

FINANCIAL INCLUSION AND HUMAN CAPITAL DEVELOPMENT IN NIGERIA (1990-2023)

Attah Sunday Ogohi & Odi Nwankwo

Department of Banking and Finance, Prince Abubakar Audu University, Kogi State, Nigeria

Corresponding Email: attahogohisunday@gmail.com

ABSTRACT

This study investigates the effect of financial inclusion on human capital development in Nigeria (1990-2023). The study made use of Ex-post facto research design. The study conducted various pre and post estimation tests. ARDL was used as the main estimation technique. The study found that in the long-run Credit to Private Sector (CPS) has a positive and significant effect on HDI in Nigeria. The study also found that in the long-run Bank Loan to Rural Area (BLR) has a positive and significant effect on HDI in Nigeria. The study concluded that financial inclusion significantly affects human development in Nigeria. The study recommends that Government and financial institutions should implement policies that encourage increased lending to business. Banks should be incentivized to establish branches and mobile banking units in rural communities.

Keywords: Financial Inclusion, Human Capital Development, Human Development Index, Credit to Private Sector and Bank Loan to Rural Areas

INTRODUCTION

Financial inclusion has become a key catalyst for economic development and the advancement of human capital in global discussions. It refers to the provision of accessible, affordable, and appropriate financial products and services to individuals and businesses in a sustainable manner. These services ranging from savings and credit to insurance and payment systems empower people to actively engage with the financial system, thereby enhancing their economic participation and fostering broader economic growth. The global significance of financial inclusion is highlighted by its integration into the United Nations' Sustainable Development Goals (SDGs).

Empirical data has repeatedly shown a robust correlation between financial inclusion and the advancement of human capital. Demirgüç-Kunt et al. (2022) emphasise that nations with elevated financial inclusion levels generally enjoy improved access to education, healthcare, and nutrition, which are fundamental components of human capital. Data from the Global Findex Database (2021) indicates that 69% of adults globally now have access to financial services, a substantial increase from 51% in 2011, with considerable beneficial impacts on educational and health outcomes. However, regional disparities persist, consequently constraining the region's ability to properly cultivate its human capital.

Credit to the private sector (CPS), a proxy for financial intermediation, has shown mixed results in Nigeria. On one hand, studies such as Nwakanma et al. (2021) demonstrate that increased private sector credit has facilitated investments in education and entrepreneurship, thereby enhancing human capital. On the other hand, Olarewaju and Akande (2020) note that the high concentration of credit in urban centers limits its impact on rural populations, where educational and health needs are more pronounced.

Bank loans to rural areas, another critical proxy, have remained disproportionately low, contributing to the persistent urban-rural divide in financial access. For instance, rural areas received less than 10% of total bank loans in Nigeria in 2021, reflecting structural inefficiencies and risk aversion among financial institutions. This disparity aligns with the findings of Sarma (2022), who argues that financial exclusion in rural areas perpetuates cycles of poverty and limits investments in education and health. However, critics such as Claessens and Perotti (2021) argue that rural lending programs often face challenges of sustainability and efficiency, particularly in economies with weak institutional frameworks.

The distribution of financial resources further compounds the problem. CPS, a key indicator of financial intermediation, remains concentrated in urban areas, leaving rural populations underserved. Nwakanma et al. (2021) note that while private sector credit has supported entrepreneurship and educational investments in urban centers, rural areas where educational and healthcare needs are most pressing receive disproportionately less attention. However, Nigeria's digital financial infrastructure remains underdeveloped, with low internet penetration and poor digital literacy, particularly in rural areas (Sarma, 2022). This digital exclusion disproportionately affects marginalized populations, including women and the poor, who are already at a disadvantage in accessing financial services.

Despite the expanding literature on financial inclusion, notable deficiencies persist, especially within the Nigerian context. Although many studies have explored the correlation between financial inclusion and HDI, there is a paucity of research specifically addressing its influence on human capital development in Nigeria.

It is based on the above-mentioned problems this study sought to examine the effect of financial inclusion on human capital development in Nigeria (1990-2023).

In realizing the objectives of this study, the following questions are formulated to be answered by this study.

