EFFECT OF COVID-19 ON THE NIGERIAN OIL AND GAS INDUSTRY AND IMPACT ON THE ECONOMY

John Sylvester AFAHA[1, 2], Esther Alalade ADERINTO[1, 3], Ebenezer A. OLUWOLE [1,4], Adewale OYINLOLA[1,5], Yusuf AKINTOLA[1]

[1]Center for Petroleum Economics, Energy and Law (CPEEL), Ibadan, Nigeria
[2]Department of Economics, Caleb University, Lagos, Nigeria
[3]Lead City University, Ibadan
[4]Forest Research Institute of Nigeria
[5]Office of the Auditor-General for the Federation

Abstract

This paper x-rayed the emergence of coronavirus (COVID-19) disease and its impact on the current price of oil and gas products in the international market. This COVID-19 pandemic had revealed many weaknesses in the world's major global economies, and its attendant effect is conspicuously visible and cut across several institutions and industries: from the financial institutions to health, agriculture, tourism and hospitality, electricity, oil and gas. The core objectives and motivations for the study were to examine the impact of the covid-19 outbreak on the Nigerian oil and gas sector and its implications, and analyse the effects and implications of covid-19 and the resulting oil price decline on Nigeria's trade flow. The findings from the study revealed that crude oil prices had reduced to record low of $22 per barrel and this obviously has revenue impacting effects on the Nigeria economic system. Also, there is reviews of the prices of the premium motor spirit (PMS) or fuel downwards to cushion the rampaging impact of the pandemic on individual and business activities. Although the governmemt has come up with emergency policies to reduce the impact of the disease on the economy. However, the study recommends policies that are going concern in nature and a well-thought out stimulus package, which is not selective in its applications, could ensure that the Industry is able to bounce back much quicker than expected. Diversification priorities to alternative sectors such as agriculture, solid minerals, manufacturing and services sectors should be further intensified and also, the full deregulation of the downstream oil and gas sector.

Keywords: Corona Virus Disease (Covid-19), lockdowns, oil price, oil and gas industry, Economy, pandemic, Central Bank of Nigeria.

1. Introduction

The emergence of the novel coronavirus which originated from Wuhan in China, precisely on December 29, 2019, had its first 4 cases reported, and has spread to more than 215 countries in the last six months. All the cases were linked to the Wuhan (Southern China) Seafood Wholesale Market and, were identified by local hospitals using a surveillance mechanism for pneumonia of unknown etiology (Qun et al. 2020). The spread of this infectious disease, otherwise known as COVID-19 has been linked to person to person transmission, which are directly or indirectly infected. This has led to the total shut down of major cities and several businesses in the wake of agoraphobia and attempts to curb the spread. The global oil and gas industry has been hit hard by the fall in oil and gas prices, demand destruction and a weak global economic outlook, primarily due to the Covid-19 pandemic. The oil and gas pipeline segment are no exception, with several major upcoming pipeline projects such as Liberty Oil and Red Oak in the US stalled due to adverse market conditions (Offshore Technology, 2020). This coronavirus pandemic had revealed many weaknesses in the world's major economies, and its attendant effect is conspicuously visible and cut across several institutions and industries: from the financial institutions to health, agriculture, tourism and hospitality, electricity, oil and gas. This has resulted in unprecedented total lockdown of cities, lower working hours, staggered and declining production, fewer processing, sub-optimal manufacturing and priority distribution. The ongoing or new projects across oil and gas value chain are likely to face numerous challenges in terms of project execution, planning and risk management aspect from the pandemic.

There are combinations of factors responsible for the falling oil price; there are insinuations that Saudi Arabia and Russia oil price war are partly responsible. Another reason accounting for the persistent fall in international oil and gas prices this year is the sharp decline in global oil and gas consumption, due to the fact that major production and manufacturing activities in the major industrial capital of the world has been grounded to a halt in the wake of the coronavirus pandemic, and the economic consequences and damage is on the rise. The current market volatility and low prices have been a major cause for concern among OPEC's and non-OPEC Member Countries. The Monthly Oil Market Report (MOMR) for March 2020 submitted that the World oil demand growth in 2020 have been adjusted and lowered by 0.92 mb/d to 0.06 mb/d, to reflect slower global economic growth associated with a wider spread of Covid-19 and its adverse impacts on transportation and industrial fuels. Similarly, OPEC NGL production in 2019 is estimated to have grown by 0.04 mb/d to average 4.80 mb/d and for 2020 will grow by 0.03 mb/d to average 4.83

mb/d. In February, OPEC crude oil production dropped by 546 tb/d m-o-m to average 27.77 mb/d, while Non-OPEC supply is now forecast to grow by 1.8 mb/d in 2020, a downward revision of 0.5 mb/d, mainly reflecting a further slowdown in US tight oil.

Oil prices continued to fall in the first ten days of February in response to the significant decline in crude oil demand from China as state-owned and independent oil refineries were dramatically reduced their runs to multi-year lows amid rising oil product stocks and lower domestic demand. In mid-February, oil prices stabilized and recovered slightly after reports showed a slowing in the number of new Covid-19 cases in mainland China. However, oil prices reversed their upward trend and declined sharply during the last week of the month, dropping by about $9 in one week amid a sharp sell-off in global equity and oil markets amid renewed concerns about oil demand as the spread of Covid-19 accelerated outside China (OPEC-MOMR, 2020).

The coronavirus has also led to a decline in demand for crude and a potential supply glut could pressure prices further. Oil Plunges 24% for worst day since 1991, and hits multi-year low after OPEC deal failure, spark price war amid COVID-19 outbreak (Stevens, 2020). As the virus knows no borders, the impacts will continue to spread. In fact, 94 percent of the Fortune 1000 across the globe, and businesses in Nigeria have been impacted and are already seeing COVID-19 disruptions. Given the declining demand and excess supply, oil producing countries like Nigeria are being faced with huge fiscal deficits, inflation, exchange rate instability, foreign reserve depletion amongst other economic uncertainties. For Nigeria, this is a Twin Shock: COVID-19 Pandemic, Global & Domestic Shock, and Oil Price Shock. Nigeria's vulnerabilities to the impact of these external shocks can be adduced to increased dependencies on global economies for fiscal revenues, foreign exchange inflows, fiscal deficit funding and capital flow required to sustain the nation's economic activities. The Twin Shocks are expected to impact the economy through three channels: supply, demand and financial (KPMG, 2020). The current national budget of most oil-dependent countries like Nigeria had to be revised because it will no longer reflect the current economic reality since the budget was priced at a higher oil price from 2019, consequently, the national budget of some oil-dependent countries ran into massive deficits (Ozili and Arun, 2020).

