

Performance Evaluation of Large, Mid & Small Cap Mutual Funds in India

Abstract

Mutual funds are trusts that bring together the resources of many individuals who have a common investment objective. The funds are subsequently put into various securities and other capital market instruments. The income and appreciation of the fund's assets is distributed to its unitholders in proportion to their ownership of the fund's units. Investors in mutual funds have a number of options due to the businesses' willingness to propose a wide range of plans. Among these funds, equities diversified funds are often used as a stand-in for investing directly in the stock market. This research attempts to assess the profitability and safety of large-cap growth fund schemes. Average Return, Sharpe Ratio, Treynor Ratio, and Beta were only few of the financial indicators included in the investigation. According to the results, most of the funds chosen for the analysis have achieved superior performance relative to the Sharpe Ratio and the Treynor Ratio.

Umesh Bhatt

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Introduction

Investment involves putting over one's cash presently in exchange for a possible reward later. An investment, then, is a monetary risk on the expectation of future appreciation of one or more assets. Investing, in general, entails making a compromise between potential loss and gain. Mutual funds are a distinct category of financial institution. Mutual fund investing has been increasingly popular due to its numerous attractive features, like as diversification and expert management. Investors in the mutual fund industry once had few options, but that has changed due to the development of new offerings. For its unit holders, a mutual fund acts only as a middleman by purchasing and selling assets on the market. A mutual fund, or pooled investment vehicle, is a firm that invests its members' money in a variety of assets. Investing in a mutual fund is like taking a stake in a diversified portfolio without really owning any of the individual assets.

How to evaluate the success of a mutual fund

Every person who puts money into mutual funds does so with the intention of either increasing or creating wealth. As a result, it is crucial to regularly assess the funds' performance using resources such as fact sheets and newsletters, online resources, print media, and expert consultants such as SBI Mutual Fund Services. He risks losing control at any point if investors don't care about how their money is doing. In this dynamic field, he may encounter any of the following issues:

- Fund performance that fluctuates because of a shift in strategy or administration.
- Second, the funds' performance may deteriorate when measured against peers.
- Third, there is a chance that the fund's varied expenses will rise.
- Beta, a technical indicator of risk, may also increase.
- There is a risk that the funds' positions on the different rankings given by independent rating organisations would decline.
- Six, it may be purchased by or merged with another fund.

Measurement of Performance

The success of an equity fund can be measured in a variety of ways. Increase in NAV, Total Return, Total Return with NAV Reinvestment, Annualised Returns and Distributions, and NAV Growth on an Annualised Basis, Ratio, Outstanding Shares, Expense Ratios, Portfolio-Turnover Rate, Size of Fund, Transaction Cost, Per Share Capital Changes, Cash Flow, Calculating Total Returns Per Share Income and Expenses, and Leverage.

Debt funds' efficiency may be evaluated using the same metrics as equity funds, including NAV growth, total return, and expense ratio, as well as comparing peer group, industry exposures and concentrations, the income ratio, and nonperforming assets (NPAs).

High-volatility liquid funds' performance may be evaluated using Fund Yield in addition to Total Return, NAV Growth, and Expense Ratio.

Performance Evaluation Benchmarking concept

The idea of using a predetermined standard against which an entity may be measured is known as "benchmarking." The efficiency of a fund is evaluated against some standard. The fund is considered to have "outperformed benchmark" if its return is higher than the benchmark and to have a correlation of 1 if its return is the same as the benchmark. If the fund's return is lower than the benchmark, it is said to have underperformed.

Some of the benchmarks are:

1. For Equity funds:

Market and sectoral indices such as

- S&P CNX nifty,
- BSE-100 index,
- BSE-200 index,
- BSE-PSU index,
- BSE-500 index,
- BSE bankex, and other indices.

2. For Debt funds:

- Alternative Investments Interest Rates,
- J.P.M T-Bill Index Post-Tax Returns on Bank Deposits vs Debt Funds,
- I-Bex Total Return Index.

