Multivariate Analysis of Head Count Per Capita Poverty Rate across the 36 States in Nigeria

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ABSTRACT

In this work, we examine that the poverty rate is being influenced by the rate of corruption, conflict and unemployment rate using data obtained from the National Bureau of Statistics 2003-04, 2009-10 and 2019. Using SPSS 23, the results show that corruption, conflict and unemployment rates are statistically significant with an F-Statistics value of 1.706>0.185 (critical value).Hence, both significantly influence the rate of poverty in Nigeria. The Coefficient Output Summary difference of the variables suggest a model which is fitted as $Y_i = 22.835 + 0.227X_1 - 0.398X_2 + 0.165X_3 + \varepsilon_i$ where Y_i is poverty rate and ε_i the variations in the rate of corruption, conflict and unemployment. The results also show that the poverty rate in Nigeria increases with increases inthe level of corruption, conflict and unemployment rate across the 36 States in Nigeria.

KEYWORDS: Multiple Regression, corruption, conflict, unemployment

INTRODUCTION

There are enormous ways in which poverty can be defined. Thus, Poverty is the inability to access the basic necessities of life. The united nations access povertyas the inability of having choices and opportunities, a violation of human dignity, lack of basic ability to participate in society effectively, not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation (United Nations, 2011). Poverty is a pronounced deprivation in well-being, and comprises many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, lack of voice, and insufficient capacity and opportunity to better one's life (World Bank, 2011).

Poverty is multi-dimensional and no single indicator can capture all the aspects of poverty. We define poverty based on the availability of certain basic needs such as food, clothing, sanitation facilities, pipe-borne water, education, good healthcare and access to information. However, we access poverty based on income or consumption, which assigns numbers to living standards and makes it easier to evaluate poverty (National Bureau of Statistics, 2003).

Poverty can be looked at in two different perspectives namely; absolute poverty which impliesa lack of basic necessities, based on a set of income levels. Per World Bank guidelines, people living on less than $1.90 a day are considered to be living in absolute poverty. This generally applies to people in low-

income countries. For middle-income countries, the delineation is $3.20 a day. For upper-middle-income countries, the level is $5.50 a day. These standards account for differences in economies since a poor household in a rich economic bloc is substantially more economically privileged than one in an economically deprived bloc. Secondly, relative poverty refers to entities or individuals that do not meet minimum standards versus others in the same area, place and time. Relative poverty generally exists more in the advanced economy (United Nations, 1995).

Nigeria had one of the world's highest economic growth rates, averaging 7.4% according to the Nigerian economic report released on July 20, 2019, by the World Bank (Blastland, 2020). Following the oil collapse in 2014-2016, combined with negative production shocks, the gross domestic product (GDP) growth rate dropped to 2.7% in 2015. In 2016 during its first recession, the economy contracted by 1.6%. nationally, 40 percent of Nigerians (83 million people) live below the poverty line, while another 25 percent (53 million) are vulnerable (Mankiw, 2006). For a country with massive wealth and a huge population to support commerce, a well-developed economy, and plenty of natural resources such as oil, the level of poverty remains unacceptable (Davichand, 2011). However, poverty may have been overestimated due to the lack of information on the extremely huge informal sector of the economy, estimated at around 60% more, of the current GDP figures. As of 2018, the population growth rate is higher than the economic growth rate, leading to a slow rise in poverty. According to a 2018 report by the world bank, almost half the population is living below the international poverty line at $2 per day, and the unemployment rate at 23.1% (Shahua, 2008).

