

Performance Evaluation of Mutual Fund Schemes: A Study of Selected Topper Schemes

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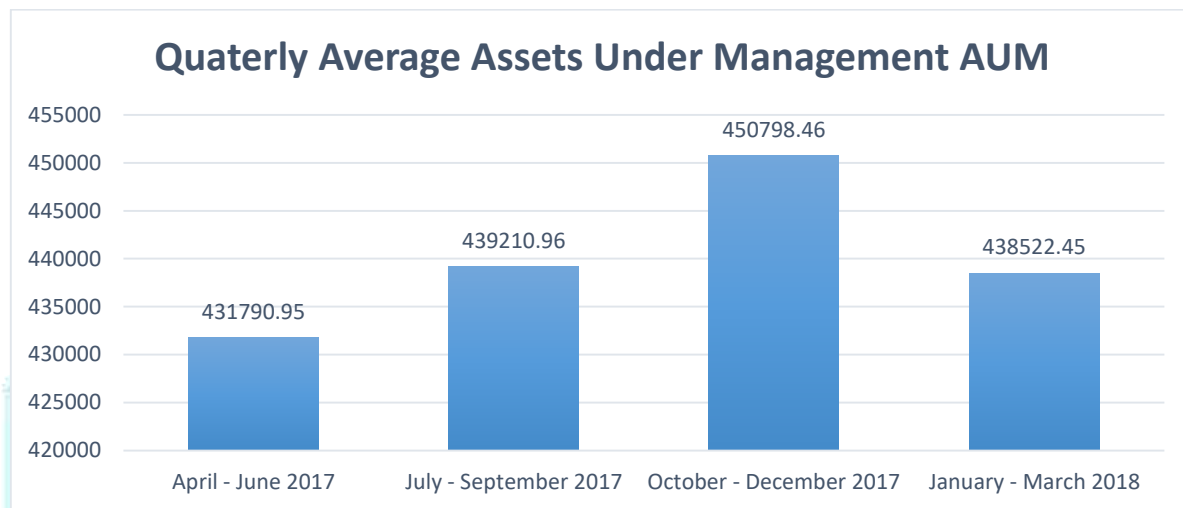
Abstract: *Mutual Fund is one of the most effective instrument for small and medium investors for investment and offers opportunity to them to participate in capital market with low level of risk. It also provide the facility of diversification i.e. investor can invest across different types of schemes. Indian Mutual Fund has achieved a lot of popularity since last two decades. For a long time UTI enjoyed the monopoly in mutual fund industry. But with the passage of time many new players came in market and industry faces a lot of competition. Now a days this industry has become the major player of the financial system. Therefore it becomes important to investigate the mutual fund performance at continuous basis. The main aim of this paper is to evaluate the performance of mutual fund schemes ranked one by CRISIL. To analysis the performance of selected funds' schemes, mean return and their standard deviation were considered and then basic measure in the regard – Sharpe's Ratio, Jensen's Ratio and Treynor's Ratio were ascertained and interpreted accordingly. Finally, HDFC Small Cap Fund is found to be good performer among the selected scheme during April 2017 to March 2018.*

Keywords: *Mutual Fund, Net Asset Value, Performance Measures, Return, Beta etc.*

I. Introduction

Economic growth can be achieved through the development of a capital market which can meet the financial requirements of the country. One of vital components of financial institutions which can serve the dual purpose generating savings from the public and providing funds for investment purpose. The mutual fund industry is one such financial institution which raises funds through the sale of the small units to public and provide funds for investment among various sectors. Despite the global economic slowdown of 2010-13, a remarkable increase is observed in mutual fund investment in India. According to facts of PwC analysis (2016), this has reported highest growth during last seven years while grew with eighteen present CAGR during the period of last ten years. As per India Attractive Survey Report, EY's 2015, our country is considered most attractive investment destination at global front as per one third of respondents under survey while remaining considers India as in top three investment centers. According to ICRA, due to trend of lowering interest rate by banks after demonetization move, positive impact can be seen in the debt oriented funds. Further, it is also expected by experts of mutual funds that assets under management of mutual funds are likely to grow at a fast pace after demonetization. As awareness increases, mutual fund could become the first choice for investment. Moreover,

the demonetization has brought both the challenges and tremendous opportunities for growth of mutual fund industry in India while the effect of GST is yet to be observed. Though mutual funds are good investment avenues for small savers who has low risk bearing capacity, the selection of appropriate mutual fund and schemes is a tedious task especially for person having non-financially background. Hence, the practitioners and academicians relating to mutual fund are supposed to fill and serve that requirement for healthy progress of the mutual fund industry.



