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CAUSAL RELATIONSHIPS BETWEEN NIGERIA'S MILITARY SPENDING, INCOME INEQUALITY  
AND POVERTY

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**Abstract**

*Insecurity challenges have persisted in Nigeria for over a decade despite rising in military spending over the years. In the same way, income inequality and poverty are part of macroeconomic issues that have remained insurmountable. Existing studies have produced mixed results. Hence, the objective of this paper is to examine the causal relationship between military spending, poverty and income inequality in Nigeria between 1980 and 2016. Data were collected from the publications of Central Bank of Nigeria Statistical Bulletin and World Development Indicators (WDI). Toda and Yamamoto approach was employed in analyzing the causal relationships between military spending, income inequality and poverty. The results of Toda Yamamoto justified our inability to reject the null hypotheses of absence causality between military spending and income inequality and between military spending and poverty index. This was because the observed p-values were greater than critical value of 0.05, while, modified Wald statistics were unnecessarily small in all cases (0.7241, 0.0095, 1.8670 and 0.4118). The results found no evidence of causality from military spending to income inequality and also from military spending to poverty index, thus, implying neutrality hypothesis between military spending, income inequality and poverty index in Nigeria. The estimated results confirmed that military spending and income inequality as well as military spending and poverty index do not empirically support one another and have no mutual and complementary relationship. The study recommended that even though security might influence poverty and income inequality and poverty, government still have to device policies that will reduce income inequality and poverty independently of policies on military spending.*

Keywords: Military spending, poverty, income inequality, Nigeria, Toda Yamamoto

**Introduction**

National security in Nigeria has been a major issue that has kept the nation off-balance and as main threat that impede the achievements of economic growth and

development. Recently, not only is the nation faced with threats of insurgency, kidnapping, cybercrimes, arm robberies but also disagreements between the service chiefs and top security officers who are supposed to work hand in hand to curb the security threat in the nation (Azimazi and Terhemba, 2020).

Security is a measure taken against physical, may be regarded as measures taken to be shielded from physical, financial, economic, or any form of threats against a person or thing (Clifton and Brooks, 2012). Referring to this definition above and bringing it to the Nigerian context, where violence motivated by political, economic or social grievances is the order of the day, different groups in Nigeria resorts to violence, government soldiers kill civilians indiscriminately Campbell (2020). This is as a result of poverty and income disparity which has eaten up the populace thereby giving room to high crime rate in the country. Nigeria security is been threatened by insurgency, Armed robbery, Militancy, Cultism, Piracy, Kidnapping, Cattle rustling, Boko Haram, Fidel (2016). Having identified all security threat, the questions that runs on my mind is that, "is it a deliberate act to spite the nation's integrity or an act to find a way out of it causes. The issue of insecurity in Nigeria has caught the attention of so many Nigerians, knowing well that no one is safe or exonerated especially the issue of kidnapping for ransom which is now the order of the day. These kidnapers do not only abduct the rich but just anyone, rich or poor, young or old knowing well that some ransom will be paid or the lives of the abductees will be wasted. What then are the causes of insecurity in Nigeria? Elite manipulation of Ethnicity and Religious differences, do or die politics, widespread systemic and political corruption, struggle for resources, pervasive material inequalities, unemployment and poverty, weak security system, porous borders and terrorism (Kubiat, 2019).

Poverty on the other hand, according to Joanna (2016) is seen "as manifestations of chronic hunger, premature death, impoverishment and sufferings. United Nations definition of poverty is when someone means of survival is less than 2 US dollar a day. Furthermore, the issue of poverty is more than lack of income and resources to ensure a sustainable livelihood. Deducing from the above, poverty can be regarded as inability in attaining the salient needs of man on feeding, clothing, shelter, education and good health care system. Aliogo (2018) defined income inequality as unequal distribution of a country's wealth of people in a society. That is, widened gap between what individuals with same level of education earn at different corporations in same society. Kopp (2019) expressed income inequality as a situation where smaller segment of the population are in possession of income or wealth of the entire nation. It also implies the gap between the wealthiest and the rest of the population. Increasing rate of income disparity where the disparity between the rich and the less privileged is so widened is another reason for which people engage in crime in order to earn a living or boost disposable income. The high crime rate in Nigeria, if not curbed might deteriorate to people coming out to defend them thereby leading to social unrest in the nation.

