

Impact of Covid-19 on India's Stock Market

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Abstract

The global outbreak of COVID-19 has severely impacted the financial markets because of lockdown and decreasing demand in the whole world. The fall in the price of crude oil has further deteriorated the economic scenario. There are more than 30000 people affected in India and nearly 1200 people have died because of coronavirus. This research paper presents the impact of COVID-19 on the India's stock market. There are two major stock exchanges in India i.e. Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). For the present research, top 20 companies from NSE have been selected. The impact was measured by observing change in share price of these companies over last three months period since the pandemic has erupted.

Keywords: COVID-19, Bombay Stock Exchange, National Stock Exchange,, Stock market, Share price

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1. INTRODUCTION

Corona virus (also called COVID-19) is believed to have been originated from Wuhan (China). This virus is a respiratory virus which primarily spreads through droplets generated by an infected person when he sneezes or coughs or through droplets of saliva or discharge from the nose. One third of global population is under lockdown on account of corona virus pandemic. More than on 200k people have lost their lives and another over 2 million have been infected by this virus across the globe. Industry across the whole world is operating under the fear of collapse of global financial markets. In India, the economic growth has been very sluggish. Now because of lockdown, unemployment has increased, interest rates have been reduced and even the stock market has become highly volatile. Although number of people affected from corona virus in India is relatively low in comparison to other countries, but investor sentiment is negative. Analysts believe that although the impact of Covid-19 would be significance on India, but the country will not slip into a recession.

If we dwell deep into the history, there had been many different factors responsible for stock market crash. Here is a brief of top 10 market crashes in the history. In the year 1673, it was Tulip Mania in Netherland which crashed the

market. In 1720, it was the South Sea bubble which brought the market down in UK. In 1873, triggered by an uncontrolled speculation, there was a great fall in the value of shares in Vienna. Even the government was not able to control the downfall which ultimately affected the whole Europe. The biggest and most significant crash in financial market occurred in the year 1929 in USA. In September and early October month of 1929, the stock prices began to drop because of which panic selling took place. On 29th October, the market lost \$14 billion during the day.

In the modern financial system, the biggest financial market crash occurred on 19 October 1987. This crash began in Asia, intensified in UK and ended with Dow Jones. The industrial average of Dow Jones came down to 22.6% for the day, which is still considered as the biggest downfall in percentage terms. In the year 1997 in Thailand financial market, the foreign investors lost confidence because of country's debt condition which led to crisis in Asian stock market in 1998. The Dotcom bubble burst in the year 2000, where at the peak of NASDAQ index at 5048.62 on 10th March 2000, the big IT giants like Dell and Cisco sold their stocks. This action triggered panic selling in investors and the market lost 10% of its value. By the year 2002, investors had lost \$5 trillion in this Dotcom bubble crash. US financial crisis in the year 2008 is known to everyone. With fall of Lehman Brothers, the financial market in US collapsed very badly. This led to the fall in the global financial market. Again, the flash crash scam which happened on 6th May 2010 in US lasted for nearly 36 minutes only. It erased billion of dollars from US stock market. Last in the series is Chinese market crash which happened in the year 2015-16. In July 2015 because of chaotic panic selling, approximately \$3 trillion worth of shares were wiped out in a period of just three weeks.

2. LITERATURE REVIEW

Global stock market is a very complex network. Although very less study has been done to study the impact of one country's stock market on other nations, but it has been found that US stock market largely impacts Indian stock market. Analysts are of the view that happening of COVID-19 is definitely going to impact stock market. According to a research done by International Institute for labour Studies, these financial crises not only impact economy of a nation but also have a severe impact on the labour market. Several researches have tried to find out the reasons for global crisis.

A study by Deepak, Lalwani Idnani reported that corporate governance is the major factor behind global crisis. Another study by Naveen Kumar and J. P. Singh (2010) also identified a study related to 2008 economic crises found that countries with less international currency reserves in proportion to their current account deficits had suffered a greater loss. Shailesh Rastogi found the impact of crisis on the volatility in the stock market. They carried out an analysis on volatility index of the stock market before and after crisis. The conclusion of the study was impact largely depends upon the volatility of different nations. Kalim Siddiqui found the impact of financial crisis on the economies of India and China. The finding shows that the crisis impacted the growth, employment and

trade in emerging markets. MK Venu (2009) in the article "Learning from Lehman: A Year Later" articulate that the 2008 financial crisis had been the worst recession in the last 100 years.