3. For Liquid funds:

- J.P.M T-Bill Index
- Government Instruments (Short Term) Interest Rates as Benchmarks

comparison of fund's performance measurement is usually done with:

- i.** Market index.
- ii.** Same peer group Funds
- iii.** Other similar funds

Study Objectives

- To study the performance of Selected Large Cap, Mid Cap and Small Cap Mutual Funds in India.
- To compare the performance of Selected Large Cap, Mid Cap and Small Cap Mutual Funds in India.

Research Methodology

The research involves five years, from 2018 through 2022. All Large-Cap, Medium-Cap, Small-Cap, and Index mutual funds are included in the study's sample of 8. Secondary data gathered from fact sheets, newspapers, journals, books, and magazines were utilised to compile this summary of the Indian mutual fund industry's recent performance patterns. Information was also gathered from the AMC and AMFI websites as well as moneycontrol.com and others. We have compiled the NAV of some mutual fund schemes annually over the past decade. Additionally, risk-free rate has been approximated using Government of India treasury bills. While following statistical methodologies, techniques have been used to examine whether mutual funds underperform or outperform the market index.

(i) Average Returns

To evaluate the success of a mutual fund strategy, its performance is measured against that of a reference portfolio. In this analysis, we refer to the returns as averages. The average return is determined by averaging the annual returns, which are determined by utilising the mutual fund scheme's net asset values (NAVs).

(ii) Beta

Beta is a popular risk indicator utilised by many investors. The correlation between the fund's volatility and the benchmark's volatility serves as a rough indicator of the fund's riskiness. The degree to which a fund deviates from its benchmark can have a significant impact on beta's effectiveness. An insufficient beta would exist if the fund's portfolio lacked a suitable reference index. Funds with a beta larger than one are considered riskier than the index they are tracking, while those with a beta of less than one is considered safer. If a fund's beta is near to 1, it closely tracks its benchmark or index.

(iii) Sharpe Measure:

The Sharpe Ratio evaluates a fund's performance by comparing its excess return to its overall risk. The correlation between the portfolio's overall standard deviation and the excess return it delivers above the risk-free rate is shown by this ratio. Funds with a high and positive Sharpe Ratio have performed well relative to their risk, while those with a low and negative Sharpe Ratio have underperformed. When comparing fund performance to an industry standard, a higher Sharpe Ratio indicates better results.

(iv) Treynor's Performance Index

The Treynor ratio compares the beta measure of market risk to the excess return of a fund over a risk-free investment. A higher Treynor ratio indicates a more successful investment strategy. In general, a higher Treynor ratio than the comparator portfolio suggests better risk-adjusted performance and shows that the portfolio has outperformed the market. If assumed that portfolio is properly diversified by using the beta instead of standard deviation as in the Sharpe Index.

In the event that the Treynor ratio exceeds the standard comparison ($R_m - R_f$), the portfolio has shown better risk-adjusted performance than the market average.

Results and Findings

Type	Name	Beta	Sharpe	Treynor	Std Dev	3 Y (%)
Large Cap	Canara Robeco Bluechip Equity Fund	0.91	1	0.18	16.25	22.96
	Mirae Asset Large Cap Fund	0.96	1.02	0.18	17.15	23.79
Mid Cap	Edelweiss Mid Cap Fund	0.96	1.47	0.27	17.97	35.08
	Kotak Emerging Equity Fund	0.84	1.61	0.3	15.79	34.68
	SBI Magnum Midcap Fund	0.85	1.69	0.33	16.54	38.38
Small Cap	Nippon India Small Cap Fund	0.9	1.93	0.39	18.09	46.86
	SBI Small Cap Fund	0.72	1.8	0.37	15.04	37.34
Index Funds	UTI Nifty 50 Index Fund	1	1.01	0.18	17.98	24.93

Table 1- Risk of Mutual Fund Scheme

i. Average, standard deviation, and beta performance

Different funds can be compared to one another based on their average return, standard deviation, and Beta. Due to the fact that various funds carry varying degrees of risk, return alone should not be treated as the foundation for measuring the success of a mutual fund scheme. Variability or volatility in the returns provided by a fund are one definition of the risk associated with that investment. A fund's risk increases in proportion to its historical return volatility over any given time period.

