Effect of Low Oil Prices

By Brian Ezeonu

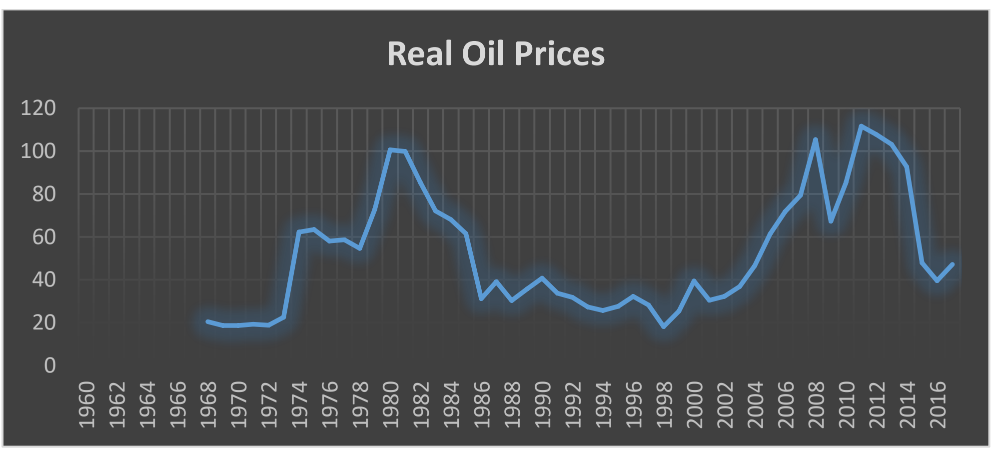
Abstract

This paper discusses the effect of low oil price on Nigeria as an oil dependent economy. The first section describes the global market and the possible causes of the decline of in oil price. It further discusses the effect of this low oil price on the exchange rate, inflation rate and economic growth of Nigeria. The last section contains viable solutions and how they can reduce unemployment and drive growth.

Keywords: Fracking, Oil prices, Nigeria, Shale, OPEC

In the last few years the Nigerian economy has been in a downward spiral which has left a lot of its citizens suffering. During a crisis, it is natural for people to point fingers instead of asking the "right" questions and looking for solutions. Over the years what determines when the Nigerian economy is thriving (statistically) and when it is crashing has been fluctuations in international crude oil prices. This is due to the heavy reliance of the Nigerian economy on crude oil exports. The world economy is currently experiencing what can be referred to as an oil glut and, while some countries like China, US, Japan, India etc. are thriving from this glut, other countries like Russia, Nigeria, Venezuela, Brazil etc. are finding it pretty difficult to adapt.

Chart 1: Oil prices at current US$ per barrel



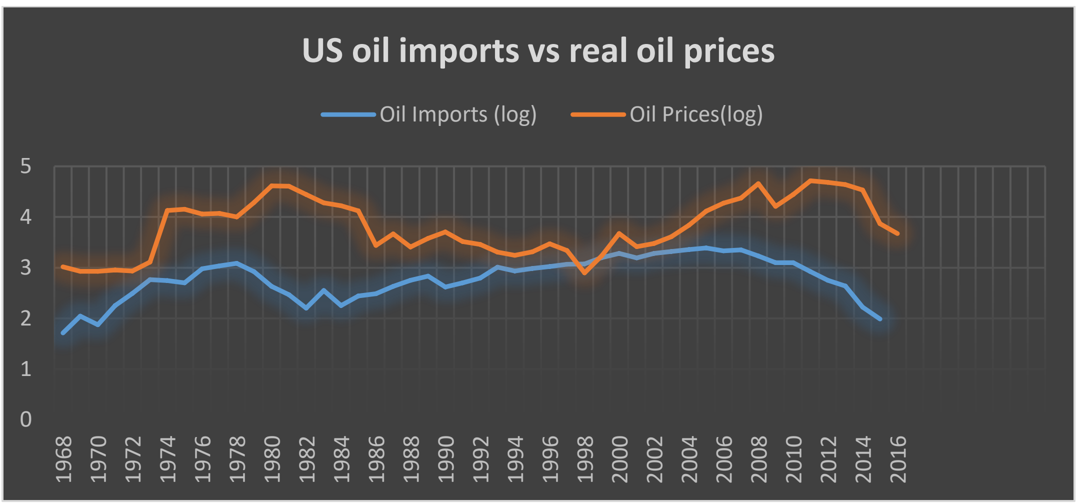
Source: U.S. Energy Information Administration

Why is the oil price falling?