- i. How does credit to private sector have significant effect on HDI in Nigeria?
- ii. To what extent bank loan to rural area have significant effect on HDI in Nigeria?

This study intended to investigate the effect of financial inclusion on human capital development in Nigeria. Other specific objectives are to;

- i. Ascertain whether credit to private sector have positive and significant effect on HDI in Nigeria.
- ii. Investigate whether bank loan to rural area have positive and significant effect on HDI in Nigeria.

To address the research question designed for this study, the following hypotheses was formulated and tested in null form;

H₀₁: Credit to private sector do not have positive and significant effect on human development index in Nigeria.

H₀₂: Bank loan to rural areas do not have positive and significant effect on human development index in Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual Review

This section describes the different concept that relate to both the dependent and independent variable of this study. This concept includes financial inclusion, financial deepening, credit to private sector, bank loan to rural area, human capital development and human development index.

Concept of Financial Inclusion

The CBN (2018) defined financial inclusion as a state wherein adult Nigerians can readily access a diverse range of formal financial services tailored to their unique need. This definition emphasizes the importance of accessibility and the provision of varied, need-based financial products for the populace.

In this study, the definition provided by the Central Bank of Nigeria will be adopted, as it offers a context-specific understanding that aligns with the unique financial landscape and developmental.

Credit to Private Sector

The International Monetary Fund (IMF) characterises domestic CPS as the financial resources provided by financial institutions to private entities, encompassing loans, trade credits, and the acquisition of non-equity securities that incur a repayment obligation (International Monetary Fund, 2020). This definition highlights the diversity of financial instruments employed to extend CPS. The Central Bank of Nigeria (CBN) underscores the significance of private sector credit within its monetary policy frameworks, asserting that such credit is vital for invigorating economic activities and attaining sustainable growth (Central Bank of Nigeria, 2020). The CBN's viewpoint corresponds with the general consensus that sufficient credit allocation to private companies is essential for economic advancement.

In this study, the definition by the International Monetary Fund (2020) will be adopted, as it offers a comprehensive framework that encompasses various forms of financial resources extended to the private sector, aligning with the study's objectives of analyzing credit dynamics within Nigeria's financial system.

Bank Loan to Rural Area

The International Fund for Agricultural Development (IFAD) characterises rural finance as a spectrum of financial services tailored to meet the distinct requirements of individuals residing in rural regions, thereby enhancing productivity, fostering business growth, and mitigating economic risks (IFAD, 2020). This definition underscores the extensive scope of financial services vital for promoting rural development.

Central Bank of Nigeria (CBN) initiated the Rural Banking Scheme in 1977, aiming to mobilize savings from rural areas, provide credit to small-scale industries, and foster banking habits among the rural populace (CBN, 1984, as cited in Oloyede, 1992). This initiative highlights the strategic role of bank loans in stimulating rural economic activities.

In this study, the definition provided by IFAD will be adopted, as it comprehensively encapsulates the range of financial services essential for empowering rural communities in Nigeria.

Human Capital Development

The World Bank (2018) characterized human capital as the knowledge, skills, and health amassed by individuals throughout their lives, enabling them to realize their potential as contributing members of society. This definition underscores the comprehensive essence of human capital, acknowledging education and health as its fundamental pillars. In addition to this viewpoint, Goldin (2016) offers a succinct definition, characterizing human capital as the talents held by the workforce, regarded as a valuable resource or asset. This view underscores the economic importance of workforce competencies.

In this study, the definition provided by the World Bank (2018) will be adopted, as it comprehensively integrates the essential elements of knowledge, skills, and health, aligning with the multifaceted approach required for effective human capital development in Nigeria.

Theoretical Review

Finance-Growth Nexus Theory

The theory is primarily attributed to Joseph Schumpeter (1911), posits that financial development dramas a fundamental role in fostering economic growth. Schumpeter posited that financial institutions, particularly banks, serve as key facilitators of economic progress by efficiently allocating capital to productive investments, thereby stimulating entrepreneurship and innovation. The theory argued that financial markets and institutions contribute to growth by mobilizing savings, reducing transaction costs, improving resource allocation, and providing access to credit, particularly to the private sector. Over time, this theory has been expanded upon by scholars such as Levine (1997).