When compared to the returns of the Nifty 50 Index Fund, the returns of five of the nine Mutual Funds schemes chosen for this analysis are higher (both in terms of average returns and average annual returns; see column 8 of Table 1). Edelweiss Mid Cap Fund, Kotak Emerging Equity Fund, SBI Magnum Mid Cap Fund, Nippon India Small Cap Fund, and SBI Small Cap Fund are the excellent performing funds in terms of their returns.

When compared to the Nifty 50 Index Fund, the remaining funds, including the Canara Robeco Bluechip Equity Fund and the Mirae Asset Large Cap Fund, performed poorly. It is therefore vital to notice that the returns of the majority of chosen mutual fund schemes have been higher than the returns of the market.

Risk associated with the chosen mutual fund schemes is summarised in Table 1's sixth column. All other things being equal, the market risk associated with certain mutual fund schemes is roughly same. When compared to the market risk of an Index Fund, standard deviations of all funds were roughly the same.

Because their betas are less than 1 and more than 0.7, certain mutual funds are considered to have lower systematic risks than the market portfolio on average.

ii. The Sharpe Ratio Performance

The Sharpe Ratio evaluates a fund's performance by comparing its excess return to its overall risk. The correlation between the portfolio's overall standard deviation and the excess return it delivers above the risk-free rate is shown by this ratio. The table 1 presents that Sharpe Ratios of the hand-pick mutual fund schemes in comparison to the benchmark portfolio.

Funds with a high and positive Sharpe Ratio have performed well relative to their risk, while those with a low and negative Sharpe Ratio have underperformed. When comparing fund performance to an industry standard, a higher Sharpe Ratio indicates better results.

Table 1 demonstrates that, relative to the Sharpe Ratio benchmark (the Nifty 50 index fund), six of the seven funds chosen for the analysis had higher values.

Canara Robeco Bluechip Equity Fund underperformed and had a worse Sharpe Ratio compared to the Nifty 50 Index Fund.

It follows that the mutual funds chosen for this study have, on average, outperformed the market index and delivered adequate returns (as measured by the Sharpe Ratio).

i. Treynor Ratio Performance

The Treynor Ratio evaluates a fund's performance by contrasting its excess return against its risk-free return and its beta. When the Treynor ratio is high, the portfolio is doing well. In general, a higher Treynor Ratio than the comparator portfolio implies better risk-adjusted performance and suggests that the portfolio has outperformed the market.

The selected mutual fund schemes' Treynor Ratio outcomes against their respective benchmark portfolios are shown in table 1 above. The study's findings show that the portfolio has outperformed

the market and shown superior risk weighted performance since all of the chosen Large Cap mutual funds have a Treynor Ratio that is greater than the benchmark performance. All of the mutual funds studied here have performed admirably and beaten the market average, as measured by the Treynor Ratio.

Conclusion

Investors in India may pick among many mutual fund plans, making it difficult for them to make an informed decision. In order to help average investors, make informed investment decisions and put their money where it will do the best, this study examined several types of mutual funds, including large-, medium-, small-, and index-capitalization funds.

Here, open-ended schemes Monthly NAVs were used as the data for the analysis. All growth/equity plans, for example, used the Nifty 50 Index Fund as a benchmark portfolio. Risk-adjusted performance indicators like the Sharpe ratio and the Treynor ratio have been used in addition to standard return-only measures in evaluating the success of some mutual fund schemes. Overall, the majority of the schemes reviewed have demonstrated better and superior returns, which bodes well for the future of the mutual fund industry. Compared to the market as a whole, the standard deviation of the selected funds is lower. Because their betas are less than one and positive, the selected funds were safer than the market portfolio. The Sharpe Ratio indicates that some funds have performed very well, while the Treynor Ratio indicates that all eight funds have performed quite well.

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