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DETERMINANTS OF POVERTY REDUCTION IN NIGERIA: A TIME SERIES APPROACH INCORPORATING SELF-EMPLOYMENT AND SOCIOECONOMIC FACTORS

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Abstract

Nigeria has faced continuous challenges in fighting poverty even though the country has implemented various economic reforms and established employment initiatives. This is evident in high incidences of poverty, high unemployment rate and economic instability. The study will investigate how self-employment affects poverty reduction in Nigeria between 1990 and 2024 by using data from the WDI National Bureau of Statistics (NBS) and Central Bank of Nigeria (CBN) Statistical Bulletin. The research used Dynamic Ordinary Least Squares (DOLS) method to determine long-term connections between poverty and various tested explanatory variables. The findings revealed that self-employment and human capital development have negative but significant impact on poverty while access to electricity and credit have negative and insignificant impact. The impact of inflation on poverty is positive and statistically significant. Thus, it is recommended that government should formulate policies that improve the productivity of self-employment, including increased skill development and entrepreneur training programs and improved business environment as well as solving macroeconomic problems like inflation, which weaken the poverty alleviation potential of self-employment.

Keywords: Self-employment; Poverty; Human capital development; Access to credit; Electricity supply; Nigeria

JEL Classification Codes: E24, I32, O17, O55

1.0 Introduction

Poverty is among the longest-lasting developmental problems faced by low and middle income countries where the labour markets are largely dominated by informal employment, low productivity, and weak institutional support systems (Tunio et al.,

2017; Ogunrinola, 2011). Globally, self-employment and the informal sector have become important aspects of survival strategies for many households, especially in developing countries which do not offer much formal employment. In this situation, the self-employment stems from the fact that one is unemployed, and hence it is a necessity, but at the same time, it is considered as a means of generating income, although its efficacy in helping people out of poverty is based on several variables such as production capability and access to finances (Kura et al., 2023).

In Africa, the relationship between self-employment and poverty exists because of structural weaknesses which affect the labour market. The continent exhibits three main characteristics, which include widespread informal employment and minimal industrialisation and restricted development of the private sector (Ajidani & Ibrahim, 2025). As a result, self-employment serves as the primary economic force which drives all economic sectors but particularly impacts trade and agriculture and service industries. However, most self-employed individuals work in low-productivity jobs which exist for basic survival but do not provide enough earnings to help families escape poverty (Ajidani & Ibrahim, 2025).

Similarly, poverty in Nigeria continues to be an essential socio-economic problem even with its strong economy and abundant human and natural resources (World Bank, 2024; Nigerian Economic Summit Group [NESG], 2025). The latest reports have shown that a considerable number of people still live in poverty, which creates various regional differences across the nation (National Bureau of Statistics [NBS], 2024a). The labour market structure plays a central role in this challenge. According to the Nigerian Economic Summit Group (NESG, 2025), Nigeria's economy has experienced structural weaknesses over the past decade, including weak job creation capacity, macroeconomic instability, and declining productivity in the formal sector. The situation has caused widespread poverty, which affects most of the working population (NESG, 2025; Ajidani & Ibrahim, 2025).

The Nigerian labour force consists of people who work in both informal industries and self-employment. The National Bureau of Statistics (NBS 2024a) reports that 93 percent of the labour force works in the informal sector while only 7.8 percent has formal employment (NBS 2024c). Also, 85% of these individuals who are employed are self-employed, while only 15% receive salaries (NBS, 2024c). This implies that the country has an imbalanced

labour market where self-employment is more predominant, due to necessity and not entrepreneurship. Most of these self-employed people engage in low-earning occupations like petty trading, transport, and subsistence farming.