Karunanayake, Athukoralalage et al. (2010) used multivariate generalized autoregressive conditional heteroskedasticity (MGARCH) model to study the effects of financial crises on stock market returns and the market volatility of four nations Singapore, Australia, UK and the US. Their findings indicate that volatilities of smaller economies are largely impacted by US stockmarket.

Eleftherios Thalassinou et al. (2015) carried out a research on the impact of financial crisis on the performance indicators of selected countries. They selected 10 countries for their study and carried out empirical analysis of various indicators such as turnover, stock market capitalisation, share price indices, etc. to explain the impact of crisis on capital market. Their findings indicated that economies of Eastern Europe were hit badly by the economic crisis. Those countries where the impact was less also suffered losses because of decreased stock exchanges, limited lending and collapse of exports.

Majdi Ksantinia and Younes Boujelbène (2014) examined the impact of financial crisis by measuring the change in GDP growth and investment of 25 countries. They used control variables to study the change for the period 1998 to 2009. Their findings showed that financial crisis has a significantly negative impact on the GDP growth and level of investment.

Rajiv Kumar and Pankaj Vashist (2009) did a research on the impact of global economic crisis on India. Their findings were that since India is not integrated with global financial system, so first round adverse impacts were not there. But because of global downtrend, second round impacts were there which could be seen through credit crunch in the market and decline in GDP by more than 2% in the fiscal year 2008-2009.

3. TESTING HYPOTHESIS

This research paper includes hypotheses to be tested by using SPSS. The hypothesis of this study is:

H₀: COVID-19 has no significant impact on India's stockmarket.

H₁: COVID-19 has significantly impacted India's stock market.

4. Objectives of the Study

The main objectives of this research are:

1. To study the impact of COVID-19 on India's stockmarket
2. To study the percentage change in stock prices of top 20 companies in the NSE 50 list.

3. To study the change in the volumes traded in top 20 companies.

4.1 Expected Outcome

The present study helps to identify the impact of COVID-19 on Indian stock market. The study examines the change in the share prices and volume traded in top 20 companies in *NSE 50*.

5. RESEARCH METHODOLOGY

Secondary data was collected for this research from *NSE* website. The time period taken was from 13 January 2020 to 17 April 2020. The reason for taking data of this period is that we tried to analyse the market before and during the COVID-19 period.

5.1 Research Design

The research design is the approach that we choose to incorporate the diverse parts of the study in a rational and logical way so that we can attend to the research problem effectively. It is basically the blueprint for the collection, measurement and scrutiny of data. The research design used in this study is empirical in nature. Only secondary data was used for this research which was available on *NSE* and yahoo finance site. Authentic data related to stock prices of different companies is always available on these sites. Quantitative as well as qualitative methods were used to collect data of top 20 companies listed on *National Stock Exchange (NSE 50)*. A well structured approach was used to analyse the data related to the stock price of these companies.

6. RESULTS AND ANALYSIS

The share prices of top 20 companies listed in *National Stock Exchange (NSE)* were collected to measure the impact of corona virus on stock market. The data was collected on weekly basis and the closing prices of the shares were taken into account. On a particular week various prices of share like opening price, closing price, high price and low prices are given. We have taken closing prices as it indicates the investors perception and the impact of various news on the share price.

