

# Measuring the Performance of Multicap Funds: Using Risk and Rolling Return

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**Abstract :** Mutual funds aid to expand your portfolio across asset classes and you may achieve both small and extensive period achievements. In mutual funds the investment is in form of units. This research intends to measure multicap funds using risk and rolling return. The data is collected from 2016-2018 and the main reason of this research is to find out the risk and rolling return of selected equity funds and to test out the different tools has used like alpha, SD, sharpe ratio, beta, from the analysis it shows that the maximum returns in both smallcap, midcap funds and minimum level of risk in Smallcap funds and midcap funds.

**Key words:** Risk, Rolling return, alpha, beta, standard deviation, sharpe ratio.

## Introduction

Mutual funds have a number of options to invest which are launched at different periods. Mutual funds investment is more comprehensive and it satisfies different needs of investors. Mutual funds are registered with SEBI to guide the interest of the investors. When a shareholder puts in their money in a mutual fund it will be combined with other investor money and makes us to buy part of the investment. The mutual fund is mostly available through bank, financial planning firms, trust companies so investor able to know their unit or shares value at any time. Mutual funds are flexible investment which you can begin and stop investing as per investor convenience.

The SEBI has framed out the new rules that the top 100 companies will be largecap and from 101-250 it is midcap funds and above 250 is Smallcap funds. Largecap equity funds that invest in large proportion. The largecap funds are less risky and it gives out the better returns. The risk is reduced when compared to midcap and Smallcap funds. The SEBI also recently modifies that the top 100 companies will be listed as largecap funds and its market capitalization is above Rs.10000 cr. The midcap funds which are invested in mid sized companies and it requires more risker than largecap funds and the market capitalization is RS.500 to RS.10000 cr. The companies from 101-250 is ranged as midcap funds. The Smallcap funds is stock of publicly traded companies and it is less than Rs.500 cr. It is more risker than largecap and midcap funds.

## Review of Literature

Made analysis of performance in risk and return analysis in selected mutual fund schemes. The performance was analysed in comparison with bse sensx and monthly yield. The performance was analysed with sharpe, Treynor and Jensen measures where the result provided will be useful for the investors for taking better investment. Thus the analysis concluded that there is highest return for the highest risk. (Dr.V.Chitra, Dr.T.Hemalatha 2018). An analysis between mid cap funds and small cap funds on the basis of return and risk factor was done with sharpe ratio, treynor ratio, Jensen ratio, standard deviation, beta, alpha with this the performance was made and result came up the varied position and doesn't give out the better investment option (Mrs.O.V.A.M.Sridevi 2018). The empirical study made on derived equity funds to find out the risk and return and the date was taken after liberalization and globalization of Indian economy which has the option of investing in particular mutual funds. The study was analysed for the performance of mutual funds is assessed after analysing the net asset value and this empirical study gives that the public and private sector gives out best result in over a period of one year to find out the solution on both public and private mutual funds three ratios were used namely Jensen, treynor, sharpe ratios (Dr.S.M.Tariq Zafar, Dr.D.S.Chaubey, Syed Imran Nawab Ali (2015). The study was based on risk and return analysis in selected securities their main is to know the maximum and minimum return and the risk involved in particular funds. The objective of the study is to give basic idea to the investors and to earn profit in particular sector this study helps the investors to analysis the profit area field before investing in particular securities and also helps how the company diversify themselves in different companies to get the maximum returns and minimise the risk. (Dr.P.Subramanayam, Dr.Nalla Bala Kalayan 2018). Risk and return analysis was made on selected mutual funds and the study focus on selected mutual funds to know the risk and return because risk may be defined as the chance of variations and to move on risk free and get out the return over the selected mutual fund area the risk and return analysis was done with basic alpha, beta, standard deviation, sharpe ratio, treynor ratio, Jensen ratio and the result shows that the only few selected mutual funds has given out the return area and fund managers has to select better scripts for good returns. (Dr.Nalla Bala Kalyan, Dr.S.Gautami 2018). Analysed financial performance of selected equity largecap mutual funds and to study the measures of risk and return associated with selected mutual funds. Largecap funds invest more than 75% for a minimum of four out of six months in each period over the last 2 years. Stock price are influence by both rational as well as irrational factors. (Hemavathy Ramasubbian, 2018) This study analysed that there is an impact on mutual fund flow in the Indian equity market (Nandhini and Rathnamani 2017).

## Research Objective

The primary objective of this research paper is to find out the risk of large cap, mid cap and small cap mutual funds. Other than that, this study analyzes the rolling return of selected equity mutual funds.

