***COVID-19, A past perspective for the future: with reference to BSE SENSEX***

***ABSTRACT:*** *This Research paper studies the impact of Covid-19 on Bombay Stock Exchange (*BSE SENSEX*) in the year 2020 (January to March 2020) and how the V shape recovery is seen in the economy. Covid-19 affected not only Indian Capital Markets but had an impact all over the world. This has led to one of the greatest downfalls in the world stock market. S&P BSE SENSEX was trading more than 42000 index in January 2020 but at the end of January it closed at its lowest level in 2020 at 40,723 points. Expectationss from the Union Budget-2020-21 along with the December quarter earning had kept investors jittery along with the outbreak of Covid-19 in India which ended in BSE hitting its lowest of 2020 at 25,981 points on 23 March 2020. This research paper discusses the various economic decisions taken by the Government of India and Reserve Bank of India (RBI) to overcome this crisis in Indian Capital Market.*

***KEYWORDS:*** *COVID-19, BSE, SENSEX, RBI, outbreak, pandemic, and Indian Capital Market.*

**INTRODUCTION**

The Indian stock market experienced huge volatility as the situation due to corona virus developed throughout the February and March. Indian capital market responded in a dramatic and unprecedented manner to the outbreak. In the hindsight, BSE-SENSEX’s reaction to the pandemic was remarkable and, in some respect, unprecedented. BSE fell more than 36% between February 2020 and March 2020, which introduced unprecedented volatility to the market.

It’s not the first time that the Indian markets had crashed. In 1997 markets crashed because of the Asian financial crashes, in 1998 due to Russian financial crisis which was fuelled by the Russian debt, default and devaluation of her currency. Markets crashed again in the 2000 due to Dot-com bubble burst which caused widespread disruption to the businesses all over the world.

In September-2001 9/11 attacks in the US caused a global crisis, whereas in May-2004 electoral loss of the NDA- Government led to a crash in the Indian market that wasn’t linked to the global markets which however, reversed fairly quickly, when in May-2006 rise in global interest rates led to another crash in the Indian markets.

In 2008 global financial crisis, which borne out of the sub-prime asset crisis and made worse due to the fall of Lehman Brothers and Merrill Lynch, created a crisis for the global credit markets

In 2011 high domestic inflation & interest rates and depreciation of the Indian rupee mixed with global uncertainties led to a crash.

In 2018 a trade & tariff war between US and China had created difficulties for the global investors, which led to a crash across the world.

Ever since the COVID-19 outbreak in March-2020 investors faced a very difficult period. At the beginning of this year the SENSEX was going strong despite weak economic growth and back in September 2019, Morgan Stanley had raised the target for SENSEX to 45,000 for June 2020 after the corporate tax rate cut by the government of India.

On 20th January 2020 indices had hit an all time high of 42,273 however after that markets fell sharply due to Union Budget and Corona virus induced panic sell. This led to a sell off trend not just in Bombay Stock Exchange but all over the Globe.

The first Covid-19 case was reported on 30th January 2020 originating from China after which outbreak was declared a pandemic and Government of India had declared a public curfew which was followed by a nationwide lock down. This lock down made demand weaker and created volatility in the stock markets. In this research, researcher has attempted to show the impact that COVID-19 had on the BSE SENSEX.

**Objectives of the study**

• To reflect upon the trend followed by BSE SENSEX between January 2020 and March-2020.

• To show how the government announcement affects the momentum of BSE SENSEX.

• To show how the RBI’s announcement affects the momentum of BSE SENSEX.

