
PEACE ACCOUNTING PERSPECTIVES AND ECONOMIC DEVELOPMENT: EVIDENCE FROM NIGERIA

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Abstract

Over the past two decades, global indicators of peace have declined, highlighting the growing economic burden of insecurity. Peace accounting, which tracks and analyzes the costs of violence and peacekeeping, provides insight into these impacts. This study examines the relationship between peace accounting and economic development in the Federal Republic of Nigeria using an ex-post facto design. Secondary data were sourced from the Central Bank of Nigeria's Statistical Bulletin and Federal Inland Revenue Service reports, covering 42 years (1982–2023), with GDP and tax revenue representing the economy. Short-run results show that the cost of insecurity negatively and significantly affects economic development, while civil unrest has a positive but insignificant effect. In the long run, insecurity exerts a positive and significant impact, whereas civil unrest negatively and significantly influences growth. The model explains the data well, with an R^2 of 0.99. Findings suggest that prolonged insecurity has hindered Nigeria's economic progress, while civil unrest continues to pose challenges. The study recommends that government should implement effective measures to reduce insecurity and address the underlying causes of civil unrest through improved governance, social

inclusion, and equitable policies. Strengthening peace accounting practices can support policymakers in mitigating the economic costs of violence and fostering sustainable development.

Keywords: Peace Accounting, Economic Development, Insecurity, Civil Unrest. Short-Run, Long-Run

1. Introduction

Throughout history, humans have consistently sought peace, from ancient times to the present. Beyond being a comforting term, peace signifies a harmonious society and a world of beauty and stability. It can be considered the highest aspiration, something every individual hopes to experience personally and to see reflected in society and the wider world. People have strived in countless ways to attain this ideal, making the quest for peace a recurring theme in human history. Over time, peace has been examined, taught, and studied from numerous perspectives, reflecting its central importance in human life and social development.

Gal tung (1967) posits that peace is a relation between two or more parties. The parties may be inside a person, a state or nation, a region or civilization, pulling in different directions. Peace is not the property of one party alone, but the property of the relation between parties. I am saying that in no sense belittles the significance of the parties in their ability to build peaceful relations. Peace Accounting is the process of recording, analyzing, and providing information that relates to the cost of restricting natural or provoked violence, or the cost associated with peacekeeping (Edesiri & Egbunike, 2016).

Over the last twenty years, global measures of peacefulness have generally worsened. Both longstanding and emerging conflicts, terrorism, civil unrest, and growing political and cultural divisions are major contributors (Global Peace Index, 2024). The economic consequences of violence are substantial: in 2023, global losses reached \$19.1 trillion in purchasing-power parity (PPP) terms, equivalent to 13.5% of total world GDP, translating to \$2,380 less economic output per person. This represents a \$158 billion increase from the previous year, largely driven by a 20% rise in GDP losses due to conflict. By contrast, spending on peacebuilding and peacekeeping amounted to only \$49.6 billion, less than 0.6% of total military expenditures (Global Peace Index, 2024). Overall, global peacefulness declined by 0.56% in 2023 (Institute for Economics & Peace, 2024). While this may appear minor, it marks the twelfth decline in the index's history, representing a total reduction of 4.5% since its inception.

The origins of the Gross Domestic Product (GDP) concept can be traced back to William Petty, who applied it to assess tax burdens and argue that landlords were unfairly taxed during the Dutch English wars from 1652 to 1674 (The Economist, 2013). Later, Simon Kuznets (1934) developed the modern framework of GDP for a United States Congress report, cautioning against its use as a direct measure of societal welfare. Despite this warning, following the Bretton Woods Conference in 1944, GDP became the primary metric for evaluating a country's economic performance.

At that time, Gross National Product (GNP) was the primary measure, as it accounted for production by a country's citizens both domestically and abroad, rather than focusing on its "resident institutional units." The United States officially transitioned from using GNP to GDP in 1991. During World War II, GDP measurements played a critical role in shaping economic

planning, which contributed to their widespread political acceptance afterward as indicators of national development and progress (Lepenes, 2016).

