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# FINANCIAL INCLUSION INITIATIVES BRIDGING THE GAP OF THE UNBANKED POPULATION IN NIGERIA

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## ABSTRACT

The economic goals of reducing poverty and income disparities are confronted with obstacles, particularly in developing nations. Electronic banking services as a platform that improves fantastic chances to obtain funding. This study aims to explore how financial inclusion initiatives can help Nigerians bridge the gap of the unbanked population. The statistical data used for the study were obtained from the Central Bank of Nigeria statistics bulletin 2024, International Monetary Fund report 2024, and the World Bank data 2024. The study employed statistical methods of regression models in analyzing the data obtained. Major findings from the study show that, according to the number of bank Branches (NBB), which measures bank branch spread, Poverty Rate (POV) is positively impacted by the spread. However, it was shown that this was not statistically significant. Moreover, banked population has a positive and significant impact on the poverty rate in Nigeria. It is recommended that the younger generation of today needs to be educated on how easy it is to register an account at home, anytime of the day, regardless of the amount involved. The study recommends that banks should expand their business presence to remote regions of the country for greater reach of the unbanked population and their inclusion into the formal financial system of Nigeria.

**Keywords:** financial inclusion, unbanked population, financial, literacy, ecosystem.
**JEL**: E44, G21, O16, I38

## INTRODUCTION

Financial inclusion initiative is now seen as essential requirement for long-term viability and sustainability of Nigerian financial system. In order to bridge the gap of the unbanked population in Nigeria, the nation wants to utilize official financial resources for a larger segment of the unbanked populace (Ade'Soyemi, Olowofela and Yunusa (2020). Initiatives to promote financial inclusion across the nation are actively being pursued by a range of stakeholders, including telecommunications providers, banking institutions, and microfinance organizations, with a primary objective of bridging the gap for the unbanked population in Nigeria (Kelly, Ferenzy and McGrath 2017).

Efforts to bridge the financial inclusion divide between the underbanked and unbanked populations was intensified, with a focus on digital financial services. Because of this, Nigerians who are financially excluded—roughly 40.0% of the adult population—continue to have a significant demand for financial services. According to David-West et al. (2016) quoted in Nkechika (2022), "the under-banked and unbanked citizens of Nigeria are predominantly women and youths between the ages of 18 and 35 with minimal education and either unemployed or in the low-income earning jobs." Recent changes to Nigeria's financial services digital ecosystem and the way telecommunications companies are offering financial products, settlements, and service delivery alternatives are indications of this understanding.

The Nigeria deposit money banks and FinTechs in Nigeria have been at the forefront of this movement by introducing creative ways to improve financial inclusion initiatives (Ogunode and Akintoye 2023). Fintech companies have been instrumental in removing obstacles and opening doors for individuals from all walks of life to obtain financial services by issuing a variety of financial instruments. Financial inclusion in Nigeria increased to 74% in 2023 from 68% in 2020 as a result of the combined effort, according to research by Enhancing Financial Inclusion and Access (EFInA) (Ogunode and Akintoye 2023).

The significance of financial inclusion is heightened by considering the advancements in payment technologies and the transition to digital transactions (Arner et a., 2020). The ease of use and effectiveness provided by electronic means of payment play a significant role in the growth of financial inclusion initiatives. Payment cards, internet transfers, and mobile banking give people the power to handle their money with security and ease (Ahmed et al., 2021

In Nigeria's pursuit of financial inclusion initiatives, payment cards, internet transfers, and mobile banking are game changers. The fight against poverty depends heavily on financial inclusion, or the availability and use of formal banking services by all segments of the population. Payment cards, internet transfers, and mobile banking have become an effective means of closing the financial inclusion gap in Nigeria, a nation with a heterogeneous population and numerous geographic obstacles (Soetan, Mogaji and Nguyen 2021). It is against this backdrop that the study seeks to examine the impact of financial inclusion initiatives in bridging the gap of the unbanked population in Nigeria.

## LITERATURE REVIEW

An environment where every individual, wherever they may reside, has access to and can take advantage of the banking and financial services required to seize opportunities and lessen risk is referred to as financial inclusion (World Bank 2013). The goal of financial inclusion was first to address the issue of low-income people and/or communities being shut out of the banking system. Banks favor doing business only with "high net worth" clients because they are more inclined to present banks with greater profit margins than low-income clients (Singh and Misra 2024). Consequently, financial inclusion is being interpreted as the development of financial sector regulations mandating universal access to banking products and services (Alonso et al., 2023; Ediagbonya and Tioluwani 2023). Furthermore, financial inclusion strives to reduce poverty and social injustice by creating economic possibilities alongside granting utilization of banking services (Ozili, 2021).