II. Literature Review

Roy, S. & Ghosh, S.K. (2012) evaluated the performance of the open ended gilt mutual fund schemes for the period of 2008-09. They examined the risk adjusted performance, market timing performance, selectivity performance and found that the selected mutual fund schemes were not performed well. Further, performance of the Indian private sector mutual fund companies was better than the public sector. Overall, it was concluded that the performance of selected open ended gilt schemes was not performed satisfactory during the recession period.

Kesavraj, G. (2013) tried to know the investor perception and awareness level towards mutual fund. The author took a sample of two hundred & four respondents to know their investing power & their interest in financial products. It was found that eighty eight percent respondent agreed that mutual fund could provide a high return & less risky. Seventy tree percent respondents were aware about different tax benefits by investing in mutual fund and it was also found that eight percent respondents were satisfied by investing in mutual fund.

Adhav & Chauhan (2015) assessed & compared the performance of mutual fund schemes of selected Indian companies by standard deviation & Sharpe's Ratio. They found that all selected equity mutual funds performed better than their benchmark indices. It was revealed from the study that risk for debt fund was much lower than

that of the equity funds. The author concluded that equity oriented hybrid funds performed better than the other type of hybrid funds and arbitrage fund & conservative debt hybrid funds showed worst performance.

Wadhwa, B.; Kaur, D. & Vashist, A. (2015) studied the factors responsible for the selection of mutual fund as an investment option and also analyzed the impact of various demographic variables on investors attitude towards mutual fund by taking three hundred respondents from Delhi region. One third respondents had given positive response and half of them had neutral response towards mutual fund. The authors found significant association between attitude and demographic features of respondents such as: age, gender, income, & occupation. It was also found that no significant association between education towards mutual fund.

Ayaluru, M.P. (2016) worked to evaluate the performance of ten open ended equity schemes of Reliance Mutual Fund. The study was related to period from Aug 2009 to July 2014. The study highlighted that all the selected funds performed above the selected benchmark return. Further, Jensen measure revealed that all the selected schemes showed positive alpha. According to beta value of ten schemes, only four schemes showed high risk. In this study Reliance Pharm Fund had highest value and Reliance Diversification Power sector had lowest value of Sharpe & Treynor Ratio.

Ratnarajun, P.& Madhav, V.V. (2016) analysed the risk return relationship and market volatility of the selected mutual funds and examined the performance of selected schemes from march 2012 to march 2016 by using Sharpe and Treynor models. The authors investigated the performance of thirty open ended diversified equity schemes. Performance of Reliance Regular Saving Fund Equity, SBI Contra Fund, and HDFC Equity Fund was not found as good. It was also found that the Sharpe's ratio was positive for all the selected schemes. These reviews are few in numbers and nowadays also mutual fund industry is one of popular research area for researchers in finance. Here, the researcher has focused only on topper schemes so that results of these can be produced before existing & potential investors of mutual funds as it is psychological view that investors focus on top schemes.

Objectives of the Study

The present study aims to review & evaluate the performance of the selected mutual fund schemes ranked by CRISIL as topper schemes.

III. Methodology

To examine the mutual fund schemes performance, ten schemes were selected which were ranked first by CRISIL during March 2018. Monthly average NAVs (Net Asset Value) of the selected schemes have been used

in this study for the period from April 2017 to March 2018. In this study the monthly yield on 91 days Treasury bill is used as risk free rate. Following Schemes & their respective benchmark were selected for the study:

Fund Name	Scheme Name	Benchmark
1. HDFC Small Cap Fund	Growth Regular Plan	S&P BSE 200
2. HDFC Small Cap Fund	Growth Direct Plan	S&P BSE 200
3. Invesco India Contra	Growth Direct Plan	S&P BSE 500
4. Principal Emerging Bluechip	Growth Regular Plan	CNX Midcap
5. Principal Emerging Bluechip	Growth Direct Plan	CNX Midcap
6. Principal Growth Fund	Growth Regular Plan	S&P BSE 200
7. Principal Growth Fund	Growth Direct Plan	S&P BSE 200
8. Sundaram Rural India Fund	Growth Regular Plan	S&P BSE 500
9. Sundaram Rural India Fund	Growth Direct Plan	S&P BSE 500
10. Tata Equity P/ E Fund	Growth Regular Plan	S&P BSE Sensex

Sources of Data

The data for this study was mainly collected from secondary sources like journals and various websites such as www.amflindia.com, www.mutualfundsindia.com, www.nseindia.com, www.sebi.gov.in and www.moneycontrol.com etc.

Statistical Tools

For the basic analysis of schemes regarding their returns& risks, mean return, standard deviation & beta (which report nature of fluctuations in unsystematic & systematic manner) were calculated & used to extract their performance. Further, for assessing their performance in more reliable manner Sharpe's, Treynor's & Jensen's measures were also applied as these techniques are considered and recommended for analyzing.

IV. Data Analysis & Result

Table 1: Mean Return, Standard Deviation & Beta of selected Mutual Fund Schemes:

Scheme Name	Mean Return	Standard Deviation	Beta (β)
1. HDFC Small Cap Fund (Growth Regular Plan)	34.52	16.33	0.97

2. HDFC Small Cap Fund (Growth Direct Plan)	36.10	16.34	0.97
3. Invesco India Contra (Growth Direct Plan)	27.0	14.96	1.04
4. Principal Emerging Bluechip (Growth Regular Plan)	17.8	16.75	1.15
5. Principal Emerging Bluechip (Growth Direct Plan)	19.20	16.75	1.15
6. Principal Growth Fund (Growth Regular Plan)	21.20	16.67	1.17
7. Principal Growth Fund(Growth Direct Plan)	22.20	16.68	1.17
8. Sundaram Rural India Fund (Growth Regular Plan)	15.30	15.26	1.02
9. Sundaram Rural India Fund (Growth Direct Plan)	16.20	15.24	1.02
10. Tata Equity P/ E Fund (Growth Regular Plan)	13.60	16.10	1.07

