

EFFECTIVENESS OF ENTREPRENEURSHIP DEVELOPMENT TO EMPLOYMENT PROMOTION AND POVERTY REDUCTION IN NIGERIA

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ABSTRACT

Entrepreneurship is widely regarded as a critical lever for employment generation and poverty alleviation in developing economies. This study examines the effectiveness of entrepreneurship development in promoting employment and reducing poverty in Nigeria over 1990-2025, addressing the persistent gap between decades of policy commitment, exemplified by the National Directorate of Employment, and continuing high unemployment and poverty. Using annual time-series data from the Central Bank of Nigeria, World Development Indicators, and National Bureau of Statistics, the study applies Autoregressive Distributed Lag (ARDL) bounds-testing models to employment and poverty as functions of entrepreneurship-related expenditure, capital formation, inflation, and unemployment. Results confirm long-run cointegration in both

models. Entrepreneurship related expenditure significantly boosts employment, correcting 98.7% of short-run disequilibrium annually; poverty results remain inconclusive due to diagnostic anomalies. The study concludes that entrepreneurship development is effective, though not self-sustaining, and recommends ring-fenced financing and stronger interagency coordination.

Keywords: Entrepreneurship development, employment promotion, poverty reduction, unemployment, ARDL bounds testing, Nigeria

1. Introduction

1.1 Background to the Study

Entrepreneurship occupies a contested but central place in development economics. While the entrepreneur eludes a single agreed definition, the underlying process is well established: the discovery, organisation, and exploitation of investment opportunities under uncertainty, generating incremental value and reallocating resources toward higher productivity (Schumpeter, 1934).

Nigeria illustrates this global pattern with unusual sharpness. Despite ranking among Africa's largest economies by nominal GDP and possessing substantial human and natural resource endowments, the country continues to record persistently high youth unemployment and a poverty headcount among the highest in the world in absolute terms. Successive administrations have responded by positioning entrepreneurship as a strategic policy instrument most visibly through the National Directorate of Employment (NDE) since the 1980s, and more recently through the compulsory integration of entrepreneurship education into the tertiary curriculum. These interventions mirror a broader international consensus that entrepreneurship development the deliberate cultivation of entrepreneurial capability through training, finance, and institutional support (Acs & Audretsch, 2005) can simultaneously advance employment promotion (ILO, 2019) and poverty reduction (World Bank, 2022). Akpor-Robaro and Afolabi (2024) find a significant poverty-alleviating effect among low-income households Unemployment and poverty remain among the most persistent development challenges confronting Nigeria in the twenty first century. Despite its vast human and natural resource endowment, and its standing as one of the largest economies in Africa, Nigeria continues to record disturbingly high levels of joblessness and deprivation among its citizens.

Yet four decades of policy commitment have not resolved the underlying problem. Nigeria continues to exhibit a marked innovation deficit among unemployed graduates, alongside stagnant GDP growth and a rising poverty rate. This disjuncture between sustained policy attention and weak outcomes points to a structural gap between policy design and policy delivery, and raises a question of clear international relevance beyond the Nigerian case: under what conditions does entrepreneurship promotion translate into measurable, macro level improvements in employment and poverty, rather than remaining confined to programme level

anecdote? This is the empirical gap the present study is designed to close, and its precise contribution to the literature is set out in the theories.

1.2 Statement of the Problem

Nigeria continues to grapple with rising unemployment among youth graduates despite deliberate government efforts to promote entrepreneurship as an alternative to white collar employment. Government at various levels has consistently emphasized entrepreneurship development as a strategy for job creation, yet a widening gap persists between employed and unemployed graduates, suggesting that entrepreneurship interventions have not translated proportionately into employment outcomes.

A major concern is that many Nigeria's entrepreneurship promotion policies exist largely on paper, with implementation frequently undermined by inconsistent government commitment, poor funding disbursement, weak monitoring, and policy designs that inadequately favour the working class they are meant to benefit. This disconnect between policy formulation and implementation has left the country dependent on oil revenue and white collar job expectations, rather than fostering a self-reliant, entrepreneurially driven economy.

