

Research Article

Impact of Economic Recession on Macroeconomic Stability and Sustainable Development in Nigeria

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Abstract: The Nigerian economy has been hit hard by a recession, caused by excessive imports, plunging oil revenue and sharply low investment inflows. This study is a wide analytical focus on the impact of the economic recession on Nigeria in the socio-economic context. The study uses multiple regression analysis of time series data on selected macroeconomic variables in two econometric models. The results show negative impact of these variables on economic growth and sustainable development. The recession impacts on socioeconomic and political lives in Nigeria, and should be studied to find the root causes and proffer solutions for sustainable economic development. This study perceives the economic recession as a symptom of deeper structural problems inherent in the Nigerian economy, and overdependence on external modern capitalist societies. It recommends that Nigeria needs positive economic change that is caused by structural and fiscal reforms. Nigeria should strive to diversify the economy, be self-reliance and corruption-free, eat what she produces, and mostly use what she makes. The paper concludes that Nigeria can get out of the recession.

Keywords: Balance of payment, Inflation, Unemployment, Imports, Household Income, Economic Recovery, And Sustainable Development.

Introduction

This paper discusses the impact of economic recession on macroeconomic stability and sustainable development in Nigeria; its concepts, causes and implications for the wider economy. There have been symptoms of recession in the Nigerian economy, just that it became full blown under the President Muhammadu Buhari regime due to certain drastic actions taken to solve perennial domestic economic problems. Economic crisis come in a cycle. A recession is an economic crisis in the business cycle contraction, which results in a general slowdown in economic activities in two or more quarters (6 months and above). Macroeconomic indicators get worse showing that if there is no appropriate policy response, the economy may slip further into a depression. The Gross Domestic Product (GDP), investment and consumption spending, savings rate, imports and exports, capacity utilization, household income, trade, capital flows, business profits

and inflation decline, while indebtedness, illiquidity, bankruptcies and the unemployment rates rise. Economic recession is also a negative economic growth for two consecutive quarters. The National Bureau of Economic Research (NBER), defines recession as "a significant decline in economic activity spread across the macro economy, lasting more than a few months, normally visible in real gross domestic product (RGDP), real income, employment, industrial production and wholesale-retail sales". Usually, recession may be triggered by financial crisis and or credit crunch, as well as demand and supply side shocks, (Kamar, 2012). Following this introduction, section II is the statement of problem. Section III presents the literature review, section IV contains the methodology, section V is the results and discussion, and section VI is the conclusion, while section VII presents the recommendation.

Statement of the Problem

Nigeria has been an economically slavish neocolonial state. The present economic recession in Nigeria is a manifestation of long-term ills in the structure of the economy that became full-blown under the present government. The recession seems to affect socio-political structures, Nigeria's credit condition, general living standard, imports, production and employment as well as consumption demand in Nigeria. Fast developing economies like China, India, Brazil, including Vietnam and Thailand depend on exports to drive their economies. Nigeria cannot afford to do otherwise. 80 percent of Nigerians still lack access to electricity, decent housing, portable water and good healthcare. This figure is growing as a result of increasing unemployment caused by the recession. For many years, The importation of petroleum products covers 30 percent of Nigeria's GDP, importation of toothpick, rice, fish, cassava starch, sugar and processed tomatoes take 20 percent; importation of garments and fabrics 15 percent, importation of cars and electronics 20 percent; resulting to sky-rockets inflation of 17.8 percent in 2016. The demand for foreign exchange and imports (including imports of petroleum products) remained high

in the face of dwindling oil revenue. Nigeria is faced with the twin problems of reduced volume of exports and reduced price of crude, resulting to reduced revenue. The implications are that the federal and state budgets cannot be funded adequately resulting to external borrowing and debt financing. These have negative implications on foreign exchange and imports of raw materials, low absorptive capacity, job losses, increased tax evasion and avoidance, low purchasing power, low standard of living caused by economic recession. The question is that why the performance of the Nigerian economy always should be determined by industrialized external powers, if not for the internal structural deficiencies working against self-reliance? The Nigerian economy is now in the intensive care unit where America and Thailand's agribusinesses have collapsed Nigeria's agriculture, China's garments and fabrics business has collapsed Nigeria's textile industries, Japan and Germany's automobile businesses have collapsed Nigeria's Ajaokuta steel company.

Literature Review

There are remote and immediate causes of the current economic recession in Nigeria. Globally, there is geopolitical tension around the world, causing global crisis and commodity prices dropping, the drop in crude oil prices, Brexit, crucial American election in 2016, South China Sea issues, Russia-Syria crisis, ISIS, illegal migration and refugee crisis which are remote but important causes of the recession as Nigeria is an integral part of the global economy. Following the mortgage crisis of 2009 which started in the USA, there have been a couple of actions which, given the size of US economy in the world, has had certain impact, both positive and negative on emerging markets and frontier markets (Adelmann, 2011), where Nigeria unfortunately stands today. Amongst the immediate causes, the current recession in Nigeria is a symptom of monoprodukt economic structure, lack of economy diversification and over-reliance on imports. The Nigerian economy contracted due to global oil price shocks and volatility, worsened by oil pipeline vandalism and depletion of foreign reserves by the previous governments. Nigeria's recession was triggered by a sharp drop in government revenues and /or a drop in consumer spending. A drop in global oil prices (which Nigeria cannot control), triggered a drop in revenue and government spending due to Nigerian government not being able to earn what it used to earn before the drop. The monoprodukt economy structure, heavy dependent on crude oil export, and official corruption are the root-causes of the economic recession. In Nigeria, where federal and state governments are the highest spenders in the economy, a drop in Government spending can dovetail into a drop in consumer spending which in turn means businesses cannot invest in products and services, and also cannot employ. Instead, there is laying off of workers and high rate of job losses. What Nigeria should realize is that, by allowing the import of goods that can be produced in Nigeria, we export wealth and jobs to those countries and import recession, unemployment and poverty to Nigeria. The country has had no control over the price and output of oil at the domestic and international market. The

structure of the economy has not only been export-dependent, but also on a resource that is non-renewable.

