Impact of COVID 19 on the Indian Stock market

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Abstract

The world that we live in today is a drastically changed one. What started in a small province of China has brought such magnanimous change in the world economies that analysts are forced to expect sudden recession in all the sectors because of global lockdown.Covid19 or the novel Coronavirus started in the small province of China and spread to almost all countries of the world in a short span of time with the mortality rate being quite high. Lack of medical facilities and fear of the unknown further led to the deterioration in the worldwide economic condition. The pandemic has not only crashed the stock markets but also brought a huge change in the volatility which is an indication of panic amongst the investors. The study is an attempt to highlight the changes that have come up in the Indian stock markets with respect to price changes, volatility and investor confidence.

Keywords: Covid, Volatility, Price-Earning Ratio.

JEL Classification: G10, G12, G23, G40

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INTRODUCTION

Stock markets all over the world which were affluent with investors' money suddenly saw the era ending when the impact of "The Unknown" started gripping the financial markets world over. Financial markets are considered to be an indicator of the economy's health as a growing secondary market shows optimism amongst investors, increased consumption expenditure leading to increased output and profitability of industries. The converse is also true when the markets fall represent panic amongst the investors.

The current stock market fall is attributed to a risk that has been neglected by the academicians, investors and financial analysts for a long time. Even when the pandemic started in China other countries including India considered it to be a regional issue and thought that they were resilient from the rising cases. However over the last few days the stock markets of all the major economies have crashed to such an extent that the financial health of the world can be considered to be at a low point. The study tries to highlight the changes that have cropped up in the Indian stock market as an outcome of the novel virus with the change of the year that is January 2020 to 15th April 2020. The study also points out how the price earnings ratio P/E and volatility index VIX has drastically worsened after the outbreak of the disease in the country. The pessimistic attitude of the investors has been visible with the lower circuit being triggered twice within a gap of 10 days – 13th march and 23rd March and the Sensex touching an all time low of 26.380 points on 23rd march 2020 thereby taking back the index to a value that was in the year 2015. The sectoral indices also presented a gloomy picture with the majority of the stocks ending in the red barring the pharma and healthcare. Foreign Institutional investors also have been net sellers from the emerging economies thereby further leading to the downfall of the stock markets. Investors are worried about the future as this might end up in a global financial recession that may take many years to recover.

OBJECTIVE OF THE STUDY

The pandemic has changed the very nature of every study and in the present scenario it has become imperative to analyze the impact of Covid19 on the stock market. The present study is therefore an effort towards the attainment of the following objectives:

- To highlight the major changes that have come up in the Indian stock market with respect to volatility.
- To identify the changes in the index values during the Covid pandemic.

- To analyze the Price Earnings ratio of the Bombay stock exchange (used as a proxy for the Indian stock market).

These values would help to identify future prospects for the investors. The data related to volatility index, P/E ratio and index value has been taken from CMIE database Prowess.

REVIEW OF LITERATURE

The pandemic started in the month of December and became a problem for the world at the beginning of 2020. China reported its first death on 11th January 2020 and since then the cases have been rising all over the world. The health disaster is not only unique but is also global in terms of its impact and consequences. It is amongst the first and the deadliest that has spread its arm all over the world with major economies going into a blackout. As far as literature is concerned there are not many studies available on the topic in terms of its impact on the stock market. Few studies that have been done till date provide that the pandemic is not only going to have grave consequences but the impact is going to be long lasting.

