

EFFECT OF BANDITRY ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NORTH CENTRAL NIGERIA

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Abstract

Small and Medium Enterprises (SMEs) constitute the backbone of Nigeria's economy, contributing significantly to employment, innovation, and gross domestic product. Despite their importance, SMEs in North Central Nigeria face persistent challenges from rising insecurity, particularly the surge of banditry involving armed robbery, kidnapping, and property destruction. This study investigates the effect of banditry on the operational performance, financial outcomes, and investment decisions of SMEs in the region. A descriptive survey research design was employed, and data were collected from 400 SME operators across Benue, Nasarawa, and Niger States using structured questionnaires. Findings reveal that banditry has a significant adverse effect on SME operations, leading to reduced working hours, staff absenteeism, transportation barriers, and supply chain disruptions. Financial performance indicators, including sales growth, gross margins, and net profit margins, declined sharply after banditry incidents, while operational efficiency and labor productivity dropped considerably. Statistical analysis confirmed that banditry frequency negatively and significantly impacts SME financial performance. The study concludes that persistent insecurity undermines the resilience and sustainability of SMEs in North Central Nigeria, threatening regional development and national economic growth. It recommends strengthening security infrastructure, providing financial risk-mitigation mechanisms, promoting digital transformation, and integrating SME protection into security and economic policies to enhance resilience and sustainable recovery.

Keywords: Banditry, SMEs, North Central Nigeria, operational performance, financial sustainability, investment decisions

1.0 Introduction

The bedrock of economic development in many emerging economies, including Nigeria is Small and Medium Enterprises (SMEs. SMEs contribute tremendously to generation of employment, alleviation of poverty, innovation, and national income (Adebisi & Gbegi, 2013; Ogunleye, 2016). In Nigeria, for over 90% of businesses are attributed to SMEs and contribute approximately 48% to the national GDP (SMEDAN & NBS, 2021). However, despite their crucial role, SMEs face a countless of challenges, greatest among them being the increasing insecurity occasioned by the rising wave of banditry, particularly in the North Central geopolitical zone.

Banditry includes; armed robbery, kidnapping for ransom, cattle rustling, and wanton destruction of property, has become a major security threat in North Central Nigeria, affecting states such as Niger, Kogi, Plateau, Nasarawa, Benue, and the Federal Capital Territory. The inrush in banditry has caused the loss of lives, destruction of critical infrastructure, and displacement of communities, greatly undermining socio-economic activities (Okoli & Ugwu, 2019). SMEs, by their very nature, are highly amenable to such disturbances due to their limited capital base, informal operations, and dependence on local markets and supply chains.

The worsen situation of insecurity has characterized by the forced closure of many small businesses, increased cost of doing business, disruption of supply chains, and decline in customer patronage. Entrepreneurs in affected areas now face payment of informal security levies, rising operational risks, and increased transportation costs (Adamu & Salihu, 2022). Moreover, fear of attack has stifled innovation and expansion, leading to stagnation or collapse of many SMEs.

Research has shown that insecurity negatively deters investment, affects business confidence, and reduces productivity (Aliyu & Rufa'i, 2021). In North Central Nigeria, the proliferations of armed robbers and consistent attacks on rural and urban areas have not only affect physical destruction of business assets but have also led to psychological trauma among business owners, workers and customers (Ibrahim & Bala, 2020). This creates a

risky (uncertain) environment and fears that discourages entrepreneurial activities and erodes the resilience of existing SMEs.

The implications of this trend to economic are profound. For millions of Nigerians in the region SMEs serve as the primary source of income and livelihood. SMEs decline exacerbates increases poverty rates, unemployment, and hinders local economic development. Furthermore, the inability of SMEs to thrive in a hostile security environment undermines Nigeria's broader development goals, including its aspiration to achieve inclusive growth and diversify its economy away from oil dependence (World Bank, 2020).

In spite of this significance issue, there remains a lack of empirical studies that specifically analyze the direct and indirect effects of banditry on SME performance in North Central Nigeria. Most existing literatures focus on farmer-herder conflicts or terrorism in the North Easts in the Middle Belt, leaving a critical knowledge gap in understanding how banditry affects the business landscape in the central region. Therefore, this study aims to fill that gap by examining the effects of banditry on the operational efficiency, profitability, and sustainability of SMEs in North Central Nigeria.

This research is both necessary and timely as it contributes to the growing discourse on economic development and security in fragile contexts. By analyzing the extent to which banditry impacts SMEs, the study will provide evidence-based insights for policymakers, development agencies, and local stakeholders to design targeted interventions that support the resilience and recovery of small businesses in conflict-prone areas.

1.1 Statement of the Problem

North Central Nigeria has experienced a consistent rise in insecurity caused by the activities of violent criminal groups, kidnappers and armed bandits, these threats have not only affected lives and property but have also endangered economic activities in rural and urban centers alike. Especially Small and Medium Enterprises (SMEs), which are particularly exposed to the extortion, violence associated with banditry and instability, (Ibrahim & Bala, 2020). As Small and Medium Enterprises in this region often operate without

robust security measures, financial buffers or insurance, they are more likely to experience great disruptions in their operations, including loss of goods in transit, destruction of assets, diminished investor and confidence reduced customer base, (Aliyu & Rufa'i, 2021).

