



Entrepreneurship Business Activity and poverty reduction in FCT, Abuja

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ABSTRACT

This study investigates the impact of entrepreneurial business activities on poverty reduction in the Federal Capital Territory (FCT), Abuja, Nigeria, using a survey research design. The independent variables are the manufacturing, transport and storage, and information and communication technology (ICT) sectors, while the dependent variable is poverty reduction. The target population includes individuals engaged in entrepreneurial activities within these sectors. A sample size of 396 respondents was determined using the Yamane formula. Data analysis was conducted using a Robust Generalized Least Squares (RGLS) model to assess the contributions of these key sectors to poverty reduction. Findings indicate that the manufacturing sector significantly contributes to poverty reduction, with a coefficient of 0.0744822, suggesting that each unit increase in manufacturing activity is associated with a 0.074 decrease in poverty levels. The transport and storage sector also shows a positive impact, with a coefficient of 0.045221, highlighting its role in enhancing economic connectivity and market access. Similarly, the ICT sector exhibits a positive effect on poverty reduction, with a coefficient of 0.0240620, underscoring the transformative role of technology in providing access to information and economic opportunities. The model's overall fit, reflected by a Wald Chi-squared statistic of 33.59 (p -value = 0.000), validates the collective significance of these sectors in poverty reduction and confirms the robustness of the model. The study recommends targeted government support for the manufacturing sector through subsidies and incentives for micro small and medium-sized enterprises (SMEs), including tax breaks, affordable credit, and access to raw materials at reduced costs, to further enhance poverty reduction efforts.

KEYWORD: Entrepreneurship Business Activity, poverty reduction, MSME

It has long been realized that poverty is one of the main issues that every developing country faces in its severe form, which is one of the major retarding factors in the economic growth and development of the country (Bruton, Ketchen, & Ireland, 2013). The World achieved the Millennium Development Goal of reducing poverty rate to half of the set target by 2030 (United Nations, 2023). According to the World Bank (2023), "despite the development made in decreasing poverty, the total number of individuals living in extreme poverty globally stays high. Today, the total population living in poverty is 2.47 billion and poverty is defined as those surviving with a daily income of US\$ 2.0 or less. By estimating global growth, poverty reduction may not be fast enough to reach the World Bank's target of ending extreme poverty by 2030." In reality, poverty is an issue in every country; however, each may be suffering from different forms of poverty, depending on their levels of economic and social development. Thus the definitions of poverty in developed, developing and underdeveloped countries are different. Entrepreneurship is one of the oldest human activities. This activity is focused on identifying new opportunities and using those opportunities in a new business venture for monetary gain (Landstrom, 2007).

Entrepreneurship is a process where an individual uses their skills to identify the opportunities and acquire and use resources and innovation to create value and fulfil the needs of those opportunities (Coulter, 2001). Each country strives hard to improve the financial well-being of its general public and explores the effectiveness of several indicators for achieving this goal (Okpara, 2011). In order to understand the effect of entrepreneurial business activities on poverty reduction in Nigeria, there is a need to review the existing evidence, theories, and barriers that impede the economies to relieve the burden of poverty. Based on this, the study tends to fill this gap by assessing the effect of entrepreneurship business activities on

I. Introduction



poverty reduction in Federal Capital Territory while specific objectives are to;

- i. Assess the effect of manufacturing on poverty reduction in Federal Capital Territory.
- ii. Investigate the effect of transport and storage on poverty reduction in Federal Capital Territory.
- iii. Determine the effect of information and communication on poverty reduction in Federal Capital Territory.

The following hypotheses were formulated and tested in this paper:

H₀₁: Manufacturing has no significant effect on poverty reduction in Federal Capital Territory, Abuja

H₀₂: Transport and storage has no significant effect on poverty reduction in Federal Capital Territory, Abuja

H₀₃: Information and communication has no significant effect on poverty reduction in Federal Capital Territory, Abuja.

II. Literature Review

Conceptual Review

Entrepreneurial Business Activities

Entrepreneurial business activities involve the identification, evaluation, and exploitation of opportunities to create and grow human capital development and physical resources (Baron & Shane, 2020). Business activities refer to the actions and operations undertaken by an organization to achieve its goals and objectives. Several authors have defined business activities as follows: According to Hill, *et al.* (2020) Business activities are the actions and tasks that an organization undertakes to create and deliver its products or services, and to manage its operations and resources." Kotler, *et al.* (2019) defined "Business activities encompass the full range of functions and processes that an organization performs to design, produce, market, and deliver its offerings to customers." Also Barney & Hesterly (2019) defined "Business activities to involve the coordination of resources, capabilities, and processes to create and sustain competitive advantage and achieve organizational goals." According to Osterwalder *et al.* (2014) "Business is defined as activities or specific tasks and operations that an organization performs to execute its business model and achieve its strategic objectives." Business activities in relation to entrepreneurship refer to the actions and operations undertaken by an entrepreneur or a start-up to create and grow a successful business.

Poverty Reduction

Onibokun and Kumuyi (1996) defined poverty as "a deprivation of entitlement through lack of access to economic and social resources, as well as to political participation and consultation". As opposed to the widely held misconception that poverty is simply "low income," Osmani (2003) refer to it as "basic capability failures." "Failures are such as the capacities to be free from hunger, to live a healthy and active life, and so on," According to World Bank (2019) "Poverty reduction involves a multifaceted approach that addresses the root causes of poverty, including economic, social, and political factors, to create sustainable livelihoods, promote social justice, and empower individuals and communities to break the cycle of poverty." "Poverty reduction refers to the process of decreasing the number of people living in poverty, improving their access to basic necessities like food, water, shelter, healthcare, and education, and enhancing their overall well-being and quality of life (United Nations, 2020).

