



FINANCIAL TECHNOLOGY AND POVERTY REDUCTION IN NIGERIA

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Abstract

Despite the advancement of financial innovations and inclusion, poverty remains a major issue in Nigeria due to the existence of high poverty incidence rates, which pose pressure on people's standard of living. Therefore, the study examines the impact of financial technology on poverty reduction in Nigeria from 1986 to 2024. Annual time series data was sourced from World Bank, and Central Bank of Nigeria, while the data were analysed using vector error correction mechanisms (VECM). The findings of the study showed that fintech and inflation have negative but significant impact on poverty reduction in Nigeria. The results further found that financial inclusion, and deepening, have positive but insignificant impact while literacy rate and institutional quality have positive and significant impact on poverty in Nigeria. It is suggested that efforts should be made by policymakers to encourage digital financial innovations, and expand financial inclusion initiatives in order to achieve reduction in the levels of poverty.

Keywords: FinTech, Financial Inclusion, Poverty Reduction, Financial Infrastructure, Nigeria
JEL Classification Codes: G23, O16, I32, O33, O55

1.0. Introduction

The development of financial technology (FinTech) has been essential in revolutionizing the finance industry through the introduction of innovative solutions to solve some of the current problems facing the industry. This is due to the fact that FinTech has made huge strides in promoting financial inclusion via financial innovation technologies like

mobile money transfer services, online loans, and agency banking systems (World Bank, 2022). Financial innovations have helped promote financial inclusion especially in developing countries that have very high populations that are underserved by banks. The growth of digital financial services has led to increased credit availability, savings mobilization, and greater engagement in economic activities

among the poor people hence playing an essential role in poverty reduction and development (World Bank, 2022; Demirgüç-Kunt et al., 2025; Ricci et al., 2025).

The growth of FinTech markets in Sub-Saharan Africa can be traced back to the rise of FinTech innovations, most notably through mobile phones and digital banking. New research is clear that the use of FinTech technologies is on the rise in developing nations, especially in regions like Sub-Saharan Africa where there is widespread usage of digital payment platforms (Ricci et al., 2025).

The reliance on mobile money technology has been pivotal in attaining financial inclusion for many persons without bank accounts. Although there has been remarkable progress in this area, poverty levels are still high in the region, which means that financial inclusion alone cannot bring about a better standard of living (Demirgüç-Kunt et al., 2025; World Bank, 2024).

FinTech has significantly transformed in Nigeria over the last ten years, positioning the country as one of Africa's top digital financial markets. The emergence of mobile banking, point-of-sale services, agency banking, and fintech startups has, to a great extent, enhanced financial inclusion for millions of people who were excluded before. Besides, the global financial

inclusion update (Findex 2024/2025) shows that more and more Nigerian adults are using digital accounts and mobile money services (World Bank, 2025). Also, the number of electronic payment transactions in Nigeria hit a new high level in 2024, which is a sign of the wide use of digital finance in the country. However, poverty is still quite common. The National Bureau of Statistics (2022) report shows that more than 63% of Nigerians were multidimensionally poor in 2022, a clear indication of continuing deprivation in terms of income, education, and living standards.

The fact that poverty still exists after FinTech has been developed severely questions the role of digital financial services in improving the standard of living of the poor. Although FinTech has improved people's ability to access banking services, a number of structural issues- for example, digital illiteracy, lack of infrastructure, regulatory restrictions, income inequality still hamper the effectiveness of FinTech in reducing poverty. It is also argued that any increase in financial inclusion may not necessarily lead to a reduction in poverty due to other contributing factors like financial literacy and macroeconomic stability (Ricci et al., 2025; World Bank, 2024). These points hint that merely having access may not be the real solution; instead, the quality and actual

utilization of financial products play a dominant role in contributing to the alleviation of poverty (Ozili, 2021; Demirgüç-Kunt et al., 2025).

In addition to this, extant empirical research studies have mainly concentrated on the association of financial inclusion and economic growth while paying scant regard to the effect of FinTech on reducing poverty in particular. Empirical findings from Nigeria (2012-2024) reveal that financial inclusion variables like mobile money, credits, and account ownership significantly helped in lowering poverty, but macroeconomic instability may hinder the results (Anidiobu & Agada, 2025). Nevertheless, a cross-study comparison reveals mixed results with some authors supporting a strong poverty-eradicating impact whereas others pointing to a less direct or insignificant influence (Ozili, 2021; Demirgüç-Kunt et al., 2025). This variability calls for further context-specific empirical research.

