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## IMPACT OF COVID-19 PANDEMIC ON SELECT INDIAN MUTUAL FUNDS

**Dr. Shahnawaz Ali**

Assistant Professor,  
AFS Department,

Oman College of Management and Technology, Muscat, Oman

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### **ABSTRACT:**

**Purpose:** This research aims to examine and study the direct impact of change in covid-19 cases and IIP index on the performance of Nifty and selected Mutual funds NAV performance for one year from the date WHO declared Covid-19 pandemic on 11th March 2020.

**Approach/Methodology/Design:** The study applies using daily NAV series of four Mutual Funds across sectors. ANOVA, Correlation, Regression, Descriptive Statistics.

**Findings:** There is a strong relation among NIFTY 50 and all the four mutual funds' NAV performance, however, the relation between daily reported Covid-19 cases and NAV performance couldn't be established.

**Practical Implications:** Economic turmoil has affected the disposable income of investors, the capital market is very volatile. This study will help the researchers and analysts to understand the relation between the covid-19, NIFTY 50 index and select mutual funds NAV movements. And they can make a better decision under similar situation.

**Keywords:** Covid-19, Mutual fund, NIFTY 50, Analysis, Pandemic

### **1.0 Introduction:**

The capital markets have become a preferred choice for investors, replacing traditional options like gold, bank deposits, and real estate. Mutual funds have gained prominence as an effective means for common people to save for their future needs. The Mutual Fund Industry, initiated in 1963 with the Unit Trust of India, has evolved into a key financial intermediary in India, attracting significant investments (Iqbal, 2010).

The onset of the COVID-19 pandemic in 2020 disrupted global financial stability, leading to job losses and economic challenges. Individual investors' share in mutual fund assets declined during this period due to financial constraints, in contrast, institutional investors' share increased. The New Fund Offers (NFO) dwindled in the year 2020 during Covid-19, with 11 NFOs in January to six in February, dropping to one in March, and none in April (Bazaz, 2020).

Despite the pandemic, the Assets Under Management (AUM) of the Indian Mutual Fund

Industry grew showed a steady increase from Rs. 8.26 trillion in December 2013 to Rs. 50.78 trillion in December 2023 (Amfiindia.com, 2020), reflecting a more than sixfold increase in the last decade. This growth underscores the role of mutual fund investments in aiding individuals with savings and providing a satisfactory return on investments.

The unprecedented COVID-19 pandemic has significantly disrupted global financial markets, creating a unique set of challenges for investors and fund managers alike. This research aims to investigate the impact of the COVID-19 pandemic on select Indian mutual funds. Specifically, the study analyzes the performance, volatility, and risk factors associated with these funds during the pandemic period. Sahoo, M. (2021) found in his study that the Covid-19 had a negative impact on Nifty 50 during the year 2020. Similarly, in a separate study by Dhinakaran, D.P. (2020), it was found that Covid 19 had a negative impact on the Index of Industrial Production (IIP) in the year 2020. The growth in IIP slowed down during this period. The main purpose of this study is to draw a relation between the Nifty 50, Index of Industrial Production (IIP) and Mutual Funds performance for the year 2020. By examining the investment strategies, portfolio compositions, and overall market dynamics, the research seeks to provide valuable insights into how Indian mutual funds have navigated through the challenges posed by the pandemic and identify potential opportunities and risks for investors in the post-pandemic financial landscape. The findings of this research will contribute to the understanding of the resilience and adaptability of mutual funds in the face of extraordinary economic events and inform both investors and fund managers about effective strategies for mitigating risks and optimizing returns in uncertain times.

This study is carried in four stages. First section is introduction, second section is a review on the existing articles and literature on this topic, the third section describes the methodology and data collection. The final and fourth stage is a detailed analysis, findings, and conclusion.

## 2.0 Review of Literature:

From the study of available literature towards the current statement of Problem, it is observed that the different experts have differing views on the impact of the pandemic on capital markets, even their conclusion from their research relating to the current topic. Some of the essential pieces of literature developed in this recent period include:

**Rao et al., 2020** found in their research that the Indian mutual funds industry suffered a lot initially as the pandemic was declared by WHO, the 6.9% decline in mutual fund performance over one year period was because of an already slowing economy before the pandemic and additionally the effect of Covid-19 made it worse. However, **Shanmugam & Ali, 2021** stated that most of the mutual fund schemes had a tough time initially, but they bounced back within the same year, even if the covid-19 cases were increasing, the funds and Indian stock market was performing good. (Himanshu et al., 2021) conducted a research in Delhi, India and they found that due to the impact

of Pandemic, most of the investors were shifting their portfolio from risky asset class to risk averse portfolio or even risk-free asset class. In the early 2020, most of the Asian markets saw the effect of panic selling and it took a major hit in the global stock market amounting to an estimate of \$77 to \$347 billion dollar or 0.1% to 0.4% of global GDP, of which two-third of the impact falls in PRC (Abiad et al., 2020). In case of any such pandemic, stock market takes the maximum hit, because the psychological factor in investors. Emotion and feeling are no more elusive than any other complex biological phenomena and can be studied objectively. They play a critical role in cognitive processes such as perception, learning, and decision-making and are equally critical in the maintenance of health (Damasio, 2006).

Wang, Zhang, Ahmed, & Shah, 2021 through their research proved that the rate of profitability depends on the assessment of financial risk, also it depends on the rate of risk tolerance. Das & Das, 2020 suggest that due to the impact of covid -19 pandemic, the NFO (New Fund Offer) has drastically declined as the mutual fund industry AUM (Asset Under Management) decreased by over 6.91% in one year. Ajmera, Jha, & Sharma, 2021 in their research found that Covid- 19 pandemic has had the major impact on Blue Chip Funds than on Mid-Cap and Small Cap Funds.

Shalini & Dauli, 2013 conducted a study on mutual funds in India and suggested that timing and investment discipline were two crucial skills that need to be adopted to succeed. Jain Madhur, Singal Pramod, Dwivedi Ajay (2014), in their study of performance evaluation of mutual funds, highlighted the various research conducted in mutual funds.

Pankow Ahmad Bilal (2017) also enlightened the concept of the mutual fund's performance in India in his best possible way and gave various valuable suggestions. Jasmine K.R.M, Basariya S. Rabiyaathul (2018) concluded in their study that a mutual fund is an instrument that aims to strike a balance between risk and income and provide the simplest of each to the capitalist.

Vasavi P, Venkata Siva Sree Hema (2020), in their article titled "Trends in Indian Mutual Fund industry", focused on the Growth and performance of mutual funds and compares it with other available instruments. They found that investors prefer capital appreciation, and they are satisfied with the available sources in the Market.

The review of the literature shows some works undertaken throughout the study on mutual funds. However, still, there is a gap in the research, so the present research paper is an endeavor to explore the impact of Covid-19 on select mutual fund schemes in India.