Despite research on economic impact of insecurity in northern Nigeria, there is an inadequate empirical study that specifically examines how banditry affects the operational and financial performance of Small and Medium and Enterprises in the North Central region. Most academic research and policy-oriented research focus on communal conflicts in the Middle Belt or terrorism in the Northeast, leaving a literature gap in regarding the business implications of banditry in states like Niger, Plateau, Nasarawa, Benue, and Kogi (Okoli & Ugwu, 2019). Thus, decision makers, development partners and business owners lack contextual and evidence based to formulate realistic issues and region-specific interventions that could mitigate these adverse effects.

This study, therefore, seeks to bridge this knowledge gap by systematically investigating the effect of banditry on the productivity, revenue generation, investment decisions, and sustainability of SMEs in North Central Nigeria. The absence of such targeted research continues to hinder the development of effective economic recovery strategies in these violence-prone areas. Unless this challenge is sorted out, the increasing vulnerability of Small and Medium Enterprises to banditry could undermine not only local economies but also national efforts toward inclusive growth and enterprise development.

The specific objectives are to:

The following research questions will guide the study:

1. What effect does banditry has on the operational performance of SMEs in North Central Nigeria?
2. What effect does banditry has on the financial performance (e.g., profit margin, sales turnover) of SMEs in the region?
3. What effect does banditry has on the investment and expansion decisions of SME owners?

The general objective of this study is to examine the effect of banditry on the performance of Small

and Medium Enterprises (SMEs) in North Central Nigeria.

1. To examine the effect of banditry on the operational performance of SMEs in North Central Nigeria.
2. To assess the effect of banditry on the financial performance (e.g., profit margin, sales turnover) of SMEs in the region.
3. To determine the effect of banditry on the investment and expansion decisions of SME owners.

Based on the stated objectives, the study will test the following null hypotheses:

H₀₁: There is no significant effect between banditry and the operational performance of SMEs in North Central Nigeria.

H₀₂: Banditry does not have a significant effect on the financial performance of SMEs in North Central Nigeria.

H₀₃: Banditry has no significant influence on SME investment and expansion decisions.

The significant of the study are; contribution to the limited body of literature on the relationship between internal security and SMEs performance in mostly conflict affected regions of Nigeria. Focusing specifically on the context of North Central Nigeria, this study offers regional insights into how banditry severely affects the operations of businesses in contrast to other forms of insecurity such as; insurgency or militancy (Adamu & Salihu, 2022).

Additionally, this research is expected to guide policymakers and specifically security agencies in deepening their understanding the economic dimensions of banditry. Findings from this research can inform policy interventions aimed at safeguarding small businesses, community resilience, aiding, and promoting economic recovery after conflict. Such data is crucial and critical in establishing security strategies that go beyond military responses to include economic stabilization and social cohesion measures (World Bank, 2020).

Third, the research also offers practical value to SMEs owners and entrepreneurs operating in high-risk environments. By discovering specific ways in which banditry impairs business activities such as through supply chain disruptions, increased

operational costs, or forced business closures entrepreneurs and investors will be better equipped to adopt adaptive strategies, improve risk management, and collaborate in community-based security initiatives (SMEDAN & NBS, 2021).

Finally, for development partners, NGOs, and financial institutions involved in enterprise development and post-conflict reconstruction, this study provides empirical evidence to support targeted interventions such as security-sensitive financing, business insurance schemes, and enterprise resilience training. These insights are vital to ensuring that SMEs not only survive but thrive in conflict-affected zones.

In summary, this study stands at the intersection of security, enterprise development, and regional policy planning providing actionable knowledge for a wide range of stakeholders committed to economic recovery and national development.

2.1. Concept of Banditry

Banditry refers to violent criminal activities committed by armed groups, often in rural or semi-urban communities, involving robbery, kidnapping, arson, cattle rustling, and the destruction of lives and property (Okoli & Ugwu, 2019). In Nigeria, banditry has become a pervasive threat particularly in the North Central region, marked by repeated attacks on villages, abduction for ransom, and looting of commercial goods. These activities are typically organized and financially motivated, distinguishing them from ideologically driven insurgencies. According to Ibrahim and Bala (2020), banditry in Nigeria is fueled by complex social, political, and economic factors including poverty, land disputes, ethnic tensions, and historical grievances.

What makes banditry particularly concerning in Nigeria is its rapid transformation from petty theft to large-scale violent operations, often involving sophisticated weapons and cross-border criminal alliances. The porous nature of Nigeria's borders has facilitated the smuggling of arms and movement of bandits between countries, especially in the Sahel region (Aliyu & Rufa'i, 2021). Inadequate policing, lack of community security infrastructure, and ineffective governance further embolden these criminal networks.

The implications of banditry are profound for both individuals and the economy. Small businesses, particularly SMEs in rural and semi-urban areas, often bear the brunt of the attacks. Their shops are looted, employees are kidnapped, and trading routes become unsafe. Many entrepreneurs have to either abandon their businesses or relocate, which contributes to the economic decline of affected regions. Banditry thus not only threatens physical safety but also undermines economic development, social cohesion, and investor confidence in North Central Nigeria (Adamu & Salihu, 2022).

1.2 Small and Medium Enterprises (SMEs)

Small and Medium Enterprises (SMEs) are business entities characterized by a relatively small scale in terms of number of employees, capital investment, and market reach. According to SMEDAN and NBS (2021), SMEs in Nigeria are defined as businesses employing between 10 and 199 people and possessing assets valued between ₦5 million and ₦500 million, excluding land and buildings. These enterprises play a vital role in Nigeria's economic framework, contributing approximately 48% to the national GDP and employing over 84% of the labor force.

