

Insecurity, government expenditure and income levels in Nigeria: responses and implications

Inseguridad, gasto público y niveles de ingresos en Nigeria: respuestas e implicaciones

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>Abstract

This study scrutinised the linkages between insecurity, government expenditure, and income levels in Nigeria. To achieve this objective, data were collected from 2012Q1 to 2023Q2. For the data analysis, vector autoregression (VAR), impulse response functions (IRFs), and a pairwise Granger causality test were deployed. After testing for unit root and diagnosing the model for serial correlation and stability, the study proceeded with the VAR estimation. The independent variables were the Global Peace Index, the number of fatalities, and government expenditures on internal security and defense, while the real GDP was used as the dependent variable to measure income levels. The variables were incorporated into the Cobb-Douglas production function; hence, capital and labour were used as control variables. The Impulse Response Functions (IRFs) indicated that real gross domestic product responded negatively to the Global Peace Index rating and the number of fatalities due to security threats. On the other hand, RGDP responded positively to government expenditures on internal security and defense. The results of the Granger causality test showed there was a one-way causality from the independent variables to RGDP, implying that the independent variables were significant determinants of income levels in Nigeria. It was concluded that insecurity could distort income levels. Granger causality test results showed there was a single directional causal flow from the independent (explanatory) variables to RGDP, implying that the explanatory variables were significant determinants of income levels in Nigeria. As a result, beyond condemnations and reassurances, the government must investigate the underlying causes of insecurity in order to come up with a long-term remedy.

>**Keywords:** insecurity, macroeconomic stability, security financing, global peace index, Nigeria

>**JEL Classification:** C32, E31

>Resumen

Este estudio analizó los vínculos entre la inseguridad, el gasto público y los niveles de ingresos en Nigeria. Para lograr este objetivo, se recopilieron datos desde 2012T1 hasta 2023T2. Para el análisis de los datos, se utilizaron la regresión automática vectorial (VAR), las funciones de respuesta al impulso (IRF) y una prueba de causalidad de Granger por pares. Tras comprobar la existencia de raíces unitarias y diagnosticar la correlación serial y la esta-

>**Palabras Clave:** inseguridad, nivel de ingresos, gasto público, índice de paz global, Nigeria

>**Clasificación JEL:** C32, E31

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bilidad del modelo, el estudio procedió a la estimación VAR. Las variables independientes fueron el Índice de Paz Global, el número de víctimas mortales y el gasto público en seguridad interior y defensa, mientras que el PIB real se utilizó como variable dependiente para medir los niveles de renta. Las variables se incorporaron a la función de producción Cobb-Douglas, por lo que el capital y el trabajo se utilizaron como variables de control. Las funciones de respuesta a los impulsos (IRF) indicaron que el producto interior bruto real respondía negativamente a la calificación del Índice de Paz Mundial y al número de víctimas mortales por amenazas a la seguridad. Por otra parte, el PIB real respondía positivamente al gasto público en seguridad interior y defensa. Los resultados de la prueba de causalidad de Granger mostraron que existía una causalidad unidireccional de las variables independientes al PIB real, lo que implicaba que las variables independientes eran determinantes significativos de los niveles de renta en Nigeria. Se concluyó que la inseguridad podría distorsionar los niveles de ingresos.

►1. Introduction

Since the military's early years of authority, when it brought in numerous weapons for use during and after Nigeria's civil war—some of which ended up in the hands of civilians—threats to national security have existed. These weapons were employed by citizens and former soldiers for nefarious activities, including armed robbery, shortly after the civil war (Ikechukwu, 2019). Resentment and disaffection among the populace are results of the government's inability to create safety for lives, properties, and economic operations. This precipitated ethnic tensions, religious violence, various agitations, and criminality in various regions of the nation, all of which have caused the untimely demise of people and the loss of properties, disrupted commercial and economic activity, and slowed Nigeria's economic development.

Over the years, it has been recorded that most ethnic groups within Nigeria exhibit resistance towards the Nigerian state at present due to the historical context wherein their territories were appropriated by colonial authorities, either through coercive measures or the execution of questionable treaties, culminating in Nigeria's independence in 1960, granted by British colonial powers. The onset of the civil conflict in 1967 can be attributed to a multitude of factors, one of which is the pervasive issue of corruption. Corruption has engendered significant socio-political and economic inequalities, which have rendered the workforce profoundly discontented due to inadequate remuneration and substandard working conditions, particularly when juxtaposed with the lavish lifestyles of the political elite in Lagos. This widespread public dissatisfaction facilitated the emergence of a military regime that overthrew the democratically elected Prime Minister through a coup d'état in 1967 (Olukoju et al., 2018). A civil war ensued, which resulted in the military factions on both sides being armed. This escalation in the availability of weapons exacerbated the security situation in Nigeria, as armaments fell into the hands of diverse individuals. The conclusion of the conflict did not signify a restoration of societal normalcy. A plethora of firearms that permeated society has posed significant challenges, particularly in the possession of unscrupulous war survivors who have utilised these weapons to perpetrate egregious acts. The post-war economic environment, characterised by pervasive poverty, has fostered criminal behaviour and the manifestation of brutal power dynamics, facilitated by the widespread availability of firearms. It is evident that the conclusion of the conflict ushered in extensive social, economic, and political challenges, all of which constitute significant impediments to national security. The rampant arms proliferation, for instance, has given rise to sophisticated criminal enterprises, wherein theft has been supplanted by armed robbery, which has further deteriorated into the contemporary climate of insecurity.

Nigeria is endowed with abundant natural resources, but most of them live in destitution. Nigeria has recently experienced financial crimes, transnational organised crime, armed robberies and other related thefts, kidnapping, conflicts between farmers and herdsmen, political assassinations, destruction of government property, insurgency by the Niger Delta Militant, Indigenous People of Biafra

(IPOB), and terrorism by the Boko Haram Sect. As a result, there have been losses of human capital, business closures, and an increase in Nigeria's macroeconomic instability and low income levels (Atai & Esetang, 2024). For instance, in 2016, a group attacked three pipelines in the Niger-Delta region, resulting in environmental hazards from oil extraction, and government revenue losses ultimately contributed to the 2016 economic recession (Mgbonyenbi & Emeni, 2020). It is recalled that among numerous attacks by Fulani herders, over 200 people were killed and 50 houses were burnt in clashes between farmers and Fulani cattle herders in Plateau state in 2016, including one devastating attack from the night of the 22nd to the morning of the 23rd that killed 21 villagers in the village of Dowaya, Adamawa State, in June 2018, thereby engendering a deterioration in food production and jeopardising food security for millions of people (Amnesty International, 2018). Over 200,000 people have been evacuated as a result, which has caused farmlands to be abandoned and exacerbated the food crisis. Also, the economy of the Southeast geopolitical zone has deteriorated due to the imposition of the sit-at-home Mondays, which subsequently led to the abrupt formation of a paramilitary organisation colloquially referred to as "Unknown Gunmen" (Mbanusi, 2024). The operations of this group have adversely influenced the economy, security, and developmental progress within the region in recent years (Orji & Anaukwu, 2024).

Indubitably, the intensifying insecurity in Nigeria exerts a significant influence on the civilian population, rendering them especially susceptible and impacted. This concerning trajectory may exacerbate as the national government engages with armed groups on various fronts, with these initiatives failing to produce the anticipated results. Despite higher defence budgetary allocations over the past few years, security services' response to the nation's growing insecurity has been less than ideal. This constitutes the primary impetus for this research. Hence, it is impossible to overstate the important role that the government plays in ensuring security, macroeconomic stability and higher national income. Adam Smith listed two of these important roles as shielding society from outside aggression and invasion, and defending each individual from being oppressed by another (Saleh, 2021). This laid the groundwork for nations all over the world to desire economic security. For economically productive activities to function and provide incentives for investment and innovation, lives and properties must be protected from both exogenous and endogenous security threats because a disturbance in economic activities is the absence of peace and security (Adofu & Alhassan, 2018). Due to this, both domestic and foreign investors have become wary of making investments in an economy "submerged" by security challenges. As such, security financing has been an important aspect of the public budgets.