Fluctuations in international crude oil prices since OPEC was created in 1960 is highly associated with changes in oil demand in the United States and supply issues usually because of Middle East crisis. The current crash in oil prices is due to a decline in United States oil imports.

This decline in imports is due to increase in domestic oil production through fracking. According to Merriam Webster dictionary "*fracking or hydraulic fracturing is technique in which a liquid is injected under high pressure into a well in order to create tiny fissures in the rock deep beneath the earth which then allow gas and oil to flow into the well*". This technique has been around for decades but with improvements in technology, oil production from shale has become much more efficient in recent years and is predicted to make the United State energy independent by 2020 (John Manfreda, 2015).

Chart 2: US net energy imports(% of energy use) and oil prices, log values.



Source: World Bank open data

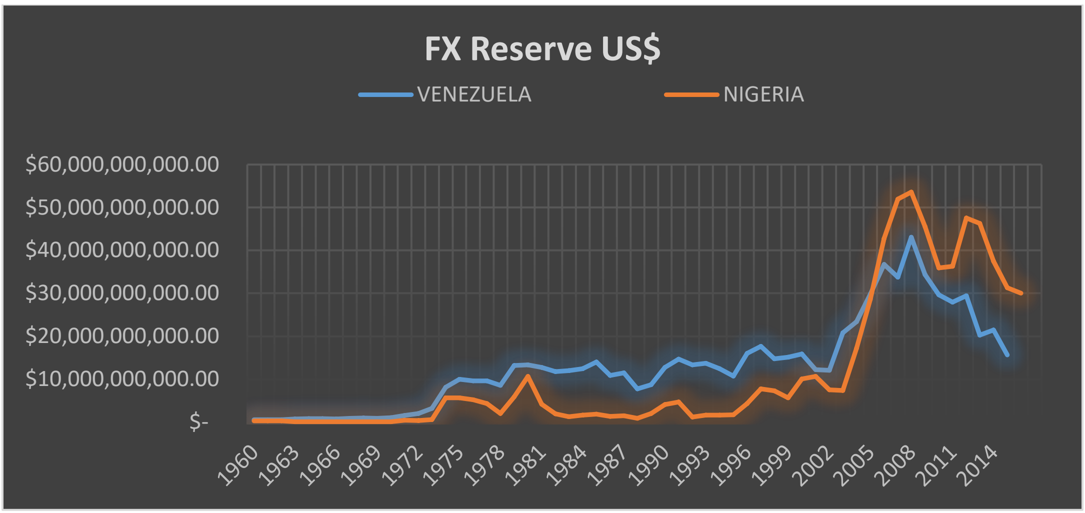
Saudi Arabia increased production from about 9.6 million barrels per day in September 2014 to about 10.5 million barrels per day in June 2015 (U.S. Energy Information Administration, 2017), which can be seen as an attempt to reduce prices and thereby make things difficult for the US shale industry. According to a Wall Street Journal breakdown of oil production cost as cited by Irina Slav (2017), in April 2016 Saudi Arabia could extract a barrel of oil at US$8.98 while the cost of US shale was US$23.35 per barrel. It is safe to say that with continued growth in US oil production, the era of high oil prices at 70s and 80s is over, even with Saudi Arabia's promises to cut back production.

What does this mean for a country like Nigeria?

It might seem like painting a bleak future but countries that rely heavily on oil as their major exports better figure out how to adapt to current reality or get comfortable with whatever economic difficulty it is currently experiencing.

Exchange Rate: The exchange rate of a country is determined by the demand and supply of its currency and/or its reserve. Countries with fixed exchange regime need a sufficient foreign reserve to maintain its exchange rate in case of an international shock. Going to the basics, foreign reserve is where a country stores foreign currencies earned from exports, selling government bonds etc. and where it receives foreign currencies for international transactions. Simply put, low foreign reserve happens when exports are falling means a low supply of foreign currency relative to its demand. This implies a higher value of that foreign currency (depreciatory pressure on the domestic currency).