In this aspect ***Fernandes*** conducted a study using the data of 30 countries to identify and measure the impact of the novel virus on the GDP growth of the countries and provided that the impact can be anywhere in the range of 3% to 15% depending upon the severity of the pandemic in any particular country. Extending to the theory ***Maital and Barzani*** supported the view of Fernandes and provided that the impact is going to be severe on the supply side while the countries are doing contradictory by changing the demand side. The study strongly supported the view that the impact of the Covid is not only going to be global but also long lasting. While the above studies have been to find out the impact on a global level there are various studies that have tried to identify the impact on a country wise level like that of ***Sansa*** wherein it was found that there was a positive and significant relationship between the rising corona cases and the stock indices of the USA and China. ***Ramelli and Wagner*** analyzed the impact of corona pandemic on the US stock market with special emphasis on sectoral impact. It provided that few sectors like healthcare, telecommunication were the only ones that were not negatively impacted by the pandemic. The article provided that the epidemic led to panic amongst investors and this health emergency is bound to convert to financial crisis anytime in the near future. As the epidemic spread to emerging economies there have been researches there also as provided by ***Koirala and Acharya*** who provided that the impact is not only on the financial sector but also on the education and other sectors. ***Ozili and Arun*** found that the lockdown in the major economies, international travel restrictions and monetary restrictions had a severe negative impact on the economic activities but the fiscal support and internal restrictions had a positive impact on the economic activities. ***Goodell*** highlighted an interesting point of the impact of covid and it provided that the impact is not only economical and financial but there has been a strong impact on the area of research too. As we can also see the sudden change in the area of research that is now inclined towards the novel coronavirus. There has been a plethora of webinars, conferences taking place in the topic related to the virus.

Various international organizations have been preparing and presenting the reports related to the impact of covid19 on the world economy wherein the conclusive evidence that can be obtained is that the impact is going to be broader and longer than any of the previous events whether it be the global financial crisis of 2008 or any other health emergency like Spanish flu and others.

COVID19 AND INDIAN STOCK MARKET

Research Methodology to analyze the impact.

The impact of novel coronavirus on the Indian stock market has been summarised under three heads:

1. Stock Market index and sectoral index changes
2. Volatility changes
3. Price Earning ratio of the index.

Bombay Stock Exchange is considered to be the barometer of the Indian stock market and the same has been used in the study. Fortnightly data from January 2020 to 15th April 2020 has been taken to analyze the impact of Covid on three parameters –P/E ratio, volatility and Index changes. Data of BSE Sensex and other sectoral indices like healthcare, banking sector, IPO and auto sector has been taken from the CMIE database Prowess.

Index changes

The spread of Covid19 has been described as the tenth deadly disease by the Global Risk Report 2020. The disease has not only impacted the lives of millions of people but also impacted the stock returns of all the markets. It led to a huge downfall in the stock indices and a high level of volatility.

The cross country linkages have had a huge impact on the other economies as China has a very high degree of supply chain linkages with almost all the world economies.

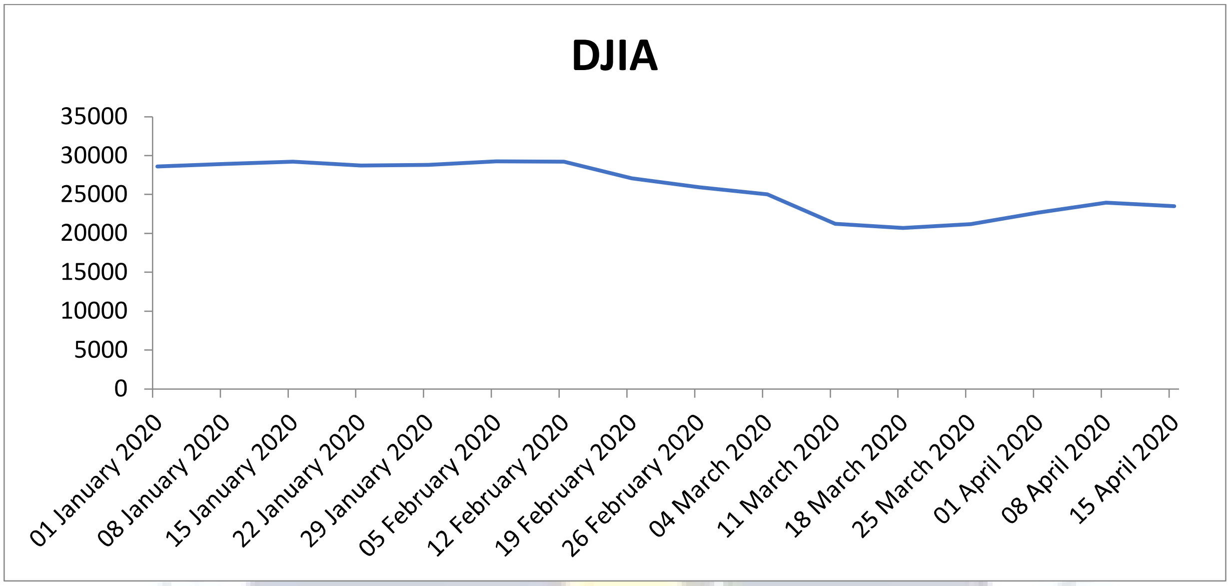
The stock market that acts as a leader for other markets to take clue is the Dow Jones Index that reached an all time high of 30,000 points in the mid of February 2020. It took Dow almost a century to cross this mark. However the index lost almost 35% of its value due to the “Panic selling” that started on account of fear of the Pandemic. The weekly index value since January 2020 is presented in table 1.

