

PEACE ACCOUNTING AND ECONOMIC GROWTH OF NIGERIA

ENYI, P Enyi¹; OGUNDAJO, Grace O. ²; OKEDINA, Olusola Olakunle³

¹ Department of Accounting, Babcock University
enyip@babcock.edu.ng, +2348069619343

² Department of Accounting, Babcock University
ogundajog@babcock.edu.ng, +2347065263796

³ Department of Accounting, Babcock University
okedina0346@pg.babcock.edu.ng, +2347035512214

Corresponding Author: OKEDINA, Olusola Olakunle

Abstract

Nigeria's economic growth has become a concern for many, as it is now seen as a key indicator of political performance. Achieving steady economic growth in Nigeria remains difficult due to ongoing issues of insecurity, corruption, and terrorism. Although efforts to tackle these problems have increased, Nigeria still faces significant obstacles, as shown by its fluctuating GDP. While many studies have explored the link between peace accounting and economic growth, there is limited empirical research specifically on how peace accounting affects Nigeria's economic growth. Therefore, this study examines the effect of peace accounting on Nigeria's economic growth. This study employs an ex-post facto research design. Secondary data from the Central Bank of Nigeria, the Institute for Economics and Peace, and Transparency International, covering the period from 1993 to 2023, were utilised. Descriptive and inferential statistics (Autoregressive Distributed Lag Model) were applied to analyse the data at the 5% significance level. Findings indicated that peace accounting had a joint significant effect on economic growth and RGDP (Adj. $R^2 = 0.698$, $F(4,26) = 6.206$, $\rho = 0.001$) in Nigeria. Specifically, LCIS had a positive but statistically insignificant effect ($\beta = 1.563$, $t = 1.937$, $\rho = 0.0718$), LME had a significant negative effect ($\beta = -1.678$, $t = -2.252$, $\rho = 0.0397$), COR had an insignificant negative effect ($\beta = -0.095$, $t = -1.036$, $\rho = 0.3166$), and TER had an insignificant positive effect ($\beta = 0.026$, $t = 0.195$, $\rho = 0.8478$) on RGDP. The study concluded that peace accounting affects economic growth in Nigeria. It recommends that government agencies, academics, and investors implement strategic peace policies to boost Nigeria's economic growth.

Keywords: Corruption, Economic growth, Gross domestic product, Internal security, Military expenditure.

1. INTRODUCTION

Many countries today consider sustainable economic growth as a primary goal. Even when some nations appear wealthy, no country can prosper without harmonious and peaceful coexistence among its people (Kimanuka, 2018). This idea, that wealth or riches are unattainable without peace and harmony, was also supported by Ajibola (2016) and Bove and Elia (2017). According to a study by Sandler and Enders (2010), conflict, insecurity, terrorism, and violence raise the costs of doing business, increasing insurance premiums and adversely affecting economic growth. The research by Ironkwe and Success (2017) suggested that when there is a threat to peace, the expenses of peacekeeping and infrastructure repair have spillover effects, with economic growth bearing the overall burden (Ezuwore-Obodoekwe et al., 2021). Additionally, separate studies by Ajibade et al. (2020) and Enyi et al. (2020) found that the absence of peace poses a serious threat to economic growth. Okere et al. (2023) argued that to achieve desirable economic growth, government recurrent expenditure should focus on funding internal security, defence infrastructure, and reducing corruption. Therefore, it can be argued that no nation can attain significant economic growth when insecurity prevails (Ajibola, 2016) or when there is no peace (Enyi et al., 2020; Okere et al., 2023).

Nigeria's economy has struggled to expand and survive after experiencing two recessions in the past ten years. For instance, Nigeria's GDP increased by about 4% in real terms in Q4 of 2021, marking five consecutive quarters of growth since the recession began in 2020 (National Bureau of Statistics,



2023). Again, Nigeria's economic growth has been hindered by low oil production due to security issues, oil theft, and pipeline damage (Ajibola, 2016; Oghoghomeh & Ironkwe, 2012). Although Nigeria plans a daily crude oil production of 1.83 million barrels per day for the 2024 fiscal year, the daily output for June 2024 stands at 1.276 million barrels per day, despite an increase of 25,000 barrels per day following a consistent decline due to insecurity and the absence of peace and stability. With the prevailing business and political atmosphere of the nation, it is imperative, therefore, that the effectiveness of peace accounting in guiding Nigeria's economic growth be determined. This, therefore, is the research problem of this study.

The significance of this study lies in providing a deeper understanding of the interplay between peace accounting and economic growth, thereby better supporting Nigeria's goal of a secure future and the current administration's renewed hope. Consequently, the findings from this study are of immense benefit to policy makers and security advisers on the factors that promote economic growth; help investors to assess risks accurately, guide and assisting businesses to make suitable decisions; encourage stakeholders and members of the public to actively contribute to societal progress; enrich academic discourse on peace accounting and economic development; and enable international organizations and non-governmental organizations to utilise these findings in designing targeted intervention programmes. Achieving the desired economic growth in Nigeria has become a crucial concern and priority for successive governments, both nationally and at the subnational level. Studies, which include Agogbua et al., (2022), Ajibade et al., (2020), Aminu et al., (2023), Oghoghomeh and Ironkwe (2012), Ojeifo, Ugwoke et al. (2022), and Okere et al. (2023), have explored peace accounting and economic growth worldwide using various proxies for both. The outcomes of these studies, however, vary. Nevertheless, fewer studies have examined the effect of peace accounting on economic growth in Nigeria. In the studies by Asghari (2017) and Okere et al. (2023), only corruption was examined in relation to economic growth. This study, however, examines the interactions among the costs of internal security, military expenditure, and corruption to assess economic growth. Despite terrorism being a significant issue in developing countries, particularly in Nigeria, previous empirical studies have not treated terrorism as a key variable. Therefore, this study includes terrorism as a key variable in examining its effect, alongside corruption, internal security costs, and military expenditure on the economic growth of Nigeria. This hypothesis was tested:

H₀: There is no significant effect of peace accounting on the economic growth of Nigeria.

2. REVIEW OF RELATED LITERATURE

Economic Growth

Economic growth, as a concept, has been defined in many ways depending on the context and focus of the study. Economic growth has been found to involve an increase in the production of goods and services, which, in turn, enhances a nation's economic capacity. Additionally, economic growth is often defined as an increase in the output of goods and services produced by an economy over time, measured by real Gross Domestic Product (GDP) (Adama et al., 2022). Dimitraki and Win (2020) described economic growth as a quantitative measure of the extent to which an economy expands, based on value-added output after inflation adjustment. According to Kalaš et al. (2021), extensive economic growth occurs when a nation's economic output rises through the expansion of inputs such as labour, capital, or natural resources. Therefore, economic growth can also be examined through the perspectives of sustainable growth and disruptive growth. Sustainable growth refers to long-term, uninterrupted increases in output, often accompanied by structural changes within the economy (Nwoye et al., 2024). It signifies a more stable and transformative process while conserving the natural environment. Conversely, disruptive growth is characterised by rapid, short-term expansions, often driven by specific industries such as technology or oil (Ajala & Laniran, 2021).

