

# COVID-19 PANDEMIC AND WORLD CAPITAL MARKETS: A REVIEW

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## Abstract

Since 2019 the world is exposed to one of the deadliest pandemics of all times. As Covid-19 hit the nations in every possible way, the global financial markets got exposed to this shock as well. This paper reviews the effects of Covid-19 on financial markets of China and other Asian countries along with its impact on financial markets from rest of the world. World health Organization declared Covid-19 as a pandemic on 11<sup>th</sup> March 2020 because of its severity and worldwide spread. The stock markets of China and other Asian countries observed a significant downfall. The investor responses were reflected in the fluctuations of stock prices. In China, the notable industries that got badly affected by the pandemic were transportation, catering, mining, agriculture and accommodation. However, the better performance of some sectors helped the stock markets like education, information technology and health in particular. The financial markets of emerging economies and developing countries also suffered badly due to Covid-19. Besides China, other prominent nations that were hard hit by the pandemic include America, United Kingdom, Italy and Spain. One of the possible reasons for negative returns in European markets was the high media coverage related to Covid-19 that led to adverse investor sentiments and decline in market. Secondly, when the pandemic started the European countries announced lockdown at a very initial stage due to which all the economic activities shut down hence resulting into a decline in the market. However, some countries remained quite successful in controlling the virus namely Taiwan, New Zealand, South Korea and Hong Kong.

**Key Words:** Covid-19, stock market, bond index, Asian economies, Global Financial Markets

## 1. Introduction

Coronaviruses (CoVs) are a huge family of viruses that results into illness involving common cold and even more serious diseases like Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Covid-19 is an altogether new strain which got discovered in 2019 for the first time in China. Virus of this nature was never found before in humans. World health Organization declared Covid-19 as a pandemic on 11<sup>th</sup> March 2020 because of its severity and worldwide spread. Pandemics are a matter of great concern since it is not just a health issue but also a political, social and economic global concern. On 31<sup>st</sup> January 2020, Covid-19 was officially declared as a “Public Health Emergency of International Concern”. The origin of this deadly pandemic was in Wuhan located in Hubei Province, one of the most prominent transportation hubs in China. The epidemic eventually turned into a pandemic as it was the time of spring festival in China, an occasion that involves one of the biggest yearly mass human migration (Liu, Wang, He & Wang, 2020).

China holds an important place in the world in terms of both demand and supply and as a country of great significance for the financial markets of other countries of the world. Hence, any adverse circumstances developing in China causes spillover effects in rest of the world (Acikgoz and Gunay, 2020). A decline in the production activities in China immediately affected businesses in other parts of the world as China is the major producer of many goods especially electronics, transport equipment, computers and pharmaceuticals. Similarly, for several other commodities, China is also a major source of demand. Restoration of complete production due to the extended delays would affect not only China but many countries of the world as shipments were brought to a halt globally (Assessment, 2020).

This study reviews the existing literature including discussions and reports about the impacts of covid-19 on the financial markets of the world. The study critically reviews how the pandemic upsets the financial markets in

emerging and developed nations across the world and how investors globally got affected from this historical outbreak.

## **2. Covid-19 and Capital Markets: Evidence from the China and other Asian Economies**

The pandemic badly significantly affected both the Chinese and Asian stock markets and the investor responses were reflected in the fluctuations of stock prices. In case of Asia, the stock market returns were suppressed in short term as a result of panic created among investors and the adverse effects continued for later periods as well. The cumulative abnormal returns (CAR) were found to be negative for all the event windows that were taken into consideration. Some sectors showed positive CAR like pharmaceutical manufacturing as there was an increase in the demand of medicine. Similarly, software and IT services sector represented positive CAR too as people had to stay at home. However, transportation, lodging and catering had negative CAR during the event window as traffic was controlled, public places of entertainment, tourist spots, hotels and restaurants were closed during the spring festival. (Liu, Wang, He & Wang, 2020).

He, Sun, Zhang & Li (2020) uses an event study approach in order to assess the impact of covid-19 on stock prices of different industries of China. An adverse impact of the pandemic was found on the stock prices of Shanghai Stock Exchange; however, a positive impact was found in case of Shenzhen Stock Exchange. Better opportunities were created for high-tech industries development whereas covid-19 badly affected the Chinese traditional industries like environmental sector, transportation, electric and heating, and mining. Transportation industry was affected hugely as the roads were closed as a result of this outbreak, the transportation of products also stopped thus affecting investor sentiment and bringing the stock prices down. Another industry that is closely related to transportation is the mining industry. Mining companies carried out strict precautionary measures by postponing projects and closing mines so that extractors and communities could be protected. Due to the pandemic the assembly activities carried out on large scale were also stopped thus greatly affecting the agricultural sector by minimizing the agricultural production and ultimately rural investment. These effects were also reflected in the capital markets. A huge shortage of labor was observed in some other sectors like heating, environmental companies, electric, infrastructure and construction companies stock prices declined. On the other hand, some sectors responded to the pandemic in a positive manner, for instance, education, health, information technology and manufacturing sector, hence boosting the stock market. Manufacturing industry performed well in the stock market as the production of medical equipment, ventilators and masks increased to a greater extent. Similarly, information technology sector also performed effectively after the pandemic hit the world. There was a massive spread of information regarding precautionary measures that was digitally transmitted to the general public for awareness against the disease. Information technology along with the education industry outperformed as online classes started thus restoring investors' confidence in both sectors.

