EFFECT OF ECONOMIC POLICY UNCERTAINTY ON POVERTY IN NIGERIA

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Abstract

The study analysed the long and short-run effect of economic policy (monetary, fiscal and trade) uncertainty on poverty in Nigeria. Annual data were collected from secondary sources and analysed using autoregressive distributed lag (ARDL) model and the associated Bounds test. The result showed that highest volatility during the period of study was exhibited by monetary policy uncertainty (MPU) (2.522), followed by consumer price index (CPI) (1.968). The fiscal policy uncertainty derived from the conditional volatility in government expenditure (FPU) had the lowest volatility (0.179). The result of Bounds test showed that economic policy uncertainty shared a long run relationship with poverty. The effect of economic policy uncertainty on poverty, proxied by household consumption per capita, showed MPU (0.055) and FPU (0.219) were positive while that of TPU (-0.109) was negative in the long run. It was recommended that uncertainty about economic policies should be reduced by the government to reduce poverty level. There is need for timely policy initiatives and economic policy uncertainty calls for the respective policy makers to consciously seek for strategies for reducing uncertainty in the economy.

Keywords: Monetary, Fiscal and Trade Policies; Uncertainty and poverty

Introduction

Major economic reform policies were introduced by the government of Nigeria in mid-1986. These reforms were expected to revitalize the economy's growth. Growth in turn was expected to contribute noticeably to improved equity in the country. Fleurbaey, (2009) suggested that poverty actually declined in the first seven years of the reforms, but debate raged about the effect of the reforms. Until recently, development efforts concentrated mostly on increasing the growth rate of Gross Domestic Product (GDP). Economic wellbeing in general, and hence poverty alleviation, was largely perceived in terms of high rate of per capita GDP. The huge population of young people represents the country's greatest asset if they are appropriately empowered to participate actively in growth opportunities that would result in economic transformation. Increasing investmentscan

stimulate productivity, profitability and create wealth for smallholders and rural communities that will stimulate growth and eradicate poverty (Abdulquadri and Mohammed, 2012).

The poor are conceived as those individuals or households in a particular society incapable of purchasing a specified basket of basic goods and services. Basic goods are nutrition, shelter or housing, water, healthcare, access to productive resources including education, working skills and tools and political and civil rights to participate in decisions concerning socio-economic condition. Impaired access to resources shifts the focus on poverty and it curtails the capability of individual to convert available productive resources to a higher quality of life(Ogwumike, 2002).

Available statistics from the last household survey conducted in 2009/2010 puts poverty rates at 46% (adult equivalent approach), or 62% in per capita terms. In terms of geographical distribution, the Northern part of the country hosts the majority of the poor (66%) while poverty is also more prevalent in rural areas than in urban areas (Zamba and Oboh, 2013). This implies that the robust growth recorded over the past decade has not translated sufficiently into enhanced living standards, job opportunities and improved human outcomes. Many of the strategies used to improve agricultural growth in the past have failed because the programmes and policies were notsufficiently based on in-depth studies and realistic pilot surveys (Adebayo and Rhoe. 2009).

Poverty remains a development issue; it has continued to capture the attention of both national governments and international development agencies for several decades. Since the mid-1980s, reducing poverty has become a major policy concern for governments and donor agencies in all poverty stricken countries, Nigeria inclusive. To attain the objective of reducing poverty in Nigeria, the preoccupation of the government has been the growth of the economy as a pre-requisite for improved welfare. To this effect, the government initiated several economic reform measures which include Economic Stabilization measures of 1982, Economic Emergency Measures in 1985 and Structural Adjustment Programme (SAP) in 1986. Components of SAP include market determined exchange andinterest rates, liberalized financial sector, trade liberalization, commercialization and privatization of a number of enterprises (Aigbokan, 2008).