**LITERATURE REVIEW:**

For this study following literature has been reviewed:

* **Gormsen, Niels Joachim and Koijen, Ralph S. J, (April 20, 2020)** In the study Joachim and Ralph analysed the expectations of investors with respect to the future dividends in response to the COVID-19 outbreak and subsequent policy responses. They also showed the fall in annual growth of dividend with respect to the GDP, using simple forecasting models. While also showing how long-term growth can be more effective compared to the short-term growth in the US and EU markets.
* **Fernandes, Nuno, (March 22, 2020)** Discussed the economic impact of the corona virus across the industries and various countries. Nun also Studied the relationship between COVID-19 and the economic cost along with the impact of COVID-19 on the GDP of 30 Countries. A comparison between 2008-09 financial crisis and Covid-19 outbreak with respect to the GDP of various the countries including Greece, Portugal and Spain has been drawn.
* **Nozawa, Yoshio and Qiu, Yancheng, (2020)** analysed the issues pertaining to corporate bonds, liquidity, stock return reaction and federal reserve’s announcement regarding the corporate bond buy on March 23rd, 2020 which reflects lower default risk more than providing liquidity.
* **Bhalekar, Vikram, (2020)** analysed the impact of shut downs by the state governments and their impact on the stock markets while also discussing the impact of COVID-19 on pollution, employment and education.
* **S. Mahendra Dev and Rajeswari Sengupta, (2020)** to show the impact of COVID-19 on the economy and also to show how state governments and RBI made efforts to help the markets and put forward set of policies for specific sectors.
* **Mohania and Mishra (2020)** there is a favourable correlation between the flow of debt and equity in the market, according to the researchers' analysis of the debt and equity movements of foreign institutional investors (FIIs) in India. When the market is low, FIIs often purchase, and when it is high, they typically sell. When weighed against debt, equity has a higher tendency to erratic flow than debt.
* **Mishra and Shrivastava (2022)** the researchers have made a study of relationship between FPIs and Growth of automobile sectors in long run and concluded that FPIs is not the only factors for the growth of automobile sectors in India for long run but for short run FPIs play major role for the growth of automobile sectors in India.

**RESEARCH METHODOLOGY**

The study is primarily focused on the trend of BSE SENSEX during the outbreak of COVID-19 during January-2020 to March-2020 and the government and RBI efforts made the momentum of BSE SENSEX during this time period to recover the v shaped recovery in the market.

**Methods of data collection**

To put it simply, secondary data is information gathered for a different purpose than its original intended one. The sources of secondary data include annual reports, research papers on housing finance, textbooks, national as well as international articles, and journals.

To unravel the purpose of the current study, secondary data have been used. For the secondary data, various journals, books, literature, magazines, and web links have been utilized. Because it was not possible to gather data personally, no questionnaire was created. Data has been collected from different websites, like www.bseindia.com and www.sebi.gov.in.

**Duration the study**

The study is short term in nature and data from January 2020 to March 2020 is taken for the study. Data collection” means gathering and measuring relevant information in a planned way to answer research questions, test hypotheses, and evaluate results.

The period of the study was restricted and bounded for 3 months, which started from January 2020 to March 2020, as it took initiative regarding the impact of both bullish and bearish trends.

**Research Design**

The research is descriptive in nature.

**Limitation of the study**

* The study is based on the secondary data due to that the accuracy of the data is depended on the sources of collection.
* The study is focused only BSE SENSEX (Bombay Stock Exchange)

**RESULTS**

The below data shows the BSE SENSEX index from 01-January-2020 to 01-April-2020 in respect of its open and close during the various trading days in the mentioned time period. The data also includes the change (fall or rise) in a day and the percentage of change in a day.

