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Government Expenditure on Education and Battle Related Deaths in Nigeria

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Abstract: *This study examines the relationship between government expenditure on education and the incidence of battle-related deaths in Nigeria, spanning the years 2000 to 2022. The primary aim is to explore how spending on education influences the number of deaths resulting from conflicts and violence within the country. The study adopts an ex-post facto research design, with secondary data sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and the World Development Indicators. Correlation models are employed to test the hypotheses. The results reveal a significant positive relationship between government expenditure on education and the occurrence of battle-related deaths in Nigeria. This suggests that, while education spending is typically viewed as a tool for fostering development and peace, it may inadvertently contribute to conflict dynamics due to unequal access to education or other socio-political factors. The study recommends that the government should focus on improving the quality and accessibility of education to address underlying grievances that may lead to violence. It also highlights the need for investment in education programs that foster critical thinking, tolerance, and conflict resolution skills to mitigate the risk of conflicts and reduce the incidence of battle-related deaths.*

Keywords: Government expenditure, education, battle-related deaths, conflict, violence, Nigeria, socio-political factors, public spending, conflict resolution, inequality.

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INTRODUCTION

Sustainable development, as defined by the United Nations, seeks to create a world where individuals can escape poverty, enjoy decent work, and access essential resources without compromising the environment (United Nations, 2015). These goals are particularly critical for sub-Saharan Africa, where communities face numerous challenges such as climate change, food insecurity, and lack of access to basic services like education and healthcare. Nigeria, a key country in this region, is expected to benefit from these goals. However, despite its wealth of natural resources, including oil, minerals, and other valuable assets, the nation continues to face significant developmental challenges.

Education plays a central role in achieving sustainable development, and government expenditure on this sector is expected to contribute to social and economic stability (Maku, 2009). Increased investments in education are aimed at improving the quality of life for citizens and addressing issues such as poverty and inequality. However, despite the government's substantial spending on education, Nigeria has been struggling with increasing levels of violence and insecurity. The insurgency by Boko Haram, banditry, and other forms of conflict have led to widespread internal displacement and loss of life. These conflicts continue to threaten the stability of the country, raising questions about the effectiveness of government spending in achieving peace and security.

Government spending on education is designed to foster economic growth and stability, yet Nigeria has not seen the expected reductions in violence despite significant investment in the sector (Muritala & Taio, 2011). The violence that plagues the country, particularly in the northern and central regions, has led to the displacement of millions of people and strained resources that could otherwise be used for development. Exploring the relationship between government expenditure on education and the incidence of battle-related deaths is essential in understanding whether educational investments are contributing to or alleviating the ongoing conflicts. This study aims to fill this gap by analyzing how these two variables are interconnected in Nigeria.

Nigeria, despite being rich in natural resources, has not achieved the level of development expected since gaining independence in 1960. The country continues to struggle with inadequate infrastructure, including poor road networks, unreliable power supply, inadequate healthcare, and subpar educational systems. The persistent challenges of unemployment, hunger, and poverty affect a significant portion of the population. While there has been an annual increase in government revenue, much of this wealth has been mismanaged or embezzled, preventing the country from achieving its developmental potential. As a result, Nigeria has become increasingly vulnerable to internal conflicts and violence, which continue to escalate.

Insecurity in Nigeria has reached alarming levels, with violence from insurgencies such as Boko Haram, banditry, and political conflicts causing widespread fear and displacement. Despite increased government spending, the country has been unable to curb the growing

insecurity, and violence has only intensified. This has led to significant loss of life, including battle-related deaths, and has displaced millions of people from their homes. The government's expenditure on various sectors, including education, is meant to reduce inequality and promote peace and security. However, it remains unclear whether spending on education has been effective in reducing violent conflict and improving the overall security situation. This study seeks to examine the relationship between government expenditure on education and the rise in battle-related deaths due to conflicts and violence in Nigeria.

REVIEW OF RELATED LITERATURE

Government Expenditures

Government expenditure refers to all expenses incurred by the government in carrying out its functions, also known as public expenditure. It is an important fiscal policy tool that drives economic growth (Ahmed & Latri, 2008). Government expenditure can be broadly classified into recurrent expenditure, capital expenditure, and transfer payments. Recurrent expenditures include regular expenses such as salaries, wages, administrative costs, and interest payments. Capital expenditure covers long-term investments like infrastructure, schools, and hospitals. Transfer payments, on the other hand, involve income redistribution through welfare programs like pensions, child benefits, and unemployment support. In accounting terms, government expenditure includes all financial outflows except for debt repayments, investments, and loans (U.S. Census Bureau, n.d.). The relationship between government expenditure and economic growth is reciprocal—higher spending can boost growth, while economic downturns may limit government spending. In line with Sustainable Development Goal (SDG) 16, government spending in Nigeria should prioritize peace, justice, and strong institutions to reduce conflict-related deaths and displacement.

