The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940

Comparative Analysis of Indian Mid Cap Mutual Funds in Pre Covid Period and Bizarre Business Environment (BBE)

1st Author name: **Mridu**

Research Scholar

Department of Accountancy and law

Faculty of Commerce

Dayal Bagh Educational Institute

Email id: mriduthakur93@gmail.com

2nd Author name: **Prof**. **Pravin Saxena**

Department of Accountancy and law

Faculty of Commerce

Dayal Bagh Educational Institute

Abstract

Since the beginning of January 2020, the stock market has experienced unpredictable and turbulent fluctuations due to the uncertainties surrounding both the financial markets and human life caused by the COVID-19 pandemic. Every service sector has suffered as a result of the lockdown. Investors in large cities have never before experienced a situation where they had to cancel their investments in order to survive, and this circumstance has a direct and indirect impact on the Indian economy. However, the RBI and SEBI's significant financial support appears to have stabilized the precipitous decline in the securities market in India. The mutual fund of mutual funds has always outperformed against other financial securities in India on the basis of risk and return. There are certain advantages of mid cap mutual funds on risk and return parameters when compared to large cap mutual funds and small cap mutual funds. Therefore, this paper attempts to analyse the performance through various ratios like Sharpe, Treynor, Jensen's alpha of top mid cap funds ranked by CRISIL prior Covid 19 and in BBE i.e. Bizarre Business Environment and compare whether there's any change in the returns of these top funds prior and BBE. The results concluded that Kotak Emerging Equity Fund performed equally well in both the periods against L&T Midcap Fund and Aditya Birla Sunlife Midcap Fund.

Keywords-Midcap, Jensen's alpha, Covid 19, Mutual funds, Sharpe ratio, Treynor's ratio, Pandemic period, Bizarre Business, L&T Midcap, Aditya Birla Fund, Kotak Equity Fund

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940

Introduction

For the masses, investing is a vital factor. Regarding investing opportunities and their importance in people's lives, there is a dearth of awareness and information. Some well-known investing alternatives include mutual funds, the Public Provident Fund, bonds issued by companies and governments, exchange-traded funds, and the National Pension Scheme. The features pertaining to each of these investments like returns offered, risk, tenure, taxation, and whether the returns are certain or market-linked are all different for each of them. With the increase in the advantages of making investments people are keen to know and invest in mutual funds. Therefore, this area of investment has gained much importance.

**Research Scholar, Department of Accountancy and Law, Faculty of Commerce, Dayalbagh Educational Institute, Agra*

***Professor, Department of Accountancy and Law, Faculty of Commerce, Dayalbagh Educational Institute, Agra*

Due to digitization, people are learning more about mutual funds and realizing how vital it is to make investments in people's lives. This has resulted in a surprise good transformation in the mutual fund sector. Mutual funds have long been regarded as secure investments in the stock market.

Mutual funds are an emerging form of financial vehicle that are backed by a pool of money collected from several contributors. Mutual funds serve as financial bridges between investors who are taking interest to invest in the financial market and financial institutions. The initial aim of mutual funds is to spread out investor risk. Most of the sectors put money in mutual funds to reduce the risk associated with their money market instruments. A portfolio consists of a group of securities from various companies of different sectors that are selected on the basis of various parameters including performance. A fund manager, money manager, or portfolio manager is a financial expert who manages these enormous sums of money in mutual funds.

Mutual fund investing promotes wealth creation, capital security, and dependable income, because the collected corpus is managed by professional managers who keep a vigilant watch on the portfolio created for a particular fund and adds new securities, sell loss making ones and churns the investments in portfolio at intervals when there is correct timing. This is done for proper diversification so that risk can be managed well and minimized and also to increase the returns at times. Advanced portfolio management, dividend reinvestment, ease in investing, and fair pricing are a few benefits of investing in mutual funds.

Large funds comprise those that make all of their investments in the top 100 businesses by market capitalization. According to SEBI regulations, a large cap fund must allocate 80% of its total assets to equity and equity-related investments in large market capitalization companies. These businesses should be well-known, reliable, and established market players. Although many people believe that investing in high cap funds is safe, this is not always the case.

At least 65% of the small cap mutual funds' total assets are comprised of equity-related securities from small cap businesses. Small cap mutual funds are a subclass of equity mutual funds. Small cap funds are ones that make equity investments in firms with little market capitalization. Small-cap funds are seen to carry higher risk than other types of investments since they invest in businesses with smaller market capitalizations.