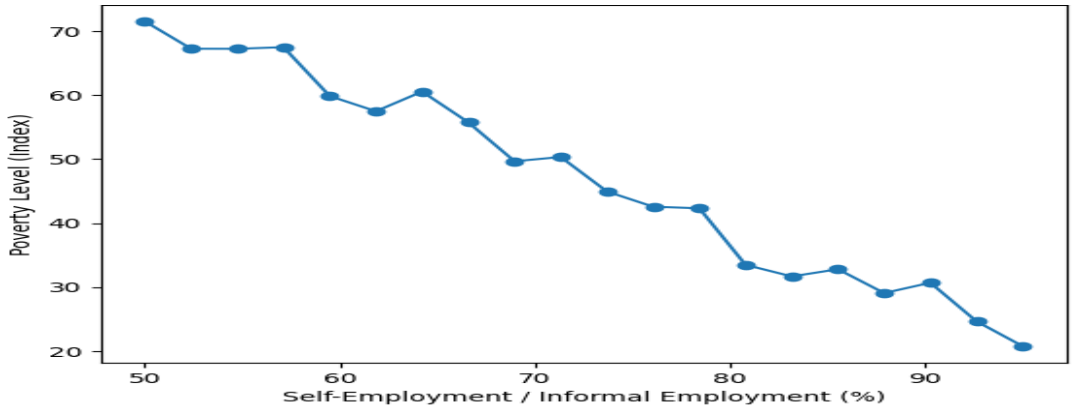

Figure 1.1: Conceptual Relationship between Self-Employment and Poverty in Nigeria
Source: Adapted from; National Bureau of Statistics (2024); NESG (2025); and World Bank poverty and labour reports on Nigeria

According to NESG (2025), several economic shocks affected the Nigerian economy from 2015 to 2024. These include economic recession, currency devaluation, inflationary tendencies, and increased costs of doing business. The macroeconomic conditions reduced the ability of formal private sector businesses to create employment opportunities, which resulted in increased numbers of people working in informal self-employment. With about 3.5 million Nigerians joining the workforce each year, a good number find themselves engaged in low-productivity informal activities, limiting income growth and reinforcing poverty cycles.

The link between self-employment and poverty reduction is therefore complex. Although self-employment serves as a means of survival and protects individuals from being excluded from the labour market, the impact of self-employment in alleviating poverty is based on factors such as productivity, financing, human capital and infrastructure. The above relation may also be understood theoretically in the concept where self-employment is seen both as a means of survival and a possible pathway out of poverty, depending on economic conditions and individual capabilities (Fields, 2014; ILO, 2018).

However, in Nigeria, structural limitations like lack of adequate access to financing, poor infrastructure, inflation, and lack of investment in human capital limit the impact of self-employment as a means of alleviating poverty. The NESG (2025) explains that poor infrastructure, regulatory barriers, and funding problems still impede business growth in the informal sector. In

this regard, self-employment has remained at a subsistence level and not developed into viable businesses that can create jobs and alleviate poverty.

Despite the dominance of self-employment and its critical role in Nigeria's labour market, there remains limited empirical consensus on how it interacts with key socioeconomic and macroeconomic factors to influence poverty reduction over time. In particular, the combined effects of human capital development, access to credit, infrastructure access, and inflation within a self-employment-driven economy remain underexplored in a time series framework. This study therefore examines the determinants of poverty reduction in Nigeria using a time series approach, incorporating self-employment and key socioeconomic factors to provide evidence-based policy insights for sustainable poverty reduction.

2.0 Literature Review

2.1 Theoretical Framework

Poverty Trap Theory, a concept that was developed by Sachs (2005), describes poverty as a cycle of events that starts with low incomes, followed by low savings, low investments, and ultimately low productivity, thus resulting in continuous poverty. It suggests that poor people do not have enough skills, resources, and even institutions to get out of poverty unless they receive help from the outside since poverty is caused by the inadequacy of certain conditions or structures. The strengths of this theory lie in its high explanatory value in regard to why poverty prevails, especially in developing nations, since it explicitly connects poverty to institutional and capital deficiencies, thus making the theory highly valuable for designing policies to overcome poverty traps (Sachs, 2005). However, critics argue that this theory is overly deterministic in nature and overlooks the importance of entrepreneurship, the informal sector, and mobility from poverty.

