



# Performance evaluation of Invesco India MID cap Equity Scheme-Direct Growth Mutual Fund

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<sup>1</sup> Sharpe. William F (1996), *Mutual Fund Performance*. *Journal of Business*. Vol.30 No.1 Jan. 1996, pp.119-138.

## Introduction

Mutual Funds play extremely crucial role in Indian economy. A mutual fund is a financial intermediary that pools the savings of small investors for collective investment in a diversified portfolio of securities. The fund manager is the person who invests the money in different types of securities according to the predetermined objectives. The present study analyses the Performance evaluation of Invesco India MID cap Equity Scheme-Direct Growth Mutual Fund with Nifty Midcap from 2020 to 2024.

## Objective of the Study

The objective of the present study is to analyze the Performance evaluation of Invesco India MID cap Equity Scheme-Direct Growth Mutual Fund with Nifty Midcap from 2020 to 2024.

## Review of Literature

Sharpe developed a composite measure of performance evaluation and imported superior performance of 11 funds out of 34 during the period 1944-63.

**Sharpe<sup>1</sup> (1966)** attempted to evaluate performance of Mutual Funds with a simple yet theoretically meaningful measure that considers both average return and risk. The capital-market model dealing with future predictions regarding performance which uses expected return and predicted deviation values have been substituted with actual return and actual standard deviation values, i.e.  $A_i$  and  $V_i$  respectively. So the model implied that *ex-post* values for  $A_i$  and  $V_i$  for efficient portfolios should lie along a straight line with higher values of  $V_i$  associated with higher values of  $A_i$ . Performance of 34 open-ended Mutual Funds during the period 1954-63 was tested by analyzing annual rate of return that was based on the sum of dividend payment, capital gains distributions and changes in net asset value. Results showed that funds with large average returns typically exhibit greater variability than those with small average returns. Moreover, the relationship is approximately linear and significant. However some other funds provided both a greater value of  $A_i$  and a smaller value of  $V_i$ . Lastly, regarding comparison of funds performance with that of Dow Jones Industrial average the results showed that average Mutual Fund managers select a portfolio at least as good as the Dow Jones Industrial Index but that the results actually obtained by the holder of Mutual Fund (after the costs charged) fall somewhat short of those from Dow-Jones portfolio (i.e. average R/V ratio of 34 funds 0.633 as against average of Dow-Jones 0.667). This is consistent with the earlier conclusion that all other things being equal the smaller a funds expense ratio, the better the results obtained by its stockholders.

## Research Methodology

The present research based on secondary data. The data was collected different sources like articles, books, newspapers, AMFI reports and web sites. The period of study is for 5 years from 2020 to 2024. The present

research study selected an Equity Diversified Mutual Fund Scheme i.e., Invesco India MID cap Equity Scheme-Direct Growth Mutual Fund.

The NAV's of the sample mutual fund scheme have been collected on monthly basis over a period of 5 years. The Market Indices are used Nifty Midcap as a benchmark for the performance evaluation. The risk free rate of return has been taken from the 91 days' treasury bills of Government of India.

The following tools are used for the performance evaluation of mutual funds i.e., Standard Deviation, Beta, Sharpe Ratio, Treynor Ratio, Jensen Ratio, Fama Ratio, M square and R square. We analyse the performance evaluation of selected mutual fund scheme return with return of benchmark portfolio.

Year	Rp	Rm	Beta	SDp	SDm	S p	S m	Tp	Tm	J	Fama	M <sup>2</sup>	R <sup>2</sup>
2020	2.62	2.54	0.70	9.52	11.81	0.27	0.21	3.68	2.48	4.22	5.14	3.24	0.89
2021	2.47	2.72	0.71	3.41	3.61	0.71	0.74	3.38	2.66	4.22	6.08	2.61	0.68
2022	-0.08	-0.11	0.77	4.81	5.42	-0.03	-0.03	-0.18	-0.17	-0.20	0.02	-0.10	0.89
2023	2.26	2.26	0.84	3.92	4.14	0.56	0.53	2.63	2.20	3.99	4.60	2.39	0.94
2024	2.73	0.91	0.74	3.43	3.21	0.78	0.27	3.60	0.86	3.32	2.45	2.56	0.58

The above table shows the performance evaluation of Mutual Fund Invesco India Midcap Equity Scheme-Direct growth in terms of return on portfolio of Invesco India midcap scheme-Direct growth, return of the market index Nifty Midcap , Beta, standard deviation of market index nifty Midcap. Sharpe Ratio of the portfolio of Invesco India midcap scheme-Direct growth, Treynor Ratio, Jensen, FAMA, Modigliani & Miller approach and R-Squared.

