

# Post Covid-19 Growth of Midcap Mutual Funds in India: A Study on Top Ten Midcap Mutual Funds

## Abstract:

Since the COVID-19 outbreak, asset management companies (AMCs) have taken the lead in increasing wealth through mutual funds. There are two types of mutual funds: open-ended and closed-ended. With 43 AMCs operating in India and an average asset under management (AUM) of ₹27.12 trillion as of July 31, 2020, equity funds are riskier. According to research, small and midcap funds have more risk and higher returns than large-cap funds, which have lower risk and lower returns. For regular investments in mutual funds, especially midcap funds, Systematic Investment Plans (SIPs) have gained popularity. Based on their assets under management (AUM) and monthly SIP inflows from 2020–21 to 2024–25, the top ten midcap funds were examined in this study. The purpose of this study is to show how the performance of the midcap funds and volatility associated with the funds. This study also analyses the volatility of the midcap funds by using Sharpe index, Treynor index, and Jensen's Alpha index. The result shows that few of the midcap funds are more volatile than the other funds but higher volatility generates higher returns for the investors over this last four years.

**Key Words:** Mutual fund, midcap fund, investment, risk, volatility, systematic investment plan.

**Introduction:**

We are currently unable to proceed with a standard plan of risk-free returns, such as government bonds, bank term deposits, etc., in order to beat inflation and generate positive returns from our funds. We must look for alternative investing possibilities, such as corporate bonds, index funds, equity traded funds, debt funds, equity mutual funds, and direct share market investment. Investing in long-term equity mutual funds is one of the finest ways to address the current circumstances. A mutual fund is an investment portfolio that is overseen by an asset management company (AMC), a reputable organisation. To purchase stocks, bonds, and other securities, this mutual fund pools the funds of several people. By spreading money among several investments, it enables investors to earn a healthy return on their investment, which is a professionally managed portfolio with minimal risk. Since more people can now understand the value of investing in mutual funds thanks to increased digitization, (digitization refers to the process of converting analogue information into digital formats). The mutual fund industry has seen some beneficial changes since the COVID-19 pandemic. When it comes to increasing investors' wealth, mutual funds have shown to be market leaders. Mutual funds are managed by one or more individual managers who choose equities from various companies that offer the highest returns and the lowest risk. Mutual funds are divided into groups based on the investor's preference for high risk, high return, and moderate returns with low risk. The first are open-ended funds, which allow for unconditional investments and withdrawals, whereas closed-ended funds have a maturity date that is set in stone. Though they are equally recognised with larger returns over longer periods of time, equity funds are the ones that carry a higher risk when investors first start with a market portfolio that includes equities. However, the most recent approach taken by these funds is to diversify their investments across several industries to achieve risk distribution. Under these equity funds, sector-specific funds are those that are limited to investors in a certain industry, such as IT, pharmaceuticals, etc.

The Unit Scheme of Unit Trust of India (UTI) marked the beginning of Indian mutual fund history in 1963. By granting operational authorisation to public sectors mutual funds like SBI Mutual Funds, Canara Bank Mutual Funds, and others, their monopoly was reduced. Foreign institutional investors and the private sector were later allowed access to the industry. These days, mutual funds provide a variety of plans with a range of goals. The mutual fund must be registered with SEBI, which examines it from a variety of angles, before entering the market. As of July 31, 2020, there were forty-three asset management firms (AMCs) operating, with an average asset under management (AUM) of ₹27.12 trillion. The primary research questions this study attempts to answer are the current state of SIP inflows into midcap funds, the performance of midcap funds over the past four years, and the degree of volatility associated with midcap funds. In this study, The author wants to demonstrate to demonstrate the overall performance of India's midcap mutual funds.

**Review of Literature:**

Each study must examine the prior research to identify the gap and establish research goals. A lot of effort has been made on mutual funds. The author have taken a few of the studies to give a broad overview of earlier research. The preference of investors and the performance and growth of mutual

funds make up the two main sections of the majority of the study. The material the author have reviewed here focuses mostly on the growth and performance of MFs.