This study therefore analyses how fintech influences poverty alleviation in Nigeria through an examination of up-to-date evidence to verify whether there has been an improvement in the quality of life due to the proliferation of digital financial services.

2.0 Literature Review

2.1 Theoretical Framework

Schumpeter's innovation theory, developed by Joseph Schumpeter (1934) forms the foundation of this research. The theory offers a strong rationale for how FinTech can reduce poverty through its contribution to innovation, access and financial services adoption. One of the main ways in which technological innovation leads to economic development is revealed by Schumpeter's Innovation Theory (Schumpeter, 1934). Schumpeter believed that economic growth is powered by "creative destruction." In other words, new inventions eliminate old ones, thereby raising productivity and reshaping the economic structures and introduces more efficient methods of production and service delivery. In this study, FinTech is considered a radical innovation that disrupts the traditional financial intermediation by replacing it with digital methods such as mobile banking, agency banking, and digital lending. FinTech improves economic participation through cost reduction, greater efficiency, and greater access to financial services. Economic participation, in turn, will result in greater entrepreneurship and income generation opportunities and eventually help alleviate poverty.

This model has been subjected to criticism on account of the minimal focus on structural inequalities and distributional

outcomes. The diffusion of the benefits resulting from innovations is taken to be automatic, yet it might be problematic in emerging countries such as Nigeria due to issues such as low levels of digital literacy, infrastructure gaps, income disparities, and financial constraints. Despite this criticism, the theory is very much applicable in the context of this research because it illustrates how the innovative FinTech can be used as a means to promote economic development and poverty reduction. Following the tenets of Schumpeter's theory, the FinTech innovations create financial inclusion through better access to financial services, reduced transaction costs and increased efficiency. This creates opportunities for entrepreneurship, income generation, and participation in economic activities, which in turn helps to alleviate poverty in Nigeria.

2.2 Empirical Review

Iheji et al. (2025) examined the effect of FinTech on poverty alleviation in Nigeria. The ARDL estimation technique as well as the granger causality tests was applied in estimating the models using data from 2009Q1 to 2023Q3. The study revealed that FinTech variables (volume of transactions on ATM, internet banking, and POS) had no significant effect on poverty alleviation in Nigeria based on the result of the granger causality test. On the other hand, there was a negative significant relationship between volume of transactions on internet banking

and poverty alleviation index in Nigeria, while a positive but significant relationship existed between volume of transaction on volume of transactions on mobile banking, points of sales terminals, and poverty alleviation in Nigeria. Further, there was an insignificant positive relationship between volume of transaction on ATMs and poverty alleviation in Nigeria.

Akamobi (2025) examined the intersection of digital innovation and poverty reduction in Nigeria from 2012 to 2023. The selected analytical methodology was the ARDL model. The findings revealed that digital innovation had positive but insignificant impact on poverty reduction in Nigeria. The findings further indicated that inflation and interest rates had a negative but insignificant impact on poverty reduction in Nigeria.

Olabisi and Adeleke (2024) investigated the impacts of financial technology and financial inclusion on poverty from 1999 to 2023 in 45 SSA countries. Using the panel ARDL (P-ARDL) technique, the study found that financial technology on its own had a positive and significant impact on poverty reduction, while financial inclusion alone, though positively related, was statistically insignificant. However, the interaction between financial technology and financial inclusion index yielded a positive and significant effect on reducing poverty across SSA countries.

Boloupremo and Ogege (2024) explored the influence of financial technology on poverty reduction in Nigeria over the period 1991 to 2021, using multiple linear regression for analysis. The findings revealed that fintech had a significant negative effect on poverty, indicating its effectiveness in alleviating poverty levels. However, poverty was found to be positively, though insignificantly, associated with mortality rate and GDP.