Statistics are constantly changing with the introduction of new and improved methodologies, better technology for analyzing and changing environments. For this reason, officially released statistical data will always be revised to ensure that the final numbers are indeed a reflection of reality. The absolute poverty measurement for 2009/10 has now been revised, with the introduction of new considerations in the methodology such as improved editing techniques, more robust food basket, better prices, and the application of a different price deflator methodology. Hence, these factors contribute to the revision of the 2009/10 absolute poverty measurement (NBS, 2019). There have been attempts at poverty alleviation to curb the rate of poverty in Nigeria but was prove abortive, most notably with the following programs. Thus;

1. National Accelerated Food Production Program and the Nigerian Agricultural and Co-operative Bank in 1972.

2. Operation Feed the Nation; whose purpose was to teach the rural farmers how to use modern farming tools in 1976.

3. Green Revolution Program; to reduce food importation and increase local food production in 1979. And

4. Family Support Program and the Family Economic Advancement Program in 1993.

The poverty line in Nigeria
Officially, there is no poverty line put in place for Nigeria but for the sack of poverty analysis, the mean per capita household is used. So, two poverty lines are used to classify where people stand officially. The upper poverty line is ₦395.41 per person annually, which is two-thirds of the mean value of consumption. The lower poverty line is ₦197.71 per person annually, which is one-third of the mean value of consumption (Max Rose 2015). When you fall under the lower poverty line you are considered extremely poor, while if you fall under the upper poverty line you are considered moderately poor. The poverty line in Nigeria is the amount of income in which anybody below is classified as being in poverty. The poverty line being defined is less than the minimum wage of labour workers in 1985, which contribute to the faulty economy (Ravallion, 2013).

Causes of poverty in Nigeria
This work access the causes of poverty in Nigeria in five jurisdictions which include the following;

Corruption and poor governance: Governance does not rely basically on a government, but also the civil society, networks, or market that exercises power over the management of the country's social and economic resources for development. If corruption and political instability are rampant in these institutions, the state will fall in fulfilling its responsibilities for the citizens and remain weak. In turn, a high rate of poverty is usually found within countries with corrupt leaders, weak state institutions and no rule of law (World Poverty Clock).

Conflict: Conflict can cause poverty in several ways. Large-scale, protracted violence that we see during the Nigerian and Biafra war can grind society to a halt, destroy infrastructure, and cause people to flee, forcing families to sell or leave behind all their assets (Michael, 2005). Women often bear the brunt of the conflict, during periods of violence, female-headed households become very common. And because women often have difficulty getting well-paying work

and are typically excluded from community decision-making, their families are particularly vulnerable. They are also targets of sexual violence while fetching water or working alone in the fields.

Unemployment: Unemployment is one of the most common causes of poverty. It accesses poverty through lack of job or loss of income. With joblessness comes a loss of income, and many families are left without sufficient incomes to meet living expenses. This can lead to indebtedness from borrowing money to support one's need, use of savings, or even to homelessness and malnutrition if individuals are unable to find another source of finance (Davichand, 2007). When individuals are forced to use savings to cover costs today, their future retirement funds are reduced. With current levels of youth unemployment increasing the chances of poverty in the future, the burden to work is more heavily placed on future generations. With this state of unemployment, individuals remain in a poverty circle. However, the unemployment of parents placed significant stress on the children of the household. With unemployed adults, children are more likely to drop out of school to enter the workforce. Without completing the needed education lower level of human capital is obtained which leave children in an unstable working environment in the future.

Climate Change: You might be stunned to learn that the World Bank estimates that climate change has the power to push more than 100 million people into poverty over the next ten years. As it is, climate events like drought, flooding, and severe storms disproportionately impact communities already living in poverty. Why? Because many of the world's poorest populations rely on farming or hunting and gathering to eat and earn a living. They often have only just enough food and assets to last through the next season, and not enough reserves to fall back on in the event of a poor harvest. So when natural disasters including the widespread droughts caused by 'EI Nino' leave millions of people without food, it pushes them further into poverty and can make recovery even more difficult (Ravallion, 2008).

Lack of infrastructure: Imagine that you have to go to work, or the store, but there are no roads to get you there. Or heavy rains have flooded your route and made it impassable. What would you do then? A lack of infrastructure from roads, bridges, and wells to cables for light, cell phones, and the internet can isolate communities living in rural areas (Ravallion, 2008). Living 'off the grid' means the inability to go to school, work, or market to buy and sell goods. Traveling farther distances to access basic services not only takes time but also costs money, keeping

families in poverty. Isolation limits opportunity, and without opportunity, many find it difficult, if not impossible, to escape extreme poverty (Ravallion, 2009).