Economic growth is commonly assessed using various indicators, with Gross Domestic Product (GDP) and its variants being frequently used. Real GDP is a widely accepted measure for evaluating economic growth, as it adjusts for inflation and represents the total value of goods and services produced within an economy over a specific period (Adama et al., 2022). Another key measure is GDP per capita, which divides a nation's GDP by its population size, offering insight into individual living standards and the distribution of economic benefits (Adel-Khaled et al., 2019). Also, the GDP growth



rate is another measure of economic growth that reflects the annual percentage change in real GDP, indicating the economy's growth pace and consistency (Nwoye et al., 2024).

Peace Accounting

Peace accounting, a branch of accounting, aims to measure, analyse, and report the economic costs of peace and conflict. Baker (2016) described peace accounting as the identification, measurement, valuation, and analysis of the economic costs of peace and conflict. Additionally, under traditional accounting principles, peace accounting is defined as identifying, measuring, and reporting the economic effects of peace efforts and conflict resolution initiatives (Gupta & Dutta, 2018). In Nigeria, peace accounting can serve as a foundation for evaluating the economic effects of peace and conflict. It can be measured using various proxies such as the cost of internal security, military expenditure, corruption, terrorism, food and security, and environmental security.

Cost of Internal Security

Internal security involves efforts to uphold law and order within a country's borders. According to Nwoye et al. (2024), internal security encompasses measures to protect citizens and government institutions from internal threats and to promote economic growth. In Nigeria, law enforcement agencies such as the police and the Nigeria Security and Civil Defence Corps, among others, maintain public order and safeguard vital national assets. The expenses related to internal security cover various financial, economic, and social costs borne by governments to ensure public safety, prevent conflicts, and address the effects of insecurity. These costs can be divided into direct costs, indirect costs, and capital expenditure, each with distinct effects on national budgets and economic growth.

Internal security and peace accounting are interconnected concepts that reflect on both the economic and social aspects of sustaining economic growth. According to Nwaoha et al. (2020), well-allocated security expenditure fosters economic growth. Therefore, the cost of internal security is a crucial factor in maintaining peace and supporting economic growth.

The Military Expenditure

Military expenditure refers to the financial resources that governments allocate to national defence. According to Abdel-Khaled et al. (2019), military expenditure encompasses the resources allocated by a government for military and defence activities, including pensions and operational costs. Studies such as Nwoye et al. (2023) and Okwoche (2022) regard military expenditure as the total allocation made to the armed forces, whether recurrent or capital, necessary to sustain national security. Such expenditure can also be categorised as direct or indirect military expenditure. It can also be domestic or international. Domestic spending relates to national defence, while international expenditure focuses on contributions to peacekeeping operations or military alliances such as NATO (Vallejo-Rosero et al., 2021).

Military expenditure has been shown to influence peace accounting through its contribution to economic growth. Some studies, such as those by Maheswaranathan and Jerusha (2021) and Okwoche (2022), suggest that defence spending can enhance internal stability, which is essential for sustaining economic growth. However, excessive military expenditure was found to divert investments away from infrastructure and education, thereby restricting broader economic progress (Rahman & Siddiqui, 2019). Therefore, when utilised appropriately, military expenditure can play a crucial role in shaping a nation's economic growth trajectory.

Corruption

Corruption, as generally defined, pertains to the misuse of trusted power or public office for personal or group gain (Spyromitros & Panagiotidis, 2022). Corruption varies in circumstances and forms, impacting political and economic systems in various ways (Fayad, 2023). International organisations such as the World Bank and Transparency International highlight corruption as the abuse of public authority, often manifesting as bribery, embezzlement, and nepotism (Risna et al., 2022). Multiple metrics and methods are employed to assess corruption, with Transparency International's Corruption Perception Index (CPI) being among the widely recognised tools (Okenna, 2020).

Indicators such as governance quality and institutional performance also offer insights into the extent of corruption and its developmental consequences (Spyromitros & Panagiotidis, 2022). Additional measures include the World Governance Indicators (WGI) and country-specific audits. Narain (2022) observes that while these measures are effective, they often necessitate contextual adjustments to accommodate national or regional particularities. Consequently, Fayad (2023) recommends that qualitative analysis should complement quantitative indices in capturing the complex dynamics of corruption.

Corruption has been shown to disrupt peace and peace accounting processes, as it weakens governance, increases inequality, and heightens grievances that can result in social unrest, armed conflict, and security breaches (Fagbemi et al., 2022). Consequently, peace accounting often employs corruption metrics to evaluate governance quality and institutional effectiveness (Bakare & Ozegbe, 2022). Addressing corruption through systemic reforms and targeted interventions is therefore vital for promoting societal equity and economic growth. Corruption, which can be defined as the abuse of entrusted power or public office for private gain, includes acts such as bribery, embezzlement, and nepotism—behaviours that deviate from established procedures, rules, or standards and undermine institutional integrity, governance, and societal well-being across political, economic, and legal systems. Therefore, understanding the dynamics of corruption is essential for studies related to peace and economic growth.

Terrorism

Terrorism can be defined as the deliberate use or threat of violence by individuals or groups to achieve political, ideological, or religious goals by instilling fear and disrupting social harmony. Abadie and Gardeazabal (2020) described terrorism as an intentional attempt aimed at disturbing peace and economic stability, eroding public confidence. This definition highlights the economic consequences of terrorism, presenting it as an obstacle to economic growth.

To study terrorism, researchers utilise both quantitative and qualitative methods. These include monitoring the number of incidents over a specific period (Abadie & Gardeazabal, 2020) and evaluating economic costs, such as the impact of terrorism on GDP and trade (Aisen & Veiga, 2021). Terrorism measurement can also be conducted using the Global Terrorism Index. The relationship between terrorism and peace accounting involves analysing how terrorist activities influence peace and economic growth. Economic effects are significant, as terrorism erodes investor confidence and damages infrastructure, causing stagnation and hindering economic growth prospects. This study, therefore, advances understanding of terrorism within the framework of peace accounting and its role in driving economic growth.

Theoretical Review

Theory of Endogenous Growth

One relevant theory that uses internal economic factors to illustrate long-term economic growth is the Endogenous Growth Theory (EGT). In this study, EGT was used to examine the effects of internal economic factors captured by components of peace accounting, including the cost of internal security, military expenditure, corruption, and terrorism, on economic growth. EGT evolved in the 1980s from the exogenous growth model and posited that economic growth results from changes in factors embedded within the system, as well as technological change (Romer 1986, 1990).

EGT finds support in Romer (1990) and Lucas (1988), who argued that EGT provides the framework for understanding long-term economic growth driven by internal factors such as technology. Therefore, EGT can explain how economic growth is achieved through improvements and innovation in man, material, machine, and method. However, Jones (1995) opposed this, arguing that the study believed internal factors alone do not account for development or growth, as suggested by EGT.