Furthermore, existing studies on entrepreneurship in Nigeria tend to focus narrowly on its short run contributions such as immediate job placement or income generation while paying limited attention to its long run effects on structural issues such as poverty. This creates a gap in understanding whether entrepreneurship offers Nigeria a sustainable, long term solution to unemployment and poverty, or merely a short term palliative. Without such an inquiry, policy interventions risk continuing to be designed without evidence of what actually works, perpetuating the cycle of graduate unemployment and economic dependency.

1.3 Objectives of the Study

The broad objective of this study is to examine the effectiveness of entrepreneurship development in promoting employment and reducing poverty in Nigeria. The specific objectives are to:

- i. Examine the extent to which entrepreneurship development has promoted employment generation in Nigeria;
- ii. Evaluate the short run and long run effect of entrepreneurship development on employment promotion and poverty reduction, using selected macroeconomic variables;
- iii. Assess the role of government fiscal support and capital formation in the relationship between entrepreneurship development, employment promotion, and poverty reduction; and
- iv. Recommend strategies for strengthening entrepreneurship development as a tool for sustainable employment generation and poverty reduction in Nigeria.

1.4 Research Hypotheses

The study tests the following hypotheses, stated in their null form:

- H01: Entrepreneurship development has no significant effect on employment promotion in Nigeria.
- H02: Entrepreneurship development has no significant relationship with poverty reduction in Nigeria.
- H03: Capital formation and government fiscal support have no significant impact on the relationship between entrepreneurship development, employment promotion, and poverty reduction in Nigeria.

1.5 Significance of the Study

This study is significant on three fundamental grounds. Theoretically, it extends entrepreneurship, human capital, and structural transformation theories to Nigeria's institutionally weak and largely informal economy, thereby enriching the empirical literature on the entrepreneurship–employment–poverty nexus in developing countries and providing a reference framework for comparative research across similar economies. From a policy perspective, the study equips regulatory and development institutions, including SMEDAN, the National Directorate of Employment, and the Bank of Industry, with empirical evidence for evaluating and redesigning entrepreneurship interventions, while strengthening the evidentiary basis for national development planning in line with Sustainable Development Goals. Practically, the findings offer entrepreneurs, financial institutions, and policymakers actionable insight into the conditions that enable entrepreneurial activity to translate into sustainable employment and poverty reduction, thereby informing more effective business decisions, credit facilities, and community-level economic empowerment initiatives. Collectively, these theoretical, policy, and practical contributions underscore the timeliness and relevance of the study to Nigeria's ongoing quest for inclusive economic growth.

2. Literature Review

2.1 Theoretical Framework

The entrepreneurship literature bifurcates into supply side theories, which locate the origin of entrepreneurial behavior in individual psychological traits, and demand side theories, in which structural circumstance, policy, and market opportunity draw individuals into entrepreneurial activity. This study synthesises five theoretical strands spanning both traditions to frame the dual outcomes of employment promotion and poverty reduction under investigation.

Schumpeterian Innovation and the Resource Based View

Schumpeter (1934) positions the entrepreneur as the principal agent of economic development through "creative destruction": the disruptive recombination of productive resources that,

notwithstanding transient frictional unemployment in displaced industries, yields a net expansion of labour demand and a redistribution of the workforce from low productivity, informal subsistence activity into higher productivity, formally waged employment. Wernerfelt (1984) and Barney (1991) complement this innovation centred account with the Resource Based View (RBV), which attributes firm survival and hence the durability of the employment thereby created to the possession of Valuable, Rare, Inimitable, and organisationally embedded (VRIO) resources; enterprise creation, on this view, generates employment only where accompanied by the sustained competitive advantage that prevents early firm mortality.

McClelland's Achievement Motivation and Kirzner's Entrepreneurial Alertness

McClelland (1961) relocates the analytical focus from institutional to psychological determinants, arguing that a heightened Need for Achievement (nAch) impels individuals toward self-employment and, as ventures scale beyond sole proprietorship, toward the direct absorption of surplus community labour. Kirzner (1973, 1997), by contrast, conceptualises the entrepreneur as an equilibrating rather than disruptive force, endowed with "alertness" to unexploited price discrepancies and unmet demand; the resulting low capital microenterprises generate immediate, accessible employment while eroding the "poverty premium" that market frictions impose on low income consumers.

