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IMPACT OF ACCESS TO FINANCE ON INCLUSIVE ECONOMIC GROWTH IN BUNKURE LOCAL GOVERNMENT AREA, KANO STATE, NIGERIA

ABSTRACT

This study investigates the impact of access to finance on inclusive economic growth in Bunkure LGA, Kano State, Nigeria by analyzing the influence of bank account ownership, access to credit and income mobility. Responses from 400 individuals were considered based on the Taro Yamane formula and employing the logistic regression model. The findings reveal that bank account ownership, credit access and income mobility jointly explain a significant portion (80.80%) of the variation in the likelihood of attaining inclusive economic growth, highlighting the vital role of access to finance in driving inclusive economic growth in Bunkure LGA, Kano State, Nigeria. Also, the non-significant chi-square value of 0.723 indicates a good fit and suggests that all observed data are well represented by the model. Specifically, bank account ownership, access to credit and income mobility indicate the likelihood of being economically inclusive as these key variables exhibit positive and significant effects on inclusive economic growth in Bunkure LGA. This indicates that individuals in possession of bank accounts, credit access and with flexible income levels are classified as economically inclusive. However, a notable finding shows that size of households has a negative but significant effect (-0.372), calling for further exploration into the effectiveness as well as understanding the significant influence of population growth for sustainable and inclusive economic growth. It is therefore recommended that relevant authorities should focus on enhancing the capacity of financial institutions to offer tailored products particularly in underserved areas and thus help bridge the financing gap.

Keywords: *Inclusive Economic Growth, Access to Finance, Access to Education, Logistic Regression Model, Income Mobility*

1. Introduction

Access to finance is a critical factor that significantly influences economic growth (Beck et al., 2004; Barro, 1991) and widely recognized as a fundamental driver of social progress and inclusive growth in any region (World Bank 2022; Organisation for Economic Co-operation and Development (OECD), 2012). In developing economies, limited access to financial services remains a significant barrier to economic progress (Demirguç-Kunt, et al., 2008).

Thus, inadequate financial resources hinder entrepreneurship and investment, and overall socio-economic activities, thereby impeding inclusive economic growth. Inclusive economic growth is focused on creating an environment where everyone can contribute to and share economic prosperity (Angulo Bustinza, 2024). It goes beyond mere survival but encompasses access to opportunities for underserved communities. Globally, approximately 4.7 billion people are not economically empowered and almost 700 million people live below a benchmark of \$2.15 per day (Arévalo-Sánchez et al., 2024). Thus, many reside in low- and middle-income countries. However, even high-income nations face issues with economic exclusion, and over 300 million individuals fall into this category within these regions.

Nigeria, the largest economy in Africa with a Gross Domestic Product of approximately \$477.38 billion in 2023 (Aluko et al., 2024), is characterized by significant challenges that hinder inclusive economic growth. Despite being the largest economy in Africa, the benefits of economic activities in Nigeria are not evenly distributed among its population. In 2023, Nigeria's unemployment rate stood at approximately 33%, with youth unemployment being particularly alarming at around 50%, and pushing a significant portion of the population into multidimensional poverty (NBS, 2022). This poverty rate has reached an alarming rate of 38.9% in 2023, with approximately 87 million Nigerians living below the poverty threshold of \$2.15 per day (in 2017 prices), making it the second largest poor population globally after India (Kumar, and Jie, 2023). The overarching development challenges facing Nigeria include inadequate infrastructure, insecurity and limited access to essential services like finance. These issues create an environment where economic opportunities are scarce for many citizens.

Kano State, a northern Nigerian state, is known for its diverse economy, including agriculture, trade, manufacturing and services. It is one of the most populous states in Nigeria with annual growth rate of approximately 4% (Koko et al., 2024). Agriculture plays a crucial role in the state's economy, and a major commercial hub in Nigeria. According to an official statement of the Kano State government in 2023, the state has been making efforts to promote industrialization through initiatives like the Kano Free Trade Zone to attract investments, as well as trade quality and access. Base on National Bureau of Statistics (2022) findings for Kano State, approximately 60% of economically active individuals are engaged in trade-related activities, and a significant report published by Kano State Agricultural Development Project (KSADP) (2019), indicated that about 70% of individuals aged between 15 to 64 years are involved in agriculture-related activity in certain rural areas, which Bunkure LGA of Kano State is not in isolation.