### Research Methodology

This study is based on the research design using secondary data. The data has been collected from published websites like money control, BSE ltd etc. The data has collected for the past three years. The period of the study is from 2016-2018. Various companies have been taken for analysis of all the three types of funds i-e largecap, midcap and Smallcap funds. Largecap funds such as ABSL frontline equity fund, HDFC equity fund, ICICI prudential bluechip fund, SBI bluchip fund, Frankline India bluchip fund. Midcap funds such as DSP midcap funds, Frankline India prima fund,HDFC midcap opportunities fund, TATA midcap funds, Sundaram midcap funds. Smallcap funds like Frankline India smaller companies, HDFC Smallcap funds, Reliance Smallcap fund, Kotak Smallcap fund, SBI Smallcap fund.

**Table 1- Risk Calculation of Largecap Funds**

Fund name	Alpha	Beta	Standard deviation	Sharpe Ratio
Aditya Birla Sun Life Frontline Equity Fund	-1.09	0.93	13.96	0.36
Franklin India Bluechip Fund	-2.7	0.92	13.59	0.24
HDFC Equity Fund	-0.5	1.16	18.49	0.38
ICICI Prudential Bluechip Fund	0.36	0.91	13.65	0.46
SBI Bluechip Fund	-2.28	0.91	13.82	0.26

**Alpha-** which shows out the risk of the fund and gives out the returns by analysing the top most companies the result shows that HDFC equity fund of value with -0.5 gives out more risk to the funds because the stock price value up for the past three years and it is underperformed in second level ABSL frontline equity fund came up with value of -1.09 where the risk is below average and in third position Franklin india bluechip fund with value of -2.7 which is average risk and ICICI bluechip fund and SBI bluechip fund with the value of 0.36, -2.28 where the risk is low.

**Beta-**Risk their willing to take to achieve the return for taking on that risk over the market as a whole from the analysis the result shows that HDFC Equity Fund 1.16 have high value of risk over return and all other companies ABSL frontline equity fund 0.93, Franklin India bluechip fund 0.92, ICICI bluechip fund 0.91 and SBI bluechip fund 0.91 which has less volatility.

**Sharpe Ratio-** From the analysis the result shows that HDFC Equity Fund 18.4% has been ranked high for the risk adjusted free returns.

**Standard Deviation-** The table explains that HDFC Equity Fund is the highest value 18.49 and the risk is high. The second level is Aditya Birla Sun Life Frontline Equity Fund with 13.96. The other risk is low when compared to above both companies.

The above Table-1, explains the over all risk of the companies alpha, beta, sharpe ratio and standard deviation and HDFC Equity Fund with high risk over the funds and Aditya Birla Sun Life Frontline Equity Fund with some next to HDFC Equity Fund and other companies with minimum risk .

**Table 2- Risk Calculation of Midcap Funds**

Fund name	Alpha	Beta	Standard Deviation	Sharpe Ratio
DSP Midcap Fund - Regular Plan	-0.66	0.93	18.3	0.41
Franklin India Prima Fund	-0.23	0.78	15.01	0.44
HDFC Mid-Cap Opportunities Fund	-0.72	0.91	17.33	0.42
Sundaram Mid Cap Fund - Regular Plan	-2.77	0.93	17.99	0.3
Tata Midcap Growth Fund - Regular Plan	-3.78	1	19.14	0.26

**Alpha** From the analysis it shows that overall fund risk is higher in Tata Midcap Growth Fund - Regular Plan -3.78 it is underperformed in mutual fund area for the past three years and next to that Sundaram Mid Cap Fund - Regular Plan -2.77 has given out the risk and all other companies have shown out the less risk compared to above companies. The other companies has performed out the risk level with HDFC Mid-Cap Opportunities Fund -0.72, DSP Midcap Fund - Regular Plan -0.66, Franklin India Prima Fund -0.23 it has performed out with low risk of fund .

#### Beta

From the Beta calculation the market risk is shown with certain level Tata Midcap Growth Fund - Regular Plan 1 which gives more risk to the investors and next to that Sundaram Mid Cap Fund - Regular Plan 0.93 and all other companies with DSP Midcap Fund - Regular Plan 0.93, HDFC Mid-Cap Opportunities Fund 0.91, Franklin India Prima Fund 0.78.