Table 1: DJIA January 2020 to 15th April 2020

Date	DJIA
01-01-2020	28583.68
08-01-2020	28939.67
15-01-2020	29196.04
22-01-2020	28722.85
29-01-2020	28807.63
05-02-2020	29276.34
12-02-2020	29232.19
19-02-2020	27081.36
26-02-2020	25917.41
04-03-2020	25018.16
11-03-2020	21237.38
18-03-2020	20704.91
25-03-2020	21200.55
01-04-2020	22653.81
08-04-2020	23949.76
15-04-2020	23504.34

Source: Statista.com

Chart 1: Dow Jones Industrial Average

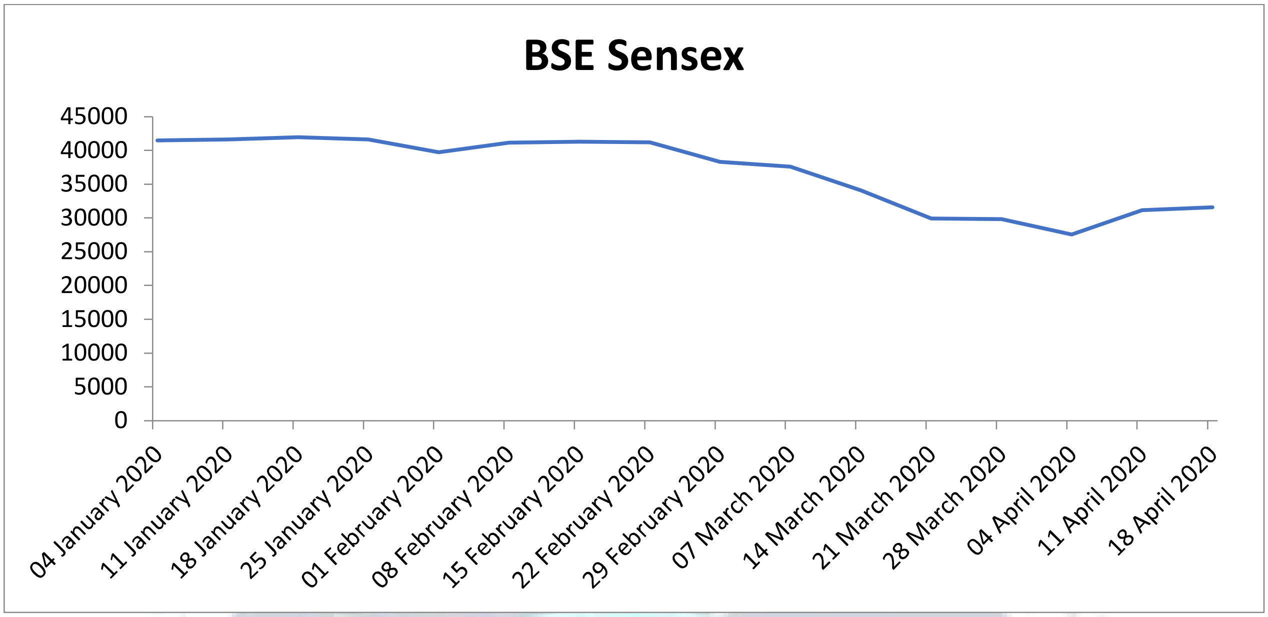


Source: Statista.com

Dow Jones had few major intraday falls of the century and within three months index came down from 28500 in January 2020 to 23500 in March 2020.