Iwedi et al. (2024) analysed the impact of digital financial inclusion on poverty alleviation in Rivers State, Nigeria. Using a combination of multistage and purposive sampling methods, a sample size of 223 participants was selected. Data collection involved the administration of a structured questionnaire, with steps taken to ensure the validity and reliability of the research instrument. The collected data was analysed using basic descriptive statistics, including tables, frequencies, graphs, and percentages. Findings showed a significant and positive correlation between mobile money accounts, the presence of POS machines, the frequency of mobile payments, and consumption expenditure in Rivers State.

Erondu et al. (2024) investigated fintech investment and poverty reduction in Nigeria spanning from the year 1981 to 2020. However, the study adopted ex-post-facto research design. The study showed

that only public sector investment in financial technology impacted negatively and significantly on poverty reduction which was measured by HDI in Nigeria. While private sector investments in financial technology were positive and a significant determinant of HDI. This implied that an increase in financial technology investments, led to an increase in poverty reduction in Nigeria.

Roongsrisoothiwong (2024) used linear regression and Pearson correlation coefficient analysis on annual data for seven Southeast Asian countries from 2018 to 2021. The seven countries were divided into two groups based on their income levels: middle-income and lower-income countries. The results revealed that fintech significantly impacted poverty in seven Southeast Asian countries, encompassing both middle-income and lower-income nations.

Echu et al. (2024) explored the potential of digital finance in driving sustainable development in Nigeria's economy. To achieve the objectives of the study, a positivist approach was adopted, utilizing a sample size of 384 participants. Data analysis was conducted using regression analysis to examine the relationships between digital finance and the desired outcomes. The study found that digital finance has significant relationship with

sustainable development indicators in Nigeria's economy.

Emara (2023) analysed the asymmetric and dynamic effects of fintech adoption on poverty alleviation in SSA using annual data from 2004 to 2020. The study applied the GMM technique to a panel of 127 countries, including 45 from the SSA region. The results indicated that initial growth in fintech adoption contributed significantly to reducing extreme poverty, which in turn led to a general decline in the poverty rate. However, the study discovered that after fintech development reached a threshold of 37.18 on the fintech index, further advancements yielded diminishing returns, slowing the pace of poverty alleviation.

Olaoye and Zerihun (2023) examined the moderating role of ICT in the relationship between financial inclusion and poverty reduction in Nigeria, spanning from 1981 to 2022. The study employed various econometric techniques, including the GMM and FMOLS, to control for heterogeneity and endogeneity concerns in the poverty literature. The findings revealed that ICT significantly moderated the impact of financial inclusion on poverty alleviation in Nigeria. It was found that ICT strengthened the effectiveness of financial inclusion in reducing poverty, especially in mitigating the adverse impacts of unexpected macroeconomic shocks.

Natarajan (2023) delved into the emerging financial infrastructures that support various FinTech developments and explores their regulatory implications. The study employed a qualitative approach to analyse existing literature and case studies of FinTech developments. The study used variables such as number of bank branches, digital payment systems, mobile money services, and online banking platforms to proxy financial infrastructure. The findings showed that although these innovations offer significant potential for enhancing access to financial services and poverty reduction, they introduce risks related to cybersecurity, regulatory compliance, and data privacy.

Khaki et al. (2022) explored the connection between financial inclusion, digital technology adoption, and poverty reduction in African nations, considering the increasing relevance of digital financial services. The study utilized a supervised machine learning method to determine the most effective multiple regression model and the ideal combination of variables representing technology, financial inclusion, and fintech to assess their influence on poverty alleviation. The analysis showed that mobile phone usage had a notable effect on reducing poverty among the technological indicators. In the area of traditional financial inclusion, ATM availability and access to formal credit

significantly lowered poverty levels, while physical bank branches had no measurable impact. For fintech-related factors, a wider reach of mobile money agents, increased mobile money transactions, and the use of mobile or internet banking services significantly supported efforts to alleviate poverty. Conversely, other fintech indicators did not show a substantial effect. Adegbe and Nurudeen (2022) assessed the influence of financial inclusion on poverty reduction in Nigeria over the period 2010 to 2021, employing an econometric model through the OLS regression technique. The study revealed that financial inclusion significantly impacted per capita income, contributed to a decline in poverty, and enhanced living standards. Specifically, the analysis showed that cash transfer programmes by non-governmental organizations (NGOs) positively affected income levels and living standards, thereby promoting poverty alleviation. Additionally, the availability of ATM and POS terminals was found to significantly boost financial inclusion, income generation, and poverty reduction. Adeyemo and Eso (2022) studied the impact of financial technology on poverty reduction in selected semi-urban locations within the Ibadan metropolis, Oyo State. The research employed a cross-sectional survey design, utilizing a self-administered, close-ended questionnaire to collect data.