### Digital financial inclusion

The phrase "digital financial inclusion" refers to giving everyone access to digital financial services in the age of widely available financial technology (FinTech) and information and communication technology (ICT). The concept of "digital financial inclusion" refers to providing every person and organization with access to an online environment where financial transactions about the purchase of goods and services are carried out digitally through a variety of safeguarded electronic channels. This is demonstrated by the availability of practical and reasonably priced services and products related to banking that satisfy people's needs and are responsible and sustainably provided.

Empirical review

Based on institutional theory conducted across multiple nations, panel and cross-section empirical research (Chatterjee, 2020; Kim, Yu and Hassan 2018; Rasheed et al., 2016; Demirgüç-Kunt and Klapper 2012) have determined that financial inclusion is essential to building a robust and well-organized system of finance, which accelerates economic growth. According to Demirguc-Kunt and Klapper (2012), income levels rise quickly in nations with a large concentration of bank branches and deposits this suggests that greater financial inclusion rates contribute to these economies' strong growth. The number of ATMs and commercial banking establishments per 100,000 adults was used by Rasheed et al., (2016) to evaluate financial inclusion. The study's findings demonstrated that financial inclusion significantly boosts the economy. Similarly, Sethi and Acharya (2018) evaluated the impact of financial inclusion on the growth of 31 nations' economies and concluded that these nations' economies were stimulated by financial inclusion.

Financial inclusion, as indicated by organizational variables in banking such as deposit money bank divisions, credit, and ATM availability, has also been demonstrated by individual country-level research on associations to be a veritable predictor of growth in the economy (Aduda and Kalunda 2012 ; Migap, Okwanya and Ojeka 2015). Financial inclusion, defined as "the procedure that indicates an increase in the number, quality, as well as effectiveness of financial intermediary services," was examined by Babajide, Adegboye, and Omankhanlen (2015) concerning Nigeria's economic development. Babajide et al. (2015) used the total amount of deposit money bank branches per 1000 km2 and per 100,000 adults as proxies for financial inclusion (FI), and they also looked at retail bank deposits. The results showed that FI is an important factor in the amount of capital per worker and the total factors of production, both of which ultimately figure out the quantity and quality of results in the economy at large.

Financial inclusion in Nigeria

Encouraging every member of a nation to have better access and utilization of the regulated banking system is the goal of the financial inclusion approach (Wakdok, 2018).. Advocates for financial inclusion contend that for people and businesses to carry out their everyday private and commercial operations, they must have access to loans and other monetary services due to the increasing complexity of daily life. Consequently, throughout the years, there has been a push for an increasingly inclusive system of finance that offers monetary services to the most disadvantaged people in society.

Nigeria has implemented several policies and strategies over the years to achieve inclusive growth and development, given the crucial importance of financial inclusion. Nigeria launched its rural banking initiative in the late 1970s to provide financial services to people in the countryside by opening a single bank branch in every local government area. This was the first major financial inclusion initiative implemented by the Nigerian government (Kama and Adigun, 2013). To aid the underprivileged in society, the People's Bank and community banks (CBs) were established in 1989 and 1990, respectively. These institutions took small deposits and gave low-income people access to microcredit. Since the beginning of the twenty-first century, additional actions have been taken. Early in the new millennium, Nigeria created the Financial System Strategy 2020, a comprehensive framework and all-encompassing road map for transforming the country's financial sector into a growth engine that will propel Nigeria into the top 20 economies by the year 2020. In addition to the Central Bank of Nigeria (CBN) adopting an updated structure for non-interest financial institutions (NIFIs) in 2011 and launching the government developed the National Microfinance Policy in 2005 (Obayori, 2020). Nigeria's financial inclusion is incredibly low, far lower than the norm for lower middle-income nations, to which Nigeria belongs, despite these regulations and initiatives. In 2011, 2014, and 2017, 22.7 percent, 44.2 percent, and 40% of Nigerian adults, respectively, maintained a financial institution account. In 2017, 58% of all adults worldwide were living in lower-middle-income countries, which is less than the global average.