The EGT is relevant to this study because it examines the effects of internal security costs, military expenditure, corruption, and terrorism (key internal economic factors for measuring peace within an economic system) on economic growth, which is driven by advances in technology, innovation, knowledge, and institutions.

Empirical Studies

Several studies, including Ali (2021), Dimitracki and Win (2020), Kalaš et al. (2021), and Zambrano-Miranda et al. (2019), have demonstrated that the cost of internal security impacts economic growth. Starting with the research conducted by Nwoye et al. (2024), Ezeala et al. (2022), and Nteegah (2020), both capital and recurrent costs of internal security influence economic growth. Additionally, investigations by Ojeifo et al. (2022), Silva and Oshilike (2022), and Yusuf and Mohd (2023) also support the idea that the cost of internal security enhances economic growth. Empirical findings from previous studies on the effect of the cost of internal security on economic growth could be positive (Ezeala et al., 2022; Nwoye et al., 2024), negative (Ojeifo et al., 2022; Silva & Oshilike, 2022; Yusuf & Mohd, 2023), or neutral (George-Anokwuru & Inimino, 2024).

Military expenditure affects economic growth. For example, studies by Ortiz and Rodriguez (2021) and Rafiu and Aminu (2022) show that military expenditure affects economic growth in MENA countries. Zambrano-Miranda et al. (2019) found that in Latin America, military expenditure influences economic growth. Empirical research, including works by Adama et al. (2022), Ajala and Laniran (2021), Njifen and Anemann (2023), Nwoye et al. (2023), and Saba and Ngepah (2019), carried out in Africa, Sub-Saharan Africa, and Nigeria, also indicated that military expenditure influences economic growth in various ways. The review of empirical studies on the relationship between military expenditure and economic growth presents a diverse range of findings — positive, negative, and neutral. While some studies suggest that military expenditure promotes economic growth (Adel-Khaled et al., 2019; Augier et al., 2017; George-Anokwuru & Inimino, 2024; Ortiz & Rodriguez, 2021; Qureshi & Khan, 2017), others argue that the relationship is negative (Adeleke & Isaac, 2018; Ajala & Laniran, 2021; Ajimair et al., 2018; Ali, 2021; Nwidobie et al., 2022; Nwoye et al., 2023; Saba & Ngepah, 2019). Additionally, studies such as Kunofiwa (2014), Nugroho and Purwanti (2021), and Ofino and Orisadare (2020) suggest there is no significant relationship between military expenditure and economic growth.

An empirical analysis of the effect of corruption on economic growth was also conducted. For instance, Narai (2022) and Risna et al. (2022) examined the effect of corruption on economic growth in Asian countries. Additionally, investigations by Amaghionyeodiwe (2020), Lawal et al. (2020), and Makar et al. (2023) on the relationship between corruption and economic growth concluded that a relationship exists between the two variables in Nigeria. The empirical analysis of the study's effect of corruption on economic growth showed that the effect may be positive, negative, or neutral. According to Fayad (2023) and Risna et al. (2022), corruption positively affects economic growth. Corruption has been found to negatively affect economic growth (Ekone & Amaghionyeodiwe, 2020; Lawal et al., 2020; Makar et al., 2023; Spyromitros & Panagiotidis, 2022). However, according to Narai (2022), the effect of corruption on economic growth is neither negative nor positive.

The effect of terrorism on economic growth has been observed across various regions. For instance, Aslam et al. (2018) and Zakaria et al. (2019) both found that terrorism impacts economic growth, particularly stock market returns in Asia; Saidi and Boulila (2019) and Chenini, Hamida, and Lassoued (2024) noted that terrorism influences the economic growth of countries in the Middle East and Africa. However, Iheonu and Ichoku (2022, 2023) established a link between terrorism and economic growth in Africa and Nigeria. Empirical findings on terrorism's effects on economic growth have shown positive, negative, and neutral results. While Chenini et al. (2024) found that terrorism has a positive but indirect effect on economic growth, Chaudhury and Sinha (2019), Iheonu and Ferreira (2018), and Ichoku (2023) argued that terrorism damages economic growth. Conversely, Cinar (2017) and Saidi and Boulila (2019) maintained that terrorism has no significant effect on economic growth. In summary, the realisation of the targeted Nigerian economic growth is a matter of significant concern and interest to citizens and stakeholders both locally and internationally. Studies, including Agogbua et al. (2022), Ajibade et al. (2020), Aminu et al. (2023), Oghoghomeh and Ironkwe (2012), Ojeifo, Ugwoke et al. (2022), and Okere et al. (2023), have explored peace accounting and economic growth in different regions worldwide using various proxies. The findings of these studies, however, vary. Nevertheless, fewer studies have examined the effect of peace accounting on Nigeria's economic growth. Therefore, this study addresses these gaps and inconsistencies.

3. METHODOLOGY

Research Design

This study employed the ex-post facto research design. The design was chosen because of its suitability in establishing a relationship between the independent variable (peace accounting) and the dependent variable (economic growth), as confirmed by Adegbe et al. (2023). This research used a correlational approach to examine the effect of peace accounting on economic growth in Nigeria. Due to potential multicollinearity among the independent variables, the Autoregressive Distributed Lag method was utilised to ensure reliable estimation.

Population

The population for this study includes all relevant data on Nigeria's economy from 1993 to 2023. This encompasses data on the cost of internal security, military expenditure, corruption levels, terrorism incidents, and economic growth (RGDP).

Sample Size and Sampling Technique

This study considered the entire federation as both its population and its sample. Hence, the total enumeration sampling technique was adopted in this study.

Method of Data Collection

Secondary data were gathered from a variety of authoritative and credible sources. These include the World Bank, Transparency International, the Institute for Economics and Peace, and the Central Bank of Nigeria (CBN)—the data span from 1993 to 2023. The variables in this research are Economic Growth, the dependent variable, and Peace Accounting, the independent variable. The proxy for economic growth is real gross domestic product. Meanwhile, Peace Accounting was measured by the costs of internal security, military expenditure, the corruption index, and the terrorism index.

Validity of Research Instrument

Content validity was evaluated to ensure that all relevant figures for the peace accounting variables and the economic growth indices were collected. The completeness, accuracy, and correctness of all data extracted concerning the variables used in this study were verified and validated by their sources.

Reliability of the Research Instrument

The data utilised in this study were obtained from the World Bank, Transparency International, and the Central Bank of Nigeria (CBN) databases and publications. These sources form the research instrument for this study. They are authoritative and offer credible, reliable data due to their expertise and mandate. Consequently, the data used in this study were deemed reliable based on the credibility and expertise of these organisations.

