplified by improving financial infrastructure and services.

Late 2000s and Early 2010s: Diversification and Investment

In the late 2000s and early 2010s, researchers began to explore how remittances influenced various aspects of household income beyond immediate consumption, including investment and savings behavior. Morse (2009) investigated how remittances influenced household savings and investment in Nigeria. The study found that while a significant portion of remittance income was used for consumption, a growing share was being directed towards investments in small businesses and productive assets. Morse's findings suggested that remittances had the potential to stimulate local economic activity and improve long-term financial stability for recipient households. Faini (2011) provided further insights into the relationship between remittances and household income by examining their impact on economic inequality and poverty reduction. Faini's research highlighted that remittances had a nuanced effect on income distribution, as they often reached the poorest households, thereby reducing inequality. However, the study also noted that the impact on poverty reduction was contingent on how remittance income was utilized within households.

Recent Studies and Current Perspectives

More recent studies have continued to build on earlier findings, incorporating new methodologies and focusing on specific dynamics such as financial inclusion, household welfare, and policy implications.

Ratha et al. (2013) provided an updated analysis of remittance flows and their impact on household income in Nigeria. Their research highlighted that remittances remained a critical source of income for many Nigerian households, contributing to poverty reduction and improved living standards. They also emphasized the importance of addressing challenges such as high transaction costs and limited access to financial services to enhance the benefits of remittances.

Olabisi and Ajibola (2020) examined the impact of remittances on household savings and investment in Nigeria, finding that remittances had a positive effect on both savings rates and investment levels. Their study suggested that improved financial access and literacy were key factors in maximizing the benefits of remittances for economic growth and household income.

Adeleye et al. (2021) explored the role of remittances in economic development and financial sector growth in Nigeria, highlighting that while remittances contributed to increased household income and financial inclusion, there were significant regional disparities. Their research underscored the need for targeted policies to enhance the effectiveness of remittances in promoting sustainable economic development. In their study, Mbaeri, Kalu, and Okoye (2023) explore the impact of international remittances on poverty reduction in Nigeria, a country that is the sixth largest recipient of remittances globally and the second highest in Africa, yet remains among the poorest nations according to World Bank reports. Utilizing data from 1986 to 2021 and employing the error correction model (ECM), the researchers analyze the effects of remittances alongside other variables such as real gross domestic product per capita, foreign direct investment, financial market access, trade openness, and inflation rate. The data were sourced from the Central Bank of Nigeria's Statistical Bulletin and the World Bank Development Indicators. The findings indicate that a unit increase in remittances leads to a 0.1138 unit decrease in the poverty rate. Additionally, real GDP per capita, foreign direct investment, and financial market access have negative associations with poverty rates, decreasing them by 41.39, 0.399, and 0.0312 units, respectively. Conversely, inflation negatively affects poverty rates, while trade openness has a positive effect. The ECM analysis also suggests a 7.57% adjustment rate towards long-run equilibrium. The study concludes with recommendations to leverage consular offices to regularize the status of Nigerian migrants and to facilitate the formal transfer of remittances to Nigeria.

Temory's (2024) study offers significant insights into the impact of international remittances on household income and poverty in Afghanistan, using a robust methodology that includes regression and microeconomic analysis based on data from 600 households. The research finds that remittances, along with education, household size, age, and employment status, positively influence household income and contribute to poverty reduction. The study highlights the critical role of remittances in enhancing financial well-being and alleviating poverty, while also noting the need for policies to address credit constraints that hinder migration and remittance flows for the poor. Overall, Temory's work underscores the positive effects of remittances on economic outcomes and the necessity for policy improvements to optimize these benefits.

Summary of Literature Review and Research Gap

The empirical literature review on the impact of international remittances on household income in Nigeria reveals several research gaps that warrant further investigation. Early studies, such as those by Adedokun (2003) and Orozco (2003), established foundational insights into how remittances affect household income and poverty alleviation, showing that remittances have a positive impact on consumption and welfare. However, these studies primarily focused on the immediate effects of remittances without thoroughly exploring their long-term implications for economic development or investment behavior.

Mid-2000s research, including Adams and Page (2005) and Ratha (2006), expanded the scope to include remittances' roles in financial sector development and poverty reduction. While these studies provided valuable insights, they often lacked a comprehensive analysis of the nuances of regional disparities and the effectiveness of remittance utilization. For instance, Ratha's emphasis on financial infrastructure improvement did not fully address how variations in access to financial services across different regions in Nigeria affect remittance impacts.

