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Poverty And Unemployment Are Causes Of Terrorism In Nigeria: A Critical Review Of Multiple Regression Analysis

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ABSTRACT

This study examined unemployment and poverty and their effect on terrorism in Nigeria, from 1999 to 2024. Data were sourced National Bureau of Statistics (NBS) and the World Bank. Terrorism served as the dependent variable, while unemployment and poverty were the independent variables. The data were analyzed using regression analysis. Findings revealed that unemployment had positive significant influence on terrorism index at 1% significant level ($t=2.03355$, $p=0.053692$). Similarly, poverty has a positive significant effect on terrorism at 5% significant level ($t=7.84633$, $p=0.0000$). The coefficient of determination ($R^2 = 0.9002$) shows that about 90.02% of the total variation in terrorism is explained by unemployment and poverty combined. The findings further revealed that unemployment and poverty collectively exert significant positive effects on terrorism, as indicated by a high F-statistic value ($F = 103.73$, $p < 0.05$). The study concludes that terrorism in Nigeria is not solely a political or religious issue but also a deep-rooted economic and social challenge. It recommends large-scale job creation, youth empowerment, poverty alleviation, and improved governance as essential strategies for mitigating terrorism and promoting sustainable peace and national development

Keywords: Regression; West Africa, Nigeria; Terrorism, Unemployment; Poverty, Boko Haram

1.1 INTRODUCTION

It is a well-known fact that a country that is peaceful or experiences a low level of insecurity is not only attractive to both local and foreign investors but also vital for promoting overall economic development and national progress. Peace and security create the stability needed for businesses to thrive, infrastructure to grow, and productive economic activities to flourish (World Bank, 2023). However, terrorism has become one of the most serious threats to peace and national security in many West African countries, including Nigeria. Extremist groups such as Boko Haram, ISWAP, and armed bandits continue to attack communities across the country killing and displacing people, destroying property, and spreading fear (International Crisis Group, 2023). Citizens now live in constant anxiety, unsure of when or where the next attack may occur.

Nigeria has been ravaged by terrorist activities which has made the country unsafe for Nigerians and foreign investors Yusuf & Mohd, 2022. The country was named the third most afflicted by terrorism in the 2020 Global Terrorism Index, trailing only Iraq and Afghanistan (GTI, 2022). For over a decade, terrorist activities have claimed more than 40,000 lives, displaced over three million persons, kidnapped thousands and allegedly received billion of naira from states and individuals as ransom payments (Rotimi et al., 2014).

One of the root causes of terrorism in Nigeria is the high level of poverty, which makes individuals especially young people more vulnerable to recruitment by terrorist and criminal groups (Afrobarometer, 2023). Despite being one of the richest countries in Africa in terms of natural resources especially oil millions of Nigerians still live in extreme poverty. According to the National Bureau of Statistics (NBS, 2024), over 133 million Nigerians, or 63% of the population, are still living in poverty. Supporting this, the International Monetary Fund (IMF, 2025) reported that Nigeria is currently ranked the 12th poorest country in the world by GDP per capita, with an income of approximately US \$807 per person, reflecting the deep disconnect between its national wealth and the living conditions of its citizens. Many people living in Nigeria particularly in rural areas lack access to basic needs such as clean water, healthcare, education, and decent housing (NBS, 2023). This widespread poverty creates feelings of frustration, abandonment, and mistrust in the government, which terrorist groups often exploit to recruit vulnerable individuals (ECOWAS, 2025).

On the other hand, unemployment remains one of the most critical economic and social challenges facing Nigeria today (Utuk, 2022). Estimates showed that Nigeria's unemployment rate stood at approximately 37.7% in 2022, rising to 40.6% in 2023, making Nigeria one of the countries with the highest unemployment rates in Africa and globally (KPMG, 2023; Vanguard, 2023). Many young people with higher education qualifications are unable to secure jobs that match their skills, leading to frustration, economic hardship, and increased vulnerability to crime and extremism.

When individuals, especially young people are jobless for a long time, they may become disconnected from society and lose hope in achieving a better life. This sense of abandonment and lack of purpose often increases their chances of joining criminal groups or being recruited by terrorist organizations (Adegoke, 2014). Terrorist groups like Boko Haram, ISWAP, and armed bandits often take advantage of this desperation. They use false promises such as money, protection, or religious justification to convince and lure poor and unemployed people to join them (Onuoha, 2014; Afrobarometer, 2023). In this way, poverty and unemployment are not merely economic problems, they are key contributors to the ongoing spread of terrorism in Nigeria.

Among the various statistical tools available for analyzing the influence of one variable on another, regression analysis is one of the most widely used and effective (Wooldridge, 2016; Adebayo & Olayemi, 2021). Regression analysis is particularly useful for identifying and measuring the strength and direction of the relationship between a dependent variable and one or more independent variables (Gujarati & Porter, 2009). In the context of this study, regression is applied to assess how poverty and unemployment (independent variables) contribute to the spread of terrorism (dependent variable) in Nigeria. This method allows researchers to estimate the extent to which changes in poverty and unemployment levels are associated with changes in terrorism incidence