The interconnection between inclusive economic growth and access to finance is complex and multifaceted. Some scholars argue that increased access to finance can stimulate inclusive economic growth by providing avenue for financial opportunities (Panakaje, et al. 2023; Romlah, et al. 2023). However, others contend that advancements in financial technology exert a significant influence on inclusive economic growth (Esquivias, et al. 2020). In the light of these considerations, this study investigates the impact of access to finance on inclusive economic growth in Bunkure LGA, Kano State, Nigeria.

2. Statement of the Problem

Bunkure LGA in Kano State faces significant financial constraints, limiting economic growth and inclusivity due to barriers in accessing formal banking services Central Bank of Nigeria (2020). As of 2020, only 38.8% of adults in Kano State have access to formal financial services, with institutional exclusion, poor access, and low awareness being major obstacles. A 2022 report of the Kano State Bureau of Statistics (KNBS) found that 77% of Bunkure's population lacks awareness of financial access points, leaving only 4% banked.

Recognizing these challenges, the Kano State government has taken steps to enhance financial inclusion, including the establishment of the Kano State Microfinance Development Agency (KMSMDA) in 2002. The agency provides interest-free loans, capacity-building programs, and credit facilities for small businesses and farmers. These efforts have contributed to increased income and employment opportunities, particularly for youth and women. Additionally, the government has introduced financial support for farmers, including grants, low-interest loans, and subsidized agricultural inputs to improve productivity.

A key gap in existing research is the limited investigation into the effects of financial access on inclusive economic growth, particularly regarding income mobility and bank account ownership. This study aims to bridge these gaps using a logistic regression model to assess the impact of financial access in Bunkure LGA. The findings could help highlight how financial inclusion enhances economic resilience and stability while providing opportunities for all segments of the population.

3. Literature Review

3.1 Introduction

This section delves into the conceptualization of inclusive economic growth, and access to finance. It discusses various definitions proposed by scholars and institutions across the globe. The second segment of

this literature review presents an empirical analysis focusing on the interconnections between access to finance and inclusive economic growth. It synthesizes findings from various studies that illustrate how access to financial services enhances inclusive economic growth. Finally, the conceptual frameworks surrounding the measures and determinants of inclusive economic growth are discussed in this section. Thus, this study's conceptual framework is highlighted.

3.2 Conceptual Review

Raheem et al. (2018), Ngepah (2017), and Rauniyar and Kanbur (2010) define inclusive economic growth as growth that lessens the disadvantages of the most vulnerable while enhancing the well-being of all members of society. It is conceptualized by Oluseye and Gabriel (2017) as growth that emphasizes productive employment, raises wages, and ensures fair rewards for participants. The Asian Development Bank (ADB) (2017) defined inclusive economic growth as broad-based participation in the economy where all segments of society have equal opportunities to contribute to and benefit from economic activities. Accordingly, the Organization for Economic Cooperation and Development (OECD) (2012) defines inclusive economic growth as growth that is fairly distributed across society, thereby opening up opportunities for all facets of the population and distributing the benefits of increased prosperity, both monetary and non-monetary.

In the words of the United Nations Development Programme (UNDP) (2019), inclusive economic growth is defined as the process and outcome in which all groups of people participate in growth and benefit equally from it. According to Klasen (2010), inclusive economic growth is termed as growth that benefits all social classes, including the wealthy, the middle class, the near poor, and the poor. Anyanwu (1997), Ali and Son (2007), and Anand, et al. (2014) define inclusive economic growth as the growth that prioritizes raising the standard of living in developing nations. Inclusive economic growth in this study is in line with definitions conceptualized by OECD (2012), Rauniyar and Kanbur (2010), Ngepah (2017), and Raheem et al. (2018) because of the significance of fair distribution of growth proceeds that is contained in the definitions, as well as emphasis in enhancing the livelihood of all segments of the population.