According to Credit Direct (2025), Nigeria's economic growth slowed to 3.98% in the third quarter of 2025, down from 4.23% in Q2. In terms of GDP composition, the contributions of the agriculture and industry sectors were lower in Q3 2023 compared to Q3 2022, a decline closely linked to insecurity and civil unrest driven by political polarization. In the 2023 Global Peace Index, Nigeria ranked 144th out of 163 countries and territories, slipping one place from 143rd in 2022 and two places lower than 146th in 2021. Rising violence, political instability, climate change, and civil unrest continue to exert a tangible negative impact on the Nigerian economy.

A 2023 UNICEF-commissioned study examined the economic cost of conflict in Northeast Nigeria, particularly focusing on violence and serious violations against children. The research estimated that cumulative economic losses over the course of the conflict totaled approximately US\$100 billion. These monetary losses reflect the broader development opportunities that the country has forfeited due to ongoing conflict and instability, underscoring the profound economic consequences of insecurity for Nigeria's growth prospects.

An analysis by the Institute for Economics and Peace (2024) indicates that peacefulness is closely linked to economic performance, creating conditions that support growth and development. Countries with higher levels of peace tend to attract greater investor confidence, driven by factors such as stable governance and effective institutions. Such environments foster business operations, encourage entrepreneurship, and promote innovation. Peace accounting is essential for measuring the economic losses caused by insecurity and identifying alternative strategies to mitigate its impact on the economy. Accordingly, this paper examines peace accounting and its relationship with Nigeria's economic development, using insecurity and civil unrest as proxies for factors affecting growth, with gross domestic product (GDP) serving as the key measure of economic performance.

2.0 Literature Review

Economic Development ED

According to United Nations Conference on Trade and Development (UNCTAD) (2025) economic development is a multidimensional process that goes beyond mere increases in national income to encompass improvements in living standards, institutional capacity, and overall human well-being. Musa (2025) emphasizes that development involves the effective use of human, financial, and technological resources to generate sustained and inclusive economic progress, rather than focusing solely on GDP growth.

Peacefulness and economic development are increasingly understood as mutually reinforcing processes in contemporary research. Recent evidence shows that societies with higher levels of "positive peace"—defined as the attitudes, institutions, and structures that sustain peaceful societies—tend to experience stronger and more stable economic performance (Yacoubian et al, 2025). Institute for Economics & Peace (2024) highlights that countries improving in peacefulness recorded significantly higher GDP growth, faster household consumption, and more stable inflation compared to less peaceful counterparts. Recent data demonstrates a clear correlation between national peacefulness and higher GDP per capita, reinforcing the idea that

peace is not merely a social goal but also an economic asset (Institute for Economics & Peace, 2025). Peaceful environments encourage investment, innovation, and trade by reducing uncertainty and risk, thereby creating the conditions necessary for long-term economic expansion (International Monetary Fund, 2026)

2.1 Gross Domestic Product GDP

Gross Domestic Product (GDP) is a central macroeconomic indicator that measures the total monetary value of all final goods and services produced within a country over a specific period, typically annually or quarterly, and is widely used to assess the size, structure, and performance of an economy (Kroese, 2024). Gross Domestic Product (GDP) measures the total value of goods and services produced within a country over a specific period, usually quarterly or annually, and is a key indicator of economic performance (Ngugi, 2024). It can be calculated using three main approaches—production, income, and expenditure—each capturing different dimensions of economic activity but theoretically yielding the same aggregate value (Kroese, 2024). According to International Monetary Fund (2025) in recent years GDP has remained a critical benchmark for economic analysis and policy, with global output growth estimated at about 3.3% in 2024 and projected to moderate to around 2.8% in 2025, reflecting uneven regional performance and post-pandemic adjustments.