### 3.0 Research Methodology:

The research aims to highlight the impact of covid-19 on selected Indian Mutual fund schemes available in the market. Due to limitation in scope, only four leading mutual funds from each major categories of mutual funds is selected for the study. The selected mutual funds are ICICI

Prudential Blue-Chip Fund is selected from Large Cap mutual funds category, HDFC Small Cap is selected from the Small Cap equity fund category. L&T Large and Mid-Cap is selected from Mid-Cap category and L&T.

Emerging Business fund is selected from the thematic funds' category. Only Secondary data is collected from sources like the Official website of the Association of Mutual Funds in India (AMFI), Journals, Articles, and related Books. The Daily NAV data is collected for the study period from AMFI India official website. Also, the daily registered covid-19 cases is collected from the government website from 11<sup>th</sup> March, 2020 till 10<sup>th</sup> February, 2021. Statistical tools and Tables such as descriptive statistics, Correlation analysis is used in this research for analyzing the data. Statistical software such as SPSS is used for the analysis of the data.

#### **4.0 Analysis and Discussion:**

Analysis and interpretation of the collected data is done in two phases. In the first phase the monthly data of NIFTY 50 Index, reported covid-19 cases and Index of Industrial Production (IIP) is compared with each of the selected mutual funds individually with the help of tabular representation and graphs. In the second phase the collected data is analyzed with the help of statistical tools. We have tried to understand the impact of the independent variables such as daily reported Covid-19 Cases and daily movement of NIFTY 50 index on the performance of each of the dependent variables which are selected mutual funds independently. For this purpose, four major schemes are taken into consideration. They are ICICI Prudential Blue- Chip fund, HDFC Small-Cap Fund, L&T Mid-Cap Fund and L&T Emerging Business Fund.

#### **4.1 ICICI PRUDENTIAL BLUE-CHIP FUND:**

This Scheme formed on May 23, 2008, has an excellent performance track record in stability and growth of NAV. It is an open-ended equity fund focused on large-cap equity stocks in Indian Stock Market. On 11<sup>th</sup> March 2020, WHO declared Covid-19 virus as a global pandemic, which caused a significant impact on the performance of this fund. Though it recovered significantly over the year, it has faced a sharp decline in the NAV in the early 2020. The Table-1 shows compiled data from various sources of NAV of the regular growth plan, monthly reported Covid-19 cases, Nifty 50, and Index of Industrial Production (IIP) from 11<sup>th</sup> March 2020 to 11<sup>th</sup> February 2021 is here along with the percentage of increase and decrease during that period. It shows that at the beginning of February, the indicators of all the four parameters (ICICI Blue-Chip Fund NAV, Reported Monthly Covid-19 Cases, NIFTY 50 Index, and IIP index) started decreasing, and this situation was continued till mid of May- June. Although IIP data shows a sharp recovery in the month of May and June and then it showed growth for the rest of the period. Nevertheless, after that, the trend rose, and till February 11, 2021, ICICI Blue-Chip Fund NAV continuously rose to 55.25, almost 50% increase in its NAV value since March 11<sup>th</sup>, 2020. However, the average growth of the Scheme

during the covid days is not much impressive as in the case of regular plan it increased by only 2.31% in the period of study, at the same time IIP index showed a better average growth of 3.3% and NIFTY 50 had an average growth of 1.79% respectively.

Figure -1 represent a comparison in percentage change every month for ICICI Blue Chip Fund NAV, IIP monthly data and Nifty 50 monthly fluctuations, from March 2020 till February 2021. The trend started going down during March and touching the lowest in April for all the three parameters. While the IIP data saw a comeback in the month of May, Capital markets maintained a slow recovery.

#### **4.1.1 Descriptive Analysis:**

Table 2: shows the mean NAV of ICICI Blue Chip fund to be 41.63 with a standard deviation of 6.29 over the period of twelve months from March 2020 till February 2021. It depicts the volatility in the NAV value of ICICI Blue Chip fund, where the minimum NAV was 28.32 on 23<sup>rd</sup> March 2020 when India first declared a country-wide lockdown. and later in the early 2021 the NAV recovered to over 55. The mean of 34,549 Covid-19 daily Cases were reported during the period of study and a standard deviation of 32,579 in the 12 month of study period. Such a significantly high standard deviation and close to mean covid-19 cases, states the skyrocketing rise in case from 62 in March 2020 to its peak of 97,894 cases during the period. Stock market Index NIFTY 50 had a mean of 11,377.6 with a standard deviation of 1799.96 in the 12-month period of study. NIFTY 50 had the minimum of 7610.25 and a maximum of 15,173.30 in the period of study.

#### **4.1.2 Correlation Analysis:**

In Table No. 3, we can clearly see that the ICICI Blue chip Fund NAV performance is perfectly positively correlated with NIFTY 50, as it has a correlation of 0.997 which is close to almost 1. Also, the correlation with daily reported covid cases is very high of 0.833, which also proves that the performance of ICICI Blue Chip fund is highly correlated with both the factors.

The figure 2 represents a normal distribution of residuals. The perfectly bell-shape of the curve represents a normal distribution of data.

#### **4.2 HDFC SMALL-CAP FUND:**

This Scheme was founded on April 3, 2008. It carries average risk and gives a healthy return. However, in the following Table-4, the trend of NAV of various plans shows that it was lessening in March and the process continued till June end after that it started developing and being better from previous performances. As a result, the average Growth of the regular plan, direct plan, and S & P BSE 200 were decreased by 9.33, 8.84, and 8.46 per cent over the period, respectively.

The following Figure - 3 show the graphical trend of the regular plan, direct plan, and NIFTY 50. The trend is lowest in April then it started struggling to be better in the following months.

#### 4.2.1 Descriptive Analysis:

Table 5: shows the mean NAV of HDFC Small Cap fund to be 36.44 with a standard deviation of 6.90 over the period of twelve months from March 2020 till February 2021. It depicts the volatility in the NAV value of HDFC Small Cap Fund, where the minimum NAV was 24.25 on 20<sup>th</sup> March 2020 and it recovered to 51.77 later in the year. The mean of 34,549 Covid-19 daily Cases were reported during the period of study and a standard deviation of 32,579 in the 12 month of study period. Such a significantly high standard deviation and close to mean covid-19 cases, states the skyrocketing rise in case from 59 on 11<sup>th</sup> March 2020 to its peak of 97,894 cases during the period. Stock market Index NIFTY 50 had a mean of 11,377.6 with a standard deviation of 1799.96 in the 12-month period of study. NIFTY 50 had the minimum of 7610.25 and a maximum of 15,173.30 in the period of study.

#### 4.2.2 Correlation Analysis:

From Table No. 6, we can clearly see that the HDFC Small-Cap Fund NAV performance shares a very high correlation of 0.986 with NIFTY 50, and a correlation of 0.855 with daily reported covid-19 cases. It proves that the performance of HDFC Small-Cap fund is highly correlated with both the factors.

The figure 4 represents a normal distribution of residuals. The bell-shape of the curve represents a normal distribution of data.

#### 4.3 L&T LARGE AND MID-CAP FUND:

Established in May 2006, with an objective of investing primarily in large and midcap stocks and is benchmarked against NIFTY 50. The objective of this fund is to generate medium to long-term return. According to the official website of L&T mutual funds, this fund has 97.57% of its investments into Indian stock market, out of which 30.53% is invested in large cap stocks, 33.83% is invested into mid-cap stocks and around 17.81% into small-cap stocks.