Financial inclusion has several advantages; however, implementing financial inclusion services frequently encounters obstacles, despite government efforts to increase access to financial services. Financial services are limited due to several factors:

i. Inadequate infrastructure
- Poor road networks, electricity, and internet services make it difficult for financial institutions to reach rural or remote areas.
- Lack of physical bank branches and ATMs reduces access.

ii. Low financial literacy
- Many people lack the knowledge and skills to understand or use financial products.
- Misinformation or lack of awareness hinders trust and adoption of banking services.

iii. High transaction costs
- Bank fees and minimum balance requirements discourage low-income individuals from opening or maintaining accounts.
- Loan interest rates can be prohibitive for small businesses or informal workers.

iv. Limited digital penetration
- Low smartphone and internet penetration limits the use of mobile banking and digital wallets, especially in rural areas.
- Technological illiteracy also reduces adoption of fintech solutions.

v. Regulatory constraints
- Stringent Know-Your-Customer (KYC) requirements may exclude people without proper identification.
- Complex and rigid financial regulations can limit innovation and discourage new entrants into the financial sector.

vi. Cultural and social barriers
- In some societies, gender roles or cultural norms prevent certain groups (like women) from accessing financial services.
- Language barriers and lack of localized financial services also contribute to exclusion.

## METHODOLOGY

Source of data

Ex-post facto research design was used for this study. The sample used in this analysis for the variables was examined from 1991 to 2023. The data used in the study were from secondary sources including the Central Bank of Nigeria statistics bulletin 2024, International Monetary Fund report 2024, and World Bank data 2024.

Model specification

To ensure the accuracy and scientific validity of the regression result, several diagnostic tests were conducted. Thus, the study model is represented by Equation 1 in its implied form in order:

$$POV = f(BKP, NBB, INT, INF) \quad 1$$

The implicit function in Equation 1 can be reduced to a linear functional function, as shown by Equation 2:

$$POV = \beta_0 + \beta_1 BKP + \beta_2 NBB + \beta_3 INT + \beta_4 INF + \mu \quad 2$$

Where;
POV – Poverty Rate
BKP – Banked Population
NBB – Number of Bank Branches
INT – Interest Rate
INF – Inflation Rate
$\beta_0$ is the intercept;
$\beta_1$, $\beta_2$, $\beta_3$, $\beta_4$ are the coefficients of the variables; and $\mu$ is the residual term.

Furthermore, in order to linearize the model and alleviate the multicollinearity and heteroscedasticity issues, factors POV, BKP, NBB, INT, INF were logged, respectively, in the model. The approximate of variable used are: $B_{0,}$ $\beta_1$,> 0; $\beta_2$ > 0; $\beta_3$,< 0; $\beta_4$,< 0.

## DATA ANALYSIS, RESULTS AND DISCUSSIONS

The first stage in the empirical part is to assess each variable's statistical summary within the model. The following summarizes the statistics in Table 1:

Table 1: Variables' descriptive statistics

| | **POV** | **BKP** | **NBB** | **INF** | **INT** |
|---|---|---|---|---|---|
| Mean | 61.18000 | 7.281818 | 1.558182 | 18.74727 | 7.931818 |
| Median | 57.10000 | 7.200000 | 1.380000 | 13.01000 | 7.400000 |
| Maximum | 88.50000 | 7.900000 | 1.950000 | 72.84000 | 18.75000 |
| Minimum | 51.30000 | 6.100000 | 1.320000 | 5.380000 | 3.300000 |
| Std. Dev. | 9.812384 | 0.360082 | 0.245999 | 16.10603 | 2.509788 |
| Skewness | 1.362161 | -0.78812 | 0.432898 | 2.093056 | 2.364405 |
| Kurtosis | 3.897775 | 4.696192 | 1.405747 | 6.471904 | 11.76994 |
| Jarque-Bera | 11.31340 | 7.372220 | 4.525461 | 40.66928 | 136.5010 |
| Probability | 0.003494 | 0.025069 | 0.104066 | 0.000000 | 0.000000 |
| Sum | 2018.940 | 240.3000 | 51.42000 | 618.6600 | 261.7500 |
| Sum Sq. Dev. | 3081.052 | 4.149091 | 1.936491 | 8300.930 | 201.5691 |
| **Observations** | **33** | **33** | **33** | **33** | **33** |