Access to finance, as defined by Innovations for Poverty Action (IPA) (2023), is the availability and affordability of financial products and services to meet the needs of low-income individuals and small enterprises. Bayero (2015) in Afolabi (2020) describes access to finance as the ease of obtaining financial resources, preventing poverty entrapment. Demirgüç-Kunt et al. (2018) define it as the ability to utilize

financial services such as banking accounts and credit facilities. This study adopts IPA (2023), Afolabi (2020) and Demirgüç-Kunt et al. (2018) definitions due to their emphasis on the significance of finance accessibility in avoiding poverty traps as well as the ability to utilize financial services. Thus, these definitions constitute the working definition of access to finance for this study.

3.3 Empirical Review

Scholars have explored the relationship between financial inclusion and inclusive economic growth; for instance, Panakaje, Rahiman, Parvin, Kulal, and Siddiq (2023) employed Structural Equation Modelling (SEM) to explore the relationship between financial inclusion and inclusive economic growth within rural Karnataka, India. Data was gathered from 398 respondents through questionnaires. The findings demonstrated financial literacy significantly impacting on financial decisions and control of funds among members of rural Karnataka. In another contemporary study, Sarpong and Nketiah-Amponsah (2022) examined the relationship between financial inclusion and inclusive economic growth in Sub-Saharan Africa, employing a panel comprising of 46 nations over the period from 2004 to 2018. The Generalized Method of Moment (GMM) estimator revealed that financial usage, coupled with awareness and accessibility of financial services has a significant impact on inclusive economic growth.

Additionally, a noteworthy study conducted by Saha, Jie, and Kazuo (2023) grounded their research on a panel data comprising 104 developing countries from 2004 to 2019 to examine the influence of opportunities for income on inclusive economic growth, as opposed to Sarpong and Nketiah-Amponsah (2022) whose analysis took into account 46 African countries. The econometric methodology applied in the estimations is the Dynamic Panel estimation technique, and the results of these estimations indicate that expanding opportunities for lower-income people, and enhancing their income levels, positively affects inclusive economic growth and contributes to overall economic growth. Olanrewaju, Tella, and Adesoye, (2019) probed the correlation between financial inclusion and the growth from informal agro-allied sector in Nigeria; a sample comprising 219 participants from 105 microfinance institutions in Anambra and Delta States was utilized. The study found that educating individuals and providing information on financial services through social networks helps informal agro-allied business operators gain access to microcredits and become more self-sufficient.

Although, there are extant studies on the nexus between access to finance and inclusive growth (see Panakaje et al., 2023; Rakhmawthi and Niza, 2023; Hussein, et al., 2023). A noticeable gap in these

empirically reviewed studies is the absence of investigation into the impact of access to finance by considering the joint impacts of income mobility, proximity of financial service points as well as access to credit on inclusive economic growth. While numerous studies have highlighted the importance of access to finance in driving inclusive economic growth, none, to the best of my knowledge have specifically focused on these distinct variables and on Bunkure LGA. Thus, the underrepresentation of this study region in existing literature makes it different with other studies.

Similarly, other studies reviewed focused on the use of different research techniques such as ANOVA (Panakaje et al., 2023), SLF-SEM (Romlah et al., 2023), GMM (Sarpong & Nketiah-Amponsah, 2022), OLS (Thomi & Mose, 2021) in their analysis on inclusive economic growth around the globe. However, logistic regression model is adopted in this study to analyze the impact of access to finance on inclusive economic growth in Bunkure LGA. Employing the logit model makes this study distinct with other studies as the technique is suitable for binary dependent variables. Also, it helps in transforming probabilities into log-odds to allow for a linear relationship between the variables which is not possible in a linear regression model. A significant distinction between this study and many other studies is the emphasis on access to finance as crucial determinants of inclusive economic growth.

