

The Growth Implications of Oil Price Shock in Nigeria

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Abstract

Oil prices traditionally have been more volatile than many other commodity or asset prices since World War II and has have a lot implications on major macroeconomic variables such as inflation, money supply, capacity utilisation and economic growth to mention a few. This paper investigated the growth implications of crude oil price shock in Nigeria. Empirical analysis was conducted by applying the multiple regression of the ordinary least square technique to the annual data on the Nigeria economy for the period 1979-2010. The model was found to be significant and most of its estimates are as expected. The study revealed that a little shock in the price of crude oil in the global oil market in the current period will produce a long-term effect on economic growth in Nigeria. The study suggested the need for the policy makers to diversify the productive base of the economy to other sectors such as Agriculture, Manufacturing, Tourism and other service oriented sectors to open up a wider spectrum for inflow of income to the economy and break the overdependence of the economy on oil sector.

Keywords: crude oil prices, economic growth, oil revenue, government expenditures.

INTRODUCTION

Oil being the mainstay of the Nigerian economy plays a vital role in shaping the economic and political destiny of the country. Although Nigeria's oil industry was founded at the beginning of the century, it was not until the end of the Nigeria civil war (1967-1970) that the oil industry began to play a prominent role in the economic life of the country. In the period between 1960 and 1966, Agriculture contributed about 58 percent to the country's Gross Domestic Product (GDP) and employed over 60 percent of her work force. But in the 1970s Agriculture lost its pre-eminent position to Mining and particularly to Petroleum due to occurrence of oil boom in the period (i.e.1970s). Oil was discovered in Nigeria in 1956 at Oloibiri in the Niger Delta after half a century of exploration. Nigeria joined the ranks of oil producers in 1958 when its first oil field came on stream producing 5,100 bpd. After 1960, exploration rights in onshore and offshore areas adjoining the Niger Delta were extended to other foreign companies.

Since oil was discover in commercial quantity in Nigeria, oil has dominated the economy of the country. In Nigeria, oil accounts for more than 90 percent of its exports, 25 percent of its Gross Domestic Product (GDP), and 80 percent of its government total revenues. Thus, a small oil price changes can have a large impact on the economy. For instance a US\$1 increase in the oil price in the early 1990s increased Nigeria's foreign exchange earnings by about US\$650 million (2 percent of GDP) and its public revenues by US\$320 million a year. Nigeria's

reliance on oil production for income generation clearly has serious implications for its economy.

Oil prices traditionally have been more volatile than many other commodity or asset prices since World War II. The trend of demand and supply in the global economy coupled with activities of OPEC consistently affects the price of oil. The recent changes in oil prices in the global economy are so rapid and unprecedented. This is partly due to increased demand of oil by China and India. However, the current global economy melt down suddenly counteracted the skyrocketing oil price. At the beginning of the crisis oil price crashed below \$40/b in the world market which had serious consequences on Nigeria fiscal budget which led to the downward review of the budget. Today oil price is oscillating between \$60/b and \$75/b. This rapid change has become a great concern to everybody including academics and policy makers; therefore a study of this kind is timely.

Oil prices have witnessed profound fluctuations and this has implications for the performance of macroeconomic variables, posing great challenges for policy making. The transmission mechanisms through which oil prices have impact on real economic activity include both supply and demand channels. The supply side effects are related to the fact that crude oil is a basic input to production and consequently an increase in oil price leads to a rise in production costs that induce firms to lower output. Oil price changes also entail demand side effects on consumption and investment. Crude oil prices have

increased on average from US \$25 per barrel in 2002 to US \$55 per barrel in 2005. An increase in petroleum prices tends to have a contractionary impact on world demand and growth in the short term.

The present study is motivated by the fact that Nigeria relies heavily on crude oil export revenues; this has severe implications for the Nigerian economy given the current wide swings in oil prices in the international oil market. It is therefore vital to analyze the effect of these fluctuations on the Nigerian macro economy and possibly trace the channels of transmission of oil price shocks to the Nigerian economy.

