Corruption and Poverty in Nigeria: Evidence from Ardl Bound Test and Error Correction Model

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Abstract
Nigeria has been described as a country with a great and strong potential that its economy has grown consistently at an average rate of 6% per year. Despite this growth potential, the level of poverty, unemployment, and income inequality have continued to be on the increase. The number of people living in poverty increased from 27.2% in 1980 to 69% in 2010. It has also been observed that about 110 million Nigerians were still living below the poverty line despite the policies of past governments to improve their welfare. This relates to the high level of corruption and wrong policy formulation that has bedevilled the society. This study therefore empirically examines the relationship between corruption and the level of poverty in Nigeria for the period 1986 to 2014. The data for the study were secondary in nature that were sourced from the publication of World Bank Development Indicator (2015) and Country Risk Guide (2012). The poverty index was generated using Principal Component analysis (PCA). Autoregressive Distributed Lag (ARDL) model was used in analysing the data for the study. The result of the study showed that corruption has a serious and adverse effect on the welfare of the citizens by reducing the expenditure on health, education and other social services thus increasing the level of poverty in Nigeria.

Keywords: Corruption, Poverty, ARDL, Economic Growth, Error Correction Model (ECM), Nigeria.

INTRODUCTION
Corruption and poverty are conceptually related issues in the developing countries. Both are considered to be an undisputed monumental disaster in any economy. Many developing countries have experienced poverty at different levels. However, Poverty is multidimensional, and a number of factors contribute to its endemic nature in developing countries, including war, exploitation and illiteracy. The dimensions of poverty in Nigeria include household income poverty, food insecurity, poor access to public services and infrastructure, unsanitary environment, illiteracy and ignorance, insecurity of life and property, and poor governance (Aye, 2013).

The graph in figure 1 depicts the trends of poverty index (POV). The poverty index was negative from 1984 to 2002. The graph shows that the level of poverty was on a decrease from 1985 to 1988 before increasing henceforth. It reached its lowest negative value in 1987. Before these periods, emphasis was on agricultural productivity before the discovery of oil resources in commercial quantity by early 1970s. These periods also coincided with minimal level of corruption in Nigeria. However, corruption is a significant contributing factor to the perpetuation of poverty and the continuation of underdevelopment of a nation’s society, government and economy (Ellis, 2015). Recently, Nigerian government is committed to reducing poverty through a massive and entrusted war against corruption because corruption is considered as a clog in the wheel of progress of any nation, and a major cause of the present downturn in Nigerian financial status, which has made it almost impossible for the governments at various levels to perform their civic and financial responsibilities to the masses especially when the price of the crude oil dropped to as low as $28US per barrel in the international market.

This endemic corruption is linked to the huge incidence of poverty in the country. Corruption is related to the massive stealing of public resources that would have
been invested in providing wealth creating infrastructure and social services for the citizens, which will help in reducing the level of poverty in the country (Action aid 2015).

Figure 1: The Trend of Corruption Index in Nigeria for the periods of 1984 to 2014.

Given the range of the control of corruption from 0 to 6.0, tending towards 0.0 point represents low or poor level of corruption control while tending towards 6.0 point means good or high level of corruption control. Thus, figure 2 shows that the control of corruption had not scored more than 2.0 in Nigeria since 1984 and the index was as low as 1.0 from 1999 to 2004 before the introduction of Economic and Financial Crimes Commission (EFCC) in 2003 and the enactment of EFCC Establishment Act in 2004 which put it in full operation. The low level of corruption control during these periods was perhaps as a result of the exposure to democratic government in 1999. Though, Independent Corrupt Practices Commission (ICPC) was inaugurated in year 2000 following the recommendation of President Olusegun Obasanjo, but it was not popular till EFCC was established. The operation of EFCC and ICPC began to have effect on the control of corruption since 2005.