#### Standard Deviation

The higher the standard deviation gives out more risk with that the analysis shows that Tata Midcap Growth Fund - Regular Plan 19.14 measures out the high value of risk to the investors the higher value next shows that DSP Midcap Fund - Regular Plan 18.1. All other companies given out the risk level with Sundaram Mid Cap Fund - Regular Plan 17.99, HDFC Mid-Cap Opportunities Fund 17.33, Franklin India Prima Fund 15.01.

### Sharpe Ratio

The table gives out the analysis with Franklin India Prima Fund 0.44 with high value which gives out risk adjusted free returns and the next companies with DSP Midcap Fund - Regular Plan 0.41 percent which has given out the maximum returns. From the table-2, it is clear that the high value of risk in Tata Midcap Growth Fund - Regular Plan and next to that Sundaram Mid Cap Fund - Regular Plan .

**Table 3 –Risk Calculation of Smallcap funds**

Fund name	Alpha	Beta	Standard Deviation	Sharpe Ratio
Franklin India Smaller Companies Fund	2.48	0.67	15.98	0.24
HDFC Small Cap Fund - Regular Plan	8.62	0.76	18.27	0.56
Kotak Small Cap Fund - Regular Plan	2.43	0.75	18.05	0.22
Reliance Small Cap Fund	6.09	0.89	20.93	0.38
SBI Small Cap Fund	6.62	0.82	20.43	0.41

### Alpha

From the analysis it shows that overall fund risk is low in HDFC Small Cap Fund - Regular Plan 8.62 which has over performed and its risk is below average and next to that the companies stands with SBI Small Cap Fund 6.62. From the analysis the all companies also has over performed its risk level.

### Beta

From the Beta calculation the market risk is less to all the companies and the maximum low level of risk is HDFC Small Cap Fund - Regular Plan 0.76 and next is Reliance Small Cap Fund 0.89. All companies has overperformed with low level of risk.

### Standard Deviation

The higher the standard deviation gives out more risk with that the analysis shows that Reliance Small Cap Fund 20.93 and all other companies has given out minimum level of risk HDFC Small Cap Fund - Regular Plan 18.27

### Sharpe Ratio

The table gives out the analysis with HDFC Small Cap Fund - Regular Plan 0.56 has high value of risk adjusted free returns and next risk free is SBI Small Cap Fund 0.41. Compared to other companies this two companies has given out the better risk free returns.

The table-3 shows that HDFC Small Cap Fund - Regular Plan 8.62 which has over performed and its risk is below average and next to that the companies stands with SBI Small Cap Fund 6.62. The Reliance Small Cap Fund 0.89.