Nigeria is not the only country that has experienced economic recession. Several other countries have also gone through recession in different phases and have recovered in varying degrees. They include: Korea, Hong Kong and Southeast Asia 1997-1998, United State of America 1974-1975, double deep recession in 1949 and 1980-1982, Japan in 1993-1994, Thailand 1997-1998, Australia 1931-1932, United Kingdom in 2000 and Venezuela double deep 2015-2016, (Chossudorsky, 2010; Richard, 1960). If any known market economy would have escaped a recession, it would have been the US economy, however, despite prudent economic management, the US economy experienced periodic recessions and the last global economic crisis was triggered by the collapse of the sub-mortgage sector, (Adelmann, 2011).

Conceptual and Empirical Impact Review of Economic Recession On Nigeria

In recession, there is usually a decline in certain macroeconomic indicators such as GDP, employment, investment spending, capacity utilization, household income, business income, and inflation, with the attendant increase in the rate of unemployment, (CBN, 2012). Chinguwo and Blewit, (2012) posited that economic recession, financial crisis and climate change problems combined to make life even more difficult for many working people and their families. According to Mailafia, (2016), economic recession stagnates wage growth and increases the proportion of people on low pay, as well as swelling unemployment and underemployment. In a research by Bauer, (2009), economic recession and the global financial crisis have inter-linkages with poverty incidence in developing countries. In a study by Oyesiku (2009), economic recession does not just occur, certain factors trigger recession which include; inflation, loss of consumer confidence, excess supply over demand, excess demand over supply, and global economic crisis. The present economic recession has severe negative and also some positive impacts on aggregate economic activities in Nigeria. It causes extreme poverty and suffering of the masses, children's right to quality education, affordable inclusive healthcare are deprived, there is adverse demand and supply shocks. It has contractionary effects on aggregate demand and supply resulting to volatile shocks in economic activities. There is scarcity of foreign exchange, few money, reduced income, decreased finances available to households and businesses. There is also weak purchasing power, reduced consumer spending and decrease in sales of goods and services. The purchase of goods and services by individuals, households and firms has drastically reduced as a result of the economic recession. Business activities are now at the low ebb, there are jobs losses and increase in unemployment rate. The reduced employment is due to decreased sales of goods and services by business owners, companies, street vendors, farmers, shop owners, retailers and wholesalers. The aggregate spending power has sharply declined.

Following the loss of jobs is the loss of income; the cost of living has gone astronomically too high for the core poor and the middle class. There is sharp decline in savings and investment; decline in the stock market activities, as some investors have pulled out their funds from the stock market due to high risks and uncertainties. There is also increase in the crime rates as life gets harder for a greater number of the population (the poor), living conditions are getting worse, crime rates have escalated; increase in robberies, petty stealing, street hawking, kidnapping, child trafficking, fraudulent schemes and other financial crimes. The aggregate poverty incidence continues to increase. There is budget deficit in government spending. The national and state budgets are experiencing spending difficulties due to shortfalls in government revenues. The governments are borrowing as an option to cover for the fall in revenues. This has geometrically increased the debt burden of the federal and state governments. There is high rate of inflation attributable to hike in pump price of petroleum, low domestic production capacity, dependence on imports, a weak Naira, scarcity of foreign exchange and high cost of doing business in Nigeria, high interest rates, poor electricity supply, lack of portable water, high cost of transportation and poor state of aggregate infrastructure. Statistical overview of growth rates in major sectors of the Nigerian economy show that they are either slow or negative sectoral growth rates. All the macroeconomic fundamentals (variables) such as exports, balance of payment, inflation, unemployment, and exchange rate are not moving in the favorable direction. Nigeria is still a generator-driven, monoculture economy with epileptic power supply. There is jobless growth as well as major social indices are negative. The basic needs of life have eluded almost 85 percent of Nigerians. Human capital indicators or social indices are fast declining, worse still, as oil revenue continues falling. The economy is deteriorating in human development indices, the quality of education and healthcare has collapsed, with abject poverty, acute hunger and starvation prevailing amongst the poorest poor.

The positive impact of the economic recession is that it is giving an edge to small scale businesses such as small scale cropping, gardening, fishery and animal farms. Low cost transportation business such as the Keke-Napep and commercial taxi are making it as it has become too expensive (in fact a luxury) to move about with car given the hike in fuel price and the level of illiquidity. Average people prefer to pack their cars, except where very necessary, and patronize cheaper means of transportation. It has become more economical to use Keke-Napep. Sales of food items and operating a low cost canteen, low cost health care are business opportunities favored by the economic recession. There are also individual, household and business austerity measures. Economic agents involved in a lifestyle that leads to wastage of money are making changes. For instance, unnecessary and irrelevant travels, avoidable shopping and flamboyant entertainment and food wastages are minimized. The rich are also complaining. These are making the average Nigerian lifestyle economical and sustainable too.

