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## Financial inclusion and poverty reduction in Nigeria: A survey-based analysis

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### Abstract

Financial inclusion's impact on poverty and economic development has remained a focus of researchers and policymakers for years, owing to its function in facilitating access to financial services, which act as a stimulus for general economic growth and development. The purpose of this study is to determine the effect of financial inclusion on poverty reduction in Nigeria. We estimated two models using data from the World Bank's 2017 Global Findex survey for Nigeria: a Logit model and an Instrumental variable model. The dependent variable was a dummy variable labeled "poor," which was set to 1 if the individual's "within economy income quintile" was in the bottom 40%, and 0 otherwise. The explanatory variables include, financial inclusion index constructed by the author, age of respondents, educational level of respondents, gender, employment status, wage, government transfers, pension, savings, and self-employment. The study established that financial inclusion reduces household poverty in Nigeria even after controlling for endogeneity in the explanatory variables.

**Keywords:** Financial inclusion; Poverty; Logit, Instrumental variables

## 1. Introduction

### 1.1. Background to the Study

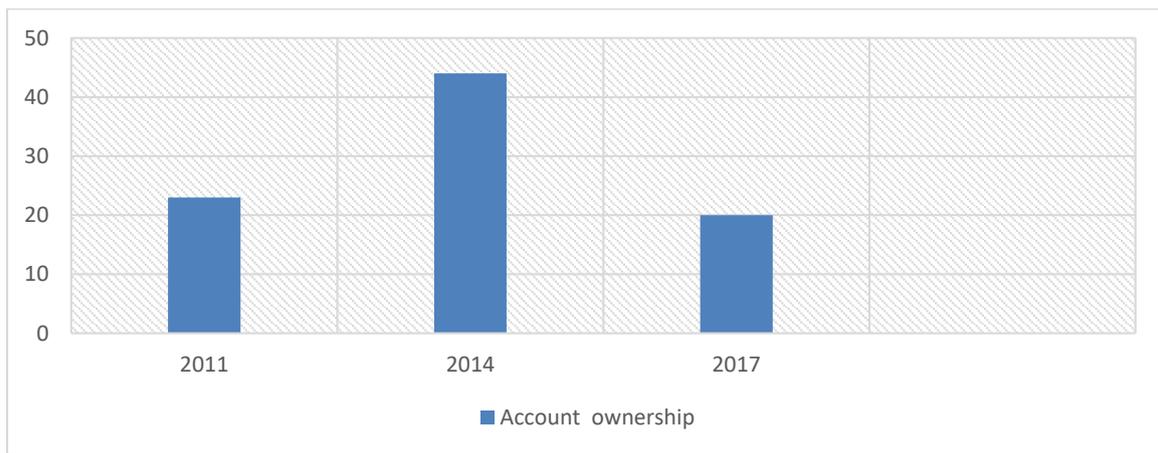
Financial inclusion is a method for social inclusion that strives to increase all members of an economy's access to, availability of, and use of the formal financial system [1]. It entails providing individuals and businesses with usable and cheap financial goods and services that are supplied responsibly and sustainably [2]. Financial inclusion can be seen of as a factor of financial development that focuses on a greater majority of people having access to financial services rather than the strength or depth of financial institutions [3]. Financial inclusion advocates say that the rising complexity of daily life necessitates that individuals and businesses have access to credit and other financial products in order to conduct their private and business operations on a day-to-day basis. As a result, there has been a movement over the years for a more inclusive financial system that provides financial services to the lowest members of society.

Financial inclusion, as evidenced by numerous studies, is critical for: Providing savings, payment, credit, and risk management solutions to people with a variety of requirements. [4], thereby increasing loan formation and capital accumulation, hence increasing investment and economic activity [5]. Promoting efficient allocation of productive resources and resource use, which would likely result in a lower cost of capital. [6], providing as a tool for advanced and developing countries to achieve sustainable and inclusive economic growth, job creation, poverty reduction, and income equality [7].