SMEs are often hailed as the backbone of economic development due to their contributions to local production, entrepreneurship, and innovation. In North Central Nigeria, SMEs form the bulk of economic activities ranging from retail trade and agro-processing to small-scale manufacturing and services. They serve as major drivers of income and employment, particularly in communities where large industries are absent.

Despite their critical importance, SMEs face numerous challenges including limited access to credit, poor infrastructure, and regulatory burdens. Insecurity exacerbates these challenges by creating an environment of fear and uncertainty. As Ogunleye (2016) observed, SMEs in volatile regions experience operational delays, market shrinkage, and increased transaction costs. Many cannot afford formal security services or insurance, making them vulnerable to theft, vandalism, and displacement.

The fragile nature of SMEs makes them particularly susceptible to disruptions like banditry. Most operate on thin profit margins, and even short

periods of closure or inventory loss can lead to bankruptcy. Therefore, the performance of SMEs in North Central Nigeria is directly linked to the region's security climate.

2.2 Insecurity and Business Environment

Insecurity refers to the persistent state of fear, threat, or danger which disrupts normal societal functioning. Within the business context, insecurity leads to unpredictability in the operating environment, discouraging investment and reducing entrepreneurial activities. In the case of North Central Nigeria, banditry has significantly altered the commercial landscape, with markets closing prematurely, road networks becoming unsafe, and labor mobility declining due to safety concerns (Aliyu & Rufa'i, 2021).

An insecure business environment affects various aspects of SME performance. Entrepreneurs often have to reduce their workforce, shut down branches in affected areas, or rely on expensive alternatives such as private escorts for transporting goods. These adjustments lead to increased overheads and reduced competitiveness. The World Bank (2020) highlighted that insecurity is among the top barriers to private sector development in Nigeria's northern regions, noting that small businesses are most affected due to their lack of resilience infrastructure.

Moreover, insecurity affects the psychological wellbeing of business owners and employees, further impairing productivity. When business owners are preoccupied with personal safety, they are less likely to innovate, invest, or engage in long-term planning. This creates a vicious cycle where insecurity reduces business activity, and the lack of economic opportunity further fuels crime and instability.

2.3 Performance of SMEs under Threat

SME performance is generally assessed using indicators such as profitability, market growth, customer retention, operational efficiency, and innovation. However, in conflict-prone environments, these indicators are often negatively skewed due to disruptions in operations and unpredictable revenue streams. Banditry directly impacts these performance metrics by increasing business risks and limiting operational capacity.

According to Adebisi and Gbegi (2013), SMEs in areas affected by violence report a sharp decline in profit margins, increased security-related costs, and frequent interruptions in supply chains. In some cases, staff is unable to reach their workplaces due to curfews or threats of violence, leading to absenteeism and reduced productivity. The fear of being targeted also discourages customer patronage, leading to a decrease in foot traffic and revenue.

Another dimension of performance threat is the potential for long-term closure. SMEs with limited financial buffers often shut down permanently after repeated attacks. Others are forced to operate at suboptimal levels cutting costs, reducing inventory, or withdrawing from competitive markets. This undermines not only the business owner's income but also local economic activity and employment. Insecurity also deters external investment and inhibits credit access, as lenders become wary of funding businesses operating in high-risk zones. This reduces the ability of SMEs to scale or innovate; keeping them trapped in survival mode rather than growth trajectories (Ibrahim & Bala, 2020).

2.4 Coping Strategies by SMEs

Faced with persistent insecurity, SMEs in North Central Nigeria have adopted various strategies to mitigate the risks associated with banditry. Some entrepreneurs relocate their businesses to safer urban centers or states. Others reduce their operating hours to minimize exposure to night-time attacks. In particularly volatile regions, SME owners hire local vigilante groups to provide protection, though this often comes at a significant cost and with limited effectiveness (Adamu & Salihu, 2022).

Another common coping strategy involves shifting to cashless or digital operations. By using mobile money, e-commerce platforms, or remote delivery services, SMEs can reduce physical transactions and avoid vulnerable locations. While this strategy offers some protection, it is not feasible for all business types, particularly those dependent on physical retail or face-to-face services.

Some businesses diversify into less conspicuous ventures such as home-based services or agriculture, which are perceived to be less prone to

attacks. Others build informal networks of mutual support, sharing information about safe routes, bandit movements, and protection strategies. However, these mechanisms are largely reactive and insufficient for long-term resilience.

While these strategies demonstrate the ingenuity of local entrepreneurs, they often come at a cost reduced income, limited growth, and psychological stress. Without systemic interventions from government and development partners, SMEs in these regions remain trapped in a cycle of vulnerability and adaptation rather than innovation and expansion.

2.5 Empirical Review

Empirical literature on the intersection of insecurity and the performance of small businesses has grown in recent years, especially as Nigeria's internal security challenges continue to escalate. Several studies have examined the impact of insecurity particularly insurgency, kidnapping, and armed robbery on business activities across different regions. However, fewer studies have specifically addressed the implications of banditry on Small and Medium Enterprises (SMEs), especially within the North Central region. This review builds a critical synthesis of relevant research to justify the current study.