2.2 Peace Accounting Perspective

Oyetola et al (2025) assert that peace accounting is an emerging concept in accounting and development studies that focuses on the systematic identification, measurement, and reporting of the economic costs associated with conflict, violence, and peacebuilding activities within society. It involves recording and analyzing expenditures related to security, conflict prevention, and peacekeeping, as well as estimating the economic losses resulting from instability, thereby providing critical information for policy decisions and governance. Peace accounting enhances transparency and accountability by revealing how public resources are allocated toward maintaining peace and addressing insecurity, helping to reduce information asymmetrical between governments and citizens and improving trust in public institutions (Enyi et al, 2026). Furthermore, contemporary research highlights the relevance of linking peace to economic development, as stable and peaceful environments encourage investment, reduce capital flight, and support sustainable growth, while the failure to account for the true costs of conflict can obscure significant economic burdens on nations (Institute for Economics & Peace, 2024)

2.3 Cost of Insecurity

The cost of insecurity refers to the wide-ranging economic, social, and developmental losses incurred because of conflict, violence, terrorism, and instability within a society (Adekoya et al, 2025). According to Henry et al (2025) recent studies show that insecurity imposes direct costs such as destruction of infrastructure, displacement of populations, loss of lives, and increased government expenditure on defense and security, as well as indirect costs including reduced productivity, disrupted markets, and declining investor confidence; global findings suggest that violent conflicts can reduce national economic output by about 7% over a five-year period, with long-term economic scars lasting over a decade, thereby highlighting the persistent and cumulative nature of insecurity costs . Onunwa (2025) posits that beyond direct

economic losses, insecurity generates significant structural and opportunity costs that hinder long-term development and societal well-being; emphasizes that insecurity weakens investor confidence, triggers capital flight, increases inflation, and diverts public resources away from critical sectors such as education, healthcare, and infrastructure toward military spending and crisis management.

Additionally, insecurity contributes to poverty, unemployment, and food crises, as conflict remains a major driver of global hunger affecting millions of people, thereby exacerbating inequality and human suffering. These multidimensional costs illustrate that insecurity is not only a security issue but also a major economic and developmental challenge, underscoring the need for integrated policy approaches that combine security interventions with economic recovery, peacebuilding, and sustainable development strategies (International Monetary Fund (IMF), 2026).

2.4 Cost of Civil/Social Unrest

Allianz Commercial (2025) asserts that the cost of civil and social unrest has to do with wide-ranging economic, financial, and societal losses arising from protests, riots, strikes, and other forms of collective disorder. According to European Financial Management (2025) recent evidence shows that civil unrest imposes significant direct costs, including destruction of property, business interruptions, injuries, and increased spending on policing and security. Globally, unrest-related incidents have risen sharply, with over 80,000 protests and riot events recorded in high-activity countries in 2024 alone, reflecting both the scale and growing persistence of such disruptions. These events can generate substantial financial losses for businesses and governments, disrupt supply chains, and reduce commercial activity, particularly in urban centers where protests are concentrated. Moreover, the broader economic cost of violence, which includes civil unrest—was estimated at nearly \$20 trillion globally in 2024, equivalent to about 11.6% of global GDP, highlighting the enormous macroeconomic burden associated with civil unrest (Institute for Economics & Peace, 2025).

Hassan (2022) notes that civil unrest harms not only economic growth but also development indicators such as poverty, inequality, nutrition, child mortality, access to clean water, and education. Dajo and Akor (2022) highlight that protests like #ENDSARS in 2020, along with labor unrest in education and oil sectors, have heavily impacted Nigeria's economy. Social unrest and insecurity have also driven away potential investors, prompting foreign investment to move to safer African countries. European Financial Management (2025) asserts further that beyond immediate damages; civil and social unrest also creates indirect and long-term economic costs that can hinder sustainable development. Studies indicate that unrest increases uncertainty, weakens investor confidence, and leads to declines in stock market performance and capital inflows, as investors perceive higher political and economic risks. Additionally, unrest disrupts labor markets, education, and social cohesion, resulting in productivity losses and reduced economic mobility over time (Parks, 2025).

