

Received:27/05/2020

Accepted:2020/06/28

## Coronavirus pandemic (COVID-19): economic impact on stock markets and oil industry

جائحة كورونا (كوفيد-19): الأثر الاقتصادي على أسواق الأسهم والصناعة النفطية

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### Abstract:

The coronavirus (COVID-19) pandemic spread is mainly a human catastrophe, affecting hundreds of thousands of human beings, obviously, it is also having a rising impact on the global economy, in this paper, we try to offer some of our insights on the impact of the COVID-19 pandemic on the world economy, including the stock market and oil industry.

**Keywords :** Covid-19, economy impact, stock market, oil industry

### الملخص:

يشكل انتشار جائحة كورونا كارثة إنسانية، أثرت على مئات الآلاف من السكان، ومن الواضح فإن تأثيرها امتد بشكل متزايد ليشمل الاقتصاد العالمي، هذه الورقة تحاول تقديم رؤية حول تأثير الجائحة على الاقتصاد العالمي بما في ذلك سوق الأسهم السندات، وقطاع الصناعة النفطية.

**الكلمات المفتاحية:** كوفيد-19، الأثر الاقتصادي، سوق الأسهم، صناعة النفطية.

**JEL:** B21/22

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## **Introduction:**

According to the latest forecast of IMF, the world economy will suffer its worst year since the great depression of the 1930s, This unprecedented shock has been a huge impact on the world economy, a lot of important sectors have shutdowns due to the collapse of demand in international markets. in addition, far-reaching processes to contain COVID-19 pandemic - lockdowns, travel restrictions, business shutdowns, and social distancing - have suddenly lead economic activity to a near-standstill. (1), Arguably COVID-19 undetectability continues to be a major challenge for social and economic relationships. in efforts to reduce the transmission of contagion among people around the world, governments have been widely adopted a strategy of suppression of personnel movement Since everyone not exhibiting symptoms must be presumed to be potentially infectious, everyone must avoid everyone else (2).

Under the current situation, Analysts thus posed questions, is the stock market going meltdown? are investors losing their money? are the oil and gas will be affected by consequences of COVID-19?, there are no answers at least for now, because the pandemic (COVID-19) continues to evolve.

### **1- Coronavirus (COVID-19) Outbreak**

Coronavirus Disease (COVID-19) is believed to has first appeared in Wuhan, the capital city of Hubei province in China, in December 2019, later has spread across Asia like wildfire, and after few days the virus ravaging many countries, like EU countries, USA, Arab gulf countries, and many countries in Africa and South America. According to statistics provided by WHO, As of 16 April 2020, the cumulative number of confirmed cases worldwide reached 2,129,343, China – the epicenter of the epidemic - led the world in the levels of the spread of the pandemic, As of April 16, 2020, the COVID-19 had infected 82,341 people in total and around 33,342 have succumbed to death in Greater China. (3). to refer, the epidemic also spread in other countries and regions, the number of cases exceeded 666,949 in the USA, Spain has also seen an increase in the number of infections by about 182,816. Italy has officially

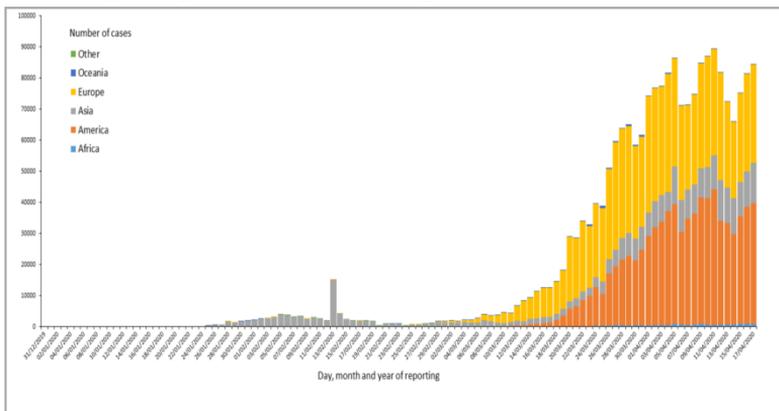
recorded 168,941 infections from the virus - the world's third-highest total after the United States and Spain.(4) Many other major countries also witnessed significant numbers of confirmed infections France (147,863), Germany (135,663), UK (103,093), Iran (77,995).