The 2020 budget was scaled down by 45% by the Federal Government because of COVID-19 and the oil glut that accompany it. Capital expenditure was cut down by 20%, and recurrent expenditure by 25%, but no State government have reviewed their budget yet. This was expedient as the crude oil benchmark of $57 per barrel has been revised to $30 per barrel following the crash in global prices. As of Friday 1st May, 2020, bonny light crude was being exchanged for $10 per and yet without buyers. Nigeria has joined OPEC and OPEC+ to cut crude oil supply by up to 10 million barrels per day between May and June 2020, and 8 million bpd between July and December 2020, and 6 million bpd from January 2021 to April 2022 in an attempt to ignite immediate short term price rebound and stability. This implies that Nigeria will limit her crude oil production to 1.412 million bpd, 1.495 million bpd and 1.579 million bpd respectively as agreed. It is expected that with the recent intervention by OPEC+, crude oil prices will rebound by at least $15 per barrel in the short term. Given this background, this study seeks to: a) examine the impact of the covid-19 outbreak on the Nigerian oil and gas sector and its implications, b) analyse the effects and implications of covid-19 and the resulting oil price decline on Nigeria's trade flow.

1.1 Methodology and Data Sources

This study employed a mixed type methods, were a critical and in depth theoretical review of the subject matter was carried out in the study, and where necessary clarifications and emphasis to drive home salient points are done through tables and charts. The second part of the study employs a descriptive research design to agree on the effects of COVID-19 on the oil and gas industry. Data were sourced from various sources, including formal sources and informal sources like newspapers, magazines and online sources to discuss the effects of Covid-19 on the oil and gas industry.

2. Literature Review

The crude oil production in Nigeria is estimated to witness a decline of approximately 7.93% during the forecast period of 2018 – 2025. Major factors driving the market are the increasing investments in the upstream and downstream sectors of the oil & gas industry. Oil and gas production had been hampered in Nigeria in the past few years, due to the attack on oil and gas infrastructure by militants. Further, oil theft has been one of the major issues faced by the oil & gas market in Nigeria, which resulted in huge losses in operating companies in the country. Presently, the crude oil production demand has greatly declined due to an oil glut in the world economy as a result of COVID-19 pandemic. The oil prices have also reduced to record low of $22 per barrel and this obviously has revenue impacting effects. Volatility has always been a challenging element of the oil and gas market but has rarely been more extreme than it is today. COVID 19-led disruptions to demand, combined with its dramatic impact on financial markets, have led to rapid price swings. As viruses know no borders, the impacts will continue to spread. In fact, 94 percent of the Fortune 1000 across the globe, and businesses in Nigeria have been impacted and are already seeing COVID-19 disruptions. We expect that the COVID-19 threat will eventually fade, as the Ebola, Zika, and Severe Acute Respiratory Syndrome (SARS) viruses have in recent years. However, social-economic impact will still be felt long after virus fades (KPMG, 2020). Global oil prices have dropped to an 18-year low of $22, thereby sending the heavily oil-reliant Nigeria and African countries gasping for breath amid huge revenue losses.

2.1 Understanding the Covid-19 pandemic

African oil-producing and reliant countries have been among the hardest hit by the COVID-19 pandemic and declining oil price. In particular, Senegal, Nigeria and Angola continue to face new challenges each day amid the threat of the economic fallout. Nigeria, like all the nations of the world, is navigating uncertain times. However, for Nigeria, as an oil-dependent economy, this is a Twin Shock: COVID-19 Pandemic, Global & Domestic Shock, and Oil Price Shock. The twin shocks on the one hand can be better illustrated using the infographics below in figure (1). Nigeria's vulnerabilities to the impact of these external shocks can be adduced to increased dependencies on global economies for fiscal revenues, foreign exchange inflows, fiscal deficit funding and capital flow required to sustain the nation's economic activities.