A comparison analysis of the performance evaluation of large-cap equity and debt mutual fund schemes was attempted by Bansal, S., and Yash, P. T. (2014). It includes information on the returns and volatility metrics of a sample of debt and equities mutual fund schemes. The UTI Opportunities Fund has the lowest standard deviation and beta of any equity mutual fund scheme, according to the data. In addition to investors, asset management firms will find the current study useful for assessing the performance and portfolios of their clients.

Busse, Goyal, and Wahal (2014) investigate active retail mutual funds and institutional products that were permitted to make investments in foreign stock markets between 1991 and 2009. Overall, they don't discover much solid proof of alphas. There are a few significant alphas in the distribution's right tail. They discover some indication of improved stock-picking skills in the far right tail when they break out stock selection from nation selection. Simulations, however, indicate that their production is as likely to be the result of chance as expertise. There is minimal indication of sustained higher performance in persistence tests.

Bhagyasree and Kishori (2016) examined the success of growth-oriented, open-ended equity plans throughout the transition economy's April 2011–March 2015 time frame. To determine the returns from the fund schemes, the daily closing NAV of several schemes has been utilised. The market portfolio has been incorporated into BSE-sensex. According to the report, 14 of the 30 mutual fund schemes had a better return than the benchmark. The findings also revealed that a few of the plans had underperformed; these schemes were having trouble diversifying.

By researching the literature, the author Tripathy (2017) studied 30 mutual fund schemes from a variety of angles. According to this study, the mutual fund sector should be regulated and fund houses should reveal the stock selection processes used in offers so that investors are aware of them.

Alagappan (2019) attempted to evaluate the performance of twelve open-ended mutual fund schemes over a one-year period. The analysis came to the conclusion that an equity open-end mutual fund does not provide a particularly strong year-over-year return. For a more thorough view of fund performance, annual returns rather than quarterly ones can be taken into consideration.

Since large-cap funds are linked to lower risk and lower returns, the majority of research focuses on evaluating their performance. Since small and midcap funds are linked to higher risk and higher returns, very few of the research focuses on evaluating their performance.

### **The Objective of the Study:**

The epidemic caused significant economic upheaval, and India was no exception. As investors sought greater returns from mid-sized businesses, midcap mutual funds experienced a comeback and growth trajectory following the initial market crash in 2020. The author's goals:

1. To evaluate the midcap sector's performance following the COVID-19 pandemic.
2. To examine the SIP inflows in order to gauge the confidence and risk tolerance of retail investors in the midcap funds.

3. To assist investors in determining their risk tolerance. ,

For this reason, the author would want to quantify the volatility of midcap funds.

### **Research Methodology:**

Using only secondary data, the analysis is based on materials made available by the Association of Mutual Funds in India (AMFI). This non-profit organisation was created by the Securities and Exchange Board of India with the responsibility of monitoring and controlling the mutual fund sector in India. To accomplish its goals, the study focuses on the top ten midcap funds, which are arranged based on their assets under management (AUM).

The analysis uses data on monthly Systematic Investment Plan (SIP) inflows into midcap mutual funds, spanning the fiscal years 2020–21 through 2024–25, with data available up to September, in order to clearly illustrate the growth trajectory of these funds.

The Net Asset Value (NAV) is analysed during a four-year period, from FY 2020–21 to FY 2023–24, in order to assess the performance of midcap funds. Each fund's absolute returns are determined using the NAV data collected between April 1, 2020, and September 30, 2024. Within the given time frame, this methodological approach offers a strong foundation for evaluating the chosen midcap funds' financial performance and investment viability.

The Treynor Index, Jensen's Alpha value, and Sharpe Index have been used to calculate the funds' volatility over the last four fiscal years, from FY 2020–21 to FY 2023–24. This temporal frame makes a thorough analysis of investing trends and patterns within the midcap class possible.