National Human Development Report (2016) highlighted that despite a robust economic growth of about 7% between 2010 and 2014, a large proportion of Nigerians still live in poverty and are exposed to the possibility of being attacked or harmed, either physically or emotionally.Economic growth in Nigeria has not been associated with

poverty reduction; that is, poverty has not always been put into consideration when considering growth in Nigeria and unemployment has not declined. An estimated 61.3% of Nigerians are classified as poor with 48.8% of them classified as multi-dimensionally poor. Nigeria missed most of the Millennium Development Goals and targets with poverty rate still remaining stubbornly high (Oleribe and Tayor-Robinson, 2016).

The focus of this study is to provide empirical evidence on the effect of economic policy uncertainty on poverty. There is scanty of literature on works done in this area in Nigeria.

Empirical studies

There is a growing consensus among development economists that an increase in the country GDP alone is not enough to reduce poverty. It is argued that widespread illiteracy, growing vulnerability to hunger and diseases, environmental deteriorations, among others, affect human welfare independently of income. It is argued that growth can contribute most to poverty alleviation when it expands employment as well as the productivity and wages of the poor; and when public resources are spent on human and physical infrastructure development. This perception of the character of economic growth obviously looks beyond the earlier trickle down doctrine and seeks to achieve broad-based and sustainable poverty reduction (Fleurbaey, 2009).

Friday and Fidelis (2013) show in an empirical study that high levels of poverty could have a negative impact on overall economic growth rate. However, it recognizes the fact that poverty goes beyond personal income. Friday and Fidelis (2013) exacerbate social tensions, limit the functioning of markets and adversely affect the employability of the poor. Such a broad perception of poverty must therefore include the roles of access to, and the availability of public facilities (healthcare, education, potable water, housing, electricity, among others) in its alleviation. These are themselvesveritable inputs for human capital formation. Every country has set of social indicators for both her poor and non-poor, therefore, the level of a given social indicator usually reflects how well or otherwise a given society has met the needs of the citizenry which is expressed by that particular indicator (Chen and Ravallion, 2001).

Specialized agencies were also established to promote the objective of poverty reduction. These include Agricultural Development Programmes, Nigeria Agricultural, Cooperative and Rural Development Bank, National Agricultural Insurance Scheme, National Directorate of Employment, National Primary Health Care Agency, Peoples Bank, Urban Mass Transit, mass education through Universal Basic, Education (UBE),

Rural Electrification Schemes (RES) among others (Adigun *et al.*, 2011).

The rise in policy uncertainty slowed recovery from the recession by causing businesses and households to cutback or postpone investment, hiring and consumption. A rapidly growing literature considers the effects of uncertainty on economic activity measuresuncertainty as rise in recessions and fall in recoveries, suggesting that uncertainty could play an important role in driving business cycles (Bloom, 2009).Intuition behind the depressing effect of uncertainty goes back to hiring and investing to address pent-up demand. Other reasons for a depressing effect of uncertainty include pushing up the cost of finance (Gilchrist *et al*, 2014), increasing managerial risk-aversion, an intensification of agency problems that reduces the value of new and existing employment, business and financial relationships (De Marzo and Sannikov,2006).

In the view of Gordon (2006), poverty is a universal concept which can be considered to have a cluster of different overlapping meanings depending on the subject area or discourse. Poverty affects different aspects of people's lives. Poverty exist when people are denied opportunities to work, to learn, to live healthy and fulfilling lives, and to live out their retirement years in security. Lack of income, access to good quality health, education and housing, and the quality of the local environment all affect people's wellbeing. Low income is an important aspect of poverty.

According to Ogwumike (2002) the poor are conceived as those individuals or households in a particular society incapable of purchasing a specified basket of basic goods and services. Basic goods are nutrition, shelter or housing, water, healthcare, access to productive resources including education, working skills and tools and political and civil rights to participate in decisions concerning socio-economic condition. Impaired access to resources shifts the focus on poverty and it curtails the capability of individual to convert available productive resources to a higher quality of life (Ogwumike, 2002).