The Highest positive return Invesco India midcap scheme-Direct growth scheme is 2.73 in the year 2024 and the benchmark return during the scheme is 0.91, shows that the scheme has more returns than the market returns. The schemes returns are positive in 4 out of 5 years and the market returns are positive in 4 out of 5 years. The fund is getting more returns than the market returns in 2 out of 5 years and 1 year is equal with market in the year 2023. It indicates that the fund are better than the market return.

The Highest Standard deviation is 9.52 in the year 2020 that the fund is less riskier than the benchmark return which is 11.81 during the same year. The scheme is riskier than the market in 1 out of 5 years but the scheme is less risky than the market in 4 out of 5 years.

The calculated beta of the scheme is positive in all the years indicating that the investment risk is going along with the market. Beta is less than 1 in all the years indicating that the scheme is less volatile than the market.In this fund Beta is not exceeding than 1 so we can say that its not much risk involved.The Highest beta value is 0.84 in the year 2023 shows that the scheme is more volatile and posing little risk and significant returns.

Sharpe ratio of the scheme has the positive value in 4 out of 5 years indicating that the scheme has produced greater returns as compare to risk free rate. The fund Sharpe ratio shows 1 negative value in the year 2022 indicating that the scheme has underperformed than the risk free rate of return. The fund Sharpe ratio is better than the marketSharpe Ratio in 3 out of 5 years indicating that fund shows equal performance to the market. As we saw in deeply means the fund is better performed than the market.

The highest Treynor's ratio of the scheme is 3.68 in the year 2020 shows a superior risk adjusted performance. The Traynor's ratio is positive in 4 out of 5 years indicating that the fund is out performed than the market but in 1 out of 5 years is under performed that the market.

Jensen Ratio is positive in 4 out of 5 years indicating that the fund returns is higher than the expected beta statistic. Jensen ratio is negative only in 1 year indicates that the fund return lower than the market return implying that the mutual fund manager would not earn enough returns given the amount of risk he was taking. Remaining 4 years, the returns are positive it indicates the out performance of mutual fund manager. The

highest Jensen ratio of the scheme is 4.22 in 2 years that is 2020 and 2021 shows the fund return is higher than the market return continuously.

FAMA shows the highest value is 6.08 in the year 2021. FAMA values are positive in all 5 years it shows that the fund out performed than the market.

The highest positive  $M^2$  value is 3.24 in the year 2020 shows that the fund outperformed the market portfolio.  $M^2$  values are positive In4 out of 5 years shows that the fund outperformed the market portfolio.  $M_2$  values are negative in 1 year shows that the fund poor performance than the market portfolio.

The  $R^2$  value is less in 1 out of 5 years indicating that the fund reliable beta is as measure of funds volatility. The high  $R^2$  values in 2020, 2022 and 2024 that is in between 85% to 100% it indicates the stock performance moves relatively in line with index.

### Finding and Conclusion

The analysis of the mutual funds scheme of Invesco India Midcap Equity Scheme-Direct Growth with Nifty Midcaprevealed that 4 out of 5 years of the funds returns better performed than the market. The beta is less than 1 in all the 5 years is less volatile than the market index. According to Sharpe ratio the fund return has performed better than the market returns in 3 to 5 years. As per The Treynor's ratio is positive in 4 out of 5 years indicating that the fund is out performed than the market but in 1 out of 5 years is under performed than the market. According to Jensen Ratio, alpha is positive in 4 out of 5 years indicating that the fund returns is higher than the expected beta statistic. Finally, the conclusion, that as per Sharpe and Treynor Ratio the funds performed better than the market index.

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