Impact of Covid-19 Pandemic on Global Economy

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Abstract

This paper examined the effect of Covid-19 pandemic on the global economy. The study employed an analytical approach reviewing the most recent literature Covid-19 global Statistics, oil price, policy responses and stock market. It was discovered that Covid-19 has spread to well over 200 countries and the economic cost may last longer than the health effect. The outbreak caused an unprecedented crash in oil price which devastated the economies of oil dependent countries. The impact of the shock of Covid-19 is likely to be less than the impact of the extreme measures taking to flatten the spread such as quarantine, lockdowns, traveling and movement restriction. The study recommends a coordinated action by all countries in implementing medical protocol of curtailing the spread and a fiscal response targeted at the productive sectors to fast-track kick starting of the economies. This will require more palliative measures to consumers and bailout to businesses

JEL classification: G14, G15, G18, H51, I18

Keywords: Covid-19, Outbreak, Coronavirus, Policy response, Stock Market

1. Introduction

The Corona virus pandemic called Covid-19 that started in Wuhan city Hubei province of China in 2019 and spontaneously spread to over 200 countries in Europe, Asia, United States and Africa (Akira Toda 2020, McKibbin and Fernando 2020, Salisu, Ebuh et al. 2020) devastated the world economy nearly grounding it to a halt (Salisu, Ebuh et al. 2020). Over 5.8 million confirmed cases with an estimated of about 360,000 deaths and 2.4 million recoveries from the virus as at 28 May, 2020 were recorded (The New York Times, 2020). The pandemic has generated economic and health crises that have deepen uncertainty and fear on its impending repercussion on the global economy. The World Health Organization on January 30th 2020, declared the Covid-19 outbreak a global emergency given its public health risk (Fernandes 2020, Nicola, Alsafi et al. 2020, Phan and Narayan 2020) and subsequently, declared it a global outbreak on 11th March, 2020 (Liu, Manzoor et al. 2020, Zhang, Hu et al. 2020).

To contain the exponential spread of the virus (flatten the curve), countries have adopted different measures ranging from total lockdowns, border closure, quarantine, travel restriction and complete business shutdowns (Akira Toda 2020, Ngwakwe 2020). These resulted in supply cuts exacerbated by panic stock piling and demand crash due to immobility of people. But at the top of it, is the enormous demand for medical supplies as many countries including the developed countries are overwhelmed in terms of health personnel, facilities and supplies. Experts recommend improved hygiene like face masks, washing hands, social distancing and self-isolation as the first line of defense of curtailing the spread.

These measures have implication for businesses across the globe. The Corona virus has deepened economic suffering and clearly has the potential to set an unprecedented economic recession globally. The unstable nature of the virus makes it tough for policymakers to come up with the right macroeconomic policy to contain it. Baldwin and Weder di Mauro (2020) observed that the Covid-19 is spreading economic suffering worldwide and it may be as contagious economically as it is medically. Though the magnitude of the impact of the pandemic is unpredictable, its shock however, is likely to linger for a long time and perhaps cause major structural changes in world economies. For instance, physical trading has given way for online shopping which has affected the supply of groceries and veggies. But the major first hit that shook the world was the steepest one-day oil price crash observed in closely three decades. Brent oil price crashed from \$34/barrel to \$25.70 on March, 2020 registering a 24% decline (Nicola, Alsafi et al. 2020). Due to the high economic uncertainty, the global stock markets experienced a crash of about \$6 trillion in wealth within a week from 24th to 28th February, 2020. And in the same week S&P 500 index made a loss of about \$5 trillion (Ozili and Arun 2020).

The slowdown of the Chinese economy as the major supplier of consumer and producer goods, has created disequilibrium in global commodity markets due to disruption in the supply chain as most of its export factories were shutdown (Ozili and Arun 2020, Salisu and Vo 2020). Countries like Nigeria that heavily rely on supplies from China are already experiencing shortages resulting in higher prices of commodities. The cut in inputs has also affected the production of companies leading to layoffs and shutting down operations. Unemployment has escalated, inflation has risen and poverty deepened (Ashraf 2020, Fernandes 2020, Zhang, Hu et al. 2020). The global financial markets have been hit hard by the shocks and major stock indices have plummeted (McKibbin and Fernando 2020). Fernandes (2020) observed that the Covid-19 pandemic is different from other shocks in history as it entails a combination of both supply and demand crises never experienced before and which is defiant to fiscal stimulus or central banks' monetary policies.

