

# A Comparative Analyses of Different Mutual Fund Schemes

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## Abstract:

**Background:** Mutual funds are one of the most important types of financial intermediaries in India, allowing tens of thousands of small and large savers to invest in and profit from the capital market. The importance of mutual funds in the transformation of India's economy underscores the need to evaluate their services for their part in the mobilisation and allocation of funds in the market. Mutual funds have a lot of room to expand, but in order to fully realise the potential, they must develop and sell new products as well as develop distinct marketing strategies. Furthermore, since India's equity culture has yet to fully grow, investor education will be critical for greater mutual fund penetration. As a result, mutual funds are expected to outperform the market, necessitating a continuous evaluation of fund results. The goal of identifying superior fund managers is of great academic interest because it poses a challenge to the efficient market hypothesis.

**Materials and Methods:** The present study looks into the risk and return analysis of the selected theme based mutual funds in India. The period been considered for the study is 2018-2020 which includes three tiers of mutual funds i.e. smallcap, midcap and largecap funds for doing a comparative analysis of selected funds under each category. Secondary data was used for study and Mean, Market return, Standard deviation, Initial Returns tools were used. **Results:** The research concludes that, in the small cap fund category, Axis Smallcap fund have comparatively performed well. Then in the midcap fund category, Motilal oswal Midcap 30 fund and UTI midcap fund have performed better and in the largecap fund category, Axis Bluechip Fund and Nippon India largecap fund have comparatively performed well.

**Key Word:** Mutual Fund, Continuous evaluation, Mean, Market return, Standard deviation, Initial Return

## I. Introduction

Mutual funds are a form of investment that allows investors to pool their money and invest in a portfolio of securities. Every security is not owned by an individual investor. He puts his money into mutual funds. The key benefit of mutual funds is that they enable investors to diversify their investments without having to spend a large sum of money.

The investment fund industry is one of India's burgeoning industries. In India, there are currently 40 players in the mutual fund industry. The Investment Trusts Association of India is a non-profit organization dedicated to the development of investment trust companies in India. It takes a knowledgeable and aggressive stance in determining the measures that must be taken to protect investors and promote the field of mutual funding.

The market cap of a mutual fund (small-cap, mid-cap, or large-cap) reflects the value of the companies in which the fund invests, not the mutual fund itself.

### Small-Cap Funds:

Companies with a market capitalization of less than \$2 billion are usually included in small-cap funds. However, the dividing line between funds and brokerage houses can shift, and exact meanings can differ. Since they invest in companies that are less stable than large-cap companies, small-cap funds may be unpredictable.

### Mid Cap Funds:

Mid-cap funds invest in firms with market capitalizations ranging from \$2 billion to \$10 billion. Mid-cap companies have some of the same growth characteristics as small-cap companies, but they create less risk, at least in principle, since they are larger and more developed. Mid-cap funds may be a good option for investors looking for higher yields without the danger of small-cap stocks.

### Large-Cap Funds:

Large-cap funds invest in businesses with market capitalizations of \$10 billion or more, i.e. Wall Street's "small fish." Large-cap funds can be excellent investment vehicles for market participants who want to purchase and retain for a long time. For those who don't want to take on too much risk, they will have consistent returns and profits. They aren't suitable for investors attempting to "beat the market," though.

## II. Literature Review

**Dr. Anand Muley, Mr. Satish Tiwari, and Dr. Jaspal Gidwani (2019)** published a paper titled "PERFORMANCE EVALUATION OF THEMATIC MUTUAL FUND SCHEMES USING CAPITAL ASSET PRICING MODEL (CAPM)".

The research primarily examined the risk-return relationship of selected Infrastructure equity mutual fund schemes as well as the financial results of selected Infrastructure mutual fund schemes. The mutual funds were evaluated using average annualised return, beta, standard deviation, and the Capital Asset Pricing Model. The study concludes that schemes like Franklin Build India Fund, L&T Infrastructure Fund, Plan, and Kotak Infrastructure and Economic Reform Fund - Standard Plan produce higher returns than others, with an average annualised return of more than 25%, while schemes like Franklin Build India Fund, L&T Infrastructure Fund, Plan, and Kotak Infrastructure and Economic Reform Fund - Standard Plan generate lower returns.

"A COMPARATIVE RISK ANALYSIS OF KOTAK SELECT FOCUS FUND (G) MUTUAL FUND SCHEME" was performed by **Dr. Ujjwal M. Mishra and Mr. Chetan Borole (2017)**. The emergence of new financial instruments has been a

significant result of the government's policy of liberalisation in the manufacturing and financial sectors. These new instruments are expected to give the financial sector more flexibility and performance. In the Indian capital market, the growth and production of various mutual fund products has proven to be one of the most catalytic instruments in generating significant investment growth. Due to a high degree of precision in the design and marketing of a variety of mutual fund products by banks and other financial institutions, the mutual fund market has grown significantly. This research paper will help to know about the risk and the returns of selected mutual fund. For the study purpose data has been taken from journals and RBI website.