Against this background, this paper seeks to examine the effect of the trend of shock in oil prices in Nigeria and its impact on economic growth. The study will also look at the future of Nigeria's oil industry. Following this introduction, the remaining parts of the paper is organized as follows: Section two covers the literature review and the theoretical underpinnings. Section three present the methodology of the study. Data analysis and interpretation of result is the main thrust of section four while section five draws up policy recommendation and conclude the paper.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Literature Review

The interactions between crude oil price shocks and economic growth have received a lot of attention of researchers. Ubogu (1984) sought to establish the impact of oil on the Nigerian economy. Examining the growth and development of the oil industry, government participation and the stages of the development of the industry, government revenue, foreign exchange earnings, employment generation and industry linkages effects, he noted that oil has been responsible for the radical increase in revenue and further buttressed the stronger dependence on oil revenue as envisaged in our development plans due to the unanticipated decline in oil earnings. He was however, strongly in support of diversification and the need for judicious use of the current limited revenue.

Taking an analytical view of the impact of oil on the Nigerian economy, Obadan (1983), sought to evaluate the impact of the development in the oil sector on the Nigerian economy through government finances, he found that effect of oil on government revenue is positive. That is, there is a positive relationship between oil price and government expenditure, claiming that this relationship is significant and have fiscal implications and linkages. And these linkages arise from the use of increasing oil revenue by the government to develop other

sectors of the economy such as Agriculture, Education, and Infrastructures etc which are components of various government capital and recurrent expenditures.

Nkomo (2006) explore three eras in the determination of international crude oil prices. Prices were determined chiefly by multinational oil companies until the 1970s when the Organization of Petroleum Exporting Countries (OPEC) asserted its capacity to influence (to varying degrees) the price via its output decisions. Since the late 1980s, however, "world oil prices have been set by a market-related pricing system which links oil prices to the 'market price' of particular reference crude".

Jin (2008) discovered that the oil price increases exerts a negative impact on economic growth in Japan and China and a positive impact on economic growth of Russia. Specifically, a 10% permanent increase in international oil prices is associated with a 5.16% growth in Russian GDP and a 1.07% decrease in Japanese GDP. On the one hand, an appreciation of the real exchange rate leads to a positive GDP growth in Russia and a negative GDP growth in Japan and China.

In addition, Olomola (2006) used the variance decomposition approach to investigate and found that oil price shocks in Nigeria explained about 48% of the shocks to the real exchange rates in the 1st quarter, 33% in the 8th quarter, and about 32% in the 10th quarter. This confirms the fact that oil price shock affects the government monetary policy significantly through the exchange rate but that this effect may become insignificant as we move into through the 4th quarter, but by the 8th and 10th quarters oil price shock contributed about 10% and 17% respectively to change in the domestic money supply.

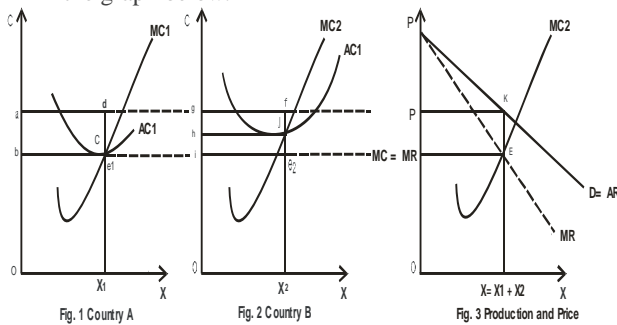
Darby (1982) had one of the earliest econometric studies that attempted to estimate the economic effects of oil shocks. His study determines what had caused the 1973-1975 recessions in the US. He figured that, oil shock's effect on the economy was statistically significant and estimated the 1973 oil shock caused a total cumulative decrease in GNP of 2.5%.