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Given the critical nature of financial inclusion, Nigeria has enacted numerous policies and strategies through time targeted at increasing financial inclusion and attaining inclusive growth and development. Nigeria began the rural banking program in the late 1970s with the goal of introducing banking services to rural areas through the establishment of one bank branch in each local government area. This was the Nigerian government's first significant financial inclusion policy [8]. This was followed by the founding of the people's bank and community banks (CBs) in 1989 and 1990, respectively, to serve the needy in society by accepting modest deposits and providing microcredit to low-income individuals. Other measures have been implemented since the turn of the twenty-first century. Nigeria developed the financial system strategy 2020 in the early 2000s, a holistic and comprehensive road map and framework for turning the Nigerian financial sector into a growth catalyst capable of propelling the country into the top 20 economies by 2020. The government established the National Microfinance Policy in 2005, and the Central Bank of Nigeria (CBN) adopted a new framework for Non-Interest Financial Institutions (NIFIs) in 2011 and launched the National financial inclusion strategy (NFIS) in 2012, which was updated in 2018 [9]. Despite these policies and measures, financial inclusion in Nigeria is extremely low, significantly lower than the average for lower middle-income countries, to which Nigeria belongs. According to World Bank Global FINDEX data from 2017, 22.7 percent, 44.2 percent, and 40% of adults in Nigeria, respectively, held a financial institution account in 2011, 2014, and 2017. This is less than the world average for lower middle-income nations, which was 58% of all adults in 2017.



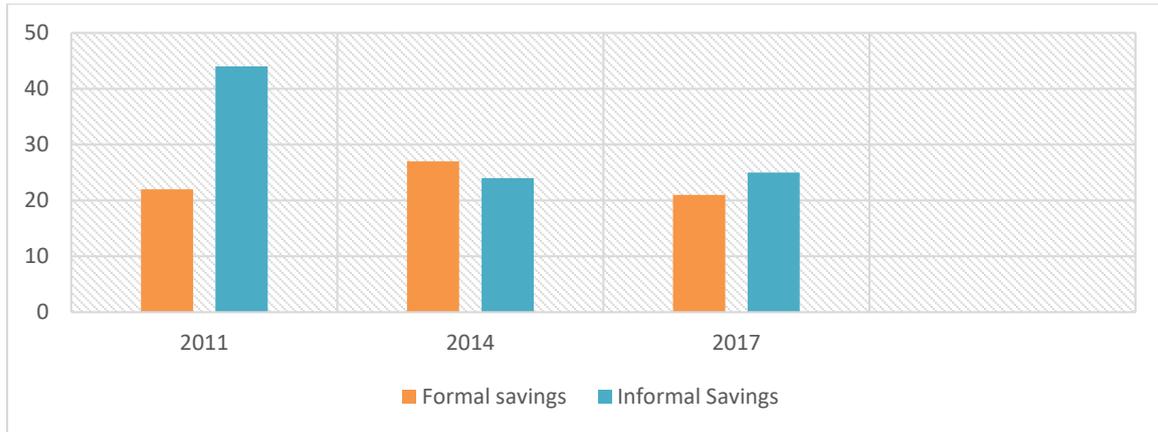
**Figure 1** Account ownership in Nigeria **Source:** [2]

Furthermore, the number of adult females that own a bank account stood at 26%, 34%, and 27% in 2011, 2014, 2017, respectively, compared to 33%, 54%, and 51% for males in the same period, indicating a gender gap in account ownership. Similarly debit card ownership increased from 19%, in 2011 to 36% in 2014, but declined to 32% in 2017.