According to Shen, Fu, Pan, Yu & Chen (2020), in the initial quarter of year 2020, transportation, accommodation and catering were affected the most in China. Similarly, the education sector also faced a loss in revenue due to decrease in extracurricular tutoring in winter vacation. In addition to these, some other service oriented high impact sectors like tourism and film entertainment that greatly depend upon social networking also got undesirably affected. This happened as a result of ban on international travel and movies were withdrawn from theaters hence decreasing the sector's revenue.

As a result of this deadly pandemic the stock markets of many countries crashed in the month of March 2020 that was undoubtedly the worst month in the history of Pakistan Stock Exchange (PSX) after December 2008. PSX showed a bearish trend. The indices of many stock markets showed a drop of hundreds and thousands of points. Due to this financial instability in the entire world, Pakistan's stock market also faced ping pong effects from January to date. The reason for bad performance of the stock market was the lockdown that was imposed by the government to control covid-19. Except from a few companies most of the firms showed an adverse trend. In order to protect the investments of stock market participants several measures and market halt was also availed. Most of the world's famous stock market indices also exhibited downfall. It was also observed that investors in several countries made an attempt to withdraw their investments. In comparison to March, the month of April 2020 turned out to be a good month for investors showing bullish trend. The reason for this recovery was the announcement made by International Monetary Fund (IMF) to grant loan of \$1.4 billion under the Rapid Financing Instrument in order to

cope with covid-19. Consequently, the PSX 100 Index also rose to 900 points hence acting as the “Green Zone” for Pakistan Stock Exchange (Jabeen & Farhan, 2020).

Ashraf (2020) investigated response of the world stock markets to covid-19. The study was conducted based on data collected for daily covid-19 and stock market returns from 64 countries of Asia, Europe, Middle East, Africa and United States of America for a time period of January 22, 2020 to April 17, 2020. The impact of growth in covid-19 confirmed cases and the cases of deaths as a result of covid-19 were specifically observed on the stock market returns. The results showed that the response of stock markets was negative whenever the confirmed cases of covid-19 increased i.e. whenever the number of confirmed cases in a country rose, the stock market returns declined. The way stock market responded to the growth in number of deaths due to covid-19 was found to be weak. Hence the stock market returns react more strongly to the confirmed cases of Covid-19 and react less strongly to the confirmed death cases due to covid-19. Moreover, the stock markets exhibited a strong reaction during the early days of confirmed covid-19 cases and then between 40 to 60 days after the day of initial confirmed cases.

In short it is very obvious that the financial catastrophe as a result of Covid-19 damaged the stock markets badly. A sharp decline was observed in all major Asian financial markets. An atmosphere of great uncertainty resulted into traders selling their shares and investors getting discouraged towards purchasing more financial assets.

### **3. Covid-19 and Capital Markets: Evidence from Rest of the World**

The emerging economies and developing countries were hard hit by the pandemic as their currencies and financial markets suffered badly. The member states of the Eurozone did not follow a common fiscal policy and encountered the self-imposed constraints of the currency block. As a result of this pandemic an accelerated transition to a cashless economy is promoted by many countries. New digital financial technologies are showing an increase in demand but at the same time FinTech startups may struggle a lot for their survival against recession and also for acquiring capital. Another possible impact of the pandemic was an increase in business services due to finances of firms at stake hence in order to prepare and verify the financial situation now the role of accountants and auditors has become even more important. In comparison to China, the pandemic spread was much more in the US which forced the country to impose longer and extensive lockdowns thus making an opportunity for Chinese economy to grow more than the US economy (Wójcik & Ioannou, 2020).

Topcu & Gulal (2020) suggest that the emerging markets of Asia were affected the most, however, the effect was less in the emerging markets of Europe. The reason why eastern and central Europe got less affected was due to the precautionary measures taken rapidly in the region. South America and Middle East also got affected but less than Asia. The stock markets were negatively affected due to an increase in the currency exchange rate and because of shocks to the real oil prices. Moreover, with an increase in the infection rate the stock market performance dropped. It was also observed that the impact of Covid-19 was much less in those emerging markets where government announced stimulus packages and timely took essential measures. However, countries that used smaller packages were affected badly by the pandemic.