### **Research Results:**

#### **Monthly SIP inflow and growth of midcap mutual funds:**

In this section, monthly figures on SIP inflow of midcap mutual funds are shown. The data were collected from April of FY 2020-21 to September of FY 2024-25. The SIP inflow was 8376 crore in April 2020 and it is raised to 25323 crore in October 2024. Over the last four and a half years, SIP has increased by 202.33 percent in absolute terms. A compound annual growth rate of 27.19 percent was recorded within the same time frame. From April 2023 to October 2024, the SIP inflow increased significantly, according to the data. The SIP inflow has nearly doubled over the past 19 months. If the SIP inflow keeps increasing at the same pace, it may surpass the thirty thousand crore level by the end of this fiscal year.

**Table-1: Monthly SIP Data.**

<b>Monthly Data of SIP from FY 2020-21 to Till Date (Rs in crore)</b>					
<b>Month / Year</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25 (till Sept.)</b>

April	8376	8596	11863	13728	20371
May	8123	8819	12286	14749	20904
June	7917	9156	12276	14734	21262
July	7831	9609	12140	15245	23332
August	7792	9923	12693	15814	23547
September	7788	10351	12976	16042	24509
October	7800	10519	13041	16928	25323
November	7302	11005	13306	17073	
December	8418	11305	13573	17610	
January	8023	11517	13856	18838	
February	7528	11438	13686	19187	
March	9182	12328	14276	19271	
Average	8006.67	10380.5	12997.667	16601.583	22749.7

Source: Association of Mutual Funds in India.

### Growth and SIP inflow of Midcap mutual funds:

Mutual funds that invest in the equity of mid-sized businesses (those with market capitalisations greater than Rs 5000 crore but less than Rs 20,000 crore) are known as midcap mutual funds. Companies that score between 101 and 250 based on their market capitalisation are classified as midcap businesses, according to established standard practice. This mutual fund allocates at least 65 percent of its capital to midcap firms, with the option to allocate 35 percent to large-cap firms for stability and 35 percent to small-cap firms for the potential for greater growth. According to Table 2, the SIP inflow into midcap mutual funds was 497 crore in April 2020 and increased to 3130 crore in September 2024. Due to the COVID-19 stock market crisis, the average monthly SIP for FY 2020–21 was -312 crore. In FY 2020–21, SIP inflows had negative growth in eight of these twelve months. From -312 crore in FY 2020–21 to 2459 crore in FY 2024–25 (till September), the average monthly SIP has increased. Over these four and a half years, the growth rate of SIP intake into midcap funds climbed eight times.

**Table-2: Monthly Growth of SIP in Midcap Mutual Funds.**

Monthly Growth of SIP inflow of Midcap Funds from FY 2022-23 to 2024-25(till Sept.) (in cr.)					
Month / Year	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25 (till Sept)
April	497	958	1549	1791	1793
May	279	1368	1831	1196	2605
June	36	1729	1851	1748	2528
July	-579	1487	1244	1623	1644

August	-603	162	1479	2512	3054
September	-67	1351	2151	2001	3130
October	-555	376	1385	2409	
November	-1317	1279	1176	2665	
December	-1635	1679	1962	1393	
January	-1206	1770	1628	2061	
February	-99	1954	1816	1808	
March	1502	2193	2128	1017	
Avg. monthly SIP	-312.25	1358.833	1683.333	1852	2459

Source: AMFI.

### Analysis of top 10 midcap funds in India in terms of AUM:

To analyze the performance of midcap funds, we have selected the top ten funds according to the assets they manage. Each fund's returns were determined by taking the NAV as of April 1, 2020, and September 30, 2024. The market value per share of a certain mutual fund, at which its units can be purchased or sold, is represented by the acronym NAV, which stands for net asset value.

$$\text{NAV} = (\text{Total Asset} - \text{Total Liabilities}) / \text{Total Outstanding Shares.}$$