Ayadi (2000) examined the effects of oil production shocks on a net oil exporting country, Nigeria. The impact responses show that a positive oil production shock was followed by rise in output, reduction in inflation and a depreciation of the domestic currency. With the same methodology and set of variables (except that oil price replaces its level of production), Ayadi (2005) finds negligible responses of output, inflation and the real exchange rate following an oil price shock.

Olomola and Adejumo (2006) studied the effects of oil price shocks on output, inflation, real exchange rate and money supply in Nigeria within a VAR framework. They found no substantial role for oil price shocks in explaining movements in output and inflation. Only the long run money supply and the real exchange rate are significantly affected following a shock to oil prices. Based on all these findings, very limited studies have been done to assess the direct effects of oil price fluctuations on the economic growth. This study fills this gap by investigating the extent and magnitude of the shocks, contributions to the growth of Nigeria economy.

Theoretical Framework

According to Weldon (1948) and Chamberlin (1933) in the process of determining oil price, OPEC studies the production cost of member’s countries especially the marginal cost (MC) and marginal revenue (MR) curves. The summation of MR and MC curves of individual countries equals the cartel’s MR and MC curves. This can further be explained with the help of the graph below:



The graph shows how the allocation of production between the plants were decided by the marginality rule; $MC1 = MC2 = MR$. In other words, OPEC as a multi-plant monopoly maximizes members’ countries profit by utilizing each country’s production up to the level at which the said marginality rule is satisfied. This is due to the fact that if the MC in one country says country B is lower than the MC in the other country, say country A, then OPEC would increase his profit by increasing her production in country B and decreasing it in country A until the marginality condition is satisfied.

From the graph on fig 1, 2, and figure 3, we sum the productions schedules of country A plus that of country B to the nth country that can be produced at various costs, the resulting marginal cost would be the industry MC and it is the least because the Industry’s $MC = MR$. Given the industry’s demand curve as shown in the graph, the OPEC’s solution which maximizes joint profits is determined by the intersection of MC and MR curves from point “E”, there is a projected line, parallel to the Y-axis which touches the demand curve of the producing countries at point “K” on Fig. 3, and this is traced out to the

price axis to determine the posted price of crude oil (P).

OPEC aims at reducing to the barest minimum the uncertainties arising from mutual interdependence of petroleum (oil) exporters who are members of the organization. From the above it can be agreed that OPEC is a cartel or better still a multi plant monopoly, a cartel decides the prices at which her products must be sold in order to attain maximum profit for members. The theory capture how the price of crude oil is determined by OPEC as a multinational organization established to co-ordinate the petroleum policies of its members with the sole aim of maximizing the industry’s profit within the framework of monopolistic competition theory as enunciated by Edward Chamberlin.

METHODOLOGY OF THE STUDY

This is a very significant part of this research work; it sets the basis for validating the empirical findings. This section addressed the issues that relate to the methodology of the study with emphasis being laid on the choice of the research design, strategies, data requirements and sources, the nature and type of data collected the data processing and the parameters to be estimated. This section also specifies the model designed to test hypothesis of the study. Vital concepts and terms used were equally defined and described for the purpose of giving the reviewers and readers a deep insight into the phenomena under study.

The Data

Given the nature of the models it is imperative that the data which permit the estimation of the stochastic equations representing the effect of oil price shock on economic growth in Nigeria can be collected. These include crude oil price, inflation rate, gross domestic product, government expenditure, money supply and exchange rate of the naira in Nigeria. Time series data were used for the study and they are purely secondary data. The data series covered the periods between 1979 and 2010. The data were obtained from the publication of central Bank of Nigeria, (CBN) (Annual Report), Statistical Bulletin, National Account and Bureau of Statistic. The secondary data used for the study shall be estimated by the ordinary least square multiple regression analytical method.