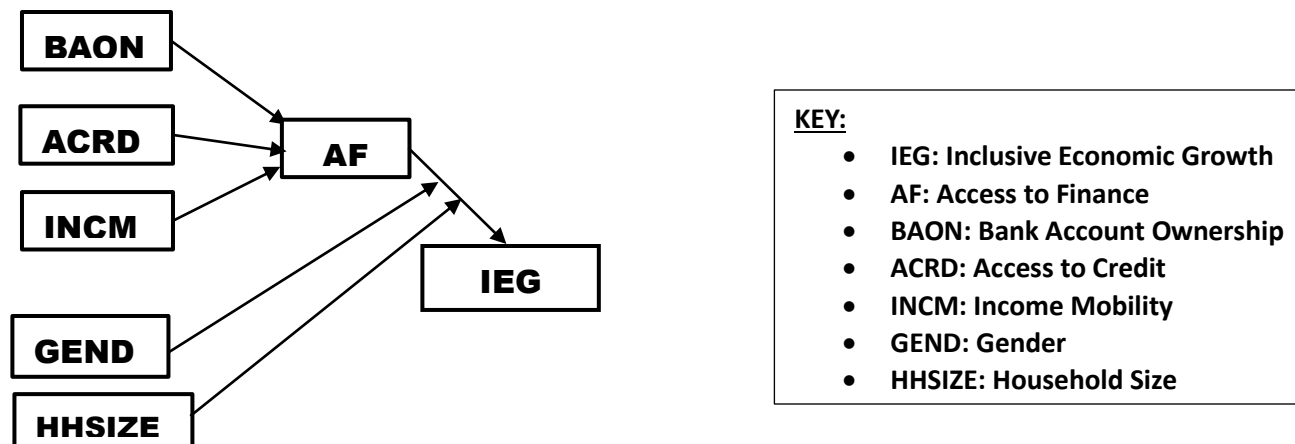
As a result, this research endeavors to fill these identified gaps by investigating the impact of access to finance on inclusive economic growth within the confines of Bunkure LGA, Kano State, Nigeria.

3.4 Conceptual Framework

Inclusive economic growth is a multidimensional concept that emphasizes equitable opportunities for economic participation and distribution of benefits across all segments of society. The multidimensional nature of inclusive economic growth can be understood through various determinants identified by scholars. For instance, Panakaje, et al. (2023) posit that financial control and increased financial literacy are essential metrics for measuring inclusive growth, highlighting their role in empowering individuals economically, and thereby becoming inclusive. Saha et al. (2023) focuses on the significance of creating income-generating opportunities as a key determinant for achieving inclusive economic growth. Kolawale (2016) in Chukwujekwu (2020) proposes access to infrastructure and growth benefits as essential determinants of inclusive economic growth. Also, Olanrewaju et al. (2019) measures inclusive economic growth on the basis of access to credits.

Hence, the determinants of inclusive economic growth highlighted (see Panakaje, et al., 2023; Saha et al., 2023; Chukwujekwu, 2020; Olanrewaju et al., 2019) provide headway for conceptualizing the measures of inclusive economic growth in this study. Based on the foregoing, proximity of financial service points, access to credit, bank account ownership, access to healthcare services, and income mobility of individuals are considered as essential metrics for measuring inclusive economic growth in this study.

Fig 1: Conceptual Framework



Source: Conceptualized by Author (2025)

4. Methodology

4.1 Research Design

This study uses quantitative methods to investigate the impact of access to finance on inclusive economic growth in Bunkure LGA, Kano State. The dependent variable in this study is attainment of inclusive economic growth based on the possibility to access finance. This research was carried out on a sample of labour force population in Bunkure LGA of Kano State, Nigeria. Logistic Regression Model was adopted in this research as a viable alternative to other analytical techniques due to its accuracy and computational efficiency when dealing with binary outcomes (see Johnson and Lee, 2022; Smith et al., 2023) as well as being a robust technique due to its flexibility and ease of interpretation (see Chen and Patel, 2023; Kumar et al., 2022; Garcia, 2021).

4.2 Population and Sample of the Study

This research was conducted in Bunkure LGA, Kano State, Nigeria with a projected population of 286,900 individuals (NPC, 2022). Thus, individuals inhabiting this location between the ages of 18 to 64 are this study's target population. According to KNBS (2022), it is estimated that the population of individuals

between the age brackets of 18-64 years in Bunkure LGA is 132,584. Based on this, multi-sampling technique was used to determine the sample size for this study. The first stage involves clustering the population base on their wards and the second stage involve random sampling where each member of the subset has an equal chance of being chosen. Out of the ten (10) wards in Bunkure LGA, six (6) wards (Bunkure, Barkum, Gafan, Gurjiya, Kumurya, and Chirin) were chosen because of their easy access and thus share similar characteristics across all locations in the LGA. Accordingly, the first five (5) closest villages/streets in each of these wards were considered for random sample selection. Also, fourteen (14) individuals were randomly selected from each village/street to make up the sample size of 400 respondents.