In nutshell, since 31 December 2019 and as of 16 April 2020, 2 029 930 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 136 320 deaths, figure.1 shows the evolution of the infected cases of COVID-19 worldwide.

**fig.1:** evolution of the epidemic COVID-19 worldwide.

**Source:** WHO, (April, 2020) COVID-19 worldwide

The figure above allows you to compare the total number of confirmed cases and across the WHO sources over time. This data is shown until April 16th, the date of our last WHO update, This histogram you can make comparisons for all continents



around the world.

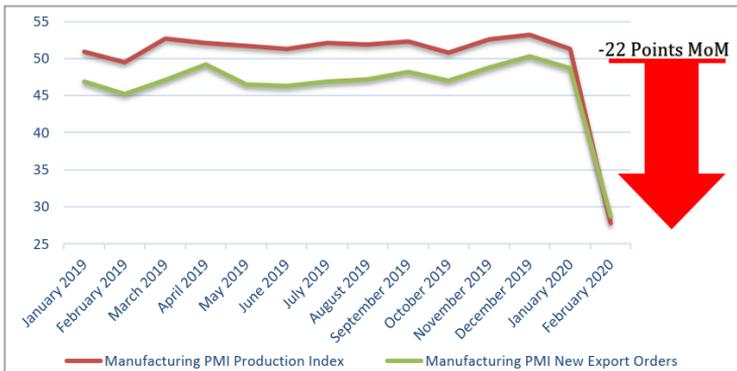
## 2- Global economy take a hit

As the virus (COVID-19) has spread across the globe, apprehensions have shifted from large-scale manufacturing issues to decline business in many significant sectors. The pandemic caused the collapse of major economies, according to recent studies this might be the largest global recession in history, with more than a third of the global population at the

time being placed on lockdown. as indicated by Japanese Finance Minister Taro Aso. at the recent G20 gathering in Riyadh, Saudi Arabia, on February 24, 2020, the spread of the new coronavirus is a public health crisis that could pose a serious risk to the both of macro and micro economy through the halt in business activities, interruptions of personnel's movement and cut-off of supply chains” as well.(5)

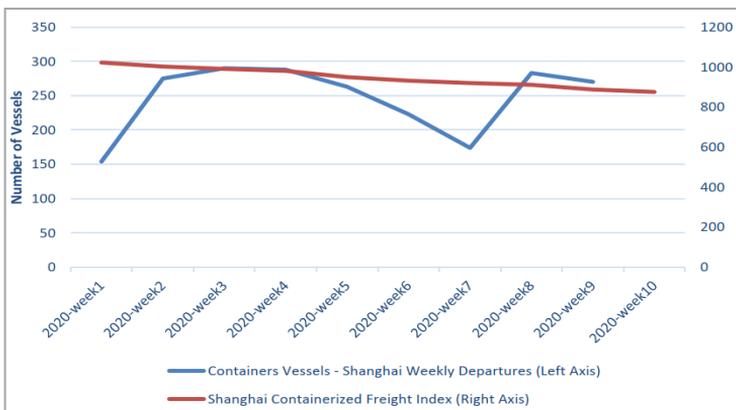
At first, the new strain of coronavirus (COVID-19) had a clear effect on Chinese economy. Thereafter, it has been expanded to include the global economy. China's industrial processes are the cornerstone of many global business operations. Any problem of China's output is expected to have fallouts elsewhere through regional and global value chains. due to quarantine measures in China, the economy has been lost weeks of activity, production halts and commercial exchange closures had resulted in a critical contraction of the economy in the first quarter of 2020, For example, between January and February 2020, manufacturing capacity was down by 13.5% year-on-year, retail sales down by 20.5% and fixed asset investments down by 24.5%. In the same period, unemployment increased by one percentage point.(6) Indeed, there are many indexes that explain china's economy, where a Manufacturing Purchasing Manager's Index (PMI), a critical production index, fell by about 22 points in February, PMI index is extremely correlated with exports and such a decline implies a reduction in exports of about 2 % on an annualized basis(fig.2). The Indicators of maritime transport refer in turn a reduction in exports for the month of February. Container vessel departures from the seaport of Shanghai were substantially lower in the first half of February with an increase in the second half (fig.3). However, the Shanghai Containerized Freight Index continues its fall thus indicating excess shipping capacity and lower demand for container vessels (7).