Nigeria's current predicament is noteworthy due to the persistent escalation of instability observed over the past several decades, alongside the nation's designation as a regional power. As one of the most significant economies within Africa, Nigeria serves as the critical security fulcrum for Sub-Saharan Africa. The intensification of insecurity within Nigeria possesses the potential to yield severe repercussions for regional stability and could engender displacement spillovers that may adversely affect the demographic and security landscapes of neighbouring states, as well as global peace. Considering the region's substantial dependence on agriculture as the foundation of its economic structure, the proliferation of banditry has severely disrupted agricultural activities, as farmers frequently exhibit trepidation about cultivating their lands due to the imminent threat of violence. This disruption has precipitated a downturn in food production, jeopardising food security for millions of individuals. According to the United Nations Development Programme (UNDP), the displacement of over 200,000 people has further culminated in the neglect of agricultural lands, thereby worsening the food crisis (UNDP, 2020). The phenomenon of banditry has compelled numerous individuals to vacate their residences, forsaking their enterprises and means of livelihood. The economic dislocation of individuals and communities has engendered a cascading effect, impacting local markets, small enterprises, and overall economic productivity. While the northern regions continue to be a focal point of insecurity, a concerning trend is emerging in the southern territories, wherein security crises are progressively infiltrating, presenting a novel array of challenges for the region.

The actual amount of planned annual government spending designated for funding security agencies is known as security financing. Government security finance, which cuddles spending on internal security and defence, is noteworthy in national budgets across all nations. Even though there have been calls in recent years for spending on security to be cut, the majority of rich and developing nations have had high security spending over the past years, suggesting a sacrifice of civil spending. In the views of Mbah, Agu and Aneke (2021), developing economies are faced with an increase in the size of public operations, which is particularly true of the defence sector in countries with heightened security

failures like Nigeria. Certainly, the past two decades have witnessed a huge increase in government security financing in Nigeria. This situation has reduced the funding for developmental needs in other critical economic sectors, leading to low income levels. Adequate budgeting for security to equip the defence sector and ensure sustainable economic growth in Nigeria is of paramount interest to the government in fulfilling its fundamental obligation of protecting lives and properties. Consequently, through security expenditures, the government strengthens security operations (military and paramilitary) tied to safeguarding lives as well as the economy as detailed in Section 14(2)(b) of the 1999 Nigerian Constitution (Isola, Ayopo, Abiola & Joseph, 2019).

Despite higher defence budgetary allocations over the past few years, security services' response to the nation's growing insecurity has been less than ideal. The dollar equivalent of the defence budget was \$387.67 million in 2021, increasing to \$511.18 million in 2022, and then to \$883.32 million in 2023, according to the Policy and Advocacy Centre (PLAC, 2024). The budget for defence in 2024 is \$2.14 billion, or roughly 5.7% of the total budget. In a similar vein, the police were allocated \$182.52 million in 2021, \$238.12 million in 2022, and \$535.23 million in 2023. The budget for law enforcement in 2024 is ₦969.6 billion. Insecurity grew even though previous governments had boosted budgeted allocations for security. Insurgency and terrorism increased in the Northeast, while banditry crept into the North Central and North West areas. Secessionist movements and the prevalence of unidentified gunmen dominated the South East, and the South-South region was the epicentre of oil theft occurrences. Like much of the nation, the South West saw a rise in abduction as the norm. This questions the viability of funds invested in national security over the years. Regrettably, a compelling rationale for the inefficacy of governmental allocations for security lies in its inability to critically address the root causes (e.g. poverty, unemployment, lack of education, etc.) of the multifaceted nature of insecurity, thereby hindering the development of a sustainable resolution to the issue beyond mere denunciations and pledges of reassurance.

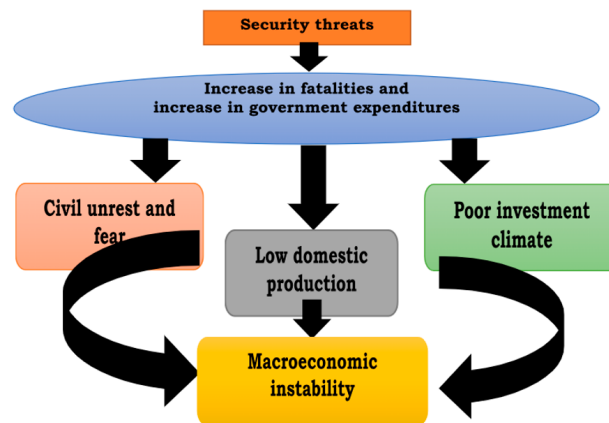
According to studies that are consistent with the foregoing, insecurity has a detrimental impact on macroeconomic dynamics (Yusuf & Mohd, 2022; Agogbua, Mgbatogu & Nzewi, 2022; Ezeajughu, 2021; Aghaulor, 2020). On the other hand, expenditures on security tend to improve the state of the economy (Nteegah, 2020). Also, observations in the literature varied, as some researchers found a positive relationship between security financing and macroeconomic stability while others established a negative linkage. Examining the relationship between income levels, government spending, and insecurity in Nigeria is the main goal of this article. In order to avoid unforeseen repercussions that could jeopardise Nigeria as a federation, it also emphasised corrective measures that the government should implement to solve the problem of national revenue and address the complex and seemingly intractable security disruptions. Following is the paper's introductory background; a review of the literature is presented in Section 2. The procedures for data analysis were presented in Section 3, the findings were shown in Section 4, and the conclusion was presented in Section 5.

>2. Literature Review

>2.1 Conceptual framework

This study was constructed as shown in Figure 1 to provide a thorough grasp of security threats and the macro economy.

Figure 1
Conceptual framework



Connotations of insecurity include “hazard,” “lack of protection,” “uncertainty,” “danger,” and “absence of safety,” among others. The feeling of fear (or worry) brought on by a lack of security is reflected in insecurity. It suggests that one is not free from unfavourable circumstances. Insecurity was defined from two angles by Abdulwahab (2020, p. 29) and Kopasker, Montagna, and Bender (2018, p. 184). The main source of insecurity is exposure to risk or the potential for danger, whereas danger is the actual state of being exposed to harm or damage. The state of being exposed to risk or worry, where anxiety is characterised as a generalised unpleasant emotion felt in expectation of some undesired outcome, is the second definition of insecurity. These narratives highlight the fact that those who experience insecurity are not only surrounded by uncertainty but also placed in peril. The ability of a state to defend against threats to its fundamental interests and ideals is a major factor in maintaining security in a dynamic environment (Omede, 2012, p. 27).

Maximizing concurrent organizational, national, and personal output that is long-lasting is the goal of income generation. It guarantees that everyone can work in a safe and healthy setting which defines a stable macroeconomic environment for income generation. National income is the achievement of sustained increase in the real value of domestic output. According to Nwakwor and Nkechukwu (2023), this aims to create a setting that would enable investment opportunities to yield the highest possible income. Therefore, sustainable income generation is paramount for economic advancement. Income levels cannot be sustainable in the absence of formidable security architecture (Dajo & Akor, 2021; Olabanji & Ese, 2024). When peace reigns alongside certainty of security, government resources and efforts are concentrated on improving human existence which in turn triggers the levels of income (Okonkwo, Ndubuisi-Okoli & Anagbogu, 2015).