III. Theoretical Framework

The parent theory of this research is hinged on The Vicious circle of Poverty which was propounded by Ragner Nurkse in (1953). The theory holds that there are circular relationships known to be vicious circle of poverty that will likely perpetuate the low level of development in less developed countries. It implies a circular constellation of forces tending to act and react upon another in such a way as to keep a poor country in a state of poverty. The vicious cycle theory implies that poverty breeds poverty, occurs through time, and transmits its effects from one generation to another (Jhingan, 2001). The theory posits that the various conditions of the poor combine to make them (the poor) remain in poverty; the poor are so entrapped in the web of poverty that there is little or no chance of escape. Indeed, the vicious circle theory has both demand side and supply side. The demand side shows that low productivity leads to low income and low income brings about low demand; low demand leads to low investment and low investment leads to capital deficiency which in turn brings about low productivity. On the supply side of the cycle, low productivity leads to low income and low income leads to low saving which in turn leads to low investment; low investment brings about capital deficiency and this in turn brings about low productivity. Hence, theory stressed the fact that less developed countries total productivity is low due to low level of real income that leads to a low level of demand



that in turn leads to low rate of investment and hence back to deficiency of capital to low productivity and low income.

Adopting the vicious circle of poverty as the parent theory for the study, the study area is not an exception to this problem in totality. North Central Nigeria, which is the area under consideration, is engulfed with many small and medium scale enterprises, with a large population. Hence, a poverty reduction strategy that hopes to achieve result be directed towards small and medium scale business activities or trade rather than agriculture and crude oil which have already been over depended on.

IV. Empirical Review

Bugaje, Abd, Said, Ho, and Adamu (2024) examined the mediating effect of entrepreneurial activity on the relationship between the precursors of entrepreneurship and poverty. The study used a survey method and partial least squares structural equation modelling (PLS-SEM) to analyze the data, which confirmed all hypotheses, revealing significant direct relationships except for uncertainty avoidance. The findings suggest that access to finance, entrepreneurial potential, individualism, and masculinity's impact on poverty are mediated by entrepreneurial activity. The paper advocates for an increase in formal and informal funding and suggests that government programs should emphasize skill development over business programs. This study enriches the existing literature by detailing the mediating effect of entrepreneurial activity on poverty drivers.

Ogundele (2019) observes that for the success of National Economic Empowerment and Development Strategy (NEEDS), Nigeria require a new development approach which will release the best in the nation human capital for the economic development effort. This Ogundele (2019) calls spiritual capitalism, which will involve among others calling out the best from every Nigerians. It will also involve individual self-development where individuals are the key driver in developing themselves. These will be capped by leadership with vision. One of the major thrusts of NEEDS is, growing the private sector, and this calls for massive training and development of indigenous entrepreneurs in Nigeria, hence the demand for refocusing on training programme more importantly on entrepreneurship.

Also, Opusunju et al. (2019) examined the effect of Entrepreneurship on the performance of small business and observed a positive significant effect of entrepreneurship on small business

performance. The study also reports a significant relationship between operation management challenge and small business performance.

Yusuf (2018) on the other hand examined the effect of entrepreneurship on economic activities. The study found that entrepreneurship has positive impact on crop production and animal production, which are argued to be the bedrock of economic activities in rural areas.

Anak, Ketut, MSIE, Gede, and Ayu (2018) also studied the role of organizational innovation as a mediator of relationship of entrepreneurial leadership on organizational performance. Data analysis was done with SEM-PLS through the stages of evaluation of measurement model, structural model evaluation, and hypothesis testing. The feasibility of the model was evaluated based on Q-square predictive relevance (Q²) and Goodness of Fit (GoF). The study revealed that there is a significant positive effect between entrepreneurial leadership on organizational innovation and organizational performance. However, this study seeks to study the effect of organizational innovation on entrepreneurial performance among small and medium enterprises in Yola North metropolis of Adamawa State.

Kayode (2017) examined the nexus between special purpose vehicles and the promotion of entrepreneurship in Kaduna State, Nigeria. Data was sourced by administering questionnaires and interviews to both beneficiaries and non-beneficiaries of You-WIN beneficiaries of the scheme. Using the descriptive statistics alongside binary logit regression, the findings reveal that jobs provided by You-WIN have a positive welfare implication via income generated from businesses.

Orugun (2016) examined poverty issue and the entrepreneurial engagement of small scale enterprises in Nigeria: an empirical study. Data for the study were analyzed with the aid of descriptive statistics, correlation analysis and regression. The findings indicate a positive correlation between entrepreneurship through SMEs and poverty level, and significant positive correlation between poverty and unemployment Nigeria.

Achumba et al. (2016) adopting an ex post facto research design to examine security challenges in Nigeria and their impact on business activities and sustainable development. The study reviewed how insecurity in Nigeria is affecting business activities as well as attainment of sustainable development. The study analyzed data thematically and found that the insecurity challenge in the country is enormous and complex and would continue to be, if the situation remains unabated. The study therefore emphasized the need to evolve a safe business environment that is



conducive for business activities and sustainable development.

In a related study, Abbas and Sani (2016) assessed the effect of entrepreneurship on operations of small and medium business enterprises in Nigeria; found that entrepreneurship seriously affects small business operations and negatively impacts socio-economic development. The study concluded that small businesses are in dire need of support and security for business growth and sustainability. Similarly, Owolabi and Ayenakin (2015) examine the effect of insecurity on foreign direct investment (FDI) in Nigeria, and found that a negative relationship between Foreign Direct Investment (FDI) and insecurity. The study concludes that insecurity prevents foreign business from investing in Nigeria.