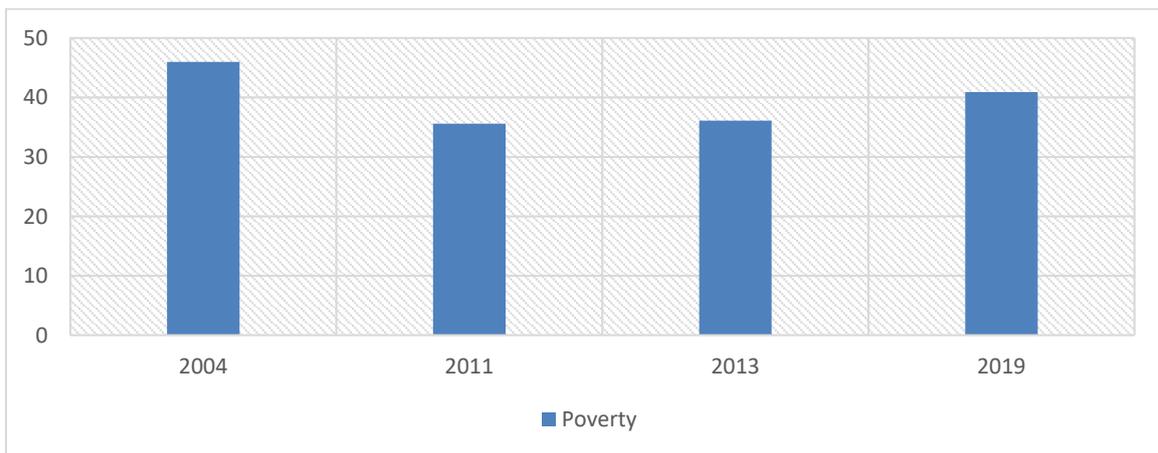
**Figure 2** Account ownership by gender in Nigeria **Source:** [2]

Financial inclusion requires that everybody is integrated in the formal financial system. However, the data indicate that there is still a large preference for informal savings like savings clubs, saving with household members and other informal organizations. Only about 22%, 27% and 21% saved in formal financial institutions between 2011, 2014 and 2017 compared to 44%, 23% and 25% that chose to save in clubs or through family and friends in the same period.



**Figure 3** Formal and Informal Savings in Nigeria **Source:** [2]

Despite government efforts to expand access to financial services and the obvious benefits of financial inclusion, adopting financial inclusion services has frequently encountered roadblocks. On the demand side, factors such as a lack of income and knowledge [4], a lack of awareness of the benefits of owning a bank account, distrust in financial institutions, personal and religious beliefs (ESCAP), high and persistent levels of financial illiteracy, high lending rates resulting in a significant spread between lending and deposit rates, and a low saving and loan repayment culture [10] all contribute to limiting the financial services. On the supply side, factors such as high maintenance costs, distance to financial institutions, a lack of credit data and solid financial records for potential bank account holders, as well as a lack of acceptable documentation, all contribute to Nigeria's lack of financial inclusion. The eradication of poverty is a primary objective of the sustainable development goals. However, nine years after the deadline passed, Nigeria's problem of extreme poverty remains prevalent. Despite various economic changes backed by the government and international agencies, Nigeria has continued to fall behind in terms of development when natural and human resources are considered. According to the National Bureau of Statistics, around 83 million individuals will live on less than 1.9 dollars a day in 2020. This amount reflects around 40% of the country's total population. Additionally, this figure exceeds the 33.1 percent recorded in 2013, indicating that economic conditions have deteriorated over time. As a result, Nigeria is one of the poorest countries in the world [11].



**Figure 4** Poverty rate in Nigeria **Source:** [11]

Economists attribute the SSA's high poverty rate to a lack of financial inclusion [12]. Additionally, World Bank studies demonstrate the complementary function of financial inclusion in facilitating the achievement of other sustainable development goals, most notably poverty reduction [13]. On a micro level, financial exclusion denies individuals access to critical financial services that can improve their quality of life and help them escape poverty. On a macroeconomic level, financial exclusion results in the possible loss of deposits or savings, the loss of investible funds, and the resulting loss of the economy's capability to generate wealth. Financial inclusion enables individuals to save in regulated financial institutions, thereby expanding the pool of capital available for investment and development. In view of the foregoing, it is necessary to do research on the effects of financial inclusion on poverty. As a result, this study's purpose is to ascertain the effect of financial inclusion on poverty reduction in Nigeria.