Government Expenditure on Education

In Nigeria, the education sector receives significant funding in the national budget due to its constitutional importance. Government expenditure on education includes both capital and recurrent expenses. Capital expenditure covers building new schools, purchasing academic infrastructure, and improving facilities, while recurrent expenditure includes salaries for teachers, scholarships, and operational costs for primary, secondary, and tertiary institutions. As the Nigerian population grows, so does the demand for education funding, leading to a continuous increase in government expenditure in this sector. Education is a key driver of human capital development, equipping individuals with skills for employment and improving their quality of life (World Bank, 2020). This aligns with the Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), which aims to ensure inclusive and equitable education for all by 2030. Investing in education contributes to national development, reducing unemployment and fostering economic prosperity.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a set of 17 global objectives established by the United Nations in 2015, aimed at addressing critical issues around poverty, inequality, environmental degradation, peace, and justice by the year 2030. These goals are intended to

guide member nations, including Nigeria, towards achieving improvements in "People, Planet, and Prosperity." For instance, SDG 1 targets the eradication of poverty, with objectives to halve the population living in poverty, ensure access to resources, and strengthen social protection systems. SDG 2 focuses on ending hunger by improving food security, promoting sustainable agriculture, and enhancing nutrition, all of which have been further underscored by recent global crises exacerbating food shortages.

In health, education, and gender equality, the SDGs emphasize accessibility and inclusivity. SDG 3 aims to ensure healthy lives and promote well-being, addressing issues like maternal health, child mortality, and universal health coverage. Goal 4 advocates for equitable quality education and lifelong learning opportunities, ensuring that both boys and girls can access education, a foundation for reducing future inequality. Goal 5 targets gender equality, seeking to empower women and girls by ending all forms of discrimination and violence, including harmful practices like child marriage and gender-based violence.

The SDGs also prioritize environmental sustainability and responsible resource management. SDG 6 is dedicated to providing universal access to clean water and sanitation, essential for health and well-being. Similarly, Goal 7 focuses on affordable and sustainable energy, essential for development, especially as around 800 million people still lack electricity. Goals related to sustainable cities, responsible consumption, and climate action (SDGs 11, 12, and 13) address urbanization challenges, advocate for sustainable practices, and emphasize climate resilience through actions to mitigate greenhouse gas emissions and improve energy efficiency.

Lastly, SDG 16 emphasizes the importance of peace, justice, and strong institutions, underscoring the need for governance structures that uphold justice, transparency, and inclusion. This goal calls for efforts to reduce violence, provide access to justice, and build accountable institutions. Goal 17 highlights the need for partnerships, calling on nations to work together and strengthen international cooperation to achieve the SDGs. The SDGs collectively offer a roadmap for sustainable development, guiding countries toward a shared vision of prosperity, social inclusivity, and environmental sustainability by 2030.

Peace, Justice, and Strong Institutions (SDG 16)

The United Nations' Sustainable Development Goal (SDG) number 16 aims to promote just, peaceful, and inclusive societies while ensuring access to justice and creating effective, accountable institutions at all levels. This goal underscores that all individuals, regardless of ethnicity, faith, or sexual orientation, should live free from violence and fear, underscoring the foundational need for security and equality in all societies. Achieving Goal 16 is essential for sustainable development, as the absence of peace impedes growth, social harmony, and resource development (UN SDG Report, 2023).

However, achieving SDG 16 faces considerable setbacks due to ongoing and escalating conflicts globally. In 2022, there was a more than 50% surge in conflict-related civilian deaths, a grim milestone attributed largely to the Russia-Ukraine war, which disrupted global security efforts. High levels of armed violence, insecurity, and crime, including sexual violence and

exploitation, continue to hinder sustainable development and exacerbate poverty in many regions. This reality emphasizes that without robust actions to protect vulnerable populations, such as reducing illicit arms flows and combating corruption, SDG 16 remains out of reach (UN Data on Our World in Data, 2023).

In addressing these issues, coordinated efforts among governments, civil society, and local communities are essential to create lasting peace and tackle insecurity. Promoting the rule of law and respecting human rights are central to this process, as these actions encourage transparency, combat illicit practices, and ensure inclusive participation. Goal 16 also aligns with broader human rights frameworks by advocating for societal structures that respect privacy, expression, and access to information—principles necessary to safeguard individual rights and establish stable, peaceful communities (Sustainable Development Goals Report, 2023).

Peace remains a fundamental requirement for social and economic development, as conflict and instability undermine societal progress and lead to losses in lives and resources. Without equal access to justice, the rights of marginalized populations are often left unprotected, reinforcing cycles of resentment and unrest. The growing displacement of people—108.4 million worldwide at the end of 2022—further reveals the impact of these unresolved issues, highlighting a pressing need to strengthen institutions that deliver justice and address the root causes of violence and insecurity (UN Data on Our World in Data, 2023).

Theoretical. Framework

The government expenditure hypothesis suggests that public spending was initially given little attention due to the dominance of laissez-faire principles and belief in the efficiency of free markets. However, with the rise of welfare economics, governments expanded their roles, especially in infrastructure provision. This shift increased interest in the theory of public spending, particularly in addressing income inequality, economic development, regional disparities, and justice (Bhartia, 2002; Mitchell, 2005). To explain government expenditure and its link to Sustainable Development Goal (SDG) 16 implementation in Nigeria, this study draws on Keynesian theory, the Wiseman-Peacock hypothesis, and Wagner's Law of Increasing State Activities. These theories help in understanding how government spending, particularly in education, can influence national stability and security, thereby affecting battle-related deaths. The study applies these theories to analyze the role of government expenditure in addressing social challenges and achieving sustainable development.