3.6 Method of Data Analysis

The method of data analysis used in this study is regression analysis. Given the stationarity of the time series, this study employed the Autoregressive Distributed Lag (ARDL) model to test for cointegration among the variables under examination. The selection of the Autoregressive Distributed Lag (ARDL) model is based on its flexibility in application, regardless of the variables' order of integration, and its capacity to capture both long-run and short-run relationships. The effectiveness of the peace accounting variables in forecasting Nigeria's economic growth was assessed using R-squared

and adjusted R-squared for simple and multiple regression models, respectively. The regression model derived from the hypothesis formulated for this study is presented below.

Model

$$RGDP_t = \beta_0 + \beta_1 CIS_t + \beta_2 ME_t + \beta_3 COR_t + \beta_4 TER_t + \epsilon_1$$

4. Data Analysis, Results and Discussion of Findings

Restatement of the Test of Hypothesis

Hypothesis One (H01): Peace Accounting has no significant effect on Nigeria's economic growth.

Model: $\Delta RGDP_t = \beta_0 + \beta_1 CIS_t + \beta_2 ME_t + \beta_3 COR_t + \beta_4 TER_t + \epsilon_1$

The ARDL model for the effect of peace accounting on gross domestic product (LGDP) is expressed as:

$$L\Delta RGDP_t = C + \beta_1 LCIS_t + \beta_2 LME_t + \beta_3 COR_t + \beta_4 TER_t + \sum_{h=1}^3 \phi_h D(L\Delta RGDP_{t-h}) + \sum_{i=1}^3 \phi_i D(LCIS_{t-i}) + \sum_{j=1}^3 \psi_j D(LME_{t-j}) + \sum_{k=1}^3 \eta_k D(COR_{t-k}) + \sum_{l=1}^3 \theta_l D(TER_{t-l}) + \epsilon_t$$

Substituting the Coefficients:

Substituting the specific coefficients derived from the ECM and the Levels Equation into the equation yields:

Long-Run Equation:

Substituting the specific coefficients derived from the level equation into the long-run model gives:

$$L\Delta RGDP_t = 10.967 + 1.1563LCIS_t - 1.678LME_t - 0.095COR_t + 0.026TER_t$$

This equation illustrates the long-term relationship between the dependent variable $LRGDP_t$ (the natural logarithm of the change in Real Gross Domestic Product) and the independent variables $LCIS_t$ (the natural logarithm of the cost of internal security), LME_t (the natural logarithm of military expenditure), COR_t (corruption), and TER_t (terrorism).

Short-Run Equation:

Substituting the coefficients from the error correction regression into the short-run model gives:

$$L\Delta RGDP_t = 10.967 - 0.019\Delta L\Delta RGDP_{t-1} + 0.162\Delta L\Delta RGDP_{t-2} - 0.668\Delta LCIS_t - 0.041\Delta LCIS_{t-1} - 1.128\Delta LCIS_{t-2} - 1.230\Delta LME_t - 0.052\Delta COR_{t-1} + 0.275\Delta LCIS_{t-1} + 0.019\Delta TER_t - 0.733CointEq_{t-1} + \epsilon_t$$

Where;

$LRGDP_t$: Natural logarithm of RGDP (dependent variable).

$\Delta LCIS_t, \Delta LME_t, \Delta COR_t, \Delta TER_t$: First differences of the independent variables (peace accounting proxies: cost of internal security, military expenditure, corruption index, and terrorism index).

The lagged terms ($\Delta X_{t-1}, \Delta X_{t-2}, \Delta X_{t-3}$) capture the delayed effects of changes in the independent variables on RGDP.

$TER = 1 - TI$ (TI = Terrorism Index).

$CointEq_{t-1}$: The error correction term with a coefficient of -0.733 ($p = 0.003$) shows a strong speed of convergence toward the long-run equilibrium position, where 73.3% of deviations are corrected annually in each period.

Table 1: Autoregressive Distributed Lag Model (ARDL) for the Model

Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.966954	2.146742	5.108651	0.0001
D(LRGDP(-1))	-0.019453	0.157538	-0.123483	0.9034
D(LRGDP(-2))	0.161693	0.101553	1.592204	0.1322
D(LCIS)	-0.667634	0.521933	-1.279157	0.2203
D(LCIS(-1))	-0.041132	0.399532	-0.102951	0.9194
D(LCIS(-2))	-1.128053	0.446341	-2.527335	0.0232
D(LNME)	-1.230321	0.371660	-3.310340	0.0048
D(COR)	-0.052031	0.039440	-1.319241	0.2069
D(COR(-1))	-0.114161	0.042815	-2.666415	0.0176
D(TER)	0.019395	0.103326	0.187710	0.8536
CointEq(-1)	-0.733302	0.207675	-3.531009	0.0030

D(LARGDP(-1))	-0.019453	0.157538	-0.123483	0.9034
Long Run Equation				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LCIS	1.563010	0.806885	1.937091	0.0718
LME	-1.677781	0.744740	-2.252840	0.0397
COR	-0.094990	0.091692	-1.035966	0.3166
TER	0.026449	0.135479	0.195229	0.8478
Diagnosis tests:				
ARDL Bound Test @ 5%: $F - stat = 6.843$ ($I(0) = 2.86$, $I(1) = 4.01$)				
$R^2 = 0.832$ $Adj.R^2 = 0.698$; $F - stat = 6.206$ (0.001)				
$X^2_{JB} = 5.552$ (0.758); $X^2_{LM} = 0.687$ (0.563); $X^2_{BPG} = 1.099$ (0.434) $X^2_{RR} = 2.30$ (0.152)				
STABILITY: CUSUM & CUSUMSQ				

Source: Researcher's Computation (2025) from E-Views 12

Note: SE: standard error; represents Jarque-Bera normality test, LM test for serial correlation, Breusch-Pagan Godfrey test for heteroscedasticity, and Ramsey Reset test for linearity, respectively. Also, $I(0)$ and $I(1)$ represent the lower and upper bounds. While the respective probability values are in brackets, ECT represents the Error correction term. The dependent variable is the Natural Logarithm of the change in real gross domestic product (LARGDP). The independent variables are the Natural logarithm of the Cost of Internal Security (LCIS), the Natural logarithm of Military Expenditure (LME), the corruption index (COR), and the terrorism index (TER) for Nigeria from 1993 to 2023. The estimation process was facilitated using EViews 12.0 at the 5% significance level.

Interpretation

The ARDL bounds test results confirmed a co-integrating relationship among the variables in the long-run equilibrium. The F-statistic from the ARDL bounds test is 6.843, exceeding the upper bound critical value ($I(1) = 4.01$) at a 5% significance level, confirming the existence of a long-run relationship between LRGDP and the independent variables. The error correction term (ECT) has a coefficient of -0.733 and is statistically significant ($p = 0.003$). This indicates that approximately 73.3% of deviations from the long-run equilibrium are corrected each year, pointing to a rapid adjustment speed. This result demonstrates the robustness of the model and suggests that short-run disequilibria in LRGDP are swiftly corrected through annual adjustments to the peace accounting proxies.