Name of Company	Date (Weekly data: Year 2020)														
	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/2	3/9	3/16	3/23	3/30	4/6	4/13	4/17
Reliance Industries	1581	1522	1383	1434	1488	1486	1329	1271	1105	1018	1066	1077	1220	1224	1224
TCS	2219	2183	2165	2137	2184	2157	2000	2116	1806	1797	1825	1654	1766	1806	1806
HUL*	2060	2074	2075	2160	2255	2248	2175	2189	2033	2052	2141	2154	2372	2385	2385
HDFC Bank	1278	1245	1199	1242	1219	1217	1178	1135	1070	883	904	814	925	910	910
HDFC	2454	2451	2268	2406	2402	2370	2176	2109	2067	1754	1754	1500	1703	1681	1681
Bharti Airtel	500	524	497	539	565	546	524	519	492	463	449	424	489	502	502
Infosys	768	783	780	777	786	797	732	739	642	585	653	586	636	629	629
ICICI Bank	532	534	505	536	546	547	497	486	447	346	340	287	343	376	376
ITC	240	238	219	213	208	207	198	182	162	176	163	178	185	188	188
Kotak Mahindra	1698	1643	1648	1653	1681	1686	1620	1631	1470	1262	1399	1141	1273	1186	1186
SBI	318	324	303	321	319	328	303	271	242	210	196	176	188	193	193
Asian Paints	1830	1787	1755	1859	1877	1842	1798	1877	1798	1743	1604	1521	1651	1756	1756
Nestle*	15440	15756	15525	16328	16357	16540	15779	16429	14992	14146	15109	15105	16840	17324	17324
Maruti Suzuki	7520	7128	6813	6972	6914	6758	6283	6446	5839	5079	4646	4012	5327	5505	5505
Avenue Supermarts*	1991	1949	2072	2287	2408	2463	2324	2242	2101	1916	2080	2067	2393	2212	2212
Bajaj Finance	4232	4195	4276	4654	4782	4880	4466	4226	3953	2952	2542	2208	2552	2308	2308
Axis Bank	740	737	705	748	737	744	697	658	569	428	360	325	420	479	479
Larsen	1304	1359	1287	1299	1295	1281	1188	1159	1051	865	837	775	813	933	933
HCL Tech	599	608	591	608	622	608	534	566	493	445	431	406	469	455	455
Sun Pharma	455	448	423	431	419	405	373	401	384	365	338	376	454	457	457

Table 1: Share price of top 20 companies in NSE week wise from 13 January to 17 April

From the above table, if we observe the first and last closing price, then it can be seen that share price of most of the companies have decreased. But share price of companies such as *HUL*, *Nestle*, and *Avenue Supermarts* have increased. The reason for this may be because during lockdown the requirement of necessary commodities has increased manifold. But because of the lockdown in many countries and the people following work from home approach, the demand for energy, transportation and projects professionals in various sectors like IT and infrastructure have reduced drastically. The above data can be understood more easily from the graphs drawn below.