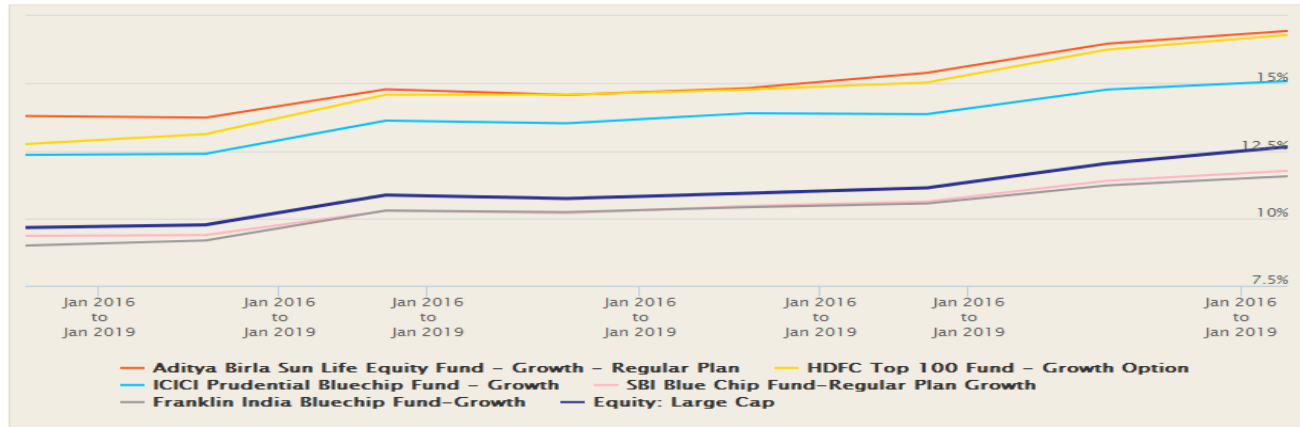
### Rolling Returns

**Table 4 Rolling Return of Largecap Funds**

Fund Name	Average	Median	Maximum	Minimum	Less than 0%	0 - 8%	8 - 12%	12 - 15%	15 - 20%	Greater than 20%
Aditya Birla Sun Life Frontline Equity Fund	15.06	14.80	16.94	13.73	0.00	0.00	0.00	62.50	37.50	0.00
HDFC Equity Fund	14.73	14.68	16.79	12.75	0.00	0.00	0.00	62.50	37.50	0.00
ICICI Prudential Bluechip Fund	13.69	13.74	15.08	12.35	0.00	0.00	0.00	87.50	12.50	0.00
SBI Bluechip Fund	10.43	10.37	11.76	9.35	0.00	0.00	100.00	0.00	0.00	0.00
Franklin India Bluechip Fund	10.30	10.35	11.56	8.99	0.00	0.00	100.00	0.00	0.00	0.00
Equity: large cap	10.97	10.90	12.65	9.66	0.00	0.00	75.00	25.00	0.00	0.00

From the rolling return performance the best result is given by Aditya Birla Sun Life Frontline Equity Fund it has performed from all over the largecap companies . The Aditya Birla Sun Life Frontline Equity Fund has given the Average 15.06, Median 14.80, Maximum 16.94, Minimum 13.73. The Aditya Birla Sun Life Frontline Equity Fund has given out 15-20% return is over 37.50% . In second the HDFC Equity Fund has given out the equal level of result but with some little changes in percent from the analysis both companies has given out the better returns.

Fig 4 Rolling Returns of Largecap Funds



The chart explains the performance of Aditya Birla Sun Life Frontline Equity Fund as it raises than all other companies. The other companies Franklin India Bluechip Fund, HDFC Equity Fund, ICICI Prudential Bluechip Fund, SBI Bluechip Fund shows out level of result.

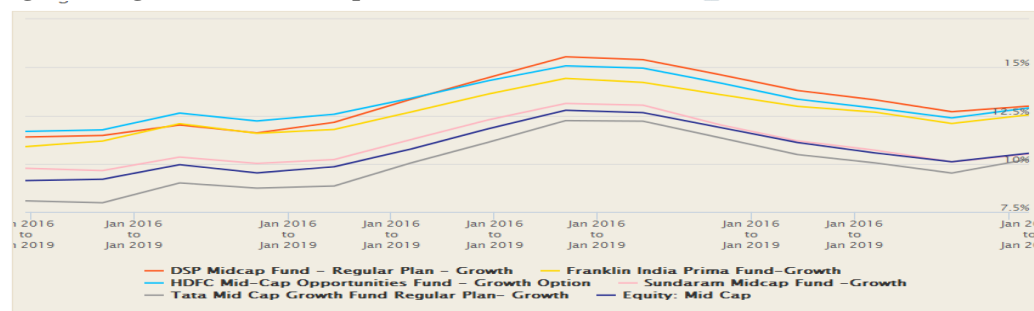
Table 5 Rolling Returns of Midcap Funds

Fund Name	Average	Median	Maximum	Minimum	Less than 0%	0 - 8%	8 - 12%	12 - 15%	15 - 20%	Greater than 20%
DSP Midcap Fund - Regular Plan- Growth	13.20	13.16	15.55	11.39	0.00	0.00	21.43	64.29	14.29	0.00
Franklin India Prima Fund-Growth	12.60	12.61	14.43	10.89	0.00	0.00	28.57	71.43	0.00	0.00
HDFC Mid-Cap Opportunities Fund - Growth Option	13.17	12.89	15.08	11.68	0.00	0.00	14.29	78.57	7.14	0.00
Sundaram Midcap Fund -Growth	11.02	10.61	13.13	9.65	0.00	0.00	71.43	28.57	0.00	0.00
Tata Mid Cap Growth Fund Regular Plan- Growth	9.99	10.05	12.24	7.98	0.00	7.14	78.57	14.29	0.00	0.00
Equity: Mid Cap	10.89	10.55	12.78	9.13	0.00	0.00	80.00	20.00	0.00	0.00

Source: Secondary data

From the Rolling return performance of midcap funds the output shows that two companies has given out the equal level of performance DSP Midcap Fund - Regular Plan – Growth Average 13.20, Median 13.16, Maximum 15.55, Minimum 11.39. The DSP Midcap Fund - Regular Plan – Growth has given out 15-20% return is over 14.29% . The second level of performance is given out by HDFC Mid-Cap Opportunities Fund - Growth Option Average 13.17, Median 12.89, Maximum 15.08, Minimum 11.68. The HDFC Mid-Cap Opportunities Fund - Growth Option has given out 15-20% return is over 7.14%. The interpretation shows that investing in both the companies have good returns.