Mid Cap Funds invest in stocks and securities of mid-sized companies, which fall between positions 101st -250th according to market capitalization. These companies offer a balance of advantages and drawbacks compared to small-cap and large-cap firms. While mid-cap funds tend to be more volatile than large-cap funds, they typically offer higher returns than small-cap funds while being more stable. As an investor, carefully choosing the right schemes with a diversified portfolio and skilled fund manager can lead to significantly higher returns. Overall, mid-cap mutual funds offer a good balance of risk and return for investors.

Covid-19 which started devastating the economy of China through loss of human life, financial resources etc. soon spread to other economies and ruined the economies of the world. Beside massive deaths, falling productivity of resources, financial markets were also affected. Financial markets crashed abruptly on 28th February ,2020 after the instability due to Covid 19. Sensex fell by 1448 points and Nifty lost 432 points. The contraction in market liquidity around March 2020 led the Reserve Bank of India to conduct Open Market Operations in two tranches of 15,000 crores each in the month of March 2020. (RBI PRESS RELEASE, 2020). The investors faced unemployment, fall in output etc. due to COVID 19. Hence, they want to hedge themselves against the crisis. The fund managers have also got the opportunity to outperform in response to market dislocations due to the pandemic. In March 2020, the COVID 19 pandemic caused problems for India. Due to the same, it had an impact on every single global sector. The steep decline in mutual fund returns brought on by the Covid 19 epidemic is due to this cause.

A recent study carried out by Findoc Group, a financial advisory firm revealed that despite the challenges posed by the COVID-19 pandemic, mutual funds remain the most attractive investment option for investors. The survey found that many investors were drawn to mutual funds due to the strong returns offered by this asset class. Indeed, the PTI report revealed that after the pandemic, 72% of the participants, equivalent to 63% of the surveyed individuals, chose mutual funds as their investment option and expressed contentment with their choice.Since the crash in March 2020, the stock market has regained 70% as of the completion of July 2020. The mutual fund business in India has quickly recovered, and up until the month of December, mutual fund investments have witnessed positive growth. (Nakum, 2021)

Among large cap funds, midcap funds and small cap funds, mid-cap funds can be said to be more suitable for aggressive investors as these tend to characterize by positive features of both small cap funds and large cap funds and are seen as a mid-way. Additionally, a report published in Economic Times stated that the performance of mid cap funds was better when compared to small cap funds and large cap funds during Covid period.

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940
As discussed in Economics times (2020), during the COVID-19 epidemic, mid-cap funds in India did outperform large cap funds. (Sharma, 2020) This is so because mid cap firms, as compared to high cap corporations, are often more agile and have better growth potential. Additionally, they have a stronger emphasis on the local market, which held up better throughout the epidemic.There are certain dangers in investing in mutual funds besides many advantages and thus returns are not certain. While it's possible that mid cap funds outperformed large cap funds during the epidemic, it is still important to undertake careful research and take into account a number of different criteria.

Mid-cap mutual fund performance analysis entails examining different performance indicators over a predetermined time period, such as returns, risk, and volatility. Investors use this data to assess a mutual fund's historical performance and to decide wisely on new investments.Due to the pandemic's effects on the financial markets, investors and scholars have shown a particular interest in performance analysis of mid-cap mutual funds in the context of COVID-19. Studies have looked at the performance of mid-cap mutual funds throughout the pandemic in comparison to large-cap mutual funds, as well as how different market and economic conditions have impacted their success.

Review Of Literature

Global financial markets, including the Indian market, were significantly impacted by the COVID-19 epidemic. Due to their superior performance as compared to large-cap funds at this time, mid-cap funds in India garnered notice. The aim of this literature review is to gather and assess the existing information regarding mid-cap funds in India amidst the COVID-19 outbreak.

Kandi S. (2022) the study aims to analyse the how sound are small cap funds for investment purpose and after comprehensive investigation the author leads us to the conclusion that mid cap and small cap funds contain low chance of loss and provide sustained outperforming results in the form of high returns and fostering growth. Fund houses, who act as intermediaries in the investment industry, serve as a vital source of funding for both common investors and corporations by serving as an indirect link between the public and private corporate sectors. Contrary to many other investment vehicles, mutual funds make it easier for you to build a diverse and well-balanced portfolio. Consequently, it can be reasonably concluded that small-cap mutual funds present a reliable investment option for investors who are allocating significant amounts of capital, considering the comparison index of both mutual funds within the category being investigated.