Existing studies in the literature on income inequality and military spending have produced mixed results. Some Related studies like Felix (2002), Aigbokhan (2000), as well as Evelyn et al (2015) have all examined poverty and income inequality, how economic growth is affected as well as why inequality matters for poverty. However, this study goes further by analyzing the causal relationships between poverty, income inequality and military spending in Nigeria between 1980 and 2016. Previous sections presented empirical literature, research methods, results and discussion of findings as well as conclusions respectively.

### **Empirical Literature**

Several authors have reviewed relevant literatures relating to issues of poverty, income inequality and the military spending.

#### **Inequality and Poverty**

Linking macro to micro analysis between poverty and poverty alleviation in Nigeria during the period of Structural Adjustment Programme, the gap between the rich and the poor was higher between rural population and males residents in urban areas (Aigbokhan, 1997). In addition, inequality was found to be higher among females in the rural areas. In addition, the study by Aigbokhan on the profile of poverty and polarization of income distribution in Nigeria revealed that introduction of structural policy reforms of 1986 and the reversal of January 1994 enhanced increased poverty and widen income inequality, hence his study failed to validate 'trickle down hypothesis' (Aigbokan, 2000).

Also, Lin showed that economic growth led to rising inequality in income in a bid to reduce poverty in China between the period of 1985-2001. The study also showed that economic growth effectively reduced poverty (Lin, 2003). Closely related Lin (2003)'s findings, Ravallion (2006) study showed that increased growth and reduced inequality in income had combined impact in reducing poverty in India and China between 1980 and 2000. He concluded that poverty reduction needed a combination of economic growth, which involves "pro-poor" pattern of income inequality reduction and economic growth.

Le conducted a study in Vietnam showing relationship between economic growth, inequality and poverty at provincial level. The study found that reducing poverty entails the reduction of inequality and vice versa and that human capital investment, growth rate of GDP and trade openness influenced inequality and poverty reduction. His conclusion implied that a more equitable society is attainable with appropriate policy on poverty reduction (Lee, 2008).

Analysis of the threats of income inequality on the health of people in Nigeria between 1980 and 2014 showed that health related variables have influence on income inequality. The study revealed that while income inequality negatively affect mortality rate and exhibited a one way dimensional relationship with life expectancy (Fatukasin and Ajasin, 2015).

#### **Income Inequality and Military Spending**

Analysis of the condition of related among military expenditure and inequality in income in the literature have produced mixed results. Studies such as Abell (1994), Ali and Galbraith (2003), Chaitanya (2008), Ali (2012) and Elveren (2012) showed that increased expenditure on military personnel worsen inequality in income. One of the findings revealed that the influence of other variables pertaining to the economy like growth, rate of interest, taxes, other spending on the economy and inflationary spiral confirmed that income inequality is hampered by increased in military spending (Abell, 1994). Using panel regressions, it was further confirmed that that expenditure on military widen income gap (Chaitanya, 2008; Ali and Galbraith, 2003). Similarly, Elveren, (2012) study from Turkish data showed that there exist long-run connection among spending on defense and inequality in income, such that income distribution gap is granger caused by military expenses.

Moreover, Kentor et al. (2012) found that military spending especially on high-technology worsens inequality in income. On the other hand, Ali (2012), Comton (2005) and Henderson et al. (2008) among others verified that increased military spending improves income inequality. Ali, (2012) confirmed that while, military spending was affected negatively by growth of the economy in Middle Eastern and North African (MENA) nations,

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inequality and distribution of income were enhanced by spending on military. Inequality in income and spending on military were inversely related, such that higher spending on military enhances better distribution in income and more jobs especially for non-skilled labour in United States (Comton, 2005). Also, Henderson et al. (2008) showed that in United States, inequality in income widens as military expenses reduce, especially when employment is boosted in less productive and productive sectors. An Iranian study between the period of 1969 and 2011 on income distribution gap and spending on military showed the connection between income distribution and spending on military, thereby confirming that an inverted-U shaped relationship exists between them (Mohammed et al, 2012).