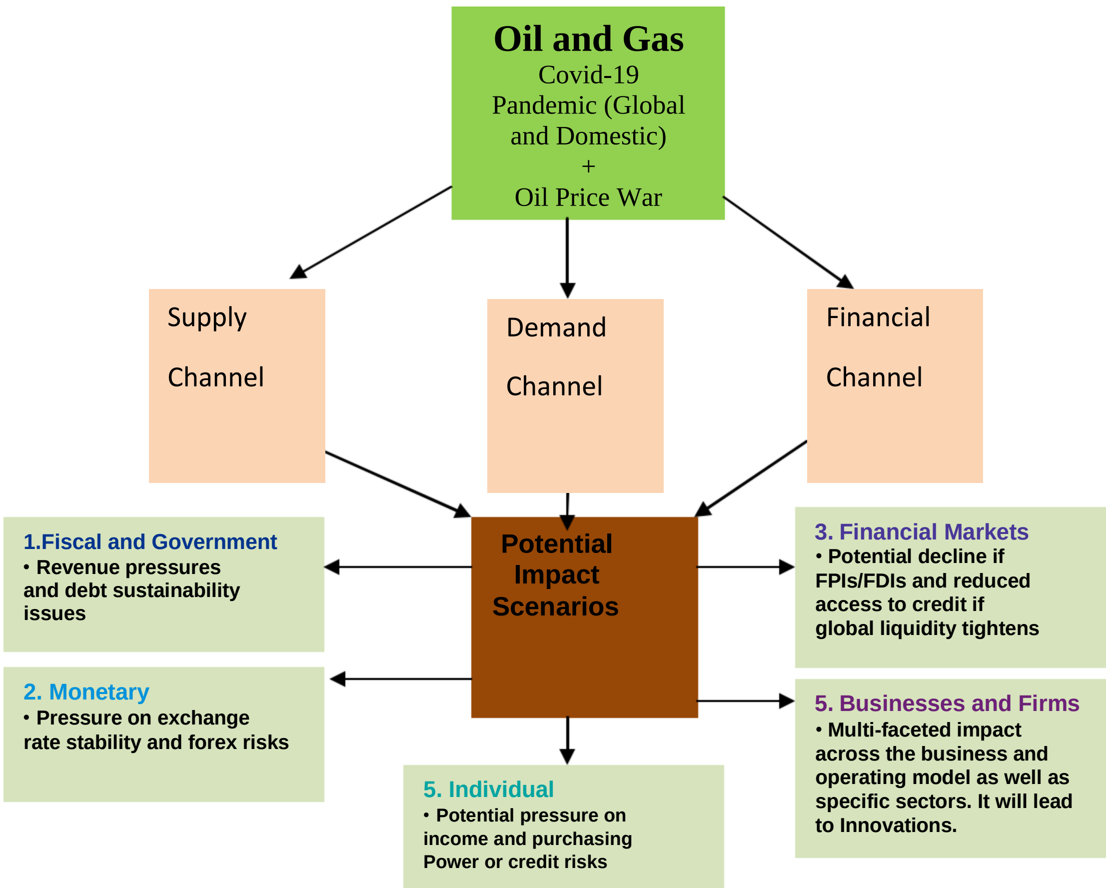


Figure 1: The Impact of Twin Shocks on Nigeria is Multifaceted
Source: Authors and KPMG, 2020.

The Twin Shocks are expected to impact the economy through three channels: supply, demand and financial (KPMG, 2020). However, this study will focus more on the demand channel that has to do with the Demand for/decline in the product and prices of crude oil.

2.2 Universal Spread of COVID-19 (Some selected Countries)

The coronavirus COVID-19 is affecting 215 countries and territories around the world and 2 international conveyances. The list of countries and territories and their continental, regional classification are based on the United Nations Geoscheme. Factual and real-time data on the spread of the coronavirus disease was collected from Worldometer. The data show that the US has the highest number of infected individuals, followed by Spain, Italy, France and Germany as at 18th of April 2020. The statistics are reported in Table 1.

Table 1: COVID-19 Statistics (as at 17th May 2020)

Country	Confirmed Cases	Total Death	Total Recovered	Active Cases
World	4,722,233	313,266	1,813,014	2,595,953
USA	1,507,773	90,113	339,232	1,078,428
Spain	276,505	27,563	192,253	56,689
Russia	272,043	2,537	63,166	206,340
UK	240,161	34,466	N/A	N/A
Brazil	233,511	15,662	89,672	128,177
Italy	224,760	31,763	122,810	70,187
France	179,365	27,625	61,066	90,674
Germany	176,244	8,027	153,400	14,817
Turkey	148,067	4,096	108,137	35,834
Iran	118,392	6,937	93,147	18,308
India	90,927	2,872	34,224	53,831
Peru	88,541	2,523	28,272	57,746
China	82,947	4,633	78,227	87
Nigeria	5,621	176	1,472	3,973

Sources: Peterson and Thankom 2020; https://www.worldometers.info/coronavirus/#countries

Universally, the impact of the Covid-19 pandemic has affected the global economy in two ways. One, the spread of the virus encouraged social distancing which led to the the zero demand of crude oil and thereby crashing the price of crude oil prices from $70 a barrel to as low as $20 a barrel, it also led to the shutdown of financial markets, corporate offices, businesses and global events. Two, the rate at which the virus is spreading, and the heightened uncertainty about how bad the situation could get, led to flight to safety in consumption and investment among consumers and investors (Ozili and Arun, 2020).2 There is a general consensus among top economists that the coronavirus pandemic would plunge the world into a global recession[1]. Top International Monetary Fund (IMF) economists such as Gita Gopinath and Kristalina Georgieva stated that the Covid-19 pandemic would trigger a global recession. In financial markets, global stock markets erased about US$6 trillion in wealth in one week from 24th to 28th of February.

Regional data on the spread of the coronavirus disease which was reported by the World Health Organization show that Europe has the highest number of infected cases, followed by America, Asia, Africa and Oceania as at 17 May 2020. The statistics are reported in Table 2. It is quite obvious that the African regions are not doing badly, and recoveries the Virus is also increasing, which is a good signal of total crushing of the diseased virus soon.

Table 2: World Region Situation in Numbers as of 17th May 2020

Region	**Confirmed cases**	**Active cases**	**Total Deaths**	**Total Recovered**
Europe	1,761,352	844,155	161,672	755, 525
North America	1,662,832	1,138,254	101,950	422,628
South America	425,165	255,557	22,557	147,172
Asia	779,766	309,243	24,342	446,181

[1] Financial Times: Global recession already here, say top economists. https://www.ft.com/content/be732afe-6526-11ea-a6cd-df28cc3c6a68

African	83,363	48,534	2,726	32,103
Oceania	3,647	631	119	7,897

Source: Peterson and Thankom 2020; https://www.worldometers.info/coronavirus/#countries

2.2.1 The Implication of Covid-19 on the Global Oil Market?

As demonic pandemic and so much panic continues to grip the world over the outbreak of COVID19, there is plenty of bearish sentiment hanging over the markets. The Energy Information Agency (EIA) has revised down its global oil demand forecast, which suggests that major importers such as China as well as European countries will reduce demand for oil. The latter has followed the trend of industrial production, which has slowed as manufacturing of waxes, perfumes, dyes, shaving creams, shampoos and conditioners that rely on refined oil have been disrupted by the virus. The trend of falling industrial production is even more noticeable across all grades of fuel spanning gasoline to diesel, which also fell by 2.9% and 3.8% respectively (Fig 2).