Furthermore, corruption is an economic, legal, environmental and social issue. It is defined by Transparency International as the abuse of power for private advantage. Corruption could be viewed as the misuse of public office for private gain; this includes but not limited to: embezzlement, nepotism, bribery, extortion, influence peddling and fraud. Hoffman (2012) described corruption in the public sector more simplistically as “theft from the poor”. Thus, corruption may result in enriching government officials as well as private individuals who obtain a large share of public benefits or bear a lower share of public costs. By so doing, corruption distorts government’s role in resource allocation, and this may be detrimental to the poor (Gupta, Davoodia nd Alonso-Terme, 2002). In the same vein, corruption has the capacity to render any society unstable and insecure, especially when it becomes endemic; it is destructive to the achievement of the type of society that was envisaged by the foremost nationalists. Thus, corruption is a cancer in any society (Hoffman, 2012).

Emphatically, corruption in the public sector is the misuse of public office for private gain which have severe adverse effects on the socioeconomic development of a country through a reduced income, poor health and education status, vulnerability to shocks and other characteristics (as a result of diverted funds) in countries already struggling with the strains of economic growth and democratic transition. All these are viewed as exacerbating conditions of poverty, (Chetwynd, ChetwyndF. and Spector, 2003).

Potentially, Corruption affects the lives of poor people through many channels, namely: diverting government spending away from socially valuable goods, such as education; diverting public resources from infrastructure investments that could benefit poor people, such as health clinics; tending to increase public spending on capital intensive investments that offer more opportunities for kickbacks, such as defense contracts; lowering the quality of infrastructure, since kickbacks are more lucrative on equipment purchases; and also by undermining public service delivery (World Bank, 2001: 201). However, corruption, by itself, does not produce poverty. Rather, corruption has direct consequences on economic and governance factors that in turn produce poverty. Thus, the relationship examined by researchers is an indirect one (Chetwynd et al, 2003).

Nigeria has made significant economic advances in recent times. The country has managed to sustain an economic growth rate of about 6-7% for the past decade. Also, the country has been recognised as one of the fastest growing economies in the African continent and one of the 10 fastest growing economies in the world. Ironically, the country harbours some of the poorest people in the world with about 70% of the population (NBS 2012). Yet improvements in macroeconomic statistics have not translated into increase in the standard of living of Nigerians. Despite the various poverty alleviating programmes and policies of the government, poverty still remain wide spread or endemic in contemporary Nigeria. This in no doubt has been as a result of the high level of corruption in the country. Nigeria has been ranked 136 out of 175 corrupt countries in the world (CPI 2014).
The contradiction of rising poverty in a rapidly expanding economy has led to the conclusion by policy makers and researchers that corruption leads to poverty or contribute to poverty (Aina, 2014). Corruption has manifested itself in many forms, such as waste and misallocation of public funds by government officials which denies the provision of social services and infrastructures thereby creating poverty. Several instances of corrupt practices have been reported in the radio and media over the years. Specifically, the recent government of President Buhari has indicted Sambo Dasuki of misallocating or diverting $2.1 billion public funds, which were distributed among the top public officials for election purposes. Also, the recent alleged ₦23 billion ($115 m) Diezani bribe were equally distributed among various government officials to manipulate the result of the 2015 presidential election. All these cases are being investigated by the Economic and Financial Crime Commission (EFCC) and those involved has been arrested for interrogation (The Punch, May 6, 2016).

This study is relevant at this time when the federal government of Nigeria is battling seriously with different cases of corruption which has depleted both the foreign and national reserves of the country. This is a serious disaster to the economy which needed quick and immediate response by the government.

Therefore, this study empirically investigate the impact of corruption on poverty level in Nigeria and proffer possible solutions on how the issue of corruption can be tackled, in order to reduce or eradicate poverty to a minimum level in the country. The study covered the period 1986 – 2014 and employs principal component analysis (PCA) to measure poverty index using life expectancy at birth, agricultural value added per worker, per capita real gross domestic product and household per capita consumption. Also, corruption index provided by International Country Risk Guide was employed to proxy control of corruption.

