## CHAPTER - 6

# An Analytical Study of Covid-19 and It's Impact on National Stock Exchange

Khushboo Sogani\*

### **ABSTRACT**

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus, which was started from a research lab in Wuhan, China and slowly it spread all over the world. Its effect was so much dangerous as World Health Organization (WHO) had to declare it a global pandemic on 11 March, 2020. It badly affected the personal, social as well as the economic life of the people. It not only affected the economic life of people at micro level, but also it affected the economy of the country at macro level. Its affect can be seen at every aspect of economy. Stock market is one of them aspect. As it is treated as the barometer of an economy and the economy of our country is also affected by covid-19. So the researchers want to know the effect of covid-19 on the Indian stock market, and for this purpose National Stock Exchange (NSE) is taken. In this paper some sectors of NSE are taken for study purpose. The study is based on secondary data. Simple statistical tools are used for this purpose. The finding shows a negative impact of covid-19 on Indian Stock *Market in first wave, while in second wave it impacted positively.* 

Keywords: Corona; Pandemic; NSE; NIFTY; Stock market.

## 1.0 Introduction

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first case was identified in Wuhan, China in December

<sup>\*</sup>Assistant Professor, Department of ABST, Mahaveer College of Commerce, Jaipur, Rajasthan, India (E-mail: soganikhushboo@gmail.com)

2019. Since then, the disease has spread around the world, causing an ongoing pandemic. It has affected the social as well as economic life of the people as a whole. And not only at micro level but also at macro level on the economy of the country. If we see its impact on economy than we can say that it has affected the economy in both the waves. Impacts of corona can be seen on economy in different aspects. Stock market is one of them. Indian Stock Market is one of the parameters to check the performance of the Indian economy.

The stock market is affected all over the world. The share price of the several companies share had dropped very frequently. Indian stock market is also affected by the all three waves of Covid-19 and faced many ups & downs in these phases.

#### 2.0 Literature Reviews

Yashraj & Renuka (2021), hired the unique model to have a look at the fast-time period effect of covid-19 on Indian stock marketplace and summarized as that everyone the sectors have been impacted quickly, but the economic area faced the worst.

Liu et al., (2020) hired occasion look at method, analysing 21 main stock exchanges and concluding that the COVID-19 outbreak had a large bad effect on the inventory markets of all affected nations, with Asia recording an extra lower in phrases of extraordinary returns. This explanation is steady with the findings of Harjoto et al., (2021), who used occasion evaluation to expose the sturdy negative impact of COVID-19 on the global markets, especially rising markets and small companies. In step with this have a look at, large firms and the United States inventory market recorded nice strange returns compared to the alternative rising market economies.

Al-Awadhi *et al.*, (2020) used a panel regression method to observe the effect of the global pandemic at the extraordinary sectors of the Chinese stock market place. In line with this observe, excessive marketplace capitalisation stocks were adversely affected,

but the performance of the facts era and pharma sectors were quite better.

Kotishwar (2020) the aim of this research turned into to research the effect of the Covid-19 virus at the stock market. From March eleven to April 2020, the studies checked out the positive boom of six international locations (the United States, Spain, France, Italy, China, and India), which were the Hardest hit. (On March eleven, 2020, the world fitness employer proclaimed COVID 19 a deadly disease.) According to the observation which hired the VECM to determine the link, the Covid-19 has an extensive poor long-run association with all of the chosen nation's stock indexes. The CAAR version turned into carried out, and it turned into discovered that in the submit-duration, all of the chosen nations' indices reacted favorably extra than inside the pre-duration. Investors are comparing an extended-time period plan and investing in any respect ranges, in line with the studies.

Kumar (2020) study five NSE indexes are selected at random. The observation in comparison the overall performance of selected variables for the duration of and earlier than the Covid-19 epidemic the usage of easy statistical strategies like percentage and common.

# 3.0 Objective of the Study

The present study is executed to know the performance of National Stock Exchange (NSE) during the two waves of Covid -19 pandemic. i.e., first and second wave.

# 4.0 Significance of the Study

The current study is important to know the impact of covid-19 on the performance of NSE. The study will be helpful for various stake holders related to NSE.