**The study "MEASURING SYSTEMIC RISK CONTRIBUTION OF INTERNATIONAL MUTUAL FUNDS" was conducted by Joshua Aizenman, Yothin Jinjarak, and HuanhuanZheng (2016).** From 2000 to 2011, the report uncovers new evidence of systemic risk contribution in the international mutual fund market. The aim of the study is to show that foreign mutual funds contribute more than their fair share of systemic risk. Mean SD Minimum Maximum tools are used in the research. As a result, the study concludes that the systemic risk contributions of foreign mutual funds, whether derived from idiosyncratic risks or common factors affecting the mutual fund industry, are found to be more than proportionally greater given the fund's size.

**Dr. Partap Singh Chahal conducted a study entitled "RISK AND RETURN REGARDING SOME SELECTED EQUITY MUTUAL FUND SCHEMES (WITH SPECIAL REFERENCE TO SBI MUTUAL FUNDS)" in 2017.** The paper assesses the risk of SBI mutual funds schemes across various equity categories. The research is focused on secondary sources. A five-year study period was chosen. SBI Mutual Funds have been divided into six groups. The data set used to test the hypothesis came from the Association of Mutual Funds of India's database (AMFI) Mean, standard deviation, variance, the compound annual growth rate (CAGR), and other statistical methods were used to analyse data. It is evident from the review of return and risk calculation for the different six categories and schemes of SBI Mutual Fund of Equity Mutual Fund Schemes that all SBI funds performed well with a reasonable

### III. Methods and Materials

This prospective comparative study was carried out at Haardik Nayak Wealth Management Company in Navsari, Gujarat.

**Study Design:** Quantitative Research Design has been used for this study.

**Study Location:** Haardik Nayak Wealth Management Company

**Study Duration:** February 2021 to March 2021

**Primary Objective:**

- To analyze market capitalization based Mutual Funds in India.

**Secondary Objective:**

- To evaluate the performance of selected mutual funds.
- To analysis the return of selected mutual fund.
- To study the risk measurement tools of selected mutual funds.

**Need of the study:** Mutual fund is one of the most desirable investments for small investors because they offer the opportunity to invest in relatively low-cost, diverse and professionally managed investments. The recent trend in the mutual fund industry is the active expansion of foreign investment fund companies and the reduction of state-owned banks and small private companies. The growth and development of various investment fund products in Indian capital markets has proven to be one of the most catalytic tools to promote capital market growth.

**Scope of the study:** The main focus of the study was to track the performance of the different mutual fund schemes. Since different companies come out with similar themes in the same season, it becomes difficult for the company to constantly perform well so as to survive the competition and provide maximum capital appreciation or return as the case may be. Other than the market, the performance of the fund depends on the kind of stock selected by the fund managers of the company.

The analysis is done on the performance of funds with the same theme or sector and reason out why a fund performs better than the others in the lot. It is limited to investors and their investment preferences. Study objective is to investigate the return on investment in share market and to understand the fund sponsor qualities influencing the selection of Mutual Funds/Schemes.

**Tools and Technique used for analysis :**

- Jenson Measure
- CAPM (Capital Asset Pricing Model)
- Alpha
- Beta
- Sharpe Ratio
- Treynor Ratio
- Standard Deviation

### IV. Discussion

**Small Cap Funds:**

Year/scheme	Axis Smallcap fund	Kotak Smallcap fund	HDFC smallcap fund	SBI small cap fund	Nifty Smallcap 250 TRI (index)
2018	-8.94	-17.3	-8.08	-19.62	-26.15
2019	19.38	5.04	-9.49	6.1	-7.26
2020	22.37	34.21	20.17	33.62	26.46

<b>Beta</b>	0.53570547	0.96571154	0.577174096	0.988994722	
<b>Average Return</b>	10.9366666	7.31666666	0.866666667	6.7	
<b>Standard Deviation</b>	17.2784962	25.8303587	16.73203614	26.62507089	
<b>Risk Free Rate of Return</b>	0.08	0.08	0.08	0.08	
<b>Sharpe</b>	0.628334	0.28016129	0.047015597	0.248637836	
<b>Treynor</b>	20.2661111	7.49361098	1.362962532	6.693665649	
<b>Alpha</b>	12.1777176	9.55389841	2.203786655	3.394338611	
<b>CAPM</b>	-1.2039074	-2.2344886	-1.30329391	-2.29029068	
<b>Jensen</b>	27.0239074	28.0544886	27.12329392	28.11029068	

On the basis of data collected, it clearly indicates that all 4 schemes are not risky as they have beta value less than 1. Among them Axis small cap fund which has beta value of 0.5357 is the least risky one and SBI small cap fund which has the beta value of 0.9889 is the most risky of them all.