Hussain, Bhuiyan and Bakar (2014) conducted an empirical review on entrepreneurship development and poverty alleviation. The study was a general search to accumulate empirical literatures by the name of entrepreneurship development and poverty alleviation in different online database sources such as Google Scholars, Springer Link, Wiley, Science Direct, JSTOR, Emerald full text, Scopus, and EBSCO HOST etc. it was found that innovation, entrepreneurship training and education, family background, government support program, social entrepreneurship, women participation, individual entrepreneurial characteristics, participation of micro, small & medium enterprises, youth empowerment, collaboration of government-university-industry is the key tool for entrepreneurship development which is stimulating employment are eventually alleviating poverty. Training in entrepreneurship and provision of other facilities could give poor owners of micro and small enterprises opportunities to grow their businesses and get themselves and other out of poverty.

Adebayo (2014) examined impact of micro and small business entrepreneurship on poverty reduction in Ibadan metropolis, South Western Nigeria. The study population was drawn from a register of relevant trade association, published government documents, which yielded to a total of 383 enterprises. The study used proportional sampling method. The main statistical tool was the counterfactual or Difference-in-Difference model of impact assessment. With $\exp(B_3) = 1.385$, the empirical results indicated that the odds of individual in micro and small business entrepreneurship in Ibadan metropolis to earn more than US\$1.25 per day increased by 39%. The study found that the impact could have been more pronounced but for some socio-economic, infrastructural and management

challenges. The study recommended strengthening of youth entrepreneurship, increased publicity of government business development and support services, liberalization of access to and usage of business premises, reduction in cost of production, improvement of infrastructural facilities among others.

Bruton, Ketchen and Ireland (2013) argued that rather than viewing those in poverty as a market for goods, the solution to the poverty lies in understanding how to help those living in poverty create their own businesses; as entrepreneurship among those in poverty will create a long lasting solution to their poverty. Hence, they examine the extant knowledge about entrepreneurship.

Misango and Ongit (2013) examined the economic role of women entrepreneurs in poverty reduction in Kenya. A case study was carried out among women entrepreneurs at the Maasai market within Nairobi City's Central Business District. From the target population of 664, 15% were sampled for this study, through stratified and purposive sampling techniques. Quantitative and qualitative data were collected by use of questionnaires and interviews, hence analyzed concurrently. The study showed that the economic activities carried out by the respondents were similar in nature and included selling of African artifacts, clothing and ornaments. Most respondents (95%) used readily available raw materials to make their products for sale. Majority of the respondents (83%) agreed that the businesses had made them improve their economic status. The businesses contributed to the promotion of tourism, employment and export trade. The study concludes that women entrepreneurs play a major role in poverty reduction in Kenya.

Adofu and Akoji (2013) examined the impact of entrepreneurship skill acquisition on poverty in Kogi State of Nigeria. They used structured questioners for collecting primary data from six Local Government Area of the state and used descriptive statistics like frequencies and percentages. They found that 65% of the respondents accepted that lack of entrepreneurship skills among youth is responsible for the high rate of poverty in Nigeria. The result also revealed that at least 60% of the people that benefitted from the skill acquisition programme can afford the basic necessity of life.

Ismaila (2012) conducted study on "small and medium scale enterprises and employment generation in Nigeria: the Role of Finance". The study examined the contribution of small and medium scale enterprises on employment generation in Nigeria. The Binomial Logistics Regression Analysis was employed as tools for statistical



analysis. The study observed that the sector was unable to achieve this goal due to inability to adequate business finance for the sector. The study recommended the need for integration of activities of formal sector with that of informal financial institutions.

Mela (2011) conducted a study on “small-scale enterprises and poverty reduction in Benue State: A case study of the Burnt Bricks laying enterprises in Makurdi metropolis”. He distributed 100 questionnaires from which primary data were collected and analyzed using percentages, tables and charts. He also used logistic regression and discovered that brick laying created employment and provided income for the sampled respondents to access the basic need of life. The study discovered that, the challenges of brick laying included: low prices of bricks, low demand for bricks, poor transportation networks, fire wood scarcity as well as shortage of capital. The researcher recommended that infrastructural development should be given adequate attention, that more credit should be directed to small scale enterprises, that more awareness should be created about the durability of burn bricks to increase their demand, that brick layers should be credit worthy and that corruption should be dealt with using more stringent measures.

Ampadu (2010) profiled the main characteristics of MSEs by means of literature review, focus group discussions (FGD), and personal interviews of key informants. The insight gained from this qualitative research is supported by quantitative data collected by means of a structured questionnaire designed for the local actors in the MSE sector. The study covered six districts in the northern region. Generally, the study indicates that several constraints related to vocational training, management and lack of access to larger distribution networks and technology hamper the path of rural enterprise development and poverty reduction in rural Northern Ghana. The study recommended that policy makers, development planners and business development organizations should design the appropriate incentive packages, training and financial support for rural small-scale enterprises development.

V. Methodology

The research design used in the study is a survey. Small and large enterprises employ survey research designs to comprehend and examine new trends, market demands, and sample opinions. This kind of design is used to depict what is happening right now and to identify the qualities that are most prevalent in a population at a particular period.

Furthermore, it established relationships between the variables. In accessing the effect of entrepreneurial activity on poverty reduction in Federal Capital Territory, Abuja, this survey design allows for the systematic collection of quantitative data. Respondents may be asked to provide information on factors influencing their decision to engage in entrepreneurial activities, their socio-economic context, and the perceived effect of entrepreneurial activities on poverty reduction in Federal Capital Territory, Abuja.

The target population of this study covers the entrepreneurship activities of people by various firms such as manufacturing, transport and storage and information and communication in Abuja, FCT. The populations have the total of 38,003 persons from the following firms: manufacturing has 10,095 persons, transport and storage has 18,408 persons, and information and communication has 4,453 persons (SMEDAN, 2023). It is from this population that representative sample size was used for carrying out the study.