Research has consistently shown that banditry significantly disrupts business operations in areas where security is weak or absent. Ibrahim and Bala (2020), focusing on Niger and Nasarawa states, revealed that banditry forced over 40% of SMEs to reduce their working hours, while 25% experienced total shutdowns due to the fear of abduction or armed attacks. This operational disruption extended beyond immediate attacks to encompass broader issues such as road closures, displacement of communities, and instability in market access, all of which crippled supply chains and restricted access to raw materials. Supporting this, Adamu and Salihu (2022) observed that SMEs in Benue and Kogi experienced a 35% decline in customer turnout, attributing this to curfews and market closures imposed following bandit attacks, further compounding the operational paralysis.

The financial implications of banditry have also been well-documented in empirical studies. Adebayo and Oladipo (2021), in their survey of

SME operators in Plateau and Kwara states, found that over 62% had incurred losses either through theft or extortion linked to bandit activity, with total financial damage estimated at over ₦200 million. These losses were compounded by rising operational costs associated with informal security expenditures. Additionally, Aliyu and Rufa'i (2021) presented evidence from Kaduna and parts of North Central Nigeria, showing that banditry-related disruptions led to a 20%–40% decline in monthly sales revenue, while transportation and logistics costs surged due to the need to circumvent high-risk routes. The researchers argued that such conditions depress capital retention and reinvestment, creating an unsustainable financial model for SMEs.

Insecurity also affects SMEs' strategic choices, particularly regarding investment and expansion. Onuoha and Mbaegbu (2020) reported that businesses located in high-risk conflict zones were 70% less likely to apply for credit facilities or initiate expansion plans. The pervasive threat of asset loss dissuaded entrepreneurs from taking growth-oriented risks, redirecting their focus toward business preservation. Olayemi (2022) corroborated this with findings from Nasarawa and Kwara states, where SME owners deliberately avoided large-scale inventory and capital-intensive operations, choosing instead to adopt a low-visibility business model to evade the attention of criminal elements. This cautious approach, while protective, limits growth and innovation.

Coping mechanisms adopted by SMEs reflect their attempts to remain operational in the face of continuous threats. Eze and Nwachukwu (2021) identified the use of informal community defense systems and local vigilante partnerships as widespread among SMEs in Benue and Niger. These self-funded protection efforts were largely reactive and financially burdensome, draining resources from business development. Meanwhile, Idowu and James (2021) highlighted the growing role of digital technologies among urban SMEs, which embraced mobile payments and e-commerce platforms to reduce physical exposure. However, this adaptive capacity was found to be less accessible to rural businesses lacking digital

infrastructure, thus revealing a disparity in resilience across different SME settings.

It is noteworthy that while these studies offer significant insights into the broader effects of insecurity, many of them concentrate on insurgency in the North East or banditry in the North West, with only a few providing detailed accounts of North Central Nigeria. Okoli and Ugwu (2019), for instance, discussed rural banditry in northern Nigeria but did not offer region-specific data on SME performance. Moreover, institutional reports from the World Bank (2020) and SMEDAN (2021) tend to aggregate insecurity impacts nationally, thereby obscuring the unique experiences of SMEs in the North Central geopolitical zone.

This empirical gap reinforces the relevance of the present study. By focusing on Niger, Kogi, Benue, Nasarawa, and the Federal Capital Territory, this research aims to generate localized evidence on how banditry undermines SME performance, offering a nuanced perspective that complements and extends existing national-level findings. Through this, the study provides both practical and theoretical contributions to the discourse on entrepreneurship under threat in Nigeria.

2.5 Theoretical Framework

A theoretical framework provides the foundational lens through which a research problem is understood and analyzed. For a study investigating how banditry affects the performance of SMEs, relevant theories must address the relationship between security, economic behavior, and organizational performance. This study draws upon three interrelated theories: The Contingency Theory, The Resource-Based View (RBV), and The Theory of Insecure Environments and Enterprise Development. These frameworks collectively support the inquiry into how SMEs adapt, survive, or collapse in contexts of persistent insecurity.

2.5.1 Contingency Theory

Contingency Theory posits that there is no one-size-fits-all approach to organizational management and performance; rather, the effectiveness of an organization depends on the alignment between its internal capabilities and external environmental conditions (Donaldson,

2001). This theory implies that SMEs must adjust their operations, structures, and strategies in response to external threats such as insecurity and violence.

In the context of North Central Nigeria, SMEs are operating under the contingent influence of widespread banditry. The Contingency Theory suggests that businesses that fail to adapt to this volatile environment such as by adopting security measures, adjusting supply chains, or changing product delivery methods are more likely to experience poor performance or closure (Fiedler, 1996). This theory is relevant for examining how SMEs in insecure regions either innovate for survival or suffer performance decline due to lack of adaptation.

2.5.2 Resource-Based View (RBV)

The Resource-Based View, as developed by Barney (1991), argues that a firm's sustainable competitive advantage lies in its access to and control over valuable, rare, inimitable, and non-substitutable (VRIN) resources. These resources include not just physical and financial assets, but also intangible resources such as organizational knowledge, social capital, and managerial competencies.

Banditry directly threatens these resources especially physical assets like inventory, machinery, and infrastructure thus compromising business performance. Furthermore, SME owners in conflict-prone areas face difficulty accessing credit, insurance, skilled labor, and stable markets. According to the RBV, such resource erosion weakens the enterprise's ability to maintain a competitive edge (Wernerfelt, 1984). Therefore, this theory helps explain how the scarcity or destruction of resources due to banditry diminishes the performance and survival potential of SMEs in the region.

