Impact of Covid 19 on Stock Returns of Indian Healthcare

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Abstract

The COVID-19 pandemic, declared by the World Health Organization (WHO) on March 11, 2020, has had a significant economic and financial impact on every economy in the world. The rise in COVID-19 cases has had a significant impact on India's economic growth, as well as people's health and daily lives. Stock returns from diverse industries demonstrate a country's stagnant economy, but healthcare may be affected in a different way. The goal of this research is to determine how the pandemic has affected healthcare stocks. Descriptive statistics and T-test has been applied for the current study. Findings shows that there is a difference between stock market return of Indian healthcare. This indicates that the stock market began to rebound in mid-April 2020, following a negative influence during the initial period of the pandemic. We hypothesise that investors' fear levels fluctuated regularly in the stock markets during the pandemic.

Keywords: COVID 19, Healthcare, Returns, Industries, Economic growth.

Introduction

The stock market is vital to a country's economy since it facilitates the majority of global money transaction. A disciplined stock market investment plan can result in significant gains, Rouf et al. (2022). Healthcare has become India's most important sector in terms of revenue and jobs. The primary goal of the Indian government's investment and development in these industries is to improve residents' quality of life and protect them from potential worldwide pandemics. In the twenty-first century, when people travel frequently for work or leisure, disease can spread quickly to different regions of the world.

The Indian healthcare system is a sophisticated network that works to offer medical services to a population of more than 1.3 billion people. The system is distinguished by a mix of public and private healthcare institutions, with a sizable section of the population dependent on government-sponsored programmes. Primary health centres, district hospitals, and tertiary care facilities are part of the public healthcare infrastructure: nonetheless, difficulties such as inadequate infrastructure, a scarcity of healthcare workers, and uneven resource distribution continue.

The COVID-19 epidemic began in Wuhan in early December 2019, after people were exposed to an unknown source at a seafood market and became unwell. The market was swiftly shut down. Until

Impact of Covid 19 on Stock Returns of Indian Healthcare



January 20th, 2020, there were approximately 50 cases. However, the number of instances increased dramatically after January 20th, 2020, and the financial markets, which were nearing a record high, began to feel the squeeze. The coronavirus caused fear in stock markets around the world, and traders became frightened and anxious, Singh and Shaik (2021). The COVID-19 epidemic posed considerable challenges to India's healthcare system, testing its resilience and capacity. India had an increase in COVID-19 cases during various waves, necessitating swift responses from the government and healthcare institutions.

In the early stages, there were concerns about the healthcare infrastructure's ability to handle a significant volume of cases. The epidemic highlighted the importance of continued investments in healthcare infrastructure, worker training, and pandemic preparedness to ensure India's ability to respond to future health emergencies effectively. To combat the virus's spread, the government imposed lockdowns and travel restrictions, which had economic and social consequences.

30 Jan	First case identified			
6 March	Screening of International Passengers			
12 March	First death reported			
15 March	Confirmed cases 100			
22 March	Passenger air travel suspended			
25 March	3 week nationwide lockdown imposed			
14 April	Confirmed cases 10,000 reported			
29 April	Death cross 1,000 mark			
1 May	Lockdown extended by 2 weeks			
7 May	Confirmed cases reach 50,000			
17 May	Lockdown extended by 2 more weeks			
19 May	Confirmed cases reach 100,000			
17 June	Death cross 10,000 mark			
16 July	Confirmed cases reach 10,00,000			

Table [•]	1-'	Timelin	les of	COVID	19	in	India
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Table 1 shows that COVID 19 pandemic entered in India on Jan 30 2020. After that on March 12 first death was reported due to COVID 19. On March 15 100 cases were confirmed and 3-week nationwide lockdown was imposed on 25th March. On April 14 cases cross 10,000 mark. On 1st May again lockdown extended for two weeks and on 29th April death mark crossed 1000 mark.

Impact of Covid 19 on Stock Returns of Indian Healthcare



Literature Review

Mittal and Sharma (2021), showed how has the pandemic impacted healthcare and pharmaceutical stocks? Daily closing prices of sector-specific indices for 233 days, spanning 15 May 2019 to 24 April 2020, were used to compare different sectors to our test sector using various parameters. The event study approach suggests that there have been significant abnormal returns and cumulative abnormal returns in our test sector (healthcare and pharmaceutical sectors) over the event window, but when compared to other sectors using another econometric model, the returns are not statistically significant and do not explicitly indicate this.

Chaudhary et al. (2020) attempts to analyses the impact of COVID-19 on the performance of the Indian stock market in terms of two composite indices (BSE 500 and BSE Sensex) and eight sectoral indices of India's Bombay Stock Exchange (BSE) (Auto, Bankex, Consumer Durables, Capital Goods, Fast Moving Consumer Goods, Health Care, Information Technology, and Realty).GLS regression has been applied to assess the impact of COVID-19 on the multiple measures of volatility, namely standard deviation, skewness, and kurtosis of all indices. The data demonstrate a lower mean daily return and specific, negative returns during the crisis era compared to the pre-crisis period. The standard deviation of all indices has increased, the skewness has turned negative, and the kurtosis values are very high. During the crisis, the correlation between indexes grew stronger. The Indian stock market has nearly the same standard deviation as worldwide markets, but with stronger negative skewness and positive kurtosis of returns, making it appear more volatile.