There is budget deficit and budget cuts for individuals, households and businesses. Purchase of expensive phones, new cars, household gadgets and appliances when old ones are still in good condition are discouraged. People are fast imbibing maintenance culture. Those with long appetite for imported foods and services are beginning to realize that it is not economical, or too expensive and unsustainable. In fact many have switched to buy "made in Nigeria" and have realized that they gain more by doing so. This is good for local manufacturing and employment. Even for the rich, areas of priority spending have become housing, food, affordable education, healthcare, transportation and clothing. Economic agents are into part-time job, business and small scale farming for household consumption which is a positive injection to the economy. Medical tourism to India, United States of America, and shopping spree in Dubai, France, Italy, South Africa and wholesale imports from China and other countries are fast declining.

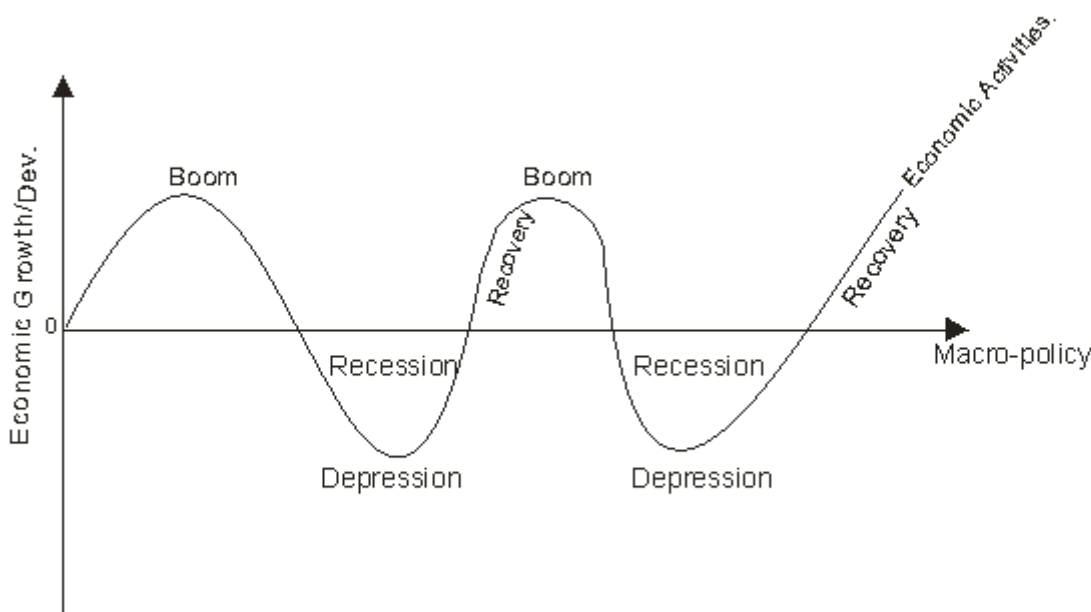
Theoretical Underpinning

Macroeconomic policies in response to recession; monetary and fiscal, are derived from both the Keynesian theory (aggregate demand and the liquidity trap), and the classical (mercantilist theory) and concept of macroeconomic equilibrium. The classical theory was the main body of economic theory (Say's Law and the Quantity Theory of Money) accepted by Economists from the 18th Century until 1936 when Keynes published his book, the General Theory of Employment, Interest and Money. In the Classical theory, market forces operated in the system such as to maintain full employment and productive resources and consequently keep the aggregate output at the level produceable under conditions of full employment. The factors which determine the productive capacity of an economy are the quantity and quality of available resources in the economy, skill and efficiency (technology) with which these resources are combined. However, Keynes disagrees with the Classics on the concept of self-regulatory equilibrium. The focal points of the Keynesian theory are increasing aggregate demand, money supply, planned spending, interest rates regulation, devaluation, increasing government spending stimulus/injection. Deficiencies in effective demand cause unemployment, inflation and economic recession. Unemployment is not just a short-run voluntary issue as claimed by the classical theory, but a problem caused by ineffective demand and bad economic planning, (Brenner, 2006; Bauer, 2009; UNESAP, 2009; Markard, Raven and Truffer, 2012; Jackson and Victor, 2011). Others are decreasing taxation and stabilization policy in compliance with expansionary monetary policy, (Pells, 2008; Barber, 2009; Onyesiku, 2009 and Frank, 2013). The classical theory advocates absolute and comparative advantages in free international trade, in line with the mercantilist aggressive policies to stimulate exports, reduce imports and the accumulation of capital through trade and exchange rate manipulations, (Toyo, 2000). This has facilitated the imperialist unipolarity of the world in a term coined globalization or liberal marketization.

Macroeconomic policies in response to recession are grouped into two: fiscal policy and monetary policy. Reduction in imports, increased domestic production, investment in infrastructure, agriculture and manufacturing, promoting SMEs and inter-regional trade, encouraging indigenous entrepreneurship would help to remove the pressure on the Naira, and also cancel the desperate search for the dollar (foreign exchange). Regional integration, vigorous trade between Nigeria and the rest of the world, particularly African nations and raising exports will improve the economy and serve as a remedy to economic recession. Tight (contractionary)

fiscal policy will also help. Nigeria is having economic recession along side with inflation. There is need to reduce the levels of government borrowing. Controlling excess government borrowing is essential for the economy to bounce back. There is need to reduce income taxes for household and firms, and increase domestic production, domestic trade and employment. These will boost disposable income and increase producer and consumer spending, raise general economic activities and improve macroeconomic variables in this business cycle of recession.

Table 1: Graphical Example of Business Cycle



In table 1, effective macroeconomic policies affect economic activities, which leads to growth and development; and vice versa. The macro-policies are a combination of sound monetary policy and fiscal policy.