The Hypothesis

This study verifies the null and the alternative hypothesis stated below:

- H₀:** There is no significant relationship between oil price shock and economic growth in Nigeria.-
- H₁:** There is a significant relationship between oil price shock and economic growth in Nigeria

The Model

According to the traditional neo-classical growth theory, output growth results from increase in labour quality and quantity (through education and population growth), increase in capital (through saving and investment) and improvement in technology (Todaro and Smith 2004). Again, the neo-classical viewpoint which is based on a technological relationship between output and productive inputs as considered in the pioneering work of Robert Solow (1978), its extensions finds an empirical variant in the Cobb-Douglas production function. However, Solow’s method of the residual and his estimate were disapproved on many grounds, that the residual approach was not of much use in understanding the growth process because it is based on the concept of a stable production function, his approach was based on the unrealistic assumptions of perfect competition, constant returns to scale and complete homogeneity amongst other criticisms.

In the light of the shortcomings of Solow’s growth model, according to Mankiw, Romer and Weil (1992), the aggregate output of the economy appear as:

$$Y_t = A_t K_t^\alpha H_t^\beta L_t^{1-\alpha-\beta} \tag{1}$$

Where A - index of technical change that varies overtime but for the moment held constant, K - the capital stock, L -s labour supply and H-stock of human capital.

Note that, the coefficients α and β are expected to lie between 0 and 1 and $(\alpha+\beta)<1$, implying that there are decreasing returns to all capital. From the equ (1), the model was re-modified as;

$$RGDP = F(L, K, DC, E) \tag{2}$$

Where; RGDP - represents the real gross domestic product,

L - Represents labour

K - Represents the capital

DC - Represents domestic consumption of crude oil

E - Represents crude oil export.

Where the Real GDP is GDP at factor prices deflated by the consumer price index (at constant factor cost). Incorporating the variables into the Cobb-Douglas production function, the model appeared to be:

$$RGDP = AL^{\beta_1} K^{\beta_2} DC^{\beta_3} E^{\beta_4} \tag{3}$$

This can be specifically expressed in linear form as:

$$RGDP = \beta_0 + \beta_1 L + \beta_2 K + \beta_3 DC + \beta_4 E + U \tag{4}$$

But with this little modification, as regards to the changes in techniques of oil price shocks trend in Nigeria, with its key determinants (crude oil price, real exchange rate, inflation rate, gross domestic product, government expenditure and money supply). This study adopts a model that captured the effect oil price shock on economic growth in Nigeria. That is; $RGDP = f(COP, REER, GOVEXP, INFL, MSP)$ (5) Where:

RGDP = Real Gross Domestic Product

COP = Crude Oil Price

REER = Real Exchange Rate of naira

GOVEXP = Government Expenditure

INFL = Inflation Rate

MSP = Money Supply

Putting in linear form, the model can be re-written as; $RGDP = \beta_0 + \beta_1 COP + \beta_2 REER + \beta_3 GOVEXP + \beta_4 INF + \beta_5 MSP + \mu_i$(6)

μ_i = Error term (stochastic term) assumption to be normally distributed in zero and constant variance.

The *a priori* economic expectations are:

$$\beta_0 > 0, \beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 < 0, \beta_5 > 0$$

Based on the above modification, equation (6) shall be estimated in the course of this study.

The Theoretical Proposition of the Model

In line with economic theory, we expect a positive relationship between crude oil price and output growth, although a large body of empirical research indicates that oil price increases have a significant negative effect on real GDP growth in oil importing countries, the increase in the price of oil generates a positive relationship with the output growth in Nigeria; the most thorough research to date has found that post-shock recessionary movements of output are largely attributable to the oil price shocks, not to monetary policy. Hamilton (2003) posits that the relation between oil price changes and real GDP growth is nonlinear, namely, that oil price increases matter but oil price declines do not. Furthermore, oil price increases that occur after a period of stable oil prices matter more than those increases that simply reverse earlier declines. Considerable debate exists about both the strength and stability of the relation between oil prices and GDP.