Kumar S. (2021) The paper aims to compare the performance of mid cap and small cap funds during Covid 19. Mid-cap mutual funds outpaced large-cap mutual funds during the COVID-19 epidemic, according to an analysis of their performance in India that was done in this research using a variety of statistical approaches.

Maheen M. (2021) The study utilized tools such as sys-GMM and fixed effect/LSDV estimation to assess the influence of COVID-19 on Indian mutual funds. The findings

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940
indicated that actively managed funds performed at par with the market but were unable to outperform it.

Nakum K. (2021) the paper studied the dynamic modifications in mutual fund industry due to Covid 19. The study concluded that there was no downfall in investment industry but still there is effect on the industry.

Ramaya V. (2020) this research also examines the performance of mid-cap mutual funds in India during the epidemic, and after studying through various tools discovered that they outperformed large-cap mutual funds in terms of risk-adjusted returns.

Pastor L. (2020) The research analysed the performance and cash flows of active equity mutual funds in the United States. Contrary to the belief that active funds fare better during economic downturns, the majority of active funds were discovered to perform worse than passive benchmarks. This underperformance was particularly noticeable when compared to the S&P 500 index, as well as style benchmarks. However, the study revealed that funds with higher star and sustainability ratings exhibited better performance compared to their counterparts. Notably, investors displayed a preference for funds with strong sustainability ratings and those that utilized exclusion criteria in reallocating capital. This preference suggests that investors perceive sustainability as a vital aspect rather than a luxury, even in times of severe crisis.

Polisetty A. (2020) the chapter aims to evaluate the impact the Covid 19 had on mutual fund industry. It concluded the impact of Covid 19 on Indian mutual fund industry. Some schemes, particularly credit risk schemes, were unable to handle redemption pressure. This impacted fund AUMs due to which some funds like Franklin Templeton Debt funds wound up. SEBI brought new regulations to ease the situation.

Kiosses N. (2023) the study analysed the cash flows and performance of active equities mutual funds. The results challenged the belief that active funds perform better during economic downturns as the majority of active funds were found to underperform passive benchmarks, particularly when compared to the S&P 500 index and style benchmarks. However, funds with higher sustainability ratings and star ratings were found to outperform their peers. The study also revealed that investors favoured funds with strong sustainability ratings and those that used exclusion criteria when reallocating capital, indicating that sustainability is considered a necessity rather than a luxury by investors, even in times of severe crisis.

Mirza N. (2020) the study aims to evaluate the performance, volatility timing, and price response during Covid 19 of European investment funds. It also aims to examined the period from January to June 2020 and show that, while the majority of investment funds perform under pressure, social entrepreneurship funds maintained resilience. The findings in the research paper suggest that throughout the pandemic, social entrepreneurship funds outperformed their comparable funds. With proof of this occurrence for social funds, the results for volatility timing remained solid. During the early stages of the epidemic, the

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940
treasury funds were positive, but as the problem got worse, the CARs turned out to be negative. In addition, we think that this change in treasury fund performance has led to later-stage social funds having even larger CARs.

Shanmugum V. (2021) This paper examined how the viral outbreak from December 2019 to May 2020 affected the mutual fund sector in India. For this study, twenty-five equity-oriented direct growth funds has been taken as sample into consideration in order to examine their performance and sectoral variations. The findings indicate that while some funds' values rose during the period, the bulk of the funds' values declined.

Research Gap

Realising that the process of identifying a research gap is not a one-time occurrence but rather a continual review and improvement is crucial. The researcher should uncover brand-new gaps that were not previously known as the researcher read more deeply into the literature or might change the research topic to better address the gaps that have been identified. In order to, make sure that the study is pertinent and meaningfully adds to the body of current knowledge, this iterative approach is crucial.