Structural and Credit Constraint Theories: Lewis, Occupational Choice, and the Poverty Trap

Lewis's (1954) dual sector model attributes development to the expansion of a productive modern sector that absorbs surplus labour from a traditional, low productivity sector, subject to infrastructural constraints on absorptive capacity. Banerjee and Newman (1993) formalise the resulting occupational choice as conditioned on access to credit, since collateral constraints exclude otherwise capable individuals from entrepreneurship; Banerjee and Duflo (2011) extend this logic into an intergenerational poverty trap framework in which targeted interventions credit and training foremost among them are required to lift households past the threshold of self-sustaining investment.

2.2 Empirical Review

A modest but growing body of Nigerian literature has examined the relationship between entrepreneurship, employment, and poverty. Agbana and Agbana (2024) synthesise scholarly and empirical evidence to show that entrepreneurship development supports economic growth, job creation, and poverty alleviation, while cataloguing persistent constraints such as inadequate finance and infrastructure. Akpor-Robaro and Afolabi (2024) provide micro-level survey evidence that entrepreneurship significantly alleviates poverty among low-income Nigerian families. Ogu and Omenihu (2025) find that government expenditure on entrepreneurship training significantly reduces unemployment (1990–2024), with digital entrepreneurship emerging as an even stronger negative predictor of joblessness pointing to the growing

importance of digital channels alongside traditional fiscal support. Akanwa and Akpanabia (2012), relying on secondary data, examined the role of entrepreneurship development in promoting employment in Nigeria and concluded that government and its agencies should deliberately encourage entrepreneurial culture and skills in order to reduce the country's high unemployment and boost economic development. Adebayo and Nassar (2014) assessed the impact of micro and small business entrepreneurship on poverty reduction in Ibadan metropolis and found a positive relationship between entrepreneurial activity and household poverty reduction. Sule, Ibrahim and Abdullahi (2024) find that small and medium enterprises meaningfully advance women's economic empowerment, an important distributional dimension largely absent from earlier Nigerian studies. Ayegba and Omale (2016) identified structural factors including inadequate financing, weak infrastructure, and policy inconsistency that constrain entrepreneurial development in Nigeria. Onwuka (2025) applies an Error Correction Model to Nigerian entrepreneurship and economic development data and likewise finds a positive long-run relationship between entrepreneurial investment and growth. Popoola et al. (2025) similarly confirm a positive relationship between entrepreneurship practices and poverty reduction using recent Nigerian survey data. Akingbade (2022) examined the challenges confronting small and medium enterprises in Nigeria, noting that limited access to finance and an unfavorable regulatory environment remain persistent obstacles to enterprise growth and, by extension, to their employment generating potential.

Taken together, the empirical literature converges on two broad conclusions. First, there is reasonably consistent evidence that entrepreneurship development, when accompanied by adequate training, financing, and policy support, generates measurable employment and poverty reduction outcomes in the Nigerian context, lending empirical support to the Schumpeterian (1934) and McClellandian (1961) theoretical propositions discussed above. Second, and equally consistently, the literature documents that these positive outcomes are neither automatic nor uniform: they are substantially conditioned by the presence or absence of a supportive institutional and infrastructural environment, consistent with the emphasis Sen's (1999) capability approach places on the enabling conditions required for individual initiative to translate into expanded substantive freedom.

2.3 Gap in the Literature

While the reviewed literature establishes a theoretically grounded and empirically supported case for the poverty reducing potential of entrepreneurship development in Nigeria, three gaps remain. First, much of the existing empirical work is geographically narrow, focusing on single states, local government areas, or specific programmes, which limits the generalisability of findings to the national level (such as Akpor-Robaro and Afolabi (2024) and Sule et al. (2024), is geographically narrow or survey-based, focusing on specific households, states, or enterprise categories, which limits generalisability to the national level.). comparatively few studies, before or after 2024, simultaneously and quantitatively model the full causal chain from

entrepreneurship development through employment promotion to poverty reduction; most, including the 2025 macro-level unemployment study, examine either the entrepreneurship–employment or the entrepreneurship–poverty link in isolation. Third, the moderating influence of institutional and policy factors although widely acknowledged qualitatively has rarely been tested formally within a unified statistical model. This study addresses these gaps by adopting national level time series data and an integrated ARDL modelling framework capable of assessing simultaneously the effectiveness of entrepreneurship development on employment promotion and on poverty reduction in Nigeria.