The persistence of such instability can create a cycle of reduced growth, unemployment, and inequality, while also diverting public resources away from development priorities toward security and crisis management. Consequently, the cost of civil unrest extends far beyond immediate financial losses, encompassing structural economic damage and long-term social

consequences that can delay national development and weaken institutional stability (Institute for Economics & Peace, 2025).

2.5 Human Security Theory

The Commission on Human Security (CHS) developed the concept of human security to address two key dynamics. First, it responds to the growing complexity of both traditional and emerging threats—ranging from poverty and ethnic violence to human trafficking, climate change, pandemics, terrorism, and economic crises—which often transcend national borders and cannot be managed solely through military means. Second, human security offers a comprehensive, integrated approach, linking development, human rights, and national security to address these challenges effectively.

In its report *Human Security Now*, CHS (2003) defines human security as protecting the essential core of human life, safeguarding fundamental freedoms, shielding people from severe and widespread threats, and fostering systems—political, social, economic, environmental, military, and cultural—that support survival, livelihood, and dignity. While this study is grounded in peace theory, the concept of human security is relevant as it encompasses all proxies for peace accounting and aligns with the study’s objectives.

2.6 Empirical Review

2.6.1 Cost of Security and Economic Development

Ogu et al (2026) employed an Ordinary Least Squares (OLS) regression using time-series data from 1999–2024 to examine the relationship between national security expenditure and real GDP per capita. Their findings indicate that security expenditure shows a negative but statistically insignificant relationship with economic development. Onunwa (2025) adopted a qualitative methodology based on secondary data and policy analysis to evaluate the broader impact of insecurity on Nigeria’s economic stability, finding that rising insecurity leads to declining investment, business closures, unemployment, and inflation, thereby weakening overall development performance and exposing inefficiencies in security spending and policy coordination.

Prieto-Curiel et al (2025) using optimal control theory in the context of cartel violence in Mexico demonstrates that security-related costs impose substantial economic burdens—estimated at over \$19 billion annually—and that even near-optimal allocation between security and social spending remains insufficient to significantly curb violence, implying long-term fiscal pressure and constrained development. Adekoya et al (2025) applied an Autoregressive Distributed Lag (ARDL) model to time-series data (1990–2023) and found a strong negative relationship between insecurity indicators—such as terrorism and conflict—and economic growth, concluding that insecurity imposes substantial macroeconomic costs that outweigh the stabilizing intentions of security expenditure

Ajibua (2025) uses ARDL estimation on data from 2002–2023, established that insecurity significantly reduces foreign direct investment inflows, thereby constraining capital formation and long-term development prospects. Ndidi et al (2025) adopted a dynamic panel model across West and Central African countries (2000–2023) and found that while military expenditure can stimulate growth under certain conditions, excessive spending tends to crowd

out social and productive investments, thereby limiting its net contribution to development. Obi et al (2025) incorporated defense spending into a growth model and found that while it plays a role in mitigating terrorism, its overall contribution to economic growth remains limited when insecurity persists, suggesting diminishing returns to increased spending without structural reforms. Similarly, Akindoyin and Obafemi (2025) using qualitative evaluation, further confirmed that insecurity strains government resources and disrupts economic activities, thereby deepening inequality and slowing national development.

Further empirical evidence reinforces the multidimensional cost of insecurity. Rotimi et al (2024) utilized a Structural Vector Autoregression (SVAR) approach to examine terrorism and economic growth, finding that persistent violent activities reduce productivity, discourage trade, and weaken key economic sectors, indicating that insecurity generates both direct and indirect economic costs. Ibrahim and Dauda (2024), through descriptive and analytical methods, also found that widespread insecurity discourages both domestic and foreign investment while increasing government expenditure on security, diverting resources away from productive sectors such as health and education.

