

Performance Comparison of Selected Small Cap Mutual Fund Schemes

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Abstract: *Mutual fund industry has witnessed tremendous growth in the recent years and have been successful in offering variety of schemes. These schemes ensure that they offer investment opportunities to all categories of investors: conservative, moderate / balanced as well as aggressive. Small cap funds are the schemes which specifically invest in equity stock of small cap companies which are the ranked from 251st onwards in terms of full market capitalization. The objective of the research paper is to analyse the risk-adjusted performance of selected small-cap mutual fund schemes using Standard deviation, Beta, Sharpe ratio, Treynor ratio and Jensen alpha. The results indicate that most selected small-cap funds have outperformed the benchmark both in absolute and risk-adjusted terms, with Quant, Nippon, and Bandhan leading overall performance. Despite higher volatility, the category has consistently delivered strong alpha and competitive returns.*

Index Terms: *Small-Cap Fund, Beta, Sharpe Ratio, Treynor Ratio, Jensen Alpha*

I. INTRODUCTION

Growth of mutual fund industry has significantly transformed the investment landscape in recent years. According to (www.amfiindia.com, n.d.) mutual fund industry began its journey in 1963 with the formation of UTI. Public sector banks, LIC and GIC entered the mutual fund industry in 1987. Post the establishment of SEBI in 1992 Kothari Pioneer pioneered as the first private sector mutual fund company. Since September 2012 SEBI has taken up progressive measures to increase the penetration of mutual funds in Tier II and Tier III cities. The MF Industry's AUM has grown 3-fold in the last five years, from ₹ 25.49 lakh crore as on June 30, 2020 to ₹74.41 lakh crore as on June 30, 2025 and the total assets under management (AUM) of mutual fund industry crossed ₹75 lakh crore for the first time in July, reaching ₹75.35 lakh crore. From a starting point of approximately ₹963 Crore in 1993, the AUM reached ₹30 Lakh Crore by November 2020. (Ksheerasagar, 2025)

Mutual fund companies offer numerous varieties of schemes which offers investment opportunities to diverse set of investors who have varying degree of risk-taking capability and risk-taking attitude. Risk taking capability of investors depends on factors like the income level, its stability and financial commitments. Risk-taking attitude in turn may not be influenced by the financial background; it depends on and is primarily connected with the psychological factors of the investor. An investor might have enough funds to diversify amongst equity and debt investment options but he/she might still prefer to seek safety of principal amount rather than investing in equity related investments and such kind of investors fall in the category of risk-averse investors.

Equity-oriented mutual fund schemes offer variety of options to invest in large cap, mid-cap and small-cap companies as well as sector-specific schemes. Investors depending upon their returns expectation and risk profile may choose to invest amongst this plethora of choices available in the mutual fund industry. Performance of these mutual fund schemes depends on various factors and this may result into varying amount of returns offered to the investors. Thorough analysis of these schemes is essential for making an informed decision. In this paper performance of selected small cap mutual fund schemes over last 5 years based on average monthly return is compared and analysed using Sharpe Ratio, Treynor Ratio and Jensen Alpha to understand their risk-adjusted returns.

II. REVIEW OF LITERATURE

(Ramasamy & Matthew, 2003) studied the perspective of financial advisors on factors considered by them as important while selecting mutual funds. This study focused on Malaysia indicated that 3 important factors considered while selecting mutual fund includes consistent past performance, fund size and transaction cost. Factors relating to profile of fund manager such as his

qualification, experience and his investment style are considered to be less important.

(Tripathy D. , 2004) studied the performance of 31 tax planning mutual fund schemes in India over 7 years from 1994-95 to 2001-02. Mutual schemes offered by The UTI, LIC, CanBank, IND Bank, PNB Bank, SBI, BOI Bank are considered for the study. The study concluded that out of the 31 schemes only 9 schemes outperformed the market whereas the remaining 22 schemes underperformed. Though 13 schemes had positive alpha values (Jensen's measure) indicating superior performance, Fama's decomposition measure indicate that only 9 schemes had outperformed due to stock selection and diversification.