Sample size of a population is used to make inferences about a population. The benefits of using sample size include cost effectiveness, convenience, timesaving, ease of managing data, collection of detailed information from respondents and ease of data analysis. The entire population provided for the study cannot be reliably studied; hence, the need to select a sample that would be representative of the entire population. A representative sample size with known confidence and risk levels will be selected, based on the work of Yamane (1967) formula.

$$n = \frac{N}{1 + Ne^2}$$

Where:

n = Sample size

N = Population size

e = Level of significance (error)

1 = Constant number

For the purpose of this study, our level of significance (e) = 5% or 0.05 that is 95% confidence limit. Based on this, the sample size was determined.

$$n = \frac{N}{1 + Ne^2}$$

Since $N = 38,003$

$e = 0.05$

$$n = \frac{38,003}{1 + 38,003(0.05)^2}$$

$$n = \frac{38,003}{1 + 38,003(0.0025)}$$

$$n = \frac{38,003}{1 + 95.0075}$$

$$n = \frac{38,003}{96.0075}$$



n = 395.8
n = 396

The sample size of this study is therefore 396. This shows that 396 respondents were selected for the study which is justified because information derived from the sample is adequately generalized to be views of the whole population under study. The samples of 396 entrepreneurs were selected from various sectors, including manufacturing, transport and storage, and information and communication. The sample consisted of registered firms Abuja, FCT, Nigeria. The data collection approach employed for the study was quantitative in nature and used the survey method. Data were collected using in-depth questionnaire, which allowed for greater control over the survey environment (Randall & Gibson, 1990), reduced potential misunderstandings, and ensured standardized administration.

This study's analysis was based on multiple linear regression models and descriptive statistics to determine the effect of entrepreneurial activities on poverty reduction in North Central Nigeria. Based on the respondent bio-data and the concerns mentioned in the questionnaire, the descriptive statistics were calculated using a simple percentages approach of data analysis. For ease of comprehension, the analysis was provided in tabular form and includes the total number of responses and the appropriate percentage calculated using the formula below:

$$\frac{\text{Number of Respondent}}{\text{Total Number of Questionnaire}} \times \frac{100}{1}$$

The Robust Generalized Least Squares (RGLS) methodology was employed to estimate the multiple linear regression models in this study. The choice of RGLS is justified by its ability to provide efficient estimates in the presence of heteroscedasticity and non-normality in the data, which often violate the assumptions underlying ordinary least squares (OLS) estimates. The estimation process was carried out using the statistical software STATA 14. To summarize the central trends and characteristics of the dataset, descriptive statistics were utilized. These statistics include measures such as mean, median, standard deviation, maximum, minimum, skewness, and coefficients of variation. Descriptive statistics play a crucial role in the initial stages of statistical analysis as they help identify outliers, explore correlations between variables, and provide insights into the distribution of the data. Moreover, they serve as the foundation for all subsequent quantitative analyses and were instrumental in assessing the quantitative

data derived from the structured questionnaires employed in this study. In this context, multiple linear regression is a statistical technique that utilizes two or more independent variables to predict the outcome of a dependent variable. This approach allows for the analysis of one dependent variable proxy against several independent variable proxies. The primary objective of the study is to estimate the value of the single dependent variable using the known values of the independent variable proxies. This method aligns well with the research questions of the study, as it investigates how three independent variables influence the outcome of one dependent variable proxy. The application of RGLS not only strengthens the robustness of the findings but also enhances the reliability of the conclusions drawn from the analysis.

VI. Model Specification

This study utilized multiple regression models as developed by Pearson (2001). The multiple regression models captured as follows:

$$Y = \beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j} + \dots + \beta_n X_{nj} + e_t \quad \text{-----} \quad (3.1)$$

In this study, equation 3.1 is modified to suit this research study, to have the following functional equation:

$$\text{POVR} = f(\text{MFR}, \text{TRS}, \text{INC}) \quad \text{-----} \quad (3.2)$$

Where:

POVR= Poverty Reduction

MFR= Manufacturing

TRS= Transport and storage

INC= Information and communication

However, the linear equation of the model in 3.2 is specifying as;

$$\text{POVR} = \beta_0 + \beta_1 \text{MFR}_{t-1} + \beta_2 \text{TRS}_{t-2} + \beta_3 \text{INC}_{t-3} + \varepsilon_t \quad \text{-----} \quad (3.3)$$

Where;

β_0 = Intercept

$\beta_1 - \beta_4$ = Coefficients

ε_t = Error Term

VII. Results and Discussion

The study aimed at a sample of 396 populations (100%), the number of questionnaire retrieved and valid for analysis was less. 396 copies of the questionnaire were distributed, 5 copies could not be retrieved while 4 copies were not properly filled, making them invalid and unusable. In all a total of 387 copies were both properly filled and returned. In other words, the sample for this study is 97.7%.



Table 4.1 Frequency and Percentage Distribution of Respondents by their Socio-economic Characteristics, Business Location and Nature of Business

Socio-economic Characteristics	Frequency	Percentages (%)
Gender		
Male	309	79.8
Female	78	20.2
Total	387	100.0
Age Status		
18-35 Years	240	62.02
36-45 Year	120	31.0
46-60 Year	24	6.20
61 Year Above	3	0.78
Total	387	100.0
Marital Status		
Single	72	18.6
Married	315	81.4
Total	387	100.0
Education Status		
Primary	30	7.8
Secondary	52	13.4
Tertiary	305	78.8
Total	387	100
Location		
Abuja Municipal	300	77.5
Bwari	10	2.6
Gwagwalada	40	10.3
Kuje	15	3.9
Kwali	12	3.1
Abaji	10	2.6
Total	387	100

Source: Field Survey (2024)

The distribution of respondents by gender, age, educational status and location of business by Area Council in Abuja Federal Capital Territory is shown in table 4.1. From this table, there were more male (79.8%) in entrepreneurial activities than female (20.2%). This is expected as men are usually the dominant bread winners of many households. The business units under study are principally of formal sector and as a result having 100% Nigerians in them.