Olatomide (2012) added that poverty affects many aspects of the human conditions, including physical, moral and psychological. Different criteria have been used to conceptualize poverty. Most analyses follow the conventional view of poverty as a result of insufficient income for securing basic goods and services. Others view poverty as a function of education, health, life expectancy, child mortality. Poverty may arise from changes in average income or changes in the distribution of income and can be conceptualized in four ways which are lack of access to basic needs or goods, a result of lack of or impaired access to productive resources, outcome of inefficient use of common resources and result of exclusive mechanisms. Wellbeing is understood as material progress measured by income.

According to United Nations Development Programme(UNDP) (2016), countries worthy of receiving external financial assistance are those below the poverty line and poverty is measured by counting the number of people living under an arbitrary poverty line. The first target under Sustainable Development Goal (SDG) of the 2030 Agenda for Sustainable Development is to, by 2030, eradicate extreme poverty for all people everywhere, currently ensured as people living on less than $1.25 a day. This target refers to the international extreme poverty line which was set in the late 1990s.

Yu *et al.* (2018) investigated how Global Economic Policy Uncertainty (GEPU) drives the long- run components of volatilities and correlations in crude oil and U.S. industry level stock markets. Using the modified generalized autoregressive conditional heteroskedasticity mixed data sampling (GARCH-MIDAS) and dynamic conditional correlation mixed data sampling (DCC-MIDAS) specifications, the study found that GEPU was positively related to the long run volatility of financials and consumer discretionary industries but negatively related to information technology, materials, telecommunication services and energy.

In the study of short and long run uncertainty by Barrero*et al.* (2017), uncertainty appears to have both a short-run and a long-run components which they measured using firm and macro implied volatility data from options of 30 days to 10 years duration. They ask what may be driving uncertainty over these different time horizons and find out that oil price volatility was particularly important for short-run uncertainty; policy uncertainty was particularly important for long run uncertainty,

Hossein *et al*. (2018) analyzed economic policy uncertainty and long-run stock market volatility and correlation using Baker *et al*. (2016) economic policy uncertainty indices in combination with the mixed data sampling approach to investigate long run stock market volatility and correlation, primarily for the United States (US) and United Kingdom (UK). The study found out that long run US-UK stock market correlation depends positively on US economic policy uncertainty shocks. The dependence was asymmetric, with only positive shocks increasing uncertainty being of importance. The US long-run stock market volatility depends significantly on US economic policy uncertainty shocks but not on UK shocks, while the UK long-run stock market volatility depends significantly on both.

Nagar *et al.* (2017) determined whether economic policy uncertainty exacerbates information asymmetry among investors using daily data to link liquidity to the economic

policy uncertainty index. At the aggregate market level with year fixed effects, the study found out that increased economic policy uncertainty was associated with decreased stock liquidity, especially for firms more exposed to economic policy uncertainty. Increased economic policy uncertainty also lowers investors' reaction to earnings for firms with high liquidity risk. Management, in turn, increases voluntary disclosure, which only partly reverses the liquidity drop. These results suggested that information asymmetry was an important channel through which economic policy uncertainty affects asset pricing.

Bakare, (2013). developed a new index of economic policy uncertainty based on a range of indicators, including the frequency of U.S. newspaper references to policy uncertainty. Several pieces of evidence including a human audit of 5,000 newspaper articles indicated that their economic policy uncertainty index offers a good proxy for movements in policy related economic uncertainty over time. Using micro data, they investigated the effects of economic policy uncertainty on investment and hiring, finding negative effects for firms heavily exposed to government contracts. At the macro level, positive innovations in economic policy uncertainty index foreshadow declines in investment, output and employment in VAR models.