Kumar *et al.* (2021) seeks to investigate and analyses the impact of the COVID-19 outbreak on Indian enterprises listed on the NSE across several sectors. Furthermore, a sub-sample study based on market capitalization was undertaken to determine the impact of size during extreme occurrences. The findings help owners manage their portfolios and reduce the systemic risk of their assets amid severe occurrences like pandemics, wars, and others. This is the first complete examination of the COVID-19 outbreak's impact on several sectors in India.

Shukla *et al.* (2021) attempts to comprehend the various facets of economic issues confronting the Indian healthcare system and propose potential solutions to mitigate the impact of the COVID-19 outbreak in India. It examines the short- and long-term effects of the pandemic on India's health-care sector in terms of efficiency and equity. The Indian government had moved quickly to provide cash, resources, and labor. It announced relief packages for marginalized communities and reimbursed expenses. Specific research centers around the country must collaborate to immediately mitigate any future damage.

Joshipura and Lamba (2022) study uses an event study methodology to evaluate the impact of COVID-19 on stock returns in the healthcare (66 stocks) and tourism (39 stocks) sectors of Indian markets. The study found that investors' reactions to both occurrences were distinct and asymmetric in the healthcare and tourism sectors. Investors in the tourism industry underreacted to the first reported case because they were unable to forecast the potential repercussions, and then overreacted to the lockdown news. The findings back up the behavioral finance theory of under reaction and overreaction, particularly under stressful settings. The study has significance for investors and money

Impact of Covid 19 on Stock Returns of Indian Healthcare



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managers seeking profitable investment opportunities as a result of transitory stock price fluctuations induced by investors' irrational reactions to particular black swan events.

Research Methodology

Current study is based on the stock returns of Apollo healthcare. A total number of 150 returns has been taken for this study 75 returns before COVID19 and 75 after COVID period. Descriptive statistics and T-test has been applied for the current study.

Objective of the Study

- To calculate the stock market returns of Indian healthcare.
- To compare the stock market return of Indian healthcare.

Hypotheses of the Study

Based on the objective following hypotheses has been framed:

H_1 : There is no difference between stock market return of Indian healthcare.

Alternative Hypothesis

H_{1a} : There is a difference between stock market return of Indian healthcare.

Results and Discussion

For examining the results of healthcare, mean, variance, Pearson correlation, t-statistics, p-values of the data has determined. A detail output explained through the below Table:

Parameters	Return (Pre COVID period)	Return (Post COVID period)
Mean	3.726985	1.540062
Variance	5.377659	19.698752
Observations	5	5
Pearson correlation	-0.30256474	-
Hypothesized mean difference	0	-
t-statics	0.869547	-
P-value (<0.01) One tailed	0.21	-
Critical one tailed	3.658	-
P-value (<0.01) Two tailed	0.46	-
Critical two tailed	3.677	-

Table 2: Results output related to stock Return

Source: Primary Data

Impact of Covid 19 on Stock Returns of Indian Healthcare



AIJRA Vol. IX Issue III

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Table 2 describes the comparison between return of stock market before the COVID-19 period and after the COVID-19 period. The mean value is 3.726985 before the COVID-19 period and 1.540062 after COVID-19 period. It shows that there is huge differs 2.181923 (3.726985-1.540062) in returns of the stock market before and after the COVID-19 period. Study also conclude that before COVID period people are more interested to invest in stock market. Calculated t value (3.677) is more than the t-statics (0.869547) and significance level P is >0.01. Henceforth null hypothesis has been rejected and alternative hypothesis has been accepted that:

H_{1a} : There is a difference between stock market return of Indian healthcare. Conclusion

The healthcare business is expected to increase rapidly in the foreseeable future as people's lifestyles and life expectancies improve. India is poised to become a leader in the pharmaceutical business, moving from third place to first. Stock market indices had rapid corrections prior to confirmed instances in the country. South Korea and Japan have outperformed other developed economies over this time period. The pandemic has had a significant impact on all markets, regardless of location. Globalization has brought markets closer together, even during challenging times. The US and China, the two largest economies, have the highest number of confirmed cases and are more likely to experience a recession, contributing to the dramatic market reaction. Stock prices experienced a severe drop in the near term due to the global spread of the health crisis. Efforts to boost the economy have led to a significant recovery. Investors believe healthcare and pharmaceutical industries will benefit from the pandemic by investing in research and development to prepare for future crises. During uncertain times, several industries may underperform because to poor demand and growth. However, investors anticipate that the pandemic will help healthcare and pharmaceutical companies. They plan to invest in research and development to prepare for current and future pandemics. By improving their operations and turnover, healthcare and pharmaceutical companies can efficiently meet demand for their products and services, making them a top investment option.

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Impact of Covid 19 on Stock Returns of Indian Healthcare



AIJRA Vol. IX Issue III www.ijcms2015.co

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