However, evidence of no relationship was found confirmed between inequality in income and spending on military in ASEAN countries, except for Malaysia only where it was observed that spending on military granger caused inequality in income (Lin and Ali, 2009; Hirnissa et al., 2009).

**Poverty and Military Spending**

In Nigeria, Olofin study established negative relationship between poverty and components of military expenses during the period of 1990 and 2010. His results deviated from Keynesian conclusion on military expenditure on hardware and human well-being. His study concluded that increasing spending on military hardware will result in fewer resources to the betterment of the poor (Olofin, 2012)

**Research Methods**

In the attempt to analyse the causal relationship between inequality, military spending and poverty, we adapted Faisala, Tursoya and Resatoglua (2016). Secondary data taken from the period of 1980 to 2016, the period was chosen based on availability of data. Poverty index and gini coefficients were used as proxies for poverty and income inequality respectively. We sourced for data from the publications and website of World Development Indicators, CBN Statistical Bulletin and also from Ewubare, and Ogbonna (2018). Bivariate analysis included military spending and poverty on one hand and inequality in income and military spending on the other hand.

Toda Yamamoto procedure, an alternative to conventional granger causality test was employed to analyse the causality between the identified variables. Toda Yamamoto disregards decision on the order of integration of the variables in question and the underline regressors whether they are mutually cointegrated or not. Also, Augmented Dickey Fuller test (ADF) and Phillips-Peron (PP) tests were carried out in order to determine the lag length of the variables.

To determine the causal relationships between military spending, income inequality and poverty, modified Wald test was employed as suggested by Toda Yamamoto approach.

Hence, we applied Toda and Yamamoto approach to the equations under the VAR system in levels below: For military spending (MI) and poverty (PI), we specify as:

$$\begin{aligned}
 PI_t &= a_0 + \sum_{i=1}^k a_{1i} PI_{t-1} + \sum_{j=k+1}^{dmax} a_{2j} PI_{t-j} + \sum_{i=1}^k \theta_{1i} LMS_{t-1} + \sum_{j=k+1}^{dmax} \theta_{2i} LMS_{t-j} \\
 &\quad + e_{1t} \dots \dots \dots (1) \\
 LMS_t &= b_0 + \sum_{i=1}^k b_{1i} LMS_{t-1} + \sum_{j=k+1}^{dmax} b_{2j} LMS_{t-j} + \sum_{i=1}^k \theta_{1i} PI_{t-1} + \sum_{j=k+1}^{dmax} \theta_{2i} PI_{t-j} \\
 &\quad + e_{2t} \dots \dots \dots (2)
 \end{aligned}$$

For Income inequality (GIN) and military spending, we also specified

$$GIN_t = a_0 + \sum_{i=1}^k a1i GIN_{t-1} + \sum_{j=k+1}^{dmax} a2j GIN_{t-j} + \sum_{i=1}^k \theta1i LMS_{t-1} + \sum_{j=k+1}^{dmax} \theta2i LMS_{t-j} + e1t \dots \dots \dots (3)$$

$$LMS_t = b_0 + \sum_{i=1}^k b1i LMS_{t-1} + \sum_{j=k+1}^{dmax} a2j LMS_{t-j} + \sum_{i=1}^k \theta1i GIN_{t-1} + \sum_{j=k+1}^{dmax} \theta2i GIN_{t-j} + e2t \dots \dots \dots (4)$$

**Results and Discussions of Findings**

**Table 1: Unit Root Test (Augmented Dickey Fuller)**

Variable	Level		First difference		Second difference		Integration order
	Intercept	Intercept and trend	Intercept	Intercept and trend	Intercept	Intercept and trend	
LMS	-0.5716	-3.6709**	-9.6596*	-9.4760*			I(1)
GIN	-2.4465	-2.5091	-3.0411**	-3.0116	-5.5230*	-5.4370*	I(2)
PI	-2.0456	-1.7361	-6.3574*	-6.4458*			I(1)

\*, \*\*, \*\*\* means significance at 10%, 5%, and 1%.