1.2 Statement of the Research Problem

In the recent time, almost every week, Nigeria records incidents of terrorist attacks, resulting in the loss of innocent lives, destruction of property, displacement of communities, and a growing atmosphere of fear. Nigerians now live in a state of uncertainty and anxiety, unsure of when or where the next attack might occur. Despite the Nigerian government's continuous deployment of military force and law enforcement operations, these approaches have not brought lasting peace or significantly reduced the threat of terrorism. This persistent insecurity calls for a deeper examination of the root causes behind the rise of terrorism in Nigeria particularly the roles of poverty and unemployment. The inability of the current civilian administration to significantly reduce terrorism, despite repeated promises combined with increase unemployment and poverty in the country motivate this study empirically examine the link unemployment and poverty has with rise and persistence of terrorism in Nigeria. Although several studies have explored the causes and consequences of terrorism in Nigeria—many pointing to poverty, unemployment, political instability, and ethnic or religious tensions as major contributing factors (Adebayo & Olayemi, 2021; Okorie & Salawu, 2022; Umar & Uchenna, 2020; Ukah et al. (2021); Urowoli and Akujobi (2022); Ike et al., 2022; Ojo et al., 2023). However, most of these studies have not focused

specifically on the influence of poverty and unemployment on terrorism within the context of Nigeria's civilian governments. This is an important gap, considering that civilian administrations have governed the country continuously since 1999, a period that has also witnessed a significant rise in terrorism and insurgency, especially in the northern and middle-belt regions.

1.3 Aim and objectives of the Study

The aim of the study is to model terrorism, unemployment and poverty rates in Nigerian using regression analysis

1.4 Objectives of the study

- i. To examine the trend of terrorism, unemployment and poverty in Nigerian over the period of 1999 to 2024
- ii. To fit a multiple regression model for unemployment and poverty on terrorism.
- iii. To assess the influence of death rates on population dynamics in the study area.
- iv. To determine the combined effect of unemployment and poverty on terrorism in Nigeria

1.5 Significance of the Study

This study is significant for several reasons. First, it contributes to the growing body of literature on terrorism by offering a data-driven analysis of how poverty and unemployment have influenced the rise and persistence of terrorism in Nigeria. While previous studies have often addressed these issues separately or from a general perspective, this study uses regression analysis to quantify the relationship between economic deprivation and terrorism specifically during civilian governments, which have been in power since Nigeria's return to democracy in 1999.

Secondly, the findings of this research will provide empirical evidence that can inform policy decisions. By identifying the strength and direction of the relationship between poverty, unemployment, and terrorism, the study will offer insights into which economic indicators are most influential in driving insecurity. This can guide policymakers, development agencies, and security institutions in designing targeted interventions that address the root causes of terrorism through job creation, poverty reduction, and improved economic inclusion.

Moreover, the study is relevant in evaluating the effectiveness of civilian governance in handling socio-economic problems that may trigger national insecurity. The analysis will help assess whether democratic administrations have successfully addressed the economic conditions that fuel terrorism, or whether new approaches are needed to ensure peace and stability.

Lastly, the research will serve as a useful resource for academics, researchers, and students interested in conflict studies, development economics, political science, and public policy, particularly within the Nigerian and West African context

1.6 Scope of the Study

The scope of this study is limited prevalence of poverty, unemployment and terrorism in Nigeria during the civilian regime, covering the period from 1999 to 2024. The study focuses on Nigeria as a case study due to its long-standing challenges with both economic hardship and insecurity, especially in the northern and northeastern regions. The study does not cover the military era or examine other socio-political factors such as religion, ethnicity, or foreign influence on terrorism. Instead, it narrows its focus to the economic dimensions of terrorism specifically poverty and unemployment and how they have played out under civilian democratic governance.

2.1 REVIEW OF LITERATURE

Terrorism is a deliberate use of violence and fear by individuals or groups to achieve political, religious, or ideological objectives. It targets civilians or governments to create widespread fear and influence decisions or behaviors (United Nations, 2023). The United Nations General Assembly (1994) defined terrorism as "criminal acts meant to create fear among the public for political purposes," emphasizing that terrorism is not just about physical harm but also about psychological impact. According to the Global Terrorism Index (Institute for Economics & Peace, 2023), terrorism involves the use or threat of illegal

violence by non-state actors to pursue goals through intimidation. This highlights that terrorism affects both security and public morale.

Schmid (2021), a respected terrorism scholar, described it as a method involving repeated violent acts intended to inspire fear, where victims are often selected to represent a broader population. His updated definition also considers modern forms like cyberterrorism. Similarly, Jackson (2016) argues that the term “terrorism” can sometimes be applied selectively and may resemble state violence used to suppress opposition. The UK Government (2019), through its Terrorism Act of 2006, describes terrorism as any action or threat designed to influence government or intimidate the public for ideological, political, or religious purposes.

Uche (2019) sees terrorism as a strategic violent act intended to destabilize a lawful government and create fear to achieve political or social aims. Walter and Todd (2022) define it as premeditated violence or threat by subnational groups to reach broader goals by intimidating the public beyond direct victims. Thomas (2020) notes that terrorism is often politically motivated violence targeting non-combatants to sway public opinion or policy. Lutz and Lutz (2021) argue terrorism involves planned violence with political motives, designed to generate fear in a larger audience, often extending beyond those directly attacked. They emphasize that the presence of both violence (or its threat) and a political goal distinguishes terrorism from other crimes

In the Nigerian context, Boko Haram represents a clear example. Founded by Mohammed Yusuf in 2002, the group operates mainly in northeastern Nigeria. Their aim is to impose Islamic rule and abolish Western education, which they believe contradicts their religious views (Itaobong, 2018). Boko Haram has carried out widespread violence, leading to death, displacement, and fear across several communities.

In summary, terrorism is a major global issue that takes many forms and has deep social, political, and psychological impacts. While definitions may vary, key elements include violence, fear, and political or ideological motivations. Tackling terrorism requires coordinated national and international efforts that address not only security, but also the underlying causes such as poverty, marginalization, and social injustice.