This paper attempts to review how the Covid-19 pandemic has affected the world economy. The rest of the paper is organized as follows: section two present global statistics on Covid-19, section three presents impact of Covid-19 on oil dependent countries, section four gives the impact of covid-19 policy responses on the economy section five reviews impact of covid-19 on world stock markets and section six concludes the paper.

2. Global Statistics on Covid-19

Table 1 shows the global spread of Covid-19 by country as at 5th July, 2020 which was obtained from Worldometer. Clearly from the Table, US had the highest registered cases which were about 3 million cases followed by Brazil (1,578,376), India (695,396), Russia (681,251), and UK (285,416).

Table 1 World Covid-19 Statistics

Countries	Total Cases	Total Deaths	Total Recovered	Population
World	11,467,740	535,048	6,489,415	
USA	2,955,345	132,394	1,261,420	331,023,450
Italy	241,611	34,861	192,108	60,460,552
Iran	240,438	11,571	201,330	84,000,693
Germany	197,460	9,085	181,700	83,787,168
South Africa	187,977	3,026	91,227	59,314,150
France	166,960	29,893	77,060	65,275,320
China	83,553	4,634	78,516	1,439,323,776
Nigeria	28,167	634	11,462	206,144,243
Ghana	20,085	122	14,870	31,074,883
Japan	19,282	977	16,959	126,470,615
UK	285,416	44,220	N/A	67,889,941
Mexico	252,165	30,366	152,309	128,944,098
Brazil	1,578,376	64,365	978,615	212,574,666
India	695,396	19,692	423,001	1,380,122,667
Russia	681,251	10,161	450,750	145,935,301
Saudi Arabia	209,509	1,916	145,236	34,817,001
Turkey	205,758	5,225	180,680	84,346,550
Canada	105,317	8,674	68,990	37,745,217
Pakistan	231,818	4,762	131,649	220,920,226
Cameroon	12,592	313	10,100	26,548,238
Source: Worldometers 2020				

The World has witnessed many pandemics some having a global spread whereas few were restricted to a particular region. Each has its underlying nature, source and the concomitant causalities. For instance, the Asian flu which originated in China in 1957-58 had a global coverage and led to the death of over a million people. Another pandemic that claimed similar number of causalities was the Hong kong Flu of 1968. However, the Ebola Virus pandemic which originated in West Africa mainly affected the region unlike the rest. This information is depicted in Table 2.

Table 2 History of Pandemics

Pandemic	Country/Year	Coverage	Estimated Deaths	Affected Group
Asian flu (H2N2)	China 1957/58	Global	1.1 Million people	school children, young adults, pregnant women and the elderly
Hong Kong flu (H3N2)	Hong Kong 1968	Global	1 Million people	Mostly over 65 years old
Severe Acute Respiratory Syndrome (SARS)	China 2002	Global[1]	X	18,000 to 46,000 deaths
2009 Avian flu (N1H1) – Bird Flu	California 2009	Global[2]	151,700 - 575,400 people	x
Middle East Respiratory Syndrome (MERS)	Saudi Arabia 2012	Global[3]	35% of reported patients died	x
Ebola Virus Disease (EVD)	West Africa 2014 – 2016	West Africa	X	All
Corona Virus (Covid-19)	Wuhan, China 2019	Global	535,048	All
Source: Baldwin and Weder di Mauro (2020)				

3. Impact of Covid-19 on Oil Dependent Countries

Just before the pandemic, oil price crashed in the international market due to the price cold war between Saudi Arabia and Russia. The impasse between the two countries started during OPEC meeting in Vienna on 6th March, 2020 (Nicola, Alsafi et al. 2020, Salisu, Ebuh et al. 2020). This led to oil glut in the international market that precipitated an unprecedented crash in oil price which devastated the economies of, especially, the oil dependent countries like Nigeria, Venezuela and Angola (Ozili and Arun 2020). With the surge in Covid-19 pandemic, oil price declined by about 30 per cent which is the highest recorded since the end of Gulf War of 1991 But with the ease in movement restrictions and after an agreement was reached by OPEC