**Table 2: Unit Root Test (Phillips-Perron)**

Variable	Level		First difference		Second difference		Order of Integration
	Intercept	Intercept and trend	Intercept	Intercept and trend	Intercept	Intercept and trend	
LMS	-1.4050	-3.8874**	-10.2023*	-9.9932*			I(1)
GIN	-1.8009	-1.7387	-2.7736	-2.7176	-10.8616*	-10.6481*	I(2)
PI	-2.0351	-1.6971	-6.3347*	-6.4508*			I(1)

\*, \*\*, \*\*\* showed level of significance at 10%, 5%, and 1%.

Tables 1 and 2 above showed that both ADF and PP test results showed that military spending (LMS) and poverty index (PI) became stationary at first difference, while income inequality (GIN) was stationary at second difference. The implication of the result is that the maximum order of integration for the series was taken to be 2.

In order to carry out the modified Wald Statistics, it is important that the optimal lag length be known. We employed criteria on the basis of Log Likelihood, Akaike Information, Schwarz Bayesian and Hannan Quinn to determine the optimal lag length. All the criteria (except Log Likelihood) indicated 2 as the optimal lag. Thus, 2 seemed to be more appropriate as indicated by all information criteria except Log likelihood. This was shown in table 3.

**Table 3: Results of lag Criteria among Spending on military and Inequality in Income**

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-177.5694	NA	132.5796	10.56290	10.65269	10.59352
1	-104.7667	132.7578	2.318346	6.515688	6.785046	6.607547
2	-92.68850	20.60398*	1.446349*	6.040500*	6.489430*	6.193598*
3	-91.58561	1.751652	1.728242	6.210918	6.839420	6.425255

\*figures showed the optimal lag which was chosen on the basis of the lag criteria

We checked for the stability and fitness of the model so as to ensure that normal distribution, constant variance and autocorrelation were considered for the chosen optimal lag.

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We performed serial correlation LM test at lag 2 under the unrestricted VAR so as to confirm the absence of serial correlation. Also, heteroscedasticity test was conducted as shown in table 4 and 5 respectively.

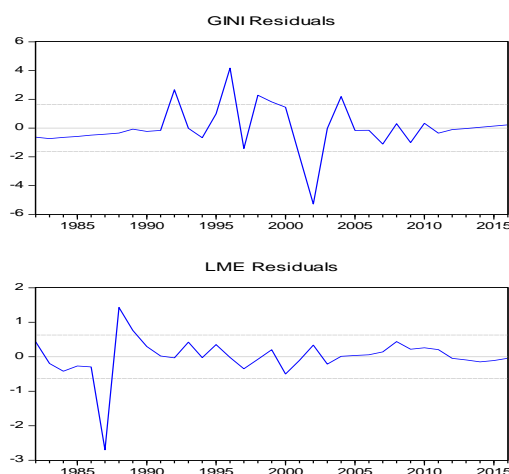
**Table 4: Serial Correlation LM test for Military Spending and Income Inequality**

Lags	LM Stat.	Prob.
1	2.546573	0.6363
2	2.593405	0.6280

Tables 4 and 5 showed that the probabilities of LM test statistic (for serial correlation) and Chi-sq. (for heteroskedasticity) revealed that ( $P > 0.05$ ) in all cases, meaning that the null hypothesis of no correlation and absence of heteroskedasticity were accepted. We concluded that the model has a goodness of fit.

**Table 5: Heteroskedasticity Test**

Chi-Sq	Df	Prob.
36.30249	24	0.0513



**Figure 1: Normality Test**

**Table 6: AR Roots Characteristics Polynomial**

Endogenous variable: LMS, GIN	
Root	Modulus
0.976809	0.976809
0.733371 - 0.277808i	0.784226
0.733371 + 0.277808i	0.784226
-0.384805	0.384805

To ensure whether the model is stable, AR Characteristics Polynomial was performed and shown in table 6 as shown by the Roots of characteristics polynomial at optimum lag 2 for military spending and income inequality.