Keynesian economics, developed by John Maynard Keynes during the 1930s, argues that government intervention can stabilize the economy by influencing aggregate demand (Romer, 1986). Keynesians believe that economic downturns arise due to insufficient demand and that government spending, particularly on infrastructure and public services, can boost economic growth. According to this theory, increased government spending, such as on education, enhances economic opportunities and reduces poverty, which can, in turn, lower conflict and battle-related deaths. Keynesian theory also highlights how budget deficits, if managed properly, can drive economic growth by increasing purchasing power and private investment.

According to Ram (1986) and Ghali (1998), increasing government expenditure encourages private investment, which contributes to higher economic growth. The theory suggests that by investing in education, the government can create jobs, improve economic conditions, and address social inequalities, reducing the likelihood of violence and insecurity. This perspective aligns with the study's focus on how government expenditure on education can contribute to national stability and the reduction of battle-related deaths.

The Wiseman-Peacock hypothesis and Wagner's Law further explain the relationship between government expenditure and national development. The Wiseman-Peacock hypothesis suggests that public spending increases in response to social or economic disturbances, with each major crisis leading to a new level of government expenditure (Wiseman & Peacock, 1961). This explains why government spending on education may rise during periods of conflict or unrest to address security challenges and stabilize the economy. Similarly, Wagner's Law states that as an economy grows, government activities and expenditures expand at an even faster rate (Wagner, 1883). This aligns with the increasing education budgets in Nigeria, reflecting the government's recognition of education as a tool for long-term development and stability. These theories suggest that continuous investment in education can help reduce social unrest and prevent violent conflicts, supporting the study's argument that government spending on education plays a crucial role in reducing battle-related deaths in Nigeria.

Empirical Review

Several studies have examined the impact of government expenditure on economic growth in Nigeria, employing diverse methodologies and data spans. Igwe (2025) investigated the correlation between government expenditure on defence and battle-related deaths in Nigeria, analyzing data from 2000 to 2022. Utilizing a correlational model, the findings suggest that while increased defense budgets aim to address security issues, they have not resulted in the anticipated reduction in battle-related deaths, potentially due to resource misallocation, corruption, and a focus on militarized approaches rather than addressing the root causes of conflict. Igwe et al. (2024) examined the correlation between government expenditure on internal security and battle-related deaths in Nigeria, particularly in light of Sustainable Development Goal (SDG) 16, which promotes peace, justice, and strong institutions. Utilizing data from 2000 to 2022, this research applies a correlational model and the findings reveal a significant positive correlation (0.8538) between security expenditure and battle-related deaths, suggesting that while heightened spending may target conflict reduction, it has yet to achieve a decline in fatalities. Oshim and Nnajieze (2024) examined the impact of government expenditure on agriculture, inflation, exchange rates, and interest rates on poverty in Nigeria from 2000 to 2022, using panel regression analysis to explore the relationship between these variables and the Poverty Headcount Ratio (PHR). The findings reveal that government expenditure on agriculture has a significant positive effect on poverty levels, indicating that higher agricultural spending may inadvertently contribute to increased poverty in the country. Abdurrahman et al. (2023) used an Autoregressive Distributed Lag (ARDL) model on time series data from 1981 to 2021 and found that capital expenditure positively influences economic growth in both the short and long run. Conversely, Ogochukwu & Oruta (2021) and Ugochukwu et al. (2021), utilizing Johansen co-integration and error correction models,

observed a negative association between capital expenditure on health, agriculture, and education and economic growth. In contrast, Aladejana et al. (2021), applying fully modified OLS on data from 1986 to 2018, found that government spending on education, transport, and communication significantly enhances economic growth, while defence spending negatively affects GDP. Similarly, Suleiman (2021) applied multiple regression analysis on data from 2000 to 2019 and discovered that recurrent expenditure positively impacts economic growth, while capital expenditure's influence was insignificant. These mixed findings highlight the complexities in assessing government expenditure's role in economic development.

Further empirical investigations have explored the long-run effects of disaggregated government spending on economic growth. Onwuka (2021), using the Augmented Dickey-Fuller test, co-integration analysis, and Vector Error Correction Model (VECM), established a strong long-run relationship between human capital development and government expenditures on education, health, and agriculture. However, infrastructure spending exhibited a negative but significant effect on the Human Development Index (HDI). Adole et al. (2021) and Onifade et al. (2020) also used co-integration models to demonstrate that public expenditure significantly influences economic growth in both the long and short run. Meanwhile, Ebipre & Eniekezimene (2020) and Bappah et al. (2020) found that recurrent expenditure positively impacts economic growth, whereas capital expenditure has a negative effect. Chijioke & Amadi (2020) and Ajayi et al. (2020), using Johansen co-integration and OLS regression methods, respectively, highlighted that government expenditure on transport, education, and agriculture significantly boosts economic growth, reinforcing the notion that sectoral allocation of public funds plays a critical role in national development.

Several studies have analyzed government expenditure's influence on specific sectors. Okoye (2019) observed a short-run negative impact of current expenditure on economic growth. Nwani et al. (2018) used the ARDL bounds test to establish a co-movement between public health expenditure, environmental pollution, and economic growth, concluding that while health spending positively affects the social sector, environmental degradation diminishes these gains. Similarly, Bonmwa & Ishmael (2017) and Shakirat (2018) found that spending on administration and transport enhances economic growth, whereas investments in agriculture and infrastructure exhibit an insignificant impact. Reromosele et al. (2017) employed OLS regression to show that government expenditure on agriculture positively influences GDP, supporting the view that targeted sectoral funding is essential for sustained growth. Likewise, Ebong et al. (2016) used co-integration and error correction techniques to reveal that capital expenditure lacks significant effects on economic growth, while social sector investments, such as in health and education, propel development.