3. Institutional and Policy Context

3.1 The National Directorate of Employment (NDE)

Nigeria's principal entrepreneurship and employment generation institution is the National Directorate of Employment (NDE), which operates through four main programmes. The National Youth Employment and Vocational Skills Development Programme delivers apprenticeship based skills training through schemes such as the National Open Apprenticeship Scheme, the Waste to Wealth Scheme, and Schools on Wheels to youths without marketable skills, preparing them for either wage employment or self-employment. The Small Scale Industries and Graduate Employment Programme (SSIGEP) supports unemployed persons in establishing businesses after entrepreneurship training, with participants submitting bank assessed feasibility studies and receiving loans guaranteed by NDE and collateralised against their academic certificates, repayable over five years at a Central Bank determined interest rate. The Agricultural Sector Employment Programme (ASEP), run jointly with state governments, allocates cleared farmland and startup loans to registered applicants; between 2013 and September 2014 alone, NDE reported empowering 177,168 participants across its vocational, agricultural, entrepreneurial, and graduate transient job creation schemes (Olayinka, 2014). The Special Public Works Programme provides temporary employment in the construction and maintenance of roads, buildings, and other public infrastructure, alongside environmental sanitation and land clearing activities. Across these programmes, NDE consistently identifies low and inconsistent funding as its principal constraint, limiting, programme expansion, and facility upgrades to international standards.

3.2 Policy Measures

Beyond the NDE, Nigeria's broader policy architecture for employment and poverty reduction includes macroeconomic reforms (power sector reform, ease of doing business initiatives, and financial inclusion policy), social protection programmes designed to promote job creation through social services, and the Renewed Hope Employment initiative, which provides free vocational, technical, and agricultural training alongside startup capital. Coordinated collaboration among the Central Bank of Nigeria (CBN), NDE, the Bank of Industry (BOI), and

other institutions together with increased budgetary allocation to entrepreneurship development and stronger accountability and monitoring mechanisms is widely advocated as necessary to convert these policy instruments into measurable employment and poverty outcomes.

4. Methodology

4.1 Research Design

The study adopts an exposit facto research design, appropriate because the variables of interest have already occurred and cannot be manipulated by the researcher. The study is quantitative and time series in nature, examining the relationship between entrepreneurship development, employment promotion, and poverty reduction in Nigeria using annual historical macroeconomic data. Because the study relies on already existing macroeconomic series, an exposit facto design permits an objective analysis of trends and causal associations over time (UNESCO, 1993).

4.2 Data Sources

Annual data covering the period 1990–2025 were employed. Data were extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin and World Development Indicators (WDI), supplemented by National Bureau of Statistics (NBS) Labour Force Statistics and reports of the Corporate Affairs Commission (CAC), the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), and NDE. All estimation was conducted in EViews.

4.3 Theoretical and Analytical Framework

Most Nigerian macroeconomic time series including unemployment, poverty, credit to SMEs, and capital formation are typically integrated of order one, $I(1)$, rather than stationary at level. Consequently, an Autoregressive Distributed Lag (ARDL) bounds testing approach to cointegration (Pesaran, Shin & Smith, 2001) is preferred over static Ordinary Least Squares, since ARDL remains valid irrespective of whether the underlying regressors are purely $I(0)$, purely $I(1)$, or a mixture of both, and it yields both long run and short run (error correction) estimates from a single specification. This is consistent with the study's Schumpeterian and McClellandian theoretical grounding, in which entrepreneurship development is treated as an economic input affecting employment and poverty outcomes both directly and through complementary factors such as capital formation, credit availability, and fiscal support.

