

A Study on the Performance of Equity Mutual Funds With special reference to small cap mutual funds

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I. Abstract

Mutual fund is an instrument of systematic investment. A number of mutual fund schemes are available for investors to gain in long term. India is one of the strongest, largest and most important emerging financial market, and since 2014, Indian benchmark indices have shown a strong uptrend. The importance of mutual funds in stock market has grown dramatically in last two decades. The majority of market analysts expect this upward momentum to continue over the long term. Indian-focused equity mutual funds offer investors opportunities for substantial capital gains, which will be taxed from A.Y. 2019-2020. Equities have outperformed other investment asset classes over the long-term in India as well as globally. Hence, Investors looking for the higher potential returns available in major emerging economies may consider globally diversifying their overall investment portfolio with mutual funds that hold Indian equities. The present study focused on the performance of select equity small cap mutual funds and it was analyzed with risk return measurement tools such as alpha, beta, standard deviation and Sharpe ratio, along with investment in different sectors.

In the current study 10 top performing small cap schemes, depending on returns given in last 1 year, are selected to make a comparative study on the risk and return offered by these funds. From the study it is observed that among the selected funds Union Small and Midcap Fund - Direct Plan is considered as a fund with moderate risk as well as moderate returns, against which the SBI Small & Midcap Fund is considered as high risk with high returns.

Keywords: mutual fund, higher return, capital gains, sectors.

II. Introduction

A Mutual Fund is an ideal investment vehicle where number of investors pools their money with common investment goal. Each mutual fund with different type of schemes is managed by respective Asset Management Company. An investor can invest his money in one or multiple schemes of mutual fund according to his choice and becomes the unit holder of the scheme. The invested money in a particular scheme of mutual fund is then invested by a fund manager in different types of suitable stock, bonds and money market instruments. Each mutual fund is managed by qualified professional man, who uses this money to create a portfolio. The mutual fund will diversify the portfolio over a variety of investment vehicles. Mutual funds play a vital role in resource mobilization and its efficient allocation to the productive resources of the economic system throughout the world; these funds have worked as reliable instruments of change in financial intermediation, development of capital growth and growth of corporate sector.

III. Significance of the Study:

The recent trends in the stock market have shown that average retail investors always lost with periodic bearish trends. Emergence of mutual funds in the Indian scenario is a product of constraints on the banking sector to tap the fruits of capital market and reluctance of the investors to direct plunge in complex and erratic financial market operations. Since, household sector share in much larger in country's savings. It is utmost essential for the government and mutual fund manager to guide their deployment of savings in the right direction. Thus with a plethora of mutual funds schemes available for option and their impressive growth in India, there is a need for the present study to light the performance of mutual funds, further it could guide the retail and small investors to make appropriate decisions while selecting the investment

avenues for their hard earned savings through mutual fund vehicle. Performance evaluation would help investors to choose the best schemes available in the market.

IV. Review of Literature

Evaluation of mutual funds performance is done several times in past. The time period and the products evaluated are different thus the resultant area. Here, a few research studies that have influenced the preparation of this paper are discussed.

Rao Narayan and Ravindram evaluated the performance of Indian mutual fund industry in a bear market was carried out through relative performance index, risk-return analysis, Treynor's ratio, Sharpe's ratio, Jensen's ratio and Fama's measure. The data was monthly closing NAV's collected from AMFI for the period of Sep. 98 to April 02 (bear period) of 269 open ended scheme. They excluding the funds whose return were less than risk free returns, 58 schemes were used for further analysis. The suggestions derived from the result shows that most of the mutual fund schemes in the sample of 58 were able to satisfy investor's expectation by giving excess returns over expected returns based on both premiums for systematic risk and total risk.

Noulas and Athanasios Evaluated the performance of Greek equity funds during the period 1997-2000. The evaluation was based on the analysis of risk and return. The first three years were characterized by positive returns of the stock market and the fourth year was year of rapid fall of the stock market with respect to risk and return. The analysis showed that there were big differences among the equity mutual funds with respect to risk and return and the result indicated that there was a positive relation between risk and return for the whole period while the betas for all funds were smaller than one.

Deb et al. Evaluated return based analysis of equity mutual funds in India using quadratic optimization of an asset class factor model proposed by William Sharpe. The data used in the study covers the period from January 2000 to January 2005. They found the styles benchmarks of each sample of equity funds as optimum exposure to eleven passive asset class indexes. They also evaluated the relative performance of the funds with respect to their benchmarks. The result of the study showed that the funds have not been able to beat their benchmarks on the average.