Zhang, Hu & Ji (2020) observed that as a result of this deadly pandemic the global financial market risks increased. Top ten countries stock markets with confirmed cases along with Singapore, Japan and Korea were taken into consideration. Each country's stock market reacted against the outbreak depending upon its level of intensity. Due to uncertainty and economic losses the markets become extremely volatile and were less predictable. In order to cope up with the negative effects of the pandemic, US implemented some policies like zero percent interest rate and introducing an unlimited quantitative easing (QE). Instead of doing any good, these policy measures resulted into much uncertainty and long-term problems as there was inconsistency between expectations of investors in short as well as long run. Moreover, it was also observed that as a result of introducing quantitative easing after the global financial crisis of 2008, the systematic risk increased significantly.

Ali, Alam & Rizvi (2020) investigate the way financial markets reacted around the world with respect to the decline and volatility when China was the epicenter of coronavirus and further when the disease spread to Europe and to the US. In order to assess the impact of covid-19 on the volatility of financial markets, the daily prices and returns of MSCI indices for top countries affected by the pandemic were taken into consideration namely China, United States

of America, United Kingdom, Italy, Spain, France, Germany, Switzerland and South Korea. Some regional indices were also used namely World (WRLD), Europe (EU) and Asia. Moreover, some other indices like corporate bonds index (S&P 500), US treasury bonds core index (ICE core), Bitcoin, Oil (WTI spot) and Gold were also incorporated into the study. According to the findings the epicenter of covid-19 i.e. China showed stability whereas the global financial markets showed a drop in later phase. One of the possible reasons for negative returns in European markets was the high media coverage related to covid-19 that lead to negative investor sentiments and decline in market. Secondly, when the pandemic started the European countries announced lockdown at a very initial stage due to which all the economic activities shut down hence resulting into a decline in the market.

The reason why China's markets showed stability over European markets was due to measures taken by their government to ease the fiscal policy that supported the economy. Moreover, authorities in China took early measures to control the spread of the pandemic. It was found that some of the safest commodities like gold suffered as well but with the least volatility as compared to other commodities. Gold maintained its status of a safe haven asset resisting the effects of this adverse economic event.

Haroon & Rizvi (2020) study focuses on analyzing how the markets of the world and the US respond to pandemic and the impact of media coverage in creating sentiments of panic among the financial markets. Panic Index, Global Sentiment Index and Media Coverage were used in order to investigate the association among the sentiments between the news and updates on the coronavirus outbreak and volatility in stock markets. Panic index was observed to be positively related with World Index volatility thus representing the fact that financial markets exhibited uncertainty whenever panic caused due to media. In US market, there was an increase in volatility in returns as a result of negative sentiments in news. Although a lower level of volatility was observed in rest of the world markets even though the news related to the spread of Covid-19 was high. In case of indices of different industrial sectors of US, the panic created due to corona news was positively related with volatilities in these indices. The worst hit industries that exhibited the strongest association included automobiles, transportation, energy and travel & leisure. News related to covid-19 causing panic was correlated to the volatility in the stock prices of many other sectors namely basic materials, consumer goods, industrial goods, banks, technology, hotels, media, delivery services and insurance.

He, Liu, Wang & Yu (2020) examines the direct and spill-over effects of Covid-19 on the stock markets of China, France, Germany, Italy, Japan, Spain, South Korea and the USA. The stock indices were studied in two parallel timelines. One is the domestic timeline, i.e. the timeline for the outbreak of the coronavirus pandemic in China and the other is the foreign timeline. It was evident from the domestic timeline that Covid-19 had a short term and negative impact on the stock markets of the selected eight countries that got affected by the pandemic. America and most of the in Europe were undesirably affected by covid-19 because the pandemic's impact on the stock market of Asia had a spill-over effect on these regions. As a result of these spill-over effects investors at an international level got panicked and were under great fear. Hence, the bi-directional spill-over effects of the covid-19 was observed between the stock markets of Asia, Europe and America. When compared to the S&P 1200 Global Index it was found that in the short event window for domestic timeline the covid-19 did not have a negative impact on the selected countries stock indices except for China. Being the first country to get hit by the pandemic, China faced severe effects than the rest of the world. Mostly due to such pandemics when the world economies undergo recession the investors normally lack confidence in the stock markets. Despite the fact that Covid-19 started showing a drop in China, the CSI 300 Index still underperformed as the pandemic's impact on Europe and America's stock markets had a spill-over effect on the stock markets of China. It was also found that if covid-19 was controlled in the initial two months its impact on the stock markets would have been limited. It is quite evident that even the most developed nations of the world were not safe from the undesirable effects of this deadly pandemic. Strict monetary and financial measures had to be adopted by countries in order to cope up with the adverse effects of the outbreak.

