IMPACT OF OIL PRICE CHANGES ON SELECTED MACROECONOMIC VARIABLES IN NIGERIA

ABSTRACT

In this study we evaluated the impact of oil price changes on selected variables in Nigeria within the period, 1981-2016. Adopting the ex-post facto research design with annual time series and using The Autoregressive Distributed Lag (ARDL) model; the results revealed that change in oil price had a positive and significant impact on government revenue and government expenditure, but had no positive and significant impact on the domestic price level. It is therefore recommended that the monocultural of the economy should be killed through well-planned and implementation diversification.

Keywords: Oil Price; Government Revenue; Government Expenditure; ARDL; Nigerian Economy.

1. Introduction

The price of crude petroleum rose for the first time in Nigeria in 1973 from $3 to $11.6 per barrel in response to the uncertainties created by the Arab – Israel war, which erupted in October 1973. The resultant rise in the price of crude petroleum generated a total of N9.2 billion in revenue for Nigeria. In 1994 as the country exported 108 million tons of crude oil that year, the upsurge in crude oil and price and the resultant increase in the revenue for the country created opportunity for industrial development and modernization of the Nigeria economy.

Although the oil price increase in 1973 was short lived, between 1979 and 1980, the price of oil rose in the international market between 135 and A$40 a barrel from et $14 level recorded in the early part of 1978. the rise in crude oil price again was only mainly to the Iraninan revolution. In responses Nigeria produced 84.25 million barrels in 1979 and realized N9305.6 million in the prices "The Africa Guardian, 1986, First Bank Business Report,1990" with the increased revenue derivable from oil sector the Nigeria economy became mono-cultural as emphasis shifted from the agriculture sector to the oil sector. Thus in 1980 the nation experienced a severe economic crisis which is traceable to the over dependence a severer economic crisis which is traceable to the overdependence on the oil sector. The oil glut era of the 1980s created a serious problem for the industrial sector, as there was a decline in industrial output and the level of industrial employment. Ijeh, 2010). Odeyemi (2016)

Consequent upon the freezing, the country passed through a period of structural adjustment programme in 1986. This was accompanied by austerity measure of enormous proportion. By 1990 a sign of relief was welcome with the price of oil in the international market soaring as a result of the Gulf war between Iraq and Kuwait. Nigeria earning from crude oil export reached N106.62 million as against the targeted N38.62 million (Oyejide & Adewuyi, 2011),.

This windfall of N68 billion since the exchange rate was stabilized at N9 to 11 between September and December 1990. The revenue gained from the glut crises was however not translated to productive investment and increased manufacture productivity.

In the late 1990's and early 2000 crude oil maintained its position as the highest contributor to the federation account. This was shown in the year 2003 annual budget. Out of estimated revenue of N1,819.0214 billion, a total of N120. 1789 billion representing 61.58% is expected to be generated from oil. The projection was predicated on a crude oil price at $21 per barrel: the answer to this question rest on the pattern of crude oil price volatility.

According to (Afolabi, 2011). the recent oil price shock (large fall in oil prices) has been attributed to factors such as higher than expected supply, weakness in global demand for oil, driven largely by

improvements in production technology, particularly the shale technology in the United States, steady rise in production of countries not belonging to the Organization of Petroleum Exporting Countries (OPEC), the faster than expected recovery of production in some stressed OPEC producers (Iran for instance); OPEC's November 2014 decision to maintain production level despite the sharp decline in prices, which clearly shows that the trend might not abate soon. Oil price volatility has been and will remain a subject of discourse among different scholars. It can be external when it comes from a large unanticipated change in world economic conditions which impacts upon a national economy. Oil shocks are of great concern to most economies because of its transmission effects on several spheres of economies of the world.

The current declining oil price and the daunting challenges it poses to the Nigerian economy, has brought to the fore, the need to reconcile theory with practical realities. Given that empirical literature on the recent shocks, this study fills an important research gap by clarifying the direction of the transmission effects of declining oil prices on Nigerian economic indicators in terms of magnitude and impact. The permanent/transitory nature of the shock and most importantly, the symmetry of the shock. In view of the foregoing analysis of this research will focus on the impact of oil price changes on Government Revenue, Expenditure and Domestic Prices.