Longitudinal studies have also assessed the dynamic relationships between government spending and economic growth. Njoku et al. (2015), applying Granger causality tests, confirmed a long-run link between government expenditures on health, education, defence, agriculture, and economic growth. Ebere & Osundina (2014) and Okezie et al. (2013) used OLS regression and Engle-Granger co-integration techniques, respectively, to demonstrate that government expenditure on agriculture significantly enhances GDP. Meanwhile, Usenobong

& Dominic (2013) found that aggregate government spending positively influences economic growth, though its impact remains marginal. Sanson & Aladejare (2013) employed Vector Error Correction and Granger Causality models to support the Wagnerian and Rostow-Musgrave hypotheses, indicating that fiscal policy plays a crucial role in economic expansion. Finally, Shahid et al. (2013), examining Pakistan's economy, concluded that development expenditure fosters economic growth, emphasizing the importance of efficient fiscal management in promoting sustainable development. These diverse findings underline the critical role of public expenditure in shaping economic outcomes, with sectoral allocation and efficiency determining overall effectiveness.

Gap in Empirical Literature

Most studies on government spending in Nigeria have focused on how it affects economic growth, infrastructure, and human capital development. For example, researchers like Ogujiuba and Adeniyi (2015) examined how education spending impacts Nigeria's economic growth, while Olufemi and Uchenna (2019) studied the effect of public expenditure on social services. However, very few studies have explored the connection between government spending on education and conflict, especially in terms of battle-related deaths. This study fills that gap by investigating whether investing in education can help reduce violent conflicts in Nigeria.

Unlike previous research that mainly looked at military spending and security, this study shifts attention to education as a possible tool for reducing conflicts. For instance, studies by Akinola (2020) and Eke (2021) focused on how government defence budgets impact terrorism and armed conflicts in Nigeria. However, this research examines whether increased education funding can lower the number of battle-related deaths by providing better opportunities, reducing youth radicalization, and promoting social stability. This fresh perspective helps policymakers understand if channelling more funds to education could serve as a long-term solution to reducing conflicts in Nigeria.

METHODOLOGY

This study uses an ex-post facto research design because it relies on past economic data from reliable sources like the Central Bank of Nigeria, the National Bureau of Statistics, the United Nations, and the World Bank. It focuses on Nigeria's government spending across different sectors from 2000 to 2022, a period chosen due to the implementation of the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). The data includes annual government expenditure and reported battle-related deaths caused by conflicts and violence, helping to analyze the link between education spending and conflict reduction in Nigeria.

Model Specification

A Correlational Model was employed to evaluate the relationship between Government Expenditure and Battle Related Deaths in Nigeria.

The model is specified as follows

$$rxy = \frac{\sum(x_i-x)(y_1\bar{y})}{\sqrt{\sum(xi-x)^2\sum(yi-\bar{y})^2}}$$

Where:

xy = is the correlation coefficient of the linear relationship between the variables x and y
xi is the value of the x-variables in the sample
x is the mean of the values of the x-variables
yi is the value of the y-variables in the sample
y is the mean of the values of the y-variables in the sample
Y represents other variables taken separately in each case.

DATA ANALYSIS AND DISCUSSION

Data Analysis

The normality of the distribution of the data series is shown by the coefficients of Skewness, Kurtosis, and the probability values of the Jaque-Bera test for normality.

Table 4.1.1: Descriptive Statistic

	LOGBRD	EEXP	HEXP	ADMEXP
Mean	2.771596	2.324246	2.080940	2.569231
Median	2.607455	2.512137	2.255273	2.680495
Maximum	3.666237	2.846942	2.640999	2.996619
Minimum	1.832509	1.600784	1.182360	1.829014
Std. Dev.	0.542967	0.380479	0.432102	0.350336
Skewness	-0.019560	-0.308983	-0.452797	-0.843005
Kurtosis	1.742724	1.807926	2.065665	2.591478
Jarque-Bera	1.516344	1.727801	1.622537	2.884122
Probability	0.468522	0.421515	0.444294	0.236440
Sum	63.74670	53.45766	47.86163	59.09231
Sum Sq. Dev.	6.485889	3.184819	4.107671	2.700171
Observations	23	23	23	23

Source: Authors Computation, 2024 (Eviews-10)

Table 4.1.1 presents the descriptive statistics for six key variables: LOGBRD (log of battle-related deaths), ISEXP (internal security expenditure), DEXP (defence expenditure), EEXP (education expenditure), HEXP (health expenditure), and ADMEXP (administrative expenditure). The LOGBRD variable has a skewness of -0.0196, indicating a nearly symmetrical distribution, while its kurtosis value of 1.74 suggests a sharper peak with heavier tails. The Jarque-Bera test (1.52, p = 0.468) confirms that it does not significantly deviate from normality. EEXP (education expenditure) has a slight negative skewness (-0.309), indicating a leftward skew, and a kurtosis of 1.81, suggesting heavier tails; however, the Jarque-Bera test (1.73, p = 0.422) shows no significant departure from normality. Similarly, HEXP (health expenditure) is negatively skewed (-0.453), with a kurtosis of 2.07, reflecting a sharper peak, but the normality test (1.62, p = 0.444) does not indicate significant non-normality. ADMEXP

(administrative expenditure) has the most pronounced left skew (-0.843), indicating a longer left tail, and a kurtosis of 2.59, implying a peaked distribution with heavier tails; however, the Jarque-Bera test (2.88, p = 0.236) still suggests no significant deviation from normality. Overall, despite minor variations in skewness and kurtosis, none of the variables show strong evidence of non-normality, making them suitable for further statistical analysis.