Obadan (1983) argued a positive relationship between oil price and government expenditure, claiming that this relationship is significant and have fiscal implications and linkages. And these linkages arise from the use of increasing oil revenue by the government to develop other sectors of the economy such as Agriculture, Education and Infrastructures e.t.c which are components of various government capitals and recurrent expenditures. Also, the role of government has also been on the increase since oil boom which automatically reflects in the expansion in total government spending, this is due to the fact that the government is the main recipient of oil rents and attempts to distribute them through increases in investments on infrastructure and salaries which blow up government spending. Therefore, an increase in the price of oil will obviously boost government revenue and its total expenditures. However, an increasing in the oil prices improves the terms of trade and appreciates the real effective exchange rate. The national currency, Naira, strengthened as foreign

exchange inflows outweighed outflows, and foreign reserves were built up.

There is no doubt that, there is positive relationship between oil price and money supply in Nigeria, this is because an increase in oil price thereby leading to an increase in government revenue make the government to go into expansionary fiscal and monetary policies and these expansionary policies reflected in government expenditure and budget, and liberal monetary policies on the money supply, exchange rate, interest rate etc. Cover (1997) and Oladeji (2007) affirmed that expansionary and contraction fiscal and monetary policy has implication on the policy output-interactions.

In conclusion, the empirical evidence on the relation between oil price increases and inflation is mixed. Theoretically, the real balance channel posits that oil price increases lead to higher inflation, with a given money supply, which lowers the amount of real balances. Burbidge and Harrison (1984), using a sample ending in 1982, and obtain mixed results. While oil prices are seen to significantly impact the U.S. and Canadian price levels, the price effects in Japan, Germany, and the U.K are found to be much smaller.

DATA ANALYSIS AND DISCUSSIONS

Table I Unit Root Test

| Variables | Integration | No of Lag | Critical values | ADF Test | Remark |
|-----------|-------------|-----------|-----------------|----------|------------|
| RGDP | 1(1) | 2 | 2.9665 | 11.70482 | Stationary |
| COP | 1(2) | 3 | 2.9705 | 3.529000 | Stationary |
| INFL | 1(1) | 2 | 2.9665 | 4.248488 | Stationary |
| REER | 1(0) | 1 | 2.9627 | 3.756174 | Stationary |
| GOVEXP | 1(0) | 1 | 2.9627 | 3.307040 | Stationary |
| MSR | 1(1) | 2 | 2.9665 | 4.555692 | Stationary |

Source: Researcher’s Computation

The stationarity of the unit root test in Table (I) above shows that two variables (Real exchange rate and Government expenditure) were stationary at level. This can be seen by comparing the test statistics (in absolute term) of both the ADF test statistics with the critical values (also in absolute terms) at the 5% level of significance. However, the variables that exhibited non stationarity at level were again differenced (i.e lagged) second time. The result indicates that three variables (Real gross domestic product, Inflation rate and Money supply) were stationary at the first differenced. The only variable (Crude oil price) that is not stationary at first differenced was again lagged for the third time; the result shows that, at the second differenced all the variables become stationary.

Following this, the test for co-integration was performed using the Johansen Maximum likelihood estimation approach. Under this approach, the trace test statistic was used in testing whether a long run

equilibrium relationship exist among the variables. If this test established that at least one one co-integration vector exist among the variables under investigation, then, a long term equilibrium relationship exist among them. The co-integration test result is presented in Table (II)

Table II: The Co-integration Test Result

| Eigenvalue | Likelihood Ratio | 5%Critical Value | 1%Critical Value | Hypothesized No. of CE(s) |
|------------|------------------|------------------|------------------|---------------------------|
| 0.877304 | 139.0956 | 94.15 | 103.18 | None** |
| 0.685934 | 76.15425 | 68.52 | 76.07 | At most 1** |
| 0.517256 | 41.40968 | 47.21 | 54.46 | At most 2 |
| 0.341238 | 19.56161 | 29.68 | 35.65 | At most 3 |
| 0.136012 | 7.039808 | 15.41 | 20.04 | At most 4 |
| 0.084664 | 2.653910 | 3.76 | 6.65 | At most 5 |

Source: Researcher’s Computation

The result from Table (II) shows that, there I a co-integration vector in the function and hence we can conclude that long run relationships exist between the dependent and the independent variables in the model, since the likelihood ratio is more than critical value at 5% percent level of significance.