Table 4.1 also presents the age structure of the sampled business entrepreneurs. From this table micro and small business entrepreneurs between 18-35 years were 62.02%, closely followed by those between 36-45 years (31.0%). The rest consisted of those between 46-60 years (6.2%) and those above 60 years (0.78%). From this sample, micro and small

business entrepreneurs in Abuja federal capital territory metropolis were predominantly young. Since the active labour force is made up of those between 18 and 60 years, whose combined population in this study is 384 (or 99.2%) the study is made richer. This is because most of the respondents (99.2%) belong to the age group, whose employment should be a major source of concern. About one third (78.8%) of the entrepreneurs had primary education. This is followed by those with secondary education (13.4%). The remaining 7.8% of the sample held tertiary education. From this table, Abuja municipal council had the highest respondents of 77.5%, followed by Gwagwalada 10.3%, Kuje 3.9%, Kwali 3.1% in that order. Bwari and Abaji both had lowest number of respondents of 2.6%.



Table 4.2: Frequency and Percentage Distribution of Respondents by Nature and Characteristics of Business

Entrepreneurial Activities	Frequency	Percentages (%)
Manufacturing	109	28.2
Transport and storage	128	33.1
Information and Communication	150	38.7
Others	0	0
Total	387	100.0
Entrepreneurial Motivation		
Opportunity	77	19.9
Necessity	310	80.1
Total	387	100.0
Age of Business		
< 5 years	120	31.0
5 – 10 years	210	54.3
> 10 years	57	14.7
Total	387	100.0
Number of Workers		
1-5	342	88.4
6-10	45	11.6
Total	387	100.0
Size of Start-up Capital		
≤ 1,500,000	30	7.8
1,500,001 – 50,000,000	48	13.4
> 50,000,000	305	78.8
Total	387	100

Source: Field Survey (2024)

From table 4.2. 33.1% of the respondents were engaged in transport and storage, while those in manufacturing were 28.2%. Those engaged in information and communication were 38.7%. Entrepreneurship literature has theoretically established two dominant motives of entering into business; exploitation of economic opportunity and inability to secure alternative means of livelihood. Those who engage in the former are called opportunity entrepreneurs while those engaged in the latter are referred to as necessity entrepreneurs. From table 4.2 about 80.1% of the respondents were into necessity entrepreneurship while the remaining 19.9 percent were engaged in opportunity entrepreneurship.

The table reveals that 54.3% of the businesses have been in operation for between 5 to 10 years, suggesting a level of sustainability among these enterprises. Businesses operating for less than five years constitute 31.0%, indicating a relatively high number of new or emerging enterprises. Those with over ten years in operation represent only 14.7%, showing a smaller proportion of established businesses. This distribution suggests that while a

good number of businesses are able to endure beyond the initial few years, relatively few survive or sustain growth beyond a decade. This trend is consistent with studies that indicate the first five years are critical for business survival and growth, and those able to survive this period are better positioned for stability and potential expansion.

Most of the surveyed businesses are microenterprises, with 88.4% employing between 1-5 workers, indicating a reliance on minimal staffing to maintain operations. This high percentage of microenterprises reflects the structural composition of small businesses in developing economies, where limited access to capital and markets often restricts expansion. Only 11.6% of respondents' businesses employ between 6-10 workers, categorizing them as small enterprises under the adopted definitions. This distribution illustrates the challenges many entrepreneurs face in scaling their businesses to a larger size, which can be attributed to factors such as limited financing, market access, and administrative support.

In terms of start-up capital, the majority of respondents, 78.8%, began with more than 50



million, showing that a significant amount of initial investment is required for business entry in the sample's industries, which may contribute to barriers for entry-level entrepreneurs. A smaller proportion, 13.4%, reported start-up capital between 1,500,001 and 50,000,000, while only 7.8% initiated their ventures with 1,500,000 or less. This distribution indicates a high entry cost barrier, with capital

requirements possibly limiting entrepreneurial activity to individuals with greater financial resources or access to credit. This trend is consistent with findings in entrepreneurship research, which indicate that high start-up costs can impede potential entrepreneurs, especially in capital-intensive sectors such as manufacturing and information and communication.

Table 4.3: Frequency and Percentage Distribution of Respondents' Perceptions on the Socio-Economic Impact of Entrepreneurial Activities in Manufacturing, Transport, Information Sectors, and Poverty Reduction

Question	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Total
Manufacturing						109
Manufacturing activities positively impact income.	35 (32.1%)	40 (36.7%)	20 (18.3%)	10 (9.2%)	4 (3.7%)	109
Increased manufacturing leads to job creation.	50 (45.9%)	30 (27.5%)	15 (13.8%)	8 (7.3%)	6 (5.5%)	109
Manufacturing supports local economic growth.	45 (41.3%)	37 (33.9%)	15 (13.8%)	7 (6.4%)	5 (4.6%)	109
Transport and Storage						128
Transport and storage reduce barriers to employment.	40 (31.3%)	45 (35.2%)	20 (15.6%)	15 (11.7%)	8 (6.2%)	128
Improved transport boosts access to goods and services.	55 (43.0%)	40 (31.3%)	20 (15.6%)	8 (6.2%)	5 (3.9%)	128
Transport and storage create jobs and support growth.	52 (40.6%)	42 (32.8%)	18 (14.1%)	10 (7.8%)	6 (4.7%)	128
Information and Communication						150
Access to information drives business opportunities.	60 (40.0%)	50 (33.3%)	20 (13.3%)	15 (10.0%)	5 (3.3%)	150
Communication technology improves income generation.	58 (38.7%)	55 (36.7%)	22 (14.7%)	10 (6.7%)	5 (3.3%)	150
Information access reduces poverty and creates awareness.	65 (43.3%)	45 (30.0%)	20 (13.3%)	12 (8.0%)	8 (5.3%)	150
Poverty Reduction						387
Entrepreneurial activities directly reduce poverty levels.	70 (18.1%)	90 (23.3%)	100 (25.9%)	80 (20.7%)	47 (12.1%)	387
Increased access to credit for entrepreneurs reduces poverty.	60 (15.5%)	75 (19.4%)	130 (33.6%)	80 (20.7%)	42 (10.9%)	387
Skills training programs for entrepreneurs enhance income opportunities and reduce poverty.	80 (20.7%)	85 (22.0%)	100 (25.9%)	70 (18.1%)	52 (13.4%)	387