Aye *et al* (2019) analysed the short run effect of fiscal and monetary policy uncertainty on inequality in the U.S using quarterly time series data from 1980:1 to 2008:4. on different measures of income, labour earnings, consumption and total expenditure inequality as well as economic uncertainty. Results based on the local projection method showed that both contractionary monetary and fiscal policies increase inequality, and in the presence of relatively higher levels of uncertainty, the effectiveness of both policies is weakened.

Methodology

The study area for the research was Nigeria. Secondary data consisting of annual time series covering a period of 36 years (1981-2016) were used for the study. Particularly, data on the values of interest rate, exchange rate, government expenditure, consumers price index (inflation) agricultural GDP, household consumption per capita and population data were obtained from the Central Bank of Nigeria and World Development Indicators. To measure uncertainty or volatility in the different policy variables, the GARCH (1,1) was used. Preliminary analysis was conducted using descriptive statistics such as mean and standard deviation and unit root tests such as the Augmented Dickey-Fuller (ADF) and

Phillips-Perron (PP) tests. Bounds tests component of the autoregressive distributed lag (ARDL) model and error correction model (ECM) part of the ARDL model was used to evaluated the short and long run effect of economic policy uncertainty on poverty.
The ARDL representation of the economic relationship between the selected variables can be constructed as

$$\Delta L_n HCPC_{it}^{\square} = b_1 + \sum_{i=1}^{m1} b_{2i} \Delta HCPC_{t-i} + \sum_{i=0}^{m2} b_{3i} \Delta LnMPU^{\square}_{t-i} + \sum_{i=0}^{m3} b_{4i} \Delta LnTPU^{\square}_{t-i}$$
$$+ \sum_{i=0}^{m4} b_{5i} \Delta LnFPU_{\square_{t-i}} + \sum_{i=0}^{m5} b_{5i} \Delta LnCPI^{\square}_{t-i} + P_1 L_n HCPC_{t-1} + P_2 L_n MPU_{t-1}$$
$$+ P_3 LnTPU_{t-1} + P_4 LnFPU_{\square_{t-1}} + P_5 LnCPI_{t-1\square} + \mu_t --------(1)$$

Where
MPU=Monetary policy uncertainty derived from the conditional volatility of interest rate
FPU= Fiscal policy uncertainty derived from the conditional volatility in government expenditure
TPU= Trade policy uncertainty derived from the conditional volatility in exchange rate
HCPC = Household Consumption Per Capita at current purchaser's prices- quarterly (in Naira)
CPI= Consumer Price Index
Dickey and Fuller considered the estimation of the perimeter from the models

$$y_t = Py_{t-1} + C_t ------------------------------(2)$$

$$y_t = \mu + Py_{t-1} + ---------------------------(3)$$

$$y_t = \mu + Py_{t-1} + C_t + ----------------------(4)$$

The perimeter P is the AR-Parameter denoted by a so far. Assumed that $y_0 = 0$.

In most economic data series there will be substantial short term autocorrelation which makes it more reasonable to assume the model

$$Z(\alpha) = T(\hat{p}u - 1) - \frac{T^2(2\pi\hat{f}(0) - s^2)}{2\sum_{t=2}^{T}(y_{t-1} - \bar{y} - 1)^2} ------------- (5)$$

Corresponding for model that allow time trend under the alternative Phillips and perron suggest the adjust $\Delta f test sas$

$$Z(\hat{\alpha}) = T(\hat{p}_{T-1}) - \frac{T^2(2\pi\hat{f}(0) - s^2)}{2\sum_{t-1}^{T}(y_{t-1} - \hat{y})^2} - - - - - - - - - - - - - - - (7)$$

and

$$Z(t\,\hat{\alpha}) = \sqrt[TT]{\frac{s^2}{2\pi\hat{f}^2(0)}} - \frac{T(2\pi\hat{f}(0) - s^2)}{\sqrt[2]{2\pi\hat{f}(o)\sum_{t-1}^{T}(y_{t-2} - \hat{y})^2}} - - - - - - - - - - (8)$$

where y is the projection of y_{t-1} on $1, t s^2$ defined as before but now from the residuals from the regression of $y_{t-1,l,t}$