Cluster random sampling was chosen as the sampling technique for this study because of its significant advantage in terms of homogeneity within clusters, feasibility of implementation as it allows engagements with existing groups where data is easily accessed. Its cost effectiveness and time savings also makes it an essential tool in most research methodologies (Ye, 1983; Susanna, 2018).

Though, the sample size of 400 respondents for this study was calculated based on the Taro Yamane formula with N = the population of the study area and an error margin of 5% (Yamane, 1967). However, a major limitation encountered during the data collection and sampling process is funding which almost compromises on sample size as most of the locations are dispersed and require adequate funds to cater for transportation cost and other logistics.

4.3 Data Collection

The data collection technique in this study was a survey using a well-structured questionnaire. The questionnaire was created following the structure advised by Easterby-Smith, Thorpe, and Jackson (2012), which includes introducing factual questions based on the objectives of the study, followed by instructions on how to answer the questions, while also varying the question types and grouping similar types. The questionnaire focused on key indicators of each of the variables in this study like bank account ownership, income mobility and access to credit to measure access to finance. Self-administering of the questionnaires was employed, and this influenced a faster retrieval of completed questionnaires and hence provided on-spot clarifications to respondents.

4.4 Model Specification

Different techniques are being used to analyze inclusive economic growth at various dimensions. Some use structural equation modelling (SEM) on access to finance while others use analysis of variance (ANOVA)

to study it. Zizi, et al. (2020) utilized logistic regression modelling in an effort to predict the probability of financial failure to occur on SMEs. The model is specified as.

$$\ln\left(\frac{P}{1-P}\right) = \beta_0 + \sum_{i=1}^{k-1} \beta_i X_i \quad \dots (1)$$

The above equation was further rewritten in Zizi, et al. (2020) as a function of P below:

$$P = \frac{\exp(\beta_0 + \sum \beta_i X_i)}{1 + \exp(\beta_0 + \sum \beta_i X_i)} \quad \dots (2)$$

Where P is the probability of failure of SMEs or Success of SMEs at 5% confidence level. Therefore, the decision rule is written as:

$$\begin{aligned} y_i &= 1 \quad \text{if } \beta_i X_i + \varepsilon_i > 0 \quad \text{or} \quad \text{if } P(y_i = 1) > 0.5 \quad (\text{SMEs in the failure group}) \\ y_i &= 1 \quad \text{if } \beta_i X_i + \varepsilon_i \leq 0 \quad \text{or} \quad \text{if } P(y_i = 1) > 0.5 \quad (\text{SMEs in the success group}) \quad \dots (3) \end{aligned}$$

Hence, this study adopted and modified the above model in equation (1) by augmenting different variables (as discussed in the conceptual framework) to determine inclusive economic growth in Bunkure LGA, Kano State, Nigeria.as;

Let $P_i = \log\left(\frac{P(Y=1)}{P(Y=0)}\right)$;

$$\log\left(\frac{P(Y = 1)}{P(Y = 0)}\right) = \beta_0 + \beta_1 AF \quad \dots (4)$$

Where;

$P(Y = 1)$ is the probability of achieving Inclusive Economic Growth,

$P(Y = 0)$ is the probability of not achieving Inclusive Economic Growth,

Based on the above, equation 4 is re-specified by including the vectors of explanatory variables below;

$$P_i = \beta_0 + \beta_1 BAON + \beta_2 ACRD + \beta_3 INCM + \beta_4 GEND + \beta_5 HHSIZE + \varepsilon \quad \dots (5)$$

where p is the probability of inclusive economic growth to occur at 5% confidence level given other factors, BAON, ACRD, INCM, are the explanatory variables while GEND, and HHSIZE are control variables, β_0 is intercept, β_1 to β_5 are coefficients that represent the change in log odds of achieving

inclusive economic growth for a one-unit increase in each independent variable, and ε is the error term. Therefore, the decision rule is written as:

$$\begin{aligned} & \text{if } P(y_i = 1) > 0.5 \text{ (inclusive economic growth occurs)} \\ & \text{if } P(y_i = 1) > 0.5 \text{ (inclusive economic growth did not occur)} \quad \dots (6) \end{aligned}$$

In the model above, inclusive economic growth is represented by 1 while exclusive is represented by 0. Thus, households that have bank account ownership, access to credit, and with flexible income levels are classified as economically inclusive. Those who do not meet these criteria are considered economically exclusive.