Chart 3: Venezuela and Nigeria Reserve

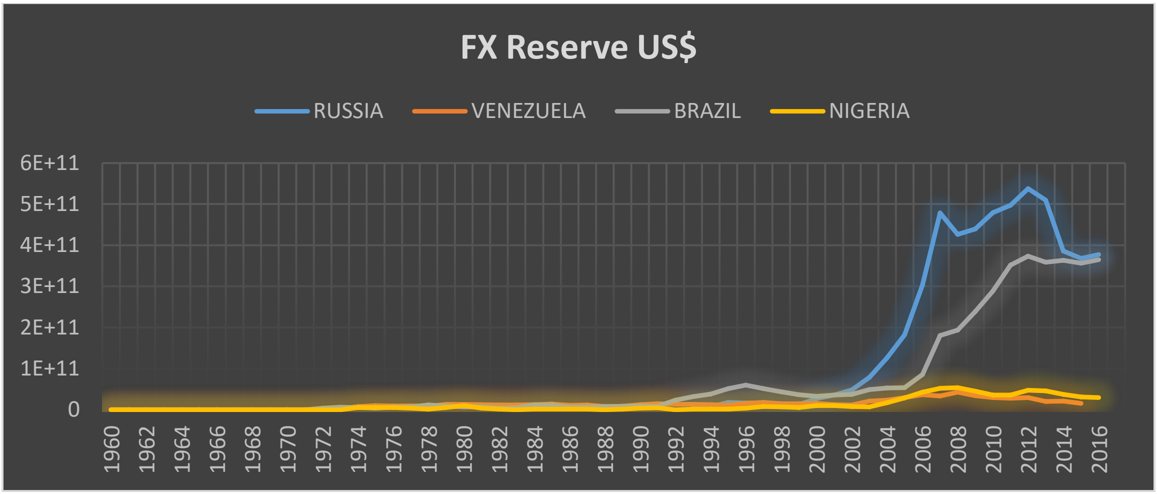


Source: World Bank open data

For a country that is supposedly on a fixed exchange rate regime this is a very low reserve which is one of the first complaints made by the current Nigerian president, Mohammed Buhari, when he took office in 2015. In the face of declining oil prices (hence shortage of dollar), the central bank pegged the Naira at 195 per dollar while the administration restricted the importation of some goods which could be produced domestically like rice. However, these measures failed to curb the depreciatory pressures on the Naira as it was valued at about 400 per dollar on the black market. The Naira has depreciated from about 195 per US dollar in 2015 to about 322 per us dollar since the peg to dollar was abandoned in late 2016.

Venezuela is also experiencing a similar but worse situation with their free floating exchange rate policy. According to an article published in CNN money in December 2016 by Gillespie et al, the value of the Bolivars plunged from about 1,567 per dollar to 3,480 per dollar between November 1 and November 28, 2016. Other countries that rely on oil as their major export like Brazil and Russia maintain a relatively stable exchange rate.

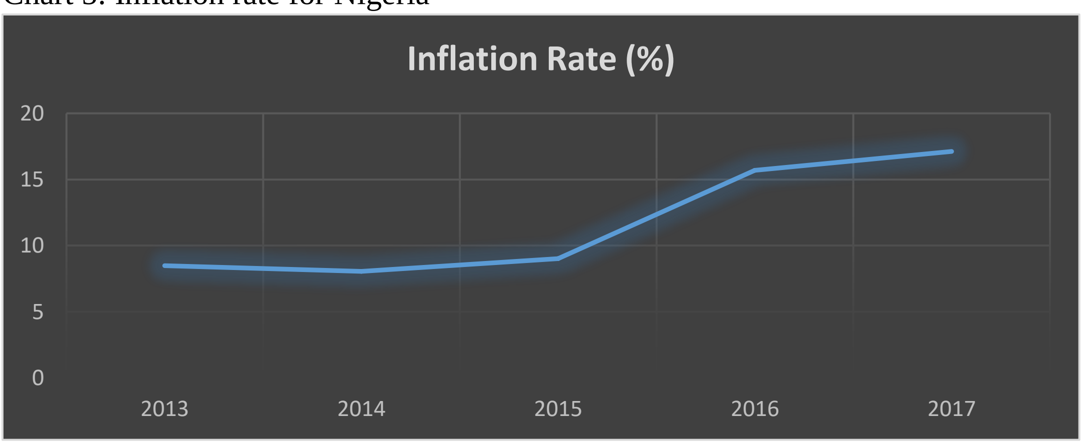
Chart 4: Russia, Venezuela, Brazil and Nigeria Reserve