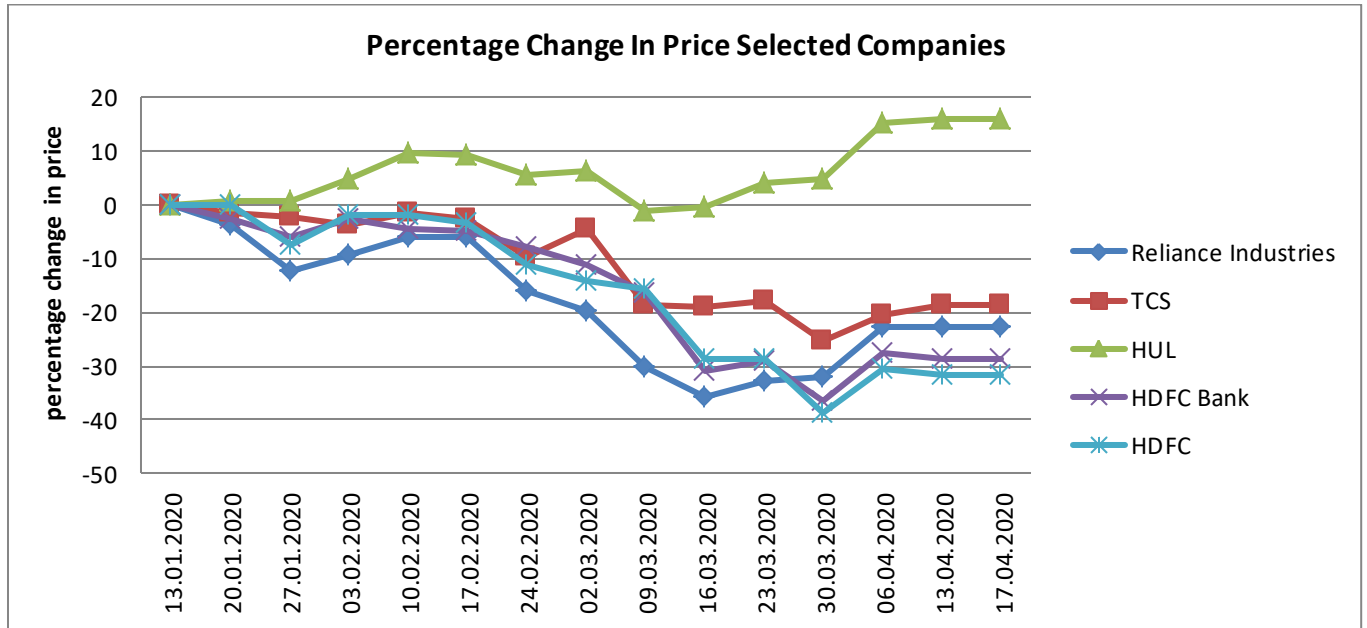


Diagram1.1: Percentage change in price of companies ranging from 1 to 5 in the series

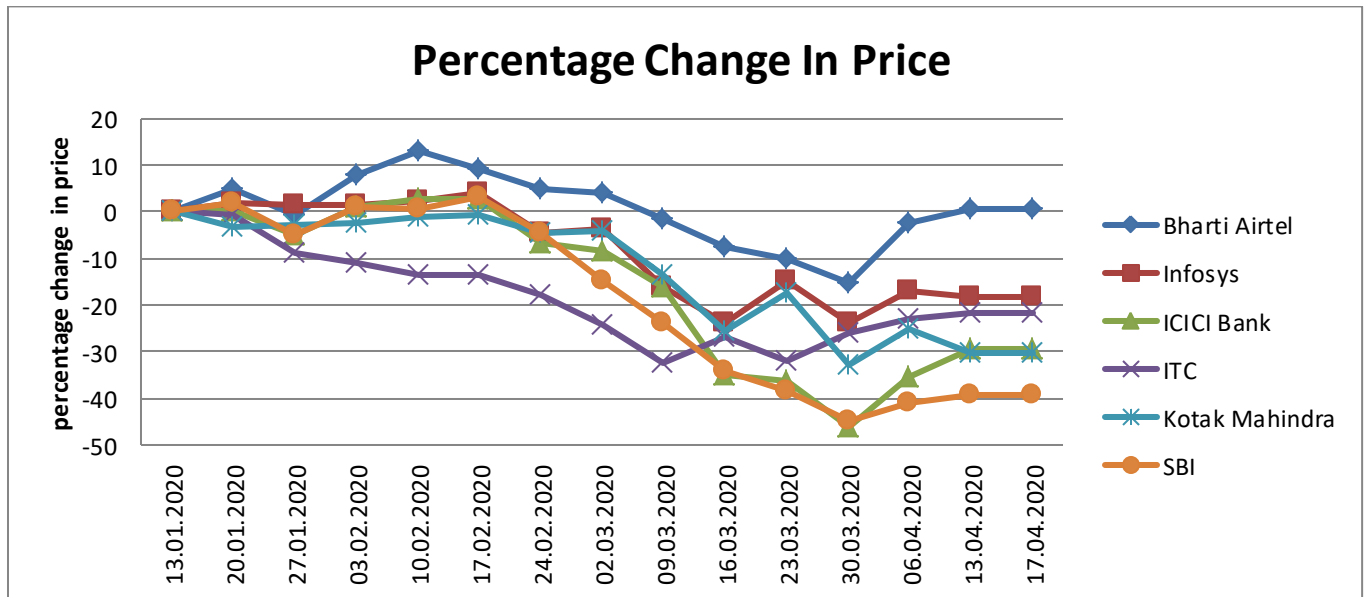


Diagram1.2: Percentage change in price of companies ranging from 6 to 10 in the series