Recent studies, such as those by Morse (2009), Faini (2011), Olabisi and Ajibola (2020), and Adeleye et al. (2021), have explored how remittances influence savings, investment, and financial inclusion, revealing both positive effects and regional disparities. Despite these advancements, gaps remain in understanding the specific mechanisms through which remittances impact household income and poverty reduction across diverse socio-economic and regional contexts within Nigeria.

Additionally, Mbaeri, Kalu, and Okoye's (2023) analysis highlights the relationship between remittances and poverty reduction but does not delve deeply into how remittances interact with other economic factors like inflation and trade openness in a comprehensive manner. Similarly, Temory's (2024) study on Afghanistan demonstrates the need for further exploration into how similar dynamics could be applied to Nigeria, particularly regarding policy interventions to overcome credit constraints and enhance remittance benefits.

Based on the literatures reviewed, previous studies failed to these three important issues with international remittances thus; investigate the correlation between remittance inflows and poverty levels in Nigeria; determine the effectiveness of remittances in reducing income inequality in Nigeria and assess how remittances influence household decisions regarding savings in Nigeria. This present study seeks to fill these gaps by assessing the individual impact of international remittances on poverty levels in Nigeria; in reducing income inequality in Nigeria and it impacts on household savings in Nigeria.

METHODOLOGY

In carrying out this study, we made use of time series secondary data. The secondary data were obtained from central bank of Nigeria statistical bulletin (2022) and World Bank Development indicators (WDI).

Model Specification

An autoregressive distributed lag model is adopted for this study because it assess direct impact of international remittances on poverty level, income inequality among households and savings in Nigeria. The functional form of the model is thus specified as:

$$POVR = f(REM, FDI, INF) \quad (1)$$

$$INQ = f(REM, FDI, INF) \quad (2)$$

$$HSAV = f(REM, FDI, INF) \quad (3)$$

Where POVR = Poverty rate; REM = Remittance inflow into Nigeria, FDI = Foreign direct investment; and INF = Inflation rate. INQ = income inequality, HSAV = household savings. For the purpose of estimation we shall restate the above functional form explicitly as:

$$POVR_t = \lambda_0 + \lambda_1 REM_t + \lambda_2 FDI_t + INF_t + \mu_t \quad (4)$$

$$\text{INQ} = \lambda_0 + \lambda_1 REM_t + \lambda_2 FDI_t + INF_t + \mu_t \quad (5)$$

$$\text{HSAV} = \lambda_0 + \lambda_1 REM_t + \lambda_2 FDI_t + INF_t + \mu_t \quad (6)$$

The autoregressive distributed lag model can be written as below:

$$InPOVR_{t-1} = \sum_{i=1}^{p} \alpha_i InPOVR_{t-1} + \sum_{j=0}^{q} \beta_j \ln REM_{t-j} + \sum_{j=0}^{q} \varphi_j InFDI_{t-j} + \sum_{j=0}^{q} \gamma_j INF_{t-j} + \mu_{1t} \quad (7)$$

$$InINQ_{t-1} = \sum_{i=1}^{p} \alpha_i InINQ_{t-1} + \sum_{j=0}^{q} \beta_j \ln REM_{t-j} + \sum_{j=0}^{q} \varphi_j InFDI_{t-j} + \sum_{j=0}^{q} \gamma_j INF_{t-j} + \mu_{2t} \quad (8)$$

$$InHSAV_{t-1} = \sum_{i=1}^{p} \alpha_i InHSAV_{t-1} + \sum_{j=0}^{q} \beta_j \ln REM_{t-j} + \sum_{j=0}^{q} \varphi_j InFDI_{t-j} + \sum_{j=0}^{q} \gamma_j INF_{t-j} + \mu_{3t} \quad (9)$$

All variables remain as described in equations 1 to 3, $\alpha, \beta, \varphi, \gamma$ are parameters to be estimated while μ = Error term, t = time period. The *a priori* expectations are: $\alpha, \beta, \varphi, \gamma > 0$.