2.6.2 Cost of Civil Unrest on Economic Development

Recent studies consistently show that conflict and unrest have deep and lasting economic consequences, particularly in developing countries. For instance, Goraya (2026) uses a mix of econometric techniques to examine African aid-receiving countries and finds that conflict and fragility are closely linked to weak macroeconomic performance and poor institutions. These conditions, in turn, reduce how effective development aid can be, creating a vicious cycle where instability and underdevelopment reinforce each other.

Similarly, Gates et al. (2025) show that civil conflict significantly reduces GDP both immediately and over time. Their findings highlight severe and long-lasting effects in low-income countries, suggesting that conflict acts as a structural barrier to economic progress. Focusing specifically on Nigeria, Onunwa (2025) adopts a qualitative approach and finds that unrest discourages investment, leads to business closures, fuels inflation, and increases unemployment. These pressures weaken critical sectors such as infrastructure, education, and healthcare, ultimately slowing overall development.

Case-based evidence reinforces these patterns. Pandey and Gautam (2025), examining protests in Nepal, document disruptions to business activity, falling productivity, and localized economic paralysis during unrest. Using more advanced quantitative methods, Keseljevic et al. (2025) estimate that conflict in the former Yugoslavia led to losses of up to 38% in per capita GDP, with long-term regional inequalities that persisted even after the conflict ended.

Large-scale institutional analyses point to similar conclusions. A World Bank (2025) report finds that countries affected by conflict have experienced average annual declines in per capita GDP since 2020, while other developing economies continued to grow. These conflict-affected areas are also where extreme poverty, food insecurity, and weak human capital are increasingly concentrated. In the same vein, Benmelech (2025) finds that conflicts lead to an average 13% drop in GDP, along with prolonged declines in investment and worsening fiscal conditions, with little recovery even after a decade.

Country-specific analyses further illustrate the depth of these impacts. Ichev and Spruk (2025), studying Yemen, report sharp declines in output, investment, trade, and human development, alongside institutional breakdown. Meanwhile, Abdullahi and Ding (2024) show that conflict effects are not confined within borders. Their findings demonstrate that instability spreads across neighboring countries in Sub-Saharan Africa, reducing regional growth and reinforcing broader economic fragility.

Evidence from policy and real-world observations supports these empirical findings. The OECD (2025) reports that conflict in Sudan has destroyed infrastructure, displaced skilled labor, and depleted household assets, weakening the country’s development capacity despite some localized adaptation. Likewise, assessments linked to the International Monetary Fund highlight how post-election unrest in Mozambique slowed economic growth by disrupting businesses and trade routes, showing that even short-term instability can have meaningful macroeconomic effects.

Finally, unrest also affects financial markets through investor behavior. Barrett et al. (2023) find that periods of social unrest are associated with lower IPO first-day returns, reflecting weakened investor sentiment. However, they also note that strong institutional frameworks can cushion this effect, suggesting that better governance can reduce the economic damage caused by instability.

3.0 Methodology

This study used an ex-post facto research design, relying on secondary data sourced from the statistical bulletin of the Central Bank of Nigeria (CBN) and reports from the Federal Inland Revenue Service (FIRS). The scope of the study covers the Nigerian economy over a 42-year period, from 1982 to 2023, using Gross Domestic Product (GDP) and tax revenue as key indicators. To capture the cost of insecurity and civil unrest, the study utilized data on total internal security expenditure and total defense spending, as reported in the CBN statistical bulletin and FIRS publications. Data on GDP for the corresponding years were also obtained from the CBN bulletin. Given the credibility of these official sources, the data used in this study are considered reliable and suitable for achieving the study’s objectives. For analysis, the study adopted a quantitative approach. Specifically, the Autoregressive Distributed Lag (ARDL) regression model was employed to examine how the independent variables influence the dependent variable in both the short run and the long run. The Error Correction Model (ECM) was further applied to capture the speed of adjustment toward long-run equilibrium.