Methodology

Data collection is from secondary sources. Basically, these are time series data on macroeconomic variables impacted by economic recession, (Schmidheiny, 1998; Venkatachalam and Bauer, 2010). The ordinary least square (OLS) method is adopted for data analysis, (Green, 2000; Gujarati, 2003). Two models and two functions are formulated from the model thus: Equation 1 measures the impact of recession on macroeconomic stability, while equation 2 measures the sustainable development variables.

$$GDP = f(UMEMR, INFLR, BOP, APOV)$$

$$Y = a_0 - a_1UMEMR - a_2INFLR + a_3BOP + a_4APOV + \mu \text{ ----- (1)}$$

Where a_0 is the intercept of the model, a_1 , a_2 , and a_3 are the slope of the respective independent variables in equation one, a_1 , a_2 and $a_3 < 0$

Y= Gross Domestic Product= GDP
UMEMR= Unemployment rate

INFLR= Inflation rate
BOP= Balance of payment for imports and Exports

APOV= Aggregate poverty rate
The prior expectations of the independent variables are negative.

$$RGDP = f(EXHEL, EXEDU, EXINFRAS, GRMAN)$$

$$YR = \beta_0 + \beta_1EXHEL + \beta_2EXEDU + \beta_3EXINFRAS + \beta_4GRMAN + e \text{ ----- (2)}$$

Where β_0 is the intercept of the model, β_1 , β_2 , β_3 and β_4 are the slopes of the respective independent variables in equation two, β_1 , β_2 and $\beta_3 > 0$. μ and e are the stochastic error terms in equation one and equation 2 respectively.

YR= Percentage Real Gross Domestic Product =RGDP

EXHEL= Aggregate expenditure on health

EXEDU= Aggregate expenditure on education

EXINFRAS= aggregate expenditure on infrastructure

GRMAN= Percentage Growth in Manufacturing index

Results and Discussion of Findings

Equation 1

Dependent Variable: GDP

Method: Least Squares

Date: 08/12/016 Time: 01:04

Sample: 1980 2016

Included observations: 37

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.193729	5.535824	-1.480128	0.1486
INFLR	-0.138853	0.131952	-1.052298	0.3005
UNEMPR	-0.279701	0.299907	-0.932623	0.3580
APOV	0.282618	0.126851	2.227955	0.0330
BOP	-0.127302	0.439708	-0.289515	0.7741
R-squared	0.700797	Mean dependent var	3.516216	
Adjusted R-squared	0.100897	S.D. dependent var	7.523759	
S.E. of regression	7.134108	Akaike info criterion	6.892740	
Sum squared resid	1628.656	Schwarz criterion	7.110431	
Log likelihood	-122.5157	Hannan-Quinn criter.	6.969486	
F-statistic	2.009972	Durbin-Watson stat	1.757099	
Prob(F-statistic)	0.116702			

Equation 2

Dependent Variable: RGDP

Method: Least Squares

Date: 08/12/016 Time: 01:12

Sample: 1980 2016

Included observations: 37

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.376229	2.274443	-0.605084	0.5494
EXHEL	-13.91696	4.906119	-2.836654	0.0078
EXEDU	8.386198	3.057665	2.742681	0.0099
EXINFRAS	1.134885	2.851363	0.398015	0.6933
GRMAN	-0.010314	0.092968	-0.110942	0.9124
R-squared	0.629415	Mean dependent var	0.454054	
Adjusted R-squared	0.358092	S.D. dependent var	5.177065	

The data for these regression results are in the appendices. As shown in the data and in these results, EXEDU, EXHEL and EXINRAS are sectoral capital expenditure as percentages of total capital expenditure on RGDP for the period 1980-2016. Capital expenditures on public goods (social sectors) such as health, education and infrastructure tend to have significant impact on poverty reduction, sustainable development and inclusive growth. However, in Nigeria, the pattern of growth in capital expenditures on public goods shows either a declining proportion or insignificant, mere marginal increases. Capital expenditures on education, healthcare and infrastructure as percentages of GDP have been dismal. This is in line with the findings of Ebong et al. (2016) and Eneji et al. (2013).

S.E. of regression	4.147820	Akaike info criterion	5.808131
Sum squared resid	550.5411	Schwarz criterion	6.025823
Log likelihood	-102.4504	Hannan-Quinn criter.	5.884878
F-statistic	6.020706	Durbin-Watson stat	1.562355
Prob(F-statistic)	0.000993		

There are linkages between economic recession, macroeconomic stability and sustainable development in Nigeria. As indicated in the multiple regression results for equation 1 and 2, the economic recession has serious negative impacts on government revenue, employment, income vulnerability, inflation, human health, infrastructural supply, poverty and natural resource management in Nigeria. Aggregate poverty (APOV) was growing at 28 percent along with growth in GDP which is an abnormal trend. The recession seems to increase poverty incidence and the level of unemployment and underdevelopment. GDP is basically aggregate demand, or the sum of Consumer Spending, government Spending, Investments and then Net Exports. It is a good measure of economic activity in any economy and is a benchmark for macroeconomic planning; government budgeting, income and expenditure, investment inflows, in and out, of the economy. However, the GDP is not an adequate measure of sustainable development, (Adebamowo, (2011). It is a combination of several indices, including the poverty incidence and unemployment rate, and the growth in the real sector such as manufacturing (GRMAN). The private sector also relies on the GDP of Nigeria to determine which areas have robust economic activity, helping them to decide where to invest. GDP Growth rate is the difference between the GDP of one period compared to the GDP of a prior period mostly over a year. When estimating GDP growth rates, economists adjust the values for inflation (INFLR). Countries that experience robust GDP growth rates over time will attract investments as it signifies a business opportunity for everyone. Likewise, an economy in recession, like Nigeria is currently, does not attract sufficient investments as it signifies a risky business climate. The economic recession is seen by this study as, though not sustainable and painful, but as a necessary path (that requires fiscal and monetary policies), to transition and development of the Nigerian economy. Nigeria's over reliance on foods imports and low-tech consumer and industrial goods have resulted in negative balance of payment (BOP=-0.127302) in equation 1. Massive importation of food is a drain on Nigeria's foreign reserve and BOP. This is in line with the findings that Nigeria's foods imports costs as much as refined petroleum products, (IFAD, 2009: IFPRI, 2008). Nigeria's dependent on food imports since the 1970s has made the country become more vulnerable not only to global price shocks, but also to the tightening of credit on the global financial markets. The present economic recession further threatens food security in Nigeria. If effective economic and political measures are not taken quickly, more than 80 percent of Nigerians will be living in extreme poverty in the next decade (by 2026), which is an irony of the poverty reduction policies. Presently, many Nigerians are not earning income, talk less of those who spend all their