This theory is highly pertinent to this research study as it helps understand how the poor remain trapped in poverty even when they participate in self-employment. This theory suggests that poverty prevails due to the inability of the people to have the needed human and financial capital along with infrastructures in order to engage in productive activities (NESG, 2025). The case in Nigeria and other developing nations is that most self-employment activities take place in the informal economy, where entry is easier, but productivity and earnings are usually low. Self-employment in such cases is mainly driven by the lack of formal job options and thus occurs more out of necessity than a

desire for sustainable wealth creation (Fields, 2014; ILO, 2018). The theory further explain that people who are trapped in poverty are hindered by their inability to save, invest in education, and access productive capital, making it difficult for them to pursue more sustainable forms of self-employment that can be highly profitable (Barrett et al., 2019; Kraay & McKenzie, 2014).

2.2 Empirical Review

Ajidani and Ibrahim (2025) studied the effect of human resource entrepreneurship on poverty reduction in Nigeria between 1995 and 2024. The study used an ex-post-facto research approach, secondary data on the included variables, and the autoregressive distributed lag (ARDL) method to conduct the analyses. The findings revealed that, while informal sector growth, social inclusion programs, and unemployment rates all had a positive effect on poverty reduction in Nigeria, skills development had a negative effect.

Adjei-Mantey and Kunawotor (2024) conducted research on self-employment and its impact on poverty in Ghana using cross sectional data. A positive and significant impact was discovered as the data was evaluated using a linear probability model. This suggested that, compared to those who work for pay, self-employed people are more likely to be impoverished. The contribution of entrepreneurial self-employment to Nigeria's human development index was assessed by Chiekezie and Nworie (2024). Secondary data collected between 2007 and 2022 was assessed using descriptive methods and inferential analysis. The findings demonstrated that entrepreneurial self-employment significantly raised the Nigerian HDI by increasing income levels, encouraging education, and improving general living conditions.

Using company performance as a mediator, Kura et al. (2023) examined how the self-efficacy of small business owners improves poverty reduction in Nigeria. Using a descriptive analytical approach, the study examined the literature and developed a conceptual framework that connected improved business performance, self-efficacy, training, and supervision to poverty reduction. It concluded that although microbusinesses played a critical role in reducing poverty and unemployment, their ability to do so was constrained by their poor survivability. The study highlighted how self-efficacy had a major impact on company success, which in turn helped to reduce poverty, when combined with proper training and supervision.

Ajila et al. (2023) investigated the effects of small and medium-sized businesses on sustainable development and poverty reduction in Osun-State, Nigeria, using descriptive and inferential statistics. According to the report, SMEs have a major impact on reducing poverty by generating cash, developing skills, and creating jobs. Yerrabati (2023) used the two-step Generalised Method of Moments technique to investigate how self-employment helped reduce poverty in 56 developing nations between 1995 and 2019. Although the effects varied depending on the metrics and threshold, the results showed that self-employment decreased poverty in these nations.

Ognjenović et al. (2022) investigated if Serbian self-employed individuals were at a higher risk of poverty. The study used longitudinal and cross-sectional data from the Survey on Income and Living Conditions (SILC). The key findings showed that solo entrepreneurs and those working in family businesses were more likely to be poor. Businesses run by men, low-skilled persons, and young entrepreneurs were all more likely to be poor than other entrepreneurs or employees, particularly those represented by women and highly educated individuals.

Similarly, Tunio et al. (2017) investigated the relationship between poverty in emerging nations and self-employment at the Small and Medium Enterprises (SMEs) level. In order to develop a deeper comprehension of the issue, the study employed the narrative literature review methodology to examine related research streams in this field. According to the study, self-employment at the SMEs level contributed in some way to the fight against poverty in developing countries.

The effect of self-employment on reducing poverty in Benue State was investigated by Akiri et al. (2016). Three Local Government Areas, one from each of the state's three senatorial districts were chosen in the first step of the study's multistage sampling process, and 150 respondents, 50 from each Local Government Area were purposively sampled to create the study's population. To evaluate the impact of self-employment on poverty reduction, data were gathered using a structured questionnaire and analysed using quantitative methods such as the Logistic Regression Model and qualitative statistical tools such as simple percentages and tables. It was discovered that self-employment is an effective way to reduce poverty in the state's economy. The study also discovered that although self-employment has greatly reduced poverty, its effects have not been able to translate into the desired higher living standards as indicated by certain

socioeconomic factors that are supposed to demonstrate higher living standards among households. Additionally, it was discovered that a variety of problems, such as a shortage of funding, several government fees, low patronage, and an inadequate supply of electricity, hinder the expansion of self-employment in the area.