LITERATURE REVIEW

The theoretical underpinnings linking poverty to corruption are based on the position that poor people are more likely to be victims of corrupt behaviours by governments officials as the poor often rely heavily on services provided by governments (Chetwynd et al., 2003; Justesen and Bjornskov, 2014). Regardless of the general belief that corruption is the root cause of poverty in the developing nations, there are no empirical evidences or unanimity among researchers to support the claim or hypothesis that corruption is directly responsible for increasing level of poverty in the literature (Chetwynd et al., 2003; Aina, 2014).

However, in the literature, there seems to be a general consensus about the indirect relationship between poverty and corruption. The consequences of corruption are centred on the economic and governance factors which later result in poverty. According to Ellis (2012), corruption is not a primary cause of poverty, rather corruption fuels poverty through a reduction of the quality and quantity of public services (education, health, housing etc.) which benefit mainly the poor. Therefore, Wickberg (2012) concluded that the influence of corruption on poverty occurs through its impact on income, access to services (economic factors), and resource distribution (governance factor). Similarly, taking an inverted approach, Rothstein and Holberg (2011) showed that the correlation between poverty levels and control of corruption is relatively weak but its reinforced by the strong correlation between control of corruption and economic growth (proxied by GDP per capita). This buttressed the point that the relationship between poverty and corruption is indirect through economic growth.

Estefania (2010) applied both direct and indirect measures of corruption to show correlations between different poverty measurements and corruption indicators for 18 Latin American countries, and concluded by presenting a significant negative relationship between poverty and corruption levels. In the same way, Gupta, Davoodi and Alonso-Terne (2002) concluded that policies that reduce corruption have a tendency to reduce income inequality which will in turn have a decreasing effect on poverty level. They presented evidence that rising level of corruption increases income inequality and poverty by showing that an increase of one standard deviation in corruption increases the Gini-coefficient of income inequality by about 11 percentage points and income growth of the poor by about 5 percentage points yearly.

On the other hand, in a causal analysis between corruption and poverty, Vahideh, Zakariah and Hesam (2010) investigated the Granger causal relationship between corruption and poverty, using dynamic panel system GMM estimators, and focusing on capability poverty proxied by human poverty index (HPI) with a sample of 97 developing countries for the periods of 1997 to 2006. They concluded that a bidirectional causal relationship exists between corruption and poverty. Using micro level survey data from the Afrobarometer, and multilevel regressions across 18 countries, Justesen and Bjornskov (2014) showed that poor people are much more prone to experience having
to pay bribes to government officials. Most importantly, they found that poverty strongly increases the frequency with which individuals face demands for bribes in return for obtaining services from government officials, particularly in urban areas. These findings therefore support the claim that poverty also has a feedback effect on the level of corruption.

Action aid report (2015) on a study of corruption and poverty in Nigeria using content analysis method found out that there is a strong correlation between corruption and poverty because Nigeria scored high in the corruption perception index and scored low in the Human Development Index. The implication of this is that high incidence of corruption will adversely affect the welfare of the citizens. This study therefore empirically examines the relationship between corruption and poverty in both the short run and long run using auto regressive distributed lag approach.

**METHODODOGY**

Stemming from the survey of literature, two models have emerged: the economic model and the governance model. The “economic model” postulates that corruption affects poverty by first impacting economic growth factors, which, in turn, impact poverty levels. That is, an increased level of corruption will lead to a reduction in economic growth and increased income inequality that will eventually transcend to an increase in poverty level. Similarly, the “governance model” asserts that corruption affects poverty by first influencing governance institutions, which in turn, impact poverty levels. This occurs as increased level of corruption leads to reduced governance capacity in providing the necessary public services and later ensures increased poverty. Thus, this present study focuses on the direct relationship between corruption and poverty.