Estimation Procedure

To properly analyze time series data, it's crucial to determine the integration order of the series. We will utilize the Augmented Dickey-Fuller (ADF) unit root tests to assess the time series properties of our model variables. The optimal lag length will be chosen based on the Akaike Information Criterion (AIC). Next, we'll examine whether there is a long-term relationship among our variables of interest using the ARDL Bound test approach. Following this, the series will be estimated using an autoregressive distributed lag model. Post-estimation tests will be conducted to ensure the assumptions of ordinary least squares (OLS) are satisfied.

Stationarity test

To determine the unit root property of time series data, a stationarity test is essential. Stationary time series data have constant mean, variance, and autocovariance over time, which is crucial for reliable empirical analysis and forecasting. Non-stationary data, which exhibit time-varying mean or variance, can lead to misleading or spurious regression results. Given the prevalence of non-stationary series in macroeconomic data, it is important to establish stationarity before analysis. Typically, taking the first or second differences

of a series can achieve stationarity. A series is termed I(1) if differenced once, I(2) if twice, and I(0) if stationary at level. The Augmented Dickey-Fuller (ADF) test is commonly used to test for unit roots and will be employed in this research to assess the stationarity of the series.

Cointegration test

The bounds test for cointegration, we specify the conditional ARDL (p, q) for the model as follows:

$$\Delta InPOVR_{t-1} = \sum_{i=0}^{p}\alpha_i InPOVR_{t-1} + \sum_{j=0}^{q}\beta_j \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j INF_{t-j}$$

$$+\sum_{i=o}^{p}\alpha_i \Delta InPOVR_{t-1} + \sum_{j=0}^{q}\beta_j \Delta \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j \Delta InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j \Delta INF_{t-j} + \varepsilon_{1t} \ldots\ldots\ldots\ldots (10)$$

$$\Delta InINQ_{t-1} = \sum_{i=1}^{p}\alpha_i InINQ_{t-1} + \sum_{j=0}^{q}\beta_j \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j INF_{t-j}$$

$$+\sum_{i=o}^{p}\alpha_i \Delta InINQ_{t-1} + \sum_{j=0}^{q}\beta_j \Delta \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j \Delta InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j \Delta INF_{t-j} + \varepsilon_{2t} \ldots\ldots\ldots\ldots (11)$$

$$\Delta InHSAV_{t-1} = \sum_{i=1}^{p}\alpha_i InHSAV_{t-1} + \sum_{j=0}^{q}\beta_j \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j INF_{t-j}$$

$$+\sum_{i=o}^{p}\alpha_i \Delta InHSAV_{t-1} + \sum_{j=0}^{q}\beta_j \Delta \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j \Delta InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j \Delta INF_{t-j} + \varepsilon_{3t} \ldots\ldots\ldots\ldots (12)$$

Testing for cointegration establishes the stationarity of the residuals generated from running a static regression of the regressand on the regressor at level. Granger (1986) in Gujarati (2013) noted that a test for cointegration can be thought of as a pre-test to avoid 'spurious regression' situations. For the purpose of testing for cointegration in this research work, we employed both the Bound test for cointegration test. The bound test hypothesis states that "at the long run, the coefficient equation is equal to zero while the alternative is the opposite." We can only specify short run model only if we accept the null hypothesis as stated in above equation 10 to 12. But if otherwise, we state the error correction models (ECM) as stated in the following equation for the three objectives:

$$\Delta InPOVR_{t-1} = \sum_{i=0}^{p}\alpha_i InPOVR_{t-1} + \sum_{j=0}^{q}\beta_j \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j InINF_{t-j}$$

$$+\sum_{i=o}^{p}\alpha_i \Delta InPOVR_{t-1} + \sum_{j=0}^{q}\beta_j \Delta \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j \Delta InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j \Delta InINF_{t-j} + \Psi ECT_{j-1} + \varepsilon_{1t} \quad (13)$$

$$\Delta InINQ_{t-1} = \sum_{i=1}^{p}\alpha_i InINQ_{t-1} + \sum_{j=0}^{q}\beta_j \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j InINF_{t-j}$$

$$+\sum_{i=o}^{p}\alpha_i \Delta InINQ_{t-1} + \sum_{j=0}^{q}\beta_j \Delta \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j \Delta InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j \Delta InINF_{t-j} + \Psi ECT_{j-1} + \varepsilon_{2t} \quad (14)$$

$$\Delta InHSAV_{t-1} = \sum_{i=1}^{p}\alpha_i InHSAV_{t-1} + \sum_{j=0}^{q}\beta_j \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j InINF_{t-j}$$

$$+\sum_{i=o}^{p}\alpha_i \Delta InHSAV_{t-1} + \sum_{j=0}^{q}\beta_j \Delta \ln REM_{t-j} + \sum_{j=0}^{q}\varphi_j \Delta InFDI_{t-j} + \sum_{j=0}^{q}\gamma_j \Delta InINF_{t-j} + \Psi ECT_{j-1} + \varepsilon_{3t} \quad (15)$$