In Nigeria, those most at risk of poverty and financially insecure are widows specifically ones without adult children, orphans, the physically challenged, and migrants. The likeliness of poverty in rural areas of Nigeria is higher with those of household characteristics such as the number of people living in a household, education level, and production. Another determining factor of vulnerability to poverty is food poverty, which is sometimes considered the root of all poverty. The vulnerability of food poverty varies across the urban/rural and geo-political zones throughout Nigeria. Altogether, 61.68% of Nigerians are vulnerable to food poverty, so measures should be taken to increase food production and food distribution (IFPR, 2007).This research work seeks to investigate the trend of the poverty line across the 36 States in Nigeria, evaluate the best-fitted model for the analysis considering three variables which include conflict, corruption and unemploymentas some of the possible causes of the poverty rate in Nigeria.

AIM
To evaluate the trend of poverty rates across the thirty-six states in Nigeria. To estimate the best-fitted model for the analysis of poverty rates in Nigeria.

METHOD
The method considered in this research is multiple regression models where the error terms are normally distributed and the response outcomes are discrete. (Michael, 2005).

Regression Model with Response Variable
Consider the simple linear multiple regression model relating a random response Y_i to a set of predictor variables $x_1, x_2, \ldots, x_3$ is an equation of the form

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i \ldots\ldots Y_i = 0, 1, 2, 3. \qquad (1)$$

Where the outcome Y_i is the regression trend called poverty rate, taking on the values of either 0, 1, 2, 3. $\beta_1, \beta_2 \text{ and } \beta_3$ are the regression constants denoting the slope (the change in poverty rate concerning a unit increase in corruption, conflict and unemployment) and the intercept (the expected poverty value as unemployment, corruption and rate of conflict tends to zero), and ε_i, is the variations in corruption, conflict and unemployment rate in Nigeria. The expected response $E(Y_i)$ has a special meaning in this case. Since $E(\varepsilon_i) = 0$ we have:

$$E(Y_i) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \qquad (2)$$

Consider Y_i to be a discrete random variable for which we can state the probability distribution as follows:

Table.1: Probability of Y_i

Yi	Probability
3	P (Yi=3) =3βi
2	P (Yi = 2) = 2βi
1	P (Yi = 1) = βi
0	P (Yi = 0) = 1-βi

Thus, βi is the probability that $Y_i = 1$ and $1 - \beta_i$ is the probability that $Y_i = 0$. By the definition of the expected value of a random variable in Equation (2), we obtain

$$E(Y_i) = 2(\beta_i) + 1(\beta_i) + 0(1 - \beta_i) = \beta_i = P(Y_i = 1,2,3) \qquad (3)$$

Equating Equation (2) and (3), we thus have

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 X_i + \beta_3 X_i \qquad (4)$$

Then, the regression mean response function is

$$E(Y_i) = \beta_0 + \beta_1 X_i + \beta_2 X_i + \beta_3 X_i + \varepsilon_i \text{ for } i = 0, 1, 2, 3 \qquad (5)$$

Description of Variables
The dependent variable for this analysis is the poverty rate in Nigeria known as Y_i while the independent variables include X_1, and X_2 and X_3. Where

Y_i = poverty rates
X_1 = corruption
X_2 = conflict and
X_3 = unemployment rate

Maximum Likelihood Estimation
The maximum likelihood estimates of β_1, β_2 and β_3 in the simple multiple regression model are those values of β_1, β_2 and β_3 that maximize the log-likelihood function in an equation. In computer-intensive numerical search, procedures are therefore obtained to find the maximum likelihood estimates of b0 and b1.

Multiple Regression Model
The simple multiple regression model is easily extended to more than one predictor variable. Several predictor variables are usually required with multiple regression to obtain an adequate description and useful predictions.