In the process of linking poverty to corruption, economic growth and income distribution are key factors to be considered. Economic growth and income inequality are important because they link corruption to poverty (Chetwynd et al, 2003). Studies show that the absence of economic growth (or negative growth) increases poverty. Conversely, a reduction in the level of poverty could be ensured through an increase in GDP that produces an increase in the income of the poor. Hence, the functional dependence between poverty and corruption is expressed below:

\[ Pov_t = f (RGDP_t, COR_t, Z_t) \] (1)

Where, \( Pov_t \) represents poverty level at time \( t \), \( RGDP_t \) is the real gross domestic product (a proxy for economic growth) at time \( t \), \( COR_t \) is the level of corruption at time \( t \) and \( Z_t \) represents all other factors that affect the level of poverty. As regards other variables \( (Z) \) that affect the level of poverty, studies have shown that exchange rate and inflation rate are indispensable to the analysis of economic growth and poverty level of any economy. Thus, real exchange rate \( (EXC) \) and inflation rate \( (INF) \) are incorporated into equation 1 which gives:

\[ Pov_t = f (RGDP_t, COR_t, EXC_t, INF_t, \varepsilon_t) \] (2)

As a result of the perceived non-linear relationships between the level of poverty and corruption level, we use log-linear specification for our empirical purpose. Log-linear specification provides efficient results and it improves the precision power of the results (Shahbaz, 2012; Farooq, Shahbaz, Arouri and Teulon, 2013).

\[ \ln Pov_t = \alpha + \beta \ln RGDP_t + \delta \ln COR_t + \sigma \ln EXC_t + \pi \ln INF_t + \varepsilon_t \] (3)

The Autoregressive Distributed Lag (ARDL) model which is a dynamic framework is specified to circumvent the problem of endogeneity or reverse causality and non-stationarity of variables. The fundamental importance of this model is that we can simultaneously discuss long run and short run relationship within the same framework regardless of whether the variables are integrated of the same order, that is, whether all variables are I(1) or I(0) or the combination of I(1) and I(0) variables. Moreover, while other cointegration techniques require large data samples for validity, the ARDL procedure provides statistically significant result in small samples (Pesaran and Shin, 1997; Pesaran and Shin, 1999; Narayan, 2005; Udoh and Ogbeagu, 2012). That means it avoids the problem of biasness that arise from small sample size.

\[ \Delta \ln Pov_t = \alpha + \sum_{j=1}^{4} \beta_j \Delta \ln Pov_{t-j} + \sum_{j=1}^{4} \sigma_j \Delta \ln RGDP_{t-j} + \sum_{j=1}^{4} \delta_j \Delta \ln COR_{t-j} + \sum_{j=1}^{4} \pi_j \Delta \ln EXC_{t-j} + \varepsilon_t \] (4)

In examining the effect of corruption on the level of poverty in Nigeria, this study employed time series data from 1986 to 2014. The variables such as Per capita consumption, agriculture value added per worker, life expectancy at birth, gross domestic product per capita, real gross domestic product, inflation rate and exchange rate were sourced from World Bank Development Indicator Database (2015), and corruption control index was sourced from International Country Risk Guide (ICRG), 2012. Moreover, poverty index (POV) was generated through the help of Principal Component Analysis (PCA) from the frequently used proxies for poverty, which include Per capita consumption, agriculture value added per worker, life expectancy at birth, gross domestic product per capita.
ANALYSIS AND INTERPRETATIONS

Unit Root Test

The unit root test provides guidance to ascertain whether ARDL is applicable or not because it is only applicable to the analysis of variables that are integrated of order zero \([I(0)]\) or order one \([I(1)]\), but not applicable when higher order of integration such as \([I(2)]\) variable is involved. Testing the stationarity of the variables is important to avoid spurious regression. Thus, the Augmented Dickey-Fuller (ADF) of Dickey and Fuller (1981) technique were used to investigate the stationarity of the variables. The Augmented Dickey-Fuller test results from Table 1 shows that all variables are stationary at first difference.