incomes on food, up to graduate degree workers. There is a drastic reduction in wages, and many months of owed salaries. Many working people have taken into debt, pushing them into extreme poverty, thereby adding to the distress and misery of the aggregate poor households. Many so called employed and underemployed workers can no longer afford to cater for basic needs, including proper and adequate food and health care, as a bag of imported rice (N20,000), costs more than monthly minimum wage (N18,000) for an average worker. As the quality and standard of living declines, the life expectancy of many working and unemployed households is fast declining too. The excess demand for foreign goods is at the expense of jobs in Nigeria; underproduction and under supply of domestic goods. Overreliance on the dollar has contributed significantly to the economic recession, resulting to exchange rate problems and balance of payment crisis. These have made the Nigerian economy defenseless in the face of global price volatility. Investment inflows that would have found their ways into Nigeria are rather diverted to Ghana, South Africa, Kenya and other neighboring African countries. The Nigerian economy has been hit hard by imports, plunging oil revenue and sharply low investment inflows, and Nigeria needs to fight the root causes, not just the symptoms of recession. Now is the time for Nigeria to avoid all forms of waste. For instance, why should military uniforms be imported when there are tailors capable and looking for jobs in Nigeria? All military hardware and software are imported at the expense of local content, creativity and innovation. This is not sustainable.

The livelihood strategies and opportunities available to the rural and urban poor are shrinking with the recession, leaving more people in slums, squalor, darkness and hunger, thereby increasing the pressure to clear forests for food and firewood, hunting of animals for bush meat, just as a survival strategy. There are also increased militant and criminal activities, destroying national economic assets such as petroleum pipe-lines in the Niger-Delta and electricity cables and transformers in the East. The land, air and water are being polluted. Essential natural resources and ecosystem services provided by the environment to support economic growth and sustainable livelihoods are increasingly being destroyed.

The exchange rate restriction by the present government is in the right direction to curb the reckless imports. It is a demand management strategy to equate demand and supply for Nigeria to have an appropriate price for the Naira in the global market. There is need for Nigeria to be self-reliance in the production, consumption and exportation of foods, refined petroleum products, polypropylene and fertilizers. The fiscal and monetary

authorities should implement policies that would inject liquidity, to stimulate consumer spending and investment in the domestic economy. Government should scale down some of its investments in the oil and gas, particularly in the NNPC and the NLNG, sell some of its assets and focus on economy diversification in agriculture, manufacturing, tourism, solid minerals, ICT and R&D. Furthermore, the government should have the political will to implement and sustain structural reforms such as the strict exchange rate control and the Treasury Single Account (TSA) to solve the internal problems, get out of recession and stabilize the economy, no matter how painful. Programs like the Green Revolution (GR) and Operation Feed the Nation (OFN) were abandoned in the past due to lack of political will. Fast developing economies like China, India, Brazil, including Vietnam and Thailand depend on exports to drive their economies. Nigeria cannot afford to do otherwise. That 80 percent of Nigerians still lack access to electricity, portable water and good healthcare is an economic and social disaster. This figure is growing as a result of increasing unemployment caused by the recession. The policy suggestions here for Nigeria are; fiscal policy in support of robust expenditure on capital goods and infrastructure, practical entrepreneurship development policy, strict monetary policy and tight but selective exchange rate control, effective industrial policy of diversification, agricultural policy for food security, unemployment control and aggressive exports promotion.

Conclusion

The economic recession in Nigeria is caused by both endogenous and exogenous factors. There have been symptoms of a recession in the Nigerian economy, just that it became full-blown under the President Muhammadu Buhari's civilian regime due to certain drastic actions taken to solve perennial domestic economic problems. It is not abnormal for a market economy to go through a business cycle: boom, recession, and recovery. What matters is how long the phase of recession is managed to avoid a depression. The economic recession has serious negative impacts on government revenue, employment, income vulnerability, inflation, human health, infrastructural supply, poverty and natural resource management in Nigeria. Recovery and sustained economic development are desirable, but presently, Nigeria is a dependent capitalist economy. It is also not the first time Nigeria is experiencing economic recession, as the economy experienced recession in the 1970s, 1980s and 1990s. The global economic (financial) crisis of 2007/2008 affected Nigeria as a periphery economy that is dependent on the global trade. Nigeria has unrepentant, unpunished corrupt political class, over-reliance on the Federal Government revenue, over-dependence on crude oil, to a large extent, feeds on imported food, lives on foreign finished household electronics and communication manufactures, military gadgets, transport and electricity, infrastructure inputs, cloth in imported textiles and garments and drives in 100 percent imported cars. These are the root causes of the recession. The country loses \$18 billion FDI annually to foreign entrepreneurs in telecommunications, with over-blown financial corruption