The below table number 7 is a comparative analysis between the funds' performance during the year as compared to covid-19 monthly cases, NIFTY 50 monthly figures and IIP monthly data. We can see that the lowest of the NAV value of the mutual fund was in the month of march when WHO declared covid-19 situation as a global pandemic and India declared a nation-wide lockdown. It declined almost 26% in the month of march, however there was a continuous rise in NAV value in the following months. When compared with Covid-19, we can see that when the percentage increase in covid-19 cases in India was highest in the initial months, the NAV was the lowest, and as the percentage increase in new covid cases declined and became negative in the month of January and February 2021, the NAV was the highest. Compared to NIFTY 50, the average monthly growth is better for this fund, however when compared to IIP index, it has underperformed.

#### **4.3.1 Tabular Analysis: L&T Large And Mid-Cap Fund, Covid-19 Cases, Nifty 50 And Iip Data:**

The following Figure 5 clearly shows a sharp recovery for both the mutual fund NAV and also for the IIP data in the month following March. However, after that all the three lines have moved all along with a slight fluctuation.

#### **4.3.2 Descriptive Analysis:**

Table 8: shows the mean NAV of L&T Large & Mid-Cap fund to be 46.65 with a standard deviation of 6.45 over the period of twelve months from March 2020 till February 2021. It depicts the low volatility in the NAV value of L&T Large & Mid-Cap Fund, where the minimum NAV was 32.43 on 23<sup>rd</sup> March 2020 and it recovered to 58.35 later in the year. The mean of 34,549 Covid-19 daily Cases were reported during the period of study and a standard deviation of 32,579 in the 12 month of study period. Such a significantly high standard deviation and close to mean covid-19 cases, states the skyrocketing rise in case from 62 in March 2020 to its peak of 97,894 cases during the period. Stock market Index NIFTY 50 had a mean of 11,377.6 with a standard deviation of 1799.96 in the 12-month period of study. NIFTY 50 had the minimum of 7610.25 and a maximum of 15,173.30 in the period of study.

#### **4.3.3 Correlation Analysis:**

From Table No. 9, we can clearly see that the L&T Large & Mid-Cap fund NAV performance is perfectly positively correlated with NIFTY 50, as it has a correlation of 0.997 which is close to almost 1. Also, the correlation with daily reported covid cases is very high of 0.833, which also proves that the performance of L&T Large & Mid-Cap fund is highly correlated with both the factors.

The figure 6 represents a normal distribution of residuals. The perfect bell-shape of the distribution curve represents a normal distribution of data.

#### **4.4 L & T EMERGING BUSINESS FUND:**

This Scheme was founded on May 12, 2014. Although this Scheme contains a high amount of risk, it can lead to a well-diversified portfolio. Like other top schemes, the Pandemic also affected too much in April, May, and June. Then it started stabilizing itself slowly. The average Growth in L&T Emerging Business Fund is 3.04% which is a better performance as compared to NIFTY 50 index average of monthly return of 1.79%. The IIP index data also has an average monthly growth of 3.3% in the period.

#### **4.4.1 Tabular Analysis: L&T Emerging Business Fund, Covid-19 Cases, Nifty 50 And Iip Data:**

The Figure-10 is showing the trend of a regular plan and direct plan and S & P BSE small-cap, respectively. The trend was started decreasing after February and then very low in April after that it was started rising.

#### 4.4.2 Descriptive Analysis:

Table 11: shows the mean NAV of L&T Emerging Business Fund to be 20.94 with a standard deviation of 3.84 over the period of twelve months from March 2020 till February 2021. The NAV of the fund ranges from the minimum NAV of 13.88 on 24<sup>th</sup> March 2020 and it recovered to 28.43 later in the year. The mean of 34,549 Covid-19 daily Cases were reported during the period of study and a standard deviation of 32,579 in the 12 month of study period. Such a significantly high standard deviation and close to mean covid-19 cases, states the skyrocketing rise in case from 59 on 11<sup>th</sup> March 2020 to its peak of 97,894 cases during the period. Stock market Index NIFTY 50 had a mean of 11,377.6 with a standard deviation of 1799.96 in the 12-month period of study. NIFTY 50 had the minimum of 7610.25 and a maximum of 15,173.30 in the period of study.

#### 4.4.3 Correlation Analysis:

From the Table No. 12, we can clearly see that the L&T Emerging Business Fund NAV performance is perfectly positively correlated with NIFTY 50, as it has a correlation of 0.984 which is close to almost 1. Also, the correlation with daily reported covid cases is very high of 0.874, which also proves that the performance of L&T Emerging Business Fund is highly correlated with both the factors.

The figure 8 represents a normal distribution of residuals. The bell-shape of the curve represents a normal distribution of data.

#### CONCLUSION:

The present study focused on the impact of Covid-19 on mutual fund schemes. Here we can see that every Scheme got affected by the Pandemic in the initial months of 2020. However, after that we can see that the market continuously recovered from the initial shock in March and April of 2020. Even if the covid-19 cases kept on increasing though out the year, yet NIFTY 50 and the Mutual Fund performance saw a slow recovery. Higher correlation among daily reported Covid- 19 cases and NAV value further proves there was hardly any direct relation between rise in cases and its adverse impact on the Capital market. In fact, as the daily registered cases were rising, the NAV of all the four funds were also rising with fluctuations. However, there is a direct relation between the mutual funds NAV and NIFTY 50 index. All the scheme's NAV has a very high correlation with the index, equaling almost 1, making it perfectly correlated. All our null hypothesis is rejected, and alternate hypothesis is accepted. The regression equation towards the end of the chapter establishes a relation among the dependent and independent variables. Moreover, with the passing of time and days, the situation is under control now, and the investor's perception has also been changed. The present comparative study of mutual fund schemes in pandemic days is worthy. It makes the investors, along with researchers, know the trends of Growth over the period and helpful to choose the best investment alternative.