2.2 Terrorism in Nigeria

Terrorism has become a persistent threat in Nigeria, causing widespread harm to lives, properties, and the nation’s economy. Osmond (2018) reported that the first major terrorist incident occurred in Kaduna State on January 17, 1980. Since then, terrorist acts have escalated significantly, with groups such as Boko Haram, ISIS, Fulani herdsmen, and Niger Delta militants contributing to ongoing insecurity. These groups have not only disrupted national peace but also weakened Nigeria’s workforce, as many skilled and able-bodied citizens have been killed, abducted, or forced to flee. The Global Terrorism Database (2015) recorded over 9,200 deaths and more than 4,000 injuries from terrorist activities between 1980 and 2014, reflecting the extent of the devastation.

The economic and social impacts of terrorism in Nigeria are profound. According to Oluwole (2016), the persistent attacks—especially from Boko Haram have eroded investor confidence and reduced foreign direct investment. Moreover, human capital has declined due to mass displacement and casualties, threatening the stability of Nigeria’s democratic institutions (Brodeur, 2018). The educational system has also suffered; nearly 1,400 schools have been destroyed or closed, particularly in the Northeast, leaving millions of children without access to learning (UNICEF, 2017).

Displacement is another serious issue, with over 2.3 million Nigerians mostly from Borno, Yobe, and Adamawa forced out of their homes due to violence (GIZ, 2016). In addition to the humanitarian crisis, economic activities such as farming, commerce, and tourism have been severely disrupted, further worsening poverty in affected areas. The government has had to divert large portions of the national budget toward security, limiting funds available for essential services and infrastructure (Serap, 2017). Even the military has not been spared, facing deadly assaults, including a 2017 ISWAP attack that reportedly claimed over 100 soldiers (Yomi, 2017).

Altogether, the persistent threat of terrorism in Nigeria demands urgent, coordinated responses focused on improving security, governance, and economic opportunity to restore stability and safeguard the nation's future.

2.3 Types of Terrorism

Terrorist groups are different based on their goals, size, strength, targets, and where they operate. Scholars in political science and security studies often group terrorism into three main types:

2.3.1 State Terrorism

This happens when a government uses fear and violence to control or silence its people. It often targets those who oppose the government. For example, during the French Revolution, the monarchy used violence to control dissent. Similar cases include Nazi Germany, Stalin's rule in Russia, Samuel Doe in Liberia, and the Abacha regime in Nigeria (Uche, 2011; Eku, 2018).

2.3.2 Domestic Terrorism

This type happens within a single country. The group may want to rebel, cause damage, or change the government. Boko Haram in Nigeria is an example they operate mostly in the northern part of the country (Eku, 2018).

2.3.3 International (or Transnational) Terrorism

This type crosses borders and involves people from different countries. It includes attacks in one country by people from another, like cyberterrorism and attacks by Al-Qaeda. These groups operate across many countries and recruit members worldwide (Uche, 2011).

2.3.4 Unemployment

Unemployment is both a serious economic and social problem. It happens when there are not enough jobs for the growing number of people looking for work. Even those with jobs sometimes fear losing them because of job cuts or poor job security. In economics, "employment" means using resources, like labor, in productive ways. So, when a worker or any resource is not being used properly, it is called "unemployment." According to the International Labour Organization (ILO), someone is considered unemployed if they are part of the labor force, ready to work, but did not work for at least one hour during the previous week. Nigeria's National Bureau of Statistics (NBS) gives a similar definition, but uses 39 hours as the minimum for work during the same period.

Generally, unemployment means that people who are willing and able to work cannot find jobs. Balogun (2013) defines it as the percentage of people in the labor force who want to work but can't find jobs. Keynesian economists explain that unemployment happens when there are more people willing to work than there are jobs available, often because companies are unable to sell enough of their goods. Hyman (2019) adds that unemployment is a sign of how healthy or unhealthy an economy is, and it is usually measured by the unemployment rate.

In developing countries, unemployment is a serious issue. It shows that labor is not being used efficiently. High unemployment has many negative effects, including rising poverty, increased crime, and drug abuse. Anbaraki and Ismaili (2020) noted that unemployment is one of the world's biggest economic problems because it affects individuals and society. For example, in Jordan, unemployment reached 19% in 2019, with youth unemployment at 35% for males and 40% for females. These numbers show that many young people, including school and university graduates, are without jobs (Hjazeen, Seraj, & Ozdeser, 2021).

Unemployment can be voluntary or involuntary. Voluntary unemployment happens when someone chooses not to work, maybe because they have other sources of income. Involuntary unemployment occurs when people who want to work and are qualified for jobs cannot find any (Anyanwa, 2015).

According to the Central Bank of Nigeria (2014), the unemployment rate rose to 30% in 2014. This shows that unemployment is a global issue and a major obstacle to national development. It wastes a country's manpower, leads to lower production, and results in less income and well-being for people (Akinboyo, 2017; Raheem, 2013). It is particularly serious in Africa and especially in Nigeria (Vandemortele, 2018; Rama, 2018; Oladeyi, 2014; Umo, 2016). Because of its harmful effects, solving unemployment has become a major goal for many developing countries.

Okonkwo (2015) listed three main causes of unemployment in Africa: the education system; the type of technology used (machines instead of people) and lack of support for agriculture.