Insecurity leads to physical devastation, dismantling of infrastructure, machinery, transportation networks, labour forces, and other economic assets. This destruction negatively impacts the economic landscape, annihilating productive resources and redirecting resources to reinforce military capabilities. Insecurity also adversely affects international trade, leading to reduced foreign direct investment, particularly in unstable nations like Nigeria. Economic participants (like investors, governments, and consumers) carefully analyze national income levels to determine the state of the economy at a given time, which may have an impact on their investment returns. On the topic of macroeconomics, there has been extensive research on the interaction or linkages that influences income levels (Ali, Saifullah & Kari, 2019). For instance, security threats can trigger discontent and anxiety that would prevent people from conducting business freely, thus depleting national income, leading to a fall in domestic investments and low production, and high pricing for goods since there are not enough of them on the market. Due to the dependence on imported commodities, this will also result in a decline in the purchasing power of the indigenous currency.

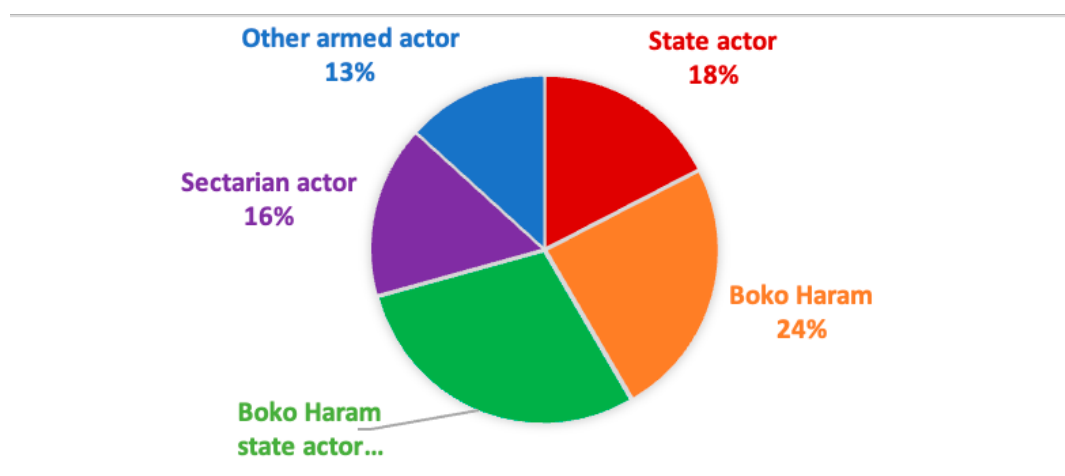
➤2.2. Insecurity, government expenditure and income levels in Nigeria: Stylized facts

A nation experiences high income levels through production when it has a peaceful environment, good and sufficient infrastructure, skilled labour, a market for finished goods, high agricultural production and raw material availability, and sound government policies. All these variables were subverted by insecurity. There is a risk of cattle rustling, kidnapping, and banditry in the North West. Even after Boko Haram militants were all but eliminated in the northeast, they continued to carry out lone assaults in isolated locations and attacks using improvised explosive devices (IEDs) in populated regions. In addition, there were intercommunal conflicts, farmer/herdsman massacres by Fulani, and remnants of banditry and kidnapping in the North Central region. Resurgent threats of militancy/cultism, oil theft, pipeline vandalism, and ocean river robbers/kidnappers (piracy) have been reported in the South-South. The proscribed Indigenous People of Biafra (IPOB) continued to fuel ethnic nationalism in the South East by killing innocent people, setting fire to INEC offices and police stations, and enforcing the “Sit-At-Home” order. In the South West, on the other hand, Sunday Igboho’s Yoruba self-determination campaign and crimes motivated by cultism emerged (Umaru, 2019).

Owing to the absence of a peaceful environment economic growth and development drastically slowed down and in some regions completely halted as farmers could not access their farms to plant or harvest crops leading to high costs of foodstuff; transportation of goods and people by land (roads and railway) and by water (rivers and sea) became very unsafe; huge loss of national revenue occurred due to oil theft, pipeline bombing/vandalisation; Nigeria became unattractive to local and foreign investors; large percentage of productive youth manpower which could have been committed to agricultural or industrial production were washed in battle field and lastly diversion of scarce developmental funds to military purposes was not helpful to economic development. Indeed, insecurity halted Nigeria’s economic growth and development.

Figure 2

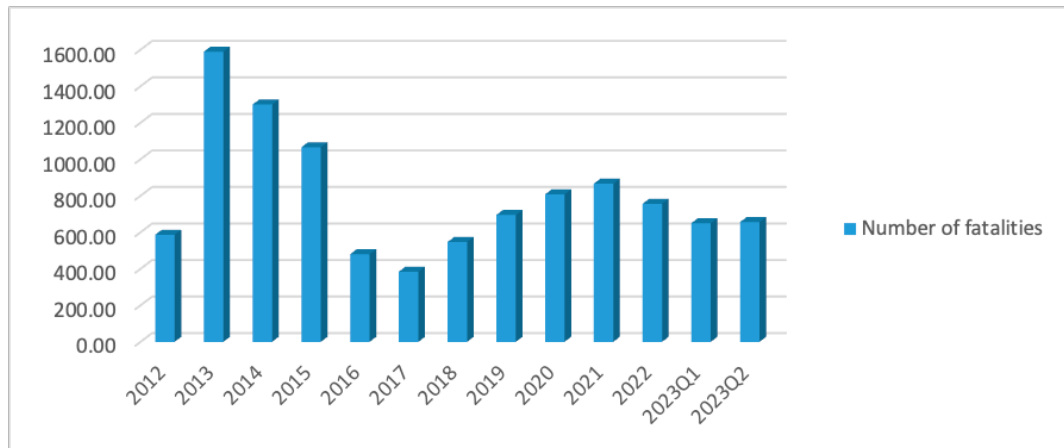
Percentage distribution of perpetrators of security threats in Nigeria



Source: Statista.com

Although the rise in insecurity in Nigeria stems from heightened economic hardship ravaging the citizens, heightened insecurity has further intensified the poverty rate and macroeconomic issues (Ozoigbo, 2019). Unfortunately, the government appears to be slow with its efforts and strategies for dealing decisively with this jeopardy, which is a more worrisome issue. This has resulted in the displacement of citizens, the loss of lives, low productivity, and low business activities, hence poor macroeconomic performance and low inward capital from foreign investors. It then implies that the Nigerian government is gradually losing the battle and has failed in its primary responsibility of safeguarding the citizenry. Figure 3 shows that the total number of deaths due to security challenges in Nigeria has been alarming.