The following models were adopted.

$$GDP_t = \beta_0 + \beta_1 CIS_t + \beta_3 CCU_t + e \dots\dots\dots (i)$$

$$LGDP_t = \beta_0 + \beta_1 CIS_t + \beta_3 CCU_t + e \dots\dots\dots (ii)$$

Where:

GDP = Gross Domestic Product

CIS = Cost of Insecurity

CCU = Cost of Civil Unrest

$\beta_0 - \beta_3$ = Coefficient

e = error term

3.1. Data Analysis

3.1.1 Descriptive Analysis

Table 1

	GDP	CIS	CCU
Mean	46388.14	228.5346	194.7998
Median	44852.95	189.0935	80.25
Maximum	72393.67	728.8275	642.0121
Minimum	21660.49	4.395766	4.206067
Std. Dev.	19039.82	219.6871	198.1154
Skewness	0.030791	0.888535	0.963403
Kurtosis	1.410801	2.774748	2.743892
Jarque-Bera	2.950905	3.743501	4.407872
Probability	0.228675	0.153854	0.110368
Sum	1298868	6398.97	5454.395
Sum Sq. Dev.	9.79E+09	1303086	1059743
Observations	28	28	28

Source: Researcher’s Computation, 2025 (E-views 9 Output)

Table 1 presents an overview of the dataset and highlights its key characteristics. The descriptive analysis of the time series data was carried out in four parts, beginning with the examination of the raw data expressed in billions of Naira. The results show that Gross Domestic Product (GDP) has an average value of ₦46,388.14 billion, with a standard deviation of ₦19,039.82 billion. The minimum and maximum values recorded for GDP are ₦21,660.49 billion and ₦72,373.67 billion, respectively. Similarly, the average values for the cost of insecurity and the cost of civil unrest are ₦288.33 billion and ₦194.80 billion, respectively. Their corresponding standard deviations are ₦219.69 billion and ₦198.11 billion, indicating noticeable variability over the study period. The table also presents the minimum and maximum values for all variables included in the analysis.

In addition, skewness, kurtosis, and Jarque-Bera statistics were reported to assess the normality of the data. The results show probability values of approximately 0.23 for GDP, 0.15 for cost of insecurity (CIS), and 0.11 for cost of civil unrest (CCU). Since these probability values exceed the conventional threshold of 0.05, the null hypothesis of normal distribution cannot be rejected. This implies that the variables are normally distributed, satisfying one of the key

assumptions for regression analysis. Given the normality of the data, the study further employed Pearson correlation analysis to examine the relationships between the independent variables and the dependent variable.

Table 2 Correlation Matrix (Pearson Correlation)

	GDP	CIS	CCU
GDP	1		
CIS	0.616369	1	
CCU	0.894002	0.68156258	1

Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 2 above shows the relationship between dependent and independent. Independent variables (cost on insecurity and cost of civil unrest) are having positive relationship with the dependent variable (Gross Domestic Product)

Table 3 Unit root Test: Augmented Dickey- Fuller

Variable	At Level			At First Difference			Stationarity
	With constant	With Constant and Trend	Without constant and trend	With constant	With Constant and Trend	Without constant and trend	
LGDP	-1.23(0.63)	0.22(0.99)	2.25(0.99)	-2.83(0.06)	-3.17(0.11)	-1.42(0.13)	1(1)
CIS	2.51(0.99)	0.69(0.00)	2.35(0.99)	-0.52(0.86)	-2.26(0.43)	0.59(0.83)	1(0)
CCU	0.95(0.99)	-1.35(0.84)	2.41(0.99)	-4.17(0.00)	-485(0.00)	-3.55(0.00)	1(1)

Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 3 presents the results of the unit root test conducted using the Augmented Dickey-Fuller (ADF) method. The findings reveal that Gross Domestic Product (GDP) and the cost of civil unrest are stationary at first difference, that is, I(1), while the cost of insecurity is stationary at level, I(0).

Given this mixed order of integration among the variables, the study adopts the Autoregressive Distributed Lag (ARDL) model, which is appropriate for analyzing relationships involving variables with different levels of stationarity.