From the collected literatures as enumerated above it is found that the performance of mutual funds has been analysed on various aspects during the pandemic period of Covid 19 not only in India but out of India too. But performance of specifically mid-cap funds prior to Covid 19 and after its arrival has not been addressed and compared by many studies. Mid cap funds are a form of investment that comprise of good features of large cap and small cap both and has been in headlines during Covid 19 for its surging performance as compared to large cap mutual funds and small cap mutual funds. Therefore, the paper attempts to analyse the performance of selected mid cap funds prior Covid 19 and BBE in respect of risk and returns. The performance of the fund managers like stock picking ability in response to global market dislocations and pandemic affecting Indian financial markets can be seen by comparing performance of the selected funds prior and post pandemic. It analyses the performance of selected mid-cap funds prior and post Covid 19 as to check what impact Covid 19 had made on the returns and results of these selected funds during the selected period

Objectives

1. To analyze the performance of selected mid cap mutual funds in terms of risk and return pre Covid 19 and BBE
2. To compare the performance of selected mid cap mutual funds in terms of risk and return pre Covid 19 and BBE

Research Methodology

Period Of The Study

The research is of an exploratory nature and the data used is entirely derived from secondary sources. The study was conducted from April 1st, 2020 to December 31st, 2022,

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940
encompassing the period known as the Bizarre Business Environment (BBE) which was characterized by unusual circumstances that affected human lives and businesses globally, resulting in an impact on financial markets. The pre-COVID period used in the study was from July 1st, 2017 to March 31st, 2020.

Tools Used In The Study

Investors and mutual fund analysts often use a variety of techniques to evaluate the performance of mutual funds. These instruments include gauging risk using parameters like standard deviation, beta, and Sharpe ratio, as well as evaluating returns, which demonstrate how much profit or loss a mutual fund has made over a certain time period. Another crucial factor is expense ratio, which measures the cost of holding a mutual fund as a percentage of assets managed. Style analysis, which determines the investing style of a mutual fund's portfolio holdings, and portfolio turnover, which gauges how frequently a mutual fund buys and sells its assets, are additional methodologies used to examine mutual funds. Additional elements including the term of the fund manager, the investing philosophy, and past performance are also taken into account in order to evaluate performance of mutual funds.

In this study ratio analysis has been used to analyse the performance of mid cap mutual funds on the basis of risk and return. Various traditional ratios like Sharpe, Treynor's, Jensen's alpha, etc. have been used for analyzing the performance of mid cap funds. S&P BSE 150 Midcap TRI is taken as the benchmark index for the funds selected. MIBOR (Mumbai Inter Bank Overnight Exchange) rate is considered as risk free rate of return.

Standard Deviation helps to know the variation in returns of respective funds. It is the measure of risk. Various ratios were used for analysing the performance of funds in term of risk and return such as Sharpe Ratio, Treynor's Ratio, Information Ratio etc. Sharpe Ratio indicates the excess return earned over risk free rate of return for every one unit of risk taken. Standard deviation is taken as risk measure for its calculation i.e. unsystematic risk. Treynor ratio also measures the excess return a fund has earned over risk free rate of return for every unit of risk taken. The risk considered here is systematic risk and is measured by beta value. Jensen Ratio also called Jensen's alpha is a differential return method. It helps to evaluate the return actually generated by a fund against the return expected out of that fund for a unit of systematic risk taken i.e. beta of the fund. Information Ratio helps us to know the consistency of fund manager in generating superior returns. The fund manager outshines if the Information ratio is high.

Source Of Data

The data has been collected from secondary sources like websites of Association of Mutual Funds of India, newspapers, etc. Funds returns have been calculated by taking quarterly average of daily returns of each of the selected mutual funds in this study. On the basis of these averages, ratios under study for performance analysis have been computed.For the purpose of calculating ratios in the study, the Mumbai Interbank Offer Rate (MIBOR) has been used as the risk-free rate of return. MIBOR is the benchmark for the call money market

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940
in India and refers to the rate at which banks borrow unsecured cash from each other in the interbank market. It is currently used as a benchmark rate for various financial instruments such as interest rate swaps, forward rate agreements, debentures of companies, term deposits, floating rate notes, and debentures with variable rates. Overnight MIBOR is used to price overnight indexed swaps, which are utilized to manage risk in interest rates.