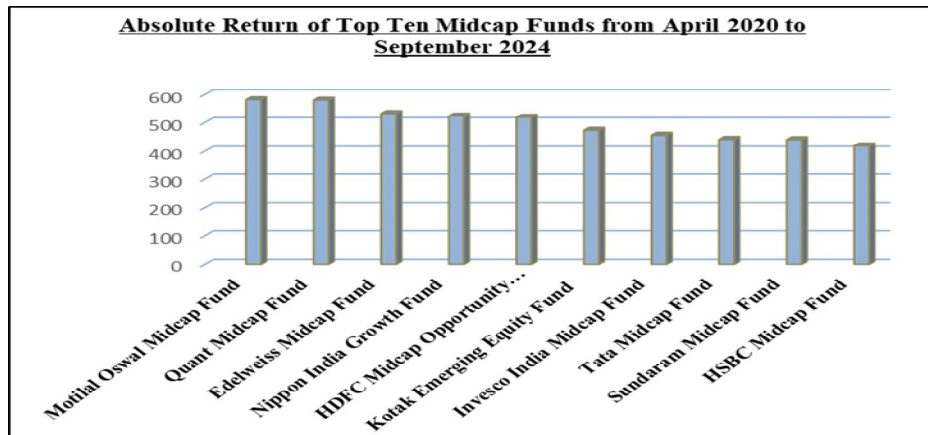
**Table-3: Return of Top Ten Midcap Mutual Fund.**

<b>Growth of Top Ten Midcap Mutual Fund (in terms of return)</b>				
<b>From FY2020-21 to Till Date</b>				
<b>Name of Fund</b>	<b>NAV as on, April 2020</b>	<b>NAV as on, September 2024</b>	<b>Absolute Return</b>	<b>Annualised Return During this Period (%)</b>
Motilal Oswal Midcap Fund	18.69	108.7	581.594	55.29
Quant Midcap Fund	42.57	247.01	580.244	55.20
Edelweiss Midcap Fund	19.01	101.11	531.878	51.86
Nippon India Growth Fund	812.75	4248.33	522.711	51.20
HDFC Midcap Opportunity Fund	37.48	194.31	518.436	50.89
Kotak Emerging Equity Fund	28.95	137.07	473.472	47.51
Invesco India Midcap Fund	37.97	173.25	456.281	46.15
Tata Midcap Fund	104.21	460.19	441.599	44.96
Sundaram Midcap Fund	324.82	1431.3	440.644	44.88
HSBC Midcap Fund	96.46	404.21	419.044	43.07

Source: NAV has collected from mutual funds' own website and the return is the author's own calculation.

The above table shows that the highest return is given by the Motial Oswal midcap fund i.e. 581.59 percent (absolute return), followed by the quant midcap fund (580.2 percent) and Edelweiss midcap fund (531.8 percent). The absolute return has been presented in figure 2 also.

**Figure 2: Return of Top Ten Midcap Funds.**



Source: Author's own calculation.

### Measurement of the Volatility of the Mutual Fund:

This section calculates the mutual fund's volatility, or how responsive it is to changes in the market. A firm's market capitalization determines its volatility; the lower the market capitalization, the more likely it is that the company will decline in the event of a market decline, and vice versa. When it comes to volatility, midcap funds are more volatile than large-cap mutual funds; but, when compared to small-cap mutual funds, volatility is lower. Three distinct indexes are used to quantify volatility: the Treynor index, Jensen's Alpha index, and the Sharpe index.

#### Sharpe Index:

The Sharpe index evaluates an investment's risk and return. It is the difference between the returns from an investment and those from any risk-free asset, such as a government bond, adjusted for risk. Greater returns from an investment with a higher risk level are indicated by a larger value of the index.

$$\text{Sharpe Index} = \frac{R_p - R_f}{\sigma_p}$$

$R_p$  = Return of portfolio.

$R_f$  = Risk-free return.