The Finance-Growth Nexus Theory is built on several key assumptions. First, it assumes that financial markets are efficient and capable of channeling savings into the most productive investments. Second, it presumes that financial intermediaries play a proactive role in reducing information asymmetries, thereby facilitating better credit allocation.

Despite its strengths, the Finance-Growth Nexus Theory has notable limitations. One of its primary criticisms is that it assumes a linear and unidirectional relationship between finance and growth, whereas empirical studies suggest that this relationship may be bidirectional or context-dependent (Robinson, 1952).

Theory of Financial Liberalization

The theory was developed by McKinnon (1973) and Shaw (1973), posits that removing financial sector restrictions leads to increased savings, investment, and overall economic growth. This theory emerged in response to financial repression, a concept where excessive government intervention, such as interest rate caps, credit rationing, and direct state control of financial institutions, distorts market efficiency and stifles economic development. McKinnon and Shaw argued that financial repression leads to low savings, inadequate investment, and inefficient credit allocation, which in turn hampers economic growth. They proposed that liberalizing financial markets by allowing market-driven interest rates, reducing government intervention, and enhancing competition among financial institutions would foster financial deepening, encourage savings, and improve resource allocation.

The Theory of Financial Liberalization is based on several assumptions. First, it assumes that financial markets are inherently efficient and that removing government-imposed distortions leads to optimal resource allocation (McKinnon, 1973). Despite its theoretical appeal, financial liberalization has several limitations. One major criticism is that it assumes financial markets are perfectly efficient, whereas real-world markets are characterized by information asymmetry, institutional weaknesses and governance challenges (Stiglitz, 2000).

Adoption of Theory

This study adopted Finance-Growth Nexus Theory. The theory assumed that financial markets and institutions contribute to growth by mobilizing savings, reducing transaction costs, improving resource allocation, and providing access to credit, particularly to the private sector. The theory posited that the expansion of financial institutions and instruments enhances economic growth by making financial resources more accessible to individuals and businesses.

Empirical Review

Ilesanmi et al. (2024) assess the effect of microcredit on rural livelihoods among farming households in Southwest Nigeria from 2018 to 2023 using a survey research design. Utilizing multinomial logistic regression with STATA software, they found that informal credit sources were predominantly utilized, and microcredit had the potential to improve rural livelihoods. The study concluded that expanding formal credit systems is essential to reduce reliance on costly informal sources and recommended enhancing financial literacy programs to improve access to formal credit.

Eke and Odukwu (2023) x-rayed the relationship between private sector credit and human capital development in South Africa from 2017 to 2022 using a panel data research design. Utilizing GMM estimation with STATA software, they found that private sector credit had a significant impact on human capital indicators such as literacy rates and health outcomes. The study concluded that financial institutions play a critical role in human capital formation and recommended policies that enhance access to credit, particularly for education and healthcare investments.

Ekeocha et al. (2023) analyzed the effect of microfinance banks on rural dwellers in Southeast Nigeria from 2015 to 2022 using a survey research design. They employed the Z-test for estimation, utilizing SPSS software, and found that microfinance banks significantly enhanced savings mobilization, credit intermediation, and employment generation among rural populations. The study concluded that microfinance institutions positively impact the economic activities of rural dwellers and recommended increased awareness and establishment of more microfinance banks in rural areas to bolster financial inclusion.

Oyedepo et al. (2023) investigated the impact of commercial bank loans on agricultural growth outcomes in Nigeria from 2010 to 2020 using a time-series research design. Applying the ARDL model and ECM with EViews software, they found that commercial bank credit positively influenced agricultural output, while exchange rates had a negative effect. The study concluded that commercial bank credit significantly contributes to agricultural growth and recommended that banks adopt more flexible lending policies to accommodate more farmers.

Ibechiole et al. (2023) examined the effect of financial inclusion on economic growth in Nigeria from 1992 to 2021 using a longitudinal research design. Employing OLS with EViews software, the study found that bank loans and deposits in rural areas contributed positively to gross domestic product (GDP), while credits to small and medium-scale entrepreneurs exhibited a negative and insignificant relationship with GDP. The study concluded that financial inclusion positively influences economic growth and recommended enhancing financial literacy programs and customer-based service products to sustain this positive trend.

