

# IMPACT OF COVID-19 ON INDIAN STOCK MARKET

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## **Abstract**

The pandemic had a significant impact on financial markets and we can see that particular markets or products had varying levels of stability as a result of their exposure to different markets. The stock market performance during the covid-19 pandemic is discussed in this paper. Because there were few studies on the stock market performance during the pandemic, our main purpose has to figure out how different industries represented by stock market indices reacted to the covid-19 shock. The impact of the covid-19 pandemic on the Indian equities markets investigated in this paper.

We use NIFTY index that encompass many characteristics of the pandemic to understand performance of Indian stock market represented by NIFTY. Increased in confirmed cases and deaths from the corona virus are linked to a large increase in market illiquidity and negative performance of stocks, according to our findings. Declining sentiment as well as the imposition of limits and lockdowns, leads to a decline in market performance.

## Introduction

The recent outbreak of corona virus (COVID-19), originating in December 2019 from (China), has infected over ten million people and has resulted in more than 580,000 deaths worldwide. Early estimates have put the global economic costs of the pandemic at around \$8.8 trillion. Given its immense human and economic impacts, the COVID-19 outbreak has spurred a deluge of news and opinions. It has also triggered government policy responses such as mandatory closures and lockdowns. Major events like the pandemic often overshadow all other events in the media. A consistent influx of pandemic-related news can cause anxiety among investors, influencing their investment decisions. Such sentiment related influences have a significant impact on trading in financial markets. Similarly, restrictive government policies can cause uncertainty which may stimulate portfolio reconstructions and abnormal trading activity and destabilize the markets.

Stock market performance is important features of financial markets. These factors tend to deteriorate under adverse market conditions such as crises and pandemics. Liquidity is being cited as a major concern during the COVID-19 pandemic. Economic theory suggests that bid-ask spreads tend to increase in the presence of risk and uncertainty, which in turn leads to the deterioration of liquidity in the markets. Liquidity in financial markets is affected by investors' ability to process information. Similarly, uncertainty has been known to adversely impact of stock markets. Recent studies find high volatility in response to COVID-19. This study has been focus on two dimensions of the corona virus pandemic. Study has evaluated the number of active covid cases influence on performance of stock market (NIFTY) and number of death due to covid cases and its influence on performance of stock market (NIFTY).

We investigate the impact of coronavirus pandemic uncertainty (associated with the new infection cases and the number of death cases reported at India), on the financial markets' performance. Indeed, investigate the impact of COVID-19 on the stock market performance we use daily data and we focus on the period of the pandemic phase of the crisis, First phase March 24 to April 14. Second phase, April 15 to 3 may these lockdowns are kept in India. These lockdowns are impacted on stock market.

## Literature Review

Review of literature is the process of analysing previous studies to ascertain the level of research already conducted in the concerned area. It provides base to develop an idea about the research problem, research methodology applied and the conclusion drawn by previous researchers. It also helps in identification of potential areas of research, describing research objectives, defining research methodology

and developing research report. This chapter attempts to review the work already done by other researchers in the field of mutual funds and has been arranged chronologically.

**Vardar and Okan (2008)** empirically assessed the short term overreaction effect in the Istanbul Stock Exchange by daily stock data from the period of year 1999 to year 2003. The research stage includes the pre- and post- Turkish financial crisis phase. They have received the proof of short term overreaction effect in the Istanbul Stock Exchange before and after the financial crisis. Their analysis decorated that the stocks that displayed a large price increase (winners) indicated a proof of the overreaction in the short run; though the stocks show a large price decline (losers) with no significant evidence. The price reversal for winners in the pre-crisis period, was seen additionally distinct than the post-crisis period. The results embarked a reduced degree of overreaction post crisis phase, which may be attributable to the trader's acts.

**Chin (2002)** noticed that the performance of accounting related contrarian investment strategies in the New Zealand market during the period of 1988-1995 periods. Their conclusions proved the usefulness of developing several contrarian strategies, as they developed the superior cumulative returns. The two-year long correction process seemed to be much larger and more developed than of U.S. and Japanese markets, where the value stock price corrections have been found to occur more quickly. This has facilitated the support to the inference that the longer horizons are requisite for value strategies to pay off in defectively competitive markets rather in the competitive markets.