S&P BSE 150 Midcap TRI is the benchmark return for all selected funds in the study. A stock market index called S&P BSE 150 Midcap TRI measures the performance of mid-sized firms listed on the Bombay Stock Exchange (BSE) in India. The index is created to track the performance of mid-cap equities, which are generally firms with market values between five and seventy-five billion rupees. The S&P BSE 150 Midcap TRI consists of 150 stocks selected from diverse industries based on their market capitalization, liquidity, and trading volume from a variety of industries, including banking, healthcare, consumer goods, and technology. To make sure the index appropriately represents the performance of mid-cap equities in India, it is reviewed and updated twice a year in March and September.The index is created using the total return of the stocks that make up its composition, which means that it takes into account both the stock price growth and any dividends that the firms may have paid. Since it considers the effect of dividends on the index's overall return, the TRI (Total Return Index) version of the index is frequently used for performance evaluation.

For the purpose of selection of funds, CRISIL rankings have been used for the period ending 31st March 2017. CRISIL Ratings' credit rating of an instrument reflects its current assessment of the likelihood that it will default. In a nutshell, the credit rating reflects the likelihood that the issuer will fail to fulfil its commitments to pay interest and principal on time and in line with the conditions of the assessed instruments. On a scale from “One to Five”, the ranks are allocated, with CRISIL Fund Rank One denoting "very good performance." The top ten percent of funds in any peer group are given a CRISIL Fund Rank “One” ranking, while the following twenty percent are given a CRISIL Fund Rank “Two”. The top three funds with rank equal to “One” under mid cap mutual funds category have been selected for the purpose of the study. Following are the three funds that have been selected which are ranked by CRISIL as top performing funds based on 31st March 2017:

1. **Aditya Birla Sun Life Midcap Fund**
2. **L&T Midcap Fund**
3. **Kotak Emerging Equity Fund**

Analysis And Interpretation

The quarterly returns ranging from time period divided into BBE period starting from April 1st, 2020 to December 31st, 2022 i.e. two years after arrival of Covid 19 in India and pre-Covid period taken from July 1st,2017 to March 31st ,2020 i.e. two years prior to arrival of Covid 19 in India of both portfolio and the benchmark returns (S&P BSE TRI 150) of Aditya Birla Sun Life Mutual Fund ,Kotak emerging Equity and L&T Midcap Fund , the three funds selected for the period of the study are shown in the following table below:

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 2927 – 2940

Table 1.0: In Bizare Business Environment (Bbe)

SCHEMES	Portfolio Return	Risk free rate	Benchmark Return
Aditya Birla Sun life Mutual fund(%)	6.01	2.2	7.23
Kotak Emerging Equity(%)	6.8	2.2	7.23
L&T Midcap Fund(%)	5.15	2.2	7.23

Source: Researcher's own calculation

Table 1.1: Pre Covid Period

SCHEMES	Portfolio Return	Risk free rate	Benchmark Return
Aditya Birla Sun life Mutual fund(%)	0.04	-0.82	3.35
Kotak Emerging Equity(%)	1.36	-0.82	3.35
L&T Midcap Fund(%)	1.33	-0.82	3.35

Source: Researcher's own calculation

It can be seen that the funds have been underperforming their respective benchmark returns both pre Covid and BBE period. A benchmark serves as a tool to assess the overall performance of a mutual fund. It provides an approximate measure of the expected returns on a person's investment, enabling a comparison with the actual returns achieved. The benchmark index for the chosen funds is S&P BSE 150 Midcap TRI. The MIBOR rate, which stands for Mumbai Inter Bank Overnight Exchange, is regarded as a risk-free rate of return.The analysis done with the help of above returns produced the following results. The following ratios has been computed such as Sharpe, Treynor, Jensen and Information ratio both post-Covid and pre-Covid along with beta and standard deviation taking into consideration the same period of study. The results are shown in table 1.2 for Bizarre Business Environment period performance and in table 1.3 for Pre Covid performance as under:

TABLE 1.2: BBE PERIOD PERFORMANCE			
PARTICULARS	**ADITYA BIRLA SUNLIFE**	**KOTAK EMERGING EQUITY**	**L& T MIDCAP FUND**

Beta	0.92	0.82	0.87
Standard Deviation	15.28	14.51	14.22
SHARPE	0.25	0.32	0.21
TREYNOR	4.14	5.61	3.39
JENSEN	-1.00	0.48	-1.43
INFORMATION RATIO	-0.37	-0.10	-0.74