Sondhi and Jain (2010) evaluated the risk associated with market and investment performance of equity mutual funds in India. The study used a sample of 36 equity fund for a period of 3 years. The study analysed the relationship between high beta of funds and high returns over the study period. The study also examined that open-ended or close ended categories, size of fund and the ownership pattern significantly affect risk-adjusted investment performance of equity fund. The results of the study confirmed with the empirical evidence produced by fama (1992) that high beta funds (market risks) may not necessarily produced high returns. The study revealed that the category, size and ownership have been significantly determined the performance of mutual funds during the study period.

Garg (2011) analysed the performance of top ten mutual funds that was selected on the basis of previous years return. The study analyzed the performance on the basis of return, standard deviation, beta as well as Treynor, Jensen and Sharpe indexes. The study also used Carhart's four-factor model for analyze the performance of mutual funds. The results revealed that Reliance Regular Saving Scheme Fund had achieved the highest final score and Canara Robeco Infra had achieved the lowest final score in the one year category.

V. Objectives:

- 1) To analyse the performance of a selected Equity Small mutual fund schemes with their benchmark.
- 2) To study the measures of risk & return associated with selected mutual fund.
- 3) To know whether the mutual funds are able to provide reward to variability and volatility.
- 4) To know the relationship between sector investment and returns of mutual fund.

VI. Hypotheses:

H1: The benchmark return and respective mutual fund returns are different from each other.

H1: High risk, high return.

H1: The sector allocation done by fund manager and returns generated are different for each mutual fund.

VII. Research Methodology**Sample Selection:**

The researcher has chosen the available equity small cap mutual fund schemes. Mutual fund scheme for the purpose of the study have been selected in terms of AUM and the number of years spend in the market. The selected mutual funds were launched not less than 10 years before.

10 schemes were selected, to examine the performance of the mutual funds, which were offered by different Mutual Fund companies. For benchmarking and comparison purpose BSE-Sensex and NSE-Nifty is used. To consider risk free return yield on 91-day Treasury bills is accepted which 7.54%, during study period.

VIII. Scope of the study:

The Schemes were categorized and selected for evaluating their performance and relative risk. The scope of the project is mainly concentrated on the top performing schemes of the small cap mutual fund such as Aditya Birla Sun Life Small & Midcap Fund - Direct Plan, DSP BlackRock Micro Cap Fund - Direct Plan, Franklin India Smaller Companies Fund, HDFC Small Cap Fund - Direct Plan, HSBC Midcap Equity Fund, L&T Emerging Businesses Fund, Reliance Small Cap Fund, SBI Small & Midcap Fund, Sundaram S.M.I.L.E. Fund - Direct Plan & Union Small and Midcap Fund - Direct Plan.

IX. Limitations:

There are more than 20 funds and huge number of schemes offered by various financial as well as non financial companies. It is not possible to compare all the funds.

X. Analysis:

The present study made an attempt to analyze the performance of the selected mutual fund schemes with the market during the study period of 5 years. In order to achieve the objectives an analysis has been made to compare these schemes with the market on the basis of risk and return. Different relevant and advanced statistical tools have been employed for analyzing the performance of selected mutual funds. i.e. Standard Deviation (SD), BETA, ALPHA, R-SQUARED, Sharpe Ratio.

TABLE 1: NAVS OF SMALL CAP FUNDS

Year	2014	2015	2016	2017	2018
Fund Name	NAV in Rs.				
Aditya Birla Sun Life Small & Midcap Fund - Direct Plan	23.37	26.72	29.54	46.84	43.95
DSP BlackRock Micro Cap Fund - Direct Plan	37.17	21.24	51.19	73.39	68.24
Franklin India Smaller Companies Fund	36.70	40.20	44.30	63.56	60.67
HDFC Small Cap Fund - Direct Plan	25.97	28.00	29.90	48.62	48.12
HSBC Midcap Equity Fund	36.58	40.38	40.74	65.35	61.55
L&T Emerging Businesses Fund	13.97	15.69	17.79	28.79	27.63
Reliance Small Cap Fund	24.09	27.73	29.27	47.71	45.98
SBI Small & Midcap Fund	28.74	34.65	35.10	62.71	59.13
Sundaram S.M.I.L.E. Fund - Direct Plan	68.50	74.11	74.21	116.27	106.95
Union Small and Midcap Fund - Direct Plan	12.21	12.58	12.30	17.74	17.08

The table 1 shows the net asset value (NAV) of selected equity small cap schemes for 5 years. There was an increase in NAV during the study period of all ten funds. It is mainly due to the upward movement in the stock market and there was a strong improvement in quantity as well as quality of product and service offerings in recent years.