The variables in equations 13 to 15 are as defined in equations earlier. The *ECT* in equation are respective error correction terms for the model, while the coefficient of ECT (Ψ) measures the speed of adjustment and Δ is the 1st difference operator.

Error correction mechanism (ECM)

The presence of cointegration forms the basis for error correction model specification. The error correction mechanism (ECM) was first used by J.D. Sargan and later popularized by Engle and Granger (Gujarati: 2013). It will be used to correct for disequilibrium. An important theorem, known as the Granger representation theorem, states that if two variables *Y* and *X* are cointegrated, the relationship between the two can be expressed as ECM (Gujarati, 2013). In the ECM, the lagged value of the residuals from the cointegrating equation is the "equilibrium error" which is used to tie the short-run behaviour of the dependent variable to its long-run value.

Post Estimation Tests

The following post estimation tests will also be conducted for the purpose of this research work: normality test, Test for serial correlation, heteroscedasticity test, stability test and cusum and cusum square test.

Data Analysis and Results Discussion

Unit Root Test

The variables in the series including poverty, inequality, saving, foreign direct investment and inflation in table 4.1 are tasted for stationarity so as to avert inconsistencies which could have arisen owing to spurious results emanating from non-stationary data used for regression. The summary of these results is shown in table 4.1 as follows:

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Table 4.1: Augumented Dickey Fuller Unit Root Test

ADF statistics						
Variables	**Level**	**1st Difference**	**Critical Values**	**Order of Integration**	**P-Value**	**Decision**
LNPOV	-0.456673	-6.934414*	1% -3.615588 5% -2.941145* 10%-2.609066	*I*(1)	0.0000	Reject H_0
FDI	-3.592942*	N/A	1% -3.596616 5% -2.933158* 10% -2.604867	*I*(0)	0.0101	Reject H_0
LNIQ	-1.813689	-2.101343*	1% -2.636901 5% -1.951332* 10% -1.610747	*I*(1)	0.0360	Reject H_0
INF	-2.956213*	N/A	1% -3.610453 5% -2.938987* 10% -2.607932	*I*(0)	0.0481	Reject H_0
LNHSAV	-0.777368	-4.342959*	1% -3.615588 5% -2.941145* 10% -2.609066	*I*(1)	0.0014	Reject H_0

*Author's computation (*shows the variable is stationary at 5% level of significant)*

From Table 4.1, the Augmented Dickey-Fuller (ADF) test results reveal that the lnPOV, lnINQ, and lnHSAV all become stationary only after taking the first difference, signifying integration of order one, I(1). While inflation rate (INF) and foreign direct investment (FDI) were stationary at level. Given the mixed order of integration (I(0) and I(1)), the Autoregressive Distributed Lag (ARDL) model was deemed appropriate for estimating the relationships. The bound test result is shown in table 4.2A to 4.2C below

Bound Test for Cointegration

To test for cointegration, the researcher employed the Bound test. The result of the bound test is shown in table 4.2 as follows.

Table 4.2A: ARDL Bound test result for model one

Null hypothesis: No long run relationship exists			
f- statistic	2.516183		K = 3
Critical Value Bounds			
Significance	I0 Bound	I1 Bound	Decision
10%	3.74	3.77	No cointegrated
5%	2.86	4.35	No cointegrated
2.5%	3.25	4.89	No cointegrated
1%	2.45	5.61	Inconclusive

Authors computation using E-views

The result above shows that there is no cointegration at 10%, 5% and 2.5% levels of significance but the result was inconclusive at 1% level of significance.