On the basis of data collected, it is seen that each and every fund has positive value of alpha which indicates that the securities have outperformed the market. The best performing fund out of the four is Axis smallcap fund with the alpha of 12.1777 and the not so good performing one is HDFC small cap fund with an alpha of 2.2038.

On the basis of data collected, all schemes are overvalued, as have higher return than CAPM. Among the four funds, there is highest CAPM return in Axis small cap fund and the CAPM return of SBI small cap fund is the lowest of all.

On the basis of data collected, all the schemes have a positive Jensen ratio, which indicates that the portfolio is earning excess returns. Here, SBI small cap fund is said to have the most returns and Axis bank is said to have the least returns out of all schemes.

On the basis of data collected, a fund with a higher Treynor ratio implies that the fund has a better risk adjusted return than that of another fund with a lower Treynor ratio. Thus according to our data we can say that Axis small cap fund has the highest risk adjusted return and HDFC small cap fund has the lowest risk adjusted rate of return.

On the basis of data collected, Sharpe ratio indicates the average return earned in excess of the risk-free rate per unit of volatility or total risk. Generally, the greater the value of the Sharpe ratio, the more attractive the risk-adjusted return. Here, The sharpe ratio of Axis small cap fund is the highest and on the other hand HDFC small cap fund has the least ratio which means it has low risk adjusted return as compared to other funds.

### Mid Cap Funds

On the basis of data collected, all 2 out of 4 schemes i.e. Motilal oswal Midcap 30 fund and ICICI prudential Midcap fund are not risky as they have beta value less than 1. On the other hand funds like SBI Magnum Midcap fund and UTI midcap fund are riskier funds as the beta value is more than 1. Among them Motilal oswal Midcap 30 fund which has beta value of 0.5565 is the least risky one and SBI Magnum Midcap fund which has the beta value of 1.3397 is the most risky of them all.

On the basis of data collected, it is seen that ICICI prudential Midcap fund has positive value of alpha which indicates that the securities have outperformed the market. And on the other hand funds like Motilal oswal Midcap 30, UTI midcap fund and SBI Magnum Midcap fund have negative alpha which means that these funds have underperformed. The best performing fund out of the four is ICICI prudential Midcap fund with the alpha of 6.9328 and the not so good performing one is SBI Magnum Midcap fund with an alpha of -2.7734.

On the basis of data collected, all schemes are undervalued as they have lower return than CAPM. Among the four funds, there is highest CAPM return in UTI midcap fund and the CAPM return of Motilal oswal Midcap 30 fund is the lowest of all.

Year/scheme	Motilal Oswal Midcap 30 fund	SBI Magnum MidCap fund	UTI midcap fund	ICICI prudential Midcap fund	Category Average (Benchmark)
<b>2018</b>	-12.7	-17.98	-14.95	-10.78	-11.71
<b>2019</b>	9.72	0.07	-0.19	-0.61	2.72
<b>2020</b>	9.32	30.45	32.68	19.11	24.56
<b>Beta</b>	0.55652370	1.3397738	1.3287232	0.8304737	
<b>Average Return</b>	2.11333333	4.18	5.8466666	2.5733333	
<b>Standard Deviation</b>	12.8302818	24.475197	24.382067	15.197145	
<b>Risk Free Rate of Return</b>	0.08	0.08	0.08	0.08	
<b>Sharpe</b>	0.15847924	0.1675165	0.2365126	0.1640658	
<b>Treynor</b>	3.65363292	3.0602180	4.3400058	3.0023025	
<b>Alpha</b>	-0.7750246	-2.7734260	-1.0494070	6.9328596	
<b>CAPM</b>	2.92383613	6.9262441	6.8697758	4.3237206	
<b>Jensen</b>	11.7894972	7.7870891	7.8435575	10.389612	

On the basis of data collected, all the schemes have a positive Jensen ratio, which indicates that the portfolio is earning excess returns. Here, Motilal oswal Midcap 30 fund is said to have the most returns and SBI Magnum Midcap fund is said to have the least returns out of all schemes.

On the basis of data collected, a fund with a higher Treynor ratio implies that the fund has a better risk adjusted return than that of another fund with a lower Treynor ratio. Thus according to our data we can say that UTI midcap fund has the highest risk adjusted return and ICICI prudential Midcap fund has the lowest risk adjusted rate of return.