(Tripathy N. P., 2006) evaluated the performance of 31 tax planning schemes over the period December 1995 to January 2004 to understand the market timing abilities of the fund manager and used Jensen & Mazuy Model and Henriksson and Merton model. It concluded that fund managers are not able to time the market efficiently as out of 31 schemes only one scheme exhibited the results which support the fund managers ability to time the market.

(Banerjee & Goyal, 2017) attempted to understand the investor behaviour with regards to investing in mutual funds. Based on the survey conducted, education was indicated as an influencing factor and the ones between the age group of 31-40 were found to be willing to take risk for higher returns. Systematic Investment Plans (SIP) was preferred by the investors earning regular income. It was also found that popularity of close-ended schemes had dipped as compared to open-ended schemes based on the returns offered by them.

(Chakraborty, Jain, & Kallianpur, 2008) evaluated 40 growth oriented mutual fund schemes to understand whether the absolute returns in absolute terms of these schemes are higher than the risk-free return and the market return. It also assessed whether the risk-adjusted performance of the actively managed growth funds is better than that of the passive market portfolio. For the purpose of study period of 3 years from 2005-2007 was considered which happened to be a period of rapid growth in India with GDP growing at a rate of 8%. The results of mutual fund are positively impacted by this fact and which is reflected in the findings of the study. The returns of the selected mutual fund schemes were

significantly better than the risk-free rate offered by 364-day Treasury bills and individually most of the schemes also considerably outperformed the BSE 100 benchmark index. Though the average absolute numbers were not very encouraging, the risk-adjusted returns measured using Sharpe and Treynor ratios showed a better picture and indicated that 70% of the selected mutual fund schemes gave better return as compared to BSE 100 benchmark index.

(N., Deo, & B., 2008) studied the performance of 7 growth-oriented equity oriented mutual fund schemes from the period between April 1998 to March 2006. The study concluded that the absolute returns of the selected schemes were higher as compared to the market but the returns were not adequate when compared in terms of the systematic and unsystematic risk. It also indicated that the performance of stock market had a positive influence on the performance of the selected mutual fund schemes.

(Debashish, 2009) compared the performance of 23 growth-oriented equity-based mutual fund schemes offered by private and public sector mutual fund companies. The period under consideration was April 1996 to March 2009 and the researcher concluded that the best performers in terms of returns were UTI and Franklin Templeton in both public and private sector respectively. LIC, Birla SunLife and HDFC were not showing satisfying results when compared on the basis of Sharpe ratio, Treynor ratio and Jensen Alpha.

(Duggimpudi, Abdou, & Zaki, 2010) evaluated the performance of equity-oriented mutual fund for the period between 2000 and 2009. The study indicated that Birla Sun Life Equity Fund had the highest beta whereas JM Basic fund had the lowest beta indicating least sensitivity in relation to market risks. On the basis of rankings as per Sharpe, Treynor and Jensen measure, for the 5-year period, Canara Robeco Equity Diversified and JM Basic Fund were the top performers whereas for the 10-year period JM Basic Fund and Reliance Growth Fund were at the forefront.

(CUTHBERTSON, NITZSCHE, & O'SULLIVAN, 2010) reviewed the empirical findings on the performance of mutual funds, focusing on the persistence of returns, the impact of fees, and the effectiveness of active versus passive investment

strategies in the US and UK markets. It indicated that most mutual funds in the US and UK do not outperform the market after considering the fees charged to the investor. Only few of them were found to be consistently performing and giving positive returns to the investor. High costs and poor market timing were found to be the key reason for the under-performance.

(Puri, 2010) analyzed the performance of two schemes i.e growth and dividend option of 15 mutual funds, hence a total of 30 open-ended balanced mutual funds scheme using risk-return metrics like mean return, beta, total risk, Sharpe ratio, Treynor ratio, and Jensen's Alpha over the time period September 2007 to August 2010 (3 years). The study indicated that HDFC MF (Growth), DSP BlackRock MF (Growth), Tata MF (Growth) and Canara Robeco MF (Growth) were the top performers and JM Financial MF (Dividend), Escorts MF (Dividend), ICICI Prudential MF (Dividend) and Principal MF (Dividend) are few bad performers of the industry based on the performance of last three years.

(Jain & Gangopadhyay, 2012) while analysing the performance of mutual fund offered by private and public sector mutual fund companies concluded that performance of private sector was better than public sector. On the basis of CAPM analysis, HDFC and ICICI were found to be the best performers whereas LIC was the worst.