Gap in Literature

From the empirical reviewed works above, it showed that studies have been carried out on financial inclusion and human capital development. From the reviewed works, it was discovered that studies such as Cherotich et al. (2020), Gonzalez (2020), Smith (2021), Ahmed (2022), Raza et al. (2023), and Osei (2023) were carried out in other countries of the world of which all the findings cannot be generalized due to environmental difference. Also, studies such as Osuka et al. (2024), Kumar (2024), Cherotich et al. (2020), Gonzalez (2020) and Smith (2021) all made used of old-time series data which result may not reflect current economic happenings and reflection. Furthermore, none of the reviewed works combined financial deepening, credit to private sector and bank loan to rural areas to determine their joint impact on human capital index in Nigeria. Also, some of the reviewed works such as Joy (2025), Osuka et al. (2024), Kumar (2024), Chen (2023), Osei (2023) and Ekeocha et al. (2023) made used of VAR, VECM, OLS, Survey, DiD, Panel Data Analysis, PSM, Z-test and SEM as their main estimation technique, living out the short-and long run effect of the variables which ARDL account for. The study of Oyedepo et al. (2023) and Ibechiole et al. (2023) whose result are inconsistent prompting the need for further studies. This is the gap this study would fill.

METHODOLOGY

This study employed an *ex post-facto* research design. This design was deemed appropriate because the independent variables under investigation had already occurred and exist within the studied timeframe. The data for this study were gotten from CBN Statistical Bulletin and WDI Data Repository between (1990-2023). To ensure that the data is good and fit for purposes, various pre and post estimation test were carried out ranging from descriptive statistics, correlational matrix, stationarity test, normality test, Multicollinearity Test, heteroscedastic test and ARDL Model was used as the main estimation technique to test the hypotheses of the study.

Table 1: Variables Measurement and Description

Variable Acronym	Measure	Variable Type	Source	A-priori Expectation
HDI	Measured as Human Development Index of Nigeria	Dependent	Osuka et al. (2024)	Nil
CPS	Measured as Credit to Private Sector	Independent	Chen (2023)	Positive

BLR	Measured as Bank Loan to Rural Area	Independent	Ibechiale et al. (2023)	Positive
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Source: Researcher compilation from the Literature, (2025).

The study employed the ARDL model as the primary estimation technique to investigate the relationships among the variables. The ARDL model offers advantages over other methods, including robustness with small sample sizes and the capacity to handle various orders of integration, as well as the ability to address diagnostic issues such as potential autocorrelation. E-Views 12.0 econometric software facilitated the analysis. Preliminary tests were conducted to assess the annual time series properties of the respective data, including both pre- and post-estimation tests detailed below.

Pre Estimation Test

Pre-estimation tests refer to the preliminary statistical procedures or diagnostics conducted before running the main estimation or analysis in a study. This includes;

Descriptive Statistics: Basic Descriptive Statistics refer to the summary statistics that describe the main features of data in a panel dataset. They include Mean, Median, Standard Deviation, Minimum and Maximum.

Correlational Matrix: Correlational Analysis refers to the process of examining the relationship between two or more variables within a panel dataset. It shows whether they exist positive and significant relationship between the variables under study. Also, it shows the direction (positive) and magnitude (significance) between the variables under study. The outcome may be positive correlation, negative correlation or zero correlation.

Unit Root Test: Unit root test is carryout to ascertain the stationarity level of the variables. The rule of Unit Root Test is that, when it is $1(0)$ that is at level, OLS would be used to test the hypotheses, when it is at first difference $1(1)$.

Normality Test: A normality test in regression analysis is used to determine whether the residuals (errors) of the regression model are normally distributed.

Post Estimation Test

To establish whether the model is best, linear and unbiased (BLUE), the following post estimation test was conducted

ARDL: The Autoregressive Distributed Lag model is a technique used to analyze the short-run and long-run relationships between variables, particularly when dealing with time series data.