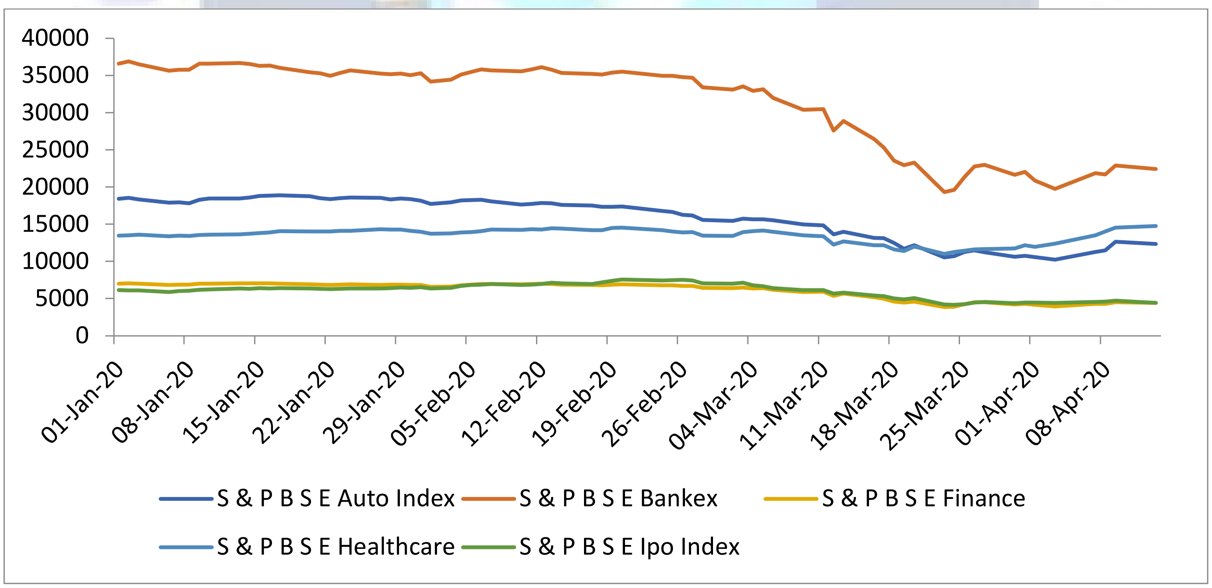
In India also the fall in Sensex has been quite steep from 42000 in January 2020 to about 28000 in March. Such a steep fall in any index can be attributed to extreme panic amongst investors – both retail and institutional. The sell off spree which was prompted because of an indication of investor pessimism brought the market to a situation that was prevailing in the year 2015, thereby taking away five years of growth from the market. The situation has been the same for almost all the sectors showing a decline except the healthcare sector. The data has been presented in chart 2 and 3 respectively.