# 5.0 Research Methodology

The current study is carried out to know the impact of covid-19 on the performance of NSE. The study is based on the purely secondary data. The NSE is selected for the study purposes because NSE is one of the major stock exchanges of India and it is first automated stock exchange of country. For study purpose major indices of the NSE namely Nifty 50 and five other sectorial indices namely Nifty-Bank, Nifty-FMGC, Nifty-IT, Nifty-Pharma & Nifty-Financial service are also selected to know the impact of covid-19 on NSE. For the study purpose the data is collected on three bases: a. 1st case reporting date, b. Date of lockdown imposed by Government. Date of Unlock or imposing the relief. The percentage is used to measure the changes in performance of the selected indices, and common line graph is used to present the data.

## 6.0 Data Analysis

This section of the study talks about the analysis and results of analysis and comments on the results the major results of the study which are shown below in the Table-1 for the impact of Covid-19 on Nifty-50 during first wave and Table-2 for the impact of Covid-19 on Nifty-50 during second wave:

Table 1: Impact of Covid-19 on Nifty-50 During First Wave

Nifty-50						
Date	30-Jan-2020	25-Mar-2020	% Change	30-Jun-2020	% Change	
Closing price	12035.8	8317.85	-30.89	10302.1	-14.40	
Shares Traded	538138743	738114713	37.16	556238560	3.36	
Turn over (cr.)	19372.67	28482.01	47.02	27342.55	41.13	

Source: Designed by author

Table 2: Impact of Covid-19 on Nifty-50 During Second Wave

Nifty-50						
Date	5 October,	5 April,	%	31 May,	%	
	2020	2021	Change	2021	Change	
Closing price	11503.35	14637.8	27.248	15582.8	35.46	
Shares Traded	530597393	500476690	-5.67	435999456	-17.82	
Turn over (cr.)	31341.55	33885.39	8.11	32739.29	4.45	

Figure 1: Graph Showing Performance of NSE Nifty 50 Index during First & Second Waves





Source: Designed by author

Figure 1 shows the impact of Covid-19 on Nifty-50 during first and second wave. The impact of covid-19 on the Nifty-50 can be seen easily from data analysis. The Nifty-50 indices fall by Approx.31% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is increased by 199975970 and the turnover is also increased by Rs. 9109.34 crore around in this period. Later on the Nifty-50 index improved as comparison to 25th March, 2020 but not as much as that on 30 Jan, 2020. So, it depicts that covid-19 impacted negatively on the Nifty-50 in first wave. While in the second wave, Nifty-50 indices raised by approx. 27% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is decreased by 30120703 and the turnover is increased by Rs. 2543.84 crore around in this period. Later on, the Nifty-50 index improved as comparison to 5th April, 2021 reached to a new zenith. So, it depicts that covid-19 impacted positively on the Nifty-50 in second wave.

The Table-3 and Table-4 below shows the impact of Covid-19 on Nifty-Bank during first and second wave:

Table 3: Impact of Covid-19 on Nifty-Bank During First Wave

Nifty-Bank						
Date	30-Jan 2020	25-Mar 2020	% Change	30-Jun 2020	% Change	
Closing price	30647.4	18481.05	-39.69	21370.15	-30.27	
Shares Traded	328858847	394556026	19.97	292655825	-11.00	
Turn over (cr.)	54410.61	9791.54	-82.00	8208.92	-84.91	

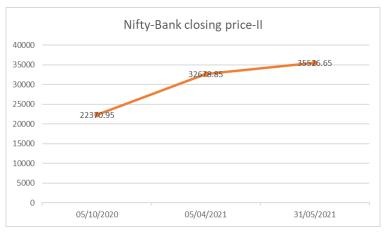
Source: Designed by author

Table 4: Impact of Covid-19 on Nifty-Bank During Second Wave

Nifty-Bank						
Date	5 October, 2020	5 April, 2021	% Change	31 May, 2021	% Change	
Closing price	22370.95	32678.85	46.07	35526.65	58.80	
Shares Traded	325414639	356389349	9.51	379880136	16.73	
Turn over(cr.)	8208.78	8317.73	1.32	7409.4	-9.73	

Figure 2: Graph Showing Performance of NSE Nifty-Bank Index during First & Second Waves





