

Performance of Indian Mutual Fund Schemes

G. Indhumathi, M. Babu, J. Gayathri

Abstract: Risk, diversification, features of investment avenues, and tax benefit are the factors considered by the investors in their decision making. The convenience of investing in small proportions and tax benefits attracts the investors towards mutual fund investments. The studies prove that market timing ability of fund managers drives the mutual fund scheme performance. This assessment of the above factors would help to the investors in their choice of mutual funds. 36 Indian Mutual Funds Schemes were assessed using the Sharpe, Treynor, Jensen's measure from January to June 2019. L&T Liquid Fund –Direct (Growth), L&T Low Duration Fund-Growth and Edelweiss Large Cap Fund - Direct (Growth) performed well.

Keywords: Jensen Ratio, Mutual Funds, Risk and Return, Sharpe and Treynor Ratios

I. INTRODUCTION

The investor's resources were collected by the Asset Management Company for investment in various avenues. The return for the investors depends on the appreciation in Net Asset Value (NAV) of mutual fund. Thus the benefits flowing from fund performance was shared by the investors in proportion to their mutual fund units. The investment in stock, bond, and money market provides diversification benefits to the mutual funds. Diversification reduces market risk compared to individual securities.

II. REVIEW OF LITERATURE

R. Ravikumar (2013) analyzed the equity based funds during and found that the average performers were Reliance and UTI, worst performer was SBI mutual fund. **M.M.Goyal (2015)** found that all the sample equity diversified mutual fund schemes provided higher and better average return than the market. **P. Sathis and K.Sakthi Srinivasan (2016)** used average rate of return, standard deviation, beta, correlation, regression and risk adjusted techniques for analyzing the mutual fund schemes. **Ratish Gupta and Shruti Maheshwari (2017)** suggested the small investors to

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combine large cap and mid cap funds in their portfolio. **O.V.A.M.Sridevi (2018)** compared the performance of balanced mutual fund schemes between mid cap and small cap fund on the basis of return and risk evaluation during 2016 to 2017. The analysis has reported diversified and varied results.

V.Chitra and T.Hemalatha (2018) analyzed performance in comparison to BSE-Sensex and the monthly yield on 91-Day T bills for risk-free rate. From the result, the standard deviation and beta value was also low for UTI Dividend Yield fund. The investor can invest in UTI Dividend Yield fund to get regular income.

III. NEED OF THE STUDY

By bringing in the collected funds, the mutual funds contribute to the development of an economy. The efficient performance of mutual fund would bring in further money. The risk and return of the mutual funds, their performance in comparison to the market, their positioning, their ability to meet the investor expectation level were analysed in this study.

IV. OBJECTIVES OF THE STUDY

The present study aims to evaluate the mutual fund schemes in India using standard performance models like Sharpe, Treynor and Jensen.

V. METHODOLOGY OF THE STUDY

The duration of the study is six months starting from 1st January 2019 to 30th June 2019. The top performing 36 mutual funds schemes in January 2019 were selected. For evaluating the performance of mutual funds, the daily net asset value (NAV) data were collected from AMFI and NSE websites. Risk free return is proxy with 91 days T-Bill rate. NSE Nifty Index has been used as benchmark portfolio.

VI. TOOLS USED FOR ANALYSIS

The performance of mutual fund schemes has been evaluated by using Treynor ratio, Sharpe ratio and Jensen ratio.

A. The Treynor measure

$$T_p = \frac{r_p - r_f}{\beta_p} \quad (1)$$

Where, T_p -Treynor Performance Measure, r_p - portfolio



return, r_f - Risk free rate and β_p -Market risk of r_p .

B. The Sharpe Measure

$$S_p = \frac{\bar{r}_p - r_f}{\sigma_p} \quad (2)$$

Where, S_p -Sharpe performance Measure, r_p - Average return of Portfolio p, r_f - Risk free rate, σ_p -Total risk of r_p

While a high and positive Sharpe Ratio shows a superior risk-adjusted performance of a fund, a low and negative Sharpe Ratio is an indication of unfavorable performance.