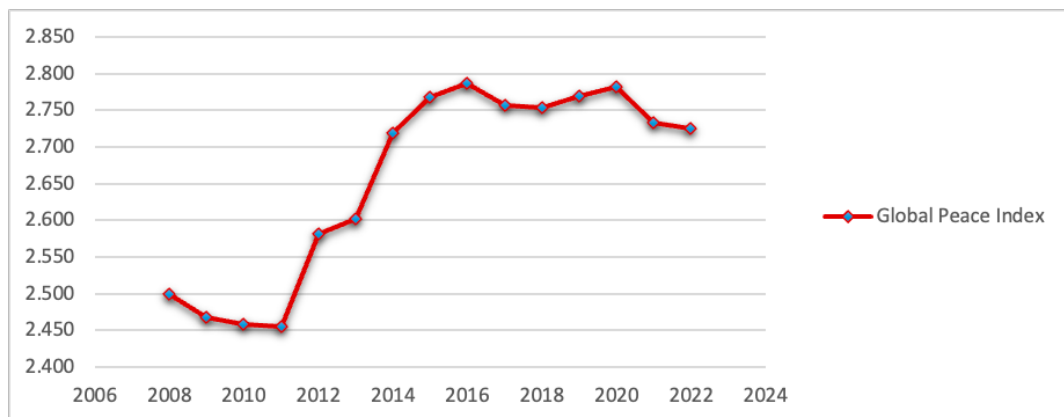
Figure 3
Trend of number of fatalities due to security threats



Source: Armed conflicts locations and events

Figure 4 reports the global peace index, which is based on three fundamental themes: the degree of societal safety, the intensity of local and foreign conflict, and the amount of militarization in the evaluation of a nation's level of peace (Institute for Economic Peace, 2023). From 2008 to 2022, Nigeria's global peace index (GPI) varied between 2.499 and 2.7878. Nigeria is ranked 143rd out of 163 countries in the 2022 GPI survey. The lower GPI, which indicates a high level of insecurity, has impacted the nation's investment climate and economic performance. According to the Global Competitiveness Index (GCI) rankings for 2022, Nigeria was rated 114th in the world and 14th in Africa, indicating the country's pitiful income level (World Competitiveness Centre, 2023).

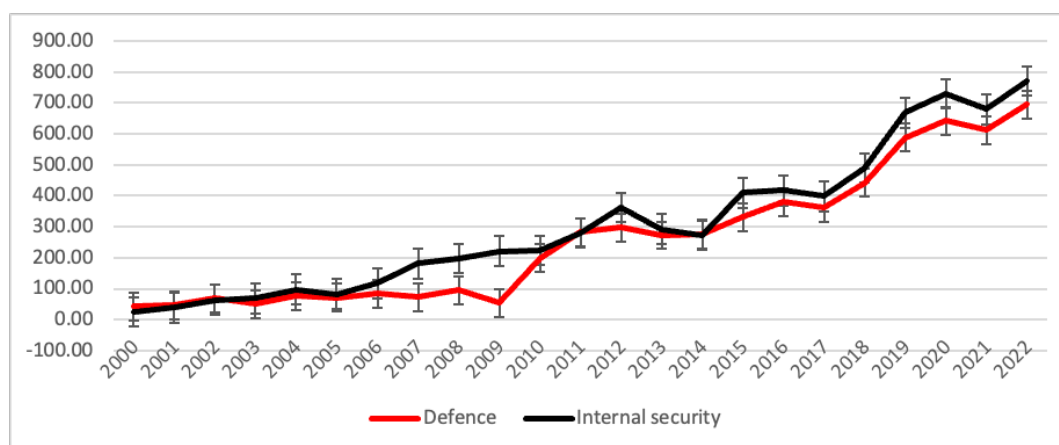
Figure 4
Global Peace Index Ranking for Nigeria (2008 to 2022)



Source: Institute for economic and peace (IEP)

The Nigerian government has established laws, regulations, and even set aside money to reduce security threats in the nation as a result of realizing the crucial role that safety and peace play in promoting growth and development over the years (Yusuf & Mohd, 2022, p. 745). For example, the Anti-Terrorism Act was passed by the government, both at the federal level and by its constituent parts. Since the early 2000s, federal government spending on defence and internal security has increased dramatically, according to statistics from the CBN (see Figure 5). This expenditure is in addition to the security budgets of Nigeria's 36 states and 774 local government units (Gershon, Ibidunni, Oye, Ufua & Osabuohien, 2021, p. 3). Although security expenditures have been increasing, the income level appears not to be keeping pace with this trend; rather, there was declining income levels during the same period.

Figure 5
Expenditure on internal security (2000 to 2022)



Source: Central Bank of Nigeria [CBN] statistical bulletin, Vol. 33 (2022)

Nigeria's insecurity has worsened despite government efforts, with terrorists and bandits becoming more aggressive. The limited effectiveness of government expenditure is due to a lack of focus on addressing the underlying causes and manifestations of insecurity, which could pose significant challenges in effectively addressing the nation's security issues. One of the fundamental causes of insecurity in Nigeria is the prevalence of unemployment and poverty (Okarah, 2014). Unemployment arises in Nigeria due to the absence of viable employment opportunities, leading to poverty rates and extreme manifestations of insecurity. This issue is exacerbated by corruption, which undermines public integrity and representation processes, resulting in widespread unemployment and deprivation, further intensifying the problem. Also the Ethnic disparities in Nigeria's governance have led to marginalization and security breaches (Zabairu, 2020). The Islamic Movement of Nigeria (IMN) has gained political prominence, causing discontent among the Southeast populace. Instabilities, unmonitored migrations, and porous borders exacerbate insecurity and criminal activities, with over 70% of Nigeria containing 8 million illicit firearms.

➤2.3 Theoretical Perspectives

Understanding in a variety of scholarly ideological contexts is fundamental to grasping insecurity from a theoretical standpoint. Though insecurity has been studied from many angles using a variety of theoretical frameworks, only three of these theories have any bearing on economics: the "rational choice theory (RCT), deprivation theory (DT), and religious fanaticism theory (RFT)".

The theory of rational choice is attributed to Adam Smith. His 1776 publication "An Inquiry into the Nature and Causes of the Wealth of Nations" introduced the idea that the inclination towards self-interest in human nature was the source of riches. A framework for understanding and modelling social and economic behaviour is provided by "rational choice theory (RCT)" (Crenshaw, 2000). The fundamental idea of a randomised controlled trial (RCT) is that individuals make logical choices based on the expected costs and benefits of several options and strive to maximise the best option that will meet their needs. The theory of terrorism holds that terrorist acts are driven by a conscious choice to adhere to a perfect and calculated procedure in order to accomplish socio-political objectives (Wilson, 2000). Terrorists must therefore allocate their available resources—cash, weapons, and human resources—across time and space in order to maximize the net returns of their actions (Shughart, 2011). According to rational choice theory, terrorist acts limit any country's ability to develop and undermine the efficiency of its policies. In Nigeria, terrorism frequently distorts economic policy decisions, leading to unforeseen increases in government spending through supplemental budgetary spending. The failure of rational choice theory to offer adequate metrics for assessing whether a perceived action will benefit or harm terrorists is one of its key flaws.

The phrase "relative deprivation" was first used by Samuel Stouffer in 1942 while he was researching army military police and air corps personnel. The 1966 book "Relative Deprivation and Social Justice" by Walter Garry Runciman clarified the distinction between fraternalistic and egoistic relative deprivation.

According to Gurr's (1970) "relative deprivation theory (RDT)" of terrorism, political violence and terrorism are largely the result of a generalised sense of relative deprivation. The Frustration-Aggression Hypothesis (FAH), which postulates that frustration entrenches aggressive behaviour, serves as the foundation for this idea. In an economic viewpoint, the FAH seeks to explain the connection between poverty and insecurity by arguing that the presence of poverty, particularly in emerging nations, is what leads to the rise of conflicts. Bellow and Miguel (2006), Collier and Hoeffler (2002) established that the main driver of insecurity in Africa is poverty. Awojobi (2014) noted that the northern youths of Nigeria were driven to join the Boko Haram movement by their frustration, lack of resources, and unemployment. According to empirical data from Edeme & Nkalu (2019), the economic downturn in Nigeria has a considerable impact on terrorism.