Source: Designed by author

Figure 2 shows the impact of covid-19 on the Nifty-Bank can be seen easily from data analysis. The Nifty-Bank indices fall by Approx. 40% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is increased by 65697179 and the turnover is also increased by Rs. 44618.97 crore around in this period. Later on, the Nifty-bank index improved as comparison to 25th March, 2020 but not as much as that on 30 Jan, 2020. So, it depicts that covid-19 impacted negatively on the Nifty-Bank in first wave. While in the second wave, Nifty-bank indices raised by approx. 46% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is increased by 30974710 and the turnover is increased by Rs. 108.95 crore around in this period. Later on, after the nifty-bank index improved as comparison to 5th April, 2021 reached to a new zenith. So, it depicts that covid-19 impacted positively on the nifty-Banking second wave.

The Table-5 and Table-6 below shows the impact of Covid-19 on Nifty-FMCG during first and second wave respectively:

Table 5: Impact of Covid-19 on Nifty-FMCG During First Wave

Nifty-FMCG						
Date	30-Jan	25-Mar	% Change	30-Jun	% Change	
	2020	2020		2020	, c change	
Closing price	30936.45	24471.7	-20.89	30063.25	-2.82	
Shares Traded	37175318	92962761	150.06	70668065	90.09	
Turn over(cr.)	2540.91	3654.07	43.80	3456.56	36.03	

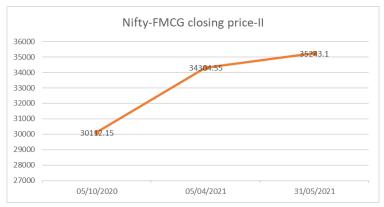
Source: Designed by author

Table 6: Impact of Covid-19 on Nifty-FMCG During Second Wave

Nifty-FMCG						
Date	5 October	5 April	% Change	31 May	% Change	
	2020	2021		2021		
Closing	30112.15	34304.55	13.92	35243.1	17.03	
Shares Traded	41338529	47978583	16.06	88839983	114.90	
Turn over (cr.)	1961.64	2728.17	39.07	3186.1	62.42	

Figure 3: Graph Showing Performance of NSE Nifty-FMCG **Index during First & Second Waves** 





Source: Designed by author

The Figure-3 shows the impact of covid-19 on the Nifty-FMCG can be seen easily from data analysis. The Nifty-FMCG indices fall by Approx. 21% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is increased by 55787443 and the turnover is also increased by Rs. 1113.16 crore around in this period. Later on, the

Nifty-FMCG index improved as comparison to 25th March, 2020 but not as much as that on 30 Jan, 2020. So, it depicts that covid-19 impacted negatively on the Nifty-FMCG in first wave. While in the second wave, Nifty-FMCG indices raised by approx. 14% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is increased by 6640054 and the turnover is increased by Rs. 766.53 crore around in this period. Later on, the Nifty-FMCG index improved as comparison to 5th April, 2021 reached to a new zenith. So, it depicts that covid-19 impacted positively on the Nifty-FMCG in second wave.

Table 7 and Table 8 shows the impact of Covid-19 on Nifty-IT during first and second wave respectively:

Table 7: Impact of Covid-19 on Nifty-IT During First Wave

Nifty-IT						
Date	30-Jan	25-Mar	% Change	30-Jun	% Change	
	2020	2020		2020		
Closing price	16327.9	12233.35	-25.07	14754.3	-9.63	
Shares Traded	18889354	47599771	151.99	25878721	37.00	
Turn over (cr.)	1715.04	2691.8	56.95	2039.72	18.93	

Source: Designed by author

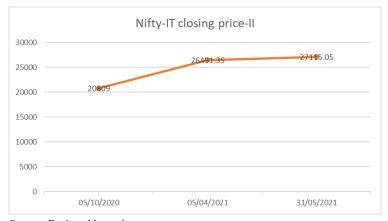
Table 8: Impact of Covid-19 on Nifty-IT During Second Wave

Nifty-IT						
Date	5 October 2020	5 April 2021	% Change	31 May 2021	% Change	
Closing price	20809	26491.35	27.30	27115.05	30.30	
Shares Traded	93778580	53479113	-42.97	19986845	-78.68	
Turn over (cr.)	9655.6	6179.06	-36.00	2687.03	-72.17	

Figure 4 shows the impact of covid-19 on the Nifty-IT can be seen easily from data analysis. The Nifty-IT indices fall by Approx. 25% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is increased by 28710417 and the turnover is also increased by Rs. 976.76 crore around in this period.

