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 attract 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 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

\[ T_p = \frac{r_p - r_f}{\beta_p} \]  

Where, \( T_p \) -Treynor Performance Measure, \( r_p \) - portfolio return, \( r_f \) - risk free rate, \( \beta_p \) - standard deviation.
return, \( r_p \) - Risk free rate and \( \beta_p \) - Market risk of \( r_p \).

**B. The Sharpe Measure**

\[
S_p = \frac{\bar{r}_p - r_f}{\sigma_p}
\]  

(2)

Where, \( S_p \) - Sharpe performance Measure, \( \bar{r}_p \) - Average return of Portfolio \( p \), \( r_f \) - Risk free rate, \( \sigma_p \) - 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.

\[ \text{Jensen’s Alpha} = \text{Portfolio Return} - \left[ \text{Risk Free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk Free Rate}) \right] \]

**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.

**REFERENCES**

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

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Scheme</th>
<th>Sharpe Ratio 1</th>
<th>Treynor Ratio 1</th>
<th>Jensen Measure 1</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Large Cap Fund</td>
<td>0.0485</td>
<td>0.0274</td>
<td>-0.0100</td>
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<tr>
<td>2</td>
<td>Mid Cap Fund</td>
<td>0.0467</td>
<td>0.0233</td>
<td>0.0023</td>
</tr>
<tr>
<td>3</td>
<td>Small Cap Fund</td>
<td>0.0460</td>
<td>0.0222</td>
<td>0.0042</td>
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<tr>
<td>4</td>
<td>Ultra Small Cap Fund</td>
<td>0.0430</td>
<td>0.0200</td>
<td>0.0053</td>
</tr>
</tbody>
</table>

Source: Secondary Data

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