Table 4.2B: ARDL Bound test result for model Two

Null hypothesis: No long run relationship exists			
f- statistic	9.226873		K = 3
Critical Value Bounds			
Significance	I0 Bound	I1 Bound	Decision
10%	2.74	3.77	cointegrated
5%	3.23	4.35	cointegrated
2.5%	3.69	4.89	cointegrated
1%	4.29	5.61	cointegrated

Authors computation using E-views

The result above shows that there is cointegration at 10%, 5%, 2.5% and 1% levels of significance.

Table 4.2C: ARDL Bound test result for model Three

Null hypothesis: No long run relationship exists			
f- statistic	2.083706		K = 3
Critical Value Bounds			
Significance	I0 Bound	I1 Bound	Decision
10%	2.72	3.77	No cointegrated
5%	3.23	4.35	No cointegrated
2.5%	3.69	4.89	No cointegrated
1%	4.29	5.61	No cointegrated

Authors computation using E-views

We proceed to estimate the models in the long run for model one and three while model two capture also short run forms as shown in the tables 4.3A to 4.3C below

Table 4.3A ARDL for Model One

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNPOV(-1)	0.905623	0.062368	14.52069	0.0000
LNFDI	0.018110	0.020761	0.872307	0.3897
LNFDI(-1)	-0.042908	0.025586	-1.677005	0.1036
LNFDI(-2)	0.038999	0.017807	2.190133	0.0362
LNREM	-0.013287	0.004994	-2.660642	0.0122
INF	0.000215	0.000603	0.357053	0.7235
C	0.426354	0.271745	1.568946	0.1268

From table 4.3A, the ARDL model estimates the relationship between poverty (LNPOV) and its determinants, including foreign direct investment (LNFDI), remittances (LNREM), and inflation (INF). The model was selected based on the Akaike Information Criterion (AIC) and includes 38 observations after adjustments, with a maximum dependent lag of one.

The coefficient of the lagged dependent variable LNPOV(-1) is 0.9056 and highly significant (p = 0.0000), indicating strong persistence in poverty levels over time. The impact of FDI on poverty is mixed, as LNFDI has an insignificant positive coefficient (p = 0.3897), while its second lag LNFDI(-2) has a positive and significant effect (p = 0.0362). This suggests that FDI may take time before influencing poverty reduction. On the other hand, remittances (LNREM) show a significant negative relationship with poverty (p = 0.0122), implying that an increase in remittances helps reduce poverty levels. Inflation (INF) does not have a statistically significant effect on poverty (p = 0.7235).

The model exhibits a strong fit, with an R-squared of 0.9073 and an adjusted R-squared of 0.8894, indicating that approximately 89% of the variation in poverty is explained by the model. The F-statistic (50.5748, p = 0.0000) confirms the overall significance of the regression. The Durbin-Watson statistic of 2.1419 suggests no severe autocorrelation issues. Overall, the results highlight the importance of remittances in poverty reduction, while the delayed impact of FDI suggests that structural factors may mediate its effectiveness.

Table 4.3B: ARDL Cointegrating and Long Run Form for model Two

Cointegrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(LNFDI)	0.003973	0.001074	3.698355	0.0009
D(LNREM)	-0.000475	0.001150	-0.413261	0.6825
D(LNREM(-1))	0.002443	0.001311	1.863334	0.0726
D(INF)	0.000036	0.000065	0.555092	0.5831
D(INF)	-0.000113	0.000065	-1.724543	0.0953
CointEq(-1)	-0.167336	0.034707	-4.821396	0.0000
Long Run Coefficients				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
LNFDI	0.023745	0.005815	4.083511	0.0003
LNREM	-0.019739	0.003123	-6.321140	0.0000
INF	0.000770	0.000398	1.936172	0.0626
C	-0.796692	0.063424	-12.561390	0.0000

The ARDL cointegration and long-run form model examines the relationship between income inequality (LNINQ) and its determinants: foreign direct investment (LNFDI), remittances (LNREM), and inflation (INF). The selected model, ARDL(1,0,2,2), includes 38 observations.

In the short run, LNFDI has a significant positive effect on income inequality (p = 0.0009), indicating that an increase in FDI may contribute to rising inequality. However, remittances (LNREM) do not have an immediate significant effect (p = 0.6825), though the first lag of LNREM shows a weakly significant positive influence (p = 0.0726). Inflation does not have a significant short-run effect, with both current and lagged values showing weak statistical relevance. The error correction term (CointEq(-1)) is negative and highly significant (p = 0.0000), confirming the presence of a long-run equilibrium relationship and indicating that deviations from equilibrium correct at a speed of 16.7% per period.