Ogunrinola (2011) investigated the role of motorbike taxis, also known as "okada," as a subsector of urban informal transportation in providing many urban unemployed people in South West Nigeria with chances for self-employment and revenue generation. A survey of 777 randomly chosen auto bike riders in two Nigerian cities produced the data. The OLS method was used in addition to the descriptive analysis. According to the survey, the subsector employs a large number of young people who dropped out of school to work in the dangerous occupation of okada riding. 86% of the operators made more than the minimum wage, according to earnings assessments, and the distribution of earnings was explained by human capital factors.

3.0 Methodology

3.1. Model Specification

This study's empirical model specification is influenced by both theoretical frameworks and preceding empirical research, ensuring that the functional link between self-employment and poverty reduction in Nigeria from 1990 to 2023 is accurately recorded. This study therefore modifies the model of Yerrabati (2023) because it incorporated some of the variables used in this present study's model, which is expressed as;

$$POV = f\ (TSE, MSE, FSE) \qquad 3.1$$

Where, POV = poverty rate, TSE = total self-employment, and FSE = female self-employment rate. Thus, this study's model is expressed functionally as;

$$POVR = f(SEMR, HCDI, ACCE, ACCR, INFR) \qquad 3.2$$

Where, POVR = poverty reduction; SEMR = total self-employment rate; HCDI = human capital development; ACCE = access to electricity; ACCR = access to credit; and INFR = inflation rate. Aggregating self-employment helps to address the issue of multicollinearity, while the inclusion of other variables in the current study is appropriate because they capture key economic and social factors influencing poverty: SEMR is directly related to income generation, whereas HCDI, ACCE, and ACCR increase productivity and opportunities for the self-employed. INFR is critical because inflation reduces the real value of income,

thus weakening poverty reduction initiatives.

The model can be expressed in econometric form as in Equation 3.3.

$$\begin{aligned}\mathrm{POVR}_t &= \beta_0 + \beta_1\mathrm{SEMR}_t + \beta_2\mathrm{HCDI}_t \\ &+ \beta_3\mathrm{ACCE}_t + \beta_4\mathrm{ACCR}_t \\ &+ \beta_5\mathrm{INFR}_t + \mu_t \qquad 3.3\end{aligned}$$

The model is further stated as a logarithm, allowing the coefficients to be interpreted as elasticities. This is specified in Equation 3.4.

$$\begin{aligned}&ln\mathrm{POVR}_t \\ &= \beta_0 + \beta_1 ln\mathrm{SEMR}_t + \beta_2 ln\mathrm{HCDI}_t \\ &+ \beta_3 ln\mathrm{ACCE}_t + \beta_4 ln\mathrm{ACCR}_t + \beta_5 ln\mathrm{INFR}_t \\ &+ \mu_t \qquad 3.4\end{aligned}$$

Where, t-1 is the lagged value of the variables; *In* = natural logarithm; μ_t is the stochastic error term which explains other variables that cannot be captured in the model; β_0 is the constant term; β_1 to β_5 are the slopes of the coefficients.

3.2. Data Analysis Techniques

The study employs Augmented Dickey Fuller (ADF) unit root test to check for stationarity because it is essential to test for unit root due to the time series nature of the dataset. Ensuring that the variables are stationary would help produce reliable results. After the stationarity test, the Johansen cointegration test was conducted to establish the long run relationship among the variables. The test is more preferrable than other tests because it can detect multiple cointegrating relationships simultaneously within a system of variables. The dynamic ordinary least square (DOLS) was utilized to estimate the parameters of the model. The DOLS is chose because it can provide unbiased and efficient long-run parameter estimates by correcting for endogeneity, serial correlation, and small-sample bias through the inclusion of leads and lags of the explanatory variables. The model can be expressed as;