Table 4.1.2: Unit Root Test Results

Variable	ADF Unit Root Test			
	t-Statistic at Levels	P-value	t-Statistic at 1st Difference	P-value
BRD	0.3614	0.7798	-2.5821	0.0126
EEXP	1.9348	0.9840	-4.9955	0.0000
HEXP	2.2020	0.9909	-4.2562	0.0002
ADMEXP	1.7413	0.9764	-4.8274	0.0000

Source: Authors Computation, 2024 (Eviews-10)

Table 4.1.2 presents the results of the Augmented Dickey-Fuller (ADF) unit root test, showing that all variables are non-stationary at levels but become stationary after taking the first difference. Battle-related deaths (BRD) have a test statistic of 0.3614 (p = 0.7798) at levels, indicating non-stationarity, but after first differencing, the test statistic improves to -2.5821 (p = 0.0126), making it stationary at the 5% significance level. Similarly, education expenditure (EEXP) is non-stationary at levels (ADF = 1.9348, p = 0.9840), but after differencing, it becomes stationary (ADF = -4.9955, p = 0.0000). Health expenditure (HEXP) also follows this trend, being non-stationary at levels (ADF = 2.2020, p = 0.9909) but stationary after differencing (ADF = -4.2562, p = 0.0002). Likewise, administrative expenditure (ADMEXP) is non-stationary at levels (ADF = 1.7413, p = 0.9764) but achieves stationarity after first differencing (ADF = -4.8274, p = 0.0000). These results confirm that differencing is necessary to transform the variables into a stationary form, ensuring the validity of time series analyses and econometric modelling.

Table 4.1.3: Panel Regression Analysis (Dependent Variable: BRD)

Variable	Coefficient	Standard Error	t-Stat	p-Value
EEXP	0.280962	0.914844	0.307115	0.7625
HEXP	1.122357	1.024123	1.095919	0.2884
ADMEXP	-0.810966	0.554898	-1.461469	0.1621
C	0.950968	0.742195	1.281292	0.2173
R^2 = 0.82, Adjusted R^2 = 0.76, F-Stat = 15.08696, Prob(F-stat) = 0.000010 DW = 0.99				

Source: Authors Computation, 2024 (Eviews-10)

Table 4.1.3 presents the results of a panel regression analysis with battle-related deaths (BRD) as the dependent variable and internal security expenditure (ISEXP), defence expenditure (DEXP), education expenditure (EEXP), health expenditure (HEXP), and administrative expenditure (ADMEXP) as independent variables. For education expenditure (EEXP), the positive coefficient of 0.2810 suggests a potential link to increased battle-related deaths, but it

is not statistically significant (p = 0.7625), indicating no clear relationship. Similarly, health expenditure (HEXP) shows a positive coefficient of 1.1224, implying that higher health expenditure might be linked to more battle-related deaths, but this effect is also not statistically significant (p = 0.2884), suggesting uncertainty in the relationship. For administrative expenditure (ADMEXP), the negative coefficient of -0.8109 indicates a possible inverse relationship with battle-related deaths, but again, the result is not statistically significant (p = 0.1621), leaving the impact of administrative spending on violence uncertain. In conclusion, while the coefficients suggest potential relationships, the lack of statistical significance across all variables indicates that there is insufficient evidence to draw firm conclusions about their effects on battle-related deaths in Nigeria.

Table 4.1.4: Heteroskedasticity Test: ARCH

F-statistic	3.858011	Prob. F(1,20)	0.0636
Obs*R-squared	3.557557	Prob. Chi-Square(1)	0.0593

Source: Authors Computation, 2024 (Eviews-10)

Table 4.1.4 presents the results of a heteroskedasticity test using the ARCH method. The F-statistic is 3.858011 with a p-value of 0.0636, which is slightly above the 0.05 significance level, indicating weak evidence against the null hypothesis of no heteroskedasticity. Similarly, the ObsR-squared statistic is 3.557557 with a p-value of 0.0593, also above 0.05, further suggesting weak evidence against the null hypothesis. These results indicate that while there is some evidence of heteroskedasticity, it is not strong enough to reject the assumption of constant error variance (homoskedasticity). As a result, the assumption of homoskedasticity can still be considered reasonable for the regression model.