**Daniel (1997)** presented a theory of the security returns variance based on an investor courage and on changes in confidence resulted through the biased self-attribution of the insinuation from news onset. The assumption seems to be based on the pool of extensive psychological facts. The theory disguised that the investors may overreact to the private fact signals and under react to the public fact signals. They have shown that the positive self-connection and post-public-announcement 'drifts' were not basically a result of less than the reaction. The theory also facilitated a structure which explained what kind of evidence should be likely implied for depicting the investor overreaction or under-reaction.

**Manglik Gauri (2006)** examined the over-confidence and over-optimism bias, which are ubiquitous amongst investors in the securities market. She analysed the occurrence, incidences and policy responses to the over-confidence and the over-optimism biases as well. These biases may augment the nature and extent of risk initiated by the investors. It has resulted in wider exposure and, therefore, higher losses in the stock market. She recommended greater attention is requisite to be paid off for the quality of investor education and its effectiveness. It ought to be imparted by the regulators as well as investors. The Personalized simulated form must be included as a part of the investor education to ensure experiential learning.

**Selvarani and Lakshmi (2009)** observed the relationship effect during the day of the week and month of the year anomaly in the NSE Indices. After the introduction of the rolling conclusion, Friday became significant. This also indicates that the Fridays, being the last day of the week is being proved to be considerably important after rolling settlement. Mondays have been found to get higher standard deviations followed by Fridays.

**Singh and Choudhary (2009)** tested Overreaction Hypothesis in Indian stock market by the means of the monthly stock prices of the sample of 460 scrips listed on the NSE during the decade phase of 1996-2007. Unpredictable to the overreaction hypothesis, the portfolios of the prior winners were found to break the prior losers. Thirty-six months and twelve months after portfolio formation, the winner stocks have earned about 51.84% and 59.46% respectively. The study acknowledged the non-existence of overreaction-based hypothesis. However, the anomalous returns were revealed by the momentum investment strategies, especially in the Indian an Empirical Analysis of Investment Strategies in Indian Equity Market 35 equity market. After the assessment of the winner stocks basics, it is revealed that these stocks have less market capitalization, high P/E and high B/M ratios instead of their counterparts.

**Tripathi and Aggarwal (2009)** assessed if there is any overreaction effect being seen in the Indian stock market by the use of the monthly closing adjusted prices of Fortune-500 stocks inclusive of S & P CNX 500 Equity Index from the duration year, 1996 till year, 2007. Their results showed an incidence of the statistically momentous, but the asymmetric overreaction consequence in the Indian stock market. On the other hand, the losers' returns have been analysed to re-lapse their direction from a tremendously negative to particularly positive path throughout the test period.

**Jegadeesh and Titman (1993)** examined the efficiency of the stock market by assessing the effectiveness of 16 strategies. The data used to be commenced from a CRSP daily returns file between the duration of 1965-1989. The results acknowledged that the out performance of momentum strategies is reliable with the delayed price reactions to the firm-specific facts. The returns of the stocks in the winners and loser portfolios in terms of the incomes in the 36 months subsequent the configuration period has also been examined and sort of similar kind of pattern was seen. Especially, the stocks in the winner portfolio realized that the significantly higher returns in comparison to the stocks in the loser portfolio about the quarterly earnings notifications that were made in the first few months post the formation date.

**Gregory (2001)** analysed the profitability of value strategies in the UK by using the data from January 1975 till December 1998. They accomplished that the value stocks had indeed led to higher returns in the UK, and that the pattern of past and future performance of value stocks seem to be consistent with the contrarian model. They also explored the profitability of value strategies which can be described using the three-factor

model of Fama and French. Their assessment declared out of sample evidence on the legality of the three-factor model. The results of the study recommended that it to be strongly rejected.

**Prasad and Verma (2013)** stated that by sample of 500 stocks listed on S&P, CNX & Nifty has endeavoured to explore either there is any size outcome in the Indian stock market. Stocks have been sorted on the grounds of total assets and market capitalization.