$$\begin{aligned}&\mathrm{POVR} = \beta_0 + \beta_1 In\mathrm{SEMR}_t + \\ &\beta_2 HCDI_t + \beta_3 ACCE_t + \beta_4 ACCR_t + \\ &\beta_5 INFR_t + \sum_{k=-p}^{p}\gamma_{1k}\,\Delta\mathrm{SEMR}_{t+k} + \\ &\sum_{k=-p}^{p}\gamma_{2k}\,\Delta\mathrm{HCDI}_{t+k} + \\ &\sum_{k=-p}^{p}\gamma_{3k}\,\Delta\mathrm{ACCE}_{t+k} + \\ &\sum_{k=-p}^{p}\gamma_{4k}\,\Delta\mathrm{ACCR}_{t+k} + \\ &\sum_{k=-p}^{p}\gamma_{5k}\,\Delta\mathrm{INFR}_{t+k} + \\ &\varepsilon_t \qquad 3.5\end{aligned}$$

Where:

- Δ= First difference operator
- $k = -p, \ldots, q$= Number of leads and lags included in the model

- γ_{ik}= Coefficients of the leads and lags of the first-differenced explanatory variables
- ε_t= Error term

In this study, one lead and one lag are included ($p = 1, q = 1$) to capture short-run dynamics and ensure unbiased estimation of the long-run relationship.

4.0 Presentation of Results and Discussion of Findings

4.1 Presentation of Results

4.1.1 Correlation Matrix

Table 4.1: Correlation Matrix Result

	POVR	*SEMR*	*HCDI*	*ACCE*	*ACCR*	*INFR*
POVR	1.000000					
SEMR	-0.537892	1.000000				
HCDI	0.604027	-0.735575	1.000000			
ACCE	0.510838	-0.724168	0.642776	1.000000		
ACCR	0.664059	-0.699740	0.652477	0.598420	1.000000	
INFR	0.479914	-0.614605	0.673591	0.656025	0.537716	1.000000

Source: Researchers' Compilation using Eviews 13.0

From the correlation matrix, it is evident that there is a negative correlation between poverty reduction (POVR) and SEMR, as the correlation coefficient is -0.5379, implying that as the level of self-employment increases, the level of poverty reduction increases as well. POVR has positive correlations with HCDI (0.6040), ACCE (0.5108), ACCR (0.6641), and INFR (0.4799). This indicates that as the level of human capital development, access to electricity, and access to finance increases, the level of poverty reduction also increases. In addition, inflation has a positive correlation with the dependent variable. Among the explanatory variables, SEMR has negative correlations with all the other variables, especially with HCDI (-0.7356) and ACCE (-0.7242), indicating an inverse association between self-employment and these development indicators. In contrast, HCDI, ACCE, ACCR, and INFR exhibit moderate positive correlations among themselves, implying that improvements in human capital, electricity access, and financial inclusion tend to occur alongside higher inflation levels during the period under review. From the above findings, it can be noted that the correlation coefficients are

moderate and below 0.80, which indicates that there is no serious problem of multicollinearity in the explanatory variables, thus providing support to the reliability of the results.

4.1.2 Augmented Dickey Fuller Stationarity Test

This subsection deals with the test of unit root. Since time series data usually exhibit unit root, ADF unit root test was employed to test for stationarity. This test is necessary so as not to have misleading results. The result is thus presented on Table 4.2.

Table 4.2: Summary of the ADF Unit Root Test

Variable	*ADF t-Statistic*	*5% Critical Value*	*Order of Integration*
POVR	-5.9667	-2.9540	I(1)
SEMR	-4.9909	-2.9540	I(1)
HCDI	-4.0497	-2.9862	I(1)
ACCE	-5.0537	-2.9640	I(1)
ACCR	-8.0074	-2.9540	I(1)
INFR	-7.1718	-2.9640	I(1)

Source: Researchers' Compilation using Eviews 13.0

The results of the ADF indicate that the absolute values of the ADF test statistics for all variables are larger than their respective critical values at 5% significance level, and the probabilities are all less than 0.05. This suggests that the null hypothesis of unit root can be rejected after differencing the variables, and hence all variables are stationary at first difference, that is, they are integrated of order one I(1). This justifies the use of cointegration techniques for estimating the long-run relationship among the variables.