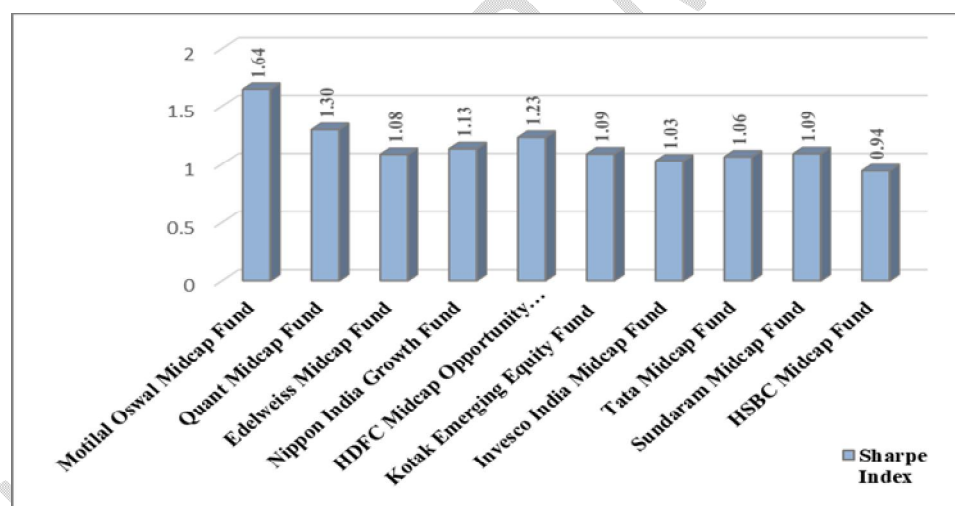
$\sigma_p$  = Standard deviation of the portfolio's excess return. Standard deviation is a number that can be used to show how much the returns of a mutual fund are likely to deviate from its average annual return. The risk-free rate of return of govt. bond of the last 4 years was 6.88 percent.

**Table 4: Volatility of the Funds Based on Sharpe Index of Last Four Financial Years.**

Name	Standard Deviation	Sharpe Index
Motilal Oswal Midcap Fund	23.48	1.64
Quant Midcap Fund	38.14	1.3
Edelweiss Midcap Fund	37.44	1.08
Nippon India Growth Fund	33.57	1.13
HDFC Midcap Opportunity Fund	31.01	1.23
Kotak Emerging Equity Fund	32.37	1.09
Invesco India Midcap Fund	31.32	1.03
Tata Midcap Fund	32.39	1.06
Sundaram Midcap Fund	30.84	1.09
HSBC Midcap Fund	35.47	0.94

Source: Author's calculation.

Figure-3: Sharpe Index.



Source: Author's own calculation.

The Sharpe index for the most recent four fiscal years, from FY2020–21 to FY2023–24, was computed. In contrast to the benchmark, which had a Sharpe index of 0.98, table 4 shows that the nine midcap funds had a greater Sharpe index. The Sharpe index of the Motilal Oswal midcap fund is the highest at 1.64, followed by that of the Quant midcap fund at 1.30 and the HDFC midcap opportunity fund at 1.23. Only one midcap fund, the HSBC midcap fund, has a lower Sharpe index than the benchmark. Figure 3 is the diagrammatic representation of the table-4.

#### Treynor Index:

The Treynor index calculates the excess returns that a financial asset or collection of securities generates for each additional unit of risk that the portfolio assumes. It is also known as the ratio of reward to volatility. Compared to the Sharpe index, it is somewhat different. The Treynor index uses the portfolio's beta, a gauge of the investor's systematic risk, while the Sharpe index uses the portfolio's standard deviation to adjust return.

.Treynor Index:  $R_p - R_f / \beta_p$

$R_p$  = Return of the portfolio.

$R_f$  = Risk-free return = The risk-free rate of return of govt. bond of the last 4 years was 6.88 percent.

