

# Global Social and Economic Impact of SARS-CoV-2 Pandemic on Industry Sectors

**Chandrani S\* and Rahul D**

Director-STES' SIOM, India

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**\*Corresponding author:** Chandrani S,  
Director-STES SIOM, Pune, India

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## Abstract

On December 31, 2019, the Chinese government formally proclaimed the identification of a new type of coronavirus (SARS-CoV-2) as the etiological source of a critical respiratory disease in Wuhan city, Hubei Province. Over the next few weeks, SARS-CoV-2 introduced a global pandemic as formally declared by the WHO on March 11<sup>th</sup>, 2020, with inveterate cases and deaths in more than 212 countries leading to exceptional social and economic consequences.

## Introduction

The COVID-19 pandemic till date has ensued over 3.7 million confirmed cases and over 258,509 deaths across the globe. It has also kindled fears of imminent economic emergency and downturn. Social distancing, self-isolation and travel restrictions mandated a reduction in the labor force across all economic sectors and subsequently triggered job losses. All Educational Institutions were given instructions to close down, and the need of commodities and manufactured products subsequently decreased. In comparison, the need for medical supplies significantly improved. The food sector also saw a significant demand due to panic-buying and amassing of food products. In rejoinder to this global epidemic, the authors recapitulate the socio-economic effects of COVID-19 on specific facets of the world economy [1-10]. The gage of additional government expenditure required to avert the existing economic catastrophe produced by the pandemic from doing damage is mammoth. Public sector obligations have increased, just as they did for numerous nations during the world wars. Those accountabilities compared to the national income are on decline after the said emergency. The COVID-19 pandemic is challenging the world's advanced and emerging economies, where many depend on informal occupation for their maintenance and livelihood. Social-distancing measures directly mark their livelihoods and make instant social assistance vital.

## Impact on Primary Sectors

### Agriculture

The suppleness of the agricultural segment has been verified by the COVID-19 outbreak. A global crash in claim from food industry and tourism has seen rates of agricultural supplies drop by a value of 20%. Countries around the world have levied a number of defensive measures to contain the exponentially increasing spread [11-20]. This comprises of social distancing, evading needless travel, and a prohibition on congregations. Instruction on self-isolation upon interaction with supposed carriers of the virus is possibly to control the number of delivery staff to safeguard confirmation and transference of products.

### Petroleum & oil

Another premium sector impacted to a very large scale during this outbreak is the Petroleum and Oil sector. During a convention at the Organization of the Petroleum Exporting Countries (OPEC) in Vienna on March 6<sup>th</sup>, a denial by Russia to reduce oil production prompted Saudi Arabia to react with unexpected concessions to consumers in sale of crude

oil. Saudi, regarded as the de facto leader of OPEC, improvised its endowment of oil by a quarter more than February 2020 to rise the volume to an unprecedented level. This triggered the steepest one-day price crash seen in the past 30 years-On March 23rd, Brent Crude dropped by 24% from \$34/barrel to \$25.70/barrel.

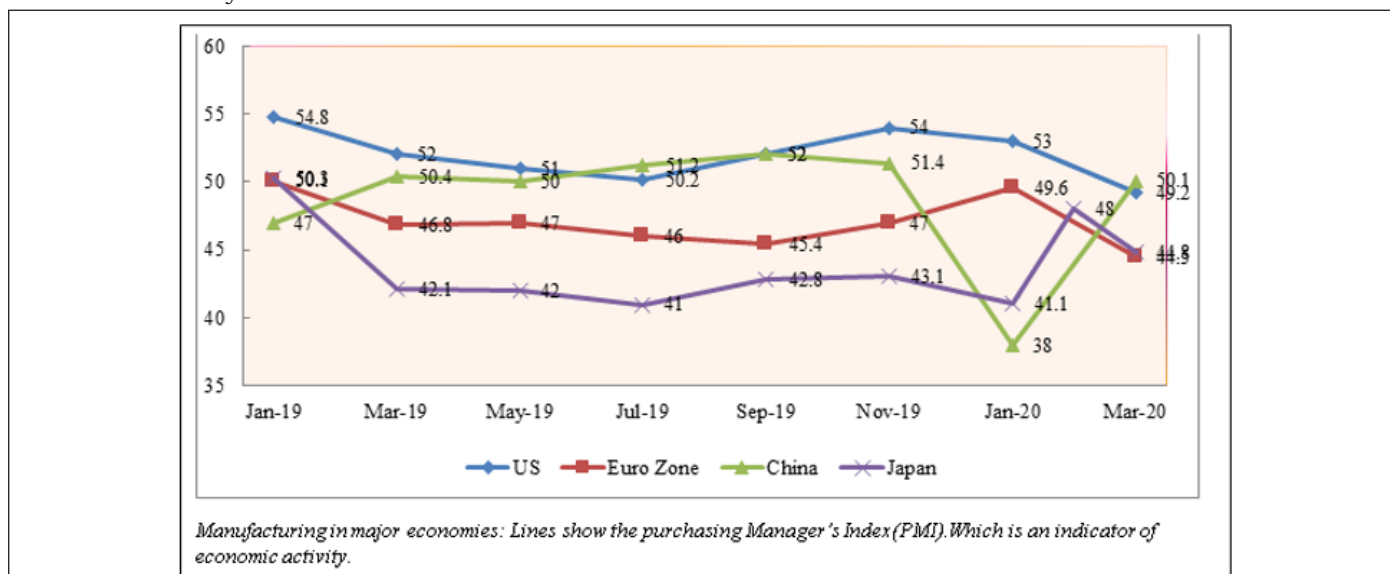
## Secondary Sectors

### Manufacturing industry

An investigation piloted by the British Plastics Federation (BPF) identified impact of COVID-19 on manufacturing businesses in the United Kingdom (UK). Over 80% of the survey respondents predicted a decrease in revenue over the next 2 quarters, with 98%