Religion has a profound impact on people's lives and the sanitisation of society, which cannot be overstated. This notion serves as the foundation for "Religious fanaticism and development theory". Because religion (fanaticism) has a detrimental impact on economic growth and, most crucially, the loss of human capital, the majority of specialists worldwide are forced to debate for and against the place of religion in society. In the theory, terrorism stemming from religious fanaticism is always driven by the desire to implement a particular development program with predefined ideological requirements (Okarah, 2014, p. 59). Giving terrorists human resources is the most severe use of religious fanaticism. Since terrorist groups are composed of bright individuals, their potential will impede any nation's economic development. The relative deprivation argument suggests that suicide bombers are not from lower socioeconomic classes; on the contrary, they are well-educated individuals.

In conclusion, the RCT shows how terrorism impedes any country's ability to establish its policies and limits its ability to flourish. Thus, insecurity can impact macroeconomic dynamics, and vice versa. The idea of religious fanaticism posits that the detrimental effects of religious fanaticism on economic dynamics stem from the depletion of human capital. The theory of relative deprivation aims to provide an economic explanation for the correlation between poverty and insecurity (Ogu, 2013, p. 92). Adam Smith's 1776 "Inquiry into the Nature and Causes of the Wealth of Nations," in which he linked laissez-faire ideology to many aspects of religion, establishes the connection between religion and economic advancement. Smith argued that because religious activities and beliefs are rational choices, people react to the benefits and drawbacks of religion in a predictable and observable way. Building on Smith's claim, it is theorized that there is a two-directional causal flow between religion and macroeconomic stability, but it places a greater emphasis on labour, independence, and cooperation (Green, 2002, p. 22).

➤2.4 Empirical Review

Recently, Nwoye, Alexander, Saheed, Bernard and Ayodeji (2024) have looked at the relationship between Nigeria's output growth from 1981 to 2021 and spending on internal security. For estimate, the ARDL model technique was used. The results demonstrated that an upward trend in RGDP was caused by a rise in capital spending on internal security. A surge in ongoing spending on internal security caused the RGDP to significantly decrease in the short term.

A similar study by McGauvran et al. (2024) explored the effects of terrorism on income inequality for 139 countries from 1994 to 2018. Furthermore, the research examined various potential causal mechanisms linking terrorism to income inequality, revealing that the observed effect was partially attributable to terrorism's detrimental impacts on institutional stability, escalated military expenditures—likely aimed at financing counterterrorism initiatives—and diminished foreign capital inflows, particularly in relation to greenfield investments. In a study of 14 Middle Eastern and North African countries over the years 2010 to 2018, Elnahass et al. (2022) looked at how bank risk and financial performance, which are indicators of bank stability, were affected by terrorism and offered compelling proof that banks with high bank risk—that is, a high credit and insolvency risk—located in nations with a high probability of terrorist attacks have low financial stability.

Again, Agogbua et al. (2022) used annual data from 2009 to 2022 to evaluate the consequences of insecurity on business operations, production growth, and the development of Nigeria's economy. By splitting the data into pre-high years of insecurity (2009–2015) and periods of high insecurity (2016–2022), the study's objectives were achieved. Using regression analysis, the study found that although insecurity hampered corporate operations, it had little effect on economic expansion. This

finding is similar to Shavah (2022) who found that the spate of insecurity undermined the level of income generated in Nigeria.

Using selected Middle Eastern countries, Ünsal and Çınar (2022) analysed the interrelationship between terrorism and economic growth across a panel comprising fifteen Middle Eastern nations during the period from 2003 to 2019. The Dumitrescu-Hurlin panel causality test, which accounts for cross-sectional heterogeneity, was applied in the analysis. The outcomes of the Dumitrescu-Hurlin causality test provided evidence in support of a unidirectional causal relationship between terrorism and economic growth for the overall panel in the Middle East, with the results further illustrating that this unidirectional relationship was predominantly influenced by country-specific factors, particularly those related to Iraq.

Likewise, Yusuf and Mohd (2022) used data from 1980 to 2019 and the ARDL to investigate the socio-economic and budgetary effects of security upheavals on economic progress in Nigeria. The results demonstrated that high unemployment rate, capital mobilization, FDI, government funding on security, and education diminished due to rising insecurity and slowing growth. Mbah et al. (2021) established a negative and substantial association between internal security and income growth.

Also, from 1986 to 2018, Amana, Aigbedion and Zubair (2020) evaluated the effect of government security spending on income growth in Nigeria. Time series data and Ordinary Least Squares (OLS) econometric methods were used in the study. According to the study's projected impact result, government spending on security had a strong influence on Nigeria's economic expansion. Long-term findings, however, showed that capital expenditures for government security, internal security, and defence were all considerable. Asen, Udo, Abner and Victor (2020), on the other hand, showed that spending on security had a favourable and substantial impact on both economic expansion and the development of human capital in Nigeria. Also, Nteegah (2020), focusing on security finance, used the ARDL model to analyse how spending on security has impacted Nigeria's economic growth between 2001 and 2019, demonstrating that spending on security boosted RGDP considerably. Aghaulor (2020) used data from 1981 to 2017 to examine Nigeria's national security reform for economic growth and found an inverse relationship of insecurity and national output.

In a study, Bardwell and Igbal (2020) used a model to aggregate the costs of four variables resulting from terrorist acts, adhering to the 2019 Global Terrorism Index methodology. The four metrics were income losses, injuries, property damage, and fatalities. It was revealed that the number of global terrorist attacks peaked in 2014, resulting in 33,555 fatalities and \$US 111 billion in income losses. Terrorist attacks leapfrogged by 190%, and deaths increased by 353% between 2011 and 2014. The analysis included the 100 incidences with the largest economic impact in terms of deaths and injuries. With only \$US 40.6 billion in deaths and injuries, the September 11, 2001, attacks in the United States were the incident with the most economic impact. The Sinjar massacre in Sinjar, Nineveh, Iraq, came in second with \$US 4.3 billion.

In Pakistan, Saleem et al. (2020) undertook a study aimed at elucidating the impact of terrorism on income level from 1981 to 2016. The research employed the ARDL bounds testing methodology to address the research question and established a co-integration relationship among the variables examined. The empirical evidence substantiated an inverse and significant relationship between terrorism and income growth. Similarly, Zakaria et al. (2019) investigated the ramifications of terrorism on income growth within the Pakistani economic framework from 1972 to 2014 and showed that terrorism discouraged FDI and domestic investments amidst increased government expenditure. In a study of 163 countries, Asongu, Uduji and Okolo-Obasi (2019) evaluated the influence exerted by law enforcement agencies in moderating the relationship between insecurity and tourism during the period from 2010 to 2015 with results showing that policy variables could be effectively leveraged to mitigate the detrimental impacts of policy syndromes on tourist arrivals.

Additionally, Ugo, Okwu and Ugo (2019) assessed the connection between insecurity and poverty in Nigeria. Data were gathered through a survey of 600 participants, utilising a descriptive methodology and non-probabilistic sampling procedures. The study's investigation was based on a few fundamental ideas from the frustration-aggression paradigm. Correlation and linear regression analysis were used to examine the data that was gathered. The findings indicated that insecurity triggers a higher poverty level. On the other hand, insecurity and industrialization in Nigeria were the focus of Ndubuisi-Okolo and Anigbuogu's (2019) research using an exploratory design, establishing that Nigeria's industrialization and sustainable development were being hampered by insecurity. Likewise, Onime (2018) examined the effects on specific economic measures in a different study that made use of secondary data and

descriptive qualitative analysis techniques, reporting that economic progress was impeded by rising unemployment and falling tax collections as a result of insecurity.