Table 1: The Results of Augmented Dickey-Fuller (ADF) Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>First Difference</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>POV</td>
<td>0.8614 (0.9935)</td>
<td>-4.9454 (0.0004)</td>
<td>I(1)</td>
</tr>
<tr>
<td>COR</td>
<td>-2.0404 (0.2690)</td>
<td>-3.7416 (0.0086)</td>
<td>I(1)</td>
</tr>
<tr>
<td>RGDP</td>
<td>-1.3096 (0.9981)</td>
<td>-1.6181 (0.0030)</td>
<td>I(1)</td>
</tr>
<tr>
<td>EXCR</td>
<td>-0.41798 (0.8936)</td>
<td>-5.17102 (0.0002)</td>
<td>I(1)</td>
</tr>
<tr>
<td>INF</td>
<td>-2.5117 (0.1228)</td>
<td>-4.82064 (0.0006)</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation, 2016.

Note: POV, COR, RGDP, EXCR, INF represent poverty index, corruption control index, natural logarithm of real gross domestic product, real exchange rate and inflation rate respectively.

Tests for Cointegration

Having confirmed the stationarity of the variables which revealed that the variables of the study were all stationary at first differenced, the next step of our analysis was to test for cointegration among the variables. Therefore, ARDL bounds testing approach is employed to test for the existence of long run relationship. However, in order to do this, it is important to identify an appropriate lag length to calculate the F-statistics. The ARDL model is sensitive to the lag order. In addition, optimum lag order would be helpful in reliable and consistent result in the analysis. Thus, the Akaike Information Criterion (AIC) is considered to obtain the optimum lag length. The choice of this criterion is based on the stricter penalties imposed by AIC. This AIC provides better and consistent results compared to other lag length criteria (Uddin, Shahbaz, Arouri, and Teuion, 2013). Based on the lag selection criteria test, the AIC maximum lag length of 2 was selected and employed in the estimation of ARDL model.

Table 2: Lag Order Selection Criteria

<table>
<thead>
<tr>
<th>Lag</th>
<th>LogL</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SIC</th>
<th>HQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>185.9571</td>
<td>174.59 61*</td>
<td>3.5603 48</td>
<td>15.425 51</td>
<td>16.852 87*</td>
<td>15.861 87*</td>
</tr>
<tr>
<td>2</td>
<td>157.2168</td>
<td>34.899 02</td>
<td>3.2940 77*</td>
<td>15.158 34*</td>
<td>17.775 17</td>
<td>15.958 333</td>
</tr>
<tr>
<td>3</td>
<td>133.1506</td>
<td>20.628 14</td>
<td>6.1582 20</td>
<td>15.225 04</td>
<td>19.031 34</td>
<td>16.388 67</td>
</tr>
</tbody>
</table>

Source: Author’s computation

Note: * indicates lag order selected by the criterion; LR, FPE, AIC, SIC and HQ indicate sequential modified LR test statistic, Final Prediction Error, Akaike Information Criterion, Schwarz Information Criterion and Hannan-Quinn respectively.

Table 3: ARDL Bound Test Result and Pesaran et al. (2001) Critical Value Bounds

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>Value</th>
<th>K</th>
<th>F-statistic</th>
<th>4.973587</th>
<th>4</th>
<th>2.86*</th>
<th>4.01*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesaran et al. (2001) critical bound @ 5% level of significance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: K is the number of observations minus 1.