Source: World Bank open data

Inflation: It is a normal phenomenon in Nigeria for price level to rise whenever there is an adverse shock on the exchange rate, which makes sense for an economy that relies heavily on imports. It is usually a funny scenario when you go to a local market to buy something like tomatoes and the seller is raising price with an excuse "*don't you know that the price of dollar has risen?*" and you are left wondering what is the correlation between dollar price and the tomatoes you're pretty sure he/she (the seller) just harvested from his/her backyard the previous day. I guess that is their own way of raising their "wage" to keep up with the "rising cost of imports" driven inflation. The inflation rate is currently at about 17%. Families are currently finding it difficult to put food on the table with the price of food rising constantly. Venezuela on the other hand is hitting an inflation rate of over 700 percent.

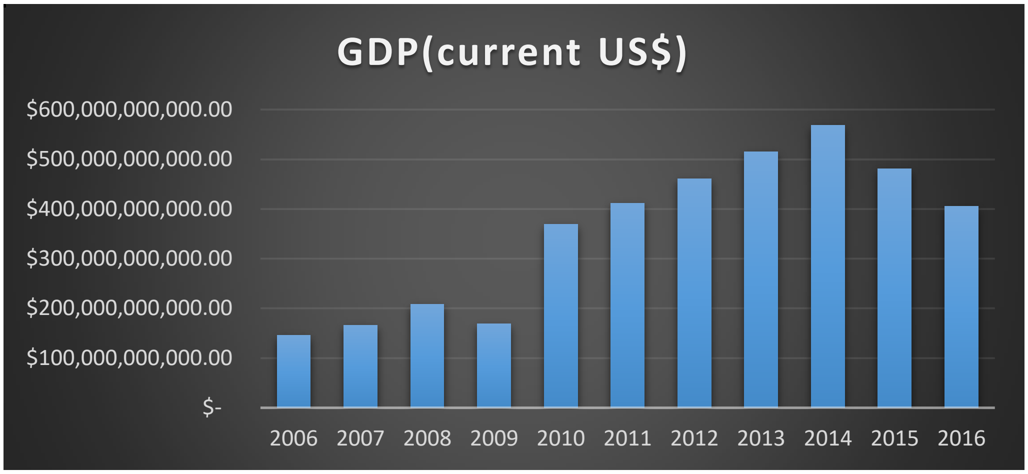
Chart 5: Inflation rate for Nigeria



Source: World Bank open data

Growth: Falling oil prices and reduction of oil production due to destruction of oil pipelines by the Niger-Delta militants in the south-south including the activities of the terrorist group Boko Haram, driving foreign investors away are other factors adversely affecting the growth of the Nigerian economy.