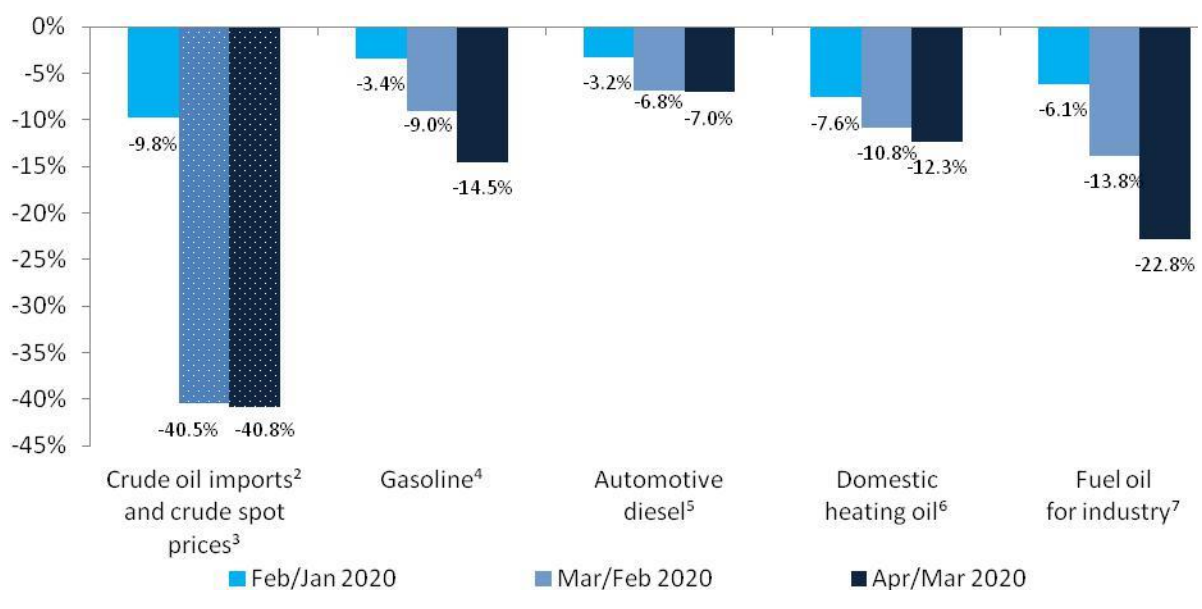


Figure 2: Latest International Energy Association (IEA) Monthly Crude Oil and Oil Product Price Changes[2].

Source: IEA, 2020.

[2] Some data have been extrapolated based on available data. Unless otherwise specified, prices include France, Germany, Italy, Spain, UK, Japan, Canada and USA. 2. Volume-weighted average cif cost, reported in US dollars. Feb/Jan 2020 includes crude oil import costs for France, Germany, Italy, Spain, UK, Japan, Canada and USA. 3. Mar/Feb 2020 and Apr/Mar 2020 are based on Argus crude spot prices and are the simple average of Dubai, North Sea and WTI . 4. Unleaded premium (95 RON) for France, Germany, Italy, Spain and the United Kingdom; regular unleaded for Canada, Japan and the United States. 5. Automotive diesel for non-commercial use. 6. Apr/Mar 2020 includes domestic heating oil prices for France, Germany, Italy, Spain, UK, Japan and Canada. 7. Mar/Feb 2020 includes fuel oil prices for industry in France, Italy, Japan and Spain.

As such, the implications for developing economies will be much more pronounced in the near term, as a weaker currency and higher interest payments will compound budget constraints. Crude oil imports have fallen by 13.4% (chart 2), which will cause the economy to grow at a slower pace. Oil revenue, channeled through government spending, is the main driver of economic activity, but volatile oil prices and procyclical fiscal policy have caused the boom and bust cycles, hence the need to reduce reliance on commodity exports. Furthermore, the low demand in world crude oil for both lighting and heating will affect Nigeria's revenue, and has already affected our budget, which has been cut down to N10 trillion Naira (Budget office, 2020). Although, the global oil prices[3] have fallen to historic lows, the economic impact of COVID-19 will be more heterogeneous as a pharmaceutical company in Japan is currently producing vaccines from antibodies; an approach first used in China. As such, deferred spending in China could reduce the adverse impacts of the virus, while a recovery in manufacturing activity will increase demand for oil over the medium term

Conclusively, the market signals depict that not only will the demand for crude oil be very low, but the global oil industry will experience insufficiency in crude oil storage facilities. Less demand for oil globally, has resulted in storage facilities, refineries, terminals, ships and pipelines reaching their full capacity (Matt, 2020). Demand is falling so fast relative to supply that the main concern of many producers will shift to finding an outlet for their crude oil and also reducing the domestic pump/gasoline prices for petroleum products. Indeed, it is speculated that crude oil prices could turn negative (Sam, 2020).

[3] According to information from oilprice.com, Nigeria's headline crude, Bonny light, approached the $27 mark rising to $26.96 per barrel. This is its highest price in about 2 months. Brent crude has risen to $31.34 per barrel, whereas American headline crude, WTI, which went negative last month, is selling for $27.59 per barrel.

2.3 Covid-19: The Nigerian experience

2.3.1 Trend, facts and spread of COVID-19 within Nigeria

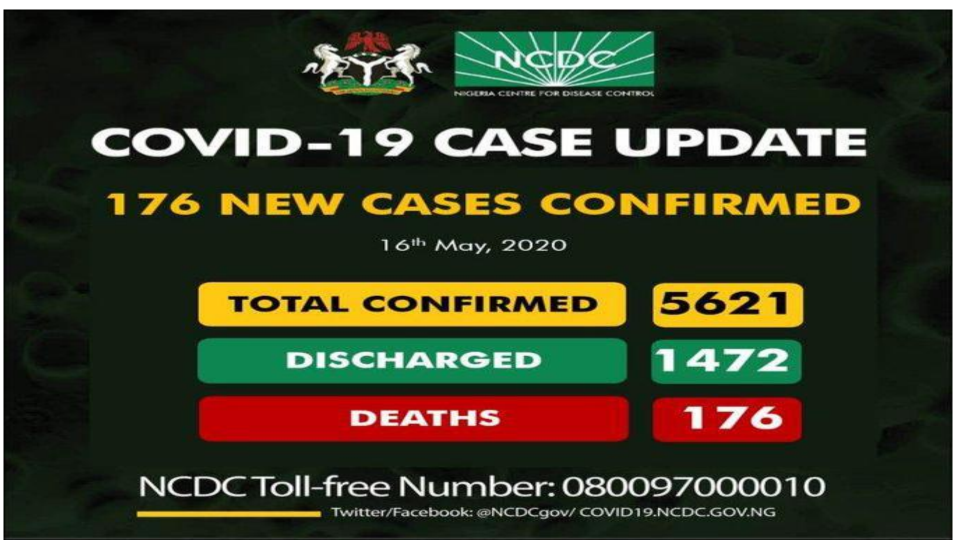
On 27th February, a 44-year old Italian citizen was diagnosed of COVID-19 in Lagos State. The case is the first to be reported in Nigeria since the first confirmed case was reported from China in January 2020. The case arrived the Murtala Muhammed International Airport, Lagos at 10pm on 24th February 2020 aboard Turkish airline from Milan, Italy. He traveled on to his company site in Ogun state on 25th February. On 26th February, he presented at the staff clinic in Ogun and there was a high index of suspicion by the managing physician. He was referred to IDH Lagos and COVID-19 was confirmed on 27th February. Some reported cases are shown in table 3a and 3b and graph below:

Table 3a. Confirmed COVID19 Cases - Nigeria 2020, as @ Sunday 11:58 am 17 May 2020

Confirmed Cases	Active Cases	Discharged Cases	Deaths	Samples Tested
5,621	3,973	1,472	176	32,942

Source: Nigeria Centre for Disease Control (NCDC), May, 2020

Table 3b. Confirmed COVID19 Cases - Nigeria 2020, as @ Saturday 11:58 am 16 May 2020



Sources: Nigeria Centre for Disease Control (NCDC), May, 2020

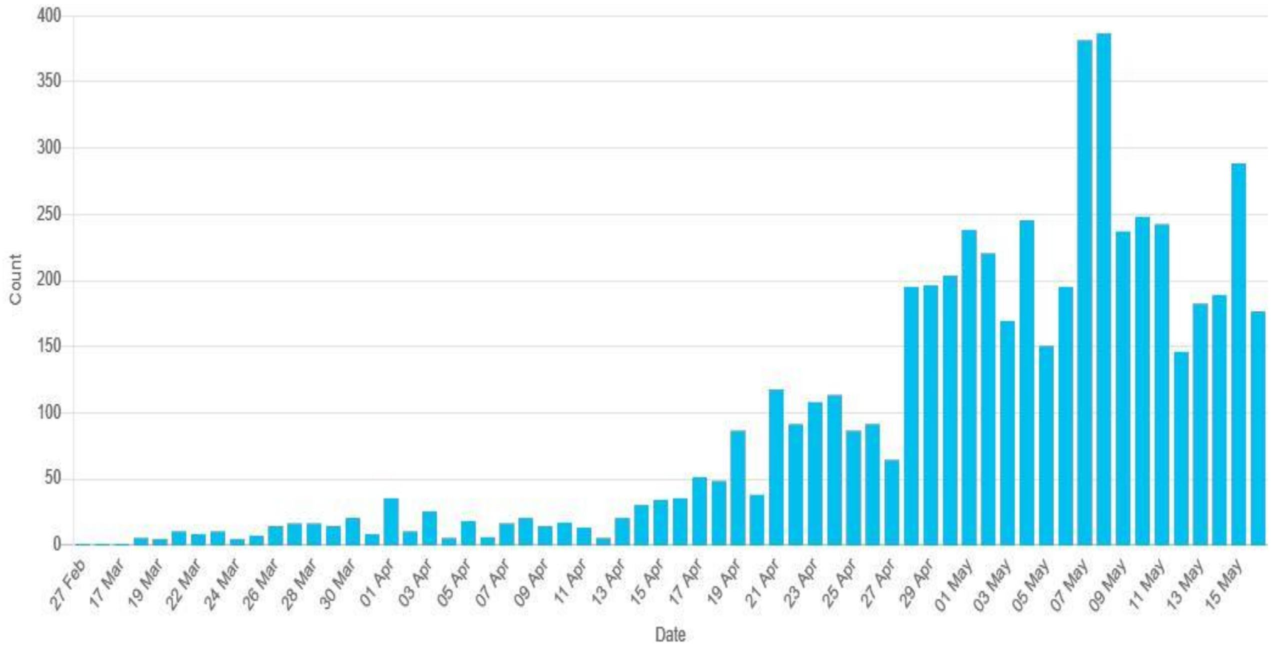


Figure 3: Confirmed COVID19 Cases - Nigeria 2020, as @ Saturday 11:59 pm 16 May 2020[4]
Source: Nigeria Centre for Disease Control (NCDC), May, 2020

As at 15th, May 2020, Two hundred and eighty-eight (288) confirmed cases were reported in the last 24 hours in 15 states – Lagos (179), Kaduna (20), Jigawa (15), Katsina (15), Borno (13), Ogun (11), Kano (8), FCT (7), Ekiti (4), Niger (4), Bauchi (3), Delta (3), Oyo (3), Kwara (2) and Edo (1). No new state recorded a confirmed COVID-19 case in the last 24 hours. The total number of states, including FCT that have reported at least one confirmed case in Nigeria is still 35 (34 states + FCT). One hundred and forty (140) cases were discharged in the last 24 hours in fourteen (14) states – Kaduna (36), Borno (24), Bauchi (16), Sokoto (13), Oyo (12), Zamfara (11), FCT (6), Rivers (5), Adamawa (4), Ekiti (4), Gombe (3), Kano (3), Ogun (2) and Ebonyi (1). Four (4) deaths were recorded in the last 24 hours in two (2) states – Lagos (3) and Gombe (1).

4 A break down of cases by states can be found via www.covid19.ncdc.gov.ng

2.1.2 Covid-19 and the Nigerian Oil and Gas Industry: Direct effects

The transmission mechanism through which the Covid-19 pandemic impacts the Nigerian economy are in five main ways: a) borrowers' capacity to service loans; b) oil demand shocks, forcing the sharp decline in oil prices (crude oil and domestic gasoline/premium motor spirits (PMS) or fuel; c) global supply chain shocks is widespread as many importers shut down their factories and closed their borders, particularly China and Nigeria; d) the national budget; e) major shocks in the Nigerian stock market. Following this, the study examines the impact of the pandemic on the oil and gas industry, with the Nigerian experience.