The use of machines and computers in place of human labor has also increased unemployment. For example, a task that used to require 40 workers can now be done by just 5 using a machine leaving 35 people without jobs. Another cause is Nigeria's fast-growing population, which is rising faster than job opportunities. With birth rates increasing and death rates between 2.5% and 3%, more people are entering the labor force without enough jobs to go around. Also, the neglect of agriculture has pushed many young people to leave villages for cities, hoping to find office jobs that don't exist. This makes urban unemployment worse and increases pressure on the few available jobs (Agbaje, Lawal, & Adebayo, 2013)

2.3.5 Poverty

Poverty is a condition where people lack the financial resources and essentials to enjoy a minimum standard of living. This means they may not have enough money for food, clean water, shelter, healthcare, education, or other basic needs According to the United Nations Human Development Report (2021), poverty is defined as a complex phenomenon that generally refers to inadequacy of resources and deprivation of choices that would enable people to enjoy decent living conditions. Moreover, the World Development Report 2000/2001, sees poverty to connote lack of a range of material needs of life as food, shelter, water, clothing and non-material needs as security, employment and literacy (Ayoola, 2020). While Tazoacha (2021) defines poverty as the absence of peace in an individual. This could be as a result of hunger, lack of medical care, marginalization, denial of human rights relating to the fulfillment of basic human needs, and freedom. It is also defined as pronounced deprivation in well-being, and comprises many dimensions as low incomes and the inability to acquire the basic goods and services necessary for survival with dignity, low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life (World Bank, 2019). United Nation Development Project, (2019) defines poverty as a denial of choices and opportunities, a violation of human dignity, which implies lack of basic capacity to participate effectively in society, not having enough to feed and clothe a family, not attaining literacy of good health, not having security of food or a job to earn one's living.

Poverty is a world-wide phenomenon, but its incidence is more severely felt in the developing countries than in the developed ones. Thus, poverty can be classified into relative and absolute poverty. Absolute poverty is a state of destitution, is the lack of basic human needs, such as clean water, nutrition, health care, education, clothing, and shelter. The World Bank defines relative poverty as living on less than US \$1.25 (PP) per day, and moderate or relative poverty as less than \$2 a day (World Bank, 2023), and it accounts for about 1.7 billion people in the world (Krugman and Robin, 2019). In Nigeria, available evidence tend to suggest that more than 40% of the Nigerian population live in extreme poverty, spending less than N320 per capita per month (Ognifiditimi, 2023). At the individual level, poverty could be seen as the determinant of income whose absence or inadequacy incapacitates him/her from acquiring the necessities for good living (Ahokegh, 2020)

2.4 Types of Poverty

2.4.1 Absolute Poverty

Absolute poverty refers to a condition where a person lacks the most basic requirements needed to survive. This includes not having enough food to eat, clean water to drink, a safe place to live, clothing, or access to basic healthcare. People living in absolute poverty struggle daily to meet the minimum physical needs required for life. It is often measured using a global standard, such as living on less than \$2.15 per day (World Bank, 2022). This form of poverty is more common in developing countries, where resources and infrastructure are limited.

2.4.2 Relative Poverty

Relative poverty is based on the economic status of a person compared to others in the same society. Even if someone can meet their basic needs, they may still be considered poor if their income is much lower

than the average income in their community or country. This type of poverty affects people's ability to fully participate in society, such as affording education, good housing, healthcare, internet, or even social activities (OECD, 2020). For example, someone may have food and shelter but cannot afford transportation to work or access to quality education for their children. Relative poverty highlights income inequality and is often used to measure poverty in more developed nations.

2.4.3 Multidimensional Poverty

Multidimensional poverty looks beyond just income and includes other important aspects of well-being. It considers whether people have access to basic services and opportunities such as good health, quality education, clean water, electricity, proper sanitation, and safe housing. A person may earn a small income, but if they also lack education, suffer poor health, and live in unsafe housing, they are considered multidimensionally poor. This approach provides a broader understanding of how poverty affects people's lives in many different ways, not just financially (UNDP, 2021)

2.5 Causes of Poverty

Lack of sustainable development in Nigeria is always attributed to poverty. Although majority of researchers are of the view that poverty is caused by illiteracy, but there is more to it than this (Tazoacha, 2021, Aboucheldid and Nasser, 2021). They maintained that illiteracy is the impediments that have not pushed the society forward to achieve sustainable development. It is the forces turning the wheel of sustainable development in many economics anti-clockwise. On the other hand, other researchers opine that the causes of poverty are multidimensional and encompass areas like economics, demography, health, social and geographic factors (Umo 2012, African Development Bank 2020, Sharma 2022, Abu 2020, Ayoola 2020). The main causes they highlighted include the low per capita income, low investment rates and tenuous financial intermediation, poor infrastructures, low human capital growth and its utilization, limited diversification of the economy, exposure to development shocks and use of flawed development concepts and strategies, adverse consequences of high population growth corruption good governance deficits and ineffective leadership.

However, there is a preponderance of studies addressing the issue of poverty in Nigeria. For instance, Olowa (2012) highlights the causes of poverty in Nigeria to include: low or negative economic growth, inappropriate macroeconomic policies, deficiencies in the labour market resulting in limited job growth, low productivity and low wages in the informal sector and a lag in human resource development. Other factors are; increase in crime and violence environmental degradation and retrenchment of workers. Ucha (2020) identifies unemployment, corruption, non-diversification of the economy, income inequality, laziness and poor education system as some of the key factors contributing to poverty in Nigeria. On the contrary, Aluko (2023) highlighted the main causes of poverty in Nigeria to include:

1) Inadequate access to employment opportunities for the poor; 2) Lack or inadequate access to assets such as land and capital by the poor. This is often attributed to the absence of land reform and minimal opportunities for small-scale credit; 3) Inadequate access to the means of fostering rural development in poor regions, the preference for high potential areas and the strong urban bias in the design of development programmes is often assumed to be its primary cause; 4) Inadequate access to market for the goods and services that the poor can sell. This is caused by their remote geographic location; (5) Inadequate access to education, health, sanitation and water services. This emanates from inequitable social service delivery which consequently results in the inability of the poor to live a healthy and active life and take full advantages of employment opportunities; 6) The destruction of the natural resource endowments, which has to led to, reduced productivity of agriculture, forestry and fisheries. This often resulted from the desperate survival strategies of the poor as well as inadequate and ineffective public policy on natural resource management. 7) The inadequate access to assistance by those who are the victims of transitory poverty such as draught, floods, pests and war. This is brought about by lack of well conceived strategies and resources; and 8) Inadequate involvement of the poor in the design of development programmes. This is often exacerbated by the non-involvement of the representatives of the

communities or beneficiaries in the discussion, preparation, design and implementation of programmes that will affect them (Utuk, 2022)

2.6 Gap in the Literature

While numerous studies have examined the links between unemployment, poverty, and terrorism in Nigeria, several critical gaps remain. Most of the existing research, such as those by Ojo et al. (2023), Egunjobi (2021), and Adebayo et al. (2021), have primarily focused on bivariate or causal relationships using techniques like ARDL, Granger causality, or ordered probit analysis. Although these methods provide valuable insights, they often fail to simultaneously account for the combined influence of multiple socio-economic variables on terrorism, particularly over the span of Nigeria's civilian regime from 1999 to 2024.

Furthermore, studies like those by Akubor (2016), Ukah et al. (2021), and Offor (2022) relied heavily on qualitative approaches or descriptive analysis, which, while rich in context, lack the quantitative rigor needed to measure the strength and direction of influence among key variables. Similarly, works that apply advanced methods such as data mining (e.g., Iorliam et al., 2021) or structural equation modeling (Ijirshar et al., 2025) are either geographically limited or context-specific (e.g., focused only on farming communities or Northern Nigeria), making their findings difficult to generalize nationally.

Moreover, very few studies have focused specifically on the civilian governance period (1999–2024) in a comprehensive and empirical manner. Despite the availability of national data spanning this democratic era, no known study has yet employed multiple regression analysis to model the interdependent effects of unemployment and poverty on terrorism in Nigeria during this specific timeframe.

This study intends to fill these gaps by applying multiple regression analysis to examine the combined and individual effects of unemployment and poverty on terrorism in Nigeria from 1999 to 2024. By doing so, it aims to provide a more holistic, statistically robust, and policy-relevant understanding of the socio-economic drivers of terrorism in the civilian democratic era

3.1 RESEARCH METHODOLOGY

This chapter outlines the methodology adopted for the study, with emphasis on the sources of data and the method of analysis. The chapter presents the justification for the chosen data sources and analytical tools and explains how these support the study's objective.

3.2 Source of Data Collection

Data for this study were obtained through secondary sources, as the research relies on existing, credible datasets to ensure consistency and comparability across the 25-year study period (1999–2024). The data used for this analysis were sourced from World Development Indicators (WDI) published by the World Bank, which provides reliable annual data on unemployment; National Bureau of Statistics (NBS), Nigeria, which offers nationally representative statistics on poverty; Global Terrorism Database (GTD) maintained by the University of Maryland, which provides comprehensive data on terrorism incidents in Nigeria. Using these data sources ensures the objectivity and credibility of the research findings.

3.3 Study Period

The study covers the period from 1999 to 2024, which corresponds to the era of civilian democratic governance in Nigeria. This period is crucial because it represents the longest uninterrupted stretch of civilian rule in the country's history. During this time, Nigeria has experienced both high levels of poverty and unemployment, as well as a significant rise in terrorism and insecurity. Studying this period provides valuable insights into how economic conditions under democratic governance may influence the spread of terrorism.

3.4 Method of Data Analysis

The study employs multiple regression analysis as the main statistical tool to examine the relationship between terrorism (dependent variable) and poverty and unemployment (independent variables). Multiple regression is a robust analytical technique that allows for the evaluation of how two or more independent

variables jointly influence a single outcome. It helps to quantify the strength and direction of the relationships, control for other influencing factors, and determine which variables significantly predict the occurrence of terrorism in Nigeria during the specified period. The choice of multiple regression is justified because it offers the ability to isolate the specific impact of each economic variable (poverty and unemployment) on terrorism while accounting for their interrelationships. This method enhances the reliability of the conclusions drawn and supports policy-oriented recommendations based on empirical evidence

The regression models assumed a linear relationship given as follows:

$$y_i = \beta_1 + \beta_2 x_{2i} + \beta_3 x_{3i} + \dots + \beta_k x_{ki} + u_i, i = 1, 2, 3 \dots n \quad (3.1)$$

Where:

β_1 is the intercept

β_2 to β_k partial slope coefficients

u_i = stochastic disturbance term

And i = th observation, n being the size of the population

Multiple regression model for this study is specified as:

$$TERRO = \beta_0 + \beta_1 POVT + \beta_2 UEMPL + u_i, \quad (3.1)$$

Where:

TERRO= Terrorism

POVT = Poverty

UEMPL = Unemployment

β_0 = intercept

β_1 to β_2 = Coefficient of Explanatory Variables

u_i = stochastic disturbance term

4.1 DATA PRESENTATION AND ANALYSIS

Table 1: Data presentation

Years	UNE	POV	TER
1999	8.756432	65.23457	1
2000	9.102345	64.87654	1.2
2001	9.54321	64.4321	1.5
2002	10.0322	63.87654	1.8
2003	10.54123	63.21099	2
2004	10.98765	62.4321	2.3
2005	11.54321	61.76543	2.7
2006	12.19877	61.09877	3
2007	12.76543	60.54321	3.5
2008	13.34568	59.98765	4
2009	13.98765	59.3211	5
2010	14.65432	58.76543	2.34
2011	15.4321	58.21099	4.65
2012	13.3211	57.65432	6.76
2013	13.21099	57.09877	8.927
2014	18.09877	56.4321	8.927
2015	19.4321	55.98765	9.31
2016	21.09877	55.4321	9.1

2017	23.4321	54.98765	8.66
2018	26.09877	54.4321	8.6
2019	27.65432	54.09877	8.31
2020	33.28321	54	8.421
2021	34.87654	53.65432	8.233
2022	33.21099	53.09877	8.065
2023	32.76543	52.76543	9.575
2024	31.98765	52.4321	9.658

Source: World Development Indicator, National Bureau Of Statistics (Nbs), Statista
(<https://www.Statista.Com>)

POV

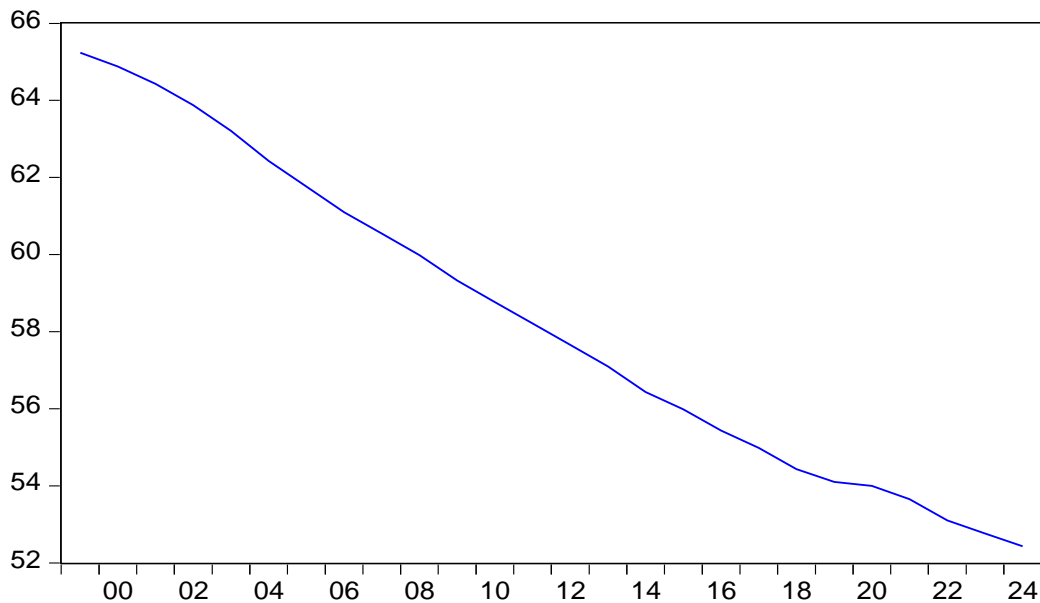


Fig 1: Trend of Poverty

During the period of 1999 to 2024, the poverty rate exhibited a consistent downward trend, falling from 65.23% in 1999 to about 52.43% in 2024. The decline was gradual but steady, particularly between 1999 and 2010, before leveling off slightly after 2015. Interestingly, the reduction in poverty occurred alongside rising unemployment, suggesting that other factors may have helped mitigate poverty levels. These factors could include growth in informal sector activities and entrepreneurship, improved access to social welfare programs or remittances, and better education and skill acquisition that enabled households to maintain income despite employment challenges.

UNE

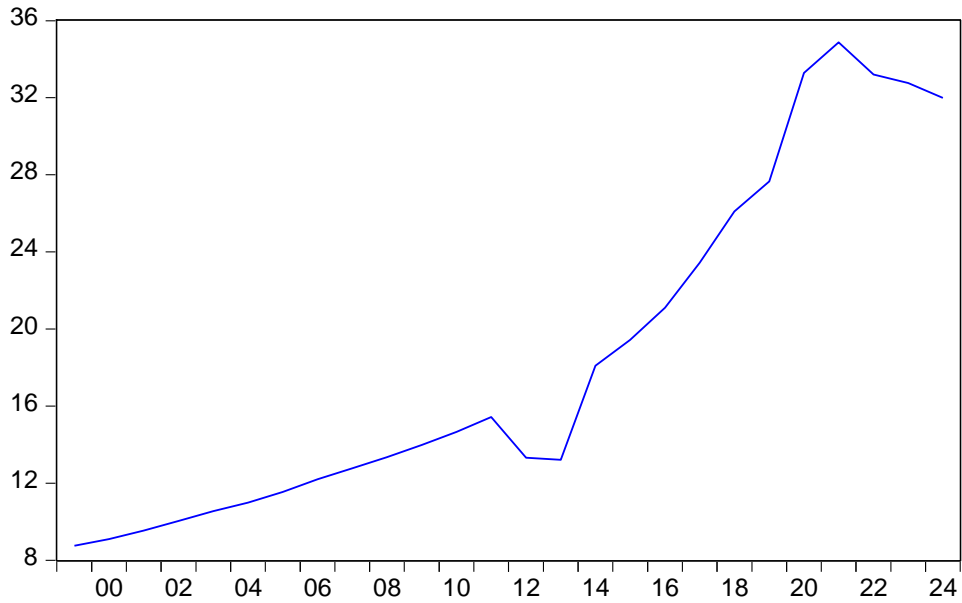


Fig 2: Trend of Unemployment

Fig 2 revealed that from 1999 to 2024, the unemployment rate in Nigeria showed a steady upward trend, rising from 8.76% in 1999 to a peak of 34.88% in 2021 before slightly declining to 31.99% in 2024. The sharpest increases were recorded between 2010 and 2021, indicating a sustained period of rising unemployment. This trend reflects worsening employment conditions over the years, which may be attributed to weak economic growth, structural unemployment, and limited job creation relative to the expanding population