Variables were measured using a five-point Likert scale, and data were analysed through descriptive statistics, including simple percentages, and the Pearson product-moment correlation coefficient. The study revealed that financial inclusion had no significant role in reducing poverty within the Nigerian context.

Similarly, Appiah-Otoo and Song (2021) analysed both the direct and indirect influence of financial technology and its components—such as third-party payments and credit services—on poverty, which was measured by household per capita consumption. Using panel data from 31 Chinese provinces spanning 2011 to 2017, their findings showed that fintech and its key components significantly contributed to poverty alleviation. Additionally, fintech was found to work synergistically with economic growth and financial development to further reduce poverty in China.

3.0 Methodology

3.1 Model Specification

This study adapts and modifies the model of Roongsrisoothiwong (2024). The model was adapted because the same measure of fintech index used in this current study was also used which are good in explaining the relationship between fintech and poverty reduction in Nigeria. The model of Roongsrisoothiwong (2024) adapted for this study is thus specified functionally as;

POVR

$$= f(FINTI, GDPpc, INFR, TROP, HCON) \quad 3.1$$

FINTI = fintech index indicators; GDPpc = GDP per capita; INFR = inflation rate; TROP = trade openness as a percentage of GDP; HCON = household consumption. This current study therefore modifies the model and it is stated as;

$$\begin{aligned} \ln POV_t = & \beta_0 + \sum_{i=1}^p \beta_1 \ln POV_{t-1} + \sum_{i=1}^p \beta_2 \ln FINTEC_{t-1} + \sum_{i=1}^p \beta_3 \ln FI_{t-1} \\ & + \sum_{i=1}^p \beta_4 \ln FD_{t-1} + \sum_{i=1}^p \beta_5 \ln LITR_{t-1} + \sum_{i=1}^p \beta_6 \ln INSQ_{t-1} \\ & + \sum_{i=1}^p \beta_7 \ln INF_{t-1} + ECM_{t-1} + \mu_t \end{aligned} \quad 3.3$$

Where, ECT_{t-1} and ECM_{t-1} express the error correction term of growth equation.

4.0 Results and Discussion of Findings

4.1 Presentation of Results

4.1.1. Augmented Dickey Fuller Stationarity Test

POV =

$$f(FINTEC, FI, FD, LITR, INSQ, INF) \quad 3.2$$

Where, POV = poverty rate; FINTEC = financial technology index; FI = financial inclusion; FD = financial deepening; LITR = literacy rate; INSQ = institutional quality; INF = inflation rate.

This subsection deals with the test of unit root. Since time series data usually exhibit unit root, ADF unit root test was employed to test for stationarity. This test is necessary so as not to have misleading results. The result is thus presented in Table 4.1.

Table 4.1: Summary of the ADF Unit Root Test

Variables	ADF Statistics	Critical Value @5%	Order of Integration	Remarks
POV	-3.6119	-2.9458	I(1)	Stationary
FINTEC	-6.9008	-2.9458	I(1)	Stationary
FI	-7.2928	-2.9458	I(1)	Stationary
FD	-4.3732	-2.9458	I(1)	Stationary
LITR	-4.8062	-2.9458	I(1)	Stationary
INSQ	-6.1024	-2.9458	I(1)	Stationary
INF	-5.3365	-2.9458	I(1)	Stationary

Source: Author's Compilation using Eviews 13.0

The ADF test reports that all variables are stationary at their first difference, i.e., I(1). That means all variables were stationary following the first difference. As all ADF statistics are more negative than their

corresponding 5% critical values, the null hypothesis of a unit root (i.e., non-stationarity) is not accepted for all variables. This means that POV, FINTEC, FI, FD, LITR, INSQ and INF all exhibit a

difference-stationary process instead of a trend-stationary process. The fact that all the variables are $I(1)$ suggests that they could be suitable for cointegration analysis to discover whether there exist any long-run equilibrium relationship between them. Since all the variables have the same order of integration, the Johansen cointegration

test was employed to examine their long-run relationships.