Results and Discussion

Descriptive statistics

The descriptive statistics showing the mean, median, minimum, maximum, standard deviation, skewness, kurtosis, and Jarque-Bera test on the variables used for analysis are presented in Table 1. The mean of the variables shows their average values from 1981 to 2016. Looking at the standard deviations, the highest volatility during the period of study was exhibited by monetary policy uncertainty (MPU) (2.522), followed by consumer price index (CPI) (1.968). The fiscal policy uncertainty derived from the conditional volatility in government expenditure (FPU) has the lowest volatility (0.179).There is no substantial gap between the maximum and minimum of variables such as HCPC, and TPU while there is a substantial gap between the maximum and minimum values ofCPI, MPU, and FPU which gave support to volatility. In a normally distributed series, skewness must be zero (0) and kurtosis is around three (3).Regarding the results, HCPC (0.172), MPU (1.563), FPU-GE (1.169) and TPU (1.429), are skewed to the right while CPI (-0.447) was negatively skewed which implies that the distribution has a long left tail and a deviation from normality. In addition, HCPC (1.418) and CPI (1.719) are platykurtic that is, distribution is shorter, and tails are thinner than the normal distribution. The reason for this is because the extreme values are less than that of the normal distribution while MPU (4.179), FPU (3.483) and TPU (3.672) are leptokurtic with longer distribution and fatter tails. Regarding Jarque-Bera test for normality, it is consistent with the outcome provided by both statistics of kurtosis and skewness. The Jarque-Bera

probability value of AGDP (0.171), HCPC (0.1409) and CPI (0.160) were greater than 0.05 which shows normal distribution while MPU (0.000466), FPU (0.0198) and TPU (0.00265) are non-normal distribution with less than 0.05. The reason for this is because the extreme values are less than that of the normal distribution while MPU (4.179), FPU (3.483) and TPU (3.672) are leptokurtic with longer distribution and fatter tails. Regarding Jarque-Bera test for normality, it is consistent with the outcome provided by both statistics of kurtosis and skewness. The Jarque-Bera probability values of HCPC (0.1409) and CPI (0.160) were greater than 0.05 which shows normal distribution while MPU (0.000466), FPU (0.0198) and TPU (0.00265) are non-normal distribution with less than 0.05.

Table 1: Descriptive Statistics

| | LHCPC | LCPI | MPU | FPU | TPU |
LAGDP					
Mean	8.661	6.935	2.671	2.759	0.225	0.228
Median	8.431	6.836	3.298	1.918	0.159	0.0887
Maximum	9.718	7.419	5.214	9.562	0.685	0.872
Minimum	7.742	6.488	-0.706	0.366	0.0239	0.0204
Std. Dev.	0.665	0.318	1.968	2.522	0.179	0.259
Skewness	0.253	0.172	-0.447	1.563	1.169	1.430
Kurtosis	1.551	1.418	1.719	4.179	3.483	3.672
Jarque-Bera	3.537	3.933	3.659	15.342	7.840	11.868
Probability	0.171	0.140	0.160	0.000466	0.0198	0.00265

Source: Field Survey, 2019

Unit root tests

The result of unit roots test of fiscal, trade and monetary policy uncertainty variables is presented in Table 2. Based on ADF test, HCPC, CPI, MPU, FPU and TPU have p-values of 0.704, 0.562, 0.0565, 0.777 and 0.0748, respectively implying that the null hypothesis can only be rejected for MPU and TPU.A similar analysis based on Phillips-Perron unit root test which has more power than the ADF shows that only TPU was stationary, the rest are non-stationary or has unit root at level. At first difference, the t-statistics of HCPC is -6.619 with p-value of 0.0000, CPI (-3.429) and p-value of 0.0179,

MPU (-3.968) p-value of 0.0055, and FPU (-7.0929) p-value of 0.0000 which shows evidence against the null hypothesis at first difference and implies that these series have no unit root (stationary) at first difference. In summary, all the series are integrated of order 1 except TPU which is integrated of order 0.