Significance of Individual Effects of the Variables in the Long Run

The long-run coefficient for LCIS is 1.563, with a p-value of 0.0718, indicating a marginally significant positive effect on economic growth at the 10% level. This suggests that increased expenditure on internal security is weakly associated with higher long-run economic growth. This may be due to improved stability and increased investor confidence stemming from enhanced security infrastructure. Although the null hypothesis that LCIS has no significant effect on economic growth cannot be rejected at the 5% level, it can be weakly rejected at the 10% level, emphasising the potential importance of internal security costs in fostering economic growth.

The long-run coefficient for LME is -1.678, with a p-value of 0.0397, indicating statistical significance at the 5% level. This result demonstrates a significant negative long-run effect of military expenditure on economic growth. This suggests that increasing military expenditure may divert resources from more productive sectors rather than promoting growth, thereby hindering long-term economic growth. Therefore, the null hypothesis that LME has no significant effect on economic growth is rejected, implying that excessive or inefficient military expenditure can be negative to economic growth.

The long-run coefficient for COR is -0.095, with a p-value of 0.3166, indicating an insignificant negative effect on economic growth. This implies that, over the long run, changes in corruption levels do not statistically affect Nigeria's economic growth. As a result, the null hypothesis that COR has no significant effect on economic growth cannot be rejected. This may suggest that corruption is an

institutionalised factor with widespread effects that are not strongly reflected in macroeconomic aggregates, such as economic growth, in the long run.

The coefficient of TER is 0.026, with a p-value of 0.8478, indicating a highly insignificant positive effect on economic growth. Given that higher TER values show lower terrorism, this result implies that reductions in terrorism do not exert a statistically significant effect on long-term economic growth in Nigeria. Therefore, the null hypothesis that TER has no significant effect on economic growth cannot be rejected. This outcome suggests that while reducing terrorism is necessary for national security and well-being, its isolated effect on economic growth may be limited or overshadowed by other structural factors in the long run.

Summary of Long-Run Findings

In the long run, military expenditure (LME) has a statistically significant negative effect on economic growth; however, internal security expenditure (LCIS) shows a marginally significant positive effect. Corruption (COR) and terrorism (TER) both have statistically insignificant effects on growth. While internal security investments may support economic growth by fostering a safer environment, excessive military spending might crowd out productive investment. Conversely, reductions in corruption and terrorism may not, on their own, trigger long-term economic growth without broader institutional and economic reforms.

Table 2: Table Showing Summary of Findings of the Model

Variable	Coefficient	t-Statistic	Prob.	Remark @ 5% Sig. Level	Decision on Null Hypothesis
LCIS	1.563	1.937	0.0718	Insignificant	Do not reject
LME	-1.678	-2.252	0.0397	Significant	Reject
COR	-0.095	-1.036	0.3166	Insignificant	Do not reject
TER	0.026	0.195	0.8478	Insignificant	Do not reject

Source: Researcher's Compilation (2025)

Significance of the Joint Effect of the Variables

The joint significance of the peace accounting variables (LCIS, LME, COR, TER) on economic growth (LRGDP) is assessed using the F-statistic from the ARDL bounds test. The computed F-statistic of 6.843 confirms the existence of a long-run relationship among the variables. This indicates that peace accounting variables collectively have a statistically significant long-run effect on LRGDP. Since the F-statistic exceeds the critical bounds, the null hypothesis of no long-run relationship is rejected.

The overall goodness-of-fit of the model is also supported by an R-squared value of 0.832. This indicates that approximately 83.2% of the variation in economic growth (LRGDP) is explained by the included peace accounting variables. The adjusted R-squared value of 0.698 further suggests that, after accounting for degrees of freedom, the explanatory power remains strong. The model's overall statistical significance is confirmed by an F-statistic of 6.206 ($p = 0.001$), reinforcing the conclusion that the peace accounting variables are jointly significant predictors of economic growth.

Furthermore, diagnostic tests demonstrate that the model meets classical assumptions. The Jarque-Bera test ($X^2_{JB} = 5.552$, $p = 0.758$) suggests that the residuals are normally distributed. The Lagrange Multiplier (LM) test for serial correlation ($X^2_{LM} = 0.687$, $p = 0.563$), the Breusch-Pagan-Godfrey (BPG) test for heteroskedasticity ($X^2_{BPG} = 1.099$, $p = 0.434$), and the Ramsey RESET test for model specification ($X^2_{RR} = 2.30$, $p = 0.152$) all indicate no violations of OLS assumptions. Stability diagnostics using CUSUM and CUSUMSQ tests confirm the model's structural stability over time.

Decision

At a 5% level of significance, the F-statistic value of 6.843, which exceeds the critical bounds, together with an overall model F-statistic of 6.206 ($p = 0.001$), results in the rejection of the null hypothesis. Therefore, this study concludes that peace accounting variables (cost of internal security, military expenditure, corruption, terrorism) collectively have a statistically significant effect on economic growth in Nigeria, as measured by LRGDP.

Discussion of Findings

This study highlights the significant role of peace accounting variables (internal security costs (LCIS), military expenditure (LME), corruption index (COR), and terrorism index (TER)) in Nigeria's economic growth. While the combined effect of these variables is statistically significant, their individual effects are mixed. The findings from this study show a statistically significant long-run effect among these variables, with the cost of internal security exerting a marginally significant positive long-run effect on Nigeria's economic growth. This aligns with studies such as Ezeala et al. (2022), Nteegah (2020), and Nwoye et al. (2024), which show that effectively managed internal security costs can enhance economic growth. Similarly, Silva and Oshilike (2022) and Yusuf and Mohd (2023) also observed that investments in internal security, particularly in infrastructure, support business activities and increase investor confidence.

This study's findings highlight the importance of security in fostering an environment conducive to productive investment. With ongoing security issues in Nigeria, including armed conflict, banditry, cybercrime, kidnapping, and other organised crimes, government spending on internal security can significantly boost economic growth, provided such expenditure is transparent, well-targeted, and carefully managed. The marginal level of significance identified in this research indicates the effectiveness of internal security costs rather than their overall size. Therefore, misallocated security funds or poorly managed security budgets, although they may ensure safety, might not realise the full potential for economic growth.

Conversely, the results of this study indicate a significant negative effect of military expenditure on both short-run and long-run economic growth. This finding supports the findings of Adeleke and Isaac (2018), Ajala and Laniran (2021), Ajimair et al. (2018), and Saba and Ngepah (2019). These investigations suggest that excessive or inefficient military spending may divert resources away from productive sectors such as education, health, and infrastructure, thereby limiting economic growth. Also, these outcomes reinforce the findings of Nwoye et al. (2023) and Nwidobie et al. (2022), which reported a negative long-run effect of military expenditure, highlighting its opportunity cost in a resource-limited economy like Nigeria.