In table 7, we also determined the lag criteria between military spending and poverty index as shown by Akaike Information Criterion(AIC), Schwarz Bayesian Criterion(SC), Hannan Quinn Criterion(HQ) to be 1.

**Table 7: Results of lag Criteria between Military Spending and Poverty Index**

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-186.6057	NA	164.3084	10.77747	10.86635	10.80815

1	-118.1873	125.1079*	4.143356*	7.096417*	7.363048*	7.188458*
2	-114.6204	6.114693	4.260330	7.121165	7.565550	7.274567

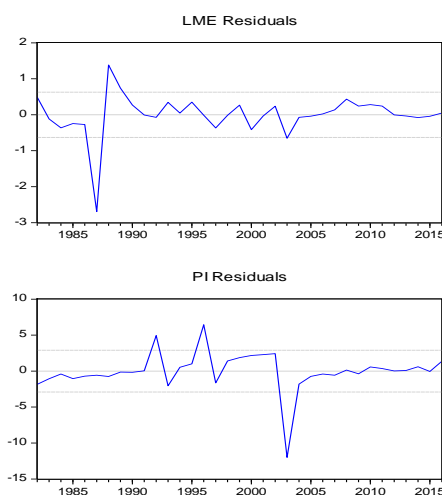
\*Indicated the optimal lag employed based on the determined lag criteria

We also performed Serial correlation LM test at lag 1 under the unrestricted VAR and heteroscedastic test in table 8. We also found that p-value was greater 0.05 in both cases it was observed that there was absence of serial correlation among the variables and that the model also had a good fit.

**Table 8:Residual Serial Correlation LM and Heteroskedasticity Tests**

Test	Statistic Test	Prob.
Serial correlation LM	1.76941	0.7781
Heteroskedasticity	28.52209	0.2386

In figure 2, we checked for the normality condition of the residual graphs. The residuals also showed normal behavior.



**Figure 2: Normality Test of Residuals**

In addition, the stability test of the model shown by the AR roots of the polynomial is less than 1 in all cases, which further revealed that the model was stable.

**Table 9: AR Roots Characteristics Polynomial between LMS and PI**

Endogenous variable: LMS, PI	
Root	Modulus
0.917432 - 0.009518i	0.917481
0.917432 + 0.009518i	0.917481
-0.384484	0.384484
-0.099239	0.099239

Finally, the Toda Yamamoto test was presented in table 10.

**Table 10: Toda-Yamamoto Long Run Non-causality Test**

Explained Variable	Explanatory Variable	F-Stats M. Wald Stats	P-value	Direction of causation
LMS	GIN	0.724170	0.3948	LMS≠GIN
GIN	LMS	0.009506	0.9223	GIN≠LMS

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LMS	PI	1.867080	0.3932	LMS ≠ PI
PI	LMS	0.411844	0.8139	PI ≠ LMS

**Discussion of Findings**

Table 10 presented F-statistics (modified Wald stats.) together with respective p-values. The table also showed the direction of causation from explained (dependent) variables to explanatory (independent) variables. Thus, the results of Toda Yamamoto justified our inability to reject the null hypotheses of absence causality between military spending and income inequality and between military spending and poverty index. This was because the observed p-values were greater than critical value of 0.05, while, modified Wald statistics were unnecessarily small in all cases. We concluded that there was no existence of causation from military spending (LMS) to income inequality and from military spending and poverty index. This result was at variance with Olofin (2012) as he found connection between Poverty and military expenditure per Soldier. However, the result was in agreement with Hirnissa et al. (2009).