and recklessness. These are the internal problems that caused the recession. Nigeria should adopt measures that will conserve its foreign reserves by reducing the demand for foreign exchange on imports that could be produced in Nigeria. Structural reforms that would lead to diversifying the economy must be fully implemented. The socio-economic effects of the recession include; unemployment, inflation and loss of livelihood strategies. These have serious negative consequences on the stability of families. The standard of living, education, healthcare, infrastructure and general wellbeing are affected. People are suffering, life is tough and crime rates are on the increase as life expectancy reduces with increases in infant and maternal mortality rates. Consumer confidence is lost; there is psychological bad faith in the economy and the government, especially by the suffering aggregate households, businesses and external sectors.

Recommendations

Addressing the economic recession requires a shift from a mono-product economy structure, overdependence on imports and diversification of the economy with at least 70 percent local contents. In order to make economic progress, Nigeria must change the structure of the economy and move away from oil to agriculture, value added entrepreneurship, chemicals, pharmaceutical industry, develop the iron and steel industry, revamp the machine tools industry for local fabrication of industrial tools. This will change the structure of the economy to a path of sustainable growth. The provision of infrastructure, qualitative education, affordable health care, constant power supply and human capital development are recommended. Unemployed people should accept a low paying job as a short-term solution, pending when a better job offer is available. In order to generate sustainable growth and maintain social cohesion, Nigeria must rise to the urgent challenge of creating 40 million productive jobs over the next decade. Government and private sector should partner to promote community-based enterprises, innovation, recycling, re-using, local farmers markets, financial cooperatives, community health and fitness, local training and skills, household gardening and natural resource conservation. The youth with all their energies and education should not shy away from agriculture, but embrace it with pride and dignity of labour, as a business and means of livelihood.

Government should encourage and promote modern agriculture for big and small farm holders. There should be deliberate policy to demystify the oil sector, promote the manufacturing sector, and small and medium scale enterprises. Ideas and innovation of Nigerians must be converted into "made in Nigeria" goods and services, not just classroom theories, empty political speeches or sentimental religious sermons. Monetary policy should provide access to cheap credits and sources of financing start-ups, with very low lending rates. There is need to reduce over-reliance on foreign goods and finance capital, with good example from the political class. States also should not over-rely on the federal government for funding, they should use local-content resources to

innovate, produce, collaborate and compete for self-reliance and economic independence. The states must be able to generate their own revenue without depending on the federal allocation, as it is done in China and other fast-developing countries. Presently, only Lagos State in Nigeria is capable of doing so. There is need to diversify the state and federal economy, improving the industrial capacity; Nigeria should grow its own rice, refine its crude oil. Farmers should be empowered to grow and process their tomatoes, value-added to cassava, cotton, cocoa, rubber, palm oil and fruits.

Government and private sectors' investment in agriculture to acquire latest technology innovations in the sector is still grossly inadequate, and does not trickle down on peasant farmers in poor areas. Government should focus on the social factors and conditions that affect the poor's capacity to respond to the economic recession such as the housing scheme, electricity, water supply, employment opportunities, health care provision, entrepreneurship and improving the quality of education. Nigeria should continue to implement fiscal and monetary policies that would reduce overreliance on the dollar so as to bring about economic stability and self-reliant development. In these ways, Nigeria can have resilience in the face of global economic (price) volatility.