**References:**

1. Goyal Shalini, Bansal Dauly (2013), "A study on Mutual Funds in India", International Journal of Scientific & Engineering Research, Vol. 4, Issue. 5, May 2013, ISSN: 2229-5518
2. Jain Madhur, Singal Pramod Kumar, Dwivedi Ajay (2014), "Performance Evaluation of Mutual Funds: A study of selected research", GGGI Management Review, Vol.4, Issue.1, pp. 63-68, Jan-June 2014,
3. Jasmine KRM, Basariya S Rabiya (2018), "A study on the customer benefits on mutual funds", International Journal of Civil engineering and Technology, 9(4),45-48
4. Pankow Bilal Ahmad (2017), "Performance of Mutual Funds in India", International Journal of Research in I.T., Management and Engineering, Vol.07, Issue.1, Jan 2017, pp 14-23, ISSN: 2249-1619, Impact Factor- 6.123.
5. Das, K.K. and Ali, S., 2021. Effect of demonetization on microfinance industry in India. *International Journal of Research in Business and Social Science (2147-4478)*, 10(3), pp.352-356.
6. Khudir, I.M. and Ali, S., 2019. An Empirical Study on Financial Statement Analysis of Myer Holdings and David Jones. *International Journal of Advanced Science and Technology*, 28(1), pp.189-202.
7. Das, K.K. and Ali, S., 2020. The role of digital technologies on growth of mutual funds industry: An empirical study. *International Journal of Research in Business and Social Science (2147-4478)*, 9(2), pp.171-176.
8. Shahnawaz Ali (2023) "Impact of Firm Performance on Stock Returns: A Study of 30 Listed Firms in Bombay Stock Exchange", *European Economic Letters (EEL)*, 13(3), pp. 1249–1258. doi: 10.52783/eel.v13i3.422.
9. Vasavi P, Venkata Siva Sree Hema (2020), "Trends in Indian Mutual Fund Industry", Parishodh Journal, Vol. IX, Issue. II, Feb 2020, ISSN No. 2347-6648, Page. 892-904.
10. Babbar, S., & Sehgal, S. (2018). Mutual Fund Characteristics and Investment Performance in India. *Management and Labour Studies*, 43(1-2), 1–30. <https://doi.org/10.1177/0258042X17745183>
11. Rao, D., Bushra, S., & Gulati, K. (2020). Emerging Challenges and Strategic Implications for Indian Mutual Fund Industry in Post Covid-19. Regime. *Financial Economics Negative Results eJournal*.
12. Shanmugam, V. P., & Ali, K. A. A. (2021). Impact of COVID-19 pandemic on equity-oriented mutual funds: A preliminary analysis of Indian mutual funds industry.

- International Journal of Financial Engineering, 08(01), 2150006.  
<https://doi.org/10.1142/s2424786321500067>
13. Himanshu, Ritika, Mushir, N., & Suryavanshi, R. (2021). Impact of COVID-19 on portfolio allocation decisions of individual investors. *Journal of Public Affairs*.  
<https://doi.org/10.1002/pa.2649>
  14. Abiad, A., Arao, M., Dagli, S., Ferrarini, B., Noy, I., Osewe, P., Pagaduan, J., Park, D., & Platitas, R. (2020). The Economic Impact of the COVID-19 Outbreak on Developing Asia. *ADB Briefs*. <https://doi.org/10.22617/brf200096>
  15. Damasio, A. R. (2006). Emotion and the Human Brain. *Annals of the New York Academy of Sciences*, 935(1), 101–106. <https://doi.org/10.1111/j.1749-6632.2001.tb03475.x>
  16. Das, S., & Das, S. (2020). JOURNAL OF CRITICAL REVIEWS IMPACT OF PANDEMIC COVID-19 ON INDIAN MUTUAL FUND INDUSTRY-AN ANALYTICAL STUDY. Retrieved from website: <http://www.jcreview.com/fulltext/197-1597063378.pdf>
  17. Ajmera, G., Jha, B., & Sharma, S. (2021). Investigating the Impact of COVID-19 on the Performance of Indian Mutual Fund Schemes: An Investors Perspective. *Journal of Contemporary Issues in Business and Government*, 27(02).  
<https://doi.org/10.47750/cibg.2021.27.02.220>
  18. Wang, F., Zhang, R., Ahmed, F., & Shah, S. M. M. (2021). Impact of investment behaviour on financial markets during COVID-19: a case of UK. *Economic Research-Ekonomska Istraživanja*, 1–19. <https://doi.org/10.1080/1331677x.2021.1939089>  
*Amfiindia.com*. (2020). Available at: <https://www.amfiindia.com/indian-mutual>.
  19. Iqbal, N. (2010). Paradigm of Mutual Funds Industry in India. *SSRN Electronic Journal*, p.22. doi:<https://doi.org/10.2139/ssrn.1653632>.
  20. Bazaz, S. (2020). Mutual fund NFOs hit by COVID19 pandemic; new launches postponed. *The Economic Times*. [online] 5 May. Available at: <https://economictimes.indiatimes.com/mf/analysis/mutual-fund-nfos-hit-by-covid19-pandemic-new-launches-postponed/articleshow/75551161.cms?from=mdr> [Accessed 20 Jan. 2024].
  21. Sahoo, M. (2021). COVID-19 impact on stock market: Evidence from the Indian stock market. *Journal of Public Affairs*, 21(4). doi: <https://doi.org/10.1002/pa.2621>

**Appendix:****Table 1: TABULAR ANALYSIS: ICICI PRUDENTIAL BLUE-CHIP FUND, COVID-19 CASES, NIFTY 50 AND IIP DATA**

Date	ICICI BLUE CHIP (NAV) Rs.	% Increase or decrease	Covid 19 Cases.	% Increase or decrease	NIFTY 50	% Increase or decrease	IIP	% Increase or decrease
11/3/20	36.53	-15.6 %	59	1866.667	10458	-13.62%	117.227	-12.628
9/4/20	33.50	-8.29 %	8384	14110.17	9111	-12.87%	54.075	-53.8715
11/5/20	34.24	2.21 %	62322	643.3445	9239	1.40 %	90.16	66.73139
10/6/20	37.02	8.12 %	226767	263.8635	9902	7.17 %	107.92	19.69831
10/7/20	38.90	5.08 %	551987	143.4159	10768	8.75 %	117.86	9.210526
11/8/20	41.59	6.92 %	1480116	168.1433	11322	5.15 %	117.22	-0.54302
11/9/20	42.02	1.03 %	2330346	57.44347	11464	1.25 %	124.13	5.894898
10/10/20	42.48	1.09 %	2460554	5.587496	11914	3.92 %	129.63	4.430839
11/11/20	46.14	8.62 %	1563378	-36.4624	12749	7.01 %	126.68	-2.27571
11/12/20	49.05	6.31 %	1142859	-26.8981	13513	6.00 %	137.42	8.478055
11/1/21	52.82	7.69 %	652404	-42.9147	14484	2.57 %	136.6	-0.59671
11/02/21	55.25	4.60 %	401424	-38.47	15173	4.75 %	129.93	-4.88287
Average							-	
Growth (%)	-	2.31%	-	1426 %	-	1.79 %		3.3%

**TABLE 2: DESCRIPTIVE STATISTICS**

Mean	Std. Deviation	N
ICICI Blue Chip Fund	41.6311 6.29304	230
NIFTY 50	11377.6122 1799.96877	230
Reported Covid Cases	34549.4478 32579.00906	230

TABLE 3: CORRELATIONS

		ICICI Blue Chip Fund	NIFTY 50	Reported Covid Cases
Pearson Correlation	ICICI Blue Chip Fund	1.000	.997	.833
	NIFTY 50	.997	1.000	.853
	Reported Covid Cases	.833	.853	1.000
Sig. (1-tailed)	ICICI Blue Chip Fund	.	.000	.000
	NIFTY 50	.000	.	.000
	Reported Covid Cases	.000	.000	.
N	ICICI Blue Chip Fund	230	230	230
	NIFTY 50	230	230	230
	Reported Covid Cases	230	230	230