## 2. Empirical literature

Park C et.al, [14], by focusing on developing Asian nations, contributed to the existing literature on financial inclusion. The study developed its own financial inclusion measure in order to examine the numerous macroeconomic and country-specific factors affecting the degree of financial inclusion in 37 emerging Asian nations. The study examines the effect of financial inclusion on poverty and income disparity, as well as the effect of other control variables. The study's findings demonstrate that per capita income, the rule of law, and demographic variables all have a major impact on financial inclusion in emerging Asia. Additionally, the study discovers that financial inclusion dramatically reduces poverty and also appears to diminish income disparity. The study's findings indicate that provisions for young and elderly populations, such as retirement pensions, as well as a stronger rule of law, including the enforcement of financial contracts and financial regulatory oversight, will increase financial inclusion, thereby contributing to poverty reduction and income inequality reduction.

Donou-Adonsou et.al, [15], studied the extent to which banks and microfinance institutions alleviate poverty. The study used instrumental variables and two-stage least squares to analyze a panel of 71 developing nations from 2002 to 2011. Using credit to GDP as the primary metric of financial development, the findings reveal that banks alleviate poverty when assessed in terms of headcount ratio and poverty gap. Banks have no discernible effect on the squared poverty gap. On the other hand, regardless of the measure of poverty used, MFIs do not appear to have any effect on poverty. These findings suggest that, while banks have some capacity to alleviate poverty, MFIs do not, at least aggregately.

Abraham TA et.al, [16], examined the effect of financial services accessibility on household resistance to climate change. The study discovered that lending to rural farm households organized into savings clubs and expanding access to formal credit would help households in the lowest income quintile. However, it was discovered that traditional crop insurance benefits only the richest farmers. The study concluded that in order to eradicate poverty for all in a post-2015 sustainable development framework, it may be time to examine how rural farm households in developing countries are organized in order to determine how to assist them in coping with or adapting to covariate and idiosyncratic agricultural shocks. Additionally, assisting developing nation governments in transitioning away from traditional crop insurance would be beneficial.

Mohammed IJ et.al, [17], the article discusses the possible effects of financial inclusion on poverty reduction among low-income persons in 35 Sub-Saharan African nations. The treatment effect model and propensity score matching procedures were used in this investigation. The study's findings indicate that the poor who are financially included gain from increased net wealth and wellbeing than those who are not financially involved.

Ayensu AE et.al, [18], studied the role of financial inclusion in reducing poverty in Sub-Saharan Africa. The study investigates the level of financial inclusion in the region using a representative sample of 40 nations from the region from 2010 to 2014. [19], method was used to calculate the financial inclusion index for the 40 nations studied. Additionally, the study explores the factors that influence financial inclusion in Sub-Saharan Africa, as well as the impact of financial access on poverty reduction in the region. The study is quantitative in nature and developed estimations using econometric models. The study's findings reveal that the majority of nations in Sub-Saharan Africa have medium financial economies, with only four nations falling into the high financial economy category during the study period: Cabo Verde, the Seychelles, Sao Tome and Principe, and Nigeria. Second, the findings indicate that gross national income (GNI) per capita and remittances are the primary determinants of financial inclusion in the region, implying that per capita income is the primary determinant of financial inclusion in Sub-Saharan Africa and that involuntary financial exclusion may be significantly influenced by insufficient household income and a high-risk profile. Additionally, the findings indicate that while financial access has no discernible effect on poverty reduction in the region, domestic bank loans to the private sector (financial depth) considerably reduced poverty in Sub-Saharan Africa.