The main objective of this study is to investigate the impact of oil price changes on the Nigeria's key macroeconomic variables. The study will specifically seek to: investigate the impact of changes in crude oil price on Government revenues; ascertain the impact of changes in oil prices on Government expenditure and to examine the impact of changes in oil price on Nigeria's inflation Nigeria represents the geographical settings for this study.It covers a period of 35years from 1981 to 2016 with focus on the oil price changes and selected macroeconomic variables.. The year 2016 was chosen as the end point period to ensure currency of data and 1981 to cover period immediately before the introduction of the structural adjustment programme.

This study will be of significance to stakeholders in the oil and gas industry and the Nigerian economy at large. It will help to further enrich the literature in this very important area of macroeconomics and finance in Nigeria. Economic planners, policy makers and macroeconomic managers will find this work as an invaluable tool for improved economic planning. The rest of the paper is divided into four sections, section two present literature review. Section three

presents the methodology, followed by the results and discussion in Section four, and finally, section five presents the main conclusion and recommendations.

2. Literature review.

Nations that export oil are most likely to experience contributions to the economic conditions and well-being of the populace. There are positive and negative contributions. Among the positive contributions are source of revenue to the government (Jaida, 2002), transformation and addition to balance of payment (CBN, 2014), increase in external trade (NNPC report, 2006; Lewis, 2001), increase in Gross Domestic Product (Aigbedion & Iyayi, 2007), source of employment (Odularu, 2007), transfer of technology (Oyejide & Adewuyi, 2011), provision of internal energy requirements (Oyejide & Adewuyi, 2011), increased income per capita (Husan, Arezki & Medas, 2015), and development of the economy say by providing infrastructure, industry, health facilities, educational supports, transportation and agricultural development (Afolabi, 2011).

The negative contributions resulting from oil exploration and exports include: Neglect of Agricultural sector and increased food import bills, urban congestion and oil spillage**.** Others are excess liquidity and its attendant consequences such as high rate of inflation, and over dependence on it to the detriment of strategic planning of the economy (Ijeh, 2010). Odeyemi (2016) observed the implications of fall of oil price on Nigeria economy. Among the consequences are devaluation of the naira, depletion of external reserves in a bid to save devaluing naira, depletion of funds for Government business, economic recession and dwindling activities in the Capital Market.

A number of theories guided thinking in this study. Among the theories are Mainstream Theory, Linear/Symmetric Theory, Renaissance Growth and Dutch Disease Theory. The principal theory upon which data were analysed was the Dutch disease theory. The mainstream theory postulates that economic growth results from production; and production refers to transformation of matter in some way, and requires energy.Capital, labour and land are primary factors of production; and energy resources such asoil and gas, coal and fuel are categorised as intermediate inputs usually created duringthe production period and entirely used up during the production process. Themainstream theory downplays the role of energy resources in economic growth (Oriakhi& Iyoha, 2013).

The linear/symmetric theory asserts that oil price volatility has linear relationship on the macroeconomic indicators. Thus fluctuations in say Gross National Product (GNP), and Gross Domestic Product (GDP) are occasioned by frequent fluctuations in oil prices (Goodwin, 1985; Hooker, 1986, Laser, 1987; Hooker, 2002). The renaissance growth theory an off-shoot of symmetric theory propounded that volatility/change in oil prices rather than oil price level that has significant influence on economic growth (Lee, 1998).

The Dutch disease theory of economic growth states that higher oil prices,generally, change the industrial structure of the oil-exporting country making it more concentrated on oil industry and non-traded sectors. The higher oil revenues lead to the appreciation of local currency, which consequently causes the increase of imports of consumer goods. Thus, the high concentration on imports tends to reduce the competitiveness of the local producers. It follows according to the Dutch disease theory that an increase in oil prices is not a beneficial situation for the economy of an oil exporting country (Corden & Neary, 1982).