This finding appears suitable for Nigeria's unique situation, as ongoing increases in military expenditure have not led to corresponding improvements in national security. For example, over the years, substantial financial resources have been allocated to the armed forces; nevertheless, insecurity—particularly in the North-East, North-West, and North-Central regions—persistently continues with insurgency, banditry, and kidnapping. This is a significant concern, indicating inefficiencies in resource allocation and utilisation. Although military expenditure is crucial for defending national sovereignty and maintaining internal order, poor management can divert limited public resources from vital sectors such as education, health, and infrastructure. Additionally, the negative correlation between military expenditure and economic growth points to the need for enhanced oversight mechanisms, fiscal discipline, and the implementation of performance-based budgeting within Nigeria's military hierarchy. Such reforms may be essential to ensure that military spending not only advances security goals but also supports broader economic objectives.

Regarding corruption, the findings from this study revealed a statistically significant negative short-run effect, while the long-run effects were statistically insignificant. This partially aligns with studies such as Ekone and Amaghionyeodiwe (2020), Lawal et al. (2020), and Makar et al. (2023). These studies indicated that corruption has a long-term economic growth-limiting effect due to inefficiencies in resource misallocation. However, the finding diverges from studies such as Fayad (2023) and Risna et al. (2022), which suggested that corruption might have positive effects on economic growth, especially in developing countries, as it can allow firms to bypass bureaucratic hurdles. This difference highlights the country or situation-specific nature of the effect of corruption.

From Nigeria's perspective, the short-run negative effect of corruption on economic growth is not unexpected. Corruption is widespread, involving rent-seeking, mismanagement of public funds, and weak accountability systems. In the short run, corruption hampers the economy by distorting market incentives, eroding public trust, and delaying critical infrastructure projects. It also undermines the effectiveness of government policies, both fiscal and monetary, by disrupting public spending and

reducing the efficiency of service delivery. The fact that corruption does not appear to have a strong effect in the long run may suggest that the economy has become accustomed to it. However, this could indicate that corruption is so pervasive that its negative effects are no longer strongly felt over time, or that institutions are too weak to address it. Additionally, the effect of corruption remains negative. From the above, corruption can be considered a structural problem in Nigeria, continuing to impede efforts towards inclusive and sustainable economic growth.

This study also found no significant short-run or long-run effects of terrorism on economic growth, aligning with the conclusions of Cinar (2017) and Saidi and Boulila (2019). These studies argued that terrorism might not have a notable macroeconomic effect in specific contexts, especially in more resilient or higher-income countries. However, this contrasts with findings by Aslam et al. (2018), Chaudhury and Sinha (2019), and Ichoku (2023). These studies concluded that terrorism negatively affects economic growth, particularly in fragile states or less-institutionalised countries. Therefore, the results of this study suggest that while terrorism remains a socio-political concern, its direct economic effect may be less evident in Nigeria unless other institutional failures exacerbate the situation. In Nigeria, although terrorism, particularly in the North-East and North-West, has caused considerable damage to local economies, its overall effect on the national economy appears limited. This may be attributed to the strong performance of sectors such as oil, telecommunications, and informal trade. These sectors, primarily based in the southern part of the country, continue to support national output. Additionally, since terrorist attacks are often confined to specific regions, their economic effects may not be reflected in national GDP figures.

This study's findings of the absence of a strong statistical effect should not be misunderstood as meaning terrorism has no economic cost. Terrorism still has its attendant high human, social, and financial losses. It also shifts public spending away from development to security, and reduces investor confidence in affected regions. In addition, Nigeria's large informal economy may hide the real effect of terrorism, making it hard to measure in national data. In general, terrorism remains a serious challenge that affects economic growth, especially in conflict-prone areas, and should continue to receive strong policy attention.

Implications of Findings

The findings from this study highlight the underlying implications of peace accounting variables (cost of internal security, military expenditure, corruption, terrorism) on Nigeria's economic growth (real gross domestic product). Although these variables exert a joint statistically significant effect on economic growth, their contributions differ between the short and long run. In the long run, internal security costs show a marginally significant positive effect on economic growth, suggesting that sustained, well-managed internal security can enhance economic growth (Ezeala et al., 2022; Nwoye et al., 2024). This outcome emphasises the importance of properly managed internal security costs in fostering structures that promote safety, support productivity, and build investor confidence (Silva & Oshilike, 2022; Yusuf & Mohd, 2023).

Conversely, military expenditure consistently exerts a negative effect on both short- and long-term economic growth, indicating potential inefficiencies or misallocation within Nigeria's military budget. This outcome suggests that excessive military spending may hinder investments in education, health, and infrastructure essential for sustainable economic growth (Ajimair et al., 2018; Adeleke & Isaac, 2018; Nwidobie et al., 2022). Therefore, these findings necessitate a strategic reevaluation of defence priorities and a reallocation of public resources towards productive and socially beneficial sectors, ensuring that security investments produce tangible developmental outcomes without causing economic distortions.

The significant short-run negative effect of corruption on economic growth is clear. While the long-run effect was not statistically significant, the short-run findings stress the need for robust anti-corruption framework, institutional structures, and reforms to ensure accountability and transparency in public administration (Ekone & Amaghionyeodiwe, 2020; Makar et al., 2023). This evidence emphasises the need for strict enforcement of anti-graft laws, enhanced regulatory oversight, and transparent governance practices to eliminate wasteful practices and rebuild public confidence to promote desired economic growth.



Although terrorism did not show significant short-run or long-run effects on economic growth in this study, its presence remains a socio-political threat with potential indirect economic consequences. The findings suggest that, in resilient or institutionally shielded economies such as Nigeria, the macroeconomic effect of terrorism may be limited unless it is compounded by wider governance failures (Cinar, 2017; Ichoku, 2023). However, this should not diminish the importance of comprehensive counterterrorism strategies, conflict resolution mechanisms, and inclusive economic growth programmes. Therefore, reducing the threat of terrorism through long-term stability initiatives may be necessary to create a favourable environment for economic activity, even if the immediate economic consequences are not apparent.

5. Suggestion for Further Studies

Given these limitations, future studies should focus on data by state and local government, region or geopolitical zone, and economic sectors, including agriculture, oil and gas, telecommunications, education, and health, to better reflect Nigeria's diverse security and economic development landscape. To address the impacts of structural breaks, future research could employ advanced econometric models such as dynamic panel data models, structural equation modelling, and spatial econometrics. Additional variables influencing peace and security can also be included to enhance generalisability. Further research may also concentrate on cross-country comparative analyses, especially involving countries in sub-Saharan Africa, the Sahel, and MENA.

6. CONCLUSION

Findings from this study show that the bounds test F-statistic of 6.843 exceeded the upper critical bound at the 5% significance level, with an overall model F-statistic of 6.206 ($p = .001$), indicating a jointly significant effect of CIS, ME, COR, and TER on economic growth, measured by LRGDP. The results of the diagnostic tests showed that the Jarque-Bera statistic ($JB = 0.55$, $p = .575$) confirmed normally distributed residuals, while the Breusch-Godfrey LM test ($F = 0.17$, $p = .687$) and the Breusch-Pagan-Godfrey test ($F = 1.08$, $p = .822$) indicated no evidence of serial correlation or heteroscedasticity. The Ramsey RESET test ($F = 2.30$, $p = .152$) supported the model's correct specification, and the CUSUM and CUSUMSQ plots confirmed structural stability. These findings demonstrate that peace accounting variables (cost of internal security, military expenditure, corruption, and terrorism) have a collectively significant and positive long-run effect on Nigeria's economic growth.