TABLE 1.3: PRE COVID PERFORMANCE

PARTICULARS	ADITYA BIRLA SUNLIFE	KOTAK EMERGING EQUITY	L& T MIDCAP FUND
Beta	0.45	0.53	0.50
Standard Deviation	4.83	5.99	7.12
SHARPE	0.52	0.30	0.30
TREYNOR	1.91	4.11	4.30
JENSEN	-1.01	-0.0301	0.065
INFORMATION RATIO	-0.60	-0.35	-0.29

Source: Researcher's own calculation

The volatility of the three mutual fund schemes above in pre-Covid period is less as compared to volatility of the schemes during BBE period as its standard deviation pre-Covid is far less than standard deviation post-Covid. The most volatile fund in pre-Covid period was L&T Midcap Fund and during BBE period is Aditya Birla Sunlife.In pre-Covid period as per Sharpe Index, Aditya Birla Sunlife performed well against Kotak Emerging Equity and L&T Midcap Fund while during BBE period Kotak Emerging Equity beat back the other two. While the performance of the three funds in BBE dipped respectively against the performance pre-Covid.

The highest beta value pre-Covid was of Kotak Emerging Equity and least of Aditya Birla Sunlife and during post-Covid period, Aditya Birla Sunlife has the highest beta value while Kotak Emerging Equity has the lowest. With respect to the systematic risk taken by each fund, the fund which performed well in pre-Covid period was L&T Midcap Fund and the worst performer was Aditya Birla Sunlife with Treynor ratio of 1.91 against 4.11 and 4.30 of

Kotak Emerging Equity and L&T Midcap Fund respectively. During post-Covid period, the best performer was Kotak Emerging Fund and L&T Midcap Fund performed poor. The performance of Kotak Emerging Equity improved post-Covid according to Treynor's measure.

According to Jensen's alpha, L&T Midcap Fund performed well in the pre-Covid period and Aditya Birla Sunlife was the worst performer. While, during BBE period Kotak Emerging Equity outshined the other two funds in the category. On the other hand, L&T Midcap performance dipped and Aditya Birla Sunlife improved its performance with a small percentage post Covid.L&T Midcap fund had better information ratio in the pre-Covid period among the other two schemes. During post-Covid period, information ratio of L&T Midcap Fund collapsed and Kotak Emerging Equity had a better information ratio.

The following table 1.4 and 1.5 depicts the best performers in the pre-Covid period and Bizarre Business period respectively on the basis of different ratios such as beta, standard deviation, Sharpe ratio, Treynor ratio, Jensen's alpha and Information ratio as obtained in both pre Covid 19 and BBE period as calculated in the table 1.2 and 1.3 above each for pre Covid period and Bizarre Business environment period.

Table 1.4: Pre-Covid Period Comparison Chart

PARTICULARS	I	II	III
Beta	Kotak Emerging Equity	L&T Midcap Fund	Aditya Birla Sunlife
Standard Deviation	L&T Midcap Fund	Kotak Emerging Equity	Aditya Birla Sunlife
Sharpe	Kotak Emerging Equity	Aditya Birla Sunlife	L&T Midcap Fund
Treynor	L&T Midcap Fund	Kotak Emerging Equity	Aditya Birla Sunlife
Jensen's alpha	L&T Midcap Fund	Kotak Emerging Equity	Aditya Birla Sunlife
Information ratio	L&T Midcap Fund	Kotak Emerging Equity	Aditya Birla Sunlife

Source: Researchers' own analysis

Table 1.5: Post-Covid Period Comparison Chart

PARTICULARS	I	II	III
Beta	Aditya Birla Sunlife	L&T Midcap Fund	Kotak Emerging

			Equity
Standard Deviation	Aditya Birla Sunlife	Kotak Emerging Equity	L&T Midcap Fund
Sharpe	Kotak Emerging Equity	Aditya Birla Sunlife	L&T Midcap Fund
Treynor	Kotak Emerging Equity	Aditya Birla Sunlife	L&T Midcap Fund
Jensen's alpha	L&T Midcap Fund	Kotak Emerging Equity	Aditya Birla Sunlife
Information ratio	Kotak Emerging Equity	Aditya Birla Sunlife	L&T Midcap Fund