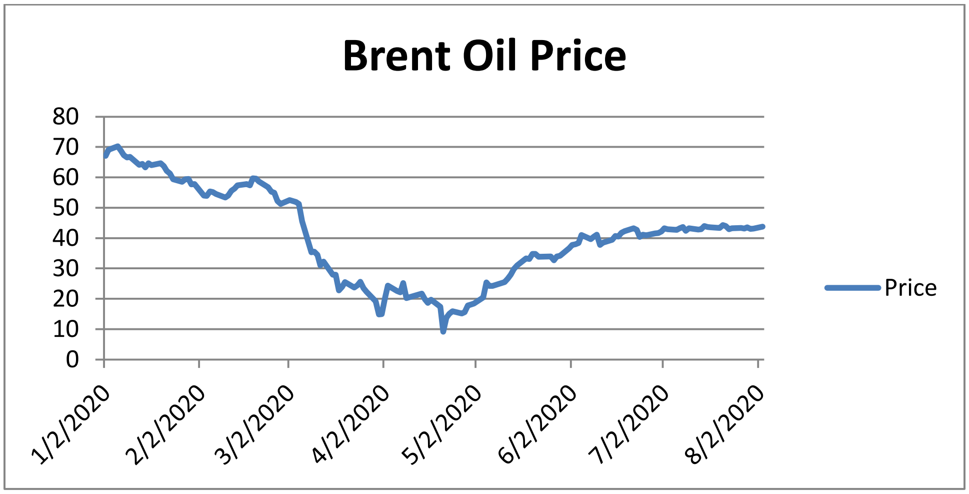
[1] Mostly affected China, Hong kong, Taiwan and Canada
[2] Mostly affected in 2009 were US, Mexico, Canada, and the UK
[3] more than 80% of the cases

members to cut down production, oil price gain a rebound by April, 2020 (Salisu, Ebuh et al. 2020).

A decline in oil price is the major channel through which Covid-19 will affect oil producing countries. Though other factors may have contributed to the decline but Covid-19 is likely the most important factor due to drastic fall in demand and closure of the Chinese economy. China accounts for about 14% of global oil demand and for more than 75% of growth in oil demand (McKibbin and Fernando 2020). And China been the global hub of supply chain, disruptions in its economy had spread a contagion to other countries accentuating fears and uncertainty. The lockdown led to low demand for oil, people don't move, airports and borders were shutdown, factories closed and all these combined to worsen the oil crises. Budget adjustment became eminent like in Nigeria, because benchmarks were set far and above the realities of the situation. This also affected balance of payments accounts. Countries such as Nigeria began hunting for foreign loans to bridge the gaps in current account deficits. The pandemic requires huge investment in healthcare requiring facilities, equipment and personnel.

Brent Oil price crashed from about \$70 per barrel to about \$10 per barrel from 2nd January to 2nd May 2020 which was unprecedented in recent decades as indicated in Figure 1. This is a loss of about 70% of its value and the storage capacity approaching its limits. The energy market has experienced one of its greatest shocks since the one of 1973. This has jeopardized the economies of oil dependent economies with shrinkage of foreign exchange to carryout fiscal expenditure. Fiscal crises is likely eminent especially for countries like Nigeria that have low external reserve. Thus, most countries have to fall back on foreign loans to augment budget deficits.

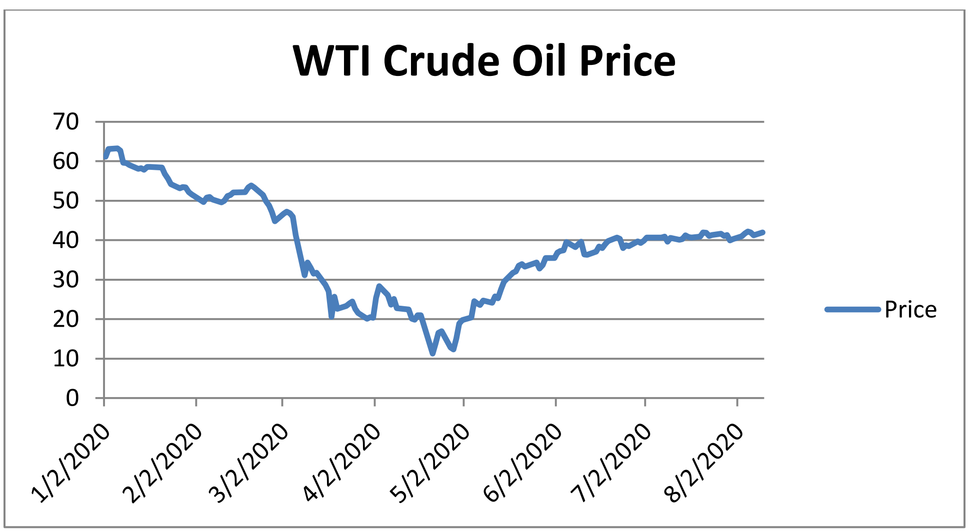
Figure 1 Brent Oil Price



Source: Wall Street Journal

Like Brent Oil, WTI oil price plummeted from a high level of over $60 per barrel on 2nd January to as low as about $10 per barrel on 2nd May 2020 as presented in Figure 2. This is about 83% loss within the short span of time.