Figure 2: Mean Return, Standard Deviation & Beta of selected Mutual Fund Schemes

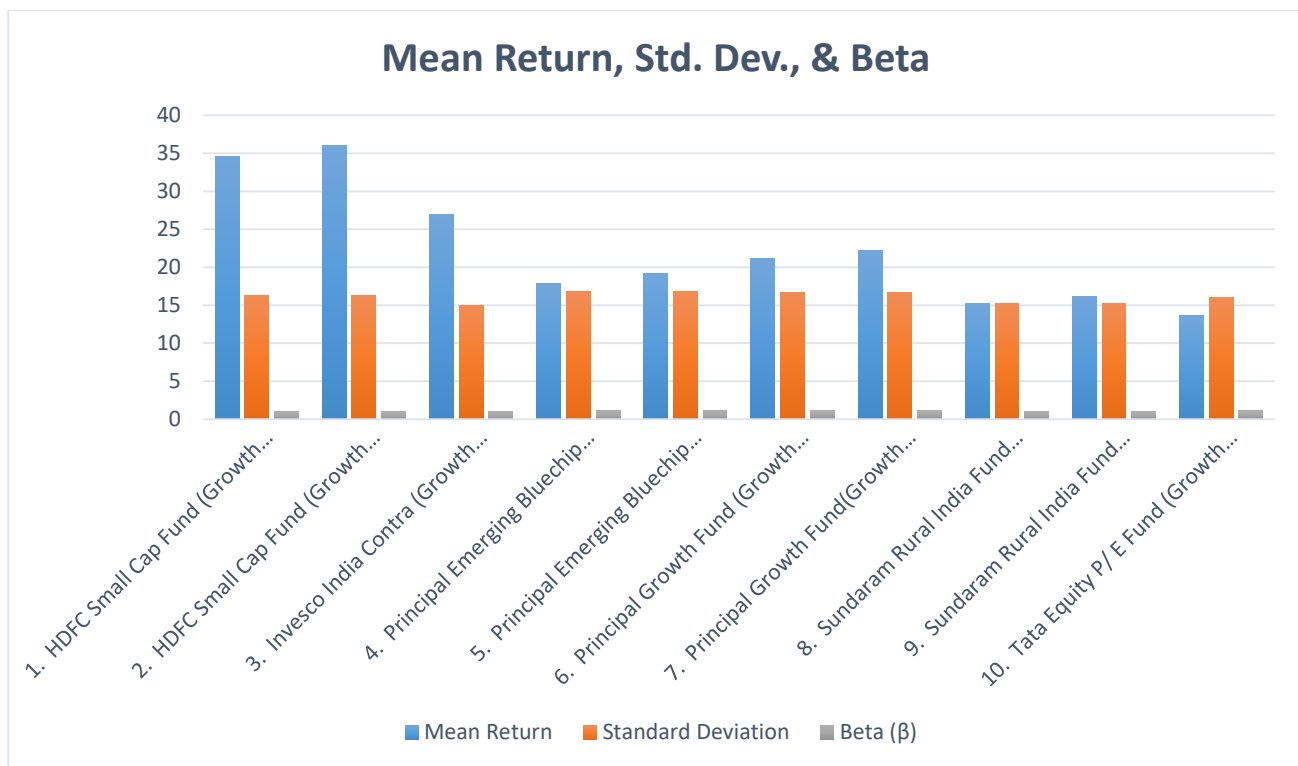


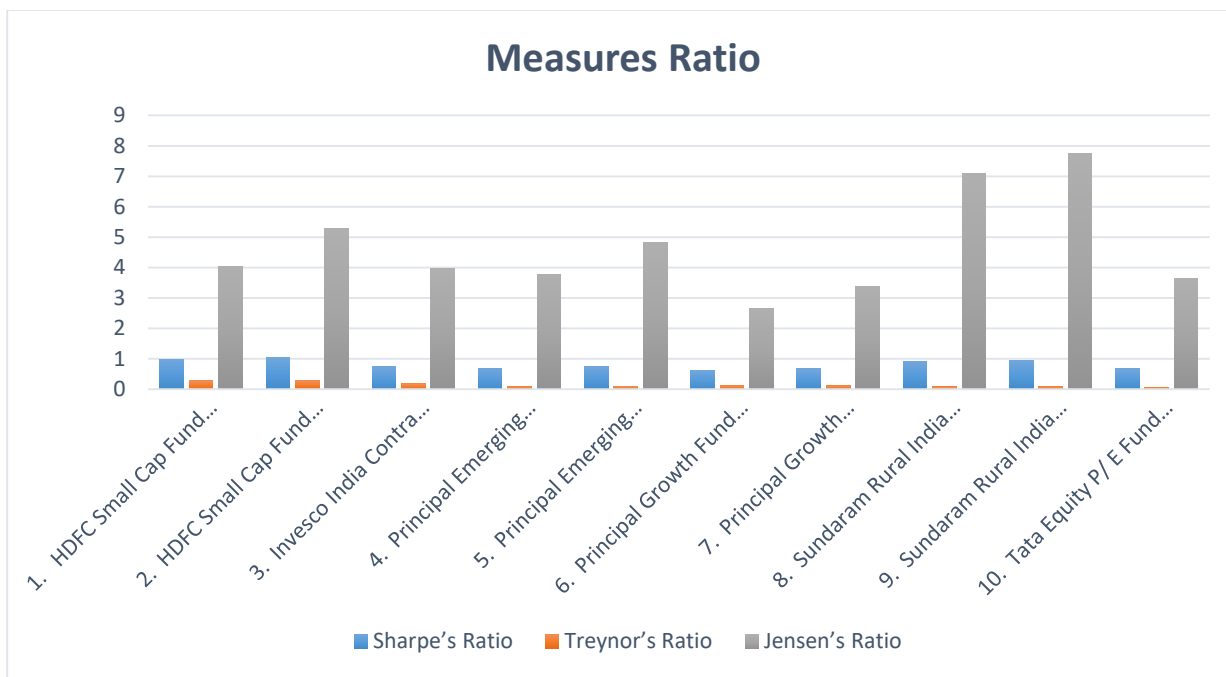
Table 1 shows competency of these schemes to make out a strong case for investment. In this comparative analysis it is observed that HDFC Small Cap Fund (Growth Direct Plan) indicates high return among the selected funds and in comparison to other funds risk & the market risk, it also has low risk. Tata Equity P/E Fund (Growth Regular Pan) has low mean return with high risk. In the context of Beta, it is observed from the table that only two out of ten schemes have beta value less than one which indicates they belong to low risk category. HDFC Small Cap Fund have low beta value than other selected funds but HDFC Small Cap Fund also yielded higher mean return than others selected funds. Invesco India Contra, Principal Emerging Bluechip, Principal Growth Fund, Sundaram Rural India Fund and Tata Equity P/E Fund schemes have their beta more than one which reveals that they belonged to high risk category comparatively. Overall, HDFC Small Cap Fund performance has been best in all terms and Tata Equity P/E fund performance is low with high risk in comparative manner.