2.3 Empirical Review

From related studies no other nations a mixed result was recorded. According to Ito (2012) the economy of Russia is highly sensitive to the oil price changes. The results of analysis showed that in a long-term period 1% increase in oil prices would increase GDP by 0.44%. Mendoza and Vera (2010) studied the asymmetric effect of oil price shocks on economic growth and found that the oil price shocks that occurred during the period (1984-2008) had a positive effect on the Venezuelan economy. The study showed that oil price increases were more significant and affected the economy more intensively than the oil price decreases. Salim and Rafiq (2013) investigated the impact of oil price volatility on six major emerging economies of Asia, namely China, India, Indonesia, Malaysia, Philippines and Thailand. The work measured quarterly oil price volatility with the realized volatility (RV) and made a number of findings. For China, it was reported that oil price volatility impacts output growth in the short run. And, for India and the Philippines, oil price volatility was found to impact both GDP growth and inflation before and after the Asian financial crisis. A related study in Nigeria, the Dutch disease theory seems evident. Olaokun (2000) showed that oil price increases exert a negative effect on the economies of Ghana and Nigeria, but has a positive effect on Russia, which like Nigeria is an oil producing country. Olomola (2006) found out that oil price volatility is highly significant in explaining GNP growth and unemployment. Similarly, Oriakhi and Osaze (2013) examined the

consequences of oil price volatility on the growth of the Nigerian economy within the period 1970 to 2010 using quarterly data and employing the Vector Auto regression (VAR) methodology. They found that oil price volatility impacted directly on real government expenditure, real exchange rate and real import, while real government expenditure impact on real GDP, real money supply and inflation. By implication, oil price changes determine government expenditure level, which in turn determine the growth of the economy thereby reflecting the dominant role of government in Nigeria.

Omisakin (2008) carried out a study on the impacts of oil price shocks on the macroeconomic performance in Nigeria using Vector Auto regression (VAR) approach. The study found that oil price shocks significantly contributed to the variability of oil revenue and output. Thus, oil price shock does not have substantial effects on money supply, price level and government expenditure in Nigeria over the period covered by the study. The impact of oil price volatility on macroeconomic activity in Nigeria has also been examined by Apere and Ijeoma (2013) finds a unidirectional relationship between interest rate, exchange rate and oil prices. However, a significant relationship between oil prices volatility and real GDP was not found. The paper concludes that oil price volatility is an important determinant of real exchange rates and in the long run, while exchange rate rather than oil price volatility affects output growth in Nigeria.

Oyeyemi (2013) confirms the positive relationship between oil price increases and economic situation; showing that during the periods of oil price decreases disruption effects occurred in balance of payments and government finances. Moreover, it was mentioned that even a small shock in global oil prices will have a long-term effect on the economic growth of the country. Similarly, Ani, Ugwunta, Iyiama and Eneje (2014) in a study on Oil price volatility and economic development: Stylized evidence in Nigeria investigated chiefly the causal relationship between oil prices and key macroeconomic variables 1980 to 2010. The findings indicate that there is a positive but insignificant relationship between oil price and the Nigerian GDP. Generally, oil prices have no significant impact on real GDP and exchange rate in Nigeria.

Most studies exploring the impact of oil prices on inflation rates employed the linear time-series model. Razmi [2016] applied the SVAR model with a view towards examining the impact of oil price on China's economy. The results revealed that increases in oil price have a positive impact on inflation, even though there is price control over domestic oil consumption and other commodities in domestic

Markets.

Kilian [2009] applied the Bayesian VAR model to examine the impact of oil price and inflation in USA quarterly data from 1948:1 to 2011:2. They found that oil price fluctuations do not necessarily spread and result in changes to overall inflation but rather are time specific. Some of the subsequent researchers attempted to investigate further the argument that oil price can affect CPI but not economic activities. Hooker[2002] applied the USA monthly data ranging from 1974:1 to 2014:7 and disaggregated the consumer price into five different components and compared the impact of oil price separately. The results revealed that oil price shock has significant positive effects on the energy-intensive CPI. While Basnet[2015] used the Autoregressive Distributed Lags (ARDL) method to study the pass-through effect of oil prices in Malaysia's consumer prices. The results indicated that oil prices and inflation have a positive relationship. On the contrary, Chou [2013] found that since 1980, oil price passthrough has become negligible. In a recent study by Lamotte [2013] the authors found that a fluctuation in oil price is absorbed and disappeared within the first five to six quarters after the shocks occurred. Notably, the shocks do not have any significant impact in the long-run, especially when the oil price is converted to domestic currency.

Ferrucci [2010] examined the long run impact of oil export and food production on inflation in African OPEC member countries. Found that oil exports have positive and significant impact connected to inflation meanwhile increases in food production has negative impact related to inflation.