Source: Field Survey (2024)

The data in Table 4.3 provides insights into respondents' perceptions of the socio-economic impact of entrepreneurial activities in three sectors: manufacturing, transport and storage, and

information and communication. The manufacturing sector shows a strong perceived positive impact on income, job creation, and local economic growth. Notably, 36.7% of respondents agreed, and 32.1%



strongly agreed that manufacturing positively impacts income, totaling nearly 70% in favor of this view. This aligns with economic theory, which positions manufacturing as a significant contributor to income generation through the production of goods and employment opportunities. Additionally, 45.9% of respondents strongly agreed that manufacturing leads to job creation, reinforcing its perceived role in reducing unemployment. Similarly, over 75% of respondents agreed or strongly agreed that manufacturing activities support local economic growth, suggesting a broad consensus on the sector's role in community development.

The transport and storage sector is seen as crucial for reducing employment barriers, with 31.3% of respondents strongly agreeing and 35.2% agreeing that this sector aids in job access. Improved transport is also recognized as enhancing access to goods and services, with 74.3% of respondents in agreement. This response highlights how transportation infrastructure is often considered a backbone of local economies, as it facilitates movement, trade, and access to resources. Furthermore, 73.4% of respondents agreed or strongly agreed that transport and storage activities create jobs and foster growth, underlining the sector's essential role in the socio-economic framework by connecting markets and reducing logistical bottlenecks.

For information and communication, the data reflects a strong consensus on its socio-economic benefits, particularly in fostering business opportunities. A significant portion, 40% of respondents, strongly agreed, and 33.3% agreed that access to information drives new business

opportunities. Moreover, information and communication technologies are seen as catalysts for income generation, with 75.4% of respondents acknowledging this benefit. The sector is also recognized for its role in poverty reduction and awareness creation, as 73.3% of respondents either agreed or strongly agreed that improved information access contributes to these outcomes. This aligns with broader findings in entrepreneurship literature, which emphasize the importance of information accessibility in leveling socio-economic disparities and enhancing entrepreneurial capacities.

Turning to the poverty reduction section, the survey findings reveal a detailed perspective on the relationship between entrepreneurial activities and poverty alleviation. A substantial 41.4% of respondents agreed and 18.1% strongly agreed that entrepreneurial activities directly contribute to reducing poverty levels. This supports the notion that entrepreneurship can serve as a powerful mechanism for economic empowerment, providing individuals with opportunities to improve their incomes and living conditions. Moreover, the perception that increased access to credit for entrepreneurs reduces poverty is reinforced by the responses, with 34.9% agreeing and 15.5% strongly agreeing. Access to financial resources is pivotal for enabling entrepreneurs to grow their businesses, create jobs, and ultimately enhance local economies. Additionally, 42.7% of respondents acknowledged the importance of skills training programs in enhancing income opportunities and reducing poverty, further emphasizing the need for targeted support in developing entrepreneurial capabilities.

Table 4.4 presents the mean, standard deviation, minimum and maximum values of the variables used in the study.

Table 4.4: Descriptive Statistics

Variables	Mean	Std. Dev.	Maximum	Minimum
POVR	0.8844156	0.0546992	0.42	0.13
MFR	0.446375	0.3224881	0.82	0.02
TRS	0.460313	0.2698611	0.98	0.01
INC	0.4534315	0.2518516	0.89	0.01

Source: Output from STATA 14, 2024

The mean value of the poverty reduction variable stands at 0.8844 with a standard deviation of 0.0547, indicating a strong consensus among respondents regarding the effectiveness of entrepreneurial activities in alleviating poverty within the Federal Capital Territory. This high mean suggests that a significant majority perceive entrepreneurship as a crucial mechanism for economic empowerment, contributing positively to

income levels and overall living conditions. The variability in responses, reflected by a minimum value of 0.42 and a maximum of 0.13, suggests that while most respondents acknowledge the benefits of entrepreneurship, there are differing opinions on the extent of its impact.

Focusing on the manufacturing sector, the mean score is 0.4464, indicating moderate perceptions of its socio-economic effects on poverty



reduction. The standard deviation of 0.3225 highlights substantial variability in views among respondents, suggesting some perceive a stronger influence of manufacturing on income generation and employment opportunities than others. The maximum score of 0.82 denotes a significant acknowledgment of manufacturing's benefits, while the minimum score of 0.02 reflects a minority opinion that sees limited impact.

In the case of the transport and storage sector, the mean is 0.4603, with a standard deviation of 0.2699, indicating generally positive perceptions regarding its contribution to poverty alleviation in the FCT. The maximum value of 0.98 shows that many

respondents recognize the substantial benefits of effective transport and storage systems in facilitating access to employment and essential goods, while the minimum value of 0.01 suggests that a few respondents may not perceive these benefits.

Lastly, the information and communication sector show a mean of 0.4534 and a standard deviation of 0.2519, reflecting moderate perceptions of its role in socio-economic improvement. The maximum score of 0.89 suggests a strong recognition of how information access and communication technologies can enhance income opportunities, while the minimum score of 0.01 indicates some respondents perceive negligible benefits.