In extending the simple Multiple regression model, we simply replace $\beta_0 + \beta_1 X_1$ by $\beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_{p-1} X_{p-1}$. To simplify the formula, we use matrix notation and the following three vectors are:

$$\beta_{p\times1} = \begin{bmatrix} \beta_0 \\ \beta_1 \\ \beta_2 \\ . \\ . \\ . \\ \beta_{p-1} \end{bmatrix} \quad X_{p\times1} = \begin{bmatrix} 1 \\ X_1 \\ X_2 \\ . \\ . \\ . \\ X_{p-1} \end{bmatrix} \quad X_{i\,p\times1} = \begin{bmatrix} 1 \\ X_{i1} \\ X_{i2} \\ . \\ . \\ . \\ X_{i\,p-1} \end{bmatrix} \qquad (6)$$

We have

$$X'\beta = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_{p-1} X_{p-1} \qquad (7)$$

$$X_i'\beta = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + ... + \beta_{p-1} X_{i\,p-1} \qquad (8)$$

From equation (7) and (8), the Simple Multiple Regression Function extends to the multiple Binary response function as follows:

$$E(Y) = \frac{\exp(X'\beta)}{1 + \exp(X'\beta)} \qquad (9)$$

However, the fitting of the model utilize the method of maximum likelihood to estimate the parameter of the multiple Binary response functions. The log-likelihood function for simple Binary regression extends directly for multiple Binary regression:

$$\log_e L(\beta) = \sum_{i=1}^{n} \left[Y_i (X_i'\beta) \right] - \sum_{i=1}^{n} \log_e \left(1 + (X_i'\beta)\right) \qquad (10)$$

Numerical search procedures are used to find the values of $\beta_0, \beta_1, ..., \beta_{p-1}$ the maximize $\log_e L(\beta)$. These maximum likelihood estimates will be denoted by $b_0, b_1, ..., b_{p-1}$. Let b denote the vector of the maximum likelihood estimates:

$$b_{p\times1} = \begin{bmatrix} b_0 \\ b_1 \\ b_2 \\ . \\ . \\ . \\ b_{p-1} \end{bmatrix} \qquad (11)$$

In this research, we shall rely on a standard statistical package for multiple regressions to conduct the numerical search procedures for obtaining the maximum likelihood estimator of the parameter with the use of the SPSS 23 version.

RESULTS AND DISCUSSIONS

Data

The data for this research work is obtained from the National Bureau of Statistics (www.statista.com/statistics/1121438/poverty headcount rates in Nigeria). Start from 2003-04, 2009-10 to May 20th, 2019. To analyze the results of Multiple growth model building and parameter estimates.

Table 2a, b: Shows the Regression output model summary and ANOVA difference of individual variables result at 95% and 99% Confident intervals.

Table 2a Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.363[a]	.132	.053	10.53465
a. Predictors: (Constant), unemployment, corruption, conflict				

Table 2a, shows the correlation coefficient (R= 0.366=37%), as a measure for the strength of correlation. R-square = R^2= 0.134=13%, meaning that unemployment, corruption and conflict explain 13% of the variation in poverty rates in Nigeria with certainty, and 87% uncertain.

From Table 2b, since the F-statistic (1.706) is greater than the F critical value (0.185), we reject the null hypothesis and conclude that there is a statistically significant difference between unemployment, corruption and conflict which implies that both variable scan significantly influence or increase poverty rate.

Table 2b ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	555.700	3	185.233	1.669	.193[b]
	Residual	3662.300	33	110.979		
	Total	4218.000	36			
a. Dependent Variable: povertyrate						
b. Predictors: (Constant), unemployment, corruption, conflict						

Table 3: Shows the Coefficients output summary difference between poverty rate, unemployment, corruption and the rate of conflict in Nigeria.