In the long run, FDI continues to have a significant positive impact on income inequality (p = 0.0003), suggesting that higher FDI inflows contribute to widening income disparities. In contrast, remittances significantly reduce inequality (p = 0.0000), implying that financial inflows from migrants help alleviate disparities. Inflation has a weakly significant positive effect (p = 0.0626), suggesting that rising prices may slightly worsen income inequality. The constant term is negative and highly significant, reinforcing the overall model stability.

These results indicate that while FDI may exacerbate income inequality, remittances play a crucial role in reducing disparities, highlighting the importance of policy interventions to balance these effects.

Table 4.3C: ARDL for Model One

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNHSAV(-1)	0.901387	0.023671	38.08054	0.0000
LNFDI	0.017673	0.018100	0.976416	0.3360
LNREM	0.071424	0.017234	4.144330	0.0002
INF	0.000669	0.001307	0.511789	0.6122
INF(-1)	-0.002797	0.001344	-2.080996	0.0453
C	-0.909680	0.350815	-2.593045	0.0141

The ARDL model estimates the determinants of household savings (LNHSAV) using foreign direct investment (LNFDI), remittances (LNREM), and inflation (INF) as explanatory variables. The selected model, ARDL (1,0,0,1), was chosen based on the Akaike Information Criterion (AIC) and includes 39 observations after adjustments. The lagged dependent variable, LNHSAV(-1), has a coefficient of 0.9014 and is highly significant (p = 0.0000), indicating strong persistence in household savings over time. FDI does not have a statistically significant impact on savings (p = 0.3360), while remittances exert a significant positive effect (p = 0.0002), suggesting that increased remittance inflows boost household savings. Inflation does not show an immediate impact on savings (p = 0.6122), but its lagged value INF (-1) has a significant

negative effect (p = 0.0453), indicating that past inflation reduces savings over time. The constant term is also significant and negative, suggesting underlying structural factors influencing savings behavior.

The model exhibits an excellent fit, with an R-squared of 0.9986 and an adjusted R-squared of 0.9984, indicating that nearly all variations in household savings are explained by the model. The F-statistic (4690.974, p = 0.0000) confirms the overall significance of the regression. The Durbin-Watson statistic of 1.8557 suggests no severe autocorrelation issues. These findings highlight the critical role of remittances in promoting household savings, while past inflation negatively affects savings accumulation.

Post Estimation Tests

Table 4.4A Summary of Results of Diagnostic Test for model one

Diagnostic Tests Results						
	LM Version			**F Version**		
Test Statistics	**Type**	**Statistic Test Value**	**P Value**	**F-Dimensions**	**F-Statistic**	**P -Value**
Breusch-Godfrey Serial Correlation LM Test: **Ho**: No serial correlation	Chi sq	0.877293	0.6449	(2,29)	0.342668	0.7127
HeteroskedasticityTest: ARCH **Ho**: No hetroscedasticity	Chi Sq	1.459487	0.2270	(1,35)	1.437290	0.2386
Normality of Residuals **Ho**: Residuals are normally Distributed	Jarque Bera	0.124307	0.939739	Not Applicable		

The diagnostic tests, including the correlation LM test, heteroskedasticity test, and Jarque-Bera normality test, presented in Table 4.4A, reveal that all the probability values exceed the 5% significance level. This indicates that the null hypotheses for these tests cannot be rejected. Consequently, there is no evidence of serial correlation, no heteroskedasticity, and although the residuals are not normally distributed.

Table 4.4B: Summary of Results of Diagnostic Test for model Two

Diagnostic Tests Results						
	LM Version			**F Version**		
Test Statistics	**Type**	**Statistic Test Value**	**P Value**	**F-Dimensions**	**F-Statistic**	**P -Value**
Breusch-Godfrey Serial Correlation LM Test: **Ho**: No serial correlation	Chi sq	1.273404	0.5290	(2,29)	0.502752	0.6100

HeteroskedasticityTest: ARCH **Ho**: No hetroscedasticity	Chi Sq	0.263173	0.6197	(1,35)	0.6079	0.2386
Normality of Residuals **Ho**: Residuals are normally Distributed	Jarque Bera	2.070059	0.355216	Not Applicable		

The diagnostic tests, including the correlation LM test, heteroskedasticity test, and Jarque-Bera normality test, presented in Table 4.4B, reveal that all the probability values exceed the 5% significance level. This indicates that the null hypotheses for these tests cannot be rejected. Consequently, there is no evidence of serial correlation, no heteroskedasticity, and although the residuals are not normally distributed.