**Conclusion and Recommendations**

This study analyzed the causal relationship between military spending, poverty and income inequality in Nigeria. Toda-Yamamoto Approach was to analyze the direction of causation between military spending and income inequality and military spending and poverty index for a period 1980 to 2016. The results found no evidence of direction of causation from military spending to income inequality and also from military spending to poverty index, thus, implying neutrality hypothesis between military spending, income inequality and poverty index in Nigeria. The estimated results confirmed that military spending and income inequality as well as military spending and poverty index do not empirically support one another and have no mutual and complementary relationship. It means that that increase or decrease in military spending will have no impact on income inequality and poverty in Nigeria. This study showed the vulnerability of low income earners and the poor in Nigeria,

The study recommended that even though security may have impact on income inequality and poverty, government will have to device policies that will reduce income inequality and poverty independently of policies on military spending. However, if government decide to reduce poverty and income inequality, increase military spending will not be affected, poverty and inequality with not be impacted in any way.

**References**

Achumba, C, Igbomereho O. S, & Akpor, M. O. M. (2013). Security challenges in Nigeria and the Implication for Business activities and sustainable development *Journal of Economics and sustainable development* 2(7) 22-31

Aigbokhan, B.E. (2000). Poverty, Growth and inequality in Nigeria: A case study. *African Economic research consortium* <http://www.researchgate.net>

Abell, J. D., (1994). Military Spending and Inequality. *Journal of Peace Research*, 31, 35-43.

Ali, E. H., (2012). Military Expenditures and Income Inequality in the Middle East and North Africa: A Panel Analysis. *Defence and Peace Economics*, forthcoming issue.

Ali, H.E., Galbraith, J., (2003). Military Expenditures and Inequality: Empirical Evidence from Global Data. The University of Texas at Austin UTIP Working Paper No. 24

Awojobi, O.N (2014). Poverty and Insecurity in Nigeria Democratic Dispensation; *International Journal of Innovative Research and Development*; 3(6).



- Azimazi, M. J, & Terhemba, D. (2020). Buhari Presidency Cracks. Downloaded from <http://n.guardian.ng/news/Buhari-presidency-cracks>.
- Carol, M. (2019). Income Inequality: <https://www.investopedia.com/terms>
- Chaitanya, V. K., (2008). Exploring the Relationship between Military Spending & Income Inequality in South Asia. William Davidson Institute Working Paper Number 918, February 2008.
- Comton. C., (2005). All Men Created Unequal: Trends and Factors of Inequality in the United States. *Issues in Political Economy*, 13, 1-20.
- Ewetan O.O. & Ese U. (2014). Insecurity and social- economic Development Studies, 5 (1), 40-63.
- Elveren, Y. A., (2012). Military Spending and Income Inequality: Evidence on Cointegration and Causality for Turkey, 1963-2007. *Defence and Peace Economics*, 23, 289-301.
- Ewubare, D. B. and O. A. Ogbonna (2018), Poverty and Income Inequality in Nigeria (1980-2017). *International Journal of Advanced Studies in Ecology, Development and Sustainability / (IJASEDS)*, Volume 5, Number 1, pp.138-151.
- Faisala, b., T. Tursoya, N. G., Resatoglua (2016), Energy Consumption, electricity, and GDP Causality; The Case of Russia, 1990-2011. 3rd Global Conference on Business, Economics, Management and Tourism, 26-28 November 2015, Rome, *Procedia Economics and Finance* 39(2016), pp. 653 – 659. Available online at [www.sciencedirect.com/2212-567](http://www.sciencedirect.com/2212-567).
- Fatukasi, A & Ajasin, B. (2015). Effect of income inequality on health indicators in Nigeria. *International Journal of Academic Research in Business and Social Sciences*. 2(3), 23-41
- Felix, N. (2002). Why inequality matters for poverty, inequality briefing paper 2.
- Fidel, M. (2016). 8 deadly security threats Nigeria is facing Daily Trust Newspaper, Wednesday May 29, 2019. Available online at <http://www.dailytrust.com.ng>
- Gujarati, D.N (2009). *Basic Econometrics* 5th Edition McGraw-Hill-Irwin
- Henderson, D. R., McNab, R. M., Rozsas, T. (2008). Did Inequality Increase in Transition: An Analysis of the Transition Countries of Eastern Europe and Central Asia. *Eastern European Economics*, 46, 28-49.
- Hirnissa, M. T., Habibullah, M. S., Baharom, A. H., (2009). Defense Spending and Income Inequality: Evidence from Selected Asian Countries. *Modern Applied Science*, 3, 96-111.
- Ilori, A.E. (2013). Fiscal –Monetary Policy Interaction and Effectiveness in Nigeria: Evidence From the New- Keynesian Model. (Unpublished master’s thesis), Department of Economics University of Nigeria, Nsukka. P.22
- Introduction to Poverty Analysis (2005). Poverty manual: World bank institute.
- Joanna, P. (2018). Absolute and Overall Poverty PSE. Poverty and Social Exclusion Downloaded from: <https://www.poverty.ac.uk>.