C. The Jensen measure

If an asset’s return is even higher than the risk adjusted return, that asset is said to have “positive alpha” or “abnormal returns”. Investors are constantly seeking investments that have higher alpha.

$$\text{Jensen's Alpha} = \text{Portfolio Return} - [\text{Risk Free Rate} + \text{Portfolio Beta} * (\text{Market Return} - \text{Risk Free Rate})]$$

VII. ANALYSIS OF PERFORMANCE OF MUTUAL FUNDS SCHEMES IN INDIA

Table-I presents the results of top performing Indian Mutual Fund Schemes during the months of January to June 2019. From the table it is clear that, L&T Liquid Fund -D(G), L&T Low Duration Fund-G and Edelweiss Large Cap Fund - Direct (G) earned high return according to Sharpe Ratio (0.6537), Treynor ratio (5.3559) and Jensen measure (0.0338) respectively during the study period. It is also found from the table that Franklin Build India Fund-D(G) with respect to Sharpe Ratio and Treynor ratio and L&T Infrastructure (G) under Jensen Ratio showed poor performance than other schemes. All the Sectoral funds selected for this study earned negative returns using all the three ratios. The schemes selected for the study belongs to Short Duration Fund, Gilt Fund (except Edelweiss Government Securities Fund – Regular (G) in Sharpe ratio), Liquid Fund and ETFs (except Kotak Nifty ETF in Treynor ratio) were recorded positive returns in Sharpe Ratio, Treynor ratio and Jensen measure.

The schemes selected under Multi Cap fund, ELSS (Equity Linked Savings Scheme) and Aggressive Hybrid Fund were recorded negative return during the study period under Treynor and Jensen measures and Conservative Hybrid funds (except BNP Paribas Conservative Hybrid Fund-D(G)) under all the three measures. The overall result found that the 36 sample mutual fund schemes provided positive return under Sharpe measures in the study period.

VIII.FINDINGS OF THE STUDY

The following are the major findings of the study.

- From the analysis of top performing Indian Mutual Fund Schemes during the month of January to June 2019, it is observed that L&T Liquid Fund -D(G), L&T Low Duration Fund-G and Edelweiss Large Cap Fund - Direct (G) yielded highest return according to Sharpe Ratio, Treynor ratio and Jensen measure (0.6537, 5.3559 and 0.0338 respectively).
- Franklin Build India Fund-D(G) earned lowest return than all other schemes with respect to Sharpe and Treynor

ratios and L&T Infrastructure (G) recorded negative performance under Jensen’s performance measure during the study period.

- The sample schemes covers under Large Cap Funds (4 schemes), Short Duration Fund (2 schemes), Gilt Fund (2 schemes), Liquid Fund (3 schemes) and ETFs (1 schemes) were recorded positive returns during the study period.
- Sample schemes from Sectoral Fund and Conservative Hybrid Fund recorded negative returns under Sharpe Ratio.
- The study found that 11 sample mutual fund schemes earned positive return and 7 schemes earned negative returns under Sharpe, Treynor and Jensen performance measures during the study period.

IX. SUGGESTIONS OF THE STUDY

- Due weight-age should be given to risk and return in making the choices.
- The regulations in relation to the mutual fund would be the prime concern for the investor’s decision.

X. CONCLUSION

The profitable investments were the outcome of proper selection and continuous appraisal of mutual funds schemes. The results prove that the growth oriented mutual funds have not performed better. The degree of diversification varies widely among the mutual fund schemes. The risk lies with the less diversified portfolio. This shows the poor performance of fund managers in terms of market timing and selectivity ability.