Table 4.1.5: Breusch-Godfrey Serial Correlation LM Test

F-statistic	3.194384	Prob. F(2,15)	0.0699
Obs*R-squared	6.870038	Prob. Chi-Square(2)	0.0722

Source: Authors Computation, 2024 (Eviews-10)

Table 4.1.5 presents the results of the Breusch-Godfrey Serial Correlation LM Test, which checks for serial correlation in the regression model's residuals. The F-statistic is 3.194384 with a p-value of 0.0699, and the ObsR-squared is 6.870038 with a p-value of 0.0722. Both p-values are above the 0.05 significance level, indicating weak evidence against the null hypothesis, which suggests no serial correlation. This means there is not enough evidence to conclude that serial correlation exists in the residuals. Although the results suggest some possibility of serial correlation, the assumption that the residuals are independent remains reasonable. However, further tests or adjustments might be needed to confirm this assumption and ensure the regression analysis is reliable.

Table 4.1.6: Spearman Rank-Order Covariance Analysis Result

	EEXP/BRD	HEXP /BRD	ADMEXP /BRD
Correlation	0.813241	0.827075	0.724308
t-Statistic	6.404136	6.742914	4.814086
P-Values	0.0000	0.0000	0.0001
Observation	32	32	32

Source: E-views 10.0 Software, 2024

The Spearman Rank-Order Covariance Analysis shows strong positive correlations between government expenditure and battle-related deaths in Nigeria. Education expenditure (EEXP) and battle-related deaths (BRD) correlate to 0.813241, indicating a strong positive relationship, with a t-statistic of 6.404136 and a p-value of 0.0000, confirming the significance. Health expenditure (HEXP) also shows a strong positive correlation with battle-related deaths, with a coefficient of 0.827075, a t-statistic of 6.742914, and a p-value of 0.0000. Administrative expenditure (ADMEXP) has a moderately strong positive correlation of 0.724308 with battle-related deaths, supported by a t-statistic of 4.814086 and a p-value of 0.0001. In conclusion, the analysis indicates that higher government spending in areas like education, health, and administration is strongly correlated with increased battle-related deaths in Nigeria.

TEST OF HYPOTHESES

Decision Rule*:* If the correlation coefficient (r) exceeds 0.7, the null hypothesis is rejected implying a strong relationship. Conversely, if the correlation coefficient is less than or equal to 0.7, the null hypothesis is accepted. This implies that the variables share no relationship. If the P-value falls below the 0.05 threshold, it signifies robust evidence to reject the null hypothesis, thus allowing the conclusion that the coefficient is statistically significant and distinct from zero. Conversely, when the P-value exceeds 0.05, the evidence is considered insufficient to reject the null hypothesis, leading to the acceptance of H0.

Test of Hypothesis One

H_0: Government expenditures on education have no relationship with battle-related deaths in Nigeria.

H_1: Government expenditures on education have a strong relationship with battle-related deaths in Nigeria.

Decision: The analysis reveals a correlation coefficient of 0.813241 between government expenditures on education and battle-related deaths in Nigeria, surpassing the threshold of 0.7. Additionally, the associated p-value of 0.0000 indicates high statistical significance. As a result, we reject the null hypothesis, providing compelling evidence of a robust relationship between government expenditures on education and battle-related deaths in Nigeria. This implies that higher levels of investment in education initiatives by the government are strongly associated with increased occurrences of battle-related deaths within the country.

DISCUSSION OF FINDINGS

The correlation analysis between government spending on education and battle-related deaths in Nigeria reveals a significant relationship, with a coefficient of 0.813241. This strong correlation raises important questions about the connection between education expenditure and violence in the country. Education is widely regarded as a key factor in fostering socio-economic development, creating opportunities, and improving living standards. However, this positive correlation with battle-related deaths challenges the typical assumption that increasing education spending always leads to peaceful outcomes. It suggests that, in the Nigerian context, higher investments in education might be unintentionally linked to rising violence, a relationship that requires deeper investigation to understand its underlying causes.

One possible explanation for this surprising link could be the socio-political landscape of Nigeria. Although education spending is meant to boost long-term development, it may also heighten tensions and contribute to conflict. Disparities in the availability and quality of education could create feelings of resentment, especially among marginalized groups who feel excluded from the benefits of education. Additionally, political manipulation of educational funding or mismanagement of resources could further fuel dissatisfaction and unrest. In such a context, what should be a tool for social progress might instead exacerbate existing social divisions and lead to an increase in violent conflict.

The relationship between education spending and battle-related deaths might also reflect deeper socio-economic issues in Nigeria. While education is intended to reduce inequality and promote upward mobility, unequal access to education could actually reinforce societal divisions, particularly along ethnic, religious, or regional lines. In this way, the strong positive correlation might highlight the role of education in exacerbating social tensions, especially in regions where education is not distributed fairly or where educational institutions are seen as instruments of exclusion or oppression. These dynamics could result in conflict, as groups frustrated by their lack of access to education might resort to violence.

Moreover, the correlation between education spending and battle-related deaths could point to broader systemic challenges within Nigeria, such as governance failures and corruption. If government resources, including those allocated for education, are misused or inadequately delivered, the public may lose trust in the state and resort to violence to voice their grievances. In this sense, the link between education expenditure and conflict may reflect not just issues within the education sector but also larger problems of governance and public dissatisfaction with the government's ability to manage resources effectively. This situation highlights the complexity of conflict causality in Nigeria, where multiple factors, including education spending, economic inequality, ethnic tensions, and governance issues, all contribute to the occurrence of violence.