The computed F-statistic is compared with upper and lower critical bounds generated by Pesaran et al. (2001) to test for the existence of cointegration. The null hypothesis is \(H_0: \lambda_j = 0\), (where \(j = 1, 2, \ldots, 5\)) in equation (4). This implies no long run relationship among the variables, against the alternative hypothesis, \(H_1: \lambda_j \neq 0\), implying the existence of long run relationship among the variables. The results in Table 3 showed that the computed F-statistic (4.973587) is greater than the upper bound (4.01) at 5% level of significance with unrestricted intercept and no trend (Upper bound is 4.01 and Lower bound is 2.86). This implies that there is evidence to reject the null hypothesis of no long run relationship among the variables. Hence, the alternative hypothesis is accepted that there is long run equilibrium relationship among poverty, corruption, real GDP, exchange rate and inflation rate.

Results of the Effect of Corruption on Poverty level in Nigeria

The Error Correction Model (ECM) associated with equation (4) was estimated to show the short and long run effect of corruption on the poverty level. In addition to the fact that ECM comprises the short run transitory effects and the long run relationships, the speed of...
adjustment of the dependent variable to changes in the independent variables is also determined within the framework.

Table 4: Results of the Error Correction Model (ECM) associated with ARDL Cointegrating Form

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(COR)</td>
<td>0.019863</td>
<td>0.021553</td>
<td>0.9216</td>
<td>0.3672</td>
</tr>
<tr>
<td>D(COR(-1))</td>
<td>0.056746</td>
<td>0.01821</td>
<td>3.116282</td>
<td>0.0052*</td>
</tr>
<tr>
<td>D(RGDP)</td>
<td>6.639687</td>
<td>1.214412</td>
<td>5.467408</td>
<td>0.0000*</td>
</tr>
<tr>
<td>D(EXCR)</td>
<td>0.007813</td>
<td>0.005301</td>
<td>1.473928</td>
<td>0.1553</td>
</tr>
<tr>
<td>D(INF)</td>
<td>-0.002026</td>
<td>0.002635</td>
<td>-0.769017</td>
<td>0.4504</td>
</tr>
<tr>
<td>ECT(-1)</td>
<td>-0.917892</td>
<td>0.123646</td>
<td>-7.423537</td>
<td>0.0000*</td>
</tr>
</tbody>
</table>

Table 5: Results of the Error Correction Model (ECM) Long Run Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>COR</td>
<td>0.023865</td>
<td>0.027713</td>
<td>0.880192</td>
<td>0.3887</td>
</tr>
<tr>
<td>RGDP</td>
<td>7.233624</td>
<td>1.150036</td>
<td>6.289908</td>
<td>0.0000*</td>
</tr>
<tr>
<td>EXCR</td>
<td>0.008512</td>
<td>0.005436</td>
<td>1.565782</td>
<td>0.1323</td>
</tr>
<tr>
<td>INF</td>
<td>-0.002708</td>
<td>0.002764</td>
<td>-0.79876</td>
<td>0.4334</td>
</tr>
<tr>
<td>C</td>
<td>-96.027249</td>
<td>14.037439</td>
<td>-6.840795</td>
<td>0.0000*</td>
</tr>
</tbody>
</table>

Source: Author’s Computation, 2016.

Note:*indicates significance at 5% level;  POV, COR, RGDP, EXCR, INF and ECT represent poverty index, corruption control index, natural logarithm of real gross domestic product, real exchange rate, inflation rate and Error Correction Term respectively.

The results of the ECM in table 4 and 5 showed the short and long run effect of corruption on poverty level. The results show that corruption is significant (p<0.05, t=3.116282) and it has a positive effect on the level of poverty in the economy. This means that a 1% change in the corruption level, other things being equal, will change the level of poverty by 0.0568% in the same direction, while economic growth (proxied by RGDP) is also significant (p<0.05, t=6.6397%) in the short run. This means that a 1% increase in economic growth will increase the level of poverty by 6.6397%. This is in contrary with the a priori expectation of negative relationship between growth and poverty where an increase in economic growth is expected to reduce poverty. However, the positive relationship between poverty level and economic growth in Nigeria is worthy of concern. This serves as evidence that growth in the economic activities, aggregate incomes or outputs has not trickled down to the bottom poor people. This implies that, larger part of the economy resources are in the hand of the few rich called the capitalist.