While the corona virus has spread across over 213 countries becoming a global pandemic, there has been a drastic reduction in oil demand from countries in Europe and Asia who are major buyers of Nigeria's crude oil as they have recorded cases of the virus in their countries. The oil and gas sector largely account for over 90 per cent of the country's foreign exchange earnings. However, the outbreak of the corona virus in December, 2019 in Wuhan, China has taken a negative toll on the sector globally. Following the breakout of the virus is the Saudi-Russia price war, which has also posed a threat to the sector. Figure 4 below shows the trend of global infected cases of the virus and crude oil prices.

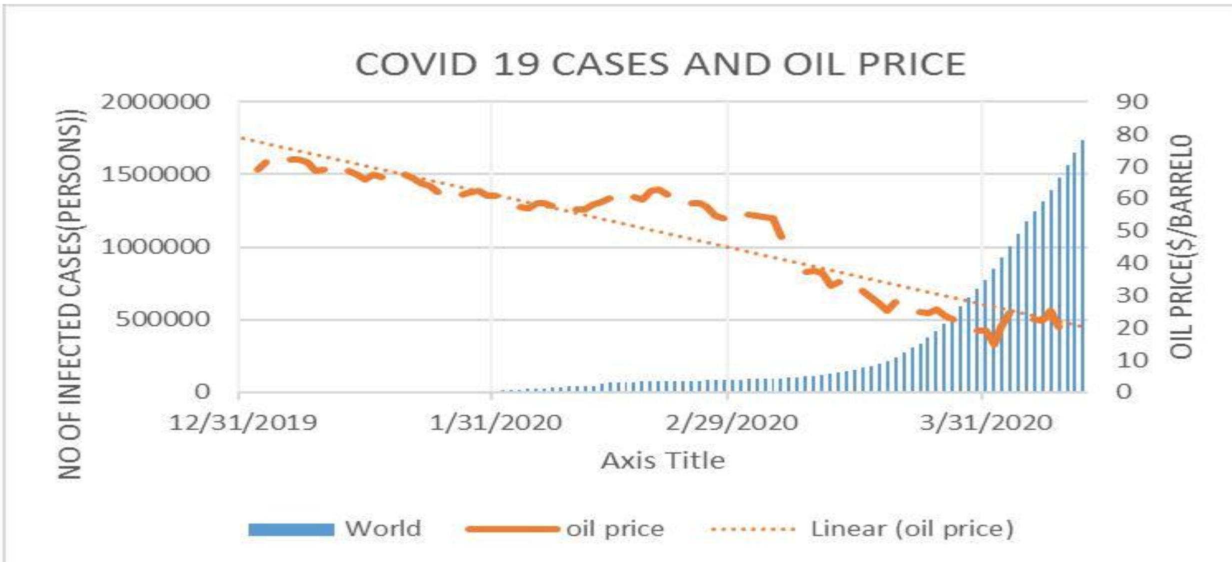


Figure 4: Trend analysis of global infected cases of COVID 19 and oil price.
Source: Computed from CBN Statistical Bulletin, 2019 and github.com, 2020

The increasing rate of confirmed cases necessitated countries to impose a lockdown on their economies and place a ban on international and local travels to control the spread of the virus. This to a large extent has reduced the demand for oil leading to an excess supply over demand in the crude oil market. Following this was the need for production cut by oil producing countries to allow the market to determine prices. However, with the disagreement between Saudi-Arabia and Russia, two of the world's biggest oil producers in this regard, there has been a sharp dwindling in oil prices form$67/barrel in December 2019 to about $20/barrel on 9th April 2020. Given that Nigeria's export market is dominated by oil with oil revenue accounting for about 65% of Government revenue and 88% of Nigeria's foreign exchange earnings (Ajayi, 2019), a dwindling in oil price could have devastating effects for Nigeria. Figure 5 below shows the trend of oil and non- oil exports in Nigeria.

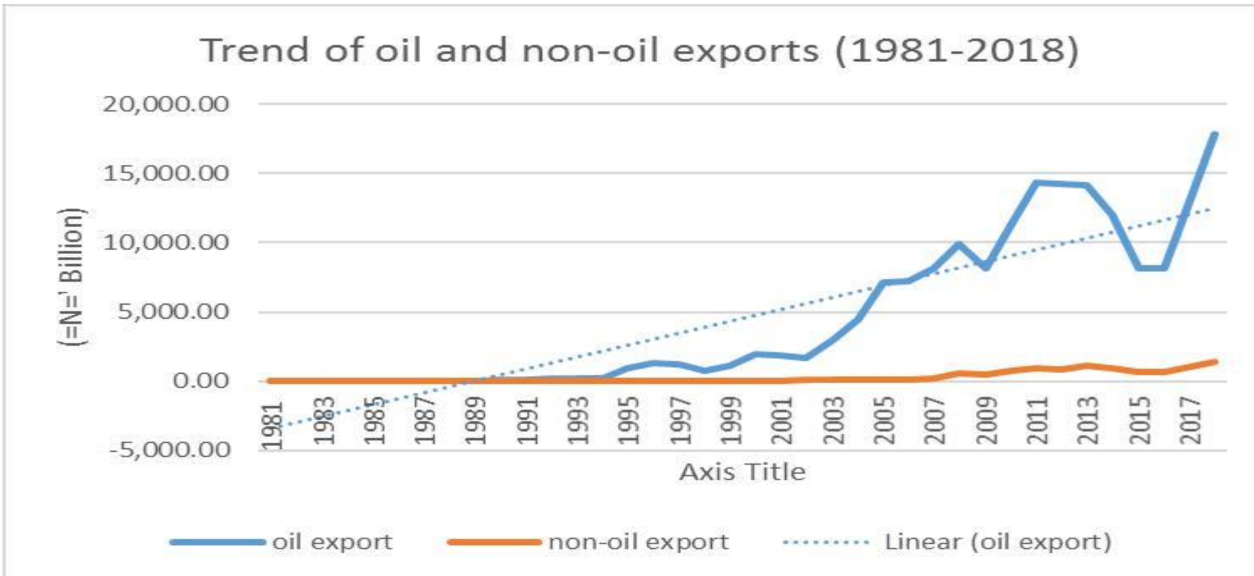


Figure 5: Trend of oil and non- oil exports in Nigeria.
Source: Computed from CBN Statistical Bulletin (2018)