Figure 2 WTI Crude Oil Price



Source: Wall Street Journal

4. Impact of Covid-19 Policy Responses on the Economy

Covid-19 hit the global economy below the belt as it has rendered policy makers, academics and scientists incapacitated on how to deal with it. The books are incapable of providing neither ready-made policy prescriptions nor economic or medical models available to address the outbreak. The pandemic is loaded with uncertainty whose nature, mutation, impact, remedy and outcome are highly unpredictable. Countries are seemed to be left at the mercy of learning from one another as the disease and various policy responses evolve (Phan and Narayan 2020). It appears medical science and economics have being pushed to the brink of new epoch, exposing their limitations in providing the needed answers on how effectively to deal with Covid-19 economically and medically. Restoring the world back to normalcy requires finding the medical and economic answers to the novel virus in order to avoid gliding in to yet another global financial crisis.

The impact of the shock of Covid-19 is likely to be less than the impact of the extreme measures taking to flatten the spread in order to avoid large scale contagion (Zhang, Hu et al. 2020). Though the virus is highly contagious, its lethality however, in most cases as observed, is not worse than the seasonal flu (Weder di Mauro 2020). As at 20th July 2020, the total global cases of Covid-19 were 14, 749, 675 out of which 8,805,250 (94%) have recovered and discharged, 59,701 (1%) were serious or critical and the number of people that died were only 610, 834 (6%). The number of deaths is highly skewed if considered per country, for instance about 143,515 or 24% of the people that died were in the US whereas some countries have single digit and some with zero deaths. China, were the virus started had only 4,634 deaths (Worldometers, 2020). Thus, the different policy measures adopted by various countries in the forms of restrictive movements of people and goods or complete lockdown of businesses could have more negative impact on economies and could last longer than the shock from the pandemic. As observed by Weder di Mauro (2020) the pandemic if not managed effectively with the right economic policies could escalate into a global economic crises that could impede globalization.

Following the crash of stock market in the US, the Federal Funds Reserve (FED) declared a zero interest rate policy and rolled out not less than $700 billion quantitative easing (QE) rescue package. Within a week it further extended the QE due to the negative reaction in the market (Zhang, Hu et al. 2020). Covid-19 pandemic compelled OECD to review its 2020 global economic outlook estimate from 2.9 per cent to 2.4 per cent and cautioned that if it goes out of hand it could further pull down the global growth to 1.5 per cent this year (OECD, 2020) cited in (Ngwakwe 2020).

The UK government introduced a package of policy measures in response to Covid-19 such as Coronavirus Job Retention Scheme (JRS) to subsidize the earnings of furloughed employees. This allows companies to reduce the hours of workers to zero without laying them off, removing the costs of searching and re-hiring workers later on. It is estimated that the scheme will cost $60 billion for the 8-months duration of the scheme (Brewer and Tasseva 2020)

It is painfully evident that the increasingly strict measures imposed by governments on business activities, travel restrictions, border closures, and factory closures to stem the tide create great economic damage across countries that could last long (Berg, Bonnet et al. , Baker, Bloom et al. 2020, Cochrane 2020). No one can reasonably predict how wide and deep the uncertainty will be, when the vaccines will be ready and the resultant effect of policies and the reactions of people (Wagner 2020). It is thus, important to consider alternative measures which could flatten the curve while at the same time avoid over heating the economy.

There are basically three main channels through which the Covid-19 Pandemic could affect the global economy: demand, supply and confidence. The strict measures taken to flatten the spread such as travel restrictions, border closures, factory closures and falloff in the services industries have disrupted the global supply chain. Decline in demand is imminent due to stay at home enforcements, layoffs, movement restrictions, schools closure and downturn in the tourism and entertainments sectors. These have generated an atmosphere of uncertainty affecting both consumer and producer confidence negatively. As a result consumers will either delay or decrease consumption of goods and services, similarly producers will either delay, decrease or forego new investments opportunities (Boone 2020).