In Pakistan, MengYun et al. (2018) conducted a quantitative analysis to evaluate the ramifications of terrorism and political instability on the equity premium, utilising panel data encompassing 306 corporations from 2001 to 2014. The results derived from the estimation indicated terrorism had an adverse effect on the equity premium. In Turkey, Estrada et al. (2018) used the TAVE (terrorist attack vulnerability evaluation) and revealed that economic disruptions in Turkey were due to terrorism. Again, Tahar, Arafet and Hadhek (2018) showed that terrorism reduced the economic performance of developing economies. Similarly, Anaghar and Iorpev (2012) found that the spate of security threats in Nigeria undermined capital market performance. Using a dynamic modelling technique, Shuaibu and Lawong (2016) found that the impact of insecurity was greater on fiscal and external sector indices than on domestic policy variables. In contrast to these studies, Nwatoh and Nathaniel (2018) affirmed that insecurity did not reduce economic activities.

The literature review makes it clear that none of the studies used quarterly data on the global peace index, the number of fatalities attributable to insecurity to gauge the threat level, or government expenditures on internal security and defence in a single model. Therefore, this study is distinguishable from previous ones as contained in the empirical review.

➤3. Methodology

The Cobb-Douglas production function served as the foundation for the study's methodology. Then, in 1928, economist Paul H. Douglas and mathematician Charles W. Cobb created the Cobb-Douglas production function (Onalan & Basegmez, 2018, p. 179). This function explains how labour and capital interact to determine economic output. The model is used to represent the substitution between capital input, labour services, and technical change. Equation (1) gives the Cobb-Douglas production function.

$$Q = f(K, L) = AK^{\alpha}L^{\beta} \quad (1)$$

GDP mirrors total production; labour input captures the aggregate number of workers; productivity of current technology or total factor productivity is the monetary worth of all buildings, machinery, and equipment; and investment capital input denotes total investment in fixed assets (Cobb & Douglas, 1928, p. 141). The parameters α and β indicate the relative production elasticities for capital and labour. Equations 2 and 3 produce the output elasticity, which quantifies how responsive output is to variations in the amounts of labour or capital mobilized for production.

$$\alpha = \frac{\frac{\delta Q}{Q}}{\frac{AK}{K}}, (\text{Output elasticity coefficient of capital}) \quad (2)$$

$$\beta = \frac{\frac{\delta Q}{Q}}{\frac{AL}{L}}, (\text{Output elasticity coefficient of labor}) \quad (3)$$

The implication of the production function originated from Cobb-Douglas is that any distortions to capital and labour would cause a significant decline in aggregate production. Hence, the spate of security threats in Nigeria is seen to have caused a massive decline in the employment of labour while productive capital diverted to tackling insecurity as the government increased expenditure on internal security and defence in a bid to quell the security challenges.

The functional relationship of the model used by this study was drawn from Nteegah (2020) as specified in equation (4).

$$GDPR = f(SEXP, ISEXP, EDXP, HEXP) \quad (4)$$

Where, GDPR = GDP growth; SEXP = security expenditure; ISEXP = internal security expenditure; EDXP = education; HEXP = health expenditure.

The model used by Nteegah (2020) was modified by dropping expenditures on education and health as they are not relevant to the current study, while the global peace index and number of fatalities arising from security threats were included in the current study. Consequently, incorporating the Cobb-Douglas framework into this study leads to the functional relationship depicted in equation (5).

$$RGDP = f(GPI, NFT, EIS, EDF, CAP, LAB) \quad (5)$$

The variables were subjected to a logarithmic transformation because the study's theoretical production function based on Cobb-Douglas is not linear, as shown in equation (1). The log-linearized form is presented by equation (6).

$$\ln RGDP_t = \beta_0 + \beta_1 \ln GPI_t + \beta_2 \ln NFT_t + \beta_3 \ln EIS_t + \beta_4 \ln EDF_t + \beta_5 \ln CAP_t + \beta_6 \ln LAB_t + \varepsilon_t \quad (6)$$

Where, RGDP = real gross domestic product; GPI = global peace index; NFT = number of report fatalities due to insecurity; EIS = expenditure on internal security; EDF = expenditure on defence; CAP = capital; LAB = labour; $\beta_0 = \text{constant}$, $\beta_1 - \beta_6$ coefficients of the explanatory variables; and ε_t = error term, \ln = natural logarithm.

Equation (6) reflects the simplified Cobb-Douglas model when the components of security threats and security financing are included alongside labour and capital.

►3.1 Nature and Sources of Data

Quarterly data from 2012:Q1 through 2023:Q2 was used. The data for RGDP, EIS, EDF, and CAP were gotten from the CBN quarterly statistical bulletin (2023). Data for NFT were collated from the website of Armed Conflicts Locations and Events. Data for the Global Peace Index was obtained from the official website of the Institute for Economic and Peace (IEP), while data for labour was extracted from the World Development Indicators [WDI] (2023).

►3.2 Description of Model Variables

The variables contained in the empirical model are described alongside their *a priori* sign as presented in Table 1:

Table 1
Description of Model Variables

Variable	Description	a priori
Independent variable:		
Real gross domestic product (RGDP)	RGDP is a metric based on production value. In order to ensure that the final volume measure only varies when inputs or productivity do, its deflator takes price fluctuations into account. RGDP is used to measure income level.	
Independent variables:		
Global peace index (GPI) rating	The degree of societal safety and security, the volume of continuing internal and cross border conflict, and the level of militarization are the three dimensions in which the GPI measures the state of peace.	negative
Number of fatalities (NFT)	NFT is the total number of Nigerians killed by different security disruption perpetrators (Boko Haram, bandits, IPOB, herders, etc.).	negative

Expenditure on internal security (EIS)	This refers to funds spent by the government of Nigeria to maintain internal peace, usually through enforcing the country's laws and fending off threats to internal security.	positive
Expenditure on defence (EDF)	These are monies paid by a national government with the express purpose of supplying its military forces as well as the armed forces of its allies, or the Alliance.	positive
Control variables:		
Capital (CAP)	Capital was measured by gross fixed capital formation (GFCF). GFCF refers to the total amount resident producers invest in fixed assets over a specific time period after subtracting disposals.	positive
Labour (LAB)	Labour was measured as the labour participation rate. The working-age population's contribution to the economy is gauged by the labour force participation rate.	positive

Source: Compiled by authors

► 3.3 Technique of Data Analysis

The vector auto-regression (VAR) model was used in this study to examine how dynamically macro-economic aggregates in Nigeria responded to security risks. Unrestricted by any theoretical economic link, a VAR model is an empirical inquiry that makes statistical analysis of correlations among variables possible. The impulse response functions (IRFs) is typically reported rather than the VAR regression because it provides a better comprehension of the relationships (Stock & Mark, 2001). The VAR model hinges on the assumption that the variables are independent and not cointegrated at different levels. The VAR model of order p is displayed by equation (7).

$$Y_t = A(L)Y_{t-1} + U_t \quad (7)$$

Y_t is an $(n \times 1)$ vector of dependent variables, Y_{t-1} is the lag term for the individual variables which denoted as $(n \times n)$ matrix of autoregressive vectors of $i = 1, 2, \dots, k$. U_t represents an $(n \times 1)$ vector of structural shocks within the variance-covariance matrix: $E(U_t U_t')$. The VAR model, which is made up of an endogenous variable vector are displayed by equation (8):

$$\begin{bmatrix} LNRGDP_t & LNGPI_t & LNNFT_t & LNEIS_t & LNEDF_t & LNCAP_t & LNLAB_t \end{bmatrix} = \begin{matrix} A_1 \\ A_2 \\ \vdots \\ A_p \end{matrix} \begin{bmatrix} LNRGDP_{t-1} & LNGPI_{t-1} & LNNFT_{t-1} & LNEIS_{t-1} & LNEDF_{t-1} & LNCAP_{t-1} & LNLAB_{t-1} \end{bmatrix} + \dots + \begin{matrix} A_p \\ A_{p-1} \\ \vdots \\ A_1 \end{matrix} \begin{bmatrix} LNRGDP_{t-p} & LNGPI_{t-p} & LNNFT_{t-p} & LNEIS_{t-p} & LNEDF_{t-p} & LNCAP_{t-p} & LNLAB_{t-p} \end{bmatrix} + \mu_t \quad (8)$$