- Kentor, J., Jorgenson, K.A., and Kick, E. (2012), The "new" military income inequality: A cross national analysis, *Journal of Social Science Research*, 41, 514-526.
- Konsyse, S. (2019). Individualistic vs. Structural: Theories of poverty retrieved from <https://www.konsyse.com>
- Kubiat, U. (2019). Insecurity in Nigeria, Causes, Effects and Solution. Downloaded from: <https://researchcyber.com>
- Le, H.Q. (2008). The linkages between growth, poverty and inequality in Vietnam: An empirical analysis. DEPOCEN working paper No. 2010/06. Available from <http://www.depocen.org/upload/pubs/VEAM/15The%linkagess/%20betweenpoverty%20growth>.
- Lin, J. (2003). Economic growth, income inequality and poverty reduction in people's republic of China. *Asian development review*, 20 (2), 105-124
- Lin, E. S., Ali, H., (2009). Military Spending and Inequality: Panel Granger Causality Test. *Journal of Peace Research*, 49, 671-685.
- Lutkepohl, H. (2007). Econometric Analysis with Vector Autoregressive Models. Eui Working Papers, Eco2007/11. In A.E. Ilori (Eds), Fiscal –Monetary Policy Interaction and Effectiveness In Nigeria: Evidence From The New- Keynesian Model. (p.21) Nsukka, Nigeria: University of Nigeria
- Longley, R. (2018). Relative Deprivation theory, [www.thoughtco.com](http://www.thoughtco.com)
- Martin, R, Shaohua, C, Prem, S. (2006). New evidence on the urbanization of Global Poverty. Downloaded from: <https://onlinedocuments.worldbank.org/> curated.
- Muhammad, S., R., Sherafatian-Jahromi, Muhammad, N. M. (2012), Linkage between Defence Spending and Income Inequality in Iran. MPRA Paper No. 41983, pp. 1-30. Available online at <https://mpra.ub.uni-muenchen.de/41983/>
- Nwagusu, E.J. (2014). Unemployment and poverty in Nigeria; A link to National Security. *Global Journal of Politics and Law Research* 3(2), 19-35.
- Ogbeide, E.N. & David O. (2015). Poverty and income inequality in Nigeria: Any causality? *Asian Economic and Financial Review*. ISSN(e): 2222-6737//ISSN(p): 2305-2147.
- Olofin, O. P. (2012), Defense Spending and Poverty Reduction in Nigeria. *American Journal of Economics*, 2(6), pp. 122-127.
- Ozsoy, O., (2008). Defence Spending and the Macroeconomy: The Case of Turkey. *Defence and Peace Economics*, 19, 195-208.
- Schulze, M. & Krastschmer-Halin, R. (2014). Relative Deprivation theory. In Michalos A.C (eds) *Encyclopedia of quality of life and well being research*, Springer, dordrecht
- Smith, C.L., Brooks, D.J. (2012). *Security Science, the theory and practice of security*. Downloaded from: <http://books.google.com.ng>
- Toda, H.Y., Yamamoto, Y., (1995). Statistical inference in vector autoregressions with possibly integrated process. *J. Econ.* 66, 225–250.