Table 4 Cointegration Test: Bound Cointegration Test

Test Statistic	Value	K
F-statistic	8.255021	3
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.72	3.77
5%	3.23	4.35
1%	4.29	5.61

Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 4 presents the results of the cointegration test, which examines whether a long-run relationship exists between the dependent and independent variables. The findings show an F-statistic of 8.25, which is higher than the upper bound critical value.

Based on this result, the null hypothesis of no cointegration is rejected, indicating the presence of a long-term relationship among the variables. In other words, the dependent and independent variables move together in the long run. Consequently, the study proceeds to estimate the Error Correction Model (ECM) to capture both the short-run dynamics and the adjustment toward long-run equilibrium.

Table 5 Error Correction Model (ECM)

Variables	Coff.	t. stat.	Prob.
Short-Run Relationship			
DCIS	-0.000	-4.66	0.00
DCCU	0.00	1.91	0.113
Coint.Eqn(-1)	-0.52	-4.77	0.00
Long-Run Relationship			
CIS	0.02	8.48	0.000
CCU	-0.00	-4.64	0.00
Con.	4.32	3.68	0.00
R2			0.99
Adjusted R2			0.99
Durbin Watson			1.73

Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 5 presents the results of the Error Correction Model (ECM), which captures both the short-run and long-run relationships among the variables.

In the short run, the cost of insecurity has a negative (−0.000) and statistically significant (0.00) effect on the development of the Nigerian economy. This implies that increases in insecurity-related costs tend to reduce economic development in the short term. On the other hand, the cost of civil unrest shows a positive (0.00) but statistically insignificant (0.11) effect on economic development, indicating that its short-run impact is weak and not meaningful.

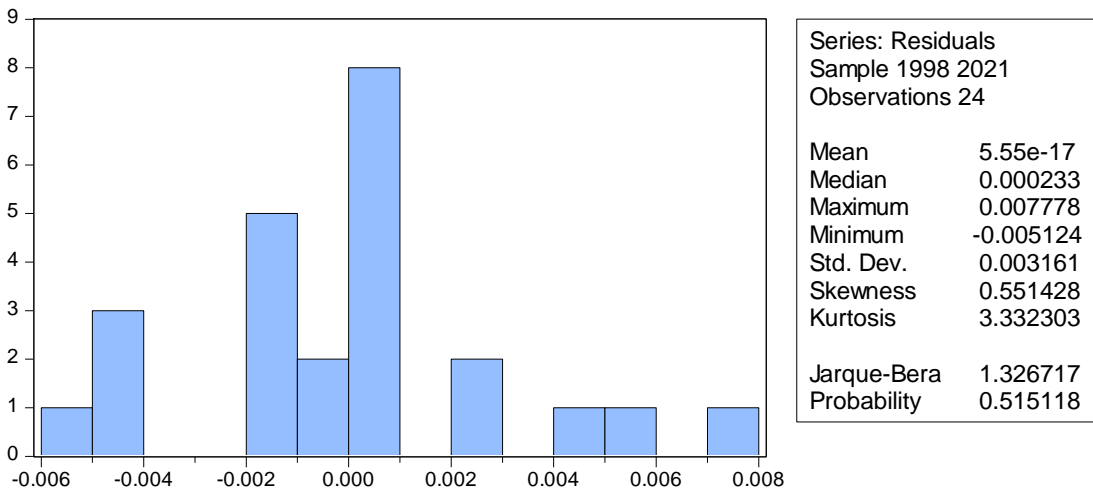
In the long run, the results reveal that the cost of insecurity has a positive (0.02) and significant (0.00) effect on economic development. Conversely, the cost of civil unrest has a negative (−0.00) and significant effect on economic development, suggesting that persistent civil unrest adversely affects the economy over time.