Nigeria is commonly referred as the 49th largest export economy in the world with petroleum oil and petroleum gas dominating the export market constituting about 93% of exports and the remainder being non-oil commodities. Exports are dominated by crude petroleum constituting about 76% of total exports in Nigeria, followed by petroleum gas constituting about 13.8% (OEC, IMF, 2016). As such, a fall in oil price is unhealthy for the Nigerian economy. Given the outbreak of the pandemic, reduced demand for crude oil globally has left the country in a position of unsold vessels of crude oil and LNG. The situation is worsened for Nigeria as major world oil producers like Saudi Arabia and Iraq could give discounts on their supplies due to their low cost of production and in a bid to attract sales. The current cost of crude oil production in Nigeria ranges between 15 to 17 dollars as against Saudi Arabia's cost of between 4 and 5 dollars per barrel (Uzoho,2020).

With the price of oil plummeting drastically with a barrel of Bonny Light crude going for $10 as at May 1st, 2020, and yet without buyers, production could become un-viable for Nigeria. Investment in oil fields is becoming less attractive as companies could start to face liquidity problems making production difficult. For many operators in the industry, crude oil prices are becoming close to the cost of production per barrel. Sustained dwindling of prices could therefore be detrimental for the industry as some operators could embrace a shut-down or drastic budget-cut. Oil companies globally are beginning to halt production as onshore oil storage worldwide is about 85% full. OPEC Secretariat's assessment of available global oil storage capacity stands at over one billion barrels (OPEC, 2020). Given the current unprecedented supply and demand gap there is likely to be an estimated excess volume of 14.7 mb/d in the second quarter of 2020. This oversupply would add a further 1.3 billion barrels to global crude oil stocks, and hence exhaust the available global crude oil storage capacity within the month of May (OPEC, 2020).

The OPEC Reference Basket has fallen from $52.7/b in March 2020 to below $20/b in early April, a decline of around 70% leading to a huge revenue decline particularly for oil exporting countries. This has led to the Federal Government's decision to cut revenue from crude oil exports from the proposed 2.64 trillion naira to 254.2 billion naira and reduce crude oil benchmark to $30 per barrel as against the $57 per barrel in the budget. The pandemic has so much reduced fuel demand as most countries have imposed travel restriction and restricted internal movement.

2.1.3 Implications of the falling oil prices on Nigeria's oil revenue.

The Federal Republic of Nigeria, located on the western bend of the African continent is the world's ninth-largest exporter of oil. The republic was declared in 1960 and has since become a nation with a $375.8 billion gross domestic product (GDP). Nigeria exported 3.8% of the world's total in 2018 with a value of $43.6 billion. Based on land size, the country is comparable to Texas. According to OPEC figures, the oil and gas sector accounts for about 10 percent of Nigeria's gross domestic product (GDP), while petroleum export revenues make up nearly 83 percent of the country's total export revenue (Tsvetana Paraskova, 2020).

Consequently, COVID-19 will affect the Nigeria's oil and gas industry through the underlisted, i) Decreased level of demand for crude oil and revenue loss for Nigeria**-** this brings about supply glut – excess supply of crude oil in the market with few or no buyers.**;** b) Increased pressure on the Naira and foreign reserves- COVID-19 has put *"*increasing pressure on the Naira and foreign reserves as the crude oil sales receipts decline and the country's macro-economic outlook worsens*"* (Economic Confidential, 2020). c) Buyer scarcity. d) DPR declaration of force majeure. e) Cost cutting measures **-** scaling down on projects and reducing their workforce. A major Nigerian independent oil and gas firm, Seplat Petroleum Development Company Plc, are already looking to cut costs by at least 30% to counter a crash in crude prices (Femi, 2020)**. f)** Premium motor spirit (PMS) price review- In reacting to the plunge in crude oil prices, the Petroleum Products Pricing Regulatory Agency (PPPRA, 2020) recently reviewed the pump price of premium motor spirit downward from N145 to N125 *per* litre effective 19 March 2020. A further reduction to N123 *per* litre was made effective 1 April 2020, which is currently in force now.

2.1.4 Implications of falling oil prices on Nigeria's trade flow (export partners)

Table 4 below gives a description of Nigeria's trade flow (export) pattern from 2014 to 2019.

Table 4: Nigeria's trade flow (export partners) from 2014-2019

Countries	2014(bn $)	2015(bn$)	2016(bn$)	2017(b$)	2018(b$)	2019(b$)
India	14,980,986.17	N/A	8933829	7938340.18	9906692.89	8.3
	-14.56%		-18.05%	(17.85%))	-15.88%	-16.40%
U.S.A.	N/A	N/A	3976135.5	5672187.4	0	2.8
			-12.09%	-12.76%		-5.30%
Netherlands	10,492,632.41	N/A	2573547.9	3765995.39	6701517.79	4.9
	-10.20%		-7.83%	-8.47%	-10.74%	-8.90%

Spain	9578485.59	N/A	3029877.1	4401172.46	6318788.9	5.3
	-9.31%		-9.21%	-9.90%	-10.13%	-10.70%
Brazil	8315635.06	N/A	N/A	N/A	N/A	N/A
	-8.08%					
France	5897743.28	N/A	2064425.5	3410700.03	4945979.27	3.6
	-5.73%		-6.28%	-7.67%	-7.93%	-6.70%
South Africa	N/A	N/A	N/A	N/A	3981193.24	3.2
					-6.38%	-7.20%
Others	53613017.2	N/A	15305231	19277971.3	30545570.64	N/A
	-52.11%		-46.54%	-43.35%	-48.95%	

Source: Computed from World Bank Data (wits.org), 2020.

Most of Nigeria's trading partners in terms of exports have been similarly hit by the pandemic, forcing them to shut down their economies. There is a broad decline in global crude oil demand due to the combination of the impact of COVID-19 and the lockdown policy responses implemented to curb the spread of the virus. This depressed demand has filtered to the demand of Nigeria's major oil importer. For example, the top 5 major oil export destinations in 2019, India, Spain, Netherlands, France, South Africa and the US are all battling the pandemic and are under lockdown. There by declining economic activities between Nigeria and its trading partners, this affects our national income in the interim.