Model Specification

The model of financial inclusion and human capital development in Nigeria is consistent with the Finance-Growth Nexus Theory reviewed in chapter two. Finance-Growth Nexus Theory The theory posited that the expansion of financial institutions and instruments enhances economic growth by making financial resources

more accessible to individuals and businesses. The models summarised the effect of CPS and BLR on HDI in Nigeria. The model was adopted and modified from studies such as Joy (2025), Kumar (2024), Ibechirole et al. (2023) and Ahmed (2022).

The structural form of the model is stated as equation 1 below;

$$Y = f(x) \dots\dots\dots (1)$$

Where Y is the dependent variables, f is the functional and X represents independent variables.

The model was further expressed in mathematical equation (i) below;

$$HDI_t = f(CPS_t, BLR_t) \dots\dots\dots (ii)$$

To make the mathematical expression estimable, it is transformed as equation (iii) below:

$$HDI_t = \beta_0 + \beta_1CPS_t + \beta_2BLR_t+ \mu \dots\dots\dots (iii)$$

Where:

HDI= Human Development Index (Dependent Variable)

CPS= Credit to Private Sector (Independent Variable)

BLR= Bank Loan to Rural Area (Independent Variable)

β_0 = interpret

$\beta_1 - \beta_2$ = Coefficient

U_1 = error terms

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Descriptive Statistics

Table 2 Descriptive Statistics

Variable	OBS	Mean	Std. Dev.	Max	Min
HDI	34	0.505905	0.030282	0.548000	0.450000
CPS	34	3.377914	0.974002	4.723331	1.525663
BLR	34	1.448832	0.720698	2.995015	0.204717

Source: E-View 12.0 Output, (2025).

Table 2 shows the mean value of the HDI is 0.505905, with maximum and minimum values of 0.548000 and 0.450000, indicating strong performance levels of the HDI throughout the study period. The standard deviation of 0.030282 suggests that the HDI value typically deviates from the mean by 0.030282.

Table 2 also shows that the mean value of CPS is 3.377914, with maximum and minimum values of 4.723331 and 1.525663, suggesting strong performance levels of CPS. The S.D of 0.974002 implies that the CPS value typically deviated from the mean by 0.974002.

Table 2 further reveals that the mean value of Bank Loan to Rural Area (BLR) is 1.448832, with maximum and minimum values of 2.995015 and 0.204717, indicating strong performance levels of BLR throughout the study period. The standard deviation of 0.720698 suggests that the BLR value typically deviates from the mean by 0.720698.

Correlation Matrix

Table 3 Correlation Matrix

Covariance Analysis: Ordinary

Date: 03/28/25 Time: 10:04

Sample: 2003 2023

Included observations: 21

Balanced sample (listwise missing value deletion)

Covariance t-Statistic Probability	HDI	FDP	CPS	BLR
HDI	0.000873 ----- -----			
FDP	0.002819 7.308591 0.0000	0.012336 ----- -----		
CPS	0.013473 13.79069 0.0000	0.049779 11.72665 0.0000	0.228630 ----- -----	
BLR	0.013396 4.903243 0.0001	0.040498 3.279250 0.0039	0.184321 3.588338 0.0020	0.367873 ----- -----

Source: E-VIEW 12.0 Output, (2025).

Credit to Private Sector (CPS) vs Human Development Index (HDI)

Given that the correlation “R” is (0.013473) and the t-stat (13.79069) which is higher than 2.5 and with an associate p-value of (0.0000) it therefore concludes that credit to private sector and HDI shows a positive and significant linear association. By this, we accept the null hypotheses and reject the alternate hypotheses.

Bank Loan to Rural Area (BLR) vs Human Development Index (HDI)

Given that the correlation “R” is (0.013396) and the t-stat (4.903243) which is higher than 2.5 and with an associate p-value of (0.0000) it therefore concludes that Bank Loan to Rural Area and HDI shows a positive and significant linear association. By this, we accept the null hypotheses and reject the alternate hypotheses.