Table 4.5: Summary of Robust Generalized Least Square (RGLS) Results

Variables	Coefficients	Robust Std. Error	Z-Values	P-Values
MFR	0.0744822	0.0153665	5.11	0.000
TRS	0.045221	0.0134398	3.42	0.000
INC	0.0240620	0.0138000	1.66	0.006
(Constant)	0.0025690	0.0043170	52.21	0.000
No. of Obs.	387			
Wald Chi ²	33.59			
Prob.	0.0000			
Log pseudo likelihood	499.55804			

Source: Output from STATA 14, 2024

Testing the Hypotheses

Based on the Robust Generalized Least Squares (RGLS) results presented in Table 4.5, we can evaluate the hypotheses related to the effects of entrepreneurship business activities on poverty reduction in the Federal Capital Territory, Abuja.

Hypothesis H01: Manufacturing has no significant effect on poverty reduction in Federal Capital Territory, Abuja.

The coefficient for Manufacturing (MFR) is 0.0744822 with a p-value of 0.000. Since the p-value is less than 0.05, we reject the null hypothesis. This suggests that manufacturing has a significant positive effect on poverty reduction in the Federal Capital Territory.

Hypothesis H02: Transport and storage have no significant effect on poverty reduction in Federal Capital Territory, Abuja.

The coefficient for Transport and Storage (TRS) is 0.045221 with a p-value of 0.000. The p-value being less than 0.05 indicates that we reject the null hypothesis. Thus, transport and storage also significantly contribute to poverty reduction in the region.

Hypothesis H03: Information and communication have no significant effect on poverty reduction in Federal Capital Territory, Abuja.

The coefficient for Information and Communication (INC) is 0.0240620 with a p-value of 0.006. Again, the p-value is less than 0.05, allowing us to reject the null hypothesis. This indicates that the information and communication sector have a significant effect on poverty reduction.

VIII. Discussion of findings

The Robust Generalized Least Squares (RGLS) results offer valuable insights into the impact of entrepreneurial activities across different sectors on poverty reduction in the Federal Capital Territory, Abuja. The coefficient for manufacturing (MFR), at 0.0744822, indicates that each unit increase in manufacturing activities is associated with a 0.074 increase in poverty reduction, a relationship that is statistically significant with a p-value of 0.000. This positive effect underscores the role of manufacturing in poverty alleviation, as this sector contributes to job creation, income generation, and skill development, thus providing a viable pathway out of poverty for many residents. These findings are consistent with



the studies by Yusuf (2018) and Hussain, Bhuiyan, and Bakar (2014), which also documented a positive influence of manufacturing and entrepreneurial activities on poverty reduction.

Similarly, the transport and storage sector shows a coefficient of 0.045221, suggesting that each additional unit in this sector's activities contributes to a 0.045 increase in poverty reduction, with a highly significant p-value of 0.000. This result emphasizes the importance of transport and storage in promoting economic connectivity, enabling the efficient movement of goods and people, and thereby fostering poverty reduction. The sector's impact on poverty can be attributed to its ability to improve market access for local producers, reduce transportation costs, and facilitate trade, all of which contribute to enhanced economic productivity and a more equitable income distribution. This finding aligns with prior research, such as Bugaje, Abd, Said, Ho, and Adamu (2024), which highlights the direct impact of transport infrastructure on poverty alleviation by improving access to employment, education, and services, particularly in underserved areas.

The information and communication sector (INC) also exhibits a significant positive effect on poverty reduction, with a coefficient of 0.0240620 and a p-value of 0.006. This suggests that an increase in activities within the ICT sector is associated with a 0.024 rise in poverty reduction. Information and communication technologies play a transformative role in addressing poverty by enhancing access to information, improving productivity, and creating new economic opportunities. Previous studies, such as Donner (2008) and the ITU (2022), underscore the crucial role of ICT in bridging access gaps, facilitating business activities, and empowering marginalized communities by improving access to resources and information.

The model's overall fit, as indicated by the Wald Chi-squared statistic of 33.59 with a p-value of 0.000, confirms the collective significance of these sectors in impacting poverty reduction, validating the robustness and predictive ability of the model (log pseudo likelihood = 499.55804). These results collectively highlight the importance of targeted support for the manufacturing, transport, and ICT sectors in Abuja. By fostering these sectors, policymakers can stimulate job creation, improve market accessibility, and elevate socio-economic conditions, suggesting that a focused approach promoting sectoral growth could be instrumental in achieving sustainable poverty alleviation.

IX. Conclusion

The findings of this study provide substantial evidence that entrepreneurial activities in manufacturing, transport and storage, and information and communication sectors significantly contribute to poverty reduction in the Federal Capital Territory, Abuja. Each sector demonstrated a statistically significant positive impact, suggesting that these areas of economic activity are pivotal in driving socio-economic improvements within the region. Manufacturing, with its capacity for job creation and skills development, plays a vital role in offering sustainable income opportunities. Similarly, the transport and storage sector enhance economic connectivity and market access, reducing the logistical barriers faced by local producers. The information and communication sector, through its transformative role in improving access to information and resources, enables economic empowerment and broadens opportunities for underserved communities. Overall, these results highlight the critical role of sector-specific entrepreneurial activities in creating pathways out of poverty and supporting socio-economic development.

X. Recommendations

Based on these findings, the following recommendations are proposed:

1. To further enhance the role of manufacturing in poverty reduction, it is recommended that the government support the sector through targeted subsidies and incentives for small- and medium-sized enterprises (SMEs). This can include tax breaks, affordable credit, and access to raw materials at reduced costs.
2. To maximize the poverty-reducing impact of the transport and storage sector, investments should be directed toward improving transport infrastructure, especially in underserved areas. Expanding and maintaining road networks, ensuring safer logistics, and reducing transit times will enhance market accessibility for rural producers and help reduce poverty by connecting remote areas with larger markets, thereby promoting economic activity.
3. Expanding access to affordable ICT services and promoting digital literacy programs can enhance the positive effects of the information and communication sector on poverty reduction. By equipping residents with digital skills and affordable technology, more individuals can engage in remote work, online education, and e-commerce opportunities, which can provide new income sources



and lift individuals out of poverty, especially in urban and semi-urban areas.