Table 2: Unit Root Tests

Variables	Levels				First Difference			
	ADF Test		**PP Test**		**ADF Test**		**PP Test**	
	T-Stat	**P-value**	**T-Stat**	**P-value**	**T-Stat**	**P-value**	**T-Stat**	**P-value**
HCPC	-1.102	0.704	-0.978	0.750	-6.619	0.0000	7.182	0.0000
CPI	-1.412	0.562	-1.548	0.498	-3.429	0.0170	2.724	0.0805
MPU	-2.899	0.0565	2.424	0.143	-3.968	0.0055	9.442	0.0000
FPU	-0.889	0.777	2.0803	0.254	-7.0929	0.0000	5.436	0.0001
TPU	-2.764	0.0748	-2.631	0.0974				

Source: Field Survey (2019)

Long-run effect of economic policy uncertainty on poverty

The results on the long run effect of economic policy uncertainty on poverty are presented in Table 5. It can be observed that the F-statistic (6.41) is greater than the critical value for the upper bound 1(1) at 10%, 5%, 2.5% and 1% which are 3.09, 3.49, 3.87, and 4.37, respectively. This implies the existence of cointegration, that is, there is a long run relationship between economic policy uncertainty and poverty. From economic perspective, the economic policy uncertainty variables have a positive effect on poverty proxied by household consumption per capita, except the trade policy uncertainty which has a negative effect. Meaning that as uncertainty in trade policy increased, the level of poverty also increased since uncertainty may weigh on confidence, thereby restraining household and business spending. The result provided evidence of long run relationship between monetary, fiscal and trade policy on poverty in line with Ayeet al.,(2019). The positive effect of monetary and fiscal policy uncertainty on welfare (poverty) may be due to the fact that investors have learnt over the period to hedge against these forms of uncertainty. However, from a statistical point of view, only MPU and CPI had statistically significant long run effect on poverty. Therefore, the null hypotheses can be rejected for fiscal policy uncertainty (FPU} and trade policy uncertainty (TPU) but not for monetary policy uncertainty (MPU) and consumer price index (CPI) in the long run.

Table 5: Estimates of the Long Run Effect of Economic Policy Uncertainty on Poverty

Variable	Coefficient	Std. Error	t-Statistic	Probability
MPU	0.055*	0.0295	1.869	0.111
FPU	0.219	0.347	0.632	0.551
TPU	-0.109	0.236	-0.462	0.660
CPI	0.214***	0.0429	4.998	0.0025
C	6.356	0.243	26.106	0.0000
F-Bounds Test	Null Hypothesis: No levels relationship			
Test Statistic	Value	Signif	1(0)	1(1)
F-statistic	6.414	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Field Survey (2019)

Short-run effect of economic policy uncertainty on poverty

The results of the short run effect of economic policy uncertainty on poverty are presented in Table 6. The R-squared value revealed that about 96% variation in poverty was explained by the variables included in the model. The result further revealed that the error correction coefficient was statistically significant and it had the expected negative sign. It suggests high speed of adjustment to long run relationship. The coefficient of HCPC was significant with coefficient of -1.569, t-statistic of -9.908 and p-value of 0.0001.For the first (-2.277) and second (-1.369) lags, the coefficients were still significant with t-statistic of -7.488 and -6.199 and p-value of 0.0003 and 0.008 respectively. This implies the coefficient is negative and statistically significant at 1% reflecting a short run downward trend in consumption as economic policy uncertainty increases. MPU was statistically significant and positive with coefficient of 0.0268, t-statistic of 5.152 and p-value of 0, 0008. At first, second and third lags, it become negatively significant with coefficient of -0.773, -0.0583 and –0.0169, t-statistic of -6.657, -5.014 and -2,156 implying that monetary policy uncertainty had positively significant effect on consumption in the short run till the first second and third lag after which the effect became negative. It implies that, although, household consumption is credit driven, household credit is also demand-driven by household consumption, which agreed with the result of (Owusu-Sekyere, 2017). The coefficient of FPU was statistically significant and positive with t-statistic of 5.352 and p-value of 0.0017 but had negative coefficient and significant with t-statistic of-4.728 and -5.334, p-value of0.0032 and 0.0018 for first and second lags.