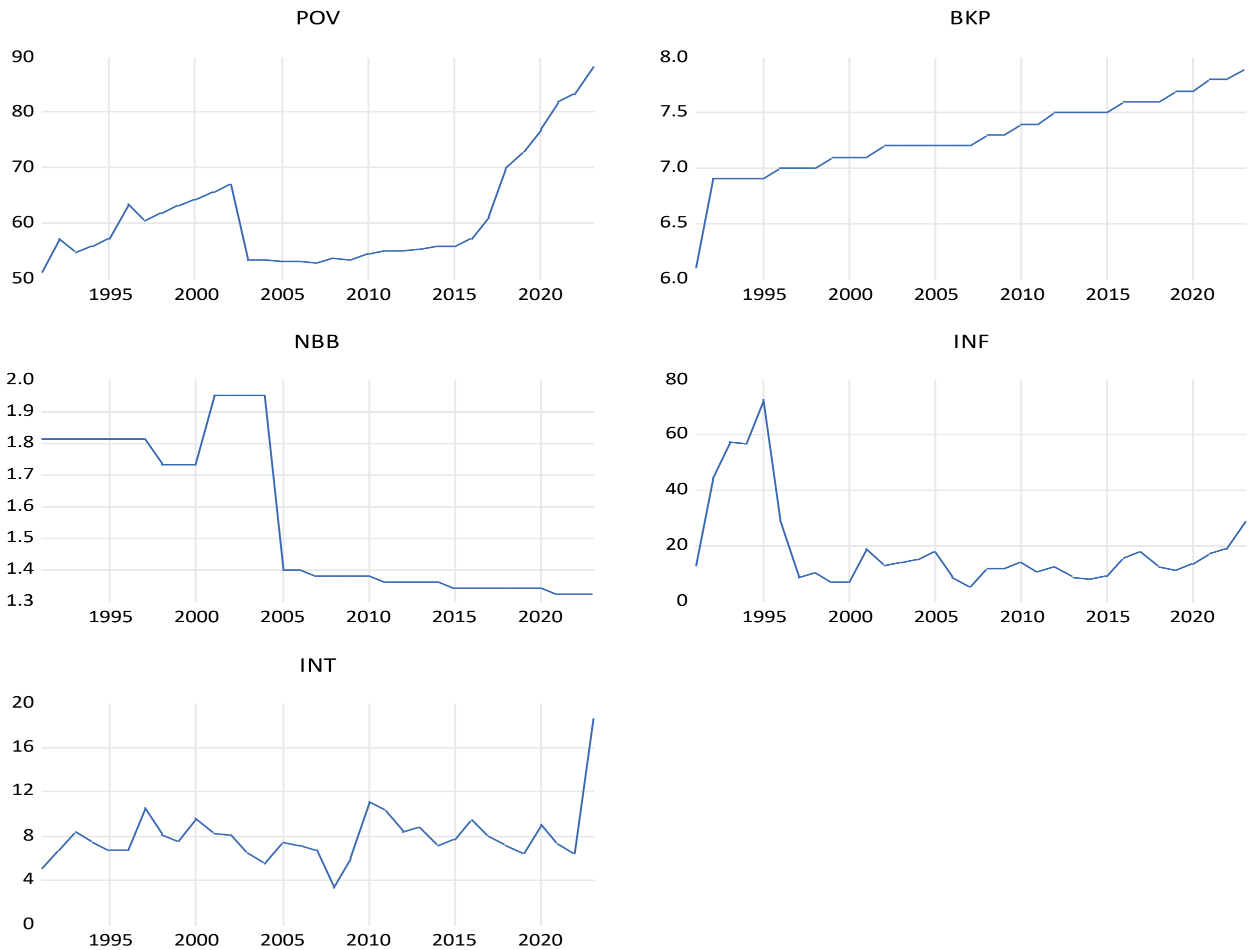
Source: Findings from the statistical software tool E-Views' data analysis

The main features of the secondary data examined for this study are summarized in Table 1; The POV had a mean of 61.18000, a median of 57.10000, and a standard deviation of 9.812384. It also shows the means, medians, and standard deviations for the other variables used in the study to ascertain whether the time series are normally distributed in the study. The Jarque-Bera test was used when a normal distribution is applied to the series; the residual assumes the shape of a Gaussian bar chart. When the probability value of the Jarque-Bera scores is less than 5%, the retained variable may be absent from the model; this is indicated by the requirement that the residual be normally distributed at the 95% confidence level. The Jarque-Bera statistics and given probability indicate that the time series are regularly distributed, except for the number of bank branches.

Graphical illustrations of the variables

Variables used in the study were graphically displayed as shown below in Figure 4.1. The variables' tendency toward different levels of fluctuation was discovered, proving the non-stationarity of the variable.