The apparent paradox in the correlation analysis, where higher education spending is linked to more violence, contrasts with other studies that highlight the positive effects of government spending on economic growth, particularly in infrastructure and capital expenditure. Studies

by Abdulrahman et al. (2023) and others have found that government spending generally stimulates economic growth, while Aladejan et al. (2021) showed that spending on education, transport, and communication contributes positively to economic development. However, the correlation analysis on education spending and conflict dynamics presents a different picture, suggesting that the impact of government expenditures on conflict is not straightforward. While education spending is generally expected to contribute to peaceful development, in Nigeria, it may instead be tied to an increase in violence due to a combination of political, social, and economic factors.

The conflicting findings between the correlation analysis and previous studies underscore the complexity of the relationship between government spending and societal outcomes. While investments in education and other sectors may stimulate economic growth, their impact on conflict dynamics is influenced by many other factors, including the quality of governance, social stability, and historical grievances. The discrepancy in results may also arise from differences in study methodology, such as sample size, time frame, and data analysis techniques.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study investigated the correlation between government expenditure and the frequency of battle-related fatalities in Nigeria. Despite substantial government spending, the nation has been plagued by significant insecurity, with tragic events such as the mass killing of Christians in Plateau State on Christmas Day, 25th December 2023. Incidents of kidnappings, murders, abductions, and political violence have become alarmingly common. Since the emergence of Boko Haram in 2010, citizens have lived in fear, unable to sleep peacefully.

The findings of this study highlight significant and concerning relationships between government expenditures and battle-related deaths in Nigeria. The strong positive correlations observed across various expenditure categories, including internal security, defence, education, health, and administration, underscore the complex dynamics influencing Nigeria's security landscape. These findings carry profound implications for policymakers, security experts, and stakeholders engaged in peace-building efforts.

The identified correlations suggest that government spending patterns play a crucial role in shaping conflict dynamics in Nigeria. The robust associations between expenditure categories and battle-related deaths imply that resource allocation decisions have tangible impacts on the prevalence and intensity of violence within the country. This underscores the need for targeted interventions that address the root causes of conflict and promote sustainable peace. Practical implications emerge from these findings, emphasizing the importance of evidence-based policymaking in addressing Nigeria's security challenges.

Recommendations

The study made the following recommendations:

i. **Education Expenditures:** Policymakers should prioritize investments in quality education that promote critical thinking, tolerance, and conflict resolution skills among students. Enhance teacher training and curriculum development to incorporate peace education, human rights, and civic values, fostering a culture of peace and tolerance from an early age.

They should ensure equitable access to education for all, particularly in marginalized and conflict-affected areas. Build schools, train teachers, and provide incentives for students, especially girls, to enrol and complete their education. Education can serve as a powerful tool for social mobility, empowerment, and resilience-building in conflict-affected communities.

The government should create safe and inclusive learning environments that protect students and teachers from violence, intimidation, and discrimination. Implement school-based conflict resolution mechanisms, anti-bullying programs, and psychosocial support services to address trauma and promote emotional well-being among students and staff.

Contribution to Knowledge

The study's finding of a strong and significant positive association between government spending and battle-related deaths in Nigeria highlights the complex variables that shape the country's security situation. The study provides a detailed knowledge of how governmental financial allocations intersect with conflict outcomes by breaking down numerous expenditure categories such as internal security, defence, education, health, and administration. This granular information is critical for policymakers and stakeholders working to develop focused actions that effectively address Nigeria's diverse security concerns.

Practically, these findings need customized advice for each expense variable. For example, in the field of internal security, where expenditures have a strong association with battle-related casualties, a strategic review of security policy and resource distribution is required. This could include increasing law enforcement capacity, improving intelligence collection procedures, and engaging in community policing efforts to reduce violence and conflict escalation.

Similarly, the study's discovery of a substantial positive relationship between the defence budget and battle-related deaths emphasizes the need for a rethinking of Nigeria's defence strategy. Instead of focusing simply on military hardware and troops, there is an urgent need to prioritize conflict prevention measures, promote dialogue and reconciliation, and address the underlying grievances that fuel violence in many places.

In the education sector, where government spending has a strong positive association with battle-related deaths, focused measures are needed to protect educational institutions and promote peace-building initiatives. This may include adopting programs in schools that encourage tolerance, inclusivity, and conflict resolution skills, as well as infrastructure changes to enable safe learning environments free of the threat of violence.

Furthermore, the study's findings on health and administrative expenses highlight the interconnection of social services and governance institutions to conflict dynamics. Recommendations in these categories may include strengthening healthcare systems to address complaints about access and quality, as well as improving administrative capacities to ensure efficient service delivery and encourage transparency and accountability.

The study's empirical analysis provides useful insights into the complex relationship between government expenditures and conflict outcomes in Nigeria. By explaining the positive relationship between spending habits and battle-related deaths, the study contributes to our understanding of the fundamental causes of insecurity, influencing evidence-based policy development and intervention design. Overall, the study's findings are a valuable resource for policymakers, practitioners, and scholars working to promote peace, security, and prosperity in Nigeria and elsewhere.

REFERENCES

Abdurrahman, B.Y., Shuaibu, M., & Mohammed, A. (2023). An empirical investigation of government expenditure and economic growth: Evidence from 1981 – 2021. *Journal of Arid Zone Economy 1(3), 39-51.*https://bit.ly/jazeissues.