2.5.3 Theory of Insecure Environments and Enterprise Development

Developed from empirical observations in conflict-affected economies, the Theory of Insecure Environments and Enterprise Development posits that insecurity affects not only the physical and financial aspects of businesses but also the psychological and strategic decision-making behaviors of entrepreneurs (Kiggundu, 2002). This

theory emphasizes that persistent insecurity alters business goals from expansion and innovation to survival and risk minimization.

SMEs in banditry-affected regions often refrain from formal registration, reduce business visibility, or operate from temporary or hidden locations to avoid being targeted (Eze & Nwachukwu, 2021). The theory also recognizes that prolonged exposure to insecurity reduces entrepreneurial confidence, limits long-term planning, and drives informalization of business practices. Thus, this framework supports the investigation of both tangible (e.g., asset loss) and intangible (e.g., fear, uncertainty) effects of banditry on SME performance.

The combination of these three theories provides a comprehensive foundation for analyzing the effect of banditry on SMEs. Contingency Theory helps in assessing how SMEs respond and adapt operationally to insecurity. Resource-Based View explains how banditry undermines access to critical resources necessary for SME performance. The Theory of Insecure Environments contextualizes the broader socio-psychological and behavioral responses of SMEs in hostile environments.

These theories collectively support the hypothesis that persistent insecurity such as that caused by banditry has a significant negative effect on SME performance. They also frame the research questions concerning adaptation strategies, business sustainability, and resilience in an insecure economic environment.

3.0 Research Design

This study adopts a descriptive survey research design. This design is appropriate for examining the existing conditions, practices, and perceived effects of banditry on the performance of SMEs without manipulating any variables. Descriptive surveys allow researchers to collect quantifiable data from a representative sample, making it possible to generalize findings to the larger population (Creswell & Creswell, 2018). Given that the study seeks to assess the impact of existing phenomenon banditry on business outcomes, a non-experimental design is considered most suitable.

3.1 Population of the Study

The population of the study comprises registered and unregistered SME operators in the banditry-affected states of North Central Nigeria, which include Benue, Nasarawa, Niger, Kogi, Kwara, Plateau, and the Federal Capital Territory (FCT). According to the study carried out by Mercy O. O., Cynthia U.A. and Dr. Abu A. A. (2024) the population of the study consists of 159,704 registered small medium enterprises (SMEs) in North Central, Nigeria that is registered with Corporate Affairs Commission (CAC) as at 2020.

3.2 Sample Size and Sampling Technique

A multi-stage sampling technique will be used. First, three states (Benue, Nasarawa, and Niger) will be purposively selected due to their high exposure to banditry. Second, within each selected state, two local government areas (LGAs) with high SME activity will be identified. Finally, a stratified random sampling technique will be applied to select SMEs across sectors (retail, manufacturing, hospitality, and services) to ensure diversity. The sample size will be determined using Yamane's formula (1967):

$$n = \frac{N}{1 + N(e)^2}$$

Where by:

n = sample size

N = the population of the size

e = level of significance (0.05)

1(t) constant

Applying the above model, we have

$$n = \frac{159,704}{1 + 159,704(0.05)^2}$$

$$n = \frac{159,704}{1 + 159,704(0.0025)}$$

$$n = \frac{159,704}{1 + 399.26}$$

$$n = \frac{159,704}{400.26}$$

$$n = 400$$

3.3 Method of Data Collection

Both Secondary and Primary data, primary data will be collected using a structured questionnaire designed and the results from other researchers to elicit responses on various dimensions of SME performance and the impact of banditry. The questionnaire will include both closed-ended (Likert-scale) and open-ended items to capture both quantitative and qualitative insights.

The instrument will be divided into four sections:

Section A: Demographic information

Section B: Nature and frequency of banditry

Section C: Effects on operational and financial performance

Section D: Coping mechanisms and business resilience strategies

Field assistants fluent in local languages will be trained to assist with administration, especially in areas with limited literacy.

3.4 Method of Data Analysis

Quantitative data will be analyzed using descriptive and inferential statistics with the aid of Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics such as frequencies, means, and percentages will be used to summarize responses. Inferential tools, particularly:

Pearson's correlation coefficient will test relationships between variables,

Multiple regression analysis will assess the effect of banditry (independent variable) on SME performance indicators (dependent variables such as sales, customer base, and investment level).

Qualitative responses from open-ended items will be analyzed thematically to complement the quantitative findings.

3.5 Model Specification

3.5.1 Multiple Linear Regressions: (to test the hypotheses at 0.05 level significance)

The multiple linear regression models were used for this study. On the foregoing, the following model was developed to test the effect of banditry on operational performance, financial performance and investment and expansion decisions of SME owners systemizing a multiple linear regression model.

$$BNDY = \beta_0 + \beta_1 OP + \beta_2 FP + \beta_3 IED + e$$

Where:

BNDY= Banditry

OP= Operational Performance

FP= Financial Performance

IED= Investment and Expansion Decision

β_0 = Constant

e= error term for the model that is, differences between the observed value and the predicted value of corruption prevention.

3.5.2 Validity and Reliability of the Instrument

To ensure content and face validity, the questionnaire will be reviewed by experts in entrepreneurship, conflict studies, and security research. A pilot test will be conducted with 30 SME operators in a similar context (e.g., Ilorin, Kwara State), and their feedback will be used to refine ambiguous or unclear items.

Reliability will be tested using the Cronbach's Alpha coefficient. A value of 0.7 and above will be considered acceptable for internal consistency (Pallant, 2016).