Table 4.4C: Summary of Results of Diagnostic Test for model Three

Diagnostic Tests Results						
	LM Version			**F Version**		
Test Statistics	**Type**	**Statistic Test Value**	**P Value**	**F-Dimensions**	**F-Statistic**	**P - Value**
Breusch-Godfrey Serial Correlation LM Test: **Ho**: No serial correlation	Chi sq	0.468559	0.5643	(2,31)	1.14436	0.6303
HeteroskedasticityTest: ARCH **Ho**: No hetroscedasticity	Chi Sq	0.803790	0.3700	(1,36)	0.777940	0.3836
Normality of Residuals **Ho**: Residuals are normally Distributed	Jarque Bera	3.101287	0.212111	Not Applicable		

The diagnostic tests, including the correlation LM test, heteroskedasticity test, and Jarque-Bera normality test, presented in Table 4.4C, reveal that all the probability values exceed the 5% significance level. This indicates that the null hypotheses for these tests cannot be rejected. Consequently, there is no evidence of serial correlation, no heteroskedasticity, and although the residuals are not normally distributed.

DISCUSSION OF RESULTS

The coefficient of the lagged dependent variable, LNPOV(-1), is 0.9056 and highly significant ($p = 0.0000$), demonstrating strong persistence in poverty levels over time. This finding suggests that poverty is a deeply entrenched issue that does not change rapidly over short periods, aligning with previous studies emphasizing the structural and cyclical nature of poverty. For instance, Akinlo and Akinbobola (2018) found that poverty in Nigeria exhibits strong persistence due to limited access to economic opportunities, inadequate social safety nets, and weak institutional frameworks. Similarly, Anyanwu (2019) highlighted that poverty reduction requires sustained long-term interventions rather than short-term policy measures.

The impact of foreign direct investment (FDI) on poverty appears mixed. The coefficient of LNFDI is positive but insignificant indicating that FDI inflows do not immediately translate into poverty reduction. However, the second lag of FDI (LNFDI(-2)) has a positive and significant effect suggesting that FDI's effect on poverty operates with a time lag. This result is consistent with the findings of Adams and Klobodu (2016), who noted that FDI's poverty-reducing impact depends on how well it is integrated into the domestic economy. If FDI primarily benefits capital-intensive industries or does not create employment opportunities for low-income populations, its immediate effect on poverty may be minimal. However, over time, as FDI-driven businesses expand, employment and income opportunities increase, leading to gradual poverty reduction (Adeniyi et al., 2020). Remittances (LNREM) exhibit a significant negative relationship with poverty indicating that an increase in remittances contributes to poverty reduction. This finding is in line with previous studies that highlight remittances as an essential source of financial support for low-income households. According to Olayemi and Osabuohien (2019), remittances enhance household income, improve access to education and healthcare, and provide capital for small-scale enterprises, thereby reducing poverty. Moreover, studies by Ratha (2021) demonstrate that remittances serve as a cushion against economic shocks, ensuring a more stable income flow for vulnerable populations.

Inflation (INF) does not show a statistically significant effect on poverty suggesting that short-term fluctuations in price levels do not directly influence poverty. However, previous studies suggest that prolonged inflationary pressures can erode real incomes, reducing the purchasing power of low-income households. For instance, Okon and Effiong (2017) argue that inflation can disproportionately impact the poor by increasing the cost of essential goods and services. While the current results do not find a significant immediate effect, persistent inflation may still pose long-term risks to poverty reduction efforts.

Regarding income inequality, FDI has a significant positive impact implying that higher FDI inflows contribute to widening income disparities. This result is consistent with the "skill-biased technological change" hypothesis, which suggests that FDI benefits skilled workers more than unskilled workers, leading to greater income inequality (Borensztein et al., 1998). In the Nigerian context, Adebayo and Ajibola (2022) found that while FDI promotes economic growth, it often exacerbates inequality by disproportionately benefiting urban elites and capital-intensive sectors, rather than improving conditions for the broader population.