Stationarity Test

Table 4: Unit Root

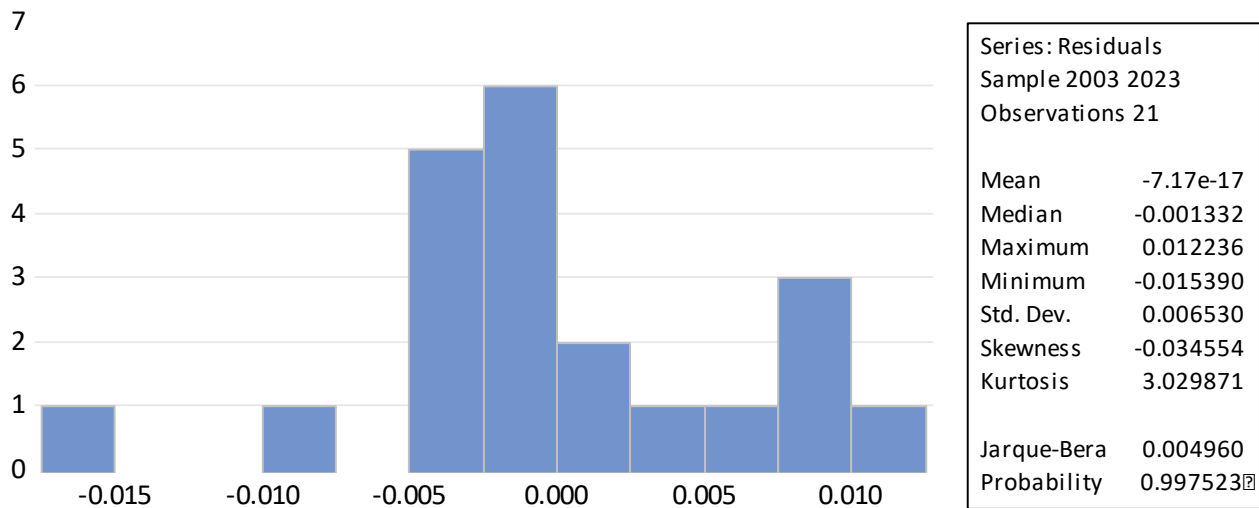
Variables	t-stat	Critical Values @5%	Order of Integration	Prob.	Remarks
HDI	3.600217	3.052169	I(1)	0.0176	Stationary
CPS	4.206859	2.957110	I(1)	0.0025	Stationary
BLR	6.479038	2.960411	I(1)	0.0000	Stationary

Source: E-view (2025).

Table 4 indicates that the variables under examination are stationary at both levels and the first order of integration. Consequently, the study will employ the ARDL approach as the primary estimating tool to evaluate the hypotheses.

Normality Test

Table 5: Summary of Normality Test Result



Source: E-view, (2025).

The normality test findings, presented in Table 5, reveal a Jarque-Bera statistic of 0.004960 and a probability value of 0.997523. Consequently, as the null hypothesis asserts that the data is not normally distributed, this study rejects the null hypothesis and supports the alternative hypothesis that the data is regularly distributed. Furthermore, a negative skewness of -0.034554.

Multicollinearity Test

Table 6: Multicollinearity Test

Variable	Coefficient Variance	Centered VIF	Remarks
C	0.000479	NA	NA
CPS	9.230005	8.828894	Absence of Multicollinearity
BLR	1.090005	1.678380	Absence of Multicollinearity

Source: Survey; from E-view computation, (2025).

Table 6 presents a summary of the study's variables, the results show that the VIF values for all variables are below 10, showing absence of multicollinearity.

Summary of ARDL Estimates

Table 7: ARDL

Variable	Coefficient	Std. Error	T-Statistic	Prob.*
Short run Estimate				
LOG_CPS	0.039414	0.010990	3.586224	0.0071
LOG_BLR	0.018028	0.004022	4.481957	0.0021
C	0.296122	0.050209	5.897778	0.0004
Long run Estimate				
LOG_CPS	0.048554	0.008549	5.679335	0.0005
LOG_BLR	0.022208	0.002937	7.562252	0.0001

Source: Authors: Computations using E-views 12.0, 2025.

Test of Hypotheses

To investigate the effect of financial inclusion on human capital development in Nigeria, the formulated hypotheses were tested using Autoregressive Distributed Lag Model (ARDL) results as show in Table 7.