Similar findings were reported in Lamotte [2013], where the authors investigated the asymmetric response of the gasoline price to changes in the oil price in France. In this study, they applied the ARDL method and found asymmetric relations with oil price changes, for which the gasoline prices gradually adjusted to a long equilibrium position. In this case, the adjustment was found to be faster when the crude oil price increases rather than decreases. In a separate study, the authors in Farzanegan [2009] found that Iran is greatly exposed to oil price changes that have asymmetric impacts on the economy. The study revealed that positive and negative oil price shocks significantly increase inflation, but the magnitude depends on the size of the shock. The authors in Ghosh [2013] showed that inflation is profoundly affected by oil price shocks and to some extent the impact is asymmetric. The authors confirmed this result by comparing the impact of a negative oil price shock to that of a positive shock that was noted in India. The

authors in Çat [2013] applied a multivariate two-regime threshold VAR model to assess the impact of oil prices in Turkey and found that oil price changes have a significant effect on inflation when the changes exceed the optimal threshold point and have the ability to adversely influence macroeconomic variables.

3. Methodology

The study adopts the *expost facto* research design given that it is a discourse on documented outcomes for the purpose of drawing conclusions and inferences. The choice of these research designs is based on the fact that this work is an*After-the-fact research*the employed variables are such that the researcher cannot manipulate,Onwumere, (2009).

All the data to be utilized are time series, quantitative and sourced from secondary sourcesbasically, The 2017 Statistical Bulletin of Central Bank of Nigeria. They are time series data because they are ordered following a natural frequency (Brooks, 2014).

Model specification

The Classical Linear Repression Model (CLRM) was employed for this study. The model, according to Gujarati (2011) and Brooks (2008) is expressed as follows:

$$Y_1 = \alpha + \beta x_t + U_t \quad \text{_____ (Eq. 1)}$$

Where:

Y = dependent variable (explained variable)

X = independent variable (explanatory variable)

α = Constant term (i.e. value of Y when X is zero)

β = Coefficient of the parameter estimates

U = error term (residual term)

t = (1, 2, 3, ….n) denotes the number of observations.

With respect to (Eq. 1), α and β are expressed as follows:

$$\beta = \sum \frac{(X_t \quad \bar{x})(yt - \bar{y})}{\Sigma(X_t - \bar{x})^2} \quad \text{_____ (Eq. 2)}$$

$$\alpha = \bar{y} - \beta\bar{x} \quad \text{_____ (Eq. 3)}$$

The dependent variables are:

i. Government Revenue (GREV)

ii. Government Expenditure (GEXP)

iii. Inflation Rate (INFR) that proxied price level

The main independent variable in the model is the crude oil price, proxied by change in Crude Oil Price (DCROP) that is the first difference of the level series crude oil price.

ARDL variant of regression was deployed in testing the hypothesis and is presented thus:

Hypothesis one (Model 1)

$GREV_t = \beta_0 + \beta_1 \Delta OP_t + \Sigma a_i OP_{t-i} + u_t$

Where: GREV = Govt. Revenue,

ΔOP = Change in Oil Price (in absolute terms)

There is also the inclusion of the lagged values of the independent variables given that the model is a lagged model.

Hypothesis two (Model 2)

$GEXP_t = \beta_0 + \beta_1 \Delta OP_t + \Sigma a_i OP_{t-i} + u_t$

Where:

GEXP = Govt. Expenditure, and the other terms are as defined above

Hypothesis three (Model 3)

$\mathbf{INFR}_t = \beta_0 + \beta_1 \Delta OP_t + \Sigma a_i OP_{t-i} + u_t$

Where: INFR = Inflation Rate

3.6 Methods of Data Analyses

The basic steps followed were:

- Standard tests
- Regression Analyses

This served as preliminary tests to ascertain the data behaviour and their goodness towards employing them for model estimation. These tests include basic descriptive statistics such as the mean, median, mode, variance, standard deviation, skewness, kurtosis and normality.

Stationarity implies that the 'mean' and 'variance' are constant over time and the value of the covariance between two time periods depends only on the distance or lag between the two time periods and not the actual time at which the covariance is computed. In this study therefore, the Augmented Dickey Fuller Unit Root Test was employed to test for the presence or otherwise of the unit root.

In this work, the Autoregressive Distributed Lag Model was used because of its relative advantages over other regression methods. These include

1. Small Sample size is involved
2. When there is a combination of different stationarity properties in the datasets
3. There is the need to guard against autocorrelation.

4. Presentation and Analyses of Data

4.1: Data Presentation

Table 1. contains the proxies for the variables under period spanning the period 1970 to 2015 in their level series form.