The TPU remained statistically significant and negative all through with t-statistic of-8.398, -6.610, -5.405 and p-value of 0.0002, 0.0006 and 0.0017, respectively. This implied that household consumption was more sensitive to trade policy uncertainty. Therefore, households must have reduced their saving in order to smoothen consumption and this agreed with the result of Masayuki(2017). The CPI was statistically significant with positive coefficient and t-statistic of6.763 and p-value of0.0005. However, CPI was statistically significant with negative coefficient and t-statistic of-3.620,-4.0781,-5.871 and p-value of 0.0111, 0.0065, 0.0011respectively for the first, second and third lags. This implies that inflation had negative effect on household consumption. In general, the effect of economic policy uncertainty variables in the short run was negative on household welfare proxied by consumption per capita which implies that increasing policy uncertainty increases poverty since poverty is an inverse of consumption per capita. The overall results from this study shows that we reject the null hypothesis that economic policy uncertainty has no significant effect on and poverty. If anything, the effect is mostly negative and calls for policy intervention to curb or reduce uncertainty in the establishment and implementation of economic policies in Nigeria.

Tables 6: Estimates of the Short Run Effect of Economic Policy Uncertainty on Poverty

Variable	Coefficient	Std. Error	t-Statistic	Probability
D(HCPC(-1))	-1.569	0.158	-9.908	0.0001
D(HCPC(-2))	-2.277	0.304	-7.488	0.0003
D(HCPC(-3))	-1.369	0.221	-6.199	0.0008
D(MPU)	0.0268	0.00521	5.151	0.0021
D(MPU(-1))	-0.0773	0.0116	-6.657	0.0006
D(MPU(-2))	-0.058273	0.0116	-5.0139	0.0024
D(MPU(-3))	-0.0169	0.00785	-2.156	0.0745
D(FPU)	1.460	0.273	5.352	0.0017
D(FPU(-1))	-0.788	0.167	-4.728	0.0032
D(FPU(-2))	-1.00915	0.189	-5.334	0.0018
D(TPU)	-1.302	0.155	-8.398	0.0002
D(TPU(-1))	-1.163	0.176	-6.610	0.0006
D(TPU(-2))	-0.708	0.131	-5.405	0.0017
D(CPI)	1.479	0.219	6.763	0.0005
D(CPI(-1))	-0.543	0.150	-3.620	0.0111
D(CPI(-2))	-0.636	0.156	-4.0781	0.0065
D(CPI(-3))	-1.637	0.279	-5.871	0.0011
CointEq(-1)*	-1.311	0.156	-8.310	0.0002
R-squared	0.958578			
Adjusted R-squared	0.895			

Source: Field Survey (2019)

Conclusion

A preliminary unit root analysis was conducted using both ADF and PP unit root tests and these show that all the variables are non-stationary in levels but stationary at first difference except trade policy uncertainty which is stationary in levels. This provided justification for the use of ARDL model The findings from the ARDL model show that monetary policy uncertainty (MPU), fiscal policy uncertainty (FPU), trade policy uncertainty (TPU), inflation (economic policy uncertainty variables) have long-run relationship with poverty in Nigeria. In the short run, all the economic policy uncertainty variables exhibit negative effect on household welfare and these effect are mainly statistically significant.

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