### **Research Gap**

Although there are lot of studies in this field of equity market has been done but the impact of COVID-19 cases in Equity Market has rarely found.

The COVID-19 impact on the financial system could not be ignored. Likewise, several early papers focus on the COVID-19 effects on stock markets return whereas only few papers underline the COVID-19 impact on performance of stock market.

### **Research Objectives:**

The purpose of this research is to analyse the performance of stock market. An attempt has been made to evaluate the performance of Nifty and stock market. However, specifically, following are the objectives of the present study:

1. The number of Covid-19 cases impact on stock market volatility.
2. The number of death due to covid-19 and its impact on Nifty performance.

### **Scope of the Study**

- Equity Market is crucial for economic development as they bring together investors seeking investment opportunities and firms seeking to mobilize resources to finance their businesses.
- Attractive investment.
- Contribution of equity shares to the financial market.
- So, this study will be helpful for investors who use equity shares for investment purpose.

### **Research Methodology**

Research Methodology means various methods used by the investigator to obtain the knowledge of information about the subject which may differ from person to person, subject to subject. It gives guidelines as to how the data is to be collected and the presentation of information. It must be collected with the help of

some technique. Collection of data is through secondary sources. NIFTY website has been used for collection of secondary data related to market performance and centre for disease control and prevention (CDC) website has been used for collection of data related to number of COVID active cases and number of deaths.

**Type of Research:**

Analytical Research

**Data:**

Secondary Data

**Sample Size:**

April 2020 to September 2021 for this time period sample for NIFTY performance and number of active COVID-19 cases and number of deaths has been taken as sample on daily basis.

**Statistical Tool:** Regression Analysis

**Data Specification:**

Closing price of NIFTY, number of daily active cases and deaths during COVID

SUMMARY  
OUTPUT

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*Regression Statistics*

Multiple R	0.589545
R Square	0.347564
Adjusted R Square	0.342216
Standard Error	785.7086
Observations	124

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ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	40121649	40121649	64.99139	5.8592E-13
Residual	122	75315229	617337.9		
Total	123	1.15E+08			

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## Interpretation

The independent variable used for the study is number of deaths and dependent variable is Nifty closing price. The analysis result which has been shows is that number of death due to covid in India is having negative impact on stock market performance which has been indicated by NIFTY.

## Number of COVID Cases and Closing prices of NIFTY

### SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.490149572
R Square	0.240246603
Adjusted R Square	0.234019116
Standard Error	847.8688821
Observations	124

### ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	27733317.81	27733318	38.5784199	7.55297E-09
Residual	122	87703560.24	718881.6		
Total	123	115436878.1			

The independent variable used for the study is number of cases and dependent variable is Nifty closing price. The analysis result which has been shows is that number of COVID cases in India is having partial negative impact on stock price which has been indicated by NIFTY. **Conclusion**

We investigate the impact of number of COVID-19 cases on the performance of stock market (NIFTY) and number of death due to COVID impact on the performance of stock market (NIFTY). Study concludes that increase in confirmed cases and deaths due to corona virus having significant impact on stock market. In regression analysis the independent variable used for the study is number of deaths due to COVID and dependent variable is stock market performance (NIFTY). While analysing the data for the study, got the result that number of death due to covid in India is having negative impact on stock market performance, and number of COVID cases in India is having partial negative impact on stock price.

## Managerial Implication:

First month of the pandemic, saw historically large and rapid declines across all sectors. primarily uncertainty was extraordinary, and the downside seemed unlimited. Initially investors has lost the money in stock market



due to overreaction on uncertainty (proved by overreaction hypothesis). The research has showed the result that number of deaths during the pandemic has influenced the stock market performance. During the pandemic or uncertain time investors should not get panic and take incorrect decision of selling or purchasing of shares in hurry.

Scope for Further Research:

1. Research can be carried on future where, researcher can try to find out the impact of COVID in the performance of equity share of different sector.
2. With the same objective research in future can be carried out pre covid and post covid performance of NIFTY.

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