Table 2: Results of Sharpe's ratio, Treynor's ratio & Jensen's ratio of selected schemes

Scheme Name	Sharpe's Ratio	Treynor's Ratio	Jensen's Ratio
1. HDFC Small Cap Fund (Growth Regular Plan)	0.99	0.27628866	4.03
2. HDFC Small Cap Fund (Growth Direct Plan)	1.06	0.29257732	5.27

3. Invesco India Contra (Growth Direct Plan)	0.74	0.185384615	3.96
4. Principal Emerging Bluechip (Growth Regular Plan)	0.69	0.087652174	3.76
5. Principal Emerging Bluechip (Growth Direct Plan)	0.75	0.099826087	4.82
6. Principal Growth Fund (Growth Regular Plan)	0.64	0.115213675	2.65
7. Principal Growth Fund(Growth Direct Plan)	0.68	0.123760684	3.38
8. Sundaram Rural India Fund (Growth Regular Plan)	0.92	0.074313725	7.08
9. Sundaram Rural India Fund (Growth Direct Plan)	0.96	0.083137255	7.76
10. Tata Equity P/ E Fund (Growth Regular Plan)	0.68	0.054953271	3.65

Figure 3: Results of Sharpe's ratio, Treynor's ratio & Jensen's ratio of selected schemes



Top performing fund as per Sharpe ratio is HDFC Small Cap Fund (Growth Direct Plan) followed by HDFC Small Cap Fund (Growth Regular Plan), Sundaram Rural India Fund (Growth Direct Plan) & Sundaram Rural India Fund (Growth Regular Plan) respectively. Table 2 and figure 3 reveal that among the selected funds, Principal Growth Fund (Growth Regular Plan) has reported low positive Sharpe ratio than others. In the study, the Sharpe ratio is positive for all schemes which shows that funds are providing returns greater than risk free rate. As per Treynor ratio, it is observed that HDFC Small Cap Fund (Growth Direct Plan) is again at top followed by HDFC Small Cap Fund (Growth Regular Plan) & Invesco India Contra (Growth Direct Plan). Tata Equity P/ E Fund (Growth Regular Plan) has again low Treynor ratio than other selected funds. In Jensen measure reveal that all schemes shoot positive value which indicate superior performance of the schemes and indicate better result on part of their fund manager to forecast security prices on time for taking better investment decision. Among all selected funds higher value of Jensen ratio is found with Sundaram Rural India Fund (Growth Direct Plan) followed by Sundaram Rural India Fund (Growth Regular Plan) & HDFC Small Cap Fund (Growth Direct Plan). Among all selected schemes Principal Growth Fund (Growth Regular Plan) has got lowest value of Jensen's ratio.

V. Conclusion

In India, mutual funds have been getting popularity as investment opportunity. Unlike stocks, it is considered safe and reliable one and continuously increasing its clientele i.e. unit holders. All the selected funds outperformed the market & indicated superior risk adjusted performance. In overall study, it reveals that HDFC Small Cap Fund (Growth Direct Plan) shows better performance than other selected funds in terms of mean

return and risk analysis. Further to awake the people of our country about the framework of mutual funds where there is enough quantum of financial illiterate people, more investigations of this kind especially by academic institutions through research students are the need of time.

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