**Table-1:** BSE SENSEX index from 01-January-2020 to 01-April-2020

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Open** | **Close** | **Change in a day** | **% change in a day** |
| 01-Jan-20 | 41349.36 | 41306.02 | -43.34 | -0.104814198 |
| 02-Jan-20 | 41340.27 | 41626.64 | 286.37 | 0.692714392 |
| 03-Jan-20 | 41634.51 | 41464.61 | -169.9 | -0.408074936 |
| 06-Jan-20 | 41378.34 | 40676.63 | -701.71 | -1.695838934 |
| 07-Jan-20 | 40983.04 | 40869.47 | -113.57 | -0.277114631 |
| 08-Jan-20 | 40574.83 | 40817.74 | 242.91 | 0.59867164 |
| 09-Jan-20 | 41216.67 | 41452.35 | 235.68 | 0.571807475 |
| 10-Jan-20 | 41568.2 | 41599.72 | 31.52 | 0.075827195 |
| 13-Jan-20 | 41788.21 | 41859.69 | 71.48 | 0.171053031 |
| 14-Jan-20 | 41883.09 | 41952.63 | 69.54 | 0.166033595 |
| 15-Jan-20 | 41969.86 | 41872.73 | -97.13 | -0.231427982 |
| 16-Jan-20 | 41924.74 | 41932.56 | 7.82 | 0.018652471 |
| 17-Jan-20 | 41929.02 | 41945.37 | 16.35 | 0.038994472 |
| 20-Jan-20 | 42263 | 41528.91 | -734.09 | -1.736956676 |
| 21-Jan-20 | 41487.57 | 41323.81 | -163.76 | -0.394720636 |
| 22-Jan-20 | 41467.13 | 41115.38 | -351.75 | -0.848262226 |
| 23-Jan-20 | 41191.5 | 41386.4 | 194.9 | 0.47315587 |
| 24-Jan-20 | 41377.04 | 41613.19 | 236.15 | 0.570727147 |
| 27-Jan-20 | 41510.68 | 41155.12 | -355.56 | -0.856550652 |
| 28-Jan-20 | 41299.68 | 40966.86 | -332.82 | -0.805865808 |
| 29-Jan-20 | 41131.57 | 41198.66 | 67.09 | 0.16311072 |
| 30-Jan-20 | 41380.14 | 40913.82 | -466.32 | -1.126917405 |
| 31-Jan-20 | 41146.56 | 40723.49 | -423.07 | -1.028202601 |
| 01-Feb-20 | 40753.18 | 39735.53 | -1017.65 | -2.497105747 |
| 03-Feb-20 | 39701.02 | 39872.31 | 171.29 | 0.431449872 |
| 04-Feb-20 | 40178.74 | 40789.38 | 610.64 | 1.519808735 |
| 05-Feb-20 | 40921.71 | 41142.66 | 220.95 | 0.539933449 |
| 06-Feb-20 | 41209.13 | 41306.03 | 96.9 | 0.235142067 |
| 07-Feb-20 | 41394.41 | 41141.85 | -252.56 | -0.610130692 |
| 10-Feb-20 | 41166.72 | 40979.62 | -187.1 | -0.454493338 |
| 11-Feb-20 | 41183.39 | 41216.14 | 32.75 | 0.079522351 |
| 12-Feb-20 | 41330.85 | 41565.9 | 235.05 | 0.568703523 |
| 13-Feb-20 | 41707.21 | 41459.79 | -247.42 | -0.593230763 |
| 14-Feb-20 | 41510.19 | 41257.74 | -252.45 | -0.608163923 |
| 17-Feb-20 | 41324.04 | 41055.69 | -268.35 | -0.649379877 |
| 18-Feb-20 | 41042.46 | 40894.38 | -148.08 | -0.360797087 |
| 19-Feb-20 | 41121.51 | 41323 | 201.49 | 0.489986871 |
| 20-Feb-20 | 41334.96 | 41170.12 | -164.84 | -0.398790757 |
| 24-Feb-20 | 41037.01 | 40363.23 | -673.78 | -1.641883753 |
| 25-Feb-20 | 40497.72 | 40281.2 | -216.52 | -0.534647383 |
| 26-Feb-20 | 40194.89 | 39888.96 | -305.93 | -0.761116649 |
| 27-Feb-20 | 39947.8 | 39745.66 | -202.14 | -0.506010343 |
| 28-Feb-20 | 39087.47 | 38297.29 | -790.18 | -2.021568549 |
| 02-Mar-20 | 38910.95 | 38144.02 | -766.93 | -1.970987601 |
| 03-Mar-20 | 38480.89 | 38623.7 | 142.81 | 0.371119275 |
| 04-Mar-20 | 38715.72 | 38409.48 | -306.24 | -0.790996525 |
| 05-Mar-20 | 38604.25 | 38470.61 | -133.64 | -0.346179501 |
| 06-Mar-20 | 37613.96 | 37576.62 | -37.34 | -0.099271653 |
| 09-Mar-20 | 36950.2 | 35634.95 | -1315.25 | -3.559520652 |
| 11-Mar-20 | 35468.9 | 35697.4 | 228.5 | 0.64422635 |
| 12-Mar-20 | 34472.5 | 32778.14 | -1694.36 | -4.915106244 |
| 13-Mar-20 | 31214.13 | 34103.48 | 2889.35 | 9.256545033 |
| 16-Mar-20 | 33103.24 | 31390.07 | -1713.17 | -5.175233603 |
| 17-Mar-20 | 31611.57 | 30579.09 | -1032.48 | -3.266145908 |
| 18-Mar-20 | 30968.84 | 28869.51 | -2099.33 | -6.778846092 |
| 19-Mar-20 | 27773.36 | 28288.23 | 514.87 | 1.853826833 |
| 20-Mar-20 | 28460.82 | 29915.96 | 1455.14 | 5.112783117 |
| 23-Mar-20 | 27608.8 | 25981.24 | -1627.56 | -5.895076932 |
| 24-Mar-20 | 27056.23 | 26674.03 | -382.2 | -1.412613657 |
| 25-Mar-20 | 26499.81 | 28535.78 | 2035.97 | 7.682960746 |
| 26-Mar-20 | 29073.71 | 29946.77 | 873.06 | 3.002919132 |
| 27-Mar-20 | 30747.81 | 29815.59 | -932.22 | -3.031825681 |
| 30-Mar-20 | 29226.55 | 28440.32 | -786.23 | -2.690122508 |
| 31-Mar-20 | 29294.94 | 29468.49 | 173.55 | 0.592423128 |
| 01-Apr-20 | 29505.33 | 28265.31 | -1240.02 | -4.202698292 |