**Fig.2** china’s Manufacturing Purchasing Manager’s Index.



**Source:** National Bureau of Statistics of China

**Fig.3** Shanghai: Containers Shipping Indicators



**Source:** National Bureau of Statistics of China

At the international level, This pandemic is different, economically speaking and poses an enormous challenge for many countries, the earlier pandemics hit nations that were – at the time – far less economically dominant. And those pandemics were unknown and far smaller, In a simple, This kind of epidemic is the most dangerous of all, this time, the hardest-hit nations include the G7 plus China, According to the articles of recent publications, data of pandemic have changed hourly,

but as of 5 March 2020, the ten countries hit hardest by Coronavirus is nearly identical to the list of the ten largest economies in the world. The US, China, Japan, Germany, Britain, France, and Italy are all in the top-ten commonly affected by the Coronavirus. in addition, China is by far the hardest hit. (8) The IMF has indicated in its half-yearly forecasts, the action of Great Lockdown worldwide would lead to a dramatic drop in activity that would be more detrimental than the recession that followed the bank failures of the late 2000s. the sudden shock caused by the spread of the COVID-19 meant it had been forced to turn global economic growth forecasts from 3.3% this year to an expected contraction of 3%.(9) Statistics so far indicate the COVID-19 could reduce global economic growth by as much as 2.0% per month in view of the continued current conditions. international trade could also fall by 13% to 32%, depending on the depth and extent of the global economic downturn.(10), In the same context, the UN predicted that The global economy to contract by up to 1 percent in 2020 due to the coronavirus pandemic, This reflected the previous forecast of 2.5 percent growth, the United Nations is also warning that it may contract even further if restrictions on the economic activities are extended without adequate fiscal responses.(11)

the UN DESA has estimated best and worst-case scenarios for global growth in 2020. taking into consideration fast-changing economic conditions. summaries of the scenarios are as follows: (12)

- **In the best-case scenario:** with a moderate drop in private consumption, investment and exports and offsetting increases in government spending in the G-7 countries and China - global growth would be reduced to 1.2 percent in 2020.
- **In the worst-case scenario:** the global output will shrink by 0.9 percent, besides, the scenario is based on demand-side shocks of different amounts to China, Japan, South Korea, the US and the EU, as well as an oil price decline of 50 percent against our baseline of USD 61 per barrel.

### 3- Sectoral impact of COVID-19 fallout

Corona pandemic has devastated the global economy and brought the world to a standstill. for the first time ever, in a related context, academics and economists warn that “full-year economy growth could fall to zero in a worst-case pandemic scenario”, There are various sectors and economies that appear most vulnerable because of this pandemic.

#### 3-1 Stock Market Sectors:

the world’s largest and most important stock markets seemed to enjoy some quality of stability at the beginning of 2020 with positive trends that were disrupted by the emergence of Covid-19 – as a “black swan” that has shaken the world stock markets and that is compromising the stability of the global economy. Financial markets “black swans” are described as rare and highly disruptive events. (13),in this regard, during the period between 20th of January 2020 and 20th of March 2020, The stock markets have faced significant reduction especially after the announcement of WHO on 20 February 2020 that the globe is facing an emergency, stock market indices were in the historical low state Dow Jones -10.7%, S&P500 -24%, FTSI100 -13.2%, DAX -29%, NIKKEI225 -8.9%, Shanghai -6.6% and Hangseng -8.5% fell down (fig.4). At the same time, This had led to the fall in crude oil prices by -53%.