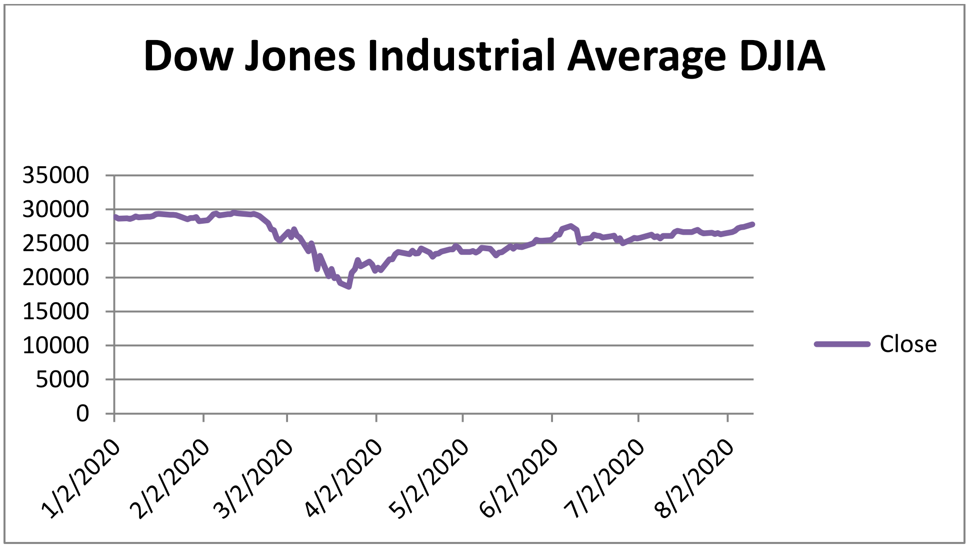
5. Impact of Covid-19 on World Stock Markets

At the global level the major global stock indices have recorded drastic decline from the shock of Covid-19 pandemic amounting to trillion of dollars losses (Ngwakwe 2020). Stock markets are prone to external shocks such as the global financial meltdown of 2008 and even to non-economic factors like epidemics. In the US the global hub of stock markets, the S&P 500 index which represents the stock performance of 500 large companies on the US stock exchange, the Dow Jones Industrial Average and the NASDAQ crashed substantially until the US government secured the Corona virus Aid, Relief and Economic Security (CARES) Act (Nicola, Alsafi et al. 2020). In March 2020, the US stock market stroke the circuit breaker four times in ten days which was hit once in 1997 since its inception in 1987 (Zhang, Hu et al. 2020).

Stock markets in Hong Kong, South Korea and Australia have recorded more that 5% drop daily while its about 3% drop in China (Salisu and Vo 2020). FTSE in UK crashed more than 10 per cent on 12th March, 2020, its poorest record since 1987. Japan's Stock exchange dropped by more than 20 per cent from its peak position in 2019 (Zhang, Hu et al. 2020). Stock markets globally have exhibited tremendous volatility never experienced before given rise to a cumulative loss of about 12.35 per cent value between Janaury and May 2020 and more than $9 trillion loss from the commencement of the Covid-19 pandemic (Salisu, Ebuh et al. 2020).

For instance, the Dow Jones Industrial Average dropped from about 29,000 point to about 19,000 point from 2nd January to 18th March 2020. This gives a negative margin of about 10,000 point making it to lose one-third of its value (or about 35%) which is a huge loss to investors as shown in Figure 3. It is its largest sharpest fall since the 2008 financial crises. But it rebound since then to about 27,000 point as at 2nd August 2020 assuming a persistent trend. Though Wagner (2020) observe that the second-worst day ever of the Dow Jones Industrial Index occurred on March 16; three of the 15 worst days ever of the US market fell between March 9 and 16.