Chart 2: BSE Sensex : Daily data from 1st Jan 2020 to 18th April 2020



Source: CMIE Prowess

Chart 3: BSE Sectoral Indices: Daily data from 1st Jan 2020 to 8th April 2020

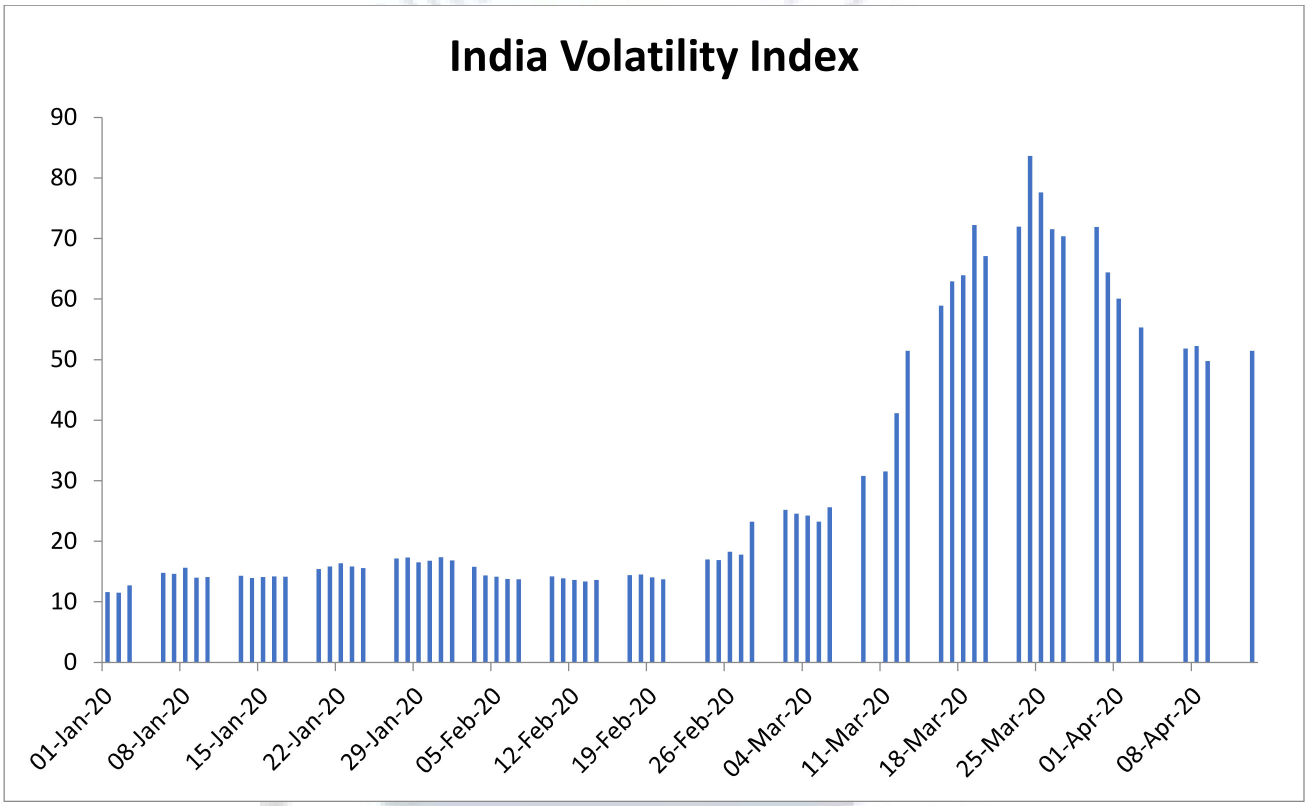


Source: CMIE Prowess

Volatility

Any crisis that disturbs the financial markets and is expected to stay for long can impact not only the present situation but also the future prospects which can be identified using the volatility. An indicator showing panic amongst investors in the Indian context is the volatility index which has been at an all time high of 71 showing a panic situation to be prevalent in the near future