In the Table-1 the open and close of BSE SENSEX index is taken and from this change in a day and percentage of change in a day is calculated. After the reduction in corporate tax in September 2019 by the finance minister and the change in the operational guidelines of Foreign Portfolio Investors (FPIs) at the end of 2019 led to an improvement in the FPI inflow leading to volatility in the BSE SENSEX index and Nifty 50.

Another reason that made market move was the US-China signing first phase of their trade deal which led to an increase in the Indian exports. Market crossed the 42000 mark on 16 of January 2020, which at. 42,059 was the highest ever in the history for BSE SENSEX.

Market kept showing some volatility till January 29th however on 30 of January 2020, first cases of corona were detected in Kerala, which led to a fall of of 466 points and market closed at 40,913. COVID-19 was declared a “Public Health Emergency of International Concern” on this day. The markets followed the trend as COVID cases went up not just in India but also globally.

On 1st February Government of India brought Union Budget of India for 2020-21, however due to income tax issues and no positive announcement for the man on the street along with the lack of support for the demand creation, markets reacted negatively and BSE fell by more than 1017 points and ending the day at 39,735.

As the number of cases grew all over the globe, between 10th February and 23rd March 2020, BSE index fell from 41,166 to 25981 which was 36.88% of BSE SENSEX index. Market fell by almost 37% within 43 days including more than thrice a 4 days long continuous negative run in a week.

RBI took Yes Bank under own management on 6th March restructuring. RBI completed the process via State Bank of India (SBI), which showed willingness both to investment in the Yes Bank and to participate in restructuring.

On 9th March 2020, downward trend of global crude oil prices leads to a decline of 1315 points and BSE closed at 35,364.