Table 4: TABULAR ANALYSIS: HDFC SMALL-CAP FUND, COVID-19 CASES, NIFTY 50 AND IIP DATA

Date	HDFC SMALL CAP FUND (NAV)	% Increase or decrease	Covid 19 Cases.	% Increase or decrease	NIFTY 50	% Increase or decrease	IIP	% Increase or decrease
11/3/20	34.98	-10.86	59	1866.667	10458	-13.62%	117.227	-12.628
9/4/20	27.23	-22.16	8384	14110.17	9111	-12.87%	54.075	-53.8715
11/5/20	27.65	1.54	62322	643.3445	9239	1.40 %	90.16	66.73139
10/6/20	30.29	9.55	226767	263.8635	9902	7.17 %	107.92	19.69831
10/7/20	32.6	7.63	551987	143.4159	10768	8.75 %	117.86	9.210526
11/8/20	36.26	11.23	1480116	168.1433	11322	5.15 %	117.22	-0.54302
11/9/20	39.25	8.25	2330346	57.44347	11464	1.25 %	124.13	5.894898
10/10/20	38.25	-2.55	2460554	5.587496	11914	3.92 %	129.63	4.430839
11/11/20	39.11	2.25	1563378	-36.4624	12749	7.01 %	126.68	-2.27571
11/12/20	45.06	15.21	1142859	-26.8981	13513	6.00 %	137.42	8.478055
11/1/21	48.23	7.04	652404	-42.9147	14484	2.57 %	136.6	-0.59671

11/02/21	51.92	7.65	401424	-38.47	15173	4.75 %	129.93	-4.88287
Average								
Growth (%)	-	2.90	-	1426 %	-	1.79 %	-	3.3%

Table 5: Descriptive Statistics

	Mean	Std. Deviation	N
HDFC Small Cap Fund	36.4428	6.90548	230
NIFTY 50	11377.6122	1799.96877	230
Reported Covid Cases	34549.4478	32579.00906	230

Table 6  
TABLE 6: CORRELATIONS

		HDFC Small Cap Fund	NIFTY 50	Reported Covid Cases
Pearson Correlation	HDFC Small Cap Fund	1.000	.986	.855
	NIFTY 50	.986	1.000	.853
	Reported Covid Cases	.855	.853	1.000
Sig. (1-tailed)	HDFC Small Cap Fund	.	.000	.000
	NIFTY 50	.000	.	.000
	Reported Covid Cases	.000	.000	.
N	HDFC Small Cap Fund	230	230	230
	NIFTY 50	230	230	230
	Reported Covid Cases	230	230	230

Table 7: TABULAR ANALYSIS: L&T LARGE AND MID-CAP FUND, COVID-19 CASES, NIFTY 50 AND IIP DATA

Date	L&T LARGE AND MIDCAP (NAV) Rs.	% Increase or decrease	Covid 19 Cases.	% Increase or decrease	NIFTY 50	% Increase or decrease	IIP	% Increase or decrease
11/3/20	36.89	-25.94	59	1866.667	10458	-13.62%	117.227	-12.628
9/4/20	38.60	19.01	8384	14110.17	9111	-12.87%	54.075	-53.8715
11/5/20	38.94	-0.19	62322	643.3445	9239	1.40 %	90.16	66.73139
10/6/20	42.08	7.59	226767	263.8635	9902	7.17 %	107.92	19.69831
10/7/20	44.26	3.88	551987	143.4159	10768	8.75 %	117.86	9.210526
11/8/20	47.53	6.66	1480116	168.1433	11322	5.15 %	117.22	-0.54302
11/9/20	47.56	-0.93	2330346	57.44347	11464	1.25 %	124.13	5.894898
10/10/20	49.24	3.75	2460554	5.587496	11914	3.92 %	129.63	4.430839
11/11/20	51.54	4.58	1563378	-36.4624	12749	7.01 %	126.68	-2.27571
11/12/20	53.93	4.05	1142859	-26.8981	13513	6.00 %	137.42	8.478055
11/1/21	56.99	3.70	652404	-42.9147	14484	2.57 %	136.6	-0.59671
11/02/21	56.97	1.10	401424	-38.47	15173	4.75 %	129.93	-4.88287
Average Growth (%)	-	2.27%	-	1426 %	-	1.79 %	-	3.3%

TABLE 8: DESCRIPTIVE STATISTICS

	Mean	Std. Deviation	N
LT Large and Mid-Cap Fund	46.6546	6.45104	230
NIFTY 50	11377.6122	1799.96877	230
Reported Covid Cases	34549.4478	32579.00906	230

TABLE 9: CORRELATIONS

		L&T Large and Mid-Cap Fund	NIFTY 50	Reported Covid Cases
Pearson Correlation	L&T Large and Mid-Cap Fund	1.000	.991	.868
	NIFTY 50	.991	1.000	.853
	Reported Covid Cases	.868	.853	1.000
Sig. (1-tailed)	L&T Large and Mid-Cap Fund	.	.000	.000
	NIFTY 50	.000	.	.000
	Reported Covid Cases	.000	.000	.
N	L&T Large and Mid-Cap Fund	230	230	230
	NIFTY 50	230	230	230
	Reported Covid Cases	230	230	230

Table 10: TABULAR ANALYSIS: L&amp;T EMERGING BUSINESS FUND, COVID-19 CASES, NIFTY 50 AND IIP DATA

Date	L&T EMERGING BUSINESS FUND (NAV) Rs.	% Increase or decrease	Covid 19 Cases.	% Increase or decrease	NIFTY 50	% Increase or decrease	IIP	% Increase or decrease
11/3/20	15.91	-30.73	59	1866.667	10458	-13.62%	117.227	-12.628
9/4/20	16.40	17.08	8384	14110.17	9111	-12.87%	54.075	-53.8715
11/5/20	15.85	-3.96	62322	643.3445	9239	1.40 %	90.16	66.73139
10/6/20	18.53	15.59	226767	263.8635	9902	7.17 %	107.92	19.69831
10/7/20	18.88	0.01	551987	143.4159	10768	8.75 %	117.86	9.210526
11/8/20	21.68	13.99	1480116	168.1433	11322	5.15 %	117.22	-0.54302
11/9/20	21.59	-2.09	2330346	57.44347	11464	1.25 %	124.13	5.894898
10/10/20	22.06	1.68	2460554	5.587496	11914	3.92 %	129.63	4.430839
11/11/20	23.88	7.90	1563378	-36.4624	12749	7.01 %	126.68	-2.27571
11/12/20	25.12	4.06	1142859	-26.8981	13513	6.00 %	137.42	8.478055

11/1/21	27.06	5.33	652404	-42.9147	14484	2.57 %	136.6	-0.59671
<b>11/02/21</b>	28.82	7.58	401424	-38.47	15173	4.75 %	129.93	-4.88287
<b>Average</b>								
<b>Growth (%)</b>	-	3.04%	-	1426 %	-	1.79 %	-	3.3%