In contrast, remittances significantly reduce income inequality ($p = 0.0000$), suggesting that financial inflows from migrants help alleviate disparities. This aligns with studies such as that of Olowa and Awoyemi (2018), who observed that remittances improve household welfare by redistributing income from wealthier, urban-based migrants to poorer, rural-based relatives. Unlike FDI, which often concentrates wealth in specific sectors, remittances directly reach low-income households, reducing overall income disparities.

Inflation has a weakly significant positive effect on income inequality indicating that rising prices may slightly worsen disparities. This finding is supported by studies such as Ogbuagu and Onuoha (2020), who

noted that inflation disproportionately affects lower-income groups, as their incomes are less likely to keep pace with rising prices, thereby increasing inequality. The negative and highly significant constant term further reinforces the overall stability of the model, indicating underlying structural factors that shape poverty and inequality trends.

Examining household savings, is highly significant indicating strong persistence in savings behavior over time. This suggests that past savings levels strongly influence current savings, a finding that aligns with the "habit persistence" theory of savings (Carroll & Weil, 1994). Similar studies in Nigeria, such as those by Nwokoma and Olajide (2021), emphasize that financial literacy, access to banking services, and economic stability play crucial roles in sustaining household savings over time.FDI does not have a statistically significant impact on savings which may be attributed to the nature of FDI inflows. If FDI is directed toward capital-intensive projects rather than directly benefiting households, its impact on savings may be minimal. This finding is similar to the conclusions drawn by Obafemi and Oseni (2019), who found that while FDI can enhance macroeconomic stability, its direct influence on household financial behavior is limited.

Remittances, on the other hand, exert a significant positive effect on household savings, suggesting that increased remittance inflows boost savings. This finding is consistent with the work of Ajao and Alimi (2020), who observed that remittances serve as an alternative income source that enables households to save and invest. By providing financial security, remittances reduce dependence on informal credit sources, further strengthening savings accumulation.Inflation does not show an immediate impact on savings but its lagged value has a significant negative effect, indicating that past inflation reduces savings over time. This finding is in line with studies by Okafor and Ekeocha (2018), who argue that inflation discourages savings by eroding the real value of money. Households may choose to spend rather than save during periods of rising inflation due to uncertainty about future purchasing power.

These findings highlight the relationship between macroeconomic variables and household economic well-being. While FDI appears to contribute to income inequality, its delayed effect on poverty suggests that policy interventions should focus on ensuring that FDI benefits are equitably distributed. Remittances emerge as a crucial tool for poverty reduction, income redistribution, and household savings, underscoring the need for policies that facilitate and encourage remittance flows. Inflation remains a key concern, particularly in its long-term impact on savings and inequality. Policymakers should therefore adopt measures to manage inflation while fostering inclusive economic growth to address poverty and income disparities effectively.

CONCLUSION AND POLICY RECOMMENDATION

The focus of the study is to examine evaluate the impact of international remittances on household income in Nigeria. This study adopted Autoregressive Distributed Lagged model (ARDL). The findings indicate that poverty in Nigeria exhibits strong persistence over time, requiring long-term interventions rather than short-term policy measures. While FDI does not immediately reduce poverty, its positive effect emerges

with a time lag, but it also contributes to widening income inequality, benefiting skilled workers more than the poor. In contrast, remittances play a crucial role in poverty reduction, income redistribution, and household savings, making them a vital tool for improving economic well-being.

In the light of the findings and analysis of this research, the researcher recommends that:

i. Nigerian government should design policies that encourage the productive use of remittances, such as promoting investment in small businesses or education. By providing incentives for remittance recipients to invest in long-term wealth-generating activities, the impact of remittances on poverty reduction and economic development can be maximized.

ii. Improving access to formal financial services for households receiving remittances would ensure better savings, investment, and economic growth. Policies that encourage remittance recipients to engage with banks or other financial institutions could facilitate better management of these funds and support broader economic stability.

iii. Given that remittances alone have not fully addressed poverty and inequality, the government should expand and strengthen social safety nets and poverty alleviation programs. These initiatives, combined with remittances, can provide more comprehensive support for low-income households, helping to reduce poverty and inequality more effectively.

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