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.644	9.221		2.456	.019
	corruption	.225	.155	.329	1.453	.156
	conflict	-.392	.213	-.520	-1.844	.074
	unemployment	.163	.094	.401	1.735	.092
a. Dependent Variable: povertyrate						

Table 3 shows β-values (the regression coefficients of three predictors). Both of them are statistically significant with $p - values$ of 0.156, 0.074 and 0.092. This shows that both β-values are significantly greater than 0, and the corresponding predictors (unemployment, conflict and corruption) are independent determinants of the poverty rate.
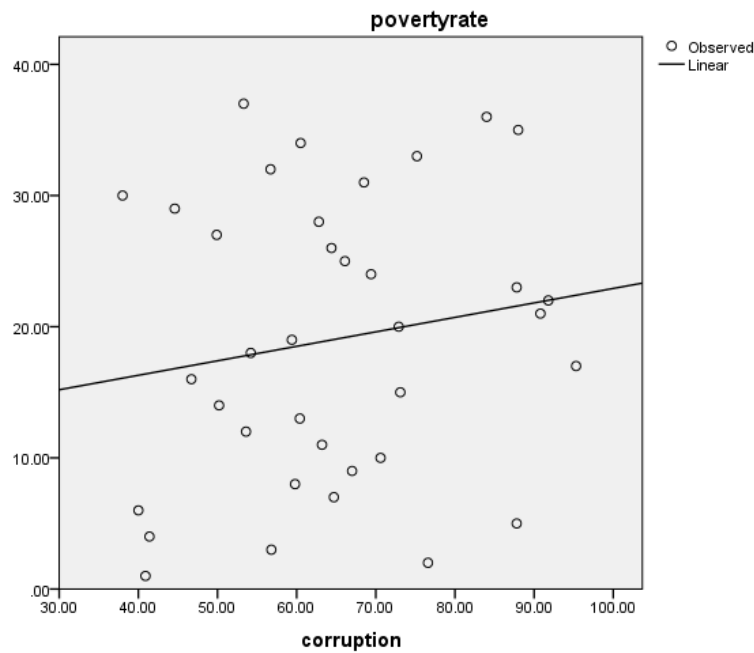
Table 4: Shows the Model Summary and parameter estimates between the poverty rate and the rate of corruption. 2003/04 poverty rates.

Model Summary and Parameter Estimates							
dependent Variable: povertyrate							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	.026	.931	1	35	.341	11.884	.110
The independent variable is corruption.							

The model summary and parameter estimate of the poverty rate and the rate of corruption are significant. That is, the F statistic (0.931) is greater than the critical value (0.341). this can be seen from the graph below (Fig,1) that the higher the level of corruption the higher the rate of poverty. The graph also denotes a positive correlation harnessing increase in the poverty rate.
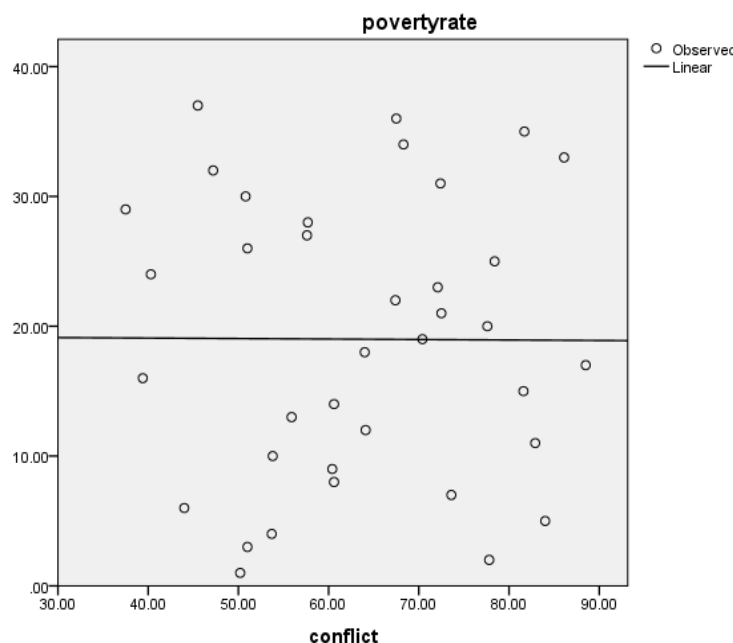
Figure 1

Figure 1: Shows an increase in corruption rate with a corresponding increase in the level poverty rate

Table 5: Shows the Model Summary and Parameter Estimates between poverty rates and conflict in Nigeria.