Specifically, AF is access to finance and the vectors of explanatory variables in this research are:

Bank account ownership by individuals (BAON). This variable is chosen as it enables individuals to participate in the economy more fully by helping to increase savings, better financial management and improve economic stability of households (Chakrabarty and Gupta, 2023; Agarwal et al., 2022; Demirgüç-Kunt et al., 2020). It is measured by the percentage or number of adults aged 15-64 years who own an account at a formal financial institution.

Access to credit by households (ACRD). This is justifiable because improved access to credit stimulates economic activity by enabling lower-income individuals and businesses to invest in opportunities (Khan, 2021; Zhang and Liu, 2020; Aghion and Howitt, 2019). It is measured by the number of individuals who have borrowed from formal financial institutions.

Income mobility of individuals (INCM). The inclusion of this variable reflects the importance of flexibility of economic ladder in terms of level of income in society to foster more inclusive growth through improved income mobility (Randall et al., 2021; Raj, 2020). Measured by the level at which the income of people changes over time. Other demographic variables include gender of respondents (GEND), and size of households (HHSIZE).

The main hypotheses of this research are.

Hypothesis 1: Access to finance does not significantly impact inclusive economic growth

Hypothesis 2: Access to education does not significantly impact inclusive economic growth

4.5 *Technique of Estimation*

The technique of data analysis adopted in this study is qualitative linear response model (Logistic Regression Model) due to its robustness in terms of providing more accurate estimates of the model coefficients by reducing their sensitivity to extreme values in the data, and ability to estimate the likelihood of an event happening. Descriptive statistics were employed here to provide concise information about the variables in the study as accorded in the work of Babbie (1990) to condense large amounts of data into manageable summaries that allow for simple comprehension and interpretation. The logic here is that p must be between 0 and 1, in the sense that the linear functions remain unbounded. Thus, changing p by the same amount requires a significant change in x .

Maximum Likelihood Estimation (MLE) is a widely used method for estimating logit models. This technique involves finding the values of the parameter that maximizes the likelihood function of the given observed data to have occurred. To apply MLE for logit model estimation, the likelihood function is then defined. Suppose a dependent variable Y_i is taken as a vector of binary responses (0 or 1), an explanatory variable X as a matrix of predictors, and β as a vector of regression coefficients, the logit model assumes that each response Y_i follows a logistic distribution with a probability function given by:

$$P_i = \frac{1}{1 + e^{-(\beta_1 + \beta_2 X_i)}} \quad \dots(7)$$

Since Y_i is a Bernoulli random variable then the probabilities of $Y = 1$ and $Y = 0$ can be written as $P_r(Y_i = 1) = P_i$ and $P_r(Y_i = 0) = (1 - P_i)$.

However, logistic regression not only identifies the point of boundary between the classes (0 and 1) but also shows (as in Eq. 7) that the class probabilities depend on distance from the boundary in a particular way, and that they go towards the extremes (0 and 1) more rapidly when β is larger. It is these statements about probabilities that make logistic regression more than just a classifier.

4. Results Presentation and Discussion

4.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1: Demographic Characteristics of Respondents

Variable	Frequency	Percentage (%)
Gender		
Male	226	67.3
Female	110	32.7
Marital Status		
Married	254	75.7
Single	82	24.3
Age		
18-30	115	34.3
31-45	143	42.6
46-60	57	17.0
60+	21	6.1
Educational Level		
Formal	161	48.0
Informal	175	52.0
Family Size		
1-5	36	10.7
6-10	130	38.7
11+	150	44.6
Monthly Income		
< ₦10,000	119	35.5
₦10,000-₦30,000	119	35.5
₦30,001-₦50,000	66	19.7
₦50,001+	32	9.5

Source: Computed by Author (2025) using SPSS version 23.