Amadou D [20], examined the effect of financial inclusion on poverty in Bolivia, Bangladesh, Nigeria, and Mali. The study used a questionnaire to ascertain the causes of poverty in Mali and to draw attention to the poor and vulnerable population's needs and desires. The results of the comparative analysis and the descriptive analysis led to several recommendations, including: for the agricultural sector to promote credit for the purchase of agricultural machinery and inputs; for the population to be sensitized and encouraged to subscribe to loans for agricultural activities; for the poor to be instilled with financial education; and for financial institutions to finance agricultural activities. In the agricultural sector, it is critical to expand agricultural land; to promote and encourage agricultural machinery imports; to facilitate agricultural product exports; and to promote agricultural product processing. Finally, in the education sector, it is critical to promote inclusive education; to promote technical and vocational education; and to increase the number of schools in rural areas.

Lal T [21], conducted a study on the effect of financial inclusion on poverty reduction via cooperative banks. To accomplish the study's aims, primary data were obtained from 540 beneficiaries of cooperative banks operating in three northern Indian states, namely J&K, Himachal Pradesh (HP), and Punjab, between July and December 2015. The methodology of factor analysis was used to condense the complete data into the fewest possible factors. The second-order CFA was used to determine the data's validity and reliability. Data analysis procedures such as one-way ANOVA, t-test, and SEM were employed. Financial inclusion through cooperative banks has a direct and considerable influence on poverty alleviation, according to the study's findings. The study demonstrates how financial inclusion has improved the lives of the poor by providing access to fundamental financial services such as savings, loans, insurance, and credit.

Hussaini U et.al,[22], used the moderating influence of microfinance to examine the impacts of financial inclusion on poverty alleviation. Self-administered questionnaires were used to collect data. The questionnaire was distributed to 384 respondents who are microfinance bank clients in Kebbi State, Nigeria, using simple random selection processes. The association between the variables was analyzed using a Partial Least Square (PLS)-Structural Equation Modelling (SEM) approach. The study's findings established a significant link between financial inclusion and poverty reduction. Additionally, the results indicated that microfinance favorably moderated the link between the factors examined. The report suggests strengthening financial inclusion in rural areas and expanding microfinance services to include education loans, technical support loans, skills training, and home appliance loans.

Koomson I et.al,[23], evaluated the effect of financial inclusion on Ghanaian households' poverty and vulnerability. A multiple correspondence analysis is used to construct a financial inclusion index from data retrieved from the seventh round of the Ghana Living Standards Survey in 2016/17, and three-stage feasible least squares is used to evaluate households' susceptibility to poverty. Endogeneity related with financial inclusion is resolved by employing the distance to the nearest bank as an instrument in a probit approach for instrumental variables. While 23.4 percent of Ghanaians are classified poor, approximately 51% are deemed vulnerable to poverty. The study discovered two effects of increased financial inclusion on household poverty. To begin, it is connected with a 27% reduction in the risk of a household being impoverished. Second, it reduces a household's vulnerability to future poverty by 28%. Female-headed families are more likely than male-headed households to have a bigger reduction in poverty and vulnerability to poverty as a result of increased financial inclusion. Additionally, financial inclusion alleviates poverty and vulnerability to poverty in rural areas more than in urban regions.

Churchill SA et.al, [24] presented new information on the consequences of financial inclusion on household poverty using data from the 2016 Financial Inclusion Insights (FII) program for Nigeria. Financial inclusion was quantified in three dimensions: access to banks, access to credit, and access to insurance. Financial inclusion, the study concludes, alleviates poverty. Specifically, evidence from instrumental variable estimates indicates that a standard deviation rise in financial inclusion is associated with a 0.277–0.672 standard deviation drop in poverty, depending on how poverty is quantified. The conclusion is strong in the face of alternate approaches to endogeneity, other measures of poverty, and the use of individual characteristics of financial inclusion. Among the components of financial inclusion, the study concludes that access to a checking, savings, or fixed deposit account is more critical to poverty reduction than credit and insurance.