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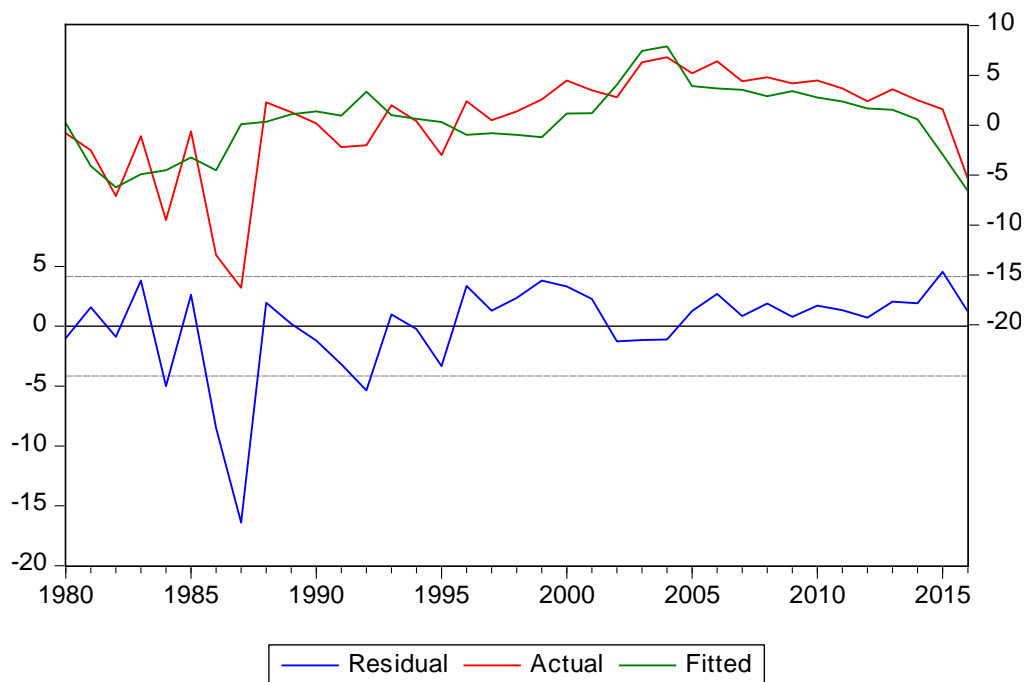
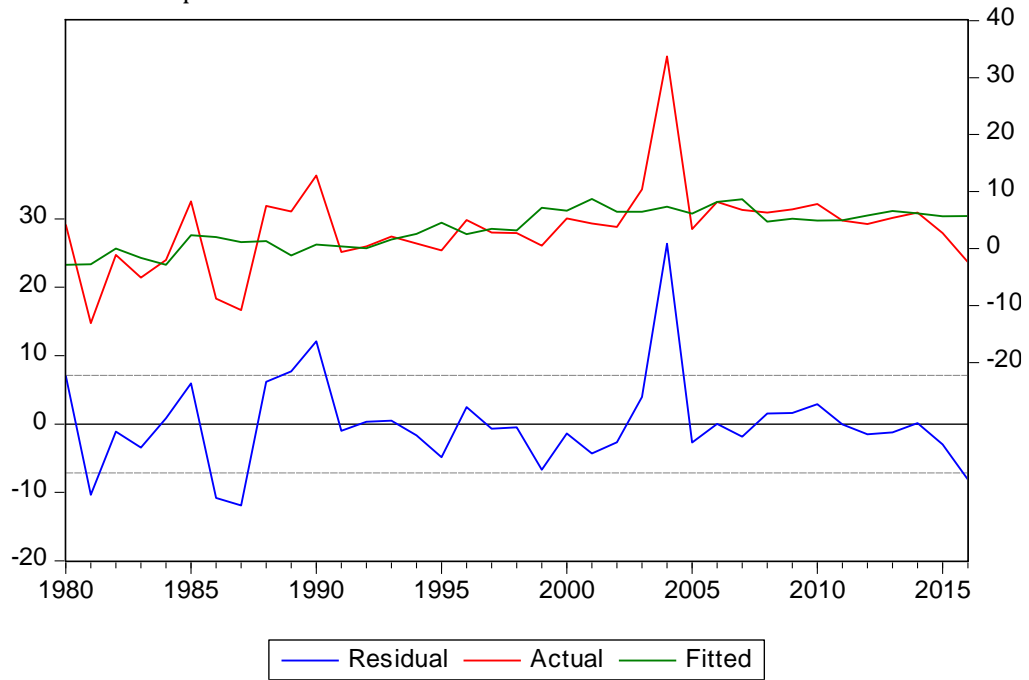
Appendies