Model Summary and Parameter Estimates							
Table 5 Dependent Variable: poverty rate							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	.000	.001	1	35	.977	19.236	-.004
The independent variable is conflict.							

Model summary and parameter estimate between the rate of conflict as a factor that causes poverty is not significant. This is because of the review of 2009/10 absolute poverty rates across Nigeria with the introduction of new considerations in the methodology such as increasing number of food items affecting the food poverty line, more robust food basket, better prices, increased number of rent models, and the application of a different price deflator methodology. This can be seen in the scattered plot below (Fig.2), showing a weak relationship between the poverty rate and the rate of conflict in Nigeria.
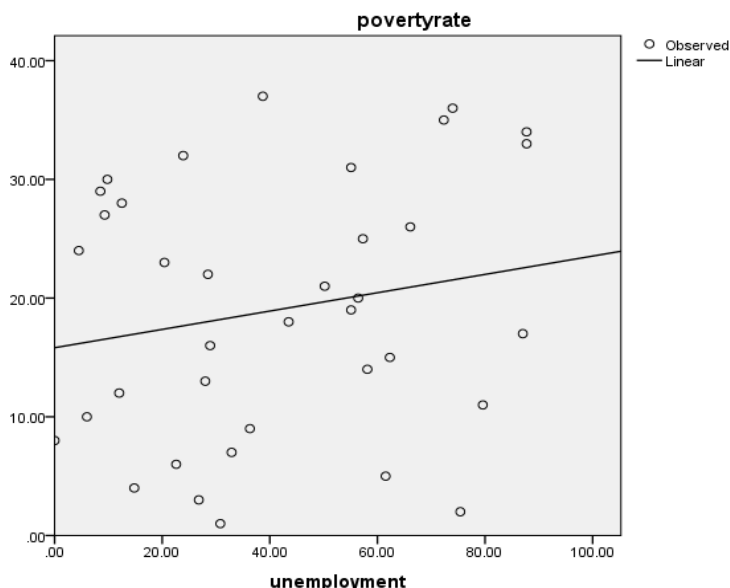

Figure 2

Table 6: Shows the Model Summary and Parameter Estimates between poverty rate and unemployment rate across the Nigerian states 2019 statistics.

Model Summary and Parameter Estimates							
Dependent Variable: poverty rate							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	.036	1.312	1	35	.260	15.818	.077
The independent variable is unemployment.							

Model summary and parameter estimates above between poverty rates and unemployment are significant. Its shows that the higher the level of unemployment the higher the poverty level. The graph also denotes a positive correlation harnessing increase in the poverty rate.

Figure 3

Figure 3 The trend of poverty rate versus unemployment

Table 7: Shows the result of T-Test 5% Confident Interval of One-Sample Statistics of poverty rates, unemployment, corruption and conflict rates across the 36 states in Nigeria with Sample Sizes, Mean, Std. Deviation and Standard Error Mean Values.

Table 7 One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Poverty rate	37	19.0000	10.82436	1.77951
corruption	37	64.4973	15.78935	2.59575
conflict	37	63.4622	14.35035	2.35918
unemployment	37	41.2081	26.64388	4.38023

The statistics show that at a mean poverty rate of 19.00 there is a corresponding increase in corruption, conflict and unemployment rates of 64.48, 63.46 and 41.21 respectively.

Table 8: Shows the result of T-Test 95% Confidence Intervals of One-Sample Statistics Test of Poverty rates, Unemployment, Hunger, and Divorce rates in Nigeria with individual t-values, Degree of Freedom, Two-tail Significant Values and Mean Difference Mean Values. The table shows a significant increase in the differences between the lower and the upper bound.