4.4 Model Specification

Model I: Entrepreneurship Development and Employment Promotion

Functional form: $EMPL = F(GEXPE, GEXPP, INF)$

Long run model: $EMPL_t = \beta_0 + \beta_1 GEXPE_t + \beta_2 GEXPP_t + \beta_3 INF_t + \mu_t$

Error correction representation: $\Delta EMPL_t = \alpha_0 + \Sigma \beta_{1i} \Delta EMPL_{t-i} + \Sigma \beta_{2i} \Delta GEXPE_{t-i} + \Sigma \beta_{3i} \Delta GEXPP_{t-i} + \Sigma \beta_{4i} \Delta INF_{t-i} + \lambda ECM_{t-1} + \varepsilon_t$

Model II: Entrepreneurship Development and Poverty Reduction

Functional form: $POV = F(GEXPE, GEXPP, UNE, INF)$

Long run model: $POV_t = \gamma_0 + \gamma_1 GEXPE_t + \gamma_2 GEXPP_t + \gamma_3 UNE_t + \gamma_4 INF_t + \mu_t$

Where EMPL and POV are the employment and poverty outcome variables respectively, GEXPE denotes government fiscal support for entrepreneurship, GEXPP denotes capital formation, UNE denotes the unemployment rate, and INF denotes the inflation rate. Variable measurement and sources are summarise in Table 1.

Table 1: Variable Definition and Measurement

Symbol	Variable	Measurement / Proxy	Source
EMPL	Employment promotion	Total number of persons in employment, or employment to population ratio (%)	NBS Labour Force Statistics
POV	Poverty level	National poverty headcount / poverty rate (%)	NBS / World Bank
GEXPE	Government fiscal support	Government capital expenditure on economic empowerment programmes (₦ billion)	Budget Office of the Federation
GEXPP	Capital formation	Gross Fixed Capital Formation (₦ billion, real)	CBN Statistical Bulletin
UNE	Unemployment rate	National unemployment rate (%)	NBS
INF	Macroeconomic stability	Inflation rate (%), included as a control	NBS / CBN

Source: Authors' compilation, based on CBN, NBS, WDI, CAC and SMEDAN records.

4.5 A Priori Expectations

Theory and the empirical literature reviewed suggest that entrepreneurship related expenditure and capital formation (GEXPE, GEXPP) should raise employment and reduce poverty, while inflation (INF) is expected to relate negatively to employment, since macroeconomic instability erodes the real value of business capital and discourages new venture creation. Unemployment

(UNE) is expected to relate negatively to employment and positively to poverty. That is: $\beta_1, \beta_2 > 0$; $\beta_3 < 0$; and, in the poverty model, $\gamma_3 > 0$.

5. Results and Discussion

5.1 Model I — Entrepreneurship Development and Employment Promotion

5.1.1 Bounds Test for Cointegration

Test Statistic	Value	I(0) Bound (1%)	I(1) Bound (1%)
Fstatistic (k = 5)	3,276.850	2.82	4.21

The computed F-statistic (3,276.850) is far above the upper bound I(1) critical value even at the 1 percent significance level (4.21), providing overwhelming evidence against the null hypothesis of "no levels relationship" and confirming that entrepreneurship expenditure, capital formation, inflation, poverty, and unemployment are genuinely cointegrated with employment in Nigeria that is, a stable long run equilibrium relationship truly exists, not merely a short run statistical association.

5.1.2 Long Run Estimates

Variable	Coefficient	Std. Error	TStatistic	Prob.
GEXPE	0.005218	0.000607	8.600671	0.0000
GEXPP	0.131619	0.020987	6.271481	0.0000
INF	0.008569	0.006928	1.236782	0.2277
POV	0.359887	0.135535	2.655309	0.0136
UNE	0.102108	0.009069	11.25846	0.0000

Long run cointegrating equation: $EC = EMPL - (0.0052 \cdot GEXPE - 0.1316 \cdot GEXPP + 0.0086 \cdot INF + 0.3599 \cdot POV - 0.1021 \cdot UNE)$

Government fiscal support for entrepreneurship (GEXPE) is positive and highly significant ($p = 0.0000$), indicating a genuine, lasting positive effect on employment. Capital formation (GEXPP) is negative and highly significant ($p = 0.0000$) a counterintuitive finding that reinforces caution about the efficiency or composition of this expenditure category. Inflation (INF) is positive but statistically insignificant ($p = 0.2277$), suggesting no reliable long run effect on employment. Poverty (POV) is positive and significant at the 5 percent level ($p = 0.0136$), suggesting that poverty and employment move together in the long run rather than poverty permanently

destroying jobs likely reflecting both variables' joint response to broad economic conditions. Unemployment (UNE) is negative and highly significant ($p = 0.0000$), confirming its persistent long run drag on employment.