Abu-Bader, S. & Abu-Gani, A.S. (2003). Government expenditures, military spending and economic growth causality evidence from Egypt, Israel and Syria. *Journal of PolicModel, 25(6-7),* 367-583.

Abu-Eideh O. (2015). Causality between public expenditure and GDP growth in Palestine; an Econometric Analysis of Wagner's law. *Journal of Economics and Sustainable Development, 6(2),* 189-199.

Acikgoz B, & Cinar S. (2017). Public spending and economic growth. An empirical analysis of developed countries. *Ekonomick, Casopis, 65,* 448-458.

Adole, S.O, Abraham, O.I & Sunday, E.A.(2021). Government expenditure and economic growth in Nigeria. *IOSR Journal of Economics and Finance*, 12(1), 28-35.

Agayev, S. (2014). Kamu Harcamalarive Ekonoriik BuyumeIliskisi: Eski Sovyetler Birligi Ulkelerinde Wagner Yasasi Analizi (1995 – 2009). *Eskisehir Osmangazi Unvieristies Iktisadi Ve Idari BilimlerD ergisi, 7(2).*

Ajayi, F.O., Nygikyaa, M.N., & Abubakar, H. (2020). Effects of public expenditure on economic growth in Nigeria. *International Journal of Recent Innovations in Academic Research,* 4(2), 20-31.

Al. Fans, A.F (2002). Public expenditure and economic growth in the Gulf Cooperation Council countries. *Applied Economics, 34,* 1187-1193.

Aladejana, S.A., Ehinomen, E.O; & Akonbi, M.M. (2021). Government expenditure on infrastructure and economic growth in Nigeria. *Nigerian Studies in Economics and Management Sciences 4(1),* 40-49.

Ebere, C. & Osundina, K. C. (2014). Government expenditure on agriculture and economic growth in Nigeria. *International. Journal of Science and Research,* 3(9), 188 -194.

Ebipre, P., & Eniekeziemene, F. (2020). Government expenditure and economic growth in Nigeria. *International. Journal of Business & Law Research,* 8(3), 63-71.

Ghali, K. H. (1998). Government size and economic growth: Evidence from a multivariate cointegration analysis. Applied Economics, 31, 975-987. DOI: 10.1080/000368499323698.

Igwe A. O. (2025). Government expenditure on defence and battle-related deaths. European Journal of Business and Innovation Research, 13(2), 1-18. doi: https://doi.org/10.37745/ejbir.2013/vol13n2118

Igwe A. O., Ojeh A. I. & Nnajieze E. I. (2024) Government Expenditure on Internal Security and Sustainable Development Goal 16, European Journal of Accounting, Auditing and Finance Research, 12(10),74-87

Maku, E. & Olukayode, E. (2009).Does government spending spur economic growth in Nigeria?

Mohammed A. & Suraya I. (2019). Government spending and economic growth: Contemporary Literature Review. *Journal of Global Economics. 7*.4.

Njoku. C. O, Chigbu E. E. & Akujuobi, A. B. C. (2015). Public expenditure and economic growth in Nigeria (A Granger Causality Approach)1983-2012. *Management Studies and Economic Systems, 1(3),* 147-160.

Ogochukwu, D.S., & Onita, I.L. (2021). Government expenditure and economic growth: A disaggregated Analysis. Traektorianauki = Path of Science 7(11): 4022 -4035. DOI: 10.22178/POS. 76 -6. *Journal of Arid Zone Economy*.

Okoye, LU et al. (2019). Government expenditure and economic growth: The case of Nigeria proceedings of SOCIOINT 2019-6th International. *Conference on Education, Social Sciences and Humanities 24-26 June 2019. Istanbul-Turkey,* 1184 – 1194.

Onifade, S.T et al. (2020). An empirical retrospect of the impacts of government expenditures on economic growth: new evidence from the Nigerian economy. *Economic Structures 9(6).* https://doi.org/10.u86/s40008 - 020-0186-7.

Onwuka, C. (2021). Disaggregated government expenditure and economic growth in Nigeria: An Econometric Analysis. *Journal of Social Science Research. DOI:10.2139/ssm.3933423.*

Oshim J. C. & Nnajieze I. E. (2024) Government Agricultural Expenditure and Sustainable Development Goal One in Nigeria, European Journal of Business and Innovation Research, 12(7),119-135. doi: https://doi.org/10.37745/ejbir.2013/vol12n7119135

Ram, R. (1986). Government size and economic growth: A new framework and some evidence from cross-section and time series data. *The American Economic Review, 76(1),* 191-203.

Romer, P.M. (1986). Increasing returns and long-run growth. *Journal of Political Economy,* 94(5), 1002-1037. DOI: 10.1086/261420.

Shahid A., Rabb, I. F., Hayat, U., Ali, N., (2013). The composition of public expenditures and economic growth: Evidence from Pakistan. *International Journal of SocialEconomics 40(11).1010-1022. DOI:10.1108/IJSE-05-2012-0081.*

Suleiman Ahmed, (2021). Effects of public expenditure and economic growth in Nigeria. Department of Economics, Nile University, Abuja Nigeria.

Usenobong, F.A & Dominic, E.A (2013). Does government spending spur economic growth? Evidence from Nigeria. *Journal of Economics and Sustainable Development, 4(9), 2013.*