Table 8 One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Poverty rate	10.677	36	.000	19.00000	15.3910	22.6090
corruption	24.847	36	.000	64.49730	59.2329	69.7617
conflict	26.900	36	.000	63.46216	58.6775	68.2468
unemployment	9.408	36	.000	41.20811	32.3246	50.0916

The table shows that at the poverty level of 19.00 rate there are corresponding average levels increases in corruption, conflict and unemployment rates of 64.50, 63.46 and 41.21 respectively.

Table 9: Shows the Pearson Correlations difference of individual variables results at 95% and 99% Confidence Intervals.

Table 9 Correlations

			Poverty rate	corruption	conflict	unemployment
Spearman's rho	Poverty rate	Correlation Coefficient	1.000	.138	-.002	.156
		Sig. (2-tailed)	.	.415	.993	.355
		N	37	37	37	37
	corruption	Correlation Coefficient	.138	1.000	.718[**]	.475[**]
		Sig. (2-tailed)	.415	.	.000	.003
		N	37	37	37	37
	conflict	Correlation Coefficient	-.002	.718[**]	1.000	.693[**]
		Sig. (2-tailed)	.993	.000	.	.000
		N	37	37	37	37
	unemployment	Correlation Coefficient	.156	.475[**]	.693[**]	1.000
		Sig. (2-tailed)	.355	.003	.000	.
		N	37	37	37	37
**. Correlation is significant at the 0.01 level (2-tailed).						

From table 9; the Pearson Correlation difference of individual results at 95% and 99% Confidence Interval is significant. This means that the unemployment rate, corruption and conflict are independent and can significantly influence or increase the rate of poverty.

Fitted Regression Model with Response Variables
Consider the simple multiple linear models;
$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i \text{ -------- } i = 0, 1, 2, 3.$$

Then we fit the regression function with its values in the model as follows;
$$Y_i = 22.835 + 0.227 X_1 - 0.398 X_2 + 0.165 X_3 + \varepsilon_i, \text{ this implies; (12)}$$

Poverty rate = 22.835 + 0.227 (corruption) - 0.398 (conflict) + 0.165 (unemployment) + ε_i

Where;
β_0 = The average value of poverty rate when unemployment, conflict and corruption rates are equal to zero.

β_1 = When we hold the rate of conflict and unemployment constant, a one-unit change in corruption result in an average change in the poverty rate of 0.227%.

β_2 = When we hold corruption and unemployment constant, a unit change in conflict rate will result in an average change in the poverty rate of -0.398%.

β_3 = When we hold corruption and conflict constant, a unit change in unemployment will result in an average change in the poverty rate of 0.165%

ε_i = The variation or fluctuation in unemployment, corruption and conflict in Nigeria.