Table 1 above summarizes the demographic characteristics of the sample where, the majority of respondents are male (67.3%), married (75.7%), and within the age range of 31-45 (42.6%). Education attainment levels are fairly split between formal (48.0%) and informal (52.0%). The largest family size group is with more than 10 (44.6%), and a significant portion of respondents earn less than ₦10,000 monthly (35.5%).

Within the scope of examining the impact of access to finance and education on inclusive economic growth in Bunkure LGA, first, opportunities for access to finance in the sample were measured through questions

relating to bank account ownership, proximity of financial service points, and access to credit. Accordingly, opportunities for access to education were measured by employing questions relating to school enrolment level, students per teacher ratio, and proximity of educational service points.

Table 2: Summary of Descriptive Statistics of Key Variables

Variable	N	Minimum	Maximum	Mean	Std. Dev	Skewness	Kurtosis	Tolerance	VIF
IEG	102	2	5	3.8	0.884	-0.462	-0.618	-	-
AF	102	1	5	3.7	1.175	-0.494	-0.743	0.850	1.177
AE	102	1	5	3.65	1.060	-0.418	-0.926	0.850	1.177

Source: Computed by Author (2025) using SPSS version 23.

Table 2 above shows the summary of data analyzed for this research. This empirical study examines the impact of access to finance, and education on inclusive economic growth in Bunkure LGA. The mean and standard deviation for these variables indicates their central tendency and dispersion respectively. The statistics shown in Table 2 provide evidence for the standard deviation which quantifies how tightly the data are clustered around the mean, suggesting that operational data values are further away from the mean than usual. Skewness measures the asymmetry of the distribution of the dataset and Kurtosis measures the tailedness of the distribution.

The skewness values for IEG, AF and AE are -0.462, -0.494 and -0.418 respectively indicate that the distribution of these variables (IEG, AF and AE) are slightly left-skewed, suggesting that there are instances where access to finance and education is significantly low and affecting the overall inclusive economic growth performance in Bunkure LGA. Hence, the left skew in all the variables in this study suggests potential barriers faced by certain segments of Bunkure LGA in accessing financial and educational opportunities, like problems of over-populated classrooms, far distance in accessing financial service points, among others, which may hinder overall economic inclusivity.

Consequently, the Kurtosis values for IEG (-0.618), AF (-0.743) and AE (-0.926) indicate a platykurtic distribution with fewer extreme outliers than what would be expected in a normal distribution. The lower kurtosis values indicate that while most segments of Bunkure LGA may benefit from adequate financial and educational opportunities, there remain significant portions of the population who do not have equal access and potentially leading to disparities in economic outcomes.

The Collinearity Statistics check for multicollinearity in the model is considered based on tolerance value and Variance Inflation Factor (VIF). The results suggest that a tolerance value (0.850) close to 1 and VIF (1.177) well below both common thresholds (5 and 10) for both access to finance and education possess a distinct impact on inclusive economic growth and can be analyzed independently without concern for unreliable coefficient estimates. Hence, this result further supports the conclusion that there is no multicollinearity issue in this model.

4.2 ANALYSIS OF COEFFICIENTS

Table 3: Model Summary for Logistic Regression

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke Square	R
1	204.385	.808	.802	

Source: Computed by Author (2025) using SPSS version 23.

Table 4: Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5.327	8	.723

Source: Computed by Author (2025) using SPSS version 23.

Table 5: Logistic Regression Analysis of Inclusive Economic Growth (IEG)

Predictor	B	SE	Wald	df	Sig.	Exp(B)
BAON	1.130	0.476	5.636**	1	0.001	3.096
ACRD	0.491	0.302	2.643*	1	0.010	1.634
INCM	0.584	0.243	5.776**	1	0.045	1.793
GEND	0.464	0.326	2.026*	1	0.037	1.590
HHSIZE	-0.372	0.131	8.064**	1	0.021	0.689

Source: Computed by Author (2025) using SPSS version 23.