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Table –I: Sharpe ratio, Treynor Ratio and Jensen Measure of Mutual Fund Schemes for January to June 2019

Sl. No.	Mutual Fund Schemes	Sharpe Ratio	Ran k	Treynor Ratio	Ran k	Jensen Ratio	Ran k
Multi Cap Fund							
1	Canara Robeco Equity Diversified Fund - Direct (G)	0.0443	19	-0.0074	16	-0.0012	20
2	Canara Robeco Equity Diversified Fund - Regular (G)	0.0400	20	-0.0105	18	0.0010	19
3	Mirae Asset India Equity Fund-Direct (G)	0.0266	26	-0.0176	19	-0.0196	30
4	Mirae Asset India Equity Fund-Regular (G)	0.0230	28	-0.0223	23	-0.0102	24
Large Cap Fund							
5	Axis Bluechip Fund-D(G)	0.0903	10	0.0261	10	0.0200	2
6	Axis Bluechip Fund (G)	0.0801	11	0.0286	11	0.0245	3
7	Canara Robeco Blue Chip Equity Fund-Direct (G)	0.0729	13	0.0092	12	0.0141	4
8	Canara Robeco Blue Chip Equity Fund-Regular (G)	0.0654	14	0.2351	9	0.0075	13
9	Edelweiss Large Cap Fund - Plan A - Growth	0.0564	16	-0.0092	17	-0.0024	22
10	Edelweiss Large Cap Fund - Direct (G)	0.0613	15	-0.1670	32	0.0338	1
ELSS							
11	Invesco India Tax Plan-Direct (G)	0.0279	23	-0.0186	21	-0.0181	29
12	Invesco India Tax Plan-Growth	0.0279	24	-0.0181	20	-0.0202	31
13	Taurus Tax Shield Fund-Regular (G)	0.0233	27	-0.0233	24	-0.0179	28
14	Taurus Tax Shield Fund-Direct (G)	0.0269	25	-0.0206	22	-0.0154	27
Sectoral Fund							
15	Franklin Build India Fund (G)	-0.0269	33	-0.0685	28	-0.0661	34
16	Franklin Build India Fund-D(G)	-0.0788	36	-0.30961	36	-0.0146	26
17	L&T Infrastructure (G)	-0.0839	35	-0.1093	31	-0.1026	36
18	L&T Infrastructure Fund-D(G)	-0.0787	34	-0.1051	30	-0.0987	35
Aggressive Hybrid Fund							
19	Principal Hybrid Equity Fund-Regular (G)	-0.0090	29	-0.0388	26	-0.0381	33
20	Principal Hybrid Equity Fund-Direct (G)	0.0476	17	-0.0327	25	-0.0254	32
21	Sundaram Equity Hybrid Fund-Regular (G)	0.0467	18	-0.0039	15	0.0015	18
Conservative Hybrid Fund							
22	BNP Paribas Conservative Hybrid Fund-D(G)	0.0387	21	0.0007	13	-0.0017	21
23	LIC MF Debt Hybrid Fund-Regular (G)	-0.0394	32	-0.0834	29	-0.0140	25
24	LIC MF Debt Hybrid Fund-Direct (G)	-0.0196	31	-0.0943	27	-0.0102	23
Short Duration Fund							
25	L&T Low Duration Fund-G	0.3542	7	5.3559	1	0.0062	16
26	Sundaram Short Term Debt Fund - Direct (G)	0.3519	8	3.4729	2	0.0083	12
Gilt Fund							
27	Edelweiss Government Securities Fund - Direct (G)	0.0315	22	0.6633	6	0.0104	10
28	Edelweiss Government Securities Fund - Regular (G)	-0.0117	30	0.5353	7	0.0087	11
29	Reliance Gilt Securities Fund-D(G)	0.0918	9	0.7547	5	0.0072	14
Ultra Short Duration Fund							
30	L&T Ultra Short Term Fund-Bonus	0.5140	4	-5.7664	34	0.0105	9
31	L&T Ultra Short Term Fund (G)	0.5093	5	-6.9628	33	0.0106	8
32	L&T Ultra Short Term Fund-D(G)	0.4941	6	-4.9916	33	0.0120	5
Liquid Fund							
33	Canara Robeco Liquid Fund - Direct (G)	0.6435	3	0.4273	8	0.0106	7
34	L&T Liquid Fund (G)	0.6456	2	2.1814	4	0.0066	15
35	L&T Liquid Fund-D(G)	0.6357	1	2.2842	3	0.0111	6
ETFs							
36	Kotak Nifty ETF	0.0786	12	-0.0003	14	0.0056	17

Source: Secondary Data

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