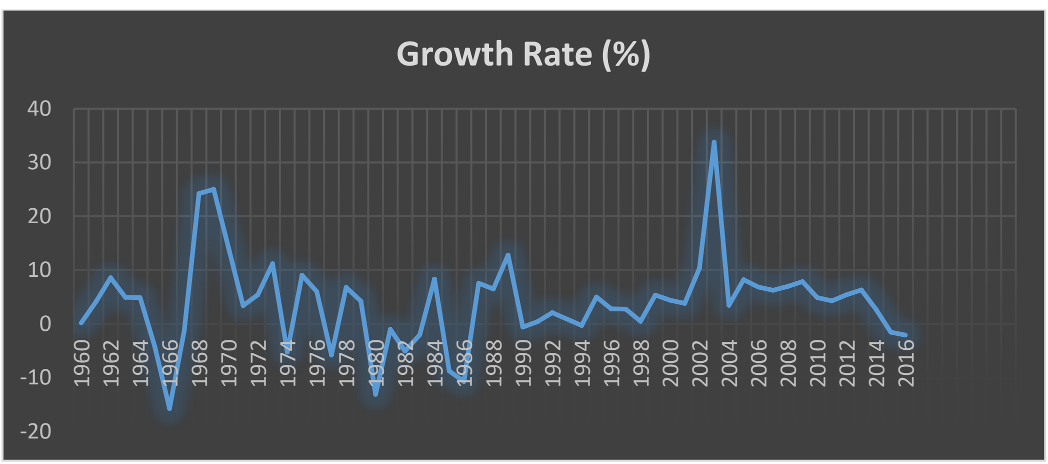
Chart 6: Nigeria GDP



Source: World Bank open data

The contractionary monetary policy (raising interest rate) adopted by the central bank to fight the growing inflation is also hurting domestic firms and driving out some foreign firms.

Chart 7: Nigeria GDP growth rate

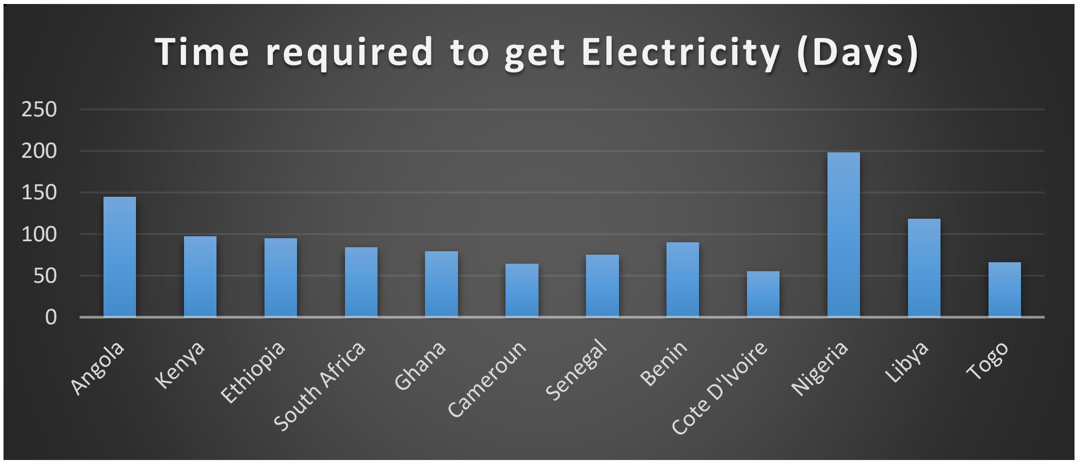


Source: World Bank open data

Solution

Power; this is one of the factors that has kept Nigeria from developing to its potential for years. A country that produces oil, natural gas and huge coal reserves but is yet unable to have constant power will baffle any individual. The private sector would not function efficiently to drive the economy if the public sector fails to provide an enabling environment and incentives. No power supply, lack of good roads and rising interest rates make the business environment tough for new businesses.

Chart 8: Time required to get electricity (no. of days)



Source: World Bank open data

The above chart shows how many days it takes to obtain a permanent electrical connection in the named countries. Even though it doesn't show how constant power supply is in these countries, it shows how poor Nigeria's power sector is relative to these countries.

Agriculture. Nigeria is a country with a large land mass suitable for agriculture and a large part of it is idle. According to Investopedia, about 31% of Brazil's land area is used for crop production. Those are the kind of figures Nigeria has aim for, especially given the current circumstances. Idle lands should be put to use by the government for industrialized agriculture with labor intensive production techniques: massive employment of youths, increased use of fertilizers, improved storage facilities, and the creation of markets, especially in Europe and America. Eventually private corporations would also enter the agricultural sector which would contribute to its sustainability. This deals with the food inflation issue, decreases unemployment and would drive growth in the non-oil sector.

In conclusion, there are other alternatives but these are the ones I believe would have a greater impact in the short-run.

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