5.1.3 Short Run Error Correction Estimates

Variable	Coefficient	Std. Error	TStatistic	Prob.
D(GEXPE)	0.003661	0.000611	5.992338	0.0000
D(INF)	0.000654	0.004886	0.133928	0.8945
D(POV)	150.6550	0.963729	156.3250	0.0000
D(UNE)	0.070316	0.008430	8.340902	0.0000
CointEq(1)*	0.987373	0.006428	153.6012	0.0000

$R^2 = 0.9988$; $Adjusted\ R^2 = 0.9986$; $Fstatistic = 3,265.850$ ($p = 0.0000$); $Durbin-Watson = 1.8644$.

The error correction term, $CointEq(-1) = -0.987$ ($p = 0.0000$), is negative and lies between 0 and -1 , confirming a stable long run equilibrium relationship. Its magnitude implies that approximately 98.7 percent of any short run disequilibrium between employment and its determinants is corrected within a single year an unusually fast speed of adjustment. The overall model fit is very strong, and the Durbin–Watson statistic indicates no significant residual autocorrelation, so the model's inferences can be trusted.

5.1.4 Discussion

Taken together, the results for Model I indicate that entrepreneurship development spending delivers a fast, statistically reliable, and positive boost to employment in Nigeria, both immediately and in the long run, while the labour market as a whole corrects almost entirely back to equilibrium within a single year. This strengthens the overall policy conclusion that sustained, well targeted entrepreneurship investment is an effective and fast acting instrument for employment promotion, but one whose benefits must be continuously renewed rather than delivered as one off spending since the system reverts just as quickly once support is withdrawn. That not all entrepreneurship related expenditure works the same way, evidenced by GEXPP's persistent negative long run link, signals possible inefficiency, misallocation, or a structurally different and more administrative form of spending that may be undermining rather than supporting job creation, and warrants closer scrutiny in future budget allocation.

5.2 Model II Entrepreneurship Development and Poverty Reduction

5.2.1 Bounds Test for Cointegration

Test Statistic	Value	I(0) Bound (1%)	I(1) Bound (1%)
Fstatistic (k = 4)	17,581.69	3.07	4.44

As with Model I, the computed Fstatistic (17,581.69) comfortably exceeds the upper I(1) bound at the 1 percent level (4.44), formally rejecting the null of "no levels relationship" and supporting the existence of a long run association between poverty, entrepreneurship expenditure, inflation, and unemployment in Nigeria.

5.2.2 Short Run Estimates and Diagnostic Anomalies

In the interest of academic transparency, the short run specification for the poverty model is reported here together with the diagnostic anomalies it displays, so that its results are not over interpreted. The full short run regression returned $R^2 = \text{Adjusted } R^2 = 1.000000$ a perfect fit that essentially never occurs with genuine macroeconomic time series data, and which signals a likely data or model construction error, most probably the inadvertent inclusion of the poverty variable (POV) as both the dependent variable and, directly or through a transformation, a regressor. Consistent with this, coefficients on GEXPE, GEXPP, INF, and UNE in that regression were of the order 10^{-14} to 10^{-16} numerically indistinguishable from zero even where nominally "significant," reflecting artificially tiny standard errors produced by the near perfect fit rather than a genuine economic relationship, and the Durbin Watson statistic (0.4714) indicated strong positive residual autocorrelation.

Table 6: Short Run Error Correction Estimates — Model II

Variable	Coefficient	Std. Error	TStatistic	Prob.
D(GEXPP)	0.006805	0.000376	18.11054	0.0000
CointEq(1)*	+0.007182	2.26E05	317.6978	0.0000

In the companion error correction regression reported with an explicit CointEq(-1) label, D(GEXPP) is negative and highly significant ($p = 0.0000$), consistent with the earlier short run finding that an increase in this entrepreneurship related expenditure category is associated with a statistically significant reduction in poverty in the same year. However, the error correction coefficient itself, CointEq(-1) = +0.007182 ($p = 0.0000$), is positive. A valid error correction mechanism requires this coefficient to be negative, representing the pace at which poverty reverts to its long run equilibrium after a shock; a positive coefficient instead indicates that deviations from equilibrium are being reinforced rather than corrected over time. Combined with

the technically implied but wrongly signed correction speed (0.7 percent per period), this indicates that, as estimated, the short run poverty equation does not behave as a genuine error correction model, notwithstanding the Bounds Test's confirmation of a long run relationship. The Durbin–Watson statistic for this equation (0.542) similarly signals strong positive autocorrelation, and the standard deviation of the differenced poverty series (4.51×10^{-15}) is implausibly close to zero for genuine poverty data pointing to a data construction or transformation issue specific to this equation.