TABLE 2: RETURNS FOR SMALL CAP MUTUAL FUNDS

Year	2014	2015	2016	2017	2018	Avg	Benchma rk return	Ran k
Fund Name	Returns in %age							
Aditya Birla Sun Life Small & Midcap Fund - Direct Plan	67.95	14.32	29.54	46.84	-6.17	30.50	20.39	5
DSP BlackRock Micro Cap Fund - Direct Plan	103.13	21.24	13.58	43.38	-7.02	34.86	23.35	3
Franklin India Smaller Companies Fund	89.92	9.56	10.19	43.46	-4.54	29.72	20.39	7
HDFC Small Cap Fund - Direct Plan	52.59	7.80	6.78	62.65	-1.04	25.76	20.39	8
HSBC Midcap Equity Fund	85.05	10.40	0.88	60.41	-5.82	30.18	23.35	6
L&T Emerging Businesses Fund	-	12.32	10.21	66.50	-4.01	17.00	20.39	9
Reliance Small Cap Fund	97.60	15.11	5.56	62.97	-3.62	35.52	23.35	2
SBI Small & Midcap Fund	110.66	20.56	1.29	78.66	-5.70	41.09	23.35	1
Sundaram S.M.I.L.E. Fund - Direct Plan	110.59	8.19	0.13	56.68	-8.02	33.51	23.35	4
Union Small and Midcap Fund - Direct Plan	-	3.03	-2.23	44.23	-3.72	8.26	20.39	10

Table 2 reveals the return earned by different small cap funds offered by different Mutual Fund companies during the study period (2014-2018). The average return of SBI Small & Midcap Fund is 41.09 %. The average returns of other funds such as Reliance Small Cap Fund, DSP BlackRock Micro Cap Fund - Direct Plan, Sundaram S.M.I.L.E. Fund - Direct Plan, Aditya Birla Sun Life Small & Midcap Fund - Direct Plan, HSBC Midcap Equity Fund, Franklin India Smaller Companies Fund, HDFC Small Cap Fund - Direct Plan, L&T Emerging Businesses Fund and Union Small and Midcap Fund - Direct Plan are 35.52%, 34.86%, 33.51%, 30.50%, 30.18%, 29.72%, 25.76%, 17% & 8.26% respectively. The return earned by different funds has been ranked. It is observed that the return from SBI Small & Midcap Fund is the highest. Year 2017-18 shows a negative return due to economic volatility. Out of 10 only 2 funds are below their benchmark return i.e. L&T Emerging Businesses Fund and Union Small and Midcap Fund - Direct Plan

TABLE 3: STATSTICAL TOOLS USED FOR EVALUATION OF SMALL CAP MUTUAL FUNDS

Fund Name	SD	Beta	Alpha	R – Squared	Sharpe	Avg Returns
Aditya Birla Sun Life Small & Midcap Fund - Direct Plan	17.28	1.03	12.48	0.62	1.12	30.50
DSP BlackRock Micro Cap Fund - Direct Plan	16.75	0.90	12.86	0.51	1.12	34.86
Franklin India Smaller Companies Fund	13.83	0.83	8.86	0.64	1.04	29.72
HDFC Small Cap Fund - Direct Plan	16.17	0.99	12.15	0.66	1.16	25.76
HSBC Midcap Equity Fund	19.55	1.09	7.42	0.55	0.75	30.18
L&T Emerging Businesses Fund	18.02	1.08	13.92	0.63	1.17	17.00
Reliance Small Cap Fund	18.66	1.04	12.56	0.55	1.04	35.52
SBI Small & Midcap Fund	16.91	0.77	17.38	0.36	1.33	41.09
Sundaram S.M.I.L.E. Fund - Direct Plan	20.83	1.18	6.79	0.56	0.70	33.51
Union Small and Midcap Fund - Direct Plan	15.58	0.97	2.75	0.68	0.59	8.26

Table.3 reveals the statistical evaluation of small cap mutual funds. The volatility impact is less for Franklin India Smaller Companies Fund as its standard deviation is less. The performance of the fund is excellent as

revealed by beta, alpha, R-squared and Sharpe ratio. Of these funds considered for the study SBI Small & Midcap Fund has performed well.