4.1.3. Cointegration Test

Following the confirmation that the variables are integrated of the same order, the Johansen Cointegration Test was conducted to determine whether a long-run equilibrium relationship exists among the variables in the model. The results of the cointegration analysis are presented in Table 4.3.

Table 4.3: Johansen Cointegration Test

Hypothesized No. of CE(s)	*Eigenvalue*	*Trace Statistic*	*Critical Value @5%*	*Max-Eigen Statistic*	*Critical Value @5%*
*None**	0.783899	101.1567	95.75366	45.96026	40.07757
At most 1	0.518042	55.19643	69.81889	21.89697	33.87687
At most 2	0.410184	33.29946	47.85613	15.83834	27.58434
At most 3	0.287615	17.46111	29.79707	10.17408	21.13162
At most 4	0.179734	7.287029	15.49471	5.943815	14.26460
At most 5	0.043786	1.343213	3.841465	1.343213	3.841465

Source: Researchers' Compilation using Eviews 13.0

The outcome of the Johansen Cointegration Test shows that there is one cointegrating equation at the 5% significance level, as both the Trace Test and Max-Eigen Statistic reject the null hypothesis of no cointegration. This means that there is a long-run equilibrium relationship between the variables POVR, SEMR, HCDI, ACCE, ACCR, and INFR during the period of study (1990-2024). Consequently, the variables move together in the long run despite the short-run fluctuations, thus the need to estimate a long-run model such as Dynamic OLS.

4.1.4. Dynamic OLS Estimation

The long-run parameters of the model are estimated using DOLS, which considers the possibility of endogeneity and serial correlation by including leads and lags of the differenced variables. The result is shown in Table 4.4.

Table 4.4: Dynamic OLS Result

Dependent Variable: POVR
Method: Dynamic Least Squares (DOLS)
Sample (adjusted): 1991 2024
Included observations: 33 after adjustments
Cointegrating equation deterministics: C
Fixed leads and lags specification (lead=1, lag=1)
Long-run variance estimate (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SEMR	-0.641373	0.899200	-3.386359	0.0117

HCDI	-0.202658	0.649535	-4.307221	0.0035
ACCE	-0.326594	0.777485	-0.351185	0.7358
ACCR	-0.831731	0.731044	-1.403028	0.2034
INFR	0.156410	0.412441	5.228405	0.0012
C	36.18015	12.65466	3.207188	0.0149
R-squared	0.960766	Mean dependent var		1.017072
Adjusted R-squared	0.848668	S.D. dependent var		0.390187
S.E. of regression	0.151788	Sum squared resid		0.161278
Long-run variance	0.013132			

Source: Researchers' Compilation using Eviews 13.0

The DOLS results suggested that a 1% increase in SEMR was associated with a 0.64% decrease in poverty in Nigeria. Also, on average, 1% increase in HCDI, ACCE and ACCR reduced POVR by 0.20%, 0.33% and 0.83% respectively. However, INFR had positive impact on POVR, which indicated that POVR increased by 0.16% as INFR also increased by 1%. The results further showed that SEMR, HCDI and INFR were statistically significant, while ACCE and ACCR were statistically insignificant at 5% level of significance. The R^2 of 0.9607 showed that about 96 percent of the variations in POVR are explained by SEMR, HCDI, ACCE, ACCR and INFR while the remaining 4 percent can be attributed to other variables which influenced POVR but are captured by error term. The percentage is quite high and it showed our model is a good fit.

4.2 Post-Estimation Tests

Test for Serial Correlation

Table 4.5: Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	6.019359	Prob. F(2,26)	0.0971
*Obs*R-squared*	10.76052	Prob. Chi-Square(2)	0.0646

Source: Researchers' Compilation Using Eviews 13.0

The Breusch–Godfrey LM test examines whether there is serial correlation in the residuals up to lag 2. The reported probabilities for both the F-statistic (0.0971) and Chi-square (0.0646) are greater than 0.05, so the null hypothesis of

no serial correlation is not rejected. This implies that there is no evidence of serial correlation in the model residuals, indicating that the model is free from autocorrelation problems and the estimates are reliable.