Table 1. Crude Oil Price and Selected Macroeconomic Variables 1981 to 2016

YEAR	CRUDEPRICE	GOVT EXP	GOVT. REV	INFR
1981	29.10	1225.9660	1023.2410	14.0
1982	21.60	337.2176	325.1440	29.3
1983	26.10	701.0594	597.2821	6.9
1984	19.50	428.2152	351.2623	8.5
1985	12.80	487.1134	353.7241	10.0
1986	16.20	160.8932	90.6226	57.0
1987	15.10	27.7495	15.5886	38.3
1988	26.10	701.0594	597.2821	6.9
1989	19.50	428.2152	351.2623	8.5
1990	28.20	13.0411	10.0014	5.5
1991	18.50	22.0187	16.1290	10.2
1992	64.60	4605.3900	3629.6070	18.9
1993	14.20	16.2237	7.9694	5.4
1994	16.00	191.2289	126.0712	57.2
1995	38.70	1426.2000	1253.6000	15.0
1996	52.65	4988.8640	3431.0710	18.3
1997	21.60	337.2176	325.1440	29.3
1998	15.10	27.7495	15.5886	38.3
1999	29.20	9.9276	7.2672	39.6
2000	29.10	1225.9660	1023.2410	14.0
2001	15.10	27.7495	15.5886	38.3
2002	38.70	1426.2000	1253.6000	15.0
2003	43.70	5185.3180	4031.8280	18.6
2004	63.30	4712.0620	3553.5430	21.6
2005	61.80	3452.9910	2642.9820	21.0
2006	63.30	4712.0620	3553.5430	21.6
2007	18.60	41.0283	25.8936	40.9
2008	29.10	1225.9660	1023.2410	14.0
2009	17.40	248.7681	249.7681	72.8
2010	63.80	4194.5770	3089.1750	21.6
2011	38.70	1426.2000	1253.6000	15.0
2012	21.60	337.2176	325.1440	29.3
2013	12.80	487.1134	353.7241	10.0
2014	64.60	4605.3900	3629.6070	18.9
2015	20.00	92.7974	53.2649	44.5
2016	16.00	191.2289	126.0712	57.2

Source: Central Bank Statistical Bulletin 2016.

Where:

CROP = Crude Oil Price (US Dollar per barrel)

INFR = Inflation Rate

GREV = Government Revenue

4.2 Data Description

Table 2 below shows basic descriptive statistics of the series under study.

Table 2 Basic Descriptive Statistics

Variable	Mean	Median	Standard deviation	Skewness	Kurtosis
DROP	0.99	0.32	14.50	1.32	14.50
GEXP	838.57	54.62	1441.57	1.29	3.10
GREV	2106.84	170.89	1774.38	1.41	3.48
INF	27.34	15.30	15.92	4.70	5.71

Source: Author's Computation

The basic aggregative averages like mean, median and mode for all the observations are shown in the table. The spread in the observations are also shown by their respective standard deviation which lies between the minimum and the maximum. Kurtosis and skewness are also shown which show the degree of peakedness and degree of symmetry of the given series.

The stationarity properties of the series which is a test for the unit root of the variables under study are shown below:

4.3 Tests for Stationarity Properties of the Series

Table 3 Summary of Unit Root Tests Results

Variables	ADF Stat	Critical Values @1%	Critical Values @5%	Critical Values @10%	P-value	Order of Integration
DCROP	-7.32	-4.18**	-3.52**	-3.19**	0.0000	I(0)
INFR	-3.50	-3.58	-2.93**	-2.60**	0.0100	I(0)
GREV	-4.43	-5.18**	-3.52**	-3.19**	0.0000	I(1)
GEXP	-7.22	-3.98*	-3.52**	-3.19**	0.0000	I(1)

****Stationary at the stated level of significance***

For the purposes of selecting a suitable model for the analyses and tests, it is interesting to note that ARDL was chosen because it tolerates a combination of I(1) and I(0) variables. The unit root tests indicate that the variables combine the I(1) and I(0) features.

Hypothesis One

Restatement of Hypothesis in Null and Alternate Form

Ho_1: Changes in Oil Price do not have positive and significant impact on Government Revenue.