### 3. Methodology

#### 3.1. Model specification

To capture the objectives of this study, which is to evaluate the impact of financial inclusion on poverty, the study will estimate two models: A logit model and an instrumental variable model.

The functional specification of the Logit model is presented as:

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$$L_i = \ln\left(\frac{P_i}{1-P_i}\right) = \beta_1 + \beta_2 \text{Fin\_incl} + \beta_3 \text{educ} + \beta_4 \text{age} + \beta_5 \text{age}^2 + \beta_3 \text{workforce} + \beta_5 \text{self\_empl} + \beta_6 \text{female} + \beta_7 \text{wage\_payment} + \beta_8 \text{pension} + \beta_9 \text{transfers} + \beta_{10} \text{recvd\_govttransfer} + \mu_i \dots \dots \dots (1)$$

#### 3.2. Instrumental variable model

The instrumental variable approach is employed when the one of the explanatory variables is thought to be an endogenous variable. Endogeneity in the explanatory variable causes the coefficient of the OLS estimates to be biased

and therefore any conclusion drawn from such model can be misleading [25]. For the purpose of this study, the following model was specified.

$$Poor = \beta_1 + \beta_2 Fin\_incl + \beta_3 educ + \beta_4 age + \beta_5 agesq + \beta_6 self\_emp + \beta_7 female + \beta_8 wage\_payment + \beta_9 pension + \beta_{10} transfer + \beta_{11} saved + \beta_{12} workforce + \mu_i \dots\dots\dots(2)$$

The instrumental variable estimation involves a two stage process. Firstly, the endogenous explanatory (Fin\_incl) variable is regressed on the instrumental variable (ownership of a mobile phone) and other exogenous variables as shown in equation 4 below.

$$Fin\_incl_{sn} = \beta_1 + \beta_2 own\_mobile + \beta_3 educ + \beta_4 age + \beta_5 agesq + \beta_6 self\_emp + \beta_7 female + \beta_8 wage\_payment + \beta_9 pension + \beta_{10} transfer + \beta_{11} saved + \beta_{12} work\_force + \mu_i \dots\dots\dots(4)$$

**Table 1** Variables Description

Variable	Description of variable
$L_i$	Log of the odds ratio or logit
$\beta_1$	constant
$Ln$	natural logarithm
$P_i$	Probability of being poor
Fin_incl	A Dummy variable that equals 1 if the financial inclusion index is less than 0.40 and 0 otherwise
Age	age in years
Agesq	square of Age
Poor	A dummy variable that equals 1 if the individual is in the bottom 40 quintile of the income group and 0 otherwise
Educ	Level of education of the respondent
Female	A dummy variable that equals 1 if the respondent is female and zero otherwise
Mobile owner	A dummy variable that equals one if the respondent owns a mobile phone and zero otherwise
Saved in the past year	A dummy variable that equals one if the respondent saved in a financial institution in the past year and zero otherwise
Govt transfer	A dummy variable that equals 1 if the respondent receives government transfers and zero otherwise
Pension payment	A dummy variable that equals 1 if the respondent received government pensions and zero otherwise
Wage payment	A dummy variable that equals 1 if the respondent received wage payment in the last 12 months and zero otherwise
Self-employed	A dummy variable that equals 1 if the respondent received self-employment income in the last 12 months and zero otherwise

Source: Researchers Compilation from Stata 2021

If the coefficient on the instrumental variable ( $\beta_2$ ) is statistically significant, the study will estimate the second stage regression which involves estimating equation 5. While using the instrument in place of the endogenous explanatory variable.

$$Poor = \beta_1 + \beta_2 (Fin\_incl = own\_mobile) + \beta_3 educ + \beta_4 age + \beta_5 agesq + \beta_6 self\_emp + \beta_7 female + \beta_8 wage\_payment + \beta_9 pension + \beta_{10} transfer + \beta_{11} saved + \beta_{12} workforce + \mu_i \dots\dots\dots(5)$$