It is essential to look at the time-series aspects of data collection before beginning any analysis. By taking this approach, the study aims to prevent any incorrect conclusions that can result from a non-stationary series or a unit root. When the mean, variance, autocorrelation, and other statistical parameters stay the same across time, the time series is adjudged stationary. A non-stationary series, y_t , is said to be integrated of order d and is transformed into a stationary one by differencing it " d " times, or $y_t I(d)$. If a series' level is stationary, either $d = 0$ or $y_t I(0)$ applies. If one variation is made to a series to make it stationary, then $y_t I(1)$. The Augmented Dickey-Fuller (ADF) test was applied to ascertain. The ADF model is captured by equations (9 and 10).

$$Y_t = \alpha + \beta Y_{t-1} + \sum_{i=1}^n \beta_i \Delta Y_{t-i} + \varepsilon \quad (9)$$

$$Y_t = \alpha + y_t + \beta Y_{t-1} + \sum_{i=1}^n \beta_i \beta_j \Delta Y_{t-1} + \varepsilon \quad (10)$$

Equations (9) and (10) indicate ADF tests without and with trend, respectively. This compares the ADF statistic with the observed critical value of MacKinnon at the 5% threshold of significance. We reject the null hypothesis to accept that the time series is stationary if the ADF statistic is higher than the MacKinnon threshold.

>4. Results and Discussions

>4.1 Summary Statistics

The distributional characteristics of the variables under examination are displayed in Table 2.

Table 2
Summary Statistic

	RGDP	GPI	NFT	EIS	EDF	CAP	LAB
Mean	17416.94	2.738696	818.0728	527.1513	470.7961	7310.510	59.17043
Median	17197.25	2.760000	682.3350	455.2650	412.0650	4459.945	59.18500
Maximum	21423.44	2.810000	4381.670	822.8700	735.5000	19519.76	60.10000
Minimum	14105.66	2.580000	320.0000	273.1400	272.3000	2361.720	58.39000
Std. Dev.	1610.826	0.061990	637.4380	183.7755	162.7200	5008.268	0.486456
Skewness	0.226897	-1.477737	3.991968	0.168599	0.211335	0.869189	0.004913
Kurtosis	2.692756	4.078126	22.47122	1.459535	1.431583	2.410116	1.920120
Jarque-Bera	0.575628	18.96960	848.8376	4.766242	5.057281	6.459012	2.235290
Probability	0.749901	0.000076	0.000000	0.092262	0.079767	0.039577	0.327049
Observations	46	46	46	46	46	46	46

Source: Author's computation using EViews 10, (2024)

The mean denotes the average value, which denotes the mean of the data series. The standard deviation shows the extent to which a series is dispersed from its mean value. The series are positively skewed except for GPI, implying that all other variables are right-tailed. Regarding kurtosis, it was realised that the values for RGDP, EIS, EDF, CAP, and LAB were less than 3, indicating that their distribution was platykurtic (flat peak), while GPI and NFT with kurtosis values that are greater than 3 are leptokurtic (high peak). The probability values of the Jarque-Bera test are indicative of the fact that RGDP, EIS, EDF, and LAB with p-values that are greater than 0.05 have a normal distribution, while the other variables with p-values less than 0.05 do not have a normal distribution. Since some of the variables are not normally distributed and others are normally distributed, the study applied the logarithmic transformation of the series to obtain estimates that are linear to circumvent any potential problem that would lead to spurious outcomes in the final analysis.

>4.2 Stationarity Tests

An earlier examination of the time series' stationary characteristics using the ADF test with trend and intercept served as the foundation for the empirical analysis. The results of the test presented in Table 2 show that the variables are stationary at various levels. After the second difference, or the integration of order two, I(2), LNRGDP, LNEIS, LNEDE, and LNCAP became stationary, whereas LNGPI, LNNFT, and LNLAB became stationary following the first difference, or the integration of order one, I(1). Stability tests are thus conducted as part of the investigation.

Table 3
ADF Unit Root Test Results

Variable	Level: I(0)	First difference: I(1)	Second difference: I(2)	Order of integration
LNRGDP	-2.221731	-1.295918	-9.291992	I(2)
LNGPI	-2.052062	-4.492047	-	I(1)
LNNFT	-3.340695	-7.835370	-	I(1)
LNEIS	-2.006851	-1.771361	-6.739554	I(2)
LNEDF	-3.166145	-2.583427	-6.843191	I(2)
LNCAP	-1.914762	-2.464529	-12.68325	I(2)
LNLAB	-0.854972	-3.701554	-	I(1)

Source: Author's computation using EViews 10, (2024)

Note: At the 5% level, -3.523623 is the ADF critical value. I(*) indicates the degree of integration

►4.3 Optimal Lag Selection Criteria

The ideal lag length of the projected VAR model is displayed in Table 3. Based on the selection test criteria, a suitable lag order of three is utilised in the estimation to guarantee consistency in the VAR estimations.

Table 4
VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	447.8069	NA	2.94e-18	-20.50265	-20.21594	-20.39692
1	721.7431	445.9427	8.67e-23	-30.96480	-28.67114	-30.11897
2	829.1447	139.8718	6.89e-24	-33.68115	-28.70039	-32.09522
3	906.6708	75.72314*	3.11e-24*	-35.00794*	-29.38054*	-32.68191*

Source: Author's computation using EViews 10, (2024)

►4.4 Serial Correlation Test

In the absence of serial correlation, the calculated VAR model's appropriate lag duration is chosen. The estimated VAR model at lags 1 through 3 is free from serial correlation, according to Table 4, which is shown by the p-values of LRE* stat and Rao F-stat., which are greater than 0.05. This indicates that VAR estimation is not plagued by serious serial correlation. Hence, the results therefrom can be trusted.

Table 5
Serial Correlation

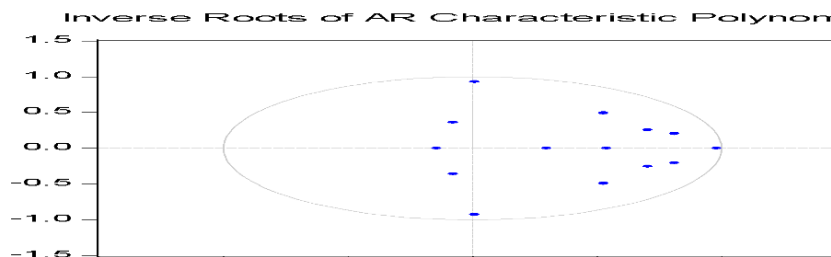
Lag	LRE* stat	df	Prob.	Rao F-stat	df	Prob.
1	0.509757	1	0.4752	0.522902	(1, 30.0)	0.4752
2	1.657456	1	0.1979	1.733799	(1, 30.0)	0.1979
3	1.414810	1	0.2343	1.473850	(1, 30.0)	0.2342

Source: Author's computation using EViews 10, (2024)

>4.5 VAR Stability Test

The VAR stability test is the crucial test that comes after the serial correlation LM test. All of the roots are shown to be inside the circle in Figure 6, which suggests that the computed VAR is stable. As a result, the initial VAR diagnostics has been satisfied, allowing the study to move forward with additional tests.