Chart 4: Volatility Index Daily data from 1st Jan 2020 to 8th April 2020

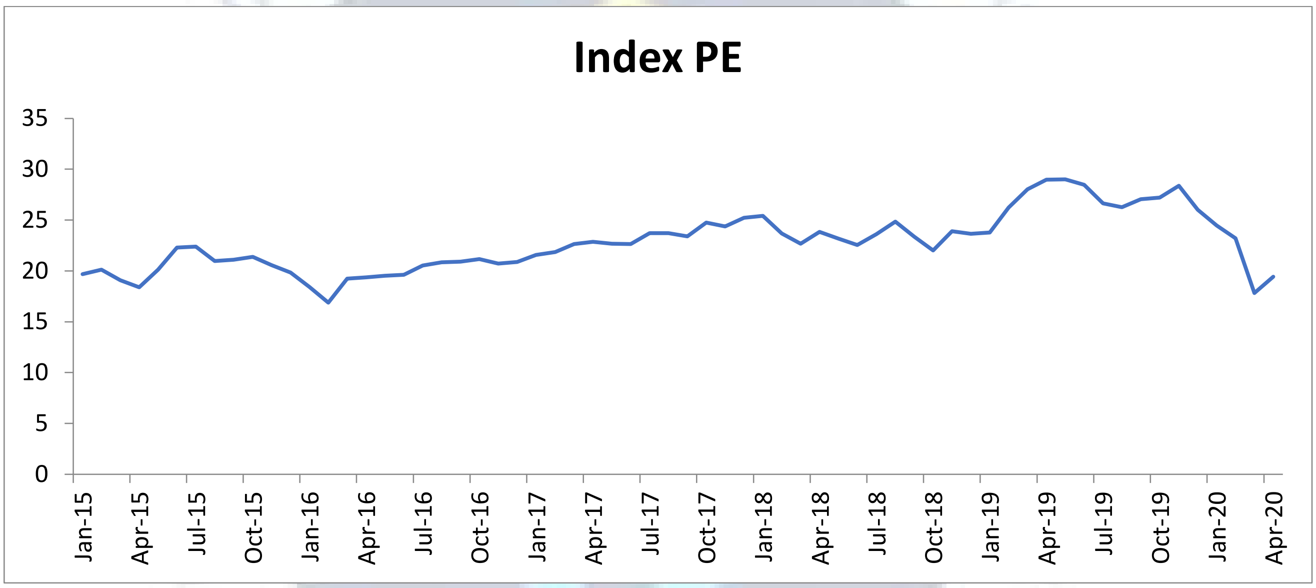


Source: CMIE Prowess

Price Earning ratio

PE ratio of an index helps in identifying the situation of the market in terms of its valuation. It is one important indicator that investors take into consideration to identify the right time to enter the market as a drastically high PE ratio indicates that the stock is in demand and the current market price is far in excess of the measure described by the earning potential of the stock and the stock is probably overvalued and too expensive to be bought. The ratio can be used in the context of an individual stock as well as for the whole stock market where in the latter case it shows optimism about the stock condition of a particular country. The measure has been used in the study to identify and show how the stock market condition has deteriorated post Covid19 not only in terms of Index fall but also in the context of PE ratio. The PE ratio of the BSE has come down to the range of 18-19 which has been generally in the range of 20-25. A low PE ratio when mixed with high volatility shows extreme disturbance amongst the investors and the situation has been in the worst category where the secondary market has been dragged back to at least 5 years as the stock market condition in terms of index value has been the same as that of the year 2015-16.

Chart 5: P/E ratio of Sensex from 1st Jan 2020 to 8th April 2020



Source: CMIE Prowess

CONCLUSION

The impact of Covid19 on the global stock markets can be compared to "Black Swan" whose existence had been nullified for years and then when it appeared it became a truth. The same is happening in the financial markets worldwide which considered themselves resilient to the impact of a disease that originated in a far off place in Hubei province.

- The article highlighted the impact of the virus on the index value (BSE) which has been reduced to a value that was prevalent 5 years ago. Investors though can be optimistic about the fall as those who missed the rally in the year 2015 can again catch the market and enter in full swing.

- The situation however is not favorable as depicted by the reduced PE ratio and high volatility which provides that the investors need to be extra cautious while entering the market as the world is already scared of a global recession. The study provides that the market is good for investors and not for the swing traders as the situation is highly volatile and risky.
- To minimise the risk of the existing volatility prevalent in the market the regulator has to bring in extreme measures as has been taken world over.

The drastic fall in the stock markets worldwide has forced the regulators of many countries to come up with steps that can reduce the volatility and panic amongst investors. Few instances can be a ban on short selling for a certain period in countries like Greece, Italy, Spain, France, Turkey amongst others. India too saw many instances of active circuits that were hit in the month of March with many stocks hitting the lower circuits. To curb the extremely high volatility regulator enhanced the margin requirement and also put a restriction on index derivatives. The IPO market in India too was badly hurt with a postponement of many issues and less optimism from the investors' side. Regulators, academicians, investors now onwards have to discount in other types of risk apart from systematic and unsystematic risk and that is the neglected risk to optimally enhance the portfolio diversification and go for maximization of investors' wealth.

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