Table 11

**TABLE 11: DESCRIPTIVE STATISTICS**

	Mean	Std. Deviation	N
L&T Emerging Business Fund	20.9382	3.83747	230
NIFTY 50	11377.6122	1799.96877	230
Reported Covid Cases	34549.4478	32579.00906	230

Table 12

**TABLE 12: CORRELATIONS**

		L&T Emerging Business Fund	NIFTY 50	Reported Covid Cases
Pearson Correlation	L&T Emerging Business Fund	1.000	.984	.874
	NIFTY 50	.984	1.000	.853
	Reported Covid Cases	.874	.853	1.000
Sig. (1-tailed)	L&T Emerging Business Fund	.	.000	.000
	NIFTY 50	.000	.	.000
	Reported Covid Cases	.000	.000	.
N	L&T Emerging Business Fund	230	230	230
	NIFTY 50	230	230	230
	Reported Covid Cases	230	230	230



Figure 1

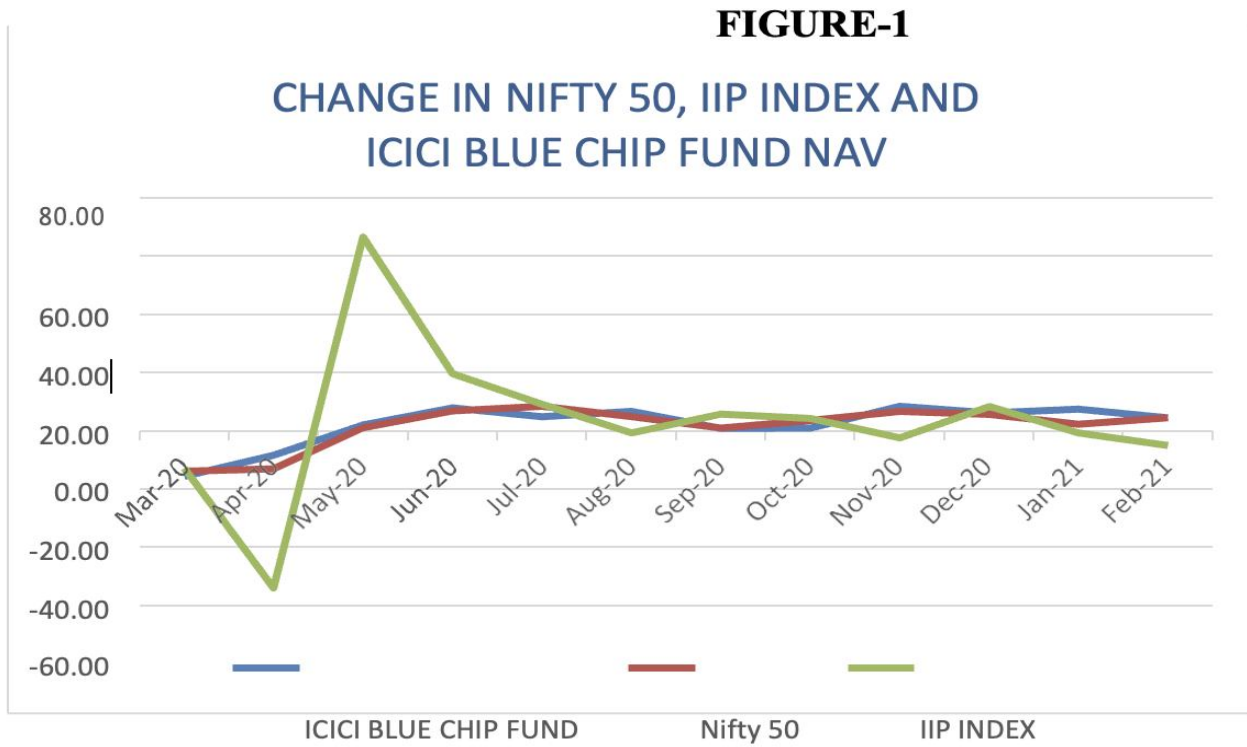


