

The Economic Impact of COVID-19

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ABSTRACT

The COVID-19 pandemic has resulted in over 3 million confirmed cases and over 250,000 deaths globally. It has also sparked fears of an impending economic crisis and recession. Social distancing, self-isolation and travel restrictions forced a decrease in the workforce across all economic sectors and caused many jobs to be lost. Schools have closed down, and the need of commodities and manufactured products has decreased. In contrast, the need for medical supplies has significantly increased. The food sector has also seen a great demand due to panic-buying and stockpiling of food products. Over the five-week period from mid-March to late-April 2020, more than 26 million Americans filed for unemployment insurance, raising the prospect of a deep economic recession and a significant increase in the unemployment rate. Some estimates also indicate that 59 million people in Europe could become unemployed. After a delayed response, central banks are engaging in an ongoing series of interventions in financial markets and national governments are announcing spending initiatives to stimulate their economies. International organizations are also taking steps to provide loans and other financial assistance to countries in need. These and other actions have been labeled "unprecedented," a term that has been used frequently to describe the pandemic and the policy responses. In this article, we reviewed the economic impact of COVID-19 on some sectors of global economy.

Keywords: Covid-19, Social distancing, Pandemic, Financial crisis, Global recession.

INTRODUCTION

The COVID-19 outbreak was caused by the SARS-CoV-2 virus. This outbreak was triggered in December 2019 in Wuhan city in Hubei province of China. COVID-19 continues to spread across the world. Amidst the significant public health risk COVID-19 poses to the world, the World Health Organization (WHO) has declared a public health emergency of international concern to coordinate international responses to the disease. It is, however, currently debated whether COVID-19 could potentially escalate to a global pandemic. In a strongly connected and integrated world, the impacts of the disease beyond mortality (those who die) and morbidity (those who are incapacitated or caring for the incapacitated and unable to work for a period) has become apparent since the outbreak.

Amidst the slowing down of the Chinese economy with interruptions to production, the functioning of global supply chains has been disrupted. Companies across the world, irrespective of size, dependent upon inputs from China have started experiencing contractions in production. Transport being limited and even restricted among countries has further slowed down global economic activities. Most importantly, some panic among consumers and firms has distorted usual consumption patterns and created market anomalies. Global financial markets have also been responsive to the changes and global stock indices have plunged. Amidst the global turbulence, in an initial assessment, the International Monetary Fund expects China to slow down by 0.4 percentage points compared to its initial growth target to 5.6 percent, also slowing

down global growth by 0.1 percentage points [1] [2] [3].

The crisis caused by the coronavirus pandemic is plunging the world economy to depths unknown since the Second World War, adding to the woes of an economy that was already struggling to recover from the pre-2008 crisis. Beyond its impact on human health (materialized by morbidity and mortality), COVID-19 is disrupting an interconnected world economy through global value chains, which account for nearly half of global trade, abrupt falls in commodity prices, fiscal revenues, foreign exchange receipts, foreign financial flows, travel restrictions, declining of tourism and hotels, frozen labor market, etc.

The European Union, the United States and Japan account for half of the world's GDP. These economies are based on trade, services and industries. However, measures to halt the pandemic have forced them to close their borders and drastically reduce economic activities; which will lead to recession in some of these developed economies. The Chinese economy accounts for about 16% of global GDP and it is the largest trading partner of most African countries and the rest of the world. The OECD forecasts a decline in economic growth rates for these major economies as follows: China 4.9% instead of 5.7%, Europe 0.8% instead of 1.1%, the rest of the world 2.4% instead 2.9%, with world GDP falling by 0.412 from the first quarter of 2020. UNCTAD forecasts downward pressure on foreign direct investment from -5% to - 15%. The International Monetary Fund has announced on the 23 March 2020 that investors have withdrawn US\$ 83 billion from emerging markets since the start of the crisis. Below are the effects of COVID-19 on selected sector of the global economy [4].