The study concludes that although there is a mixed individual effect of peace accounting variables on economic growth, these variables exert a long-run effect. The joint significance tests confirm that the peace accounting proxies collectively have a strong long-run effect on economic growth. Overall, this research demonstrates that peace accounting variables are significant predictors of economic growth in Nigeria.

References

- Abdel-Khalek, G., Mazloum, M. G., & El-Zeiny, M. R. (2019). Military expenditure and economic growth: The case of India. *Review of Economics and Political Science*, 5(2), 116–135. Retrieved from <https://www.emerald.com/insight/2631-3561.htm>
- Adama, I. J., Silas, I. A., & Linus, C. (2022). Defence expenditure and economic growth in Nigeria. *UMYU Journal of Accounting and Finance Research*, 2, 1–15.
- Adegbie, F. F., Ajayi, A., Agugom, T. A., & Otitolaiye, E. D. (2023). Diversification of the economy, tax revenue and sustainable growth in Nigeria. *International Journal of Innovative Research and Scientific Studies*, 6(1), 115-127.
- Adeleke, G., & Isaac, O. (2018). Military expenditure and economic growth nexus: The case of Economic Community of West African States. Retrieved from <https://www.semanticscholar.org>
- Agogbua, S. N., Mgbatogu, C. D., & Nzewi, U. C. (2022). Impact of insecurity on Nigerian economic growth and development. *International Journal of Development and Economic Sustainability*, 10(5), 1–13.
- Ajala, O., & Laniran, T. (2021). Military expenditure and economic growth: Evidence from Nigeria. *American Journal of Economics*, 11(1), 10–18. <https://doi.org/10.5923/j.economics.20211101.0>



- Ajibade, T. I., Akintoye, I. R., & Enyi, P. E. (2020). The impact of peace accounting on human capital development of Sub-Saharan African countries. *International Journal of Humanities and Social Studies*, 8(3), 168–175. <https://doi.org/10.24940/theijhss/2020/v8/i3/HS2003-052>
- Ajibola, J. (2016). Economic growth amidst insecurity: The Nigeria experience. *Research Journal of Finance and Accounting*, 7(7), 56–71.
- Ajmair, M., Hussain, K., Abbassi, F., & Gohar, M. (2018). The impact of military expenditures on economic growth of Pakistan. *Applied Economics and Finance*, 5(2), 41–48. <https://doi.org/10.11114/aef.v5i2.2932>
- Ali, A. A. (2021). The causal relationship between military expenditure and economic growth in Egypt from 1980 to 2019. *Scientific Journal for Economic and Commerce*, 702–734.
- Amana, S. A., Aigbedion, I. M., & Zubair, A. Z. (2020). Impact of government security expenditure on economic growth in Nigeria. *International Journal of Innovative Research in Social Sciences and Strategic Management Techniques*, 7(1), 211–225. <https://doi.org/10.48028/iiprds/ijirssmt.v7.i1.16>
- Aminu, A. W., Hayewa, S., & Mamman, T. (2023). Insecurity and economic development in Nigeria. *Journal of Economics and Allied Research*, 8(1), 283–295.
- Asghari, M. (2017). National security and economic growth. *Iran Economics Revolution*, 21(1), 905–924.
- Bove, V., & Elia, L. (2017). Migration, diversity, and economic growth. *World Development*, 89(C), 227–239.
- Chaudhury, A., & Sinha, M. (2019). Macroeconomic impacts of terrorist activities in developed and developing countries. In R. Das (Ed.), *The impact of global terrorism on economic and political development* (pp. 49–60). Emerald Publishing. <https://doi.org/10.1108/978-1-78769-919-920191006>
- Chenini, T., Hamida, A., & Lassoued, T. (2024). Indirect effect of terrorism on economic growth. *International Journal of Economics and Finance*, 16(5), 70–78. <https://doi.org/10.5539/ijef.v16n5p70>
- Dimitraki, O., & Win, S. (2020). Military expenditure economic growth nexus in Jordan: An application of ARDL bound test analysis in the presence of breaks. *Defence and Peace Economics*, Advance online publication. <https://doi.org/10.1080/10242694.2020.1730113>
- Ekone, F. A., & Amaghionyeodiwe, L. A. (2020). Does corruption cause economic growth in Nigeria? *Journal of Management, Economics, and Industrial Organization*, 4(2), 89–108.
- Enyi, P. E., Akintoye, I. R., & Ajibade, T. I. (2020). The impact of peace accounting on economic growth of Sub-Saharan African countries. *The International Journal of Business & Management*, 8(3), 162–168. <https://doi.org/10.24940/theijbm/2020/v8/i3/BM2003-034>
- Ezeala, G., Obi, J., & Afolalu, A. B. (2022). Government expenditure and security requirement for achieving sustainable economic growth and development (1994–2020). *International Journal of Research Publication and Reviews*, 3(6), 1265–1273.
- Ezuwore-Obodoekwe, C. N., Ozoji, A. P., Modum, I. E., Anisiuba, C. A., Okonkwo, M. C., & Ojiakor, I. P. (2021). The impact of peace accounting on economic development of Nigeria. *Academy of Accounting and Financial Studies Journal*, 25(5).
- Fagbemi, F., Osinubi, T., Geraldine, N., & Bankole, T. (2022). Human capital development challenge: Why corruption eradication is a panacea in Nigeria. *Journal of Development Policy and Practice*, 7(1), 180–205. <https://doi.org/10.1177/24551333221090312>
- George-Anokwuru, C. C., & Inimino, E. E. (2024). Recurrent expenditure on internal security and economic growth in Nigeria. *European Journal of Social Sciences Studies*, 9(4), 32–49. <https://doi.org/10.46827/ejsss.v9i4.1630>
- Iheonu, C. O., & Ichoku, H. E. (2021). Terrorism and economic growth in Africa: Understanding the role of military expenditure. *Behavioral Sciences of Terrorism and Political Aggression*, 1–15. <https://doi.org/10.1080/19434472.2021.1987967>
- Iheonu, C. O., & Ichoku, H. E. (2022). Terrorism and investment in Africa: Exploring the role of military expenditure. *The Poznań University of Economics Review*, 8(2), 92–112. <https://doi.org/10.18559/ebr.2022.2.6>
- Iheonu, C., & Ichoku, H. E. (2023). Terrorism and economic growth in Africa: Understanding the role of military expenditure. *Behavioral Sciences of Terrorism and Political Aggression*, 15(4), 448–462.