3. Conclusion and policy recommendations

This study has attempted a theoretical evaluation of the impact and implications of COVID-19 on the oil and gas industry and the resulting effect on the Nigerian economy. The study shows that the country is highly vulnerable to internal and external oil price shocks on all aspects of the economy, especially the oil and gas sector. The mono-product structure of the economy is heading us nowhere particularly as the country's "sweet crude is turning sour". Furthermore, from the breakdown and critique above it is quite obvious that the impact of the COVID-19 pandemic will have a far reaching implications on the Nigeria economy as it will lead to job losses and layoffs and if nothing is done quickly to bolster the sector will lead to more drastic loss of revenue and continuous cuts in our national budgets and which will increase more hardship on the populace. By implications, the lower crude oil price impacts will remain within the Industry well after some normalcy returns to the daily life of people and companies.

However, a well-thought out stimulus package, which is not selective in its applications, could ensure that the industry is able to bounce back much quicker than expected. It is the right time to strengthen our efforts in economic diversification as Nigeria needs to look beyond oil and gas, put the best economic and political team together and re-strategize. Some of the ways to boost the economy, maybe and not restricted to as follows: (i) Interim government measures. (ii) Increased more CBN Stimulus Package (iii) Emergency Economic Stimulus. The key stimulus which Nigeria should channel most resources to economic diversification and prioritise alternative viable sectors such as agriculture, solid minerals, manufacturing and services sectors should be further intensified. Enough of sheer rhetorical promises that have amounted to nothing!

References

Ajayi, Olaniwun (2019). COVID-19: Our Commitment to your Health and Safety. http://www.olaniwunajayi.net/blog/covid-19-publications/

Central Bank of Nigeria (CBN) Statistical Bulletin (2018). Staistical Bulletin. A publication of the CBN.

Central Bank of Nigeria (CBN) Statistical Bulletin (2019). Staistical Bulletin. A publication of the CBN.

Chou, J., N.-F. Kuo, et al., 2004. Potential Impacts of the SARS Outbreak on Taiwan's Economy. Asian Economic Papers 3(1), 84-112.

Economic Confidential, (2020). Nigeria's Economy Already Fragile Before COVID-19 Pandemic – Minister https://economicconfidential.com/2020/03/nigeria-economy-fragile-covid19-pandemic/

Femi Asu (2020). Nigeria slashes crude selling prices to woo buyers, Copyright PUNCH Newspaper. https://punchng.com/nigeria-slashes-crude-selling-prices-to-woo-buyers/

International Energy Association (IEA), (2020). Monthly Oil Price Statistics, Published 14th, May, 2020. Available online at www.iea.org

KPMG (2020) Covid-19: Economic Impact & Pandemic Planning. A Business Impact Series. Issue 1, 30 March 2020.

Matt Egan (2020), The world could soon run out of space to store oil. That may plunge prices below zero. https://edition.cnn.com/2020/04/01/business/oil-prices-crash-storage-space/index.html

NigeriaCentre for Disease Control (NCDC), (2020). COVID-19 Nigeria. Online at www. https://covid19.ncdc.gov.ng/report/

OEC, IMF, (2016). OEC Statistics and IMF Annual Report 2016 - International Monetary Fund. https://oec.world/en/profile/country/nga/#oilgas

Oil & Gas Journal and Offshore magazine-https://10times.com/covid-19-impact-on-the-oil-gas-industry Offshore Technology, 2020

OPEC Monthly Oil Market Report (MOMR) 11th march 2020

Ozili, Peterson., and Arun, T. (2020) Spillover of COVID-19: impact on the Global Economy SSRN Electronic Journal November 2020 DOI: 10.2139/ssrn.3562570

Oil drops as supply concerns outweigh OPEC and allies' historic production cut. https://www.cnbc.com/2020/04/12/oil-prices-flat-after-opec-and-allies-agree-to-historic-production-cut.html
https://www.cnbc.com/pippa-stevens

Qun Li et al. (2020) Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus–Infected Pneumonia. *The New England Journal of Medicine*, Vol. 382: N0. 13 *Massachusetts Medical Society.* Pp. 1199-1207

Peterson, Ozili and Thankom Arun (2020). Spillover of COVID-19: impact on the Global Economy, https://www.researchgate.net/publication/340236487

Peters Ifeoma, Omolola Coker and Adebimpe Mosanya (2020). Covid-19: Impact on the Nigerian Oil and Gas Industry. *DNL Legal & Style, 2020.* https://dnllegalandstyle.com/2020/covid-19-impact-on-the-nigerian-oil-and-gas-industry/

PPPRA (2020). The Petroleum Products Pricing Regulatory Agency is an agency of the Federal Government of Nigeria responsible for monitoring and regulating the supply and distribution, and determining the prices, of petroleum products in Nigeria

Sam Meredith, (2020). Oil prices could soon turn negative as the world runs out of places to store crude, analysts warn. https://www.cnbc.com/2020/04/01/coronavirus-oil-prices-could-turn-negative-as-storage-nears-capacity.html

Stevens, (2020). https://www.stevens.edu/directory/student-health-services/health-advisory-update/coronavirus-2019-covid-19-information/faqs.

Tsvetana Paraskova, (2020). Nigerian LNG Has Nowhere To Go As European Demand Crashes. Oilprice.com

Thisday Newspaper, (2020). COVID-19 in Nigeria: Economic Perspectives and Mitigating the Risks. Monday, April 13th, 2020. https://www.thisdaylive.com/index.php/2020/04/07/covid-19-in-nigeria-economic-perspectives-and-mitigating-the-risks/

Uzoho,(2020). COVID-19. Eko Electricity Distribution Company (EKEDC) supports Lagos with N150 million, in **Thisday Newspaper, (2020).** https://www.thisdaylive.com/index.php/2020/04/07/covid-19-ekedc-supports-lagos-with-n150m/

World Bank Data (2020). https://data.worldbank.org/
https://www.worldometers.info/coronavirus/#countries