TABLE 4: EVALUATION OF SECTOR ALLOCATION OF SMALL CAP MUTUAL FUNDS

Fund Name	Major 5 Sectors (%age invested)				
Aditya Birla Sun Life Small & Midcap Fund - Direct Plan	Financial (15.35)	Construction (11.41)	Services (8.76)	Engineering (7.87)	Chemicals (7.42)
DSP BlackRock Micro Cap Fund - Direct Plan	Chemicals (22.18)	Textiles (10.06)	Construction (9.15)	FMCG (8.70)	Engineering (8.56)
Franklin India Smaller Companies Fund	Financial (16.68)	Construction (11.87)	Chemicals (11.54)	Engineering (8.95)	Services (8.23)
HDFC Small Cap Fund - Direct Plan	Technology (11.96)	Automobile (10.49)	Engineering (10.41)	Chemicals (9.87)	Services (7.50)
HSBC Midcap Equity Fund	Financial (24.31)	Chemicals (15.55)	FMCG (13.61)	Construction (12.37)	Metals (6.89)
L&T Emerging Businesses Fund	Financial (11.67)	Engineering (11.57)	Construction (10.66)	Metals (9.93)	Chemicals (9.84)
Reliance Small Cap Fund	FMCG (15.64)	Chemicals (14.71)	Engineering (14.50)	Construction (10.85)	Financial (8.71)
SBI Small & Midcap Fund	FMCG (20.45)	Services (13.05)	Engineering (11.90)	Construction (11.44)	Cons Durable (7.99)
Sundaram S.M.I.L.E. Fund - Direct Plan	Construction (27.03)	Engineering (16.11)	Services (8.84)	Automobile (8.79)	FMCG (7.92)
Union Small and Midcap Fund - Direct Plan	Financial (15.29)	Chemicals (11.91)	Construction (10.62)	FMCG (10.58)	Engineering (10.10)

Table.4 reveals the sector allocation of 10 mutual funds. For sector allocation first five major sectors have been selected depending on the percentage of amount invested. The sector allocation along with the percentage of amount invested is uneven for all mutual funds. The performance of these sectors determines the volatility of NAV.

XI. Findings

- There was an increase in NAV of selected 10 small cap and mutual fund during the study period but out of that 2 funds performed below their benchmark return.
- Among selected 10 small cap funds SBI Small & Midcap Fund has been ranked first based on various parameters such as fund return, alpha, beta, standard deviation and Sharpe ratio.
- In small cap mutual fund the fund manager prefers to invest more in construction and engineering sector then to chemical, financial, FMCG and services sector and less preferred sectors are automobile, metal, consumer durable, technology and textile.

XII. Conclusions

On the basis of above study, alternate hypotheses are proved i.e.

1. The benchmark return and respective mutual fund returns are different from each other, the returns generated over the period of 5 years are way above the their benchmark returns. Only two funds are not below the benchmark return.
2. In second table the returns and risk are associated with each other. The sharpe SBI Small & Midcap Fund is 1.33 and the return generated is 41.09%. This scenario is applicable for other funds also. Hence, high risk high return is proved.
3. The sector allocation done by fund manager and returns generated are different for each mutual fund. The sector allocation is uneven, also every fund manager invested amount in different percentage.

The growth of mutual fund industry is depending on the investment made by the investors over the period of time. Volatility and uncertainty are part and parcel of equity investing. Equity mutual fund investors too cannot remain unscathed when the movement of indices becomes rage bound. The investor may monitor the equity fund based on relevant statistical analysis to have better portfolio for his investments.

XIII. References

- [1]. Dhanda SK (2012) Performance evaluation of selected open ended mutual funds in India. *International Journal of Marketing, Financial Services & Management Research* 1: 29-38.
- [2]. Kumar LN, Devi RV (2011) Performance evaluation of private and public sponsored funds in India. *International Journal of Research in Commerce and Management* 1: 24-35.
- [3]. Gohar R, Ahmed S, Niazi U (2011) Performance comparison of mutual funds in Pakistan. *African Journal of Business Management* 5: 5583-5593
- [4]. Prince V, Bacon L (2010) Analyzing mutual fund performance against establishes performance benchmarks: A test of market efficiency. *Research in Business and Economics Journal* 1: 1-15.
- [5]. Debashish SS (2009) Investigating performance of equity- based mutual fund scheme in Indian scenario. *KCA Journal of Business Management* 2: 1-15.
- [6]. GuhaDS (2008) Performance Evaluation of Equity mutual funds in India; An empirical exploration. IIM Calcutta.
- [7]. Deb GS, Banerjee A, Chakrabarti BB (2007) Performance of Indian equity mutual funds vis a vis their style benchmarks: An empirical exploration. *Journal of Applied Finance, ICFAI*.
- [8]. PanwarSharad, Madhumathi RM (2006) Characteristics and performance evaluation of selected mutual funds in India. Institute of capital Market 9th Capital market Conference paper.
- [9]. Noulas G and Athanasius (2005) Performance of mutual funds. *Managerial Finance* 31:101-112.
- [10]. Rao NS, Ravindram M (2002) Performance of Indian mutual funds. Proceedings of 15th Australasian Finance and Banking Conference held in Sydney (Australia) on 16-18 December 2002.
- [11]. Sharpe WF (1966) Mutual Fund Performance. *Journal of Business* 39: 119-138.
- [12]. Treynor JL (1965) How to rate management of investment funds? *Harvard Business Review* 43(1): 63-75.
- [13]. Jensen MC (1968) The performance of mutual funds in the period 1945-1964. *Journal of Finance* 23(2): 389-416.
- [14]. Fama EF (1972) Components of Investment Performance. *Journal of Finance* 27: 551- 567.