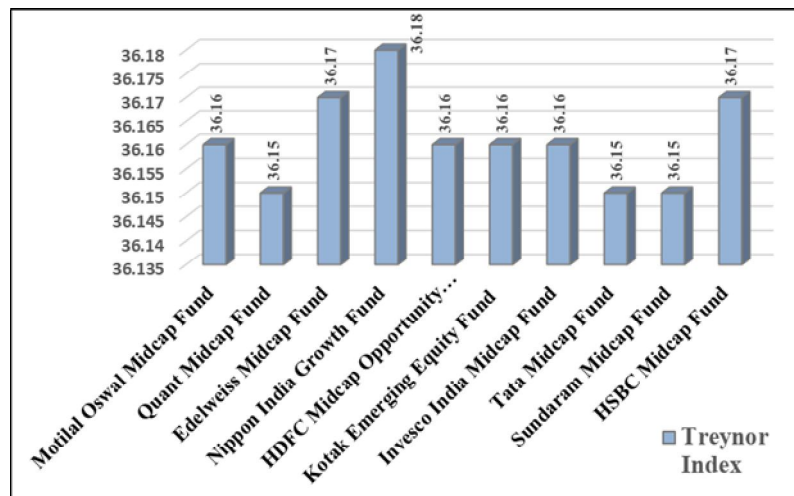
$\beta_p$  = Beta of the portfolio. Beta represents the systematic risk, which is volatility at the macro level.

**Table 5: Volatility of the Funds Based on the Treynor Index of the Last Four Financial Years.**

Name	Beta ( $\beta$ )	Treynor Index
Motilal Oswal Midcap Fund	1.068	36.16
Quant Midcap Fund	1.366	36.15
Edelweiss Midcap Fund	1.123	36.17
Nippon India Growth Fund	1.051	36.18
HDFC Midcap Opportunity Fund	1.054	36.16
Kotak Emerging Equity Fund	0.974	36.16
Invesco India Midcap Fund	0.889	36.16
Tata Midcap Fund	0.951	36.15
Sundaram Midcap Fund	0.929	36.15
HSBC Midcap Fund	0.924	36.17

Source: Author's own calculation.

**Figure-4: Treynor Index**



Source: Author's own calculation.

The Treynor index in Table 5 is diagrammatically shown in Figure 4. Additionally computed were the benchmark indexes' Treynor index (36.16) and beta (0.98). Of these 10 midcap funds, just three have a higher Treynor index than the benchmark index, and only five have a higher beta. Any midcap funds that have greater Treynor index and beta values than the benchmark also have higher volatility. According to the computation, the Quant midcap fund had the highest beta (1.37), followed by the Motilal Oswal midcap fund (1.12), and the Edelweiss midcap fund (1.12). The highest calculated value of Treynor index has been observed for the Nippon India growth fund (36.18) followed by the Edelweiss midcap fund (36.17) and the HSBC midcap fund (36.17).

### **Jenson's Alpha Index:**

For investors, Jensen's Alpha, also known as ex-post alpha, is crucial as they must consider both the overall return of a product or portfolio and the level of risk required to achieve that return. The daily returns of the market are regressed against the portfolio's daily returns. This is essentially done to calculate a measure of this systemic risk, much like the Capital Asset Pricing Model does. One way to measure performance in relation to the market is to compare the estimated or modeled risk-adjusted return with the portfolio's actual return.

$$\text{Jensen's alpha} = \alpha_p = R_p - [R_f + \beta_p (R_m - R_f)].$$

$R_p$  = Return of the portfolio.

$R_f$  = Risk-free return = The risk-free rate of return of govt. bond of the last 4 years was 6.88 percent.

$\beta_p$  = Beta of the portfolio.  $R_m$  = Market return.

If alpha is positive, the portfolio has outperformed the market, while a negative value indicates under-performance. Additionally, portfolios or their managers can be ranked using the alpha values.