Test of Heteroscedasticity

Table 4.6: Heteroskedasticity Test: Breusch-Pagan-Godfrey

Null hypothesis: Homoskedasticity

F-statistic	2.645665	Prob. F(5,28)	0.1443
*Obs*R-squared*	10.90908	Prob. Chi-Square(5)	0.1532
Scaled explained SS	5.291626	Prob. Chi-Square(5)	0.3813

Source: Researchers' Compilation Using Eviews 13.0

The BPG test for heteroskedasticity, i.e., constant variance of residuals or homoskedasticity, shows that the variance of residuals is constant. From the results, it is clear that all the values of F-statistic (0.1443), Obs*R-squared (0.1532), and Scaled explained SS (0.3813) are more than 0.05. Hence, the null hypothesis of homoskedasticity cannot be rejected. This shows that the variance of residuals is constant, and hence there is no problem of heteroskedasticity.

Test for Normality

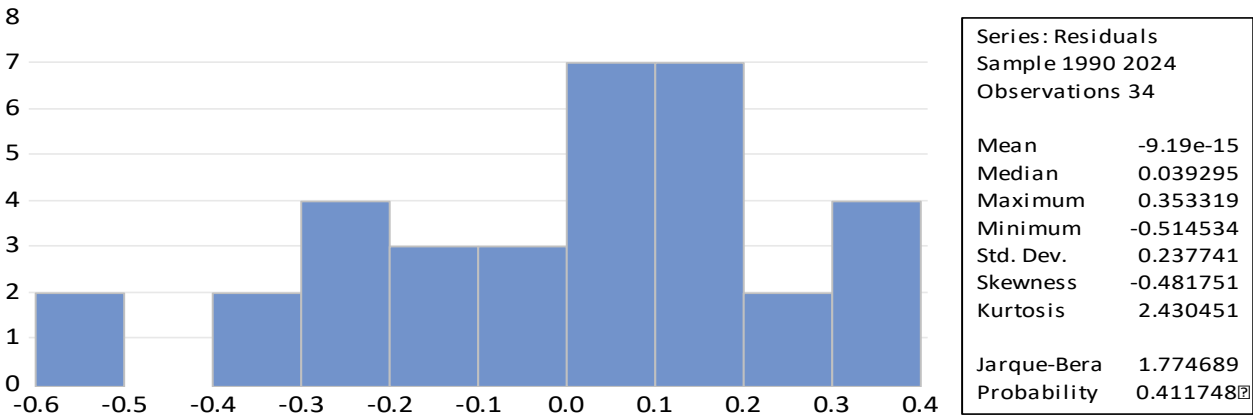

Figure 4.1: Histogram Normality Test

Source: Researcher's Compilation Using Eviews 13.0

The result of the normality test using a histogram, as presented in Figure 4.1, is used to check whether the residuals are normally distributed. The Jarque-Bera probability value is 0.4117, which is greater than 0.05, indicates that the null hypothesis cannot be rejected. This implies that the residuals are normally

distributed, and as such, the model has satisfied the normality condition, ensuring that the results obtained are reliable and valid.

Model Specification Test

Table 4.7: Ramsey RESET Test
Equation: UNTITLED
Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	1.831749	27	0.0780
F-statistic	3.355305	(1, 27)	0.0780
Likelihood ratio	3.982571	1	0.0560

Source: Researcher's Compilation Using Eviews 13.0

The Ramsey RESET test for correct specification of the model investigates whether the important variables or functions are omitted in the model. In the results, the p-values for the t-statistic (0.0780), F-statistic (0.0780), and likelihood ratio (0.0560) are all greater than 0.05. Since the null hypothesis for the correct specification of the model is not rejected, it indicates that there are no problems of omitted variables in the model.