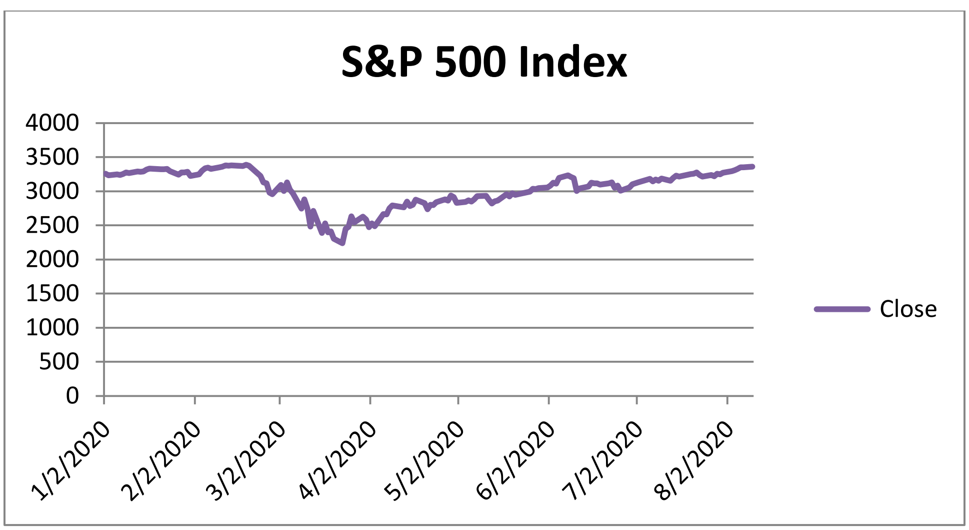
Figure 3 Dow Jones Industrial Average DJIA



Source: Wall Street Journal

S&P 500 nosedived from about 3300 point to about 2300 point losing about 30% of its net value from 2nd January to 18th March 2020 as indicated in Figure 4. But Zhang, Hu et al. (2020) reported that its lowest was o 20th March. The index rebound and took up an upward trend regaining its previous value before the crash.

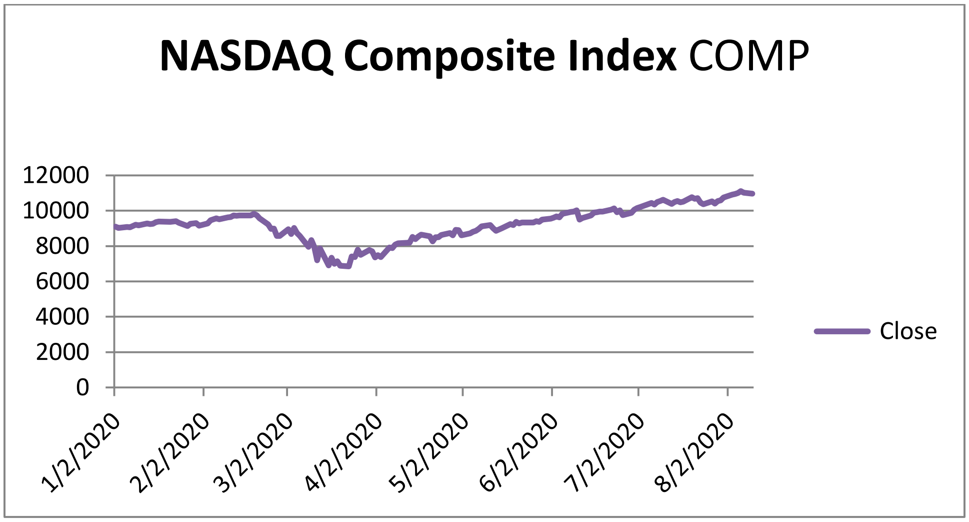
Figure 4 S&P 500 Index



Source: Wall Street Journal

As indicated in Figure 5 NASDAQ crashed from a high level of about 9800 point as at 2nd January to about 6800 on 18th March 2020 which translates in to about 30% loss.

Figure 5 NASDAQ Composite Index COMP



Source: Wall Street Journal

The stock market jumps kick started as a reaction to news on the course of the Covid-19 outbreak in the US in mid-February and early March 2020. The subsequent swings in March toward the end of April were a reflection of the policy responses to the outbreak particularly monetary and fiscal policies (Baker, Bloom et al. 2020).

6. Conclusion

The paper examined the effect of the Covid-19 Pandemic on the global economy. The outbreak has created disequilibrium in the global economy due to disruption in the supply Chain due to shut down in the Chinese. The virus has spread globally with the US having the highest recorded cases and deaths. The pandemic caused a major crash in oil price which is the worst case since the Gulf War in 1991 and this jeopardized the economies of oil dependent countries. The impact of Covid-19 on the economy will probably be less than the impact of the harsh policy measures taken to flatten the curve. Global stock markets have recorded their largest sharpest fall since the global financial crises of 2008 due to the pandemic.

At the policy level, the study recommends a coordinated action by all countries in implementing medical protocol of curtailing the spread and a fiscal response targeted at the productive sectors to fast-track kick starting of the economies. This will require more palliative measures to consumers and bailout to businesses.

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