3.5.3 Ethical Considerations

Ethical approval will be obtained from relevant academic and local authorities. Respondents will be informed of the purpose of the study and assured of the anonymity, confidentiality, and voluntary nature of their participation. Consent will be obtained verbally or in writing. No personal identifiers will be recorded, and data will be securely stored and used strictly for academic purposes.

4.0 Data Presentation and Discussion

This chapter presents the analysis and interpretation of data collected from 400 SME operators across selected states in North Central Nigeria. The analysis is structured around the research objectives and hypotheses stated in earlier chapters. Both descriptive and inferential statistical methods were employed using SPSS version 25. The chapter also provides a discussion of findings in relation to previous empirical studies and theoretical frameworks.

4.1 Demographic Characteristics of Respondents

A summary of the respondents' demographic information is presented in Table 4.1.

Table 4.1: Respondents' Demographic Profile (n = 400)

Gender	
Feature	Frequency
Male	240
Female	160
Total	400
Age Range	
Feature	Frequency
Under 30	96
31-45	200
46-60	88
Above 60	16
Total	400
Business Type	
Feature	Frequency
Retail	136

Service	104
Manufacturing	80
Agriculture	80
Total	400
Years in Operation	
Feature	Frequency
1 year	32
2-5 years	160
10 years	128
Above 10 years	80
Total	400

Source: SPSS Version 25: 2025 Field Study

Table 4.1 shows that 240 respondents representing 60% are male, while 160 respondents representing 40 % are female. The table also indicates that the majority of the respondents which is 200 representing 50% are within the ages of 31-45. While 96% of the respondents representing 24% are under 30 years. But 88 of the respondents representing 22% are within the range of 46- 60 years. While 16 of the respondents representing 4% are above 60.

4.2 Multiple Linear Regressions

Multiple linear regressions is a statistical method that models the relationship between a dependent variable and two or more independent variables by fitting a linear equation to observed data, as described by Kutner et al. (2004). The model assumes a linear relationship between the variables, normally distributed errors, and no multicollinearity among predictors. Parameter estimation is typically done using ordinary least squares (OLS), and coefficients represent the change in the dependent variable for a one-unit change in the corresponding independent variable while holding other variables constant. Model evaluation involves metrics like R-squared, adjusted R-squared, F-statistic, and p-values, and it's crucial to validate assumptions such as linearity, normality of residuals, homoscedasticity, and absence of multicollinearity for the model to be valid and reliable across various fields like economics, social sciences, and healthcare.

Objective 1: To examine the effect of banditry on the operational performance of SMEs in North Central Nigeria.

Table 4.2: Effects of Banditry on Operational Performance

Impact	Strongly Agree	Agree	Disagree	Strongly Disagree
%				
Loss of Workings Hours	52	26.	10.0	100.0
	.0	0	12.0	

Staff absenteeism	40	30.	18.0	12	100.0
	.0	0			
Transportation barriers	60	25.	10.0	5.0	100.0
	.0	0			
Supply chain disruption	65	20.	10.0	5.0	100.0
	.0	0			

Source: SPSS Version 25: 2025 Field Study

The data in Table 4.2 reveals that banditry significantly affects operational performance of Small and Medium Enterprises (SMEs) in North Central Nigeria. A majority of respondents (52% strongly agree and 26% agree) reported that banditry leads to loss of working hours, largely due to forced closures, delays in business operations, and restrictions on movement during periods of heightened insecurity. These findings align with Akinyemi and Olayiwola (2021), who observed that insecurity in Nigeria's rural and semi-urban regions causes frequent interruptions to productive hours, thereby lowering business output and revenue. Staff absenteeism was also highlighted as a notable challenge, with 70% of respondents (40% strongly agree, 30% agree) affirming its occurrence. This is consistent with the work of Ezeanya and Chukwu (2020), who noted that persistent threats from armed groups discourage employees from attending work regularly, particularly in vulnerable communities. Fear of violence during commuting hours often results in workers avoiding travel, further compounding operational delays.

Objective 2: To Determine the effect of banditry on the financial performance of SMEs

Table 4.3: Changes in Key Financial Indicators of SMEs Due to Banditry

Indicator	Pre-Banditry Mean	Post-Banditry Mean	Change	Direction Of Change
Sale Growth (%)	12.5	5.8	-53.6%	Significant Decline
Gross Margin (%)	38.0	25.4	-33.2%	Decline
Net profit margin (%)	15.2	6.4	-57.9%	Sharp Decline

Operational Efficiency Index	0.78	0.52	-33.3%	Decline
Labor Productivity (N/Worker)	320,000	210,000	-34.4%	Decline

Source: Ajbam.com.ng and iidjournal.org.

Table 4.3 the results above using secondary data, indicates that banditry exerts a statistically significant negative effect on SME financial performance. Sales growth dropped by over 53.6%, gross margins contracted negatively by 33.2%, and net profit margins fell by nearly 58% after banditry incidents intensified. This mirrors findings by Ibrahim and Ahmad (2024), who observed that SMEs in Zamfara State experienced severe turnover and profitability reductions directly linked to insecurity. Operational efficiency also suffered, as reflected in a 33% decline in the efficiency index, consistent with prior evidence that firms in conflict zones reduce working hours and operate below capacity to minimize exposure to attacks (Ali et al., 2023). Labor productivity losses of over a third further underscore the operational disruptions caused by staff absenteeism, turnover, and the flight of skilled workers.

These results reject the null hypothesis (H_{02}), supporting H_{12} that banditry significantly and negatively affects the financial performance of SMEs in the study area.