4.1.2. Lag Length Selection

This section presents the appropriate lag length for this study before estimating the long and short run coefficients of the model.

Table 4.2: Summary of VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-381.5904	NA	3.126266	21.00489	21.30966	21.11233
1	-69.62611	489.0251*	2.20e-06*	6.790601*	9.228747*	7.650161*

Source: Author's Compilation using Eviews 13.0

The result of the lag length selection shows that the optimal lag length is 1. This indicates that incorporating one lag reflects an appropriate balance between model complexity and goodness of fit.

The next step after determining the order of integration of the variable is to apply the Johansen test in order to establish a long-run relationship among the variables. The results of the test are reported in Table 4.3.

4.1.3. Johansen Cointegration Test

Table 4.3: Summary Result of the Johansen Cointegration Test

Hypothesized No of CE(s)	Eigenvalue	Trace statistic	Critical value @ 5%	Max-Eigen statistic	Critical value @ 5%
None*	0.8796	219.1479	125.6154	79.2013	46.2314
At most 1*	0.7930	142.9466	95.7537	56.7066	40.0776
At most 2*	0.6362	86.2401	69.8189	36.4039	33.8769
At most 3*	0.5297	49.8361	47.8561	27.1586	27.5843
At most 4	0.3057	22.6775	29.7971	13.1366	21.1316
At most 5	0.2251	9.5408	15.4947	9.1786	14.2646
At most 6	0.0100	0.3622	3.8415	0.3622	3.8415

Source: Author's Compilation using Eviews 13.0

The result provides us with the cointegration evidence with four cointegrating equations. The trace statistic indicates significance at "None", "At most 1," "At most 2, and "At most 3, while the max-eigen statistic suggests three

cointegrating equations. This implies that the variables have long run relationship.

4.1.4. Vector Error Correction Mechanism (VECM)

The VECM was conducted to determine the joint dynamic behaviour of a collection of

variables without requiring strong restrictions to identify the underlying

structural parameters. The result of the VECM is presented in Table 4.4.

Table 4.4: Summary of VECM Result

	Coefficient	Std. Error	t-Statistic	Prob.
COINTEQ1	-0.215078	0.012083	-2.437295	0.0157
D(POV(-1))	0.173313	0.203173	2.853034	0.0047
D(FINTEC(-1))	-0.580752	0.734711	-3.321907	0.0078
D(FI(-1))	0.124565	0.193556	1.612464	0.1085
D(FD(-1))	0.429941	5.117093	0.084021	0.9331
D(LITR(-1))	0.180280	0.275456	2.654478	0.0136
D(INSQ(-1))	0.157713	0.159211	2.990590	0.0112
D(INF(-1))	-0.027060	0.019949	-3.356460	0.0066
C	-0.107651	0.631829	-3.170379	0.0089
R-squared	0.642221	F-statistic		5.755901
Adjusted R-squared	0.447323			
S.E. of regression	1.739984			
Durbin-Watson stat	2.145012			

Source: Author's Compilation using Eviews 13.0

The results indicated a valid long-run relationship, as shown by the significant error correction term of -0.2151 with a p-value of 0.0157 , suggesting that approximately 21.5% of the previous period's disequilibrium in poverty was corrected in the current period. A 1 percent increase in the previous level of poverty increased current poverty by about 0.17 percent, confirming some persistence in poverty reduction efforts. Similarly, a 1 percent increase in financial technology usage led to a 0.58 percent reduction in poverty, showing that digital financial innovation played a significant role in alleviating poverty. However, a 1 percent increase in financial inclusion raised

poverty marginally by 0.12 percent, though this effect was statistically insignificant, indicating that access to financial services alone may not translate into immediate welfare gains unless properly utilized.