acknowledging the apprehension about the damaging influence of the pandemic on business operations [21-30]. The concerns of importations and employment deficiencies were projected as the key apprehensions for industries due to disturbances to supply chains and self-isolation strategies. In the manufacturing sector the “Work from Home” option was not a feasible proposition. As UK has to forcibly embrace similar shielding measures, the rest of the world follows the same protocol resulting in the global overlay of supply chains, and angsts transcending the boundaries. The Chemical Industry is prophesied to diminish its overall production by 1.2% attributing to the gloomy status of the sector since the 2008 financial downturn (Figure 1).

**Figure 1:** Manufacturing in major economies: Lines show the purchasing Manager’s Index (PMI). Which is an indicator of economic activity.



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## Tertiary Sectors

### Education

COVID-19 has also affected education system in totality from primary to tertiary levels. Many nations have had different policies vacillating from total lockdown in Germany and Italy and to a major extent in the United Kingdom along with over 100 nations imposing complete closure of educational facilities. UNESCO evaluates that close to 900 million learners have been impacted by the closure of these educational entities. Usage of technology enabled education is a privilege being enjoyed in the current scenario by higher-income families who can ensure education continuity digitally in the period of social isolation. Dubai experienced a huge unrest with 14000 parents signing a petition to reduce school fees by 30% due to acute shortage of funds being sourced amidst recent pay cuts reaching as high as 50%, and with costlier day to day livelihood.

### Finance industry

COVID-19 has ravaged communities, businesses and organizations globally, unintentionally upsetting the commercial

markets and the worldwide economy. Clumsy administrative responses and lockdowns have hugely disturbed the supply and demand. In China with the imposition of lockdowns there was a significant decrease in the supply of product by Chinese business units, while acts like quarantine and self-isolation procedures decreased intake, demand and usage of products and services. As COVID-19 impacted the rest of the world, China recuperates faster than the others, firming its trade negotiating influence against the US. The deterioration in global stock markets has embittered an unpredictable milieu with critical liquidity levels.

### Healthcare

The COVID-19 pandemic has racked healthcare infrastructure worldwide. In essence, the menace to healthcare workers is one of the chief susceptibilities. Considering the fact that most healthcare professionals are not allowed to work remotely, policies including the primary disposition of virus testing for asymptomatic people and frontline healthcare staff is imperative. Increase in healthcare costs, scarcities of protective gear inclusive of N95 face masks, and shortages of beds and ventilators have eventually uncovered

weaknesses in the supply of patient care. In the US, there is apprehension concerning uninsured persons, who may work in areas susceptible to an augmented threat of epidemiological infection which may result in noteworthy monetary consequences in the event of illness.

### Pharmaceutical industry

Insightful variations to the subtleties of healthcare are expected to arise, resulting in colossal investments in disease prevention infrastructure, and the rapid growth in digital avenues of healthcare delivery. In the US, active pharmaceutical components are traded in largely from India (18%), EU (26%), and China 13%. China being the biggest exporter of medical devices, accounting for 39.3%, to the US.

### Tourism

The tourism sector has been the hardest-hit by the outbreak of COVID-19, in the segment of travel supply and demand. The World Travel and Tourism Council has cautioned that 50 million jobs in the global travel and tourism sector may be at threat. To assert the above fact, Vietnam acknowledged roughly 1.45 million Chinese visitors in 2019 quarter I, dropping by 644,000 in January 2020.

### Information technology, media, research & development

With the WHO raising COVID-19's status to a pandemic, many companies and educational institutions are exploring methods and formulas to develop an effective vaccine. Four probable vaccines are presently being tested on animals, with the biotech entity Moderna preparing to start human trials with immediate effect [31-44]. The Coalition for Epidemic Preparedness Innovations (CEPI), is undertaking multiple efforts to finance and manage Covid-19 vaccine development. They have proclaimed a \$4.4m partnership funding with Novavax and Oxford University to develop a feasible solution. The Gates Foundation, Wellcome and Mastercard have also pledged \$125 million to find new treatments for COVID-19.

### Conclusion

With fears of a new downturn and financial breakdown, times like these call for spirited and strong leadership in healthcare, business, government and society at large. Instant respite needs to be realized and adjusted for those that may fall through the cracks. Medium and longer-term planning is an essential requisite for the economy to be rebalanced and reenergized following this catastrophe. A comprehensive socioeconomic development plan inclusive of every industrial segment plan and an ecosystem that boosts entrepreneurship so that those with robust and maintainable business models can be allowed to grow. It is judicious that governments and financial entities continuously re-assess and re-evaluate the scenario and goes on to deliver the promises made.

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