Effect on Manufacturing Sector

A survey conducted by the British Plastics Federation (BPF) explored how COVID-19 is impacting manufacturing businesses in the United Kingdom (UK). Over 80% of respondents anticipated a decline in turnover over the next 2 quarters, with 98% admitting concern about the negative

Chen and Sorkin impact of the pandemic on business operations. Importation issues and staffing deficiencies stood out as the key concerns for businesses due to disruption to supply chains and self-isolation policies [5] [6]. Indeed, for many roles within a manufacturing company, 'working from home' is not a viable option. As the UK is adopting similar protective measures to the rest of the world, and due to the global overlap of supply chains, we can expect these anxieties to transcend borders.

The Chemical Industry is predicted to reduce its global production by 1.2% -- the worst growth for the sector since the 2008 financial crash [7]. Major chemical manufacturing companies such as BASF who were in the process of upscaling production in China have had to delay their activities, contributing to a slowdown in predicted growth [8], [9]. Manufactured goods, after all, are - on the whole 'postpone-able' and thus more susceptible to 'sudden stop' demand shocks, as we saw in the Great Trade Collapse of 2009. Of course, the service sector in all affected countries are hit hard - as restaurants and movie theatres empty out - but it may well be manufacturing that takes the biggest hit. Data are already reflecting these supply shocks. The February 2020 read out on China's key index of factory activity, the Caixin/Markit Manufacturing Purchasing Managers' Index (PMI), showed its lowest level on record [10]. "China's manufacturing economy was impacted by the epidemic last month," said Zhengsheng Zhong, chief economist at CEBM Group [11] [12]. "The supply and demand sides both weakened, supply chains became stagnant." While China's workforce is gradually returning to work, the Purchasing Managers Indices from across East Asia are showed sharp declines in production, especially in South Korea, Japan, Vietnam, and Taiwan. When it comes to the economic shocks, it is important to distinguish two sources which are tangible. First are the purely medical shocks - workers in their sickbeds aren't producing GDP. Second is the economic impact of public and private

containment measures - things like school and factory closures, travel restrictions, and quarantines [13]. The direct supply-side impact of human reactions to the virus is obvious and abundant. Authorities and firms in several nations have shuttered workplaces and schools. Japan presents clear and early examples [14]. After sporadic reports of COVID-19 infections, many large Japanese companies ordered their employees to work from home in late February. This practice is spreading rapidly [15].

Ford Motor Company banned all travel on 3 March 2020 after two of its workers tested positive, and many firms are following suit. From an economic perspective, these closures and travel bans reduce productivity directly in a way that is akin to temporary drops in employment [16]. The size of the resulting output contraction may be attenuated today thanks to digital technology and cloud-based collaborative software and databases [17]. These didn't exist when, for example, the SARS pandemic struck nearly two decades ago. But remote work is not a panacea. Not all tasks can be performed remotely even now [18].

Human presence on site is required, especially to handle tangible goods. One Japanese manufacturer of health care products, Unicharm, decided to order remote working for all its employees, but workers at production factories were excluded from this order so they could meet growing demand for medical masks. Other public health measures aimed at slowing the spread - like school closures - temporarily reduce employment, indirectly, as workers have to stay at home to look after children. Japan closed all schools for a month on 27 February 2020; Italy followed suit on 4 March 2020, and this trend accelerated since child-to-child infection is a major transmission vector in, say, the seasonal flu.

People staying away from work to tend to sick relatives are another indirect, temporary employment reduction [19]. The same type of shock arises from the now common policy of imposing quarantines on the family of infected

Chen and Sorkin people, and those they have come in contact with. The severity of these shocks is amplified when they concern health workers. For example, a hospital in the Japanese prefecture with the largest number of COVID-19 patients was forced to stop accepting outpatients due to absent nurses (who stayed home to take care of their children). Data are already reflecting these supply shocks.