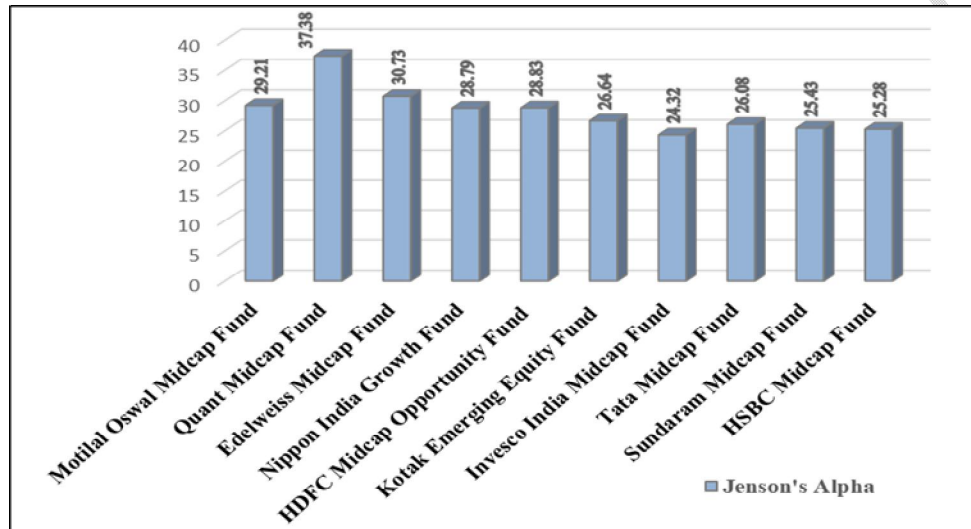
**Table 6: Risk of The Funds Based on Jenson's Alpha Index of the Last Four Financial Years.**

Name	Beta ( $\beta$ )	Jenson's Alpha
Motilal Oswal Midcap Fund	1.07	29.2
Quant Midcap Fund	1.37	37.4
Edelweiss Midcap Fund	1.12	30.7
Nippon India Growth Fund	1.05	28.8
HDFC Midcap Opportunity Fund	1.05	28.8

Kotak Emerging Equity Fund	0.97	26.6
Invesco India Midcap Fund	0.89	24.3
Tata Midcap Fund	0.95	26.1
Sundaram Midcap Fund	0.93	25.4
HSBC Midcap Fund	0.92	25.3

Source: Author's own calculation.

**Figure-5: Jensen's Alpha Index**



Source: Author's own calculation.

Jensen's Alpha index is used in Table 6 and Figure 5 to calculate the volatility of the top 10 midcap funds. Jensen's Alpha value, which is 27.35, has also been determined for the benchmark index. Five mutual funds with Alpha values above the benchmark index are among the top ten midcap funds. Among the midcap funds, the Quant fund had the greatest alpha value (37.4), followed by the Edelweiss fund (30.7), Motilal Oswal fund (29.2), Nippon India growth fund, and HDFC midcap fund (28.8). The Invesco India midcap fund has the lowest alpha value (24.3).

### Discussions:

SIP inflows to midcap mutual funds have increased significantly, rising at a compound annual growth rate (CAGR) of 27.19% from ₹8376 crore in April 2020 to ₹25323 crore in October 2024. The eightfold increase in SIP on midcap funds is a definite sign of the increased confidence of investors following the COVID-19 pandemic. Midcap mutual fund growth, performance, and volatility following COVID-19 are covered in the preceding section. All of the midcap funds covered in this section have returned more than 400 percent over the past four years, as shown in Table 3. The Motilal Oswal Midcap Fund saw the best absolute return (581.59%), with the Quant Midcap Fund coming in second (580.24%). With the top ranking (1.64), the Motilal Oswal Midcap Fund demonstrated higher risk-adjusted returns. The benchmark Sharpe index of 0.98 was outperformed by nine of 10 funds. With the highest Treynor

index (36.18), the Nippon India Growth Fund demonstrated effective use of systematic risk for returns. With an alpha of 37.4, the Quant Midcap Fund led the pack, indicating better fund management performance and excess returns over the benchmark. It demonstrates the midcap mutual funds' capacity to provide investors with a return.

### **Conclusions:**

Only 8% of Indians invested in mutual funds as of 2023, which is quite low when compared to wealthy nations. The percentage of Americans who invest in mutual funds is 46%. Low penetration in India is caused by a lack of knowledge, mistrust, and stock market volatility. Investors may learn more about midcap funds and which midcap funds are appropriate to invest in in the Indian mutual fund market thanks to our study. The Sharpe Index, Treynor Index, and Jensen's Alpha Index over the last four fiscal years will be used in this study to assist investors understand the volatility of midcap funds. This study has several limitations as well, such as determining which industry (such as IT or pharmaceutical) has had the biggest impact on midcap fund performance, figuring out why retail investors choose midcap funds over large-cap funds, and comparing the performance of Indian mutual funds to that of comparable international funds.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