Ha_1: Changes in Oil Price have positive and significant impact on Government Revenue

Test Statistics: Autoregressive Distributed Lag (ARDL) Model

Table 4: Summary of the ARDL Estimates for Hypothesis 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DCROP	20.886537	1.778577	11.2994	0.0000

R^2 90%, Adjusted R^2 89%,F-Stat 873.92(0.000), DW Stat 1.90

Source: ARDL Estimates

Interpretation of Estimates

The overall regression is significant as the probability of F-stat is less than 5% (0.05). There is also goodness of fit as the R^2 is reasonably high at 90% indicating that 90% of the changes in government revenue (GREV) are accounted for by the lagged values of government revenue and the principal explanatory variable which is oil price volatility (DCROP)). There is also no suspicion of autocorrelation as the Durbin statistics (1.90) by rule of thumb is approximately equal to 2. The model is hence certified fit for meaningful analyses.

Given that the pvalue is less than 0.05, we reject the null hypothesis and accept the alternate hypothesis and conclude that crude oil price volatility positively and significantly impacts on government revenue.

Test of Hypothesis Two

Restatement of Hypothesis in Null and Alternate Form

Ho_2: Changes in Oil Price have no positively significant impact on Government Expenditure.

Ha_2: Changes in Oil Price positively and significantly impact on Government Expenditure.

Test Statistics: Autoregressive Distributed Lag (ARDL) Model

Table 5: Summary of the ARDL Estimates for Hypothesis 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(GEXP(-1))	0.959279	0.059170	16.21218	0.0000
DCROP	0.008609	0.003647	2.360891	0.0232
C	0.286522	0.135096	2.120877	0.0402
R^2 93%, Adjusted R^2 99%,F-Stat		803.54(0.00 0),		DW Stat 2.3

Source: Extract from the ARDL Estimates in Appendix 5B

Interpretation of Estimates

The overall regression is significant as the probability of F-stat is less than 5% (0.05). There is also goodness of fit as the R^2 is reasonably high at 90% indicating that 93% of the changes in government expenditure (GREV) are accounted for by the lagged values of government revenue and the principal explanatory variable which is oil price volatility (DCROP)). There is also no suspicion of autocorrelation as the Durbin statistics (2.3) by rule of thumb is approximately equal to 2. The model is hence certified fit for meaningful analyses.

Given that the pvalue is less than 0.05, we reject the null hypothesis and accept the alternate hypothesis and conclude that crude oil price volatility positively and significantly impacts on expenditure.

Test of Hypothesis Three

Restatement of Hypothesis in Null and Alternate Form

Ho_3: Changes in oil price do not have positive and significant impact on Price level..

Ha_3: Changes in oil price have positive and significant impact on Price level..

Test Statistics: Autoregressive Distributed Lag (ARDL) Model

Table 6: Summary of the ARDL Estimates for Hypothesis 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.*

DCROP	-0.072966	0.145126	-0.502779	0.6180
C	13.07844	3.884168	3.367116	0.0017

R^2 41%, Adjusted R^2 34%,F-Stat 5.47(0.000), DW Stat 1.9

Source: Extract from the ARDL Estimates in Appendix 5C

Interpretation of Estimates

The overall regression is significant as the probability of F-stat is less than 5% (0.05). There is a less fit as the R^2 is reasonably high at 41% indicating that 41% of the changes price level are accounted for by the principal explanatory variable which is oil price (DCROP)). There is also no suspicion of autocorrelation as the Durbin statistics (1.9) by rule of thumb is approximately equal to 2. The model is hence certified fit for meaningful analyses.

Given that the pvalue is greater than 0.05, we refuse to reject the null hypothesis and conclude that crude oil price changes positively and non-significantly impacts on price level.

5. CONCLUSION

In this study we evaluated the impact of oil price changes on selected variables in Nigeria within the period, 1981-2016. Adopting the ex-post facto research design with annual time series and using The Autoregressive Distributed Lag (ARDL) model; the results revealed that change in oil price had a positive and significant impact on government revenue and government expenditure, but had no positive and significant impact on the domestic price level. As the world continues to explore alternative energy sources Government must in like manner sit up to diversify the economy for improved revenue efficiency and effectiveness.

It is further recommended that the mono-cultural of the economy should be killed through well-planned and implementation diversification.

It is believed that this study will open vistas of opportunities for further research in such areas as impact of oil price changes on different variants of inflation including a comparative study of the impact of positive oil price shocks and negative oil price shocks on all oil producing African Countries.

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