The coefficient of determination (R^2) is 0.99, indicating that the model explains about 99% of the variation in economic development, which suggests a very good fit. Additionally, the Durbin-Watson statistic is 1.73, which is close to the benchmark value of 2, indicating no serious problem of autocorrelation and further supporting the reliability of the model.

Finally, the error correction term (ECM), represented by the cointegrating equation (CointEq), is negative and statistically significant at the 5% level. This confirms the existence of a long-run relationship and shows that any short-run disequilibrium is corrected over time, with the system adjusting back to equilibrium.

Post Estimation Test

Table 6 Normality test: Jarque-Bera



Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 6 shows the normality test for the residual. The result shows jarque-Bera of 1.32 with corresponding p value of 0.51 which is higher than 5% level of significance, this implies that the residual is normally distributed. Also, Breusch-Godfrey test for serial correlation for the

residual, the result is presented in table 7. below. It shows F- Stat value of 0.26 with corresponding p value of 0.77 which implies that the residual is free from serial autocorrelation problem.

Table 7. Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.26036	Prob. F(2,9)	0.7764
Obs*R-squared	1.312622	Prob. Chi-Square(2)	0.5188

Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 8: Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.429498	Prob. F(13,10)	0.9224
Obs*R-squared	8.599063	Prob. Chi-Square(13)	0.8025
Scaled explained SS	6.10209	Prob. Chi-Square(13)	0.9424

Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 8. above shows the heteroskedacity test for the residua, it has F stat. of 0.429 with corresponding p value of 0.922 which is higher than 5% level of significance, this means that the residua are free from heteroskedacity problem.

Table 9: Stability Test: Ramsey Reset test

	Value	Df	Probability
t-statistic	0.256987	10	0.8024
F-statistic	0.066043	(1, 10)	0.8024

Source: Author’s Compilation, 2025 (E-views 9 Output)

Table 9. shows the stability test for the model, it shows t stat of 0.25 and f stat of 0.06 with corresponding p value of 0.802, this is higher than 5% level of significance, which shows that the model is stable.

4.1 Discussion of Findings

The empirical findings reveal that the two independent variables exhibit a long-run relationship with economic development. In the short run, the cost of insecurity has a negative and statistically significant effect on economic development. This aligns with the study’s a priori expectation, as resources devoted to addressing persistent insecurity could otherwise have been

invested in productive sectors to enhance economic growth, the result also agreed with the following studies: Ogu et al 2026; Onunwa 2025; Adekoya et al 2025. However, in the long run, the cost of insecurity shows a positive and significant effect on economic development, which contradicts the initial expectation of the study. To the best of the researcher's knowledge no study supported this.

Furthermore, the cost of civil unrest demonstrates a positive and significant effect on economic development in the short run. This result contradicts the a priori expectation, since civil unrest typically disrupts economic activities and reduces productivity. In the long run, however, the cost of civil unrest has a negative and significant effect on economic development, which aligns with the study's expectations. These findings are consistent with the studies of Goroya et al 2026; Gates et al 2025; Benmelech 2025 and Keselievic et al 2025. with no evidence of conflicting results from previous research.

4.2 Conclusion and Recommendations

It is widely established in the literature that peace is a critical driver of economic development, while violence poses a serious obstacle to growth and progress. However, the findings of this study deviate from the priori expectations. This divergence may be linked to the unique way Nigeria manages issues related to insecurity and civil unrest. It may also reflect broader challenges such as weak sensitivity to persistent violence and concerns around transparency and accuracy in data reporting, particularly regarding the actual costs associated with these issues. Considering these findings, the study recommends that deliberate and sustained efforts be made to address the persistent problem of insecurity in Nigeria. Insecurity has continued to fuel job instability, food shortages, unemployment, and the loss of lives, all of which come at a significant cost to economic growth and development. Furthermore, the government should focus on tackling the root causes of civil unrest by implementing policies aimed at poverty reduction, improving governance, and promoting social inclusion. Addressing these underlying issues will help reduce the incidence of civil unrest and, in turn, create a more stable environment for sustainable economic growth.

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