Source: Researchers' own analysis

Pre Covid 19 And Bbe Performance Analysis Of Funds

Volatility of Aditya Birla SunLife Fund was least among the three selected funds prior to Covid 19 pandemic but during the pandemic Aditya Birla SunLife Fund came out to be most volatile among the three top selected funds. Volatility is due to both systematic and unsystematic risks which is denoted by beta and standard deviation of the fund. The systematic risk associated with L&T Midcap Fund denoted by beta remained same in both the pre Covid 19 and during BBE while the volatility associated with unsystematic risk denoted by standard deviation was highest among three funds and became least compared to other three funds post pandemic. Kotak Emerging Equity faced highest volatility in terms of beta against three in pre-Covid period but the post-Covid period posed with low beta volatility for the fund. While the volatility associated to unsystematic risk i.e. Standard Deviation remained same in both the periods for the fund.

According to Sharpe Index, there was no change in performance of all three funds post and prior to Covid pandemic i.e. the three funds earned excess returns over risk free rate of return (MIBOR) against their respective beta in same proportion. Jensen's alpha also had the same conclusion that did not have any change in the comparative performance of funds in both periods.

The performance of L&T Midcap Fund in BBE had declined slightly as compared to its performance pre Covid due to increased standard deviation i.e. unsystematic risk. Additionally, its performance had also declined BBE as compared to the performance of the other funds as per Treynor's measure. While the performance of Kotak Emerging Equity improved as compared to other funds post Covid. The performance of Kotak Emerging Equity improved slightly from its pre Covid performance according to Treynor's measure.The performance of fund managers of Kotak Emerging Equity and Aditya Birla SunLife as depicted by respective information ratios of both periods under consideration has improved BBE while that of L&T Midcap Mutual Fund declined.

Conclusion

The economic impact of COVID-19 has been more severe than that of natural disasters, nuclear war, climate change, or localized crises. The pandemic has significantly affected various sectors, including manufacturing, consumption, and storage. The global financial markets, encompassing equities, bonds, and commodities, have also been profoundly affected by this crisis. Despite the challenging circumstances, the mutual fund industry has been experiencing rapid growth, with an increasing number of investors. However, the devastating effects of the COVID-19 pandemic have not spared the mutual fund industry either. The financial markets faced a significant downturn during this unique and bizarre business environment (BBE) caused by the pandemic. As a result, mutual funds were also impacted.

The study examined the performance of selected funds, namely Kotak Emerging Equity, L&T Midcap Fund, and Aditya Birla SunLife Fund. It found that among these three funds, Kotak Emerging Equity performed equally well during both the business bizarre environment and the pre-COVID period, in comparison to L&T Midcap Fund and Aditya Birla SunLife Fund within the same category. However, it is important to note that the performance of these funds is subject to change based on investors' perceptions, market movements, and alterations in the business environment.

References

[1] Maheen M. (2021) Impact of COVID-19 on the performance of emerging market mutual funds: evidence from India. *Futur Bus J* 7, 37 (2021). https://doi.org/10.1186/s43093-021-00081-w
[2] Aanand, C. (2020, January). Understanding the pathway of FII and DII into the Bourses and its effects- An explorative study. Retrieved from https://www.researchgate.net/publication/338526385
[3] Polisetty, Aruna. (2020). Indian Mutual Funds during COVID pandemic times.
[4] Nakum K. (2021) Impact of COVID 19 on the Mutual Fund in India, International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.8, Issue 1, page no.1450-1454, January-2021, Available :http://www.jetir.org/papers/JETIR2101181.pdf
[5] V S Prasad Kandi., & Harshitha. K & Dhyan. A. (2022). Performance of mutual funds in India: Comparative analysis of small-cap and mid-cap mutual funds. *Academy of Marketing Studies Journal*, *26*(4), 1-10.
[6] Tampakoudis, I., Kiosses, N. and Petridis, K. (2023), "The impact of mutual funds' ESG scores on their financial performance during the COVID-19 pandemic. A data envelopment analysis", Corporate Governance, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/CG-12-2022-0491
[7] Mirza, N., Naqvi, B., Rahat, B., & Rizvi, S. K. A. (2020). Price reaction, volatility timing and funds' performance during Covid-19. *Finance Research Letters*, *36*, 101657.

[8] Shanmugam, V. P., & Ali, K. 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*, *8*(01), 2150006.

[9] Sharma, R. (2020, May 12). Mid-cap funds deliver 12% returns in last one month. Should you invest? Economic Times, p. 1.