REGRESSION RESULTS AND DISCUSSIONS

The result of the equation estimated to test the validity of the growth implications of oil price shock in Nigeria is presented in the Table (III) below:

Table III

Dependent Variable: RGDP
 Method: Least Squares
 Date: 01/05/13 Time: 23:35
 Sample(adjusted): 1981 2010
 Included observations: 30 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|------------|-------------|------------|-------------|--------|
| C | 8.464060 | 2.894608 | 2.924078 | 0.0222 |
| COP | -0.047355 | 0.038743 | -1.222314 | 0.2611 |
| COP(-2) | 0.152821 | 0.063933 | 2.390339 | 0.0481 |
| INFL | -0.053528 | 0.035432 | -1.510757 | 0.1746 |
| INFL(-1) | -0.089993 | 0.027395 | -3.284987 | 0.0134 |
| REER | 0.028078 | 0.016442 | 1.707678 | 0.1315 |
| REER(-1) | 0.035119 | 0.013053 | 2.690504 | 0.0311 |
| GOVEXP | -0.016518 | 0.045999 | -0.359100 | 0.7301 |
| GOVEXP(-1) | 0.127695 | 0.075826 | 1.684050 | 0.1360 |
| GOVEXP(-2) | 0.169562 | 0.038493 | 4.404952 | 0.0031 |
| MSR | 0.108805 | 0.032625 | 3.334994 | 0.0125 |
| MSR(-1) | 0.135483 | 0.029763 | 4.552046 | 0.0026 |
| ECM(-1) | -4.446275 | 0.898904 | -4.946331 | 0.0017 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.900592 | Mean dependent var | 4.945000 |
| Adjusted R-squared | 0.730179 | S.D. dependent var | 2.226273 |
| S.E. of regression | 1.156422 | Akaike info criterion | 6.383714 |
| Sum squared resid | 9.361178 | Schwarz criterion | 6.990900 |
| Log likelihood | -20.78716 | F-statistic | 12.28475 |
| Durbin-Watson stat | 2.058419 | Prob(F-statistic) | 0.017768 |

Source; researcher’s computation

Statistical Significance of the Parameter Estimates

The statistical significance of the parameter estimate can be verified by the correlation coefficient of the parameter estimate i.e the adjusted R-square (R²), the

standard error test, the F-statistics test and the Durbin Watson Statistics.

The value of the adjusted R-square (R^2) for the model is fairly high and is pegged at 0.730179 which implies that crude oil price, Inflation rate, Real exchange rate, Government expenditure and money supply explained about 73 per cent systemic variations on the real gross domestic product. The remaining 27 per cent could be attributed to some other forces affecting real gross domestic product outside the model.

The standard error test revealed that the parameter were statistically significant. It was discovered that the standard error of the variables were less than half of their coefficient. For instance, the standard error for crude oil price (lagged twice) which stood at 0.063933 is less than half coefficient of the variable which is 0.076410. This shows that crude oil prices were statistically significant in explaining the model. Again, the standard error for the inflation rate (lagged once) is 0.027395 is less than half coefficient (i.e. 0.044999). This again shows that this variable is statistically significant. More so, the standard error for real exchange rate (lagged once), government expenditure (lagged twice) and money supply (lagged once) which stood at 0.013053, 0.038493 and 0.029763 were less than half coefficient of the variables which are 0.017559, 0.084781 and 0.067741 respectively. Hence, this shows that the estimated variables are all statistically significant.

The F- statistic of 12.28474 is high enough, this shows the overall significance of the model and this indicates that collectively, all the explanatory variables are important determinants of economic growth.