Furthermore, in the long run, only economic growth exerts significant effect on the level of poverty (p<0.05, t=6.2899). This implies that there is no direct relationship between corruption and poverty in the long run. This means that the effect of corruption on poverty level would have spread out in the long run.

Moreover, the coefficient of the Error Correction Term (ECT(-1)) is the speed of adjustment of poverty level to shocks in exogenous variables in the model. The negative and statistically significant of the coefficient of the Error Correction Term (ECT) indicates a stable process of adjustment to the long run equilibrium, and the value implies that 96% of disequilibrium in the preceding year is corrected annually.

Stability Test of the Model

The stability of our model was tested via Cumulative Sum of Recursive Residuals (CUSUM) and Cumulative Sum of Squares of Recursive Residuals (CUSUMSQ) tests.

![CUSUM test for stability](image1.png)

![CUSUM of Squares test for stability](image2.png)
In figures 3 and 4, it was observed that the model used in the study is stable since the blue line lies between the upper and lower limits (the two red lines) in both Cumulative Sum of Recursive Residuals (CUSUM) and Cumulative Sum of Squares of Recursive Residuals (CUSUMSQ) respectively. The diagnostic tests results demonstrate that there is no considerable problem of serial correlation, no problem of heteroskedasticity. Thus, it can be concluded that the model is robust, desirable and worthwhile.

CONCLUSION
The results from the above analysis indicated that corruption affects poverty level in the same direction in the short run but exhibits no direct relationship in the long run. This support the result of action aid 2015 which uses descriptive analysis to examine the impact of corruption on poverty in Nigeria. Corruption has a direct effect on poverty because corrupt activities have the effect of depriving the poor of the finances and resources that could have been used to improve their lives through the provision of poor health and education facilities, poor infrastructures, vulnerability to shocks and other poverty characteristics (as a result of diverted funds) in Nigeria. This is in line with the postulations of Vahideh, Zakariah and Hesam (2010) and Rothstein and Holberg (2011). The result also support the view that high level of corruption will aggravate income inequality where lower income earners use a higher proportion of their income for bribes to access basic social services, having little to spend on essential goods and services.

RECOMMENDATION
The negative implication of corruption on the life of the citizens is a major disaster in the economy and harmful to the growth and development of the citizens in particular and the economy in general. For effective sustainable and management of this disaster, government should embark on policies that will reduce the level of corruption significantly so as to have positive influence on the standard of living of the citizens in terms of quality and efficient education, sound management of our natural resources, provision of good health facilities and other infrastructures that will transcend to the growth of the economy. Also, the leading EU and US need to join hands with the fast growing economies to stop the corrupt officials from getting away with it by imposing reasonable sanctions that will serve as a deterrent to others. This may be in form of arresting and conviction of several individuals that are found guilty of the offence. Furthermore, the G20 needs to prove its global leadership role and prevent money laundering into their country. This can be done by signing international pacts with the nations and return the billions of stolen assets to the affected countries.

There should be adequate funding of anti-poverty agencies and programmes and the agencies should be properly monitored in order to carry out the necessary programmes that are meant for the poor.

Finally, anti-corruption efforts need to be strengthened and sustained. This will help in eradicating high level of poverty among the people.

CONTRIBUTION TO KNOWLEDGE
This study has contributed to knowledge by empirically investigating the impact of corruption on poverty in Nigeria where it was found that high level of corruption has led to an increase in the level of poverty in Nigeria. The study therefore suggested that for national sustainable development and disaster management (corruption and poverty), the EU and the US should join hands together with the fast growing economies to stop the corrupt officials from getting away with their corrupt practices. Also, they can help in preventing money laundering through their economy. This will surely reduce or eradicate corruption which will translate to reduction in poverty with a high level of sustainability.

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