5.3 Synthesis of Findings

Read together, the two models provide asymmetric but complementary evidence. The employment model (Model I) offers robust, econometrically sound evidence that entrepreneurship development proxies by government fiscal support for entrepreneurship has both an immediate and a durable positive effect on employment promotion in Nigeria, with a rapid speed of self-correction toward long run equilibrium. The poverty model (Model II), while confirming a long run cointegrating relationship through the Bounds Test, is undermined in its short run specification by data or construction anomalies that prevent firm conclusions about the speed, or even the direction, of poverty's short run adjustment. This asymmetry is itself informative: it suggests that entrepreneurship development in Nigeria has translated more reliably, and more measurably, into employment outcomes than into verified short run poverty reduction a pattern broadly consistent with the theoretical expectation (Wernerfelt, 1984; Lewis, 1954) that employment effects should precede durable poverty reduction, since sustained income and asset accumulation take longer to register than initial job placement.

6. Conclusion and Recommendations

6.1 Conclusion

This study set out to examine the effectiveness of entrepreneurship development in promoting employment and reducing poverty in Nigeria over the period 1990–2025, using an ARDL bounds testing framework. The evidence indicates a significant relationship between entrepreneurship development, employment promotion, and poverty reduction in Nigeria: employment and poverty outcomes do not arise by chance but follow from deliberate planning and policy, and their improvement is contingent on overall macroeconomic performance. For Nigeria to achieve sustained economic growth, investment in youth entrepreneurship and innovation must be treated as a core budgetary priority rather than a residual item.

On the strength of the Model I results, the null hypothesis that entrepreneurship development has no significant effect on employment promotion (H01) is rejected: entrepreneurship related expenditure exerts a positive, statistically significant, and rapidly adjusting effect on employment. The evidence on poverty reduction (H02) is more qualified: while the long run Bounds Test supports a genuine cointegrating relationship, the corresponding short run estimates require re-

verification before the null hypothesis can be confidently rejected. On H03, capital formation and government fiscal support are both confirmed to matter for the entrepreneurship–employment–poverty relationship, though not always in the theoretically expected direction, underscoring the importance of expenditure composition rather than expenditure volume alone. Overall, the study confirms that the variables under review possess stable long run statistical properties, consistent with genuine cointegration rather than a spurious, random walk association, and supports the conclusion that entrepreneurship development is an effective, though not self-sustaining, instrument for employment generation and, subject to the caveats noted, poverty reduction in Nigeria.

6.2 Policy Recommendations

- Institutionalise ring-fenced, multi-year entrepreneurship financing. Government fiscal support for entrepreneurship (GEXPE) is positive and highly significant on employment in both the short and long run, and the error correction coefficient (-0.987) shows that roughly 98.7 percent of any employment gain reverses within a single year once support is withdrawn. This directly warrants annual, ring-fenced budgetary allocations rather than discretionary or one-off spending.
- Audit and restructure capital-formation-related expenditure (GEXPP). This variable carries a negative and highly significant long-run coefficient on employment a counterintuitive result that points to inefficiency or misallocation within this specific expenditure category. This finding warrants a targeted audit of how capital-formation spending is composed and disbursed, rather than a general infrastructure recommendation.
- Target entrepreneurship programmes explicitly at reducing unemployment. Unemployment (UNE) exerts a negative and highly significant long-run drag on employment in Model I, indicating unemployment's own persistence is a structural constraint. NDE and related schemes should therefore be explicitly designed and evaluated against graduate and youth unemployment reduction targets.
- Re-verify and reconstruct the poverty data series before drawing short-run poverty policy conclusions. The short-run poverty model displayed diagnostic anomalies a near-perfect fit ($R^2 = 1.000000$), a wrongly signed and near-zero error correction coefficient ($+0.0072$), and strong residual autocorrelation (Durbin–Watson well below 1) most likely arising from the construction of the poverty variable. Short-run poverty conclusions should not be used for policy until this is corrected and the equation re-estimated, notwithstanding the confirmed long-run cointegrating relationship.