The value of Durbin-Watson is 2.058419 for the model. This falls within the determinate region and this implies that the model is free from auto-correlation problem.

In summary, since the entire econometric test applied in this study show a statistical significant relationship between dependent and independent variables from the model, thus, we accept the alternative hypothesis which states that; there is a significant relationship between oil price shock and economic growth in Nigeria.

The Theoretical Significance of the Parameter Estimate

Table (III) above reported the ordinary least square multiple regression results. The result indicates that crude oil price (at level) sign negative but not significant, after lagged twice, it has a positive coefficient and it is statistically significant at 4 per cent level. This result suggests that a direct

relationship exist between crude oil price and real gross domestic product in Nigeria. It further indicates that lunit increase in crude oil price level will cause real gross domestic product to appreciate by 15 per cent. This result is in consonance with our a priori proposition. Inflation rate is correctly signed negative but not statistically significant in the short run, however, it is correctly signed and also statistically significant in the long run. This result suggests an inverse relationship between inflation rate level and the real gross domestic product. It implies that an increase in the inflation rate over the years had negatively affected the gross domestic product. It shows that a per cent increase in inflation rate level has actually reduced the output level. The value of the coefficient of inflation rate shows a correct sign which agreed with the a priori expectations.

According to the result, real exchange rate has positive coefficient and it is significant at 3 per cent level in the long run. This result suggests a direct relationship between real exchange rate and gross domestic product in Nigeria. It implies that a unit increase in the real exchange rate will raise the gross domestic product by about 35 per cent. In line with this result, the response of the real exchange rate is generally positive after a positive oil production shock which leads to increase in output level

Government expenditure has a positive coefficient and statistically significant as expected. It shows that a per cent rise in government expenditure will raise gross domestic product by about 16 per cent. This corroborates with the work of Cover(1997) and Oladeji (2007) affirmed that expansionary and contraction fiscal and monetary policy has implication on the output interactions.

The coefficient of money supply has a positive sign and this shows that money supply determines output growth in Nigeria and also proved that there is excessive money supply in the economy during the observed period. However, money supply does not significantly determine output in the short run. It shows that 1 per cent rise in money supply will leads to 13 per cent in output growth. This is in accord with our a priori expectations.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This paper investigated the growth implications of crude oil price shock in Nigeria. Empirical analysis was conducted by applying the multiple regression of the ordinary least square technique to the annual data on the Nigeria economy for the period 1979-2010. The model was found to be significant and most of its estimates are as expected.

The study found that crude oil price shocks have sustained impact on the government expenditure. The

findings show a positive relationship between government expenditure and economic growth which is in conformity with our a priori expectation. The same relationship holds for the real exchange rate and economic growth as well as money supply and economic growth. It was also discovered that the period of oil boom in Nigeria led to accumulation of foreign exchange increase in government capital and recurrent expenditure. The study further revealed that Nigeria economy depends so much on the revenue from the Black-Gold to the extent that over 85 per cent of her total government revenue and 95 per cent of revenue from export come from the oil revenue. It was also discovered that when Nigeria witness a fall in the price of crude oil, the fall caused destabilization effects in the balance of payment position and government finances.

It can be concluded that the contribution of the non-oil sector has continue to depreciate as against the domineering oil sector of the country. The study reveals that a little shock in the price of crude oil in the global oil market in the current period will produce a long-term effect on economic growth in Nigeria.

The major policy recommendation that emerges from the study in a bid to salvage the economy from inherent problems, the following solutions are recommended. There is need to diversify the productive base of the economy to other sectors such as Agriculture, Manufacturing, Tourism and other service oriented sectors to open up a wider spectrum for inflow of income to the economy and break the overdependence of the economy on oil sector. Increase in government credible spending on capital project to encourage the productivity of the non-oil sector. Finally, there is the need to encourage laudable indigenous industrialist to invest in order to produce modern sophisticated finished goods that have positive price.

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