Figure 4: Shows a sequence plot of poverty rate, corruption, conflict and unemployment rate across the 36 states in Nigeria.
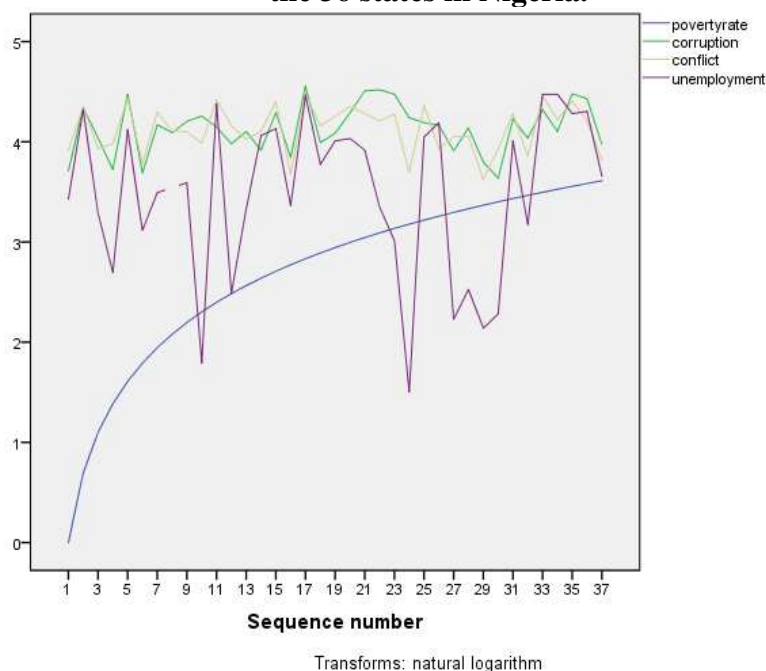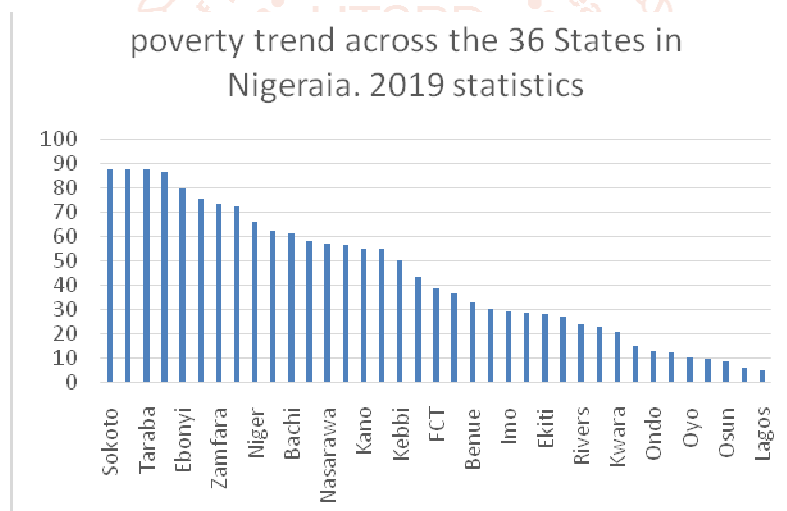

Transforms: natural logarithm

Figure 4 shows that despite the variation in government trying to implement measures to curb the rate of unemployment, conflict and corruption in the country, the level of poverty remains on the increase because of uneven distribution of wealth or resources, lack of reserves etc. Hence, the rise in poverty in the country.

Figure 5

In 2019, the Nigerian states of Sokoto and Taraba has the largest percentage of people living below the poverty line. The lowest poverty rates were recorded in the South and South-Western states. In Lagos, this figure equaled 4.5%, the lowest rate in Nigeria. An individual is considered poor in Nigeria when he has availability of less than137.4 thousand Nigerian Naira per year.

CONCLUSION

The study pointed out poverty in two different perspectives which includes; an absolute poverty-a condition characterized by severe deprivation of basic human needs, relative poverty-as a measurement based on household expenditure and dollar per day- which is the purchasing power parity rate (how much local currency is needed to buy at the same rate as the dollar). However, in Nigeria, an individual is considered poor when he has availability of less than 137.4 thousand nairas per year.

Also, the research work also shows that the variation in income per day is attributed to the differences in the economy. In Nigeria those most at risk of poverty and financially insecure are widows especially ones without adult children, orphans, physically challenge and migrants.

More so, the majority of deaths in Nigeria and around the world result from poverty-related causes. A worldwide pandemic.

Furthermore, unemployment, corruption, and conflict depict a significant effect that enhanced a hike in the poverty rate in Nigeria. This was observed in the differences in F-statistical value (1.706), greater than F critical value (0.185) and as seen in figure 4 and the variation in Pearson correlation.

The Nigerian states of Sokoto and Taraba has the largest percentage of people living below the poverty line and the south and southwest recorded the lowest poverty rates e.g. Lagos state with 4.5% depicting the lowest poverty rate in Nigeria.

The study also accesses from model summary and parameter estimate between the rate of conflict as a factor that causes poverty is not significant. This is because of the review of 2009/10 absolute poverty rates across Nigeria with the introduction of new considerations in the methodology such as increasing number of food items affecting the food poverty line, more robust food basket, better prices, increased number of rent models, and the application of a different price deflator methodology

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