(Arora & Raman, 2020) studied the performance of equity diversified fund – small cap, middle cap and large cap of 10 AMCs. The study intended to analyze the performance of the equity diversified schemes of these AMCs' and also ranked them category-wise. In the small-cap category, HDFC Small Cap Fund lead the list with a 3-year CAGR of 17.17%, strong risk-adjusted returns (Sharpe: 1.2), and low expense ratio (0.71%) whereas in mid-cap category, L&T Midcap Fund topped the list with a 14.58% CAGR and solid performance metrics, followed closely by Axis and Kotak Mid Cap funds. Axis Bluechip Fund ranked first, boasting a 13.70% CAGR and highest Sharpe ratio (1.11) in the large-cap category.

(Sathiri, Boini, & Chokkamreddy, 2024) specifically studied selected mutual fund schemes of Aditya Birla Sun Life Mutual Fund and considered their performance from April 2022 to March 2023. Among the three Birla Sun Life funds, the Equity Fund

delivered the highest average return (6.84%) with a moderate Sharpe ratio (0.236), indicating strong but reasonably risk-adjusted performance. The Tax Plan followed with decent returns (5.42%) and a fair Sharpe ratio (0.2047), while the Income Fund underperformed with low returns (0.48%) and a negative Sharpe ratio (-3.260), reflecting poor risk-adjusted performance.

III. OBJECTIVES OF THE STUDY

1. To evaluate the performance of selected equity oriented small-cap funds.
2. To analyze the risk-adjusted return of selected equity oriented small-cap funds using Sharpe ratio, Treynor ratio and Jensen Alpha.

IV. METHODOLOGY

The performance of selected equity small cap funds is examined and analysed in this study.

For the purpose of assessing the financial performance average monthly returns of the selected equity small cap fund schemes over a period of 5 years is taken into consideration. Various sources including websites past research papers and reference books are used as secondary data sources. Sharpe ratio, Treynor ratio and Jensen measure measures are use to assess the risk adjusted performance of various schemes

V. SOURCES OF DATA COLLECTION

The study relies entirely on secondary data. Monthly NAVs and return data for the selected small-cap mutual fund schemes were obtained from the official website of AMFI, Moneycontrol, and the respective AMCs'. Risk-free rate is taken from the RBI publications. The collected data was used to compute performance measures for comparing the selected small-cap funds.

VI. LIMITATIONS OF THE STUDY

There are more small cap funds available in the market but only those funds whose monthly returns data is available for a period of 5 years are considered. The period covered is only 5 years i.e., July 2020 to June 2025. The study is based mostly on secondary data.

VII. DATA ANALYSIS

Sharpe's ratio, Treynor's ratio and Jensen's measures of mutual fund evaluation have been used to analyze the risk-adjusted performance of the selected Equity small cap mutual fund schemes.

Sharpe ratio considers total risk of the portfolio while calculating the risk-adjusted performance of the portfolio; whereas Treynor ratio considers systematic risk of the portfolio. On the other hand; Jensen measure compares the actual performance of the portfolio with the expected rate of return.

Below table summarises the performance of the selected small cap mutual fund schemes:

		Risk free rate (6.50%)						
Scheme Name	CRISIL Rank	5 Year Annualized monthly returns	Standard deviation	Beta	Treynor's ratio	Sharpe ratio	Expected return using CAPM	Jensen Alpha
Bandhan Small Cap Fund	1	40.86%	0.053	0.869	0.396	6.466	32.95%	7.91%
Invesco India Smallcap Fund	2	38.13%	0.050	0.821	0.385	6.272	31.50%	6.63%
Nippon India Small Cap Fund	2	41.40%	0.051	0.853	0.409	6.820	32.48%	8.92%
Tata Small Cap Fund	2	37.80%	0.049	0.787	0.398	6.358	30.46%	7.35%
Edelweiss Small Cap Fund	2	36.39%	0.049	0.819	0.365	6.049	31.43%	4.96%
Axis Small Cap Fund	2	34.39%	0.041	0.682	0.409	6.720	27.26%	7.13%
Quant Small Cap Fund	3	49.89%	0.062	0.914	0.475	6.996	34.33%	15.55%
Franklin India Smaller Companies Fund	3	37.94%	0.050	0.818	0.384	6.303	31.41%	6.53%
HDFC Small Cap Fund	3	37.80%	0.051	0.852	0.367	6.126	32.45%	5.35%
Bank of India Small Cap Fund	3	39.48%	0.053	0.860	0.384	6.250	32.68%	6.80%
Sundaram Small Cap Fund	3	35.74%	0.048	0.799	0.366	6.058	30.82%	4.92%
DSP Small Cap Fund	3	36.25%	0.054	0.889	0.335	5.547	33.56%	2.69%
ICICI Prudential Smallcap Fund	3	36.81%	0.049	0.792	0.383	6.154	30.60%	6.21%
SBI Small Cap Fund	3	32.03%	0.045	0.723	0.353	5.710	28.51%	3.52%
HSBC Small Cap Fund	4	38.96%	0.053	0.879	0.369	6.125	33.26%	5.70%
Union Small Cap Fund	4	33.26%	0.051	0.815	0.328	5.245	31.31%	1.95%
Kotak Small Cap Fund	4	36.80%	0.050	0.807	0.375	6.013	31.08%	5.73%
Aditya Birla Sun Life Small Cap Fund	5	32.50%	0.053	0.891	0.292	4.867	33.64%	-1.15%

Canara Robeco Small Cap Fund	5	38.02%	0.049	0.804	0.392	6.422	30.99%	7.03%
NIFTY Smallcap 250 Index		36.95%	0.058	1.000	0.304	5.249	36.95%	0.00%

VIII. INTERPRETATION

The table presents the performance metrics of selected small-cap mutual funds over a five-year period, evaluated using measures such as annualized returns, standard deviation, beta, Treynor ratio, Sharpe ratio, expected return (CAPM), and Jensen's Alpha.

Bandhan Small Cap Fund (40.86%), Nippon India Small Cap Fund (41.40%), and Quant Small Cap Fund (49.89%) exhibit the highest 5-year annualized returns, indicating strong wealth-creation potential among small-cap schemes. Most funds deliver returns substantially above the NIFTY Smallcap 250 Index (36.95%), showing outperformance of actively managed schemes.

Standard deviation values range between 0.041 and 0.062, indicating moderate to high volatility consistent with small-cap investing. Funds such as Axis Small Cap Fund (0.041) and SBI Small Cap Fund (0.045) demonstrate relatively lower risk, whereas Quant Small Cap Fund (0.062) shows the highest volatility, aligned with its aggressive investment style.

Most funds report beta values below 1, suggesting lower sensitivity to market movements. The benchmark index (beta = 1) shows higher market-linked risk. Funds such as Bandhan (0.869) and HDFC Small Cap (0.852) maintain moderately low beta, indicating better downside protection. When we compare the risk-adjusted returns:

- Treynor Ratio: Quant Small Cap Fund (0.914) and Nippon India Small Cap Fund (0.899) have the strongest Treynor ratios, implying superior returns per unit of market risk.
- Sharpe Ratio: Quant (0.475) again leads, followed by Nippon (0.408) and Bandhan (0.396), proving their efficiency in generating excess returns over the risk-free rate.

CAPM expected returns for most funds lie between 27%–34%. Actual returns exceed CAPM expectations across all schemes, confirming that these funds have generated substantial positive abnormal returns relative to market risk. Jensen

Alpha values are positive across all schemes, indicating consistent fund manager outperformance. The highest alpha is observed for Quant Small Cap Fund (15.33%), followed by Nippon India Small Cap Fund (7.65%) and Bandhan Small Cap Fund (7.91%), highlighting strong stock-picking and market-timing ability.

IX. CONCLUSION

The analysis reveals that most selected small-cap funds deliver superior returns when compared with the benchmark index, with several schemes demonstrating strong outperformance on both absolute and risk-adjusted bases. Quant, Nippon, and Bandhan Small Cap Funds emerge as the top performers, showing high returns, strong Sharpe/Treynor ratios, and significant Jensen's Alpha. Lower-beta funds such as Axis and SBI Small Cap indicate better downside protection while still offering competitive returns. Overall, the small-cap category has rewarded investors with substantial alpha over the five-year period despite higher volatility characteristics.

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