### **References:**

1. Avinash, M. B., & Manoj, M. S. (2020). Performance Evaluation Of Mutual Funds Before And During The Outbreak Of Covid-19 Pandemic In India.(A Case Study Of Selected Companies). *European Journal of Molecular & Clinical Medicine*, 7(8), 2286-2305
2. Bansal, S., & Yash, P. T. (2014). Comparative study on performance evaluation of large-cap equity and debt mutual fund schemes. *Open Journal of Finance*, 3, 1-13.
3. Bauer R, Koedijk K, Otten. R, (2005). International evidence on ethical mutual fund performance and investment style. *Journal of Banking and Finance*. 29(7):1751–1767. <https://doi.org/10.1016/j.jbankfn.2004.06.035>.

4. Bhagyasree, N. & Kishori, B. (2016). A Study on Performance Evaluation of Mutual Funds Schemes in India. *International Journal for Innovative Research in Science & Technology*. Vol.2, Issue 11, pp. 812- 816.
5. Busse, J. A., Goyal, A., &Wahal, S. (2014). Investing in a global world. *Review of Finance*, 18(2), 561- 590.
6. Dr. S. M. Alagappan. (2019). Performance evaluation of mutual funds in India. *Journal of Emerging Technologies and Innovative Research*, June 2019. Volume 6, Issue 6.
7. Ferson WE, Schadt RW. (1996). Measuring fund strategy and performance in changing economic conditions. *Journal of Finance*. 51(2):425–461. <https://doi.org/10.2307/2329367>.
8. He Q, Liu J, Wang S, Yu J (2020). The impact of COVID-19 on stock markets. *Economics Political Study*. 0:1–14. <https://doi.org/10.1080/20954816.2020.1757570>.
9. Keswani, M. S. S. (2011). Effect of Fund Size on The Performance of Balanced Mutual Funds An Empirical Study in Indian Context. 1(4).
10. Kundu, N. (2024). Mutual Fund Investments in India After Covid-19 Pandemic. *JETIR* September, Volume 11, Issue 9, ISSN-2349-5162.
11. Mark Grinblatt and Sheridan Titman. Mutual Fund Performance: An Analysis of Quarterly Portfolio Holdings. *The Journal of Business*. Vol. 62, No. 3, pp. 393-416 (24 pages), July 1989.
12. Naliniprava Tripathy. (2017). Efficiency of mutual funds and performance measurement in India: an empirical investigation. *International Journal of Business Excellence*. January. Vol. 13, No. 2.
13. Roy, B., & Deb, S. S. (2004). Conditional alpha and performance persistence for Indian mutual funds: empirical evidence. *ICFAI Journal of Applied Finance*, 30-48.
14. Thakkar, A. (2017). A Study of Performance Evaluation of Selected Equity Mutual Funds in India. *Indian journal of applied research*, ISSN – 2249-555X, Vol. 7, Issue 1, January 2017.
15. Yarovaya, L., Mirza, N., Abaidi, J., & Hasnaoui, A. (2021). Human capital efficiency and equity funds' performance during the COVID-19 pandemic. *International Review of Economics & Finance*, 71, 584-591.
16. Weston J and Engen Brigham Eugene F. (1985). *Essentials of Managerial Finance*. Dryden Press, p.36.
17. Panwar, S., & Madhumathi, R. (2006). Characteristics and performance evaluation of selected mutual funds in India. In *Indian Institute of Capital Markets 9th Capital Markets Conference Paper*.

18. Covid-19 impact? Equity MF schemes. (2020). Business Standard. [https:// www.business-standard.com/article/markets/covid-19-impact-equitymf-schemes-give-25-negative-returns-to-investors-120032200247\\_1.html](https://www.business-standard.com/article/markets/covid-19-impact-equitymf-schemes-give-25-negative-returns-to-investors-120032200247_1.html).

UNDER PEER REVIEW