**Fig.4** COVID-19 impact on stock market in worldwide.



**Source:** bloomberg 27 march 2020, 13:00 GMT

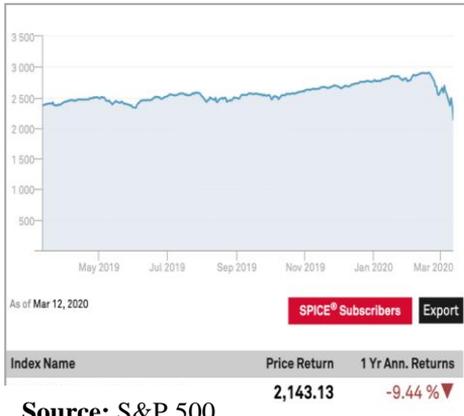
### **3-2 oil industry sector:**

Overall, The oil and gas sector has suffered extremely volatile by the beginning of 2020 in the wake of Covid-19. As Coronavirus lockdowns go on to spread throughout the world, the oil industry faces further disruption to demand and supply chains, with many profit margins and prices already collapsing. Furthermore, the energy sector is a key pillar of FDI strategies in many countries, the energy market is forecasted by Global Data to face downward earnings revisions of 208% in 2020, with the shock compounded by the oil price crash. (14) According to a study conducted by Riad Ajami observed that the demand for oil and gas sent oil prices to their lowest level in three decades. for example, these days, oil prices for West Texas Intermediate and Brent are in the range of 33 to 36 dollars/barrel. there are several estimates that oil prices may decrease further to a range of 20 USD/barrel (15). The decline in oil prices will impact the countries oil producers' ability to continue to import goods and services and will also affect the budgetary allocations to social programs internally, whereby, the rentier countries' population always looks forward to their governments for subsidies of all sorts, especially in education and healthcare. Moreover, government budgets of the oil-producing countries within OPEC were grounded on an assumption that oil prices will stay in the range of 50 USD/barrel.(16)

When we discuss the oil and gas industry stock market, it can be noted that the SP O&G index has reached its peak in 2015 and has been in serious drop since. in addition, The markets have spoken clearly and are saying that the oil and gas industry is dead, and COVID-19 is just another reason. The two charts show the market indices of the oil and gas industry. The one on the left, which dropped about 9% over a year (fig.5)

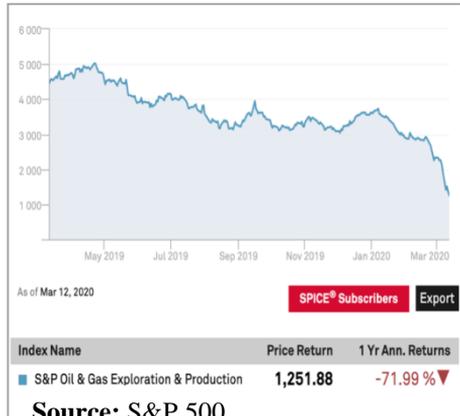
including the dip for COVID-19 fears, is for stocks of companies that don't own any fossil fuel reserves. The one on the right that is about 72% over a year(fig.6), is for companies that explore for and extract oil and gas. (17).

**Fig.5** market indices of companies that don't own any fossil fuel reserves.



Source: S&P 500.

**Fig.6** market indices of companies that explore for and extract oil and gas



Source: S&P 500.

### Conclusion:

to this day, coronavirus is spreading rapidly worldwide. statistics reported cases of COVID-19 pandemic in 213 countries with the tragic deaths of more than 40,347,944 people. the economic studies indicate that the potential loss of economy in developed and developing countries could be significant, with global GDP dropping by up to 3.9%, we can say that low-income countries hit the hardest (Decline of between 4% on average, but some over 6.5%) Governments around the world will need to offer substantial support to affected business and companies and households as well.

The coronavirus (COVID-19) has a negative impact on stock market returns across all affected countries. The major stock indexes such as Dow Jones, S&P 500, Nasdaq .... are declined, besides, the stock indexes have been seesawing since February amid the release of earnings reports, unemployment

data, and inflation, along with news of COVID-19 and its vaccines developments.

In view of the new changes, the macro-environment of The oil and gas industry is set to become even more challenging. Start with supply and demand. it is anticipated that the oil companies might face difficulties in exploitation and production, and exporting processes.