TER

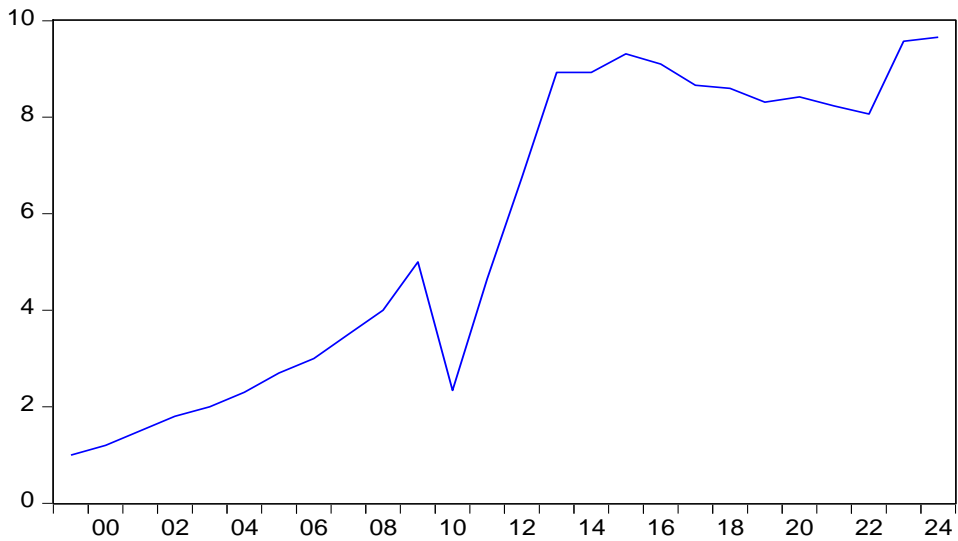


Fig 3: Trend of Terrorism index

Terrorism Index (TER) in Fig 3 showed a significant and continuous increase over the period, rising sharply from 1.0in1999 to about 9.66 in 2024. The most notable surge occurred between 2005 and 2015, indicating a period of intensified terrorist activities in the country. This sharp rise reflects growing insecurity, particularly linked to the emergence and expansion of insurgent groups such as Boko Haram and banditry-related violence during those years. The persistent high levels of terrorism in the following years suggest that insecurity has remained a serious challenge, affecting economic stability, social welfare, and national development. The rising terrorism index may also have contributed to increasing unemployment and slower poverty reduction by discouraging investment, displacing communities, and disrupting agricultural and business activities in affected regions.

Table 2: Descriptive Statistics

	<i>UNE</i>	<i>POV</i>	<i>TER</i>
Mean	18.5139	58.3011	5.67446
Standard eviation	8.86359	4.12269	3.21214
Kurtosis	2.96650	3.26506	-2.79212
Skewness	0.74923	0.23832	-0.14063
Minimum	8.75643	52.4321	1.0000
Maximum	34.8765	65.2346	9.6580
Count	26	26	26

According to the result in Table 4.2, the descriptive analysis reveals that the average unemployment rate of 18.51% is relatively high, indicating a considerable level of joblessness across the study period. Similarly, the mean poverty rate of 58.30% suggests that more than half of Nigeria’s population lived below the poverty line during the civilian regime, reflecting widespread economic hardship. The mean terrorism index of 5.67 further indicates a moderately high level of terrorist activity in the country. The standard deviation results show that unemployment exhibited the greatest variability (8.86), followed by terrorism (3.21), implying substantial fluctuations in joblessness and terrorist activities over time. The skewness values for unemployment (0.75) and poverty (0.24) suggest a slight positive skew, indicating that most of the observations are concentrated toward lower values, while terrorism (-0.14) is nearly symmetrical. In addition, the kurtosis values approximately equal to zero across the variables indicate a mesokurtic distribution, meaning that the data are relatively normal

Table 3: Regression Statistics

<i>Regression Statistics</i>	
Multiple R	0.948789
R Square	0.9002
Adjusted R Square	0.891521
Standard Error	1.057953
Dublin Watson	2.3433
Observations	26

The regression statistics reveal that the Multiple R value of 0.9488 indicates a very strong positive correlation between the independent variables (unemployment and poverty) and the dependent variable (terrorism). This implies that changes in unemployment and poverty are closely associated with variations in terrorism levels. The coefficient of determination ($R^2 = 0.9002$) further shows that about 90.02% of the total variation in terrorism is explained by unemployment and poverty combined, reflecting the high

explanatory power of the model. The Adjusted R² value of 0.8915, which accounts for the sample size and the number of predictors, confirms the robustness and reliability of the regression model. Moreover, the Standard Error of 1.058 is relatively low, suggesting that the predicted values of terrorism are very close to the actual observed values, thereby indicating a good model fit. The Dublin Watson Statistic was 2.3433, suggesting that estimated multiple regression model does not have autocorrelation. Hence, the model is reliable

Table 4: ANOVA for Regression

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	232.2031	116.1015	103.7302	000000
Residual	23	25.74309	1.119265		
Total	25	257.9461			