### 3.3. Model Justification

The logit model is a maximum likelihood estimation technique that is employed in estimating models that contains binary or dichotomous dependent variable. By using the cumulative distribution function (CDF), the Logit model ensures that the probability of success lies between 0 and 1 Gujarati (2004). On the other hand, the instrumental variable model was employed to control for endogeneity in the explanatory variable

Several studies like Amadou D [20] have pointed out the possibility of the financial inclusion variable being correlated with some unobservable in the error term. Correlation between financial inclusion and other variables subsumed in the error term in equation (2) will lead to bias in the OLS estimates of equation 2. To avoid the problem of bias resulting from endogeneity, the instrumental variable approach uses an instrument to correct for the endogeneity in the explanatory variables entering the model [25]. A valid instrument must be correlated with the endogenous explanatory variable (Fin\_incl) and can only affect the dependent variable through its relationship with the endogenous explanatory variable.

The instrumental variable estimation involves a two-stage process. Firstly, the endogenous explanatory (Fin\_incln) variable is regressed on the instrumental variable (ownership of a mobile phone) and other exogenous variables as shown in equation 4.

$$\text{Fin\_incls} = \beta_1 + \beta_2 \text{poor} + \beta_3 \text{educ} + \beta_4 \text{age} + \beta_5 \text{agesq} + \beta_6 \text{self\_emp} + \beta_7 \text{female} + \beta_8 \text{wage\_payment} + \beta_9 \text{pension} + \beta_{10} \text{transfer} + \beta_{11} \text{saved} + \beta_{12} \text{work\_force} + \mu_i \dots\dots\dots(4)$$

If the coefficient on the instrumental variable is statistically significant, the study will estimate the second stage regression which involves estimating equation 5. While using the instrument in place of the endogenous explanatory variable.

$$\text{Poor} = \beta_1 + \beta_2 (\text{Fin\_incl} = \text{own\_mobile}) + \beta_3 \text{educ} + \beta_4 \text{age} + \beta_5 \text{agesq} + \beta_6 \text{self\_emp} + \beta_7 \text{female} + \beta_8 \text{wage\_payment} + \beta_9 \text{pension} + \beta_{10} \text{transfer} + \beta_{11} \text{saved} + \beta_{12} \text{workforce} + \mu_i \dots\dots\dots(5)$$

### 3.4. Construction of financial inclusion index

To construct the financial inclusion index, the study followed the method adopted by Churchill SA et.al [24] and with some modification. Five variables (account ownership, whether the individual has saved money in his account in the last year, use of debit card, use of a mobile account, whether the respondents have borrowed from a financial institution in the last year) were used to were used to construct the financial inclusion index . Each variable was awarded a weight equal to 0.2. The sum of all weights equal 1. Respondents will be awarded points ranging from zero to one. An individual is said to be financially included if he scores a point of 0.4 and above. Otherwise, the individual is considered to be financially excluded

$$\text{Fin\_incl} = 0.2 \text{account} + 0.2 \text{debit\_card} + 0.2 \text{trans} + 0.2 \text{mobile\_acct} + 0.2 \text{borrowed}$$

### 3.5. Data and Sources

Data was sourced from the World Bank Global Findex survey 2017 conducted in Nigeria. The survey collects data on indicators of financial inclusion summarized for all adults and disaggregated by key demographic characteristics- gender, age, education, income, employment status and rural residence. The indicators of financial inclusion measure how people save, borrow, make payments and manage risk. The survey covers a time period of 2017.