H₀₁: Credit to private sector do not have significant effect on HDI in Nigeria

Table 7 indicates that, in the short term, Credit to Private Sector (CPS) exhibits a positive t-statistic of 3.586224 and a corresponding p-value of 0.0071, which is significant at the 5% level. In the long term, CPS has a positive t-statistic of 5.679335 and a p-value of 0.0005, indicating significance at the 5% level. The results demonstrate that the null hypothesis is rejected in both the short term and the long term.

H₀₂: Bank loan to rural areas do not have significant effect on HDI in Nigeria

Table 7 indicates that, in the short term, the Bank Loan to Rural Area (BLR) exhibits a positive t-statistic of 4.481957 and a corresponding p-value of 0.0021, which is significant at the 5% level. Ultimately, BLR has a positive t-statistic of 7.562252 and a p-value of 0.0001, indicating significance at the 5% level. The results demonstrate the rejection of the null hypothesis in both the short term and the long term.

Discussion of Findings

Objective One: To explore whether credit to private sector have positive and significant effect on HDI in Nigeria

The study additionally revealed that, over the long term, CPS exerts a favourable and significant influence on HDI in Nigeria. This indicates that, in the long term, a unit rise in CPS will result in an increase in HDI in Nigeria. Access to finance, especially in the private sector, acts as a stimulant for entrepreneurship, investment, and innovation, so enhancing living standards and economic success. When people and

enterprises can obtain sufficient credit facilities, they are enabled to broaden their operations, invest in productive initiatives, and create employment prospects. This not only elevates income levels but also diminishes poverty and fosters comprehensive financial stability within a nation. Furthermore, ample financial accessibility motivates individuals to participate in entrepreneurial endeavours, thus fostering economic diversification and resilience. Small and medium-sized enterprises (SMEs), which frequently constitute the backbone of numerous economies, depend significantly on credit to fund their operations, acquire equipment, and expand their businesses. Furthermore, when credit is allocated effectively to productive sectors such as agriculture, manufacturing, and technology. This thus enhances the quality of life and fosters sustained human development. This finding contradicts the a priori predictions of this investigation. This discovery corresponds with the Finance-Growth Nexus Theory, which asserts that heightened financial intermediation fosters economic growth and human development. This discovery aligns with the results of Eke and Odukwu (2023), who identified a significant influence.

Objective Two: To investigate whether bank loan to rural area have positive and significant effect on HDI in Nigeria

The study additionally revealed that, over the long term, BLR exerts a beneficial and significant influence on HDI in Nigeria. This indicates that, in the long term, a unit rise in the BLR will result in an increase in the HDI in Nigeria. Historically, bank loans to rural areas have been insufficient, primarily due to the conservative strategies of financial institutions that favour high-net-worth individuals and enterprises located in urban centres. This urban-focused lending trend has created a financial disparity, leaving rural regions inadequately served and restricting their access to vital credit resources. Improving bank loans to rural regions can significantly contribute to closing the financial disparity between urban and rural inhabitants. When financial institutions provide additional lending facilities to rural communities, it promotes the development of micro, small, and medium-sized enterprises (MSMEs), empowers local entrepreneurs, and enhances agricultural output. Moreover, enhanced access to financial services in rural regions elevates the quality of life by fostering financial inclusion, allowing rural inhabitants to invest in education, healthcare, and housing. This finding contradicts the a priori predictions of this investigation. This discovery corresponds with the Finance-Growth Nexus Theory, which asserts that financial progress promotes economic growth and human advancement. These results correspond with those of Ilesanmi et al. (2024), who identified a significant effect. However, the results are inconsistent with those of Ibechiale et al. (2023), who reported an inconsequential effect.

CONCLUSION AND RECOMMENDATIONS

The study establishes that CPS exerts a positive and significant impact on HDI, reinforcing the crucial role of private-sector financing in fostering economic activities, job creation, and enhanced living standards. Additionally, the significant and positive effect of BLR on HDI underscores the transformative potential of rural financial access in bridging developmental gaps, reducing poverty, and stimulating inclusive growth. The study concluded that financial inclusion significantly affects human capital development in Nigeria.

The following recommendations were made from the findings of this study:

- i. Government and financial institutions should implement policies that encourage increased lending to businesses, especially small and medium-sized enterprises (SMEs).
- ii. Banks should be incentivized to establish branches and mobile banking units in rural communities.

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