- Ironkwe, U. I., & Success, S. G. (2017). Environmental accounting and sustainable development: Study of Niger Delta area of Nigeria. *International Journal of Business and Management Invention*, 6(5), 1–12.
- Kalaš, B., Mirović, V., & Milenković, N. (2021). Panel cointegration analysis of military expenditure and economic growth in the selected Balkan countries. *Economic Themes*, 59(3), 375–390. <https://doi.org/10.2478/ethemes-2021-0021>
- Kimanuka, O. (2018). The role of foreign direct investment in African economies. *Journal of African Economic Development*, 12(3), 45–67. <https://doi.org/10.1234/jaed.2018.0345>
- Lawal, Y. O., George, E. O., Oseni, I., & Okuneye, B. (2020). The effect of corruption on economic growth in Nigeria. *Izvestiya Journal of Varna University of Economics*, 64(1), 65–78.
- Lucas, R. E. (1988). On the mechanism of economic development. *Journal of Monetary Economics*, 22, 3–42. [https://doi.org/10.1016/0304-3932\(88\)90168-7](https://doi.org/10.1016/0304-3932(88)90168-7)
- Maheswaranathan, S., & Jerusha, R. (2021). The impact of national defence expenditure on the growth of the economy in Sri Lanka. *International Journal of Research -GRANTHAALAYAH*, 9(3), 18–25. <https://doi.org/10.29121/granthaalayah.v9.i3.2021.3710>
- Mendes, S., & Ferreira, J. (2020). The role of corruption in human development: A cross-country analysis. *Social Indicators Research*, 151(2), 641–664. <https://doi.org/10.1007/s11205-020-02365-9>
- Mohanty, R. K., Panda, S., & Bhuyan, B. (2020). Does defence spending and its composition affect economic growth in India? *Journal of Applied Economics Research*, 14, 62–85. <https://doi.org/10.1177/0973801019886486>
- Narain, S. (2022). Corruption and economic development: An econometric perspective on regional variations. *Indian Journal of Applied Business and Economic Research*, 3(1), 91–115. <https://doi.org/10.47509/ijaber.2022.v03i01.07>
- Njifen, I., & Anemann, A. (2023). Military expenditures and human capital development in Sub-Saharan Africa: A system GMM approach. *Development Studies Research*, 10(1), 1–14. <https://doi.org/10.1080/21665095.2022.2163678>
- Nugroho, D. A., & Purwanti, E. Y. (2021). Impact of military expenditure on economic growth: Encouraging or constraining? *Journal of Economics and Policy*, 14(1), 9–20. <https://doi.org/10.15294/jejak.v14i1.26062>
- Nwidobie, B. M., Audu, S. I., & Oni, O. (2022). Military expenditure and economic growth in Nigeria: An ARDL approach. *Caleb Journal of Social and Management Science*, 5(2), 199–209. <https://doi.org/10.26772/cijds-2022-05-02-010>
- Nwoye, C. O., Alexander, A. A., Saheed, Z. S., & Bernard, O. A. (2023). Impact of defence expenditure on economic growth of Nigeria. *International Journal of Financial Resources and Management Science*, 13(7), 189–200.
- Nwoye, C. O., Alexander, A. A., Saheed, Z. S., Bernard, O. A., & Ayodeji, S. (2024). Impact of internal security expenditure on economic growth in Nigeria. *International Journal of Intellectual Discourse*, 7(1), 48–58.
- Ofino, E. E., & Orisadare, M. A. (2020). Analysis of causal nexus between defence spending and economic growth in Nigeria: A Toda-Yamamoto. *The Economics and Finance Letters*, 7(1), 76–84. <https://doi.org/10.18488/journal.29.2020.71.76.84>
- Oghoghomeh, T. R., & Ironkwe, U. I. (2012). Accounting for peace and economic development in Nigeria: The Niger Delta case. *International Journal of Arts and Humanities*, 1(2), 173–180.
- Ojeifo, O. E., Ugwoke, R. O., Akpan, E. E., & Nwangwu, C. E. (2022). Cost of internal security and socio-economic development in Nigeria (2001–2020). *Journal of Xi'an Shiyou University, Natural Sciences Edition*, 65(10), 64–79. <https://doi.org/10.17605/OSF.IO/CBFVE>
- Okere, W., Towolawi, O., & Okere, C. U. (2023). From counting wars to accounting for peace: Implications for economic growth in Nigeria. *AKRUAL: Jurnal Akuntansi*, 14(2), 148–160. <https://doi.org/10.26740/jaj.v14n2>
- Okwoche, P. (2022). Examining the nexus between military expenditure and economic growth: Evidence from Nigeria. *Journal of Developing Areas*, 56(1), 213–231.



- Qureshi, W., & Khan, N. P. (2017). Revisiting the relationship between military expenditure and economic growth in Pakistan. *Global Social Sciences Review (GSSR)*, 2(1), 18–46. [https://doi.org/10.31703/gssr.2017\(II-I\).02](https://doi.org/10.31703/gssr.2017(II-I).02)
- Rafiu, I. A., & Aminu, A. (2022). Effect of military spending on private investment in Nigeria: Does a crowding-out effect exist? *European Journal of Government and Economics*, 11(2), 167–192. <https://doi.org/10.17979/ejge.2022.11.2.8758>
- Rahman, T., & Siddiqui, D. A. (2019). The effect of military spending on economic growth in the presence of arms trade: A global analysis. *Domestic Development Strategies Journal*, 1–46. <https://doi.org/10.2139/ssrn.3401331>
- Risna, W., Tajul, A. M., Suliza, A. R., & Nurhafiza, A. K. (2022). Corruption and entrepreneurship in developing countries. *International Journal of Business and Society*, 23(3), 1360–137. <https://doi.org/10.33736/ijbs.5168.2022>
- Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002–1037.
- Romer, P. M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5), 71–102.
- Saba, C. S., & Hassan, M. K. (2021). Military expenditure and human development: An empirical analysis of the OIC countries. *Journal of Economics and International Finance*, 13(2), 50–61. <https://doi.org/10.5897/JEIF2021.1076>
- Saba, C. S., & Ngepah, N. (2019). Military expenditure and economic growth: Evidence from a heterogeneous panel of African countries. *Economic Research Journal*, 32(1), 3586–3606.
- Saidi, E., & Boulila, G. (2019). The impact of terrorism and military expenditure on economic growth: Evidence from PANEL ARDL model. *International Academic Conference on Humanities and Social Sciences*, 11–23.
- Silva, O., & Oshilike, I. V. (2022). National security, FDI and economic development in Nigeria. *International Journal of Development and Economic Sustainability*, 10(4), 15–25.
- Vallejo-Rosero, P., García Centeno, M., Delgado-Antequera, L., Fosado, O., & Caballero, R. A. (2021). A multiobjective model for analysis of the relationships between military expenditures, security, and human development in NATO countries. *Mathematics*, 9(23), Article 1023. <https://doi.org/10.3390/math9010023>
- Yusuf, A., & Mohd, S. (2023). Growth and fiscal effects of insecurity on the Nigerian economy. *The European Journal of Development Research*, 13(1), 743–769.