Fig 5 Rolling Returns of Midcap Funds



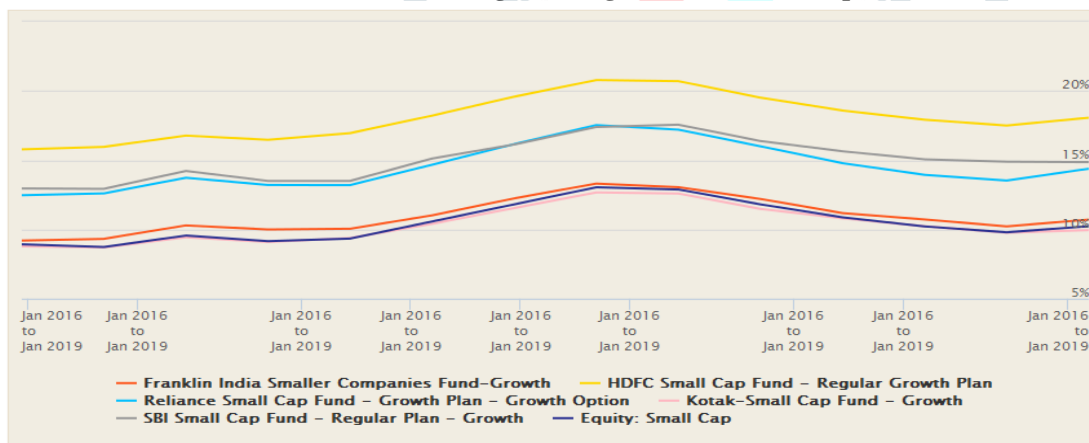
The chart explains the performance of DSP Midcap Fund - Regular Plan – Growth and HDFC Mid-Cap Opportunities Fund - Growth Option as it raises than all other companies above 15%.

Table 6 Rolling Returns of Smallcap Funds

Fund Name	Average	Median	Maximum	Minimum	Less than 0%	0 - 8%	8 - 12%	12 - 15%	15 - 20%	Greater than 20%
Franklin India Smaller Companies Fund-Growth	10.96	10.71	13.31	9.20	0.00	0.00	71.43	28.57	0.00	0.00
HDFC Small Cap Fund - Regular Growth Plan	18.05	17.99	20.78	15.78	0.00	0.00	0.00	0.00	85.71	14.29
Reliance Small Cap Fund - Growth Plan - Growth Option	14.53	14.16	17.53	12.47	0.00	0.00	0.00	71.43	28.57	0.00
Kotak-Small Cap Fund – Growth	10.34	10.09	12.67	8.70	0.00	0.00	85.71	14.29	0.00	0.00
SBI Small Cap Fund - Regular Plan - Growth	15.01	14.98	17.56	12.93	0.00	0.00	0.00	50.00	50.00	0.00
Equity: Small Cap	10.50	10.22	13.04	8.93	0.00	0.00	85.71	14.29	0.00	0.00

From the analysis of Smallcap funds the result shows that HDFC Small Cap Fund - Regular Growth Plan has outperformed its level Average 18.05, Median 17.99, Maximum 20.78, Minimum 15.78. The HDFC Small Cap Fund - Regular Growth Plan has given out 15-20% return is over 85.71% . The HDFC Small Cap Fund - Regular Growth Plan has given above 20% returns of 14.29%.

Fig 6 Rolling Returns of Smallcap Funds



The chart shows the performance of Smallcap funds and the HDFC Small Cap Fund - Regular Growth has given out the high level of better result than the other Smallcap funds. It has outperformed than 20% of returns.

### Findings

- The analysis of largecap funds the investors of largecap funds can highly prefer HDFC equity fund and Aditya Birla Sun Life Frontline Equity Fund for the better investment and can choose other companies to get out the minimum returns.
- The investors of midcap returns Sundaram Mid Cap Fund - Regular Plan and next is Tata Midcap Growth Fund - Regular Plan has given out the better returns and low level of risk.

### Conclusion

In this wake of growing and urge need for investment options with comparatively less risky than the conventional equity options, the investors have shown towards the mutual funds. This fact is certainly identified by the mutual funds companies as the number of schemes with various options and benefits they are tailoring it certainly seems that the wave of mutual funds investment is taking over. The rapid pace of engagement worldwide has helped in serving to reinforce the mutual fund which made it as investors preferred option of investing with a scope of high returns and diversification.

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