#### **4. Potential Lessons from Different Countries Responses to Covid-19 Pandemic**

One of the countries that successfully controlled this contagious disease is Taiwan. The infrastructure related to public health that was developed before Covid-19 was quite extensive hence ensuring quick response that was also well coordinated. This was observed especially in terms of early screening, better methods used for quarantine or isolation, use of digital technology to identify likely cases and massive use of masks (Summers, Cheng, Lin,

Barnard, Kvalsvig, Wilson & Baker, 2020). Another country that successfully handled Covid-19 is New Zealand. On 27<sup>th</sup> April 2020 New Zealand announced that it had won the battle against community transmission of corona. Among the developed countries of the world, New Zealand was one such country that claimed to beat the virus successfully. Prime Minister Jacinda Ardern took measures that made New Zealand among the initial corona free countries. She implemented effective communications, imposed organized and extensive lockdowns, increased the number of testing and immediately closed the borders. Moreover, the initial crisis communication approach adopted by the Prime Minister for dealing with the pandemic was extremely effective whether it was her speeches in the parliament, response briefings on covid-19, press conferences or Facebook live broadcasts (McGuire, Cunningham, Reynolds & Matthews-Smith, 2020). Many Asian neighboring countries of China successfully controlled the pandemic namely South Korea, Hong Kong and Taiwan. These nations earlier faced the epidemic of SARS through which they had learned the lesson and hence were more prepared to deal with coronavirus infectious disease by adopting preventive measures. Such measures included ban on travel, borders were closed for the non-residents and quarantining people for 14 days. The patients were isolated who had fever and acute respiratory symptoms once their exposure and travel history were obtained (Baniamin, Rahman & Hasan, 2020).

Some countries that were badly affected by the coronavirus pandemic were US, UK, Italy and Spain. Being the fifth most visited country of the world by tourists, Italy is one such nation that was severely affected by the pandemic. The government of Italy did not impose strict restrictions on tourists coming into the country due to favorable impact of tourism on the economy. This became an important factor in spreading the virus in the country (Baniamin, Rahman & Hasan, 2020). Italy is the world's second largest country in terms of maximum number of old age people. Moreover, both old and young people live together in Italy which was another obvious disadvantage. In Italy 20% people that lies between age groups 30 and 49 live with their parents. Another reason due to which virus spread quickly in Italy was the fact that Italians are highly social, they socially interact by hugging and kissing each other. The mayor of Milan reopened the cathedral for tourists (Horowitz, Bubola & Povoledo, 2020). The Champions League Football match held in Milan also became a prominent reason for spreading the virus in not only Italy but also in Spain (Giuffrida, 2020). Most of the corona positive cases in Spain were those people who went to Italy for playing the soccer game. In case of USA it was initially declared by the president to impose lockdown in the hotspot New York. Later this decision was not implemented as the Governor of New York believed that bringing the state into quarantine would be Anti-American (Savage, 2020). This step was taken in order to avoid the stock market crash which could result into loss for US economy and adversely affect the financial sector (Baniamin, Rahman & Hasan, 2020). Many countries like Iran, Malaysia and India badly suffered from the pandemic as they did not avoid the religious gatherings. In Iran the virus started from Qom which is visited by 20 million pilgrims from countries that have Shiite Muslims (Ebrahim & Memish, 2019). Many people who were infected from corona visited the city in order to get cured and also for their spiritual treatment (Al-Najjar & Al-Rousan, 2020). Similarly, in India a Sikh preacher became responsible for spreading the virus as he had a travel history to Germany and Italy and attended a Sikh festival in Anandpur Sahib resulting into quarantining around 40,000 people from 20 villages (Srivastava & Agarwal, 2020). Countries like UK and US exhibited less acceptance for wearing face masks whereas countries like Hong Kong, Seoul and Tokyo wore face masks voluntarily. People of China, Thailand, Hong Kong, Japan and Taiwan wore face masks as it was believed to be a safe behavior towards other people (Wong, 2020).

## 5. Conclusion

This study makes an effort to review the impact of covid-19 on the global financial markets. Generally, it is observed that the pandemic has undesirably affected almost all the financial markets of the world. Worldwide the financial markets were also affected badly due to the spill-over effects from one country to another. It is obvious that the world after Covid-19 is no more the same. The investors initially showed reluctance towards investment in financial markets due to which all major markets represented an obvious decline. Policies at local and international level need to be formulated so that this global crisis can be dealt with effectively. Institutions functioning in a country need to propose proactive approaches for managing their organizations smoothly. The health sector that is facing the biggest challenge of the history must also design policy framework in such a way which can address the social determinants of public health. In this regard cooperation at all levels including governments, non-governmental bodies, media, stakeholders, health specialists and individuals is required for successful implementation of policies. Moreover, it is the job of policy makers to find ways through which institutions can be strengthened in such a manner that can ensure financial resilience against pandemics of such nature.

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