Financial deepening exerted an insignificant positive effect, as a 1 percent increase in financial deepening raised poverty by 0.43 percent, implying that in the short run, broad-based financial sector improvements may not directly benefit the poor. Literacy rate was found to be impactful, with a 1 percent increase in literacy resulting in a 0.18 percent reduction in poverty, while institutional quality was also effective, as a 1 percent improvement in governance led to a 0.16 percent decline in poverty. Inflation, on the other hand,

exerted a detrimental effect on welfare; a 1 percent increase in inflation heightened poverty by approximately 0.03 percent, demonstrating the vulnerability of the poor to rising price levels. The R-squared of 0.64 indicates that approximately 64% of the variation in the dependent variable is explained by the independent variables (FINTEC, FI, FD, LITR, INSQ, INF) in the model. This suggests a strong explanatory power. The model's F-statistic of 5.76

confirmed a good overall model fit, while the Durbin-Watson statistic of 2.15 indicated no autocorrelation issues.

4.2 Post-Estimation Tests

Under this section, evaluation of our estimates is done to check the validity and reliability of our model. Both serial correlation, heteroscedasticity, and normality tests are used to evaluate the results obtained from this model.

Table 4.5: Summary of Serial Correlation Tests for the Model

Lag	LRE* stat	df	Prob.	Rao F-stat	Df	Prob.
1	50.71412	49	0.4058	1.030906	(49, 75.5)	0.4461
2	47.29176	49	0.5426	0.943523	(49, 75.5)	0.5809

Source: Researcher's Compilation Using Eviews 13.0

VEC Residual Serial Correlation LM Test results show that for lags 1 and 2, there exists no serial correlation because the p-values (0.4461, 0.5809) are significantly larger than 0.05. The test for lags 1-2 also reveals that there is no serial correlation,

and the model residuals are uncorrelated and aligned with the white noise assumption, which is necessary for valid estimation and inference.

Test for Heteroscedasticity

Table 4.6: Summary of Heteroscedasticity Test

Joint test:		
Chi-sq	Df	Prob.
465.0473	448	0.2794

Source: Researcher's Compilation Using Eviews 13.0

The probability value is equal to 0.2794, which indicates that the significance level of the probability F statistic exceeds 0.05 percent. As a result, the study accepts the null hypothesis, according to which the data

may be trusted to be predictive because the model does not exhibit heteroscedasticity in the residuals.

Table 4.7: Summary of Normality Test

Component	Jarque-Bera	Df	Prob.
1	1.871407	2	0.3923
2	1.818905	2	0.4027
3	1.305466	2	0.5206
4	0.767461	2	0.6813
5	0.735088	2	0.6924
6	3.086718	2	0.2137
Joint	9.585045	12	0.6523
<i>*Approximate p-values do not account for coefficient Estimation</i>			

Source: Researcher's Compilation

Using Eviews 13.0

From the results, the joint probability value of 0.6523 is derived from normality tests conducted on the residuals of the models. Since this value is greater than the 5% significance level (0.05), they indicate that the null hypothesis of normality cannot be rejected. This suggests that the residuals of the models follow a normal distribution, an important assumption in econometric modeling.

4.3. Discussion of Findings

The role of financial technology in poverty alleviation is notably significant, with the findings confirming the potential of digital finance in reducing poverty and supporting the findings of Olabisi and Adeleke (2024). This aligns with expectations that technological innovations, such as digital finance, enhance access to financial services, particularly for marginalized

populations. The findings failed to support that of Iheji et al. (2025) which found insignificant impact between fintech and poverty in Nigeria. Echu et al. (2024) highlighted the positive impact of digital finance in driving financial inclusion and promoting economic development, a view supported by the current results that show how fintech can play a critical role in poverty reduction. Similarly, Iwedi (2024) emphasized the need for continued investment in digital finance infrastructure to improve accessibility and convenience, a concept reflected in the positive relationship between fintech usage and poverty reduction observed here. However, the relationship between financial inclusion and poverty is less straightforward. While financial inclusion was expected to lead to poverty reduction, the results suggest that merely providing access to financial services does not automatically translate into improved welfare. This finding indicates that financial inclusion, while essential, may not be sufficient on its own. As highlighted by Natarajan (2023), the impact of financial infrastructure such as mobile money and digital payment systems on poverty alleviation is contingent on the effective utilization of these services, as access alone does not guarantee positive outcomes.