4.3 Discussion of Findings

The findings from the DOLS suggest that self-employment (SEMR), human capital development (HCDI), and inflation rate (INFR) are statistically significant in the poverty reduction equation in Nigeria, whereas access to electricity (ACCE) and access to credit (ACCR) are statistically insignificant in the poverty reduction equation in Nigeria. This finding is consistent with the theoretical perspective that self-employment and entrepreneurship are key factors in poverty reduction in developing countries such as Nigeria because self-employment generates economic opportunities and improves human capital development. Furthermore, the study findings are supported by the empirical evidence, as Yerrabati (2023) established that the significance of self-employment in the poverty reduction of 56 developing countries across the globe was established, while Adjei-Mantey and Kunawotor (2024) established that the relationship between self-employment and poverty reduction in Ghana was positive. On the other hand, Chiekezie and Nworie (2024) established that the effect of self-employment in Nigeria on the human development index was positive, as it improved income, education, and living standards, while Ajila et al. (2023) established that SMEs contribute to the

poverty reduction of developing countries such as Nigeria through job creation and income generation.

Similarly, human capital development (HCDI) has a significant negative relationship with poverty, indicating that education, skill, and health investments do contribute to poverty reduction. This finding is consistent with theory, which suggests that human capital formation is an important determinant of labour productivity and economic performance, and also aligns with empirical evidence that suggests that the accumulation of human capital helps build economic resilience and reduce poverty risk. Access to electricity (ACCE) and credit access (ACCR) were not statistically significant in reducing poverty in this model, implying that though these variables may be crucial, they may not necessarily have an immediate effect on the level of poverty in the country. This is, therefore, a contrast with some empirical findings that emphasize the significance of these variables in the economic empowerment of the people, indicating that some other mediating factors, as noted by Kura et al. (2023), may influence the effect of these variables. Inflation (INFR) had a positive relationship with poverty, indicating that an increase in inflation increases the levels of poverty. This is in line with economic theory that suggests that an increase in inflation decreases real income.

5.0 Conclusion and Policy Recommendations

The findings support the argument that self-employment plays an important role in the reduction of poverty in Nigeria, as it greatly contributes to the reduction of poverty through income generation, job creation, and improving livelihoods. It also suggests that it can be used as an approach to reduce unemployment in the long run, especially in a developing country like Nigeria where there are few economic opportunities. By helping individuals to participate in productive economic activities, self-employment not only improves income levels but also promotes local economic activities and reduces dependency ratios. On the other hand, the importance of human capital development lies in its consistency with the finding that skills acquisition, education, and health improvement are significant complements to self-employment because these are essential in improving the success rate of entrepreneurial activities. Moreover, the positive and significant influence of inflation on poverty reduction underscores the sensitivity of poor households in the economy with regard to the effects of inflation, thus emphasizing the significance of macro-economic stability in the pursuit

of poverty reduction. Although electricity access and financial inclusion were not significant in the pursuit of poverty reduction, the negative signs of the variables imply that there is potential in using these factors in the long run in the pursuit of poverty reduction, depending on how the factors are implemented. In conclusion, the study established that a holistic strategy that includes the promotion of self-employment, investment in human capital development, and macro-economic stability is essential in the pursuit of poverty reduction in Nigeria.

The following policy recommendations are made in relation to the findings of the study;

i. A targeted support scheme for self-employment should be implemented by the Small and Medium Enterprises Development Agency of Nigeria in collaboration with the Central Bank of Nigeria. This support scheme should be for low-interest loans for starting businesses and should be tied to mandatory entrepreneurship training and business mentorship. This will help solve the problem of business failure and lack of capital, hence enhancing the poverty-reducing effects of self-employment.

ii. To strengthen the development of human capital, the Federal Ministry of Education in Nigeria should collaborate with the National Directorate of Employment to institutionalize the development of vocational and digital skills programs that match the needs of the industry, ensuring that the youth graduating from these programs are able to apply the knowledge gained to increase their productivity and income levels.

iii. For **access to electricity**, the Rural Electrification Agency should scale up decentralized renewable energy projects, particularly solar mini-grids in underserved communities, to provide reliable and affordable power for small businesses; this will solve the problem of unstable electricity supply that constrains entrepreneurial activities and limits the long-term poverty reduction potential of the sector.

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