Generally, economic principles have changed and the rules of the next international situation will be extremely difficult. But Hard works with resilient activities, invention, and superior economic models, potentially very different from these days can outperform. The time for visionary intelligence and bold movement is now.

### **References:**

- 1- Euronews,(2020) COVID-19: World economy in 2020 to suffer worst year since 1930s Great Depression, says IMF, available on: [www.euronews.com/2020/04/14/watch-live-international-monetary-fund-gives-world-economic-outlook-briefing-on-covid-19](http://www.euronews.com/2020/04/14/watch-live-international-monetary-fund-gives-world-economic-outlook-briefing-on-covid-19).
- 2- Robert Shour, (2020), COVID-19: preserving the economy via networks,p1, available on: [https://www.researchgate.net/publication/340452679\\_COVID-19\\_preserving\\_the\\_economy\\_via\\_networks](https://www.researchgate.net/publication/340452679_COVID-19_preserving_the_economy_via_networks).
- 3- Mario Arturo Ruiz Estrada et all, (2020), The Evaluation of the Final Impact of Wuhan COVID-19 on Trade, Tourism, Transport, and Electricity Consumption of China, p 2, available on: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3551093](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3551093).
- 4- COVID-19 Coronavirus Pandemic, available on: [www.worldometers.info/coronavirus/#countries](http://www.worldometers.info/coronavirus/#countries).
- 5- UNCTAD, (2020), global trade impact of the coronavirus (covid-19) epidemic, pp 2-3.
- 6- Deloitte,(2020), Economics' Coronavirus Impact Monitor, p 2, available on:[www2.deloitte.com](http://www2.deloitte.com).
- 7- UNCTAD, (2020), op, cit, p 2.

- 8- Richard baldwin, beatrice weder di mauro, (2020), Economics in the Time of COVID-19, p 2.
- 9- theguardian, (2020), 'Great Lockdown' to rival Great Depression with 3% hit to global economy, says IMF, available on: <https://www.theguardian.com/business/2020/apr/14/great-lockdown-coronavirus-to-rival-great-depression-with-3-hit-to-global-economy-says-imf>.
- 10- Congressional Research Service, (2020), Global Economic Effects of COVID-19, p 2.
- 11- the economist times, (2020), Global economy could shrink by almost 1% in 2020 due to COVID-19 pandemic: United Nations, available on: [www.economictimes.indiatimes.com/news/international/business/global-economy-could-shrink-by-almost-1-in-2020-due-to-covid-19-pandemic-united-nations/articleshow/74943235.cms](http://www.economictimes.indiatimes.com/news/international/business/global-economy-could-shrink-by-almost-1-in-2020-due-to-covid-19-pandemic-united-nations/articleshow/74943235.cms).
- 12- UN,(2020), World Economic Situation And Prospects: April 2020 Briefing, No. 136, available on: [www.un.org/development/desa/dpad/publication/world-economic-situation-and-prospects-april-2020-briefing-no-136/](http://www.un.org/development/desa/dpad/publication/world-economic-situation-and-prospects-april-2020-briefing-no-136/).
- 13- Lucía Morales, Bernadette Andreosso-O'Callaghan,(2020), Covid-19 -Global Stock Markets "Black Swan", p 2, available on: <https://www.researchgate.net/publication/340176121>.
- 14-ruth Strachan,(2020), Covid-19 creates supply and demand crisis for oil and gas, available on: <https://www.offshore-technology.com/investment/covid-19-creates-supply-and-demand-crisis-for-oil-and-gas/>.
- 15- Riad Ajami, (2020), Globalization, the Challenge of COVID-19 and Oil Price Uncertainty, Journal of Asia-Pacific Business, VOL. 21, NO. 2, 77–79 available on: <https://doi.org/10.1080/10599231.2020.1745046>.
- 16- Ibid.
- 17- Michael barnard, (2020), COVID-19 Impacting Oil & Gas More Than The Markets As A Whole, available on: <https://cleantechnica.com/2020/03/13/covid-19-impacting-oil-gas-more-than-the-markets-as-a-whole/>.