On 12th March, WHO declared Corona Virus a pandemic which led to a fall of 1694 by the end of day and BSE SENSEX index closed at 32,778 which was lowest in the past 33 months.

On 16th March Market went down by 2713 points, which was the second worst fall in the entire history of BSE SENSEX but with a bit of recovery BSE-SENSEX closed the day with an overall fall of 1713 points to colse the day at 31,390.

On 18th March market ended with a fall of 2099 points and BSE SENSEX index closed at 28,869. As the number of cases and deaths increases in India, BSE SENSEX witnessed biggest fall in the history and fell by 3934 points in intraday trading on 23 March, which lead to BSE SENSEX closing at 25,981 because of 1627 points fall by the end of the day.

On 22nd March 2020, Government of India called for a national shut down in the view of rising number of COVID cases.

***Fig 1: BSE SENSEX index from 42,000 to 25,981 points***

Fig-1 shows the decline in BSE SENSEX index from 42,000 to 25,981 points which lasted till 23 March and after which graph shows an upward movement, which was triggered by the various steps that the government had taken to support the economy. Market shows a movement from 25,981 to 29,468 on 31 March 2020, this momentum was seen not only in the Indian capital Market but also across the globe. The V-shape recovery in the graph reflects the role played by the Government of India and RBI to support the economy and their impact on the capital markets. This V shaped recovery is not seen only in Indian stock market but also in the world stock market due to the announcement and aids by the Apex bank and Government of the economy. The v shape recovery for the economy was also seen in India and rest of the world.

**DISCUSSION**

[[1]](#footnote-1)The Government of India declared a complete shut down for 21 days, while RBI enhanced short term liquidity for state governments, relaxed export repatriation limit from 9 months to 15 months and all commercial, NBFCs, cooperative banks and all India financial institutions were asked to provide a moratorium of six months on loan repayments which help the individuals, corporate, MSME and other sections to pay their debts for specific time periods.

In March RBI reduced the Repo rate by 75 basis points to 4.4 percent and Reverse Repo Rate by 90 basis points to 4 percent as part of measures to boost growth and support the industries and MSMEs and households to sustain in the pandemic time period. The government of India came out with various other measures which made future look brighter despite the rising COVID cases. It is due to these measures that we see a V-shape recovery of the Indian Capital Market. The overall economy was under the extreme stress and hence the support from the government and policies amendments by the RBI helped the economy to deal with the situation and helped to make the various recommendations to be included in the upcoming budget and prepared themselves for the future also.

**CONCLUSION**

The corona virus induced pandemic has created a challenge that has never been seen before for the Indian economy. The BSE SENSEX index shown a great fluctuation in the three months under the review. However, these fluctuations was not seen for the first time in the capital market previously also we have faced the same situation but the recovery of market after the fall has shown a dramatic increase after every fall.

While the nationwide lock downs seem to have returned and likely to stay for a while the Central government and the RBI appear to have recognized the challenge and are responding in order to help the market and the overall economy overcome from the pandemic.

However, the current government response should be treated just as a beginning. The policy makers and the Government need to prepare to scale up the response as the events unfold in orders to minimize the impact on the economy not only in present scenario but also for the future perspective and pave the way for a strong recovery. While the government response must remain cautious in order to avoid any long-term damage to the capital markets.

**RECOMMENDATIONS**

Within the constraints as discussed above, the researcher have the following recommendations to be considered in order to help Indian economy to recover V shaped in future prospects when such contingencies occur and preparation for the future –

* Government should increase the budget for healthcare facilities and medicinal industries must be prepared for the essential medicine that is required in case of pandemic.
* IT sectors must be more flexible in their working structure and provides the work from home to certain segment of employees on rotation basis or permanently.
* Government should include the online learning in their curriculum and provide the ease of learning and development.
* The FIIs investment ceiling should be implemented by the SEBI so that the sudden impact on the stock market can be controlled.

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