## 4. Empirical Findings

### 4.1. Model estimation and analysis

**Table 2** Estimated Models. Financial Inclusion and Poverty Reduction

Variables	(1) Model 1 Logit	(2) Model 2 Iv
Finantial_Inclsion	-0.88***	-0.54***
	(0.22)	(0.18)
Respondent is female	0.17	-0.03
	(0.20)	(0.05)

Respondent age	-0.00	0.00
	(0.03)	(0.01)
Age sq	0.00	-0.00
	(0.00)	(0.00)
Respondent education level	-0.52***	-0.05
	(0.19)	(0.05)
Respondent is in the workforce	-0.10	-0.03
	(0.23)	(0.05)
Payments: wage payments	0.57	0.15
	(0.96)	(0.21)
Payments: government transfers	0.01	-0.01
	(0.36)	(0.06)
Payments: government pension	0.23	0.01
	(0.51)	(0.09)
self-employed	-0.72***	-0.10**
	(0.24)	(0.05)
Saved in the past year	-0.47**	-0.01
	(0.20)	(0.06)
Constant	-2.40	0.06
	(4.72)	(0.99)
<b>Observations</b>	559	559
<b>R-squared</b>		0.007

Source: Researchers Compilation from Stata 2021; Standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 5. Discussion

Financial inclusion, as evidenced by the estimated models, has a negative effect on poverty in both the logit and instrumental variable models. After adjusting for age, educational level, gender, employment status, and other control variables, the Logit model indicates that financial inclusion reduces the log odd of being poor by approximately 88 percent, whereas the Instrumental Variable model indicates that financial inclusion reduces the probability of being poor by approximately 58 percent on average. Financial inclusion had a statistically significant effect on poverty in both models. The findings corroborate with the findings of Koomson I et.al, [23]; Lal T [21]; similarly, unlike wage income, which has no statistically significant effect on poverty, self-employment income (self-employed) was found to have a statistically significant negative effect on poverty in both models. This means that self-employment reduces the likelihood of poverty.

Additionally, the Logit model reveals that education and saving reduce the likelihood of becoming poor, and that this effect is statistically significant for the cross section studied. However, the effect is statistically insignificant in the IV model.

## 6. Conclusion

The impact of financial inclusion on poverty and development has continued to receive attention from researchers and policy makers because of its role in reducing poverty and promoting overall economic growth and development. This investigated the impact of financial inclusion on poverty reduction in Nigeria. A Logit model and an Instrumental variable model utilizing the World Bank Global Findex survey data collected in Nigeria in 2017 was adopted. The dependent variable was a dummy variable “poor” while the explanatory variables includes, financial inclusion index constructed by the author, age of respondents, educational level of respondents, gender, employment status, wage payment, government transfers, pension, savings, self-employment income and wage earnings of respondents.

The study established that financial inclusion reduces household poverty in Nigeria even after controlling for endogeneity in the explanatory variables. The study also established that self-employment is crucial in poverty reduction in Nigeria in the period under review.

### *Recommendations*

The study revealed a number of interesting results which have policy implications; hence it is recommended that:

- Adoption of policies that strengthen the rule of law, particularly contract enforcement and financial regulatory oversight, thereby increasing financial inclusion and contributing to poverty reduction and income disparity reduction.
- There is a need to raise awareness about the benefits of financial inclusion, particularly in rural regions, through instilling financial literacy in the poor through education, advertising, and traditional institutions.
- Governments and monetary institutions must implement policies that encourage financial institutions to open branches in rural regions and develop financial products targeted specifically at the poor, thereby increasing poor people's access to financial services.
- Eliminating barriers to credit availability for self-employed individuals and small and medium-sized businesses by incentivizing financial institutions that fund self-owned firms and small and medium-sized firms.
- Developing financial products that cater to individuals with varying religious beliefs and faiths can help widen the appeal of financial services to a broader audience, thereby bringing financial inclusion closer to the people.

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### **Compliance with ethical standards**

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#### *Disclosure of conflict of interest*

The authors declare no potential conflicts of interest with respect to the research, authorship, and or publication of this article.

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