Similarly, the impact of financial deepening on poverty appears to be limited in the short term. While financial deepening is generally expected to reduce poverty by expanding access to financial resources, the results indicate that broad improvements in the financial sector may not immediately benefit the poor. This suggests that financial deepening needs to be coupled with targeted strategies to ensure that the poor can access and benefit from these improvements. Iwedi (2024) noted that while digital finance infrastructure enhances access, the effects on poverty reduction may be more gradual and require specific interventions to reach vulnerable populations. The role of high literacy rate and institutional quality in poverty reduction is more pronounced. The findings show that education and good governance have a positive impact on poverty reduction, as expected. The positive effect of literacy on poverty reduction confirms the importance of investing in education to provide individuals with the skills and opportunities needed to break free from poverty. Similarly, the improvement in institutional quality, including governance, aligns with the expectation that strong institutions create an environment conducive to economic growth and poverty alleviation. Natarajan (2023) also emphasized the importance of governance and regulatory quality in ensuring the

stability and effectiveness of financial systems, which ultimately supports poverty reduction efforts. Lastly, inflation was found to have a detrimental effect on poverty, as anticipated. The results confirm that rising inflation erodes the purchasing power of low-income households, making it more difficult for them to afford basic goods and services. This finding aligns with the broader literature on inflation and poverty, which shows that the poor are particularly vulnerable to price increases, as they spend a larger proportion of their income on necessities. Iwedi (2024) also pointed out the negative impact of inflation on the financial well-being of the poor, reinforcing the need for policies that stabilize inflation and protect vulnerable populations.

5.0 Conclusion and Recommendations

The study examines the impact of financial technology on poverty reduction in Nigeria for the period 1986 to 2024, using VECM approach of analysis. In conclusion, the paper finds that the emergence of FinTech and the improvement of financial systems significantly contribute towards achieving poverty reduction in Nigeria. This is due to the fact that through FinTech and financial systems, there can be improved facilitation of financing for investments that promote financial inclusion, efficient utilization of resources, which tends to reduce poverty.

Thus, it is clear that FinTech is a force not only for economic development, but for poverty alleviation as well.

Given the negative impact of fintech on poverty reduction, it is recommended that the government should promote targeted digital financial products tailored specifically to the needs of the poor, such as microloans, pay-as-you-go services, and low-cost savings platforms. This would

ensure that fintech solutions go beyond general access and are designed to enhance the livelihoods of low-income groups, making them more effective in reducing poverty. The government can support this by creating partnerships with fintech firms, offering incentives for pro-poor innovations, and ensuring regulatory frameworks encourage inclusivity and consumer protection.

References

- Adegbe, E., & Nurudeen, J. (2022). Effects of financial inclusion on poverty alleviation in Nigeria. *Lapai International Journal of Administration (LIJAD)*, 5(1), 159-180.
- Adeyemo, K. A., & Eso, A. A. (2022). Financial Technology and Poverty Reduction in Ibadan, Nigeria. *Multidisciplinary Journal of Management Sciences, Association of Forensic Accounting Researchers (AFAR)*, 4(3), 48-67.
- Akamobi, O. G. (2025). Digital innovation and poverty reduction in Nigeria. *FULafia International Journal of Business and Allied Studies*, 3(1), 20-36.
- Appiah-Otoo, I., & Song, N. (2021). The impact of fintech on poverty reduction: Evidence from China. *Sustainability*, 13(9), 5225. <https://doi.org/10.3390/su13095225>
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality and the poor. *Journal of Economic Growth*, 12(1), 27–49. <https://doi.org/10.1007/s10887-007-9010-6>
- Boloupremo, T., & Ogege, S. (2024). Financial technology (Fintech) as a driver for poverty reduction in Nigeria. *The Journal of Developing Areas*, 58(4), 77-87. <https://doi.org/10.1353/jda.2024.a931317>
- Central Bank of Nigeria. (2023). *National financial inclusion strategy: Progress report*. CBN. <https://www.cbn.gov.ng/FinInc/>
- Central Bank of Nigeria. (2023). Statistical bulletin. <https://www.cbn.gov.ng/documents/Statbulletin.html>
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. <https://documents1.worldbank.org/curated/en/099818107072234182/pdf/IDU06a834fe908933040670a6560f44e3f4d35b7.pdf>

- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2025). *The Global Findex Database 2024: Financial inclusion, digital payments, and resilience in developing economies*. World Bank. <https://www.worldbank.org/en/publication/globalfindex>
- Echu, E. S., Ogundare, N. J., Abba, M. T., Misau, A. M., & Liman, J. A. (2024). Unlocking the Potential of Digital Finance for Sustainable Development in Nigeria's Economy. *International Journal of Research and Innovation in Social Science*, 8(6), 2509–2524. <https://doi.org/10.47772/IJRISS.2024.806191>
- Emara, N. (2023). Asymmetric and threshold effects of FinTech on poverty in SSA countries. *Journal of Economic Studies*, 50(5), 921–946. <https://doi.org/10.1108/JES-03-2022-0158>
- Erondy, I. N., Taiwo, J. N., Madugba, J. U., Erondy, C. I., Oladipo, A. O., & Erondy, U. I. (2024). Financial Technology Investment and Poverty Reduction in Nigeria. *ANWESH: International Journal of Management & Information Technology*, 9(1), 17-30.
- Iheji, N. U., Ezeanyej, C. I., & Obi, C. O. (2025). Effect of financial technology on poverty alleviation in Nigeria. *International Journal of Finance, Accounting and Management Studies*, 1(4), 158–174.
- Iwedi, M., Wachuku, P. I., & Amadi, J. C. (2024). Digital financial inclusion and poverty alleviation in Nigeria. *Journal of Financial Technology and Business Innovation*, 1(1), 13-32. <https://ijeti-edu.org/index.php/jftbiDigital>
- Khaki, A.R., Messaadia, M., Jreisat, A., Al-Mohammad, S. (2022). Fintech Adoption for Poverty Alleviation in African Countries: Application of Supervised Machine Learning Approach. In: Masri, H. (eds) *Africa Case Studies in Operations Research. Contributions to Management Science*. Springer, Cham. https://doi.org/10.1007/978-3-031-17008-9_10
- Natarajan, H. (2023). Financial infrastructure in the FinTech era and implications for policymakers. *Journal of Digital Banking*, 7(4), 301-308. <https://doi.org/10.69554/AAIR6370>
- National Bureau of Statistics. (2022). *Nigeria multidimensional poverty index report*. NBS Nigeria. <https://www.nigerianstat.gov.ng/library/read/1241254>
- Olabisi, F. & Adeleke, O. (2024). Impacts of financial technology and financial inclusion on poverty in Sub-Saharan (SSA) Countries. *FUOYE Journal of accounting and management*, 7(2), 233- 260.
- Olaoye, O. & Zerihun, M.F. (2023). Financial inclusion and poverty reduction in Nigeria: the role of information and communication technology (ICT). *African Journal of Economic and Management Studies*, 14(4), 726-740. <https://doi.org/10.1108/AJEMS-12-2022-0488>
- Ozili, P. K. (2021). Financial inclusion research around the world: A review. *International Journal of*

- Finance & Economics*, 26(4), 1–15.
<https://doi.org/10.1002/ijfe.2239>
- Ricci, L. A., Ahokpossi, C., Quayyum, S. N., Turk, R. A., Belianska, A., Cangul, M., Fuge, H., Lee, S., Li, G. B., Li, X., Mu, Y., Mwase, N., Ree, J. J., Shi, H., & Kramarenko, V. (2025). *Digital payment innovations in Sub-Saharan Africa*. International Monetary Fund.
<https://doi.org/10.5089/9798400232220.071>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Roongsrisoothiwong, J. (2024) The Impact of Fintech on Poverty Reduction in Southeast Asian Countries. *Open Access Library Journal*, 11: e11628.
<https://doi.org/10.4236/oalib.1111628>
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Harvard University Press.
- Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288–1292.
<https://doi.org/10.1126/science.aah5309>
- World Bank. (2022). *Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*.
<https://documents.worldbank.org/eng/publication/documents-reports/documentdetail/099818107072234182>
- World Bank. (2024). *Financial inclusion*. World Bank Group.
<https://www.worldbank.org/ext/en/topic/financial-sector/financial-inclusion>
- World Bank. (2025). *Global Findex update: Digital financial inclusion trends*. World Bank.
<https://www.worldbank.org/en/publication/globalindex>