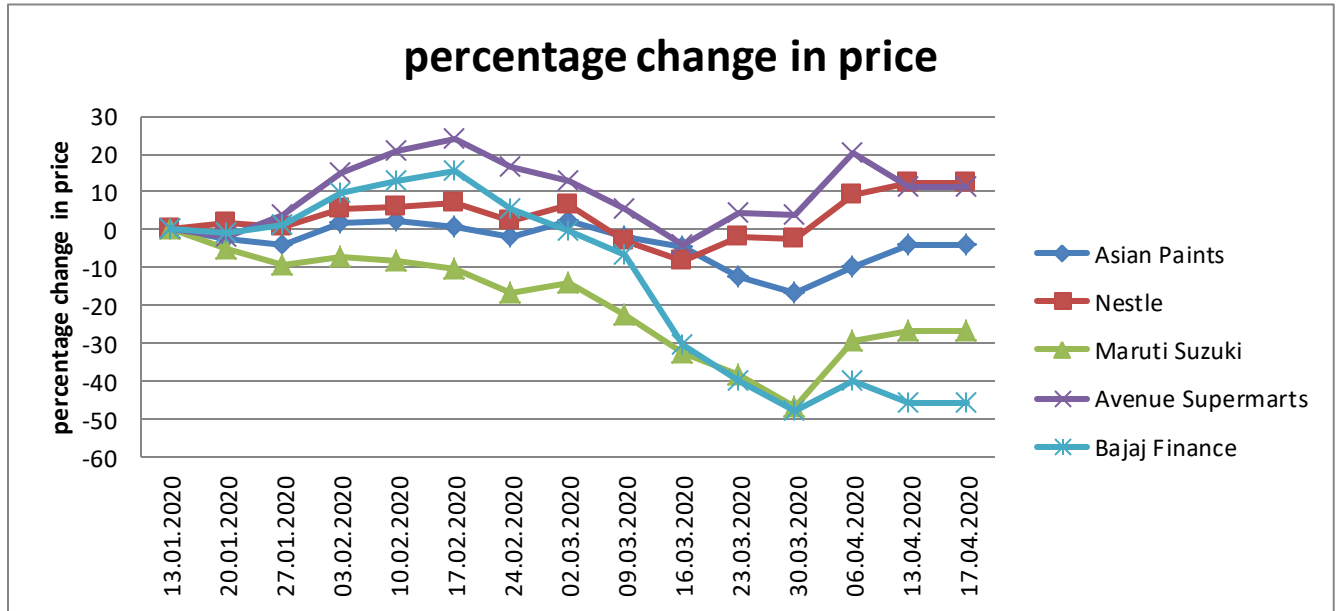


Diagram1.3: Percentage change in price of companies ranging from 11 to 15 in the series

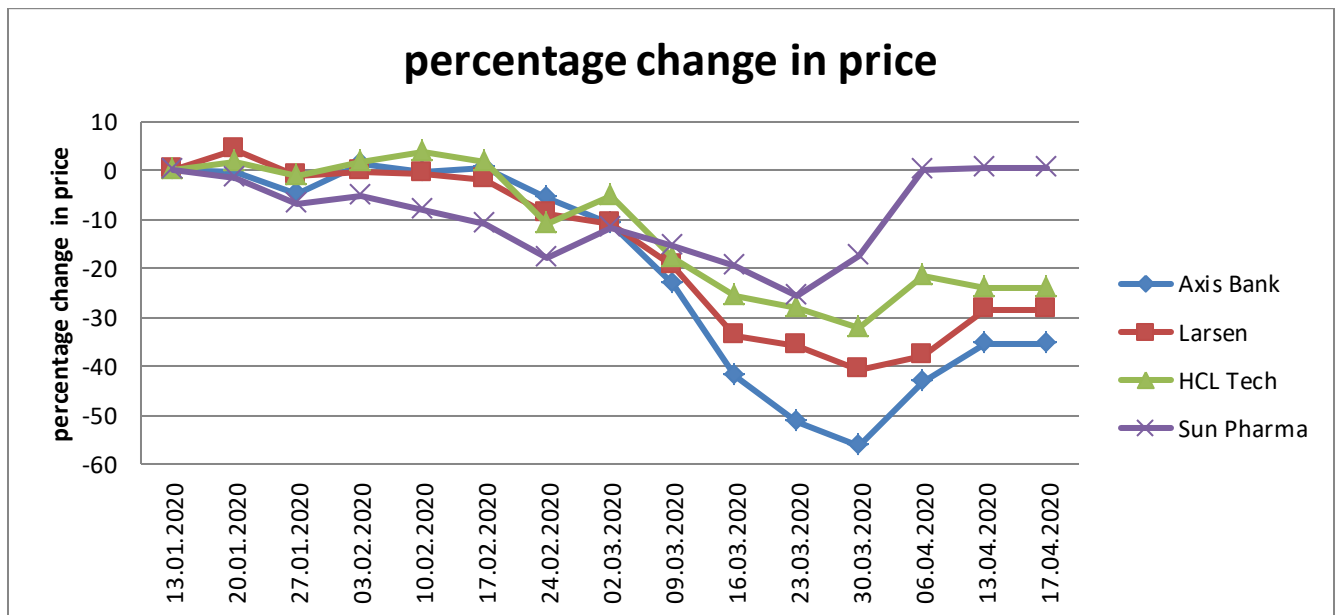


Diagram1.4: Percentage change in price of companies ranging from 16 to 20 in the series

Diagram 1.1 to 1.4 shows the change in share prices of five companies. We have taken the data of five companies at a time to understand clearly the change in scenario taking place. We have calculated percentage change in volume taking place with time period. From the above graphs, it is clear that the value of share prices is going downtrend with few exceptions.