References

- [1]. Abbas, H., & Sani, A. (2017). The effect of entrepreneurship on small and medium enterprise operations in Nigeria. Abuja: National Institute of Business Research.
- [2]. Achumba, I. C., Ighomereho, O. S., & Akpor-Oboro, M. O. M. (2016). Security challenges in Nigeria and their implications for business activities and sustainable development. *International Journal of Sustainable Development*, 4(2), 79-96.
- [3]. Adebayo, T. (2015). Impact of micro and small business entrepreneurship on poverty reduction in Ibadan, South-Western Nigeria. Ibadan: University Press of Ibadan.
- [4]. Adofu, I., & Akoji, O. (2013). The impact of entrepreneurship skill acquisition on poverty alleviation in Kogi State, Nigeria. Lagos: Nigerian Institute of Economic Studies.
- [5]. Ampadu, A. (2011). Characteristics of micro and small enterprises in Northern Ghana. Tamale: Ghana Institute of Development Studies.
- [6]. Anak, A. A. K., Gede, G. G., & Ayu, M. S. (2018). The role of organizational innovation as a mediator in the relationship between entrepreneurial leadership and organizational performance. *Journal of Entrepreneurship and Business Innovation*, 5(1), 52-70.
- [7]. Barney, J., & Hesterly, W. (2019). Strategic management and competitive advantage: Concepts and cases. Pearson.
- [8]. Baron, R. A., & Shane, S. (2020). *Entrepreneurship: A process perspective*. South-Western.
- [9]. Bruton, G. D., Ketchen, D. J., & Ireland, R. D. (2013). Entrepreneurship as a solution to poverty. *Academy of Management Perspectives*, 26(3), 3-15.
- [10]. Bugaje, S., Abd, H., Said, F., Ho, Y. W., & Adamu, Z. (2024). The mediating effect of entrepreneurial activity on the relationship between entrepreneurship antecedents and poverty. *African Journal of Business and Economic Research*, 15(1), 29-45.
- [11]. Coulter, M. (2001). *Entrepreneurship in action*. Prentice Hall.
- [12]. Hill, C., Jones, G., & Schilling, M. (2020). *Strategic management: Theory and cases*. Cengage Learning.
- [13]. Hussain, J., Bhuiyan, A. B., & Bakar, A. R. (2015). Entrepreneurship development and poverty alleviation: An empirical review. Kuala Lumpur: Asian Research Institute of Business.
- [14]. Ismaila, A. (2012). Small and medium scale enterprises and employment generation in Nigeria: The role of finance. Abuja: Nigerian Institute of Financial Studies.
- [15]. Jhingan, M. L. (2001). *The economics of development and planning*. Vrinda Publications.
- [16]. Kayode, A. S. (2017). The role of special purpose vehicles in promoting entrepreneurship in Kaduna State, Nigeria. *Journal of Small Business Management*, 55(3), 413-429.
- [17]. Kotler, P., Keller, K., & Manceau, D. (2019). *Marketing management*. Pearson.
- [18]. Landstrom, H. (2007). *Pioneers in entrepreneurship and small business research*. Springer.
- [19]. Mela, J. (2011). Small-scale enterprises and poverty reduction in Benue State: A case study of burnt brick enterprises in Makurdi. Makurdi: Benue State University Press.
- [20]. Misango, S. B., & Ongiti, A. O. (2014). Women entrepreneurs and poverty reduction: The economic role of women in Kenya. *International Journal of Social Sciences*, 5(2), 117-132.
<https://doi.org/10.1080/issn.2014.1117>
- [21]. Ogundele, O. J. (2019). The National Economic Empowerment and Development Strategy (NEEDS): Entrepreneurship and the Nigerian economy. *Nigerian Journal of Economic and Social Studies*, 11(3), 112-134.
- [22]. Onibokun, A. G., & Kumuyi, A. J. (1996). Urban poverty in Nigeria: Towards sustainable strategies for its alleviation. Ibadan: Centre for African Settlement Studies and Development (CASSAD).
- [23]. Opusunju, M. I., Ahmed, M., & Esu, G. (2019). Effect of entrepreneurship on the performance of small businesses. *Journal of Business Administration and Management Sciences Research*, 8(3), 101-110.
- [24]. Orugun, J. (2016). Poverty and the entrepreneurial engagement of small-scale enterprises in Nigeria: An empirical study. *African Journal of Economic and Management Studies*, 7(2), 198-215.
- [25]. Osmani, S. R. (2003). Exploring the relationship between globalization and poverty reduction. *World Development*, 31(3), 405-428.



- [26]. Osterwalder, A., Pigneur, Y., & Clark, T. (2014). *Business model generation: A handbook for visionaries, game changers, and challengers*. John Wiley & Sons.
- [27]. Owolabi, A., & Ayenakin, A. (2016). *Effects of insecurity on foreign direct investment in Nigeria*. Lagos: Nigerian Institute for Strategic Studies.
- [28]. Randall, S., & Gibson, J. (1991). Survey data collection methods and environmental control. *Journal of Survey Research*, 9(1), 13-25.
- [29]. Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). (2022). *Entrepreneurial activities in Abuja, FCT*. Abuja: SMEDAN Publishing.
- [30]. United Nations. (2020). *Sustainable development goals report*. United Nations.
- [31]. United Nations. (2023). *Millennium Development Goals: Progress report*. United Nations.
- [32]. World Bank. (2019). *World development report: The changing nature of work*. World Bank Group.
- [33]. World Bank. (2023). *Poverty and shared prosperity report 2023*. World Bank Group.
- [34]. Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York: Harper & Row.
- [35]. Yusuf, A. (2018). The impact of entrepreneurship on economic activities: Evidence from rural Nigeria. *Journal of Rural Economics*, 9(1), 47-60.