Figure 1: Data presented graphically




Regression result

The following is the regression result, which satisfies the ordinary least-squares assumption:

Table 2: Ordinary Least Square Outcome

Dependent Variable: POV
Method: Least Squares
Date: 06/04/24 Time: 06:56
Sample: 1991 2023
Included observations: 33

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| BKP | 21.10085 | 5.927132 | 3.560044 | 0.0013 |
| NBB | 13.57073 | 8.405117 | 1.614580 | 0.1176 |
| INF | 0.052367 | 0.092161 | 0.568208 | 0.5744 |
| INT | 0.839032 | 0.591942 | 1.417421 | 0.1674 |
| C | -121.2550 | 51.87908 | -2.337263 | 0.0268 |

| | | | |
|---|---|---|---|
| R-squared | 0.656541 | Mean dependent var | 61.18000 |
| Adjusted R-squared | 0.578904 | S.D. dependent var | 9.812384 |
| S.E. of regression | 7.733105 | Akaike info criterion | 7.067625 |
| Sum squared resid | 1674.425 | Schwarz criterion | 7.294369 |
| Log likelihood | -111.6158 | Hannan-Quinn criter. | 7.143917 |
| F-statistic | 5.880458 | Durbin-Watson stat | 2.448508 |
| Prob(F-statistic) | 0.001449 | | |

**Source:** Econometric Views, Version 9.0 (2024)

The regression result in Table 2 above indicates that the model's coefficient of determination (R-squared) is 0.656541. This indicates that for the time under review the independent variables (BKP, NBB, INT, and INF) together contributed to 65.6541% of the total fluctuation in Nigeria's poverty rate (POV). The DW statistics, which indicate that there is around 2 (i.e., 2.448508) and no first-order serial autocorrelation, support this. The Fisher's ratio which is a gauge of the overall model's statistical significance, shows that the model is statistically significant. Consequently, the following explanatory factors are examined:

BKP and POV

Banked Population (BKP) has a positive and significant impact on the poverty rate in Nigeria, BKP is measured by the BVN Penetration Index by dividing the total number of BVN accounts of the adult population in different management levels. This demonstrates that the coefficient of BKP is positive and that the significance of **5%**. This suggests that the number of Nigerians who have bank accounts significantly influenced the country's poverty rate. The empirical implication, that is financial inclusion significantly raises living standards and lowers the rate of poverty. In Nigeria particular, the outcome demonstrates that the population of banked people raises living standards and helps to reduce poverty in Nigeria.

NBB and POV

The NBB, which is a measure for bank branch spread, POV is positively impacted by the spread. However, it was shown that this was not statistically significant and the coefficient of NBB is positive. This suggests that there is a negligible pace at which the expansion of bank branches and the banking products provided encourage financial access. It is important to highlight that a significant portion of Nigeria's population lives in rural areas, where there are few bank branch networks. These areas also account for a sizable portion of the country's unbanked population. This could be the cause of the variable's statistically negligible impact on POV. In contrast to Makina and Walle's (2019) and Yego, Kibirango, and Ong'eta (2021) study found that NBB significantly impact POV. This result corroborates the research results of Gbalam and Dumani (2020).

INT and POV

A statistically insignificant impact of INT on POV was found in this study rates will result in a larger return on savings for individuals. As a result, the banking public in interest rates will result in a larger return on savings for individuals. As a result, the banking public are no longer required to invest in stocks and incur additional risk, which lowers the demand for equities. For instance, a drop in interest rates is anticipated to lower borrowing costs for bond investors in shares boosting demand for and output of investments. A rise in productivity and investment will raise income through job possibilities, enhancing people's well-being and lowering poverty.

Impact of interest rates on poverty through economic growth

- Findings: Some studies find that lower interest rates stimulate economic growth by encouraging borrowing and investment. Economic growth, in turn, can lead to job creation and higher incomes, which helps reduce poverty rates.

  A study by Loayza and Ranciere (2006) shows that financial development, which includes lower interest rates, is associated with poverty reduction in developing countries. Lower rates can enhance access to credit, fostering entrepreneurial activities and small businesses, which are crucial for poverty alleviation.

INF and POV

There is a statistically insignificant and positive impact of INF on POV. This indicate that POV is not extremely significant in Nigeria. INF, however, has a statistically positive impact on POV. Research on the relationship between inflation and poverty often investigates how changes in the inflation rate affect poverty levels. High inflation erodes the real income of households, especially those in lower-income brackets who often have less ability to hedge against inflation. This erosion of purchasing power can lead to increased poverty rates.

## CONCLUSION AND RECOMMENDATIONS

In Nigeria, the factors influencing financial inclusion were empirically investigated in the current investigation. After INT and INF were considered, BKP and NBB were all hypothesized to be the predictors of financial inclusion in the model. As a result, information from 1995 to 2023 was gathered for the estimation. Using Econometric Views version 9.0 as a tool, the ordinary least square method was utilized to estimate the time series data. This study found that the only notable predictors of financial inclusion in Nigeria are BKP and NBB. Based on these findings. The study therefore concludes that the introduction of mobile and other digital banking platforms greatly enhanced financial inclusion initiatives in Nigeria and recommends that banks expand their business activities to remote region, in order to incorporate the rural population into the formal financial sector.

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