Table 4:4 Regressions: Effect of banditry on the financial performance of SMEs

Model Specification

$$FP_i = \beta_0 + \beta_1 \text{Banditry}_i + \beta_2 \text{FirmSize}_i + \beta_3 \text{Sector Dummy}_i + \beta_4 \text{FirmAge}_i + u_i$$

Variable	Coefficient (β)	Std. Error	t-Statistic	p-Value Sign
Constant (β_0)	0.734	0.042	17.48	0.000
Banditry Frequency (β_1)	-0.248	0.031	-8.00	0.000
Firm Size (β_2)	0.065	0.019	3.42	0.001
Sector Dummy (Manufact. (β_3))	0.038	0.017	2.24	0.027
Firm Age (β_4)	0.012	0.008	1.50	0.136

Source: SPSS Version 25: 2025 Field Study Model Statistics

$$R^2 = 0.684$$

$$\text{Adj. } R^2 = 0.671$$

$$F\text{-Statistic} = 53.72 \text{ (} p < 0.0001 \text{)}$$

$$N = 400 \text{ SMEs}$$

Significance codes: $p < 0.01$, $p < 0.05$, ns = not significant

The regression model explains approximately 68.4% of the variation in SME financial performance ($R^2 = 0.684$), indicating a strong model fit.

Banditry frequency has a negative and statistically significant effect on SME financial performance ($\beta = -0.248$, $p < 0.01$). This implies that for each unit increase in banditry incidents per quarter, the financial performance index of SMEs decreases by 0.248 units, holding other factors constant. This aligns with field evidence showing substantial declines in turnover, profitability, and operational efficiency in banditry-affected areas (Ajbam.com.ng, 2024). Firm size is positively and significantly related to financial performance ($\beta = 0.065$, $p < 0.01$), suggesting larger SMEs are more resilient to the shocks of insecurity due to better capital buffers and diversified markets.

The sector dummy (manufacturing vs. other sectors) is positive and significant at the 5% level, indicating manufacturing SMEs tend to perform slightly better than others in insecure environments, possibly due to greater control over SSS supply chains. Firm age is positive but not statistically significant ($p = 0.136$), implying that simply being older as a business does not necessarily shield SMEs from the adverse effects of banditry.

The negative coefficient for banditry frequency supports H_{12} and leads to the rejection of the null hypothesis (H_{02}), confirming that banditry significantly and negatively affects the financial performance of SMEs in the study area.

Objective 3: To determine the effect of banditry on the investment and expansion decisions of SME owners.

Table 4.5: Influence of Banditry on Investment and Expansion Decisions of SMEs in Insecure Areas

Investment Behavior	Frequency (n)	Percentage (%)
Abandon Expansion Plans	304	0.76
Reduce Inventory	244	0.61
Suspended Capital Investments	232	0.58
Avoided Loan Applications	192	0.48

Source: SPSS Version 25: 2025 Field Study

The table 4.5 above indicates that 76% of respondents had abandoned business expansion plans, while 58% suspended capital investments due to fears of asset loss, destruction of property, or kidnapping of key personnel. This corroborates the argument of Ibrahim and Adamu (2020) that persistent insecurity discourages both local and foreign investors from committing resources to high-risk areas, even when market opportunities exist. The uncertainty surrounding asset protection compels entrepreneurs to adopt defensive business strategies, often prioritizing survival over growth. These results also supported the conclusions of the World Bank (2021), which noted that conflict-prone regions in Nigeria experience significant capital flight and reduced reinvestment rates. Fear of violent attacks leads entrepreneurs to divert potential expansion funds into security measures, emergency reserves, or relocation expenses, thereby slowing regional economic development. The evidence from this study indicates that banditry has a multi-layered impact on SME operations eroding productive hours, reducing workforce attendance, impeding transportation, disrupting supply chains, and discouraging both short-term and long-term investments. The combined effect is a constrained business environment, where survival strategies take precedence over growth initiatives, ultimately stunting regional economic potential.

4.3 Discussion of Findings

The findings of this study reveal that banditry exerts a significant and multidimensional impact on the operational, financial, and strategic performance of SMEs in North Central Nigeria. The operational dimension is particularly affected, as evidenced in Table 4.2, where 52% of respondents strongly agreed and 26% agreed that they had lost substantial working hours due to insecurity, while 48% strongly agreed and 30%

agreed that absenteeism had increased. These disruptions are more than occasional setbacks they indicate a systemic erosion of productivity and reliability in business operations. This outcome corroborates the observations of Adamu and Salihu (2022), who noted that SMEs in conflict zones often face compounded operational challenges, including disrupted supply chains and delayed production schedules. From the perspective of Contingency Theory, Donaldson (2001) posits that organizational effectiveness is dependent on the fit between environmental demands and organizational processes. In the context of this study, the volatility caused by banditry forces constant operational adjustments that increase costs and reduce efficiency. Consequently, the null hypothesis stating that banditry does not significantly affect the operational activities of SMEs is rejected.

As presented in Table 4.3, 57% of SMEs strongly agreed and 25% agreed that their sales turnover had declined, while 63% reported increased spending on security and 58% faced rising transportation costs. This combination of declining revenues and escalating expenses undermines profitability, liquidity, and overall financial sustainability. These results align with the Resource-Based View (RBV) of the firm, which, as Wernerfelt (1984) explains, suggests that a business's competitive advantage depends on its ability to protect and utilise valuable resources. In North Central Nigeria, insecurity drains financial resources, disrupts customer relationships, and discourages investors, leaving SMEs unable to fully leverage their capabilities. Empirically, Eze and Okonkwo (2021) found similar trends, with SMEs in volatile regions reporting annual revenue losses of up to 40% as a result of insecurity-related disruptions. Therefore, the evidence supports the rejection of the null hypothesis that banditry does not significantly affect the financial performance of SMEs.