Figure 2

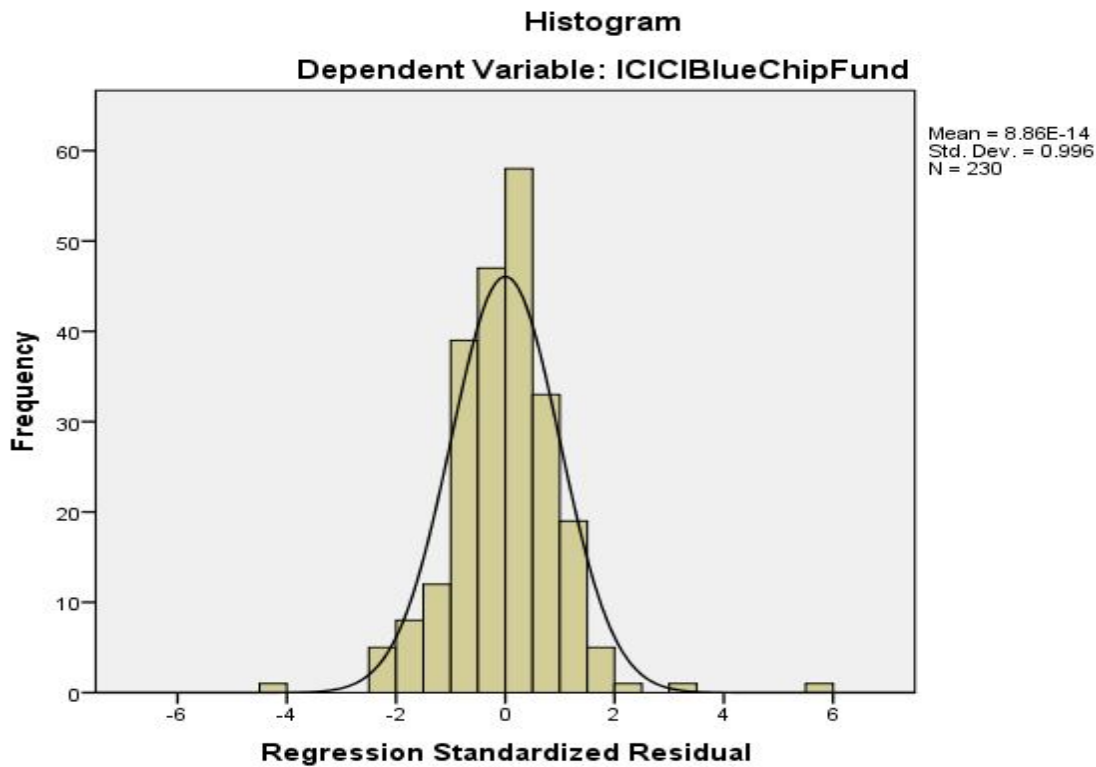


Figure 3

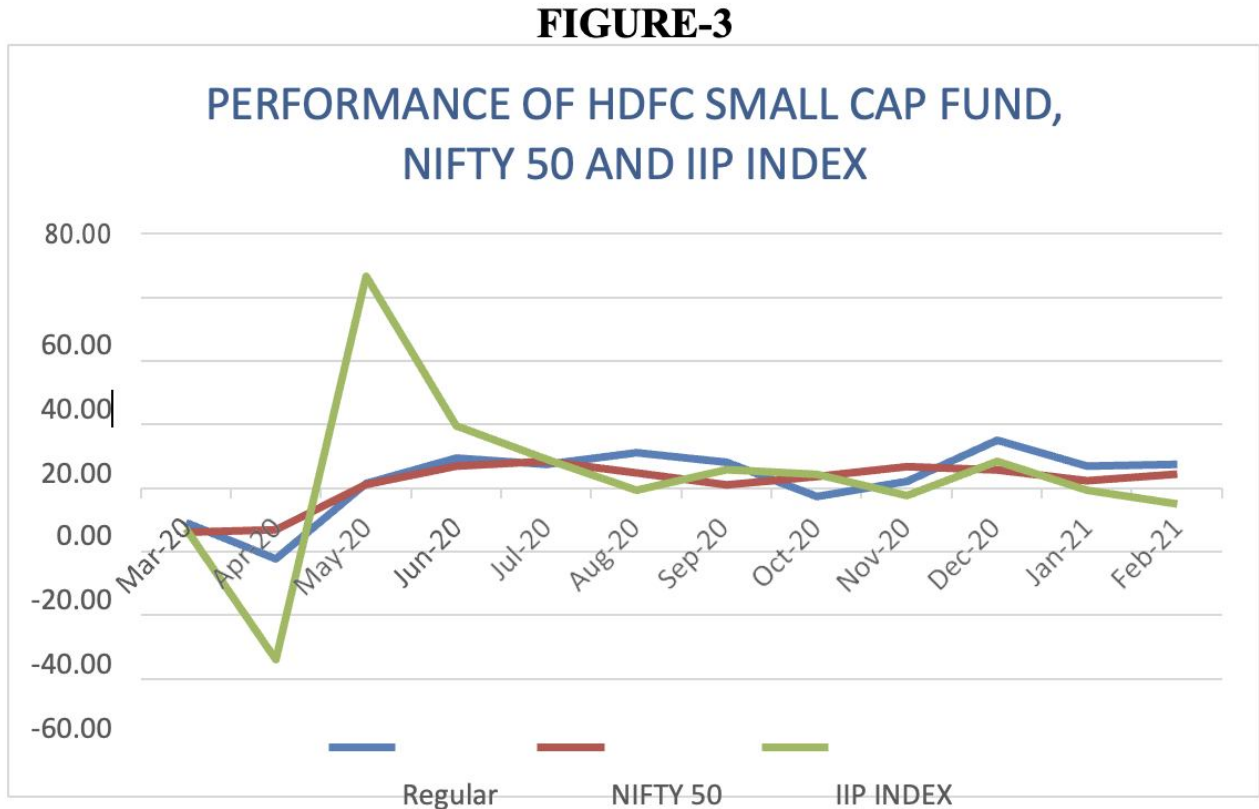


Figure 4



Histogram

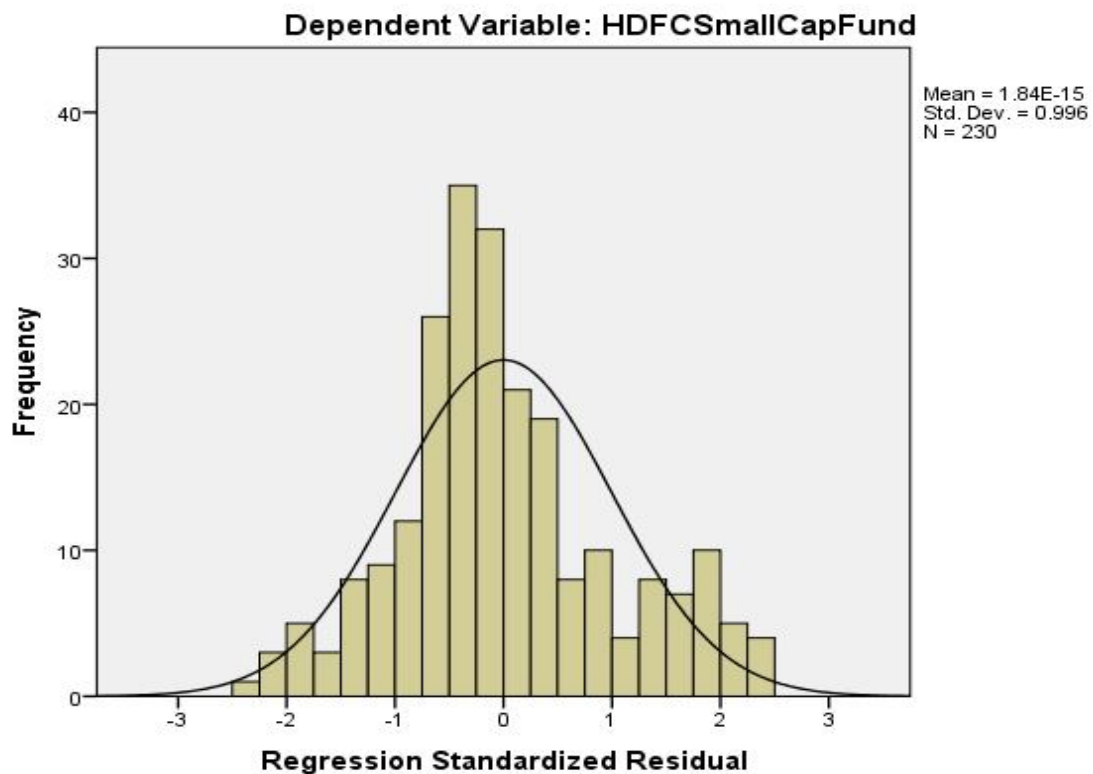


Figure 5

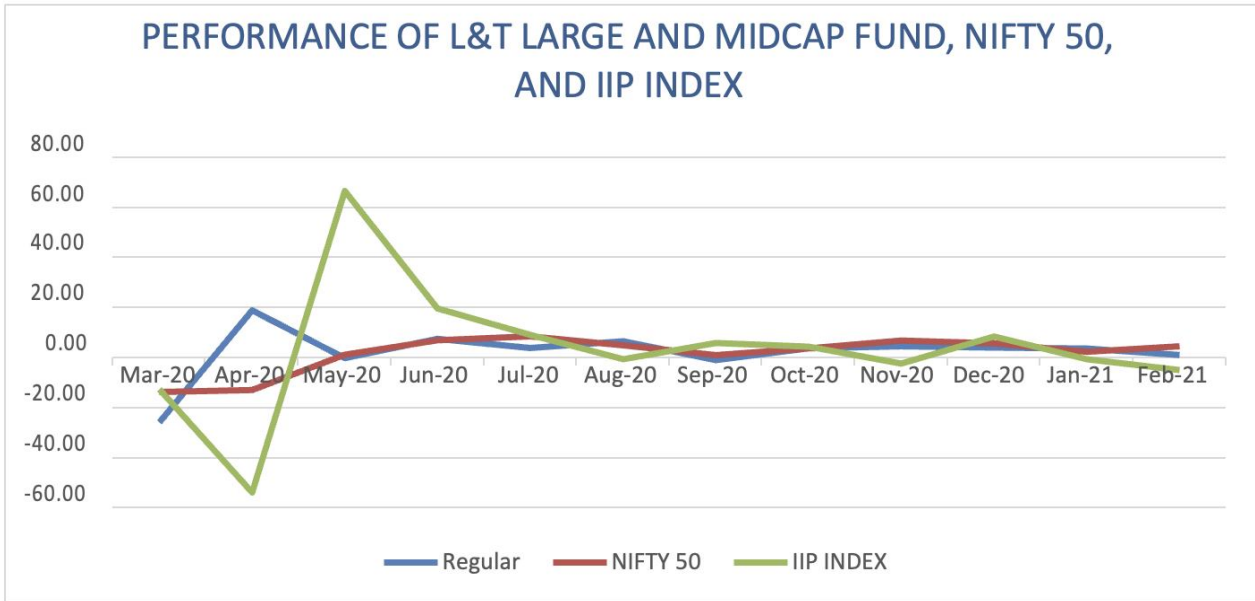


Figure 6

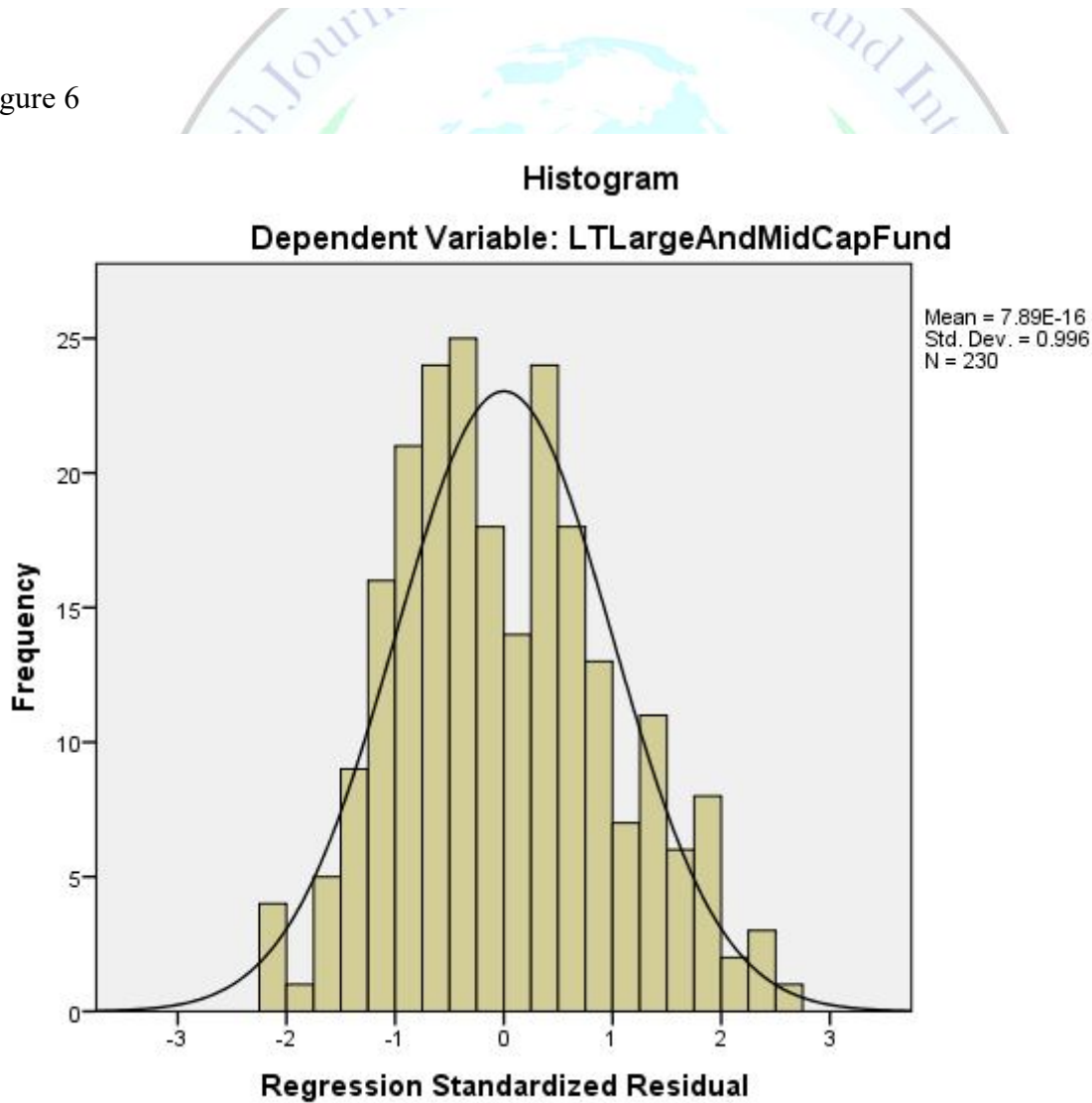


Figure 7

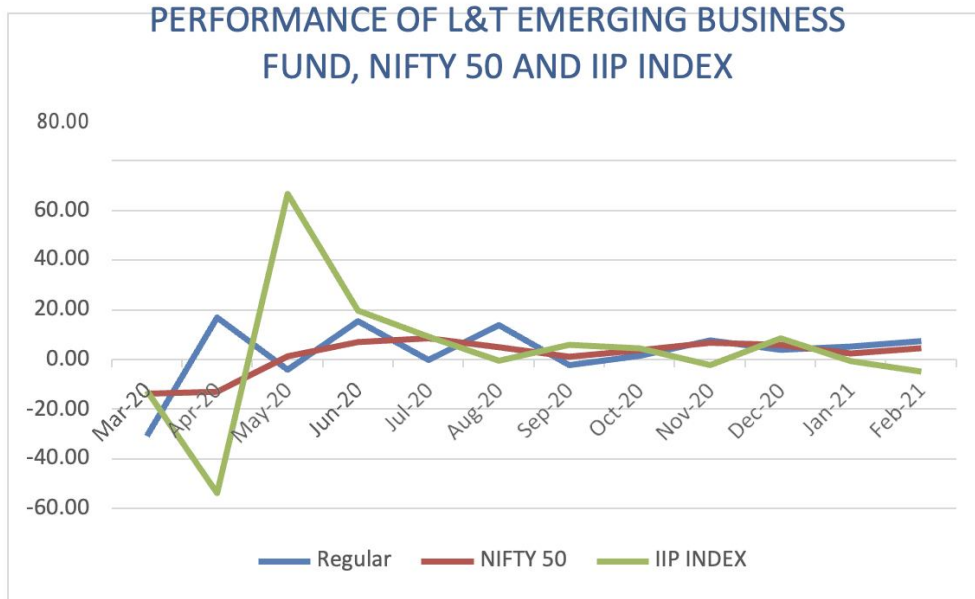


Figure 8