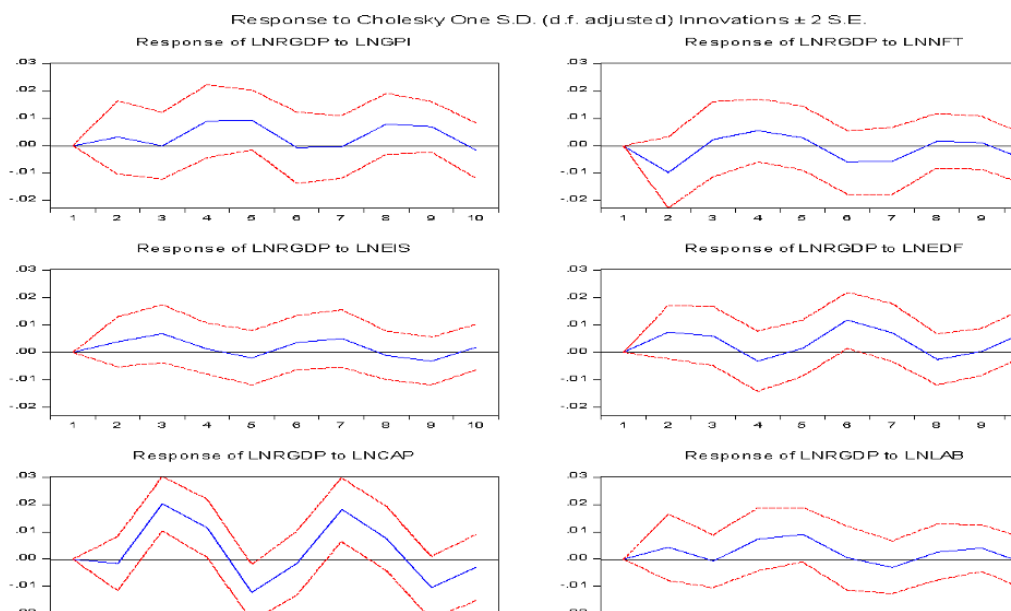
Figure 6
Stability Test



Source: Author's computation using EViews 10, (2024)

The variables' IRFs that were taken out of the calculated VAR model are displayed in Figure 7. It demonstrates how the variables reacted to innovations and shocks brought on by security threats and costs. The short run is from quarter one to quarter four; the medium term is from quarter five to quarter eight; and the long run is from quarter nine to quarter twelve.

Figure 7
Impulse Response Functions (IRFs)



Source: Author's computation using EViews 10, (2024)

The first graph shows that LRGDP responded positively to LNGPI in the short-run and medium-term but with little response in the sixth and seventh quarters. In the long run, LNRGDP to LNGPI was positive in the ninth quarter but turned negative in the tenth quarter. This implies that the RGDP has been significantly varied with the shocks triggered by the Global Peace Index rating of Nigeria. Likewise, from the second graph, LNRGDP largely responded negatively to LNNFT, indicating that a higher fatality rate caused lower productivity. In general, the responses of LNRGDP to LNGPI and LNNFT indicate that the government has been unable to tackle the security challenges that have continued

to deplete domestic production. Studies by Aghaolor (2020); Shavah (2022); Yusuf and Mohd (2021) lend credence to this finding that the negative effect of insecurity on domestic production is the root of macroeconomic instability in Nigeria. Still in support of this finding, Onime (2018) showed that insecurity hinders economic prosperity.

With regards to government security financing, which was categorised into internal security expenditure and defence expenditure, a mixed response was found. LNRGDP responded negatively to the dynamics of LNEIS and LNEDF in the fourth quarter and the eighth and ninth quarters. However, LNRGDP appeared to respond positively to LNEIS and LNEDF in the tenth quarter, that is, in the long run. This could be attributed to the fact that it takes a long time to quell security challenges and enhance economic productivity, even when the requisite expenditures have been made. This partly explains the negative responses of LNRGDP to LNEIS and LNEDF within some quarters in the short and medium term. Studies by Nwoye et al. (2024); Nteegah (2020); Asen et al. (2020); and Mbah et al. (2021) tend to support this finding that security financing enhances economic stability in the long run.

In the final case, the responses of LNRGDP to LNCAP and LNLAB were largely positive, especially in the short-term and medium-term. However, the responses of LNRGDP to LNCAP and LNLAB appeared to be negative in the long run. This could be due to the low rate of investment and low demand for labour due to the ailing situation of the Nigerian macroeconomic climate occasioned by the incessant security challenges in parts of the country.

►4.6 Pairwise Granger Causality

The findings from the Granger causality tests confirmed the association between security threats, security financing (expenditure), and income levels in Nigeria, as indicated in Table 5.

Table 5
Pairwise Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
LNGPI does not Granger Cause LNRGDP	44	8.92038	0.0006
LNRGDP does not Granger Cause LNGPI		2.73332	0.0775
LNNFT does not Granger Cause LNRGDP	44	3.38509	0.0441
LNRGDP does not Granger Cause LNNFT		0.00333	0.9967
LNEIS does not Granger Cause LNRGDP	44	17.1301	0.0000
LNRGDP does not Granger Cause LNEIS		0.65393	0.5256
LNEDF does not Granger Cause LNRGDP	44	17.0878	0.0000
LNRGDP does not Granger Cause LNEDF		0.20587	0.8148
LNCAP does not Granger Cause LNRGDP	44	18.3535	0.0000
LNRGDP does not Granger Cause LNCAP		0.17584	0.8394
LNLAB does not Granger Cause LNRGDP	44	13.9268	0.0000
LNRGDP does not Granger Cause LNLAB		2.26384	0.1174

Source: Author's computation using EViews 10, (2024)

The pairwise Granger causality results show that a unidirectional causality flowed from LNGPI, LNNFT, LNEIS, LNEDF, LNCAP, and LNLAB to LNRGDP, and there was no reverse flow. This implies that it is security threats and security financing amidst capital formation and labour participation that influence macroeconomic stability in Nigeria. This finding complements those obtained from IRFs in Figure 5.

➤5. Conclusion

This study investigated the linkages between security threats, government expenditures on security, and income levels in Nigeria. To achieve the core objective, the VAR model was used. The study's conclusions showed that, over the long term, macroeconomic stability, which was measured by RGDP, responded negatively to security threats and positively to government security financing. This finding suggests that low production due to insecurity might have deprived Nigeria of a stable macroeconomic atmosphere. This suggests that Nigeria will continue to be uninhabitable for investments that are economically productive as long as security issues continue to distort productivity and destabilise the macroeconomic environment. The analysis came to the conclusion that macroeconomic stability had been hampered over time by security challenges witnessed in Nigeria.

According to the pairwise Granger causality tests, it was reaffirmed that the variables of security threats (GPI index and number of fatalities) and a unidirectional causality flowed from government security financing (expenditures on internal security and defence) to real gross domestic product, showing that insecurity and its resultant expenditures influence real GDP. As a result of this development, it is essential to improve the security system with the sincerity and tenacity it deserves in order to make Nigeria habitable for both indigenous and foreign investors. Therefore, the government must unravel the root causes of insecurity in order to come up with a long-term remedy. Also, the government must endeavour to strengthen physical security measures across the nation through its security architecture by offering efficient security facilities and creating strict sanctions to be applied to security defaulters. Consequently, the government must be proactive in addressing insecurity by taking steps to address its root causes such as poverty mitigation programmes and employment schemes, uniting the various ethnic groups, making sufficient budgetary allocation for defence and internal security with strict monitoring of its disbursement, training of security personnel, contemporary approaches to gathering and sharing intelligence, logistics, and the deployment of cutting-edge technology in managing security challenges, as well as meting out the appropriate punishment to culprits.

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