Figure 4: Graph Showing Performance of NSE Nifty-IT Index during First & Second Waves





Later on, the Nifty-IT index improved as comparison to 25th March, 2020, but not as much as on that of 30 Jan,2020. So, it depicts that covid-19 impacted negatively on the Nifty-IT in first wave. While in the second wave, Nifty-IT indices raised by approx. 27% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is decreased by 40299467 and the turnover is decreased by Rs. 3476.54 crore around in this period. Later on, the Nifty-IT index improved as comparison to 5th April, 2021 and went upward. So, it depicts that covid-19 impacted positively on the nifty-IT in second wave.

Table 9 and Table 10 shows the impact of Covid-19 on Nifty-Service during first and second wave respectively:

Table 9: Impact of Covid-19 on Nifty-Finance during First Wave

Nifty-Financial Service						
Date	30-Jan	25-Mar	% Change	30-Jun	% Change	
	2020	2020		2020		
Closing price	14289.95	9203.3	-35.59	10561.9	-26.08	
Shares Traded	112416431	294945987	162.36	208778676	85.71	
Turn over(cr.)	7246.82	12487.45	72.31	12453.81	71.85	

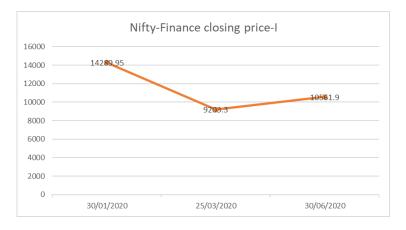
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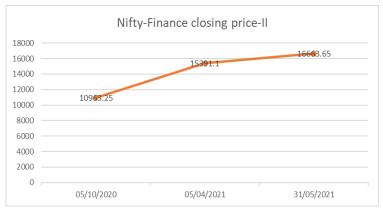
Table 10: Impact of Covid-19 on Nifty-Finance during Second Wave

Nifty-Financial Service						
Date	5 October 2020	5 April 2020	% Change	31 May 2020	% Change	
Closing price	10963.25	15392.1	40.39	16663.65	51.99	
Shares Traded	148107085	144862662	-2.19	128700153	-13.10	
Turn over (cr.)	8063.52	10678.29	32.42	9424.13	16.87	

Figure-5 shows the impact of covid-19 on the Nifty-Financial service can be seen easily from data analysis. The Nifty-Financial service indices fall by Approx. 36% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is increased by 18252956 and the turnover is also increased by Rs. 5240.63 crore around in this period.

Figure 5: Graph Showing Performance of NSE Nifty-Financial Service Index during First & Second Waves





Later on, the Nifty- Financial service index improved as comparison to 25th March, 2020, but not as much as on that of 30 Jan, 2020. So, it depicts that covid-19 impacted negatively on the Nifty-Financial service in first wave. While in the second wave, Nifty-Financial service indices raised by approx. 27% from the date of reporting first case of Covid-19 in India to date of imposing the lockdown by GOI and trading of shares in this index is decreased by 3244423 and the turnover is increased by Rs. 2614.77 crore around in this period. Later on, the Nifty-Financial service index improved as comparison to 5th April, 2021 and went upward. So, it depicts that covid-19 impacted positively on the nifty- Financial service in second wave.

#### 7.0 Conclusion

The covid-19 pandemic has huge impact on NSE and the initially it impacts negatively on the NSE. The indices related to Nifty-Pharma showed positive impact of Covid-19 and Nifty-IT & Nifty-FMCG performed in a good manner as compare to other indices in First wave. The initially reaction of the Covid-19 on indices is very bad and investors had to loss around a huge part of their investment but later on the market start to revive and the different indices perform a little batter in the First wave. While in the second wave, the Covid-19 didn't affect as much as that of the first wave. Nifty-Bank & Nifty-Financial Services were the top gainer among the selected sample in the second wave.

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