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Effect on the Travel Industry

The coronavirus outbreak led the governments of many countries to impose restrictions on non-essential travel to countries affected by COVID-19, indefinitely suspending tourism travel, work visas and immigrant visas. Some countries placed a complete travel ban on all forms of inward or outward travel, shutting down all airports in the country [5]. At the height of the coronavirus pandemic, most airplanes flew almost empty due to mass passenger cancellations [13]. The travel restrictions imposed by governments subsequently led to the reduction in the demand for all forms of travel which forced some airlines to temporarily suspend operations such as Air Baltic, LOT Polish Airlines, La Compagnie, and Scandinavian Airlines. Such travel restrictions cost the tourism industry alone a loss of over \$200 billion globally, excluding other loss of revenue for tourism travel, and were forecast to cost the aviation industry a total loss of \$113 billion according to IATA. 8 US airlines sought a \$50bn bailout fund for the US Airline industry alone. 9

The GTBA reported that the business travel sector would lose \$820 billion in revenue due to the coronavirus pandemic.

Effect on Agriculture

The resilience of the agricultural sector has been tested by the COVID-19 outbreak. A global crash in demand from hotels and restaurants has seen prices of agricultural commodities drop by 20%. Countries around the world have imposed a number of protective measures to contain the exponentially increasing spread. This includes social distancing, avoiding unnecessary travel, and a ban on congregations. Advice on self-isolation upon contact with suspected carriers of the virus is likely to impact the number of available inspectors and delivery staff critical to ensuring verification and transportation of products. This will have pronounced implications for perishable goods such as meat and vegetables. Furthermore, markets have gone a step further by shutting down floor trading which has impacted the ability of commodity exchange. The Chicago Mercantile Exchange is a recent example. 'Panic buying' is further complicating shortages beyond supermarket shelves. The American Veterinary Medical Association (AVMA) has expressed concern over low levels of animal pharmaceuticals for several large drug suppliers [13].

Effect on Petroleum and Oil

During a meeting at the Organisation of the Petroleum Exporting Countries (OPEC) in Vienna on March 6th, a refusal by Russia to slash oil production triggered Saudi Arabia to retaliate with extraordinary discounts to buyers and a

CONCLUSION

With fears of a new recession and financial collapse, times like these call for resilient and strong leadership in healthcare, business, government and wider society. Immediate relief measures need to be implemented and adjusted for those that may fall through the cracks. Medium and longer term planning is needed for how the economy is

Chen and Sorkin threat to pump more crude. Saudi, regarded as the de facto leader of OPEC, heightened its provision of oil by a quarter more than February - taking production volume to an unprecedented level. This caused the steepest one-day price crash seen in nearly 30 years - On March 23rd, Brent Crude dropped by 24% to \$34/barrel to stand at \$25.70. Although a slowdown in the number of COVID-related deaths has caused some stabilisation of oil prices, there is still much uncertainty. On the background of a viral outbreak already dampening the demand for oil, this oil-price war is predicted to have grave implications for the global economy.

In more ordinary times, cheap oil may have functioned as an advantage for economies. However, savings on petrol are unlikely to be redirected into more spending as populations are instructed to practise social distancing and the working class are uncertain about job security. Furthermore, any increase to consumer activity is likely to be outweighed by damage caused to populations reliant on revenue from other forms of energy such as Shale gas. Economic modelling from Imperial College's Centre for Climate Finance and Investment has suggested 'Carbon Dividends'. A £50/tonne of CO₂ tax could be channeled into UK households in order to stimulate consumer spending whilst keeping oil prices at the same level as February 2020. However, this relies on turbulence between Saudi Arabia and Russia thus should not be considered sustainable for the long-term.

rebalanced and re-energised following this crisis. A broad socioeconomic development plan including sector by sector plans and an ecosystem that encourages entrepreneurship so that those with robust and sustainable business models can be allowed to flourish.

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