6.3 Limitations of the Study

The study is limited by its reliance on national level annual time series data, which cannot capture regional or sectoral heterogeneity in entrepreneurship outcomes. The short run poverty model, in particular, displays diagnostic anomalies most likely arising from the construction of the poverty variable that limit the reliability of its short run coefficients; these should be treated

as provisional pending re estimation with corrected data. Future studies would benefit from disaggregated, panel, or primary survey data capable of more precisely tracing the individual level and regional mechanisms through which entrepreneurship affects employment and poverty in Nigeria.

References

- Acs, Z. J., & Audretsch, D. B. (2005). *Entrepreneurship, innovation and economic growth*. Edward Elgar.
- Adebayo, N. A., & Nassar, M. L. (2014). Impact of micro and small business entrepreneurship on poverty reduction in Ibadan metropolis, South Western Nigeria. *International Review of Management and Business Research*, 3(3), 1603–1626.
- Agbana, Z. E., & Agbana, O. A. (2024). The role of entrepreneurship development on economic growth in Nigeria. *Open Access Journal of Business and Entrepreneurship*, 2(3), 46–59.
- Akanwa, P. U., & Akpanabia, N. H. (2012). *Entrepreneurship development as panacea for unemployment reduction in Nigeria*. Reiko Journals. <https://www.reikojournals.org>
- Akingbade, W. (2022). Challenges of SMEs in Nigeria. *Nigerian Journal of Business*, 14(1), 88–102.
- Akpor-Robaro, M. O., & Afolabi, T. S. (2024). Women entrepreneurship and poverty alleviation among low-income families in developing societies: An empirical evidence from Nigeria. *International Journal of Religion*, 5(10), 2409–2427.
- Ayegba, O., & Omale, S. A. (2016). Factors rocking entrepreneurial development in Nigeria. *European Journal of Business and Management*, 8(12), 33–39.
- Banerjee, A. V., & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty*. PublicAffairs.
- Banerjee, A. V., & Newman, A. F. (1993). Occupational choice and the process of development. *Journal of Political Economy*, 101(2), 274–298.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Central Bank of Nigeria. (2020). *National financial inclusion strategy*. CBN.
- Institute of Development Studies. (2025). *Growth from below: Poverty reduction beyond social protection in Nigeria*. IDS.
- International Labour Organization. (2019). *World employment and social outlook*. ILO.
- Kirzner, I. M. (1973). *Competition and entrepreneurship*. University of Chicago Press.

- Kirzner, I. M. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of Economic Literature*, 35(1), 60–85.
- Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *The Manchester School*, 22(2), 139–191.
- McClelland, D. C. (1961). *The achieving society*. Van Nostrand.
- National Bureau of Statistics. (2023a). *Nigeria labour force survey*. NBS.
- National Bureau of Statistics. (2023b). *Unemployment and poverty*. NBS.
- Ogu, C., & Omenihu, F. (2025). Entrepreneurship and unemployment in Nigeria. *African Journal of Social and Behavioural Sciences*, 15(8).
- Onwuka, I. N. (2025). Entrepreneurship and economic development in Nigeria: Implications for job creation, innovation and wealth generation. *World Journal of Advanced Research and Reviews*, 25(2), 962–973.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289–326.
- Popoola, M. A., Ojo, A. O., & Akande, S. S. (2025). Entrepreneurship practices as a strategic tool for poverty reduction in Nigeria. *Management and Entrepreneurship: Trends of Development*, 3(33), 149–161.
- Schumpeter, J. A. (1934). *The theory of economic development*. Harvard University Press.
- Sen, A. (1999). *Development as freedom*. Oxford University Press.
- SMEDAN & NBS. (2021). *National survey of micro, small and medium enterprises*. SMEDAN.
- Sule, M., Ibrahim, M., & Abdullahi, I. A. (2024). Impact of small and medium-scale enterprises on women's empowerment in Nigeria. *British Journal of Management and Marketing Studies*, 7(2), 83–98.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- World Bank. (2022). *Nigeria poverty assessment*. World Bank.