Note; Log-likelihood = -204.385; Cox & Snell $R^2 = 0.808$; Nagelkerke $R^2 = 0.802$; Hosmer-Lemeshow = 5.327, $p = 0.723$; Wald significance Level: *0.05, **0.01

The impact of access to finance and education on inclusive economic growth in Bunkure LGA was analyzed through logistic regression and the results of the analysis are presented in the above tables. The Cox and Snell R^2 , and Nagelkerke R^2 values, which illustrate the percentage that the independent variables influence the dependent variable, are above 80% (Table 3). In addition, the model is significant because

log-likelihood (LL) indicating the goodness of fit is $(p) < .05$. The Hosmer-Lemeshow goodness of fit test was used to test the model's goodness of fit and revealed that the model fits the data really well (Table 4). This summary in tables 3 and 4 provides the -2 Log likelihood, Cox & Snell R Square, and Nagelkerke R Square values for the logistic regression model, indicating a good fit. Consequently, the non-significant chi-square ($p = .723$) also indicates a good fit of the logistic regression model, all suggesting that the observed data are well represented by the model.

According to the model estimated results presented in Table 5, households size (HHSIZE) have higher wald statistics (8.064) which indicates that HHSIZE has no effect on the outcome of inclusive economic growth in Bunkure LGA. Also, the negative value of the coefficient suggests that an increase in HHSIZE decreases the likelihood of inclusive economic growth in Bunkure LGA by about 0.37. In consideration of the odds ratio of HHSIZE, the findings equally reveal that for each one-unit increase in HHSIZE, the odds of inclusive economic growth is about 69% lower. These findings corroborate the works of Smith, (2023); Johnson & Patel, (2022); Chen & Lee, (2021), confirming that smaller household sizes enhance living standards, thereby promoting inclusive economic growth.

Consequently, key predictors in the model such as bank account ownership (BAON), credit access (ACRD), income mobility (INCM), and gender (GEND) possess positive coefficients. This indicates that an increase in each of these predictors also increases the likelihood of inclusive economic growth to occur by more than 0.46, since each coefficient represents the change in log-odds of inclusive economic growth for a one-unit increase in the predictor variable.

Wald statistics for ACRD (2.643), and GEND (2.026) are all within the threshold of 3.841 at 0.05 significance level. Although, BAON (5.636) and INCM (5.776) are within the threshold of 6.635 at 0.01 significance level with 1 degree of freedom. Thus, the result suggests that all these predictors have significant influence on inclusive economic growth in Bunkure LGA. Again, the odds ratio of these variables suggests that for each one-unit increase in these predictors, the odds of inclusive economic growth are higher than 46%.

Consequently, these outcomes conform to the claims that adequate credit facilities increases participation in economic activities (Khan, 2021; Zhang and Liu, 2020); regions with higher rates of bank account ownership experience more robust economic growth through enhanced opportunities for investment (Sarma & Pais, 2021; Demirgüç-Kunt et al., (2020); enhanced income mobility significantly impacts on

future earnings potential and thereby lead to more inclusive economic growth (Randall et al., 2021; Raj, 2020).

5. Conclusion and Recommendations

This study highlights that access to finance plays a crucial role in driving inclusive economic growth in Bunkure LGA, Kano State, Nigeria, with financial accessibility explaining 80.8% of the variation in economic inclusivity. Key factors such as bank account ownership, credit access, income mobility, and gender significantly influence economic outcomes, leading to higher productivity, improved incomes, and better living standards. Interestingly, household size is found to have a negative impact on inclusive economic growth, suggesting that population growth driven by larger households may hinder sustainable economic progress, requiring further exploration.

As part of recommendations for this study, governments should enhance microfinance institutions and community banks through regulatory reforms, incentivizing lending to low-income individuals and small enterprises. Second, supportive wage policies and career advancement opportunities should be introduced, alongside financial literacy programs that educate people about budgeting, saving, investing, and debt management. Third, the adoption of digital wallets and online banking should be encouraged to facilitate financial access in rural areas, complemented by training programs to increase community awareness. Also, given the Islamic influences on financial activities in Bunkure, targeted loan products should be designed to align with Islamic teachings, providing flexible repayment options for farmers and entrepreneurs. Lastly, policymakers should reduce biases in financial systems, ensuring marginalized groups have better access to finance.

The study acknowledges its limitations, focusing primarily on financial accessibility. Future research should explore digital financial services, adult literacy, and Islamic finance's role in economic inclusion. By implementing these findings, Bunkure LGA can create a thriving environment where access to finance drives sustainable and inclusive economic growth.

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