Appendix1: Data for Refression

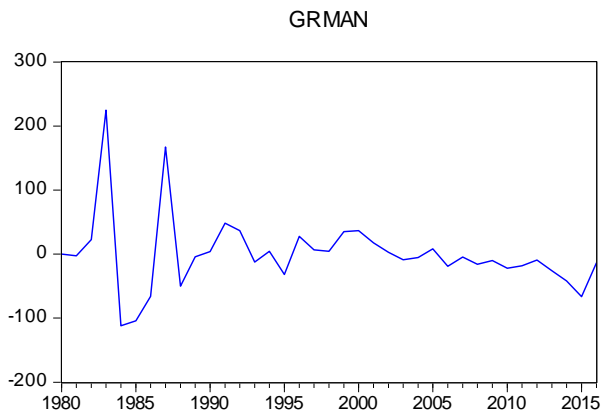
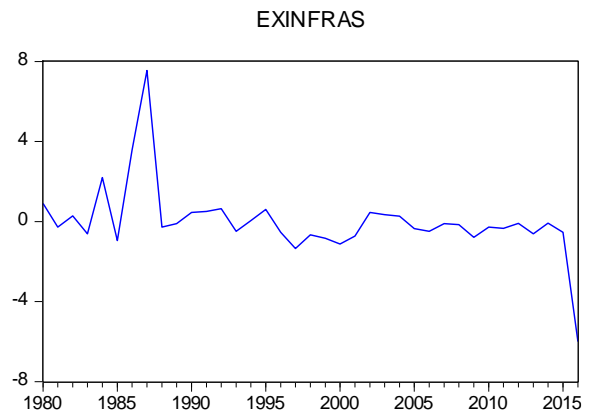
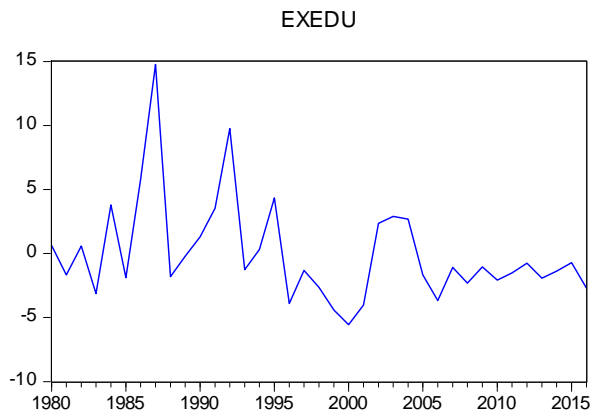
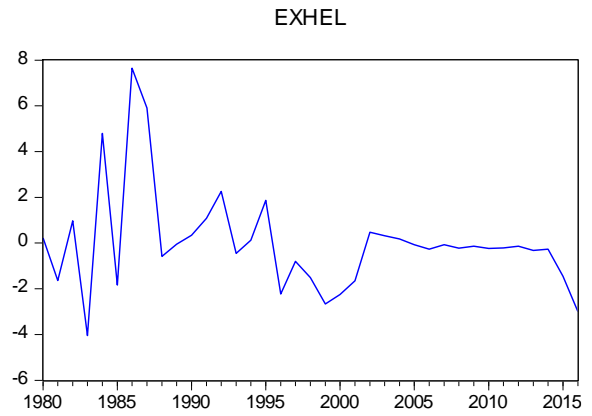
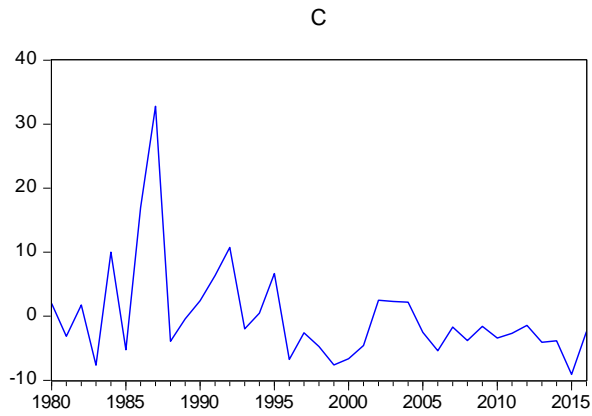
Year	GDP	RGDP	INFLR	BOP	APOV	UNEMP R	EXINFRA S	GRMAN	EXHEL	EXEDU
1980	4.2	-0.8	9.9	2.4	27	2.2	0.45	0	0.11	0.31
1981	-13.1	-2.5	20.9	-3.2	30	2	0.09	0.9	0.52	0.53
1982	-1.1	-7.1	7.7	-1.4	34	1.8	0.16	12.8	0.55	0.33
1983	-5.1	-1.1	23.2	-3.01	37	3.8	0.08	-29.4	0.53	0.41
1984	-2	-9.5	39.6	0.35	41	2.5	0.22	-11.2	0.48	0.38
1985	8.3	-0.6	6.8	0.05	44.2	3.6	0.18	19.8	0.35	0.36
1986	-8.8	-13	7.6	1.2	44	3.6	0.21	-3.9	0.45	0.34
1987	-10.8	-16.3	13.9	2.4	44	3.2	0.23	5.1	0.18	0.45
1988	7.5	2.3	16	-1.6	44	3.2	0.07	12.8	0.15	0.46
1989	6.5	1.3	33.9	-1.8	43.9	3.4	0.24	10.2	0.13	0.49
1990	12.8	0.2	20.4	-2.5	43.8	3.5	0.19	1.6	0.14	0.54
1991	-0.6	-2.2	22.5	-3.3	43	3.1	0.08	7.6	0.17	0.56
1992	0.4	-2	21.4	-1.4	42.5	3.4	0.06	3.4	0.21	0.91
1993	2.1	2	23.2	-1.6	48	2.7	0.25	6.3	0.23	0.64
1994	0.9	0.4	28.5	-1.4	53.9	2.5	0.09	9.2	0.26	0.67
1995	-0.3	-3	25.3	-0.5	59	1.8	0.09	-4.8	0.28	0.65
1996	5	2.4	40.7	-0.7	61	3.4	0.08	-4.1	0.33	0.58
1997	2.8	0.5	44.5	-0.6	66	3.2	0.52	-2.5	0.31	0.51
1998	2.7	1.4	50.3	-0.2	68	3.1	0.14	-0.9	0.32	0.56
1999	0.5	2.6	20.6	-0.4	69	4.7	0.11	-4.6	0.35	0.58
2000	5.3	4.5	29.3	-2.5	70	4.2	0.17	-5.5	0.34	0.84
2001	4.4	3.5	18.9	-2.2	71	3	0.16	-3.8	0.36	0.88
2002	3.8	2.8	12.9	-2	72	14.8	0.18	1.1	0.19	0.94
2003	10.4	6.3	14	-2.1	71	13.4	0.15	-3.9	0.14	1.26
2004	33.7	6.8	15.1	-1.7	73.4	11.9	0.12	-2.5	0.08	1.22
2005	3.4	5.2	17.8	-1.8	73	14.6	0.14	-3.3	0.03	0.66
2006	8.2	6.4	8.2	-1.2	74	12.7	0.09	3.5	0.05	0.68
2007	6.8	4.4	5.4	-2.3	76	14.9	0.06	2.8	0.04	0.65
2008	6.3	4.8	11.6	10.7	75.8	19.7	0.04	4.2	0.06	0.61
2009	6.9	4.2	12.5	9	79	21.4	0.5	6.4	0.09	0.66
2010	7.8	4.5	13.7	5.1	79	23.9	0.08	6.5	0.07	0.61
2011	4.9	3.7	12.2	3.9	78	24	0.13	6.8	0.08	0.57
2012	4.3	2.4	12.04	3	80	23.5	0.07	6.5	0.1	0.53
2013	5.4	3.6	11.9	4.4	82	22	0.15	6.4	0.08	0.47
2014	6.3	2.5	17.8	3.6	81	20	0.02	10.9	0.07	0.36
2015	2.7	1.6	18.4	0.2	82.5	24.6	0.06	7.3	0.16	0.08
2016	-2.4	-5.4	20.5	-1.8	85	26.8	2.5	5.7	1.25	1.12

Sources: CBN Annual Report(Various Issues),World Bank Development Indicators and Quarterly Update(2016), World Bank and International Financial Statistics and Balance of Payment Database,(2016) and Computation by Authors from CBN statistics.

Appendix2: Fitted Residual Graph from the Reression Series on Macroeconomic Variables



Gradients of the Objective Function



Gradients of the Objective Function