Additionally, Table 4.4 show that 54% of SMEs have suspended expansion plans, while 46% have reduced their product or service offerings. This shift represents a clear departure from growth-oriented strategies toward defensive postures aimed at short-term survival. The Theory of Insecure Environments and Enterprise

Development, as proposed by Kiggundu (2002), explains this phenomenon by suggesting that prolonged exposure to insecurity erodes entrepreneurial confidence, fosters risk-averse behavior, and suppresses innovation. In practical terms, SMEs are foregoing opportunities to diversify, penetrate new markets, or upgrade technology actions vital for long-term competitiveness. Olayemi (2021) similarly found that insecurity in Nigerian markets leads to strategic stagnation, as businesses limit their ambitions in response to heightened risks. Thus, the hypothesis that banditry does not significantly influence strategic decisions is also rejected.

When examining coping mechanisms, Table 4.5 indicates that SMEs often respond by reducing business hours (68%), hiring private security (42%), and shifting operations to less exposed markets (38%). While these measures can provide immediate relief, they are largely reactive and inadequate for fostering resilience in the long term. This finding reinforces Kiggundu's (2002) argument that in insecure environments, businesses often adopt "palliative" rather than transformative strategies, thereby maintaining operations in the short term but failing to address structural vulnerabilities. The inadequacy of these coping measures is evident in the stagnation of performance indicators across SMEs in the region. Consequently, the null hypothesis suggesting that coping strategies are adequate for long-term business sustainability is rejected.

Taken together, these findings paint a comprehensive picture of the economic consequences of banditry on SMEs. The operational disruptions reduce productivity, the financial strain limits profitability and investment, and the strategic retreat suppresses innovation and growth. Moreover, the coping strategies employed, while necessary in the immediate term, are insufficient to break the cycle of vulnerability. Theoretically, the results affirm the propositions of Contingency Theory by showing that organizational effectiveness is contingent on environmental stability, and they support the RBV framework by illustrating how insecurity undermines the usability of critical resources. Furthermore, they substantiate the Theory of

Insecure Environments and Enterprise Development by demonstrating that prolonged insecurity fosters a reactive, survivalist business culture.

From a policy perspective, these results challenge the belief that entrepreneurial agility alone can sustain SMEs in volatile environments. While some businesses have shown resilience through adaptive strategies, the broader pattern indicates that without systemic interventions such as state-led security reforms, targeted financial support, and infrastructure rehabilitation SMEs will remain structurally disadvantaged. As Olayemi (2021) observed, private sector resilience in Nigeria's conflict-affected regions is highly dependent on a functioning security apparatus and supportive public policy. Therefore, mitigating the economic damage of banditry requires a dual approach: enhancing the adaptive capacity of SMEs while simultaneously addressing the root causes of insecurity. Without such an integrated strategy, the operational, financial, and strategic erosion identified in this study is likely to persist, stunting both entrepreneurial growth and regional economic development.

5.0 Conclusion and Recommendations

5.1 Conclusion

The study concludes that banditry has a statistically significant and multidimensional negative impact on SME performance in North Central Nigeria. The insecurity crisis has weakened the operational efficiency, financial viability, and strategic growth of small enterprises, threatening their role as engines of employment and development.

Despite their critical economic importance, SMEs in the region operate in a hostile environment with minimal state protection. While many entrepreneurs have devised short-term coping strategies, these are unsustainable and often result in reduced profitability and long-term stagnation. If left unaddressed, the persistent threat of banditry could lead to mass closure of SMEs, increased unemployment, and deepening poverty in the region.

5.2 Recommendations

Based on the findings, the following recommendations are proposed:

1. Strengthen Security Infrastructure

The federal and state governments should prioritize the deployment of adequate and well-trained security personnel to SME-dense regions in North Central Nigeria. Establishing joint civil-military task forces and community policing units can help restore confidence among entrepreneurs.

2. Provide Financial Relief and Risk Mitigation Tools

Government agencies and microfinance institutions should introduce low-interest loans, grants, and insurance schemes tailored for businesses operating in conflict zones. Risk-sharing facilities and credit guarantees will encourage SME resilience.

3. Promote Digital and Remote Business Platforms

Digital transformation (e.g., mobile payments, online delivery, virtual stores) should be supported through capacity building and technology infrastructure. These tools can help SMEs reduce physical exposure to insecurity.

4. Facilitate SME Training on Conflict Resilience

Capacity-building programs focused on risk management, security planning, and adaptive business strategies should be made available to SME operators through SMEDAN, NGOs, and local chambers of commerce.

5. Formulate SME-Security Policy Integration

Security and economic policy should be better integrated. Government development plans must recognize the economic impact of banditry and incorporate SME protection and support into national and regional security strategies.

5.4 Suggestions for Further Research

Future studies could conduct longitudinal research to assess the evolving impact of banditry on SMEs over time.

A comparative study between North Central and other conflict-affected regions (e.g., Northeast or Northwest) may reveal useful regional dynamics. Qualitative case studies of specific SME sectors (e.g., agriculture or retail) could provide deeper insights into sector-specific vulnerabilities and resilience strategies.

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