On the basis of data collected, Sharpe ratio indicates the average return earned in excess of the risk-free rate per unit of volatility or total risk. Generally, the greater the value of the Sharpe ratio, the more attractive the risk-adjusted return. Here, The sharpe ratio of UTI midcap fund is the highest and on the other hand Motilal oswal Midcap 30 fund has the least ratio which means it has low risk adjusted return as compared to other funds.

### Large Cap Funds:

On the basis of data collected, all 2 out of 4 schemes i.e. Axis Bluechip Fund and SBI Bluechip fund are risky as they have beta value more than 1. On the other hand funds like Nippon India largecap fund and HDFC top 100 fund are less riskier funds as the beta value is less than 1. Among them Nippon India largecap fund which has beta value of 0.4473 is the least risky one and SBI Bluechip fund which has the beta value of 1.5440 is the most risky of them all.

On the basis of data collected, it is seen that Axis Bluechip Fund and SBI Bluechip fund has positive value of alpha which indicates that the securities have outperformed the market. And on the other hand funds like Nippon India largecap fund and HDFC top 100 fund have negative alpha which means that these funds have underperformed. The best performing fund out of the four is SBI Bluechip fund with the alpha of 16.5726 and the not so good performing one is HDFC top 100 fund with an alpha of -0.40821.

On the basis of data collected, Axis Bluechip Fund is overvalued as it has higher return than CAPM. All the other remaining funds have lower returns than the CAPM and so those funds are undervalued.

On the basis of data collected, all the schemes have a positive Jensen ratio, which indicates that the portfolio is earning excess returns. Here, Nippon India largecap fund is said to have the most returns and SBI Bluechip fund is said to have the least returns out of all schemes.

On the basis of data collected, a fund with a higher Treynor ratio implies that the fund has a better risk adjusted return than that of another fund with a lower Treynor ratio. Thus according to our data we can say that Axis Bluechip Fund has the highest risk adjusted return and SBI Bluechip fund has the lowest risk adjusted rate of return.

Year/scheme	Axis Bluechip Fund	Nippon India largecap fund	HDFC top 100 fund	SBI bluechip fund	Nifty 100 TRI( index)
2018	6.54	-0.2	0.13	-4.11	2.57
2019	18.57	7.25	7.7	11.64	11.83
2020	19.72	4.91	5.91	16.34	16.08
Beta	1.0279987	0.447309086	0.490966374	1.544019807	
Average Return	14.943333	3.986666667	4.58	7.956666667	
Standard Deviation	7.3001803	3.809860015	3.956374603	10.71101458	
Risk Free Rate of Return	0.08	0.08	0.08	0.08	
Sharpe	2.0360227	1.025409504	1.137404935	0.735380071	
Treynor	14.458512	8.733707386	9.165597157	5.101402607	
Alpha	4.4988655	-0.55799364	-0.40821835	16.57264686	
CAPM	10.442227	4.588875585	5.028941048	15.64371965	
Jensen	21.024438	26.87779108	26.43772562	15.82294702	

On the basis of data collected, Sharpe ratio indicates the average return earned in excess of the risk-free rate per unit of volatility or total risk. Generally, the greater the value of the Sharpe ratio, the more attractive the risk-adjusted return. Here, Thus according to our data we can say that Axis Bluechip Fund has the highest risk adjusted return and SBI Bluechip fund has the lowest risk adjusted rate of return.

### V. Findings

- In the small cap fund category, Axis Smallcap fund have comparatively performed well than the other 3 three funds i.e. Kotak Smallcap fund, HDFC smallcap fund and SBI small cap fund.
- In the midcap fund category, Motilal oswal Midcap 30 fund and UTI midcap fund have comparatively performed well during 2018-2020 than the other 2 funds i.e. ICICI Prudential midcap fund and SBI Magnum MidCap fund.
- In the largecap fund category, Axis Bluechip Fund and Nippon India largecap fund have comparatively performed well during 2018-2020 than the other 2 funds i.e. HDFC top 100 fund and SBI Blue chip fund.

### VI. Conclusion

The study has investigated the risk and return analysis of the selected theme based mutual funds in India. The period been considered for the study is 2018-2020 which includes three tiers of mutual funds i.e. smallcap, midcap and largecap funds for doing a comparative analysis of selected funds under each category. Secondary data was used for study and Mean, Market return, Standard deviation, Initial Returns tools were used. The research concludes that, in the small cap fund category, Axis Smallcap fund have comparatively performed well. Then in the midcap fund category, Motilal oswal Midcap 30 fund and UTI midcap fund have performed better and in the largecap fund category, Axis Bluechip Fund and Nippon India largecap fund have comparatively performed well.

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