The ANOVA results in Table 4 reveal that the calculated F-statistic value of 103.73 is considerably large, while the corresponding Significance F value (0.000000) is far less than the conventional 0.05 level of significance. This indicates that the overall regression model is statistically significant and that the relationship between the explanatory variables (unemployment and poverty) and the dependent variable (terrorism) is not due to random chance. Thus, the combined effects of unemployment and poverty have a meaningful and substantial influence on terrorism levels in Nigeria during the civilian regime. Consequently, the null hypothesis which states that unemployment and poverty have no significant effect on terrorism is rejected at the 5% level of significance. This result confirms that variations in unemployment and poverty rates play a crucial role in explaining the pattern and intensity of terrorist activities in the country

Table 5: Coefficient of Independent Variables

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>VIF</i>
Intercept	63.59028	8.076398	7.873595	0.000000	
UNE	0.11534	0.056716	2.03355	0.053692	3.6543
POV	0.95677	0.121938	7.84633	0.000000	3.2440

The regression coefficient results in Table 5 provide a detailed understanding of the relationship between unemployment, poverty, and terrorism in Nigeria during the civilian regime. The coefficient for unemployment (0.1153) implies that a 1% increase in the unemployment rate is expected to result in a 0.1153-unit increase in the terrorism index, assuming poverty remains constant. This positive relationship suggests that as unemployment rises, the level of terrorism tends to increase. However, the associated p-value of 0.0537, which is slightly above the conventional 0.05 and lower than 0.10 threshold, indicates that the effect of unemployment on terrorism is marginally significant.

On the other hand, the poverty coefficient (0.9568) shows that a 1% rise in the poverty rate leads to an estimated 0.9568-unit increase in the terrorism index, holding unemployment constant. The corresponding p-value (0.0000) is highly significant, indicating that poverty has a strong and statistically significant effect on terrorism in Nigeria. This finding implies that as more people fall below the poverty line, the likelihood of terrorist activities tends to rise substantially, possibly due to economic frustration, social discontent, and increased vulnerability to extremist recruitment. The results demonstrate that poverty exerts a stronger and more significant influence on terrorism than unemployment during the civilian

regime in Nigeria. While unemployment plays a role, the pervasive and persistent nature of poverty appears to be a more critical driver of terrorism in the country.

VIF value for independent variables in model confirmed further that reliability of the estimated regression model, The value of 3.6543 and 3.2440 for unemployment and poverty suggest that the independent variables are not highly correlated therefore there is no multicollinearity problem in dataset and in the model.

4.2 DISCUSSION OF FINDINGS

The regression result, with a high F-statistic (103.73) and a significance value of 0.000000 ($p < 0.05$), confirms that both unemployment and poverty are strong predictors of terrorism in Nigeria. This implies that as unemployment and poverty levels increase, the incidence of terrorism also rises correspondingly. This finding aligns closely with *Ojo et al. (2023)*, who discovered that unemployment significantly contributes to rising crime rates in Nigeria, thereby intensifying insecurity. The present study reinforces their conclusion by establishing a direct statistical link between unemployment, poverty, and terrorism, suggesting that lack of job opportunities and poor income conditions create an environment conducive for radicalization and recruitment into terrorist groups. Similarly, *Egunjobi (2021)* found that poverty and unemployment reinforce insecurity, a conclusion that resonates with the outcome of this study. The findings also support the view of *Akubor (2016)*, who observed that poverty and unemployment in Northern Nigeria, particularly through the manipulation of the Almajiri system, have been exploited by elites to facilitate youth recruitment into terrorism. Furthermore, the result agrees with *Ukah et al. (2021)* and *Offor (2022)*, who emphasized that poverty, unemployment, and corruption collectively drive terrorism in Nigeria.

4.3 CONCLUSION

The result from regression analysis revealed that both unemployment and poverty have strong and statistically significant positive effects on terrorism ($F=103.73$, $p=0.000$). The findings confirm that high levels of joblessness and widespread poverty increase the vulnerability of individuals, especially youths, to recruitment into terrorist and violent extremist groups. Therefore, the study concludes that terrorism in Nigeria is not only a political or religious problem but also a deep-rooted economic and social issue. Addressing unemployment and poverty is therefore essential to reducing the incidence of terrorism and ensuring sustainable peace and national development.

4.4 RECOMMENDATIONS

Based on the findings and conclusions of this research, the following recommendations are made:

- i. The Nigerian government should implement large-scale job creation initiatives, particularly in the agricultural, manufacturing, and service sectors, to absorb the growing youth population and reduce unemployment
- ii. Government and development agencies should design and implement youth empowerment programs that focus on vocational training, entrepreneurship development, and access to microcredit facilities. These initiatives will enable unemployed youths to become self-reliant and contribute productively to the economy, thereby reducing their susceptibility to terrorist recruitment.
- iii. There is a need to strengthen poverty alleviation initiatives such as social safety nets, rural development schemes, and affordable housing programs. Investment in education, healthcare, and social services should be increased to improve the living standards of the poor and enhance human capital development.
- iv. Transparency, accountability, and effective governance should be promoted at all levels of government. The mismanagement and diversion of public resources often hinder the impact of poverty reduction and job creation policies. Therefore, institutions like the EFCC and ICPC

should be further empowered to ensure that funds meant for economic development reach the intended beneficiaries.

- v. National security strategies should be aligned with economic development policies. Addressing terrorism should not rely solely on military operations but also include economic empowerment, education, and community-based peacebuilding efforts aimed at tackling the root causes of violence and radicalization.

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