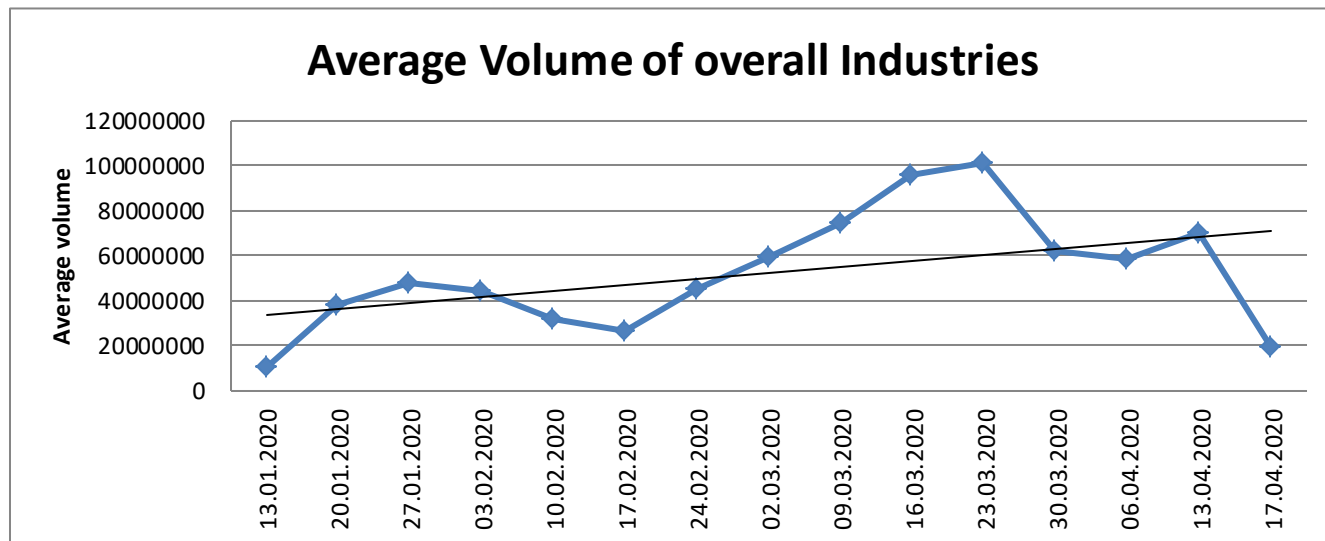


Diagram 2: Change in average volume traded

Diagram 2 show the change in average volume traded from 13 January to 17 April on weekly basis. The trend line clearly shows an uptrend in the volume traded. That means more number of people/investors invest their money when the share prices are low.

6. CONCLUSION AND DISCUSSION

The impact of COVID-19 varies from sector to sector. The analysis of data indicates that the share prices of most of the companies in top 20 list of *NSE 50* have come down significantly with time period. That means that the impact of COVID-19 has been severe on India's stock market. But overall volume traded has increased with time period. So, more money is being invested in the market, which shows that people have faith in Indian economy. These facts are supported by a recent article in *Business Line* which states that stock prices have declined by nearly 30% in the March quarter and high net-worth individuals (HNIs) are on a buying spree during the same period.

7. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The study has certain limitation which should be taken into account while interpreting the findings. Sample data taken for the study was from January 2020 to April 2020. This period may not be entirely sufficient to support the findings. The main reason for this is that the country is still under lockdown and the true impact of corona virus can be checked by measuring how the economy will change after lockdown. Because when the lockdown is removed, then only we can see what shape the economy is taking and how the market is reacting to the fear of corona virus. Secondly, the foreign portfolio investments also need to be considered as they play an important role in financial market.

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