

Performance Evaluation of Selected Private Sector Mutual Fund Schemes in India

Bhawna Kadyan¹ and Sushil Kumar²

^{1,2}Department of Commerce Kurukshetra University, Kurukshetra
E-mail: ¹bhawnakadyan92@gmail.com, ²kumarsushil587@gmail.com

Abstract—In India, Capital Market provides various investment avenues to the investors, to help them to invest in various industries and to ensure profitable return. Among various financial products, mutual fund ensures the minimum risk and maximum return to the investors. Growth and development of various mutual fund products in Indian capital market has proved to be one of the most catalytic instruments in generating momentous investment growth in capital market. In this context it is important to closely monitor and evaluate the mutual funds. This study is undertaken to analyze the financial performance of different types of schemes of private sector mutual fund over last 5 years ranging from 1 April 2011 to 31 March 2016. Various statistical parameters such as average daily returns, standard deviation, Sharpe ratio and Treynor ratio have been used to measure the performance of the selected schemes. S&P CNX NIFTY has been used as benchmark to compare the performance of private sector mutual funds in India. The results indicate that all the schemes of private sector mutual funds offered positive returns during the study period except three schemes i.e. Kotak balanced plan-dividend, Reliance income fund-annual dividend and HDFC income fund-regular-dividend. All schemes have high standard deviation value and Birla sun life advantage fund-growth scheme has highest standard deviation of 5.94 percent indicating more volatility in returns. Sharpe and Treynor index is positive for majority of the schemes except few schemes indicating that the private sector mutual fund schemes provide returns greater than risk free return.

Keywords: Mutual fund products, Risk, Return, Sharpe ratio, Treynor ratio.

1. INTRODUCTION

The reforms process has sent signals to a wave of changes in saving and investment behavior adding a new dimension to the growth of financial sector. With the advancement of economy and capital market in India, the size of investors has also increased. In fact, small investors in India have regularly invested in public issues to finance big and small projects of known promoters. They benefitted from such investments in past. As the stock market crumbled later on & new issues flopped, small investors again began looking for a good opportunity. In this situation, mutual funds proved that they are able to deliver the good results. Advent of mutual funds is a new feather in the Indian capital market. Small investors face many problems in the share market due to lack of

professional advice and lack of information. Mutual funds have come as much needed help to these investors.

A Mutual Fund is an investment vehicle that is made up of a pool of funds collected from many investors for the purpose of investing in securities with the aim of attractive yields.

The Unit Trust of India was the first mutual fund set up in India in the year 1963. In the early 1990s, the government allowed public sector banks and institutions to set up mutual funds. To protect the interests of the investors, SEBI first notified regulations for mutual funds in 1996. At a later stage mutual funds sponsored by private sector entities were allowed to enter the market.

2. OBJECTIVE OF THE STUDY

- To identify the return and measure the risk of selected private sector mutual fund schemes & presents a comparative view of fund return with benchmark return.
- To examine funds return by using portfolio evaluation models namely Sharpe & Treynor

3. LITERATURE REVIEW

McDonald (1974) conducted a research to examine the performance of American Mutual Funds in terms of risk & return for the study period 1960 to 1969 for the sample size of 123 funds. Analysis was done by using Treynor and Sharpe indexes. The results showed that 67 funds perform better than the stock market average in case of Treynor Index while as per Sharpe Index only 39 mutual funds showed higher performance than the stock market average. Macdonald concluded that average return of mutual funds increased with the increase in level of risk. **Henriksson (1984)** analyzed the market timing performance of mutual funds by taking a sample of 116 open ended mutual funds schemes from February 1968 to June 1980. Parametric and non parametric techniques were applied to evaluate the performance of open ended mutual funds using monthly data. The returns included all dividends paid by the fund and were net of all management expenses. Both the parametric and non parametric tests

showed that mutual fund managers were unable to follow a successful investment strategy. **Cumby and Jack (1990)** compared the performance of internationally diversified mutual funds with international equity index and Morgan Stanley Index for the United States. The study period ranged from 1982 to 1988. A sample of 15 U.S based internationally diversified mutual funds was taken for analysis. The performance was then compared with the help of Jensen (1968) measure and positive period weighing measure. The results concluded that the performance of funds individually or as a whole was not higher than the performance of international equity index. **Saper & Narayan (2003)** examined the performance of Indian mutual funds in bear market through relative performance index, risk-return analysis, Sharpe ratio, Treynor ratio, Jensen measure and Fama measure. A sample of 269 open ended schemes out of total schemes of 433 was taken for analysis. The results of performance measures suggested that most of mutual fund schemes in the sample were able to satisfy the investors' expectations by giving excess returns over expected returns based on both premium for system risk & total risk. **Sondhi and Jain (2010)** examined the market risk and investment performance of equity mutual funds in India on a sample of 36 equity fund schemes for 3 years. The study also examined the classified performance of open ended or close ended categories; size of fund and the ownership pattern significantly affect the risk-adjusted investment performance of equity funds. The results of the study confirmed the empirical evidence produced by Fama (1992) that high beta funds may not necessarily produce high returns. The study revealed that the performance of mutual funds during the study period was affected by category, size and ownership. **Ramanujam V & Bhuvneshwari A (2015)** analyzed the growth of Mutual Funds for ten years i.e. march 2004 to march 2014 by the following parameters; growth of assets under management, sector wise mutual fund sale, sector wise mutual fund redemption & scheme wise resource mobilization by mutual funds. The analysis revealed that the asset under management of all sectors, mutual fund sales & redemption and scheme wise resource mobilization has been increased from the year 2004 to 2014. The AUM of Indian mutual fund industry on December 2014 was Rs. 11.11 lakh crores as against Rs. 8.25 lakh cores in last year.

4. RESEARCH METHODOLOGY

To examine the performance of mutual fund schemes, 10 schemes of private sector mutual funds have been selected on the basis of market share. Monthly time series data of selected schemes has been used in the study for the period ranging from Apr. 2011 to Mar. 2016. Data regarding NAVs of Mutual Funds have been taken from the website www.amfi.com. CNX NIFTY has taken as benchmark index to measure the comparative performance of mutual fund schemes. The selection of CNX NIFTY is based on the fact that flow of MF flows has been more in NSE as compared to BSE during the

study period. The data on CNX NIFTY has been collected from the website (www.nseindia.com). Interest rate on fixed deposits has been taken as risk free rate of return during the study period which is 7% per annum. To measure the performance of selected schemes, the following performance measures have been used like return, Standard deviation and performance evaluation models like Sharpe and Treynor ratio.

5. RESULTS & ANALYSIS

The table below presents the performance of selected private sector mutual fund schemes. It also depicts the private sector mutual fund scheme's return in comparison to Nifty return.

Table 1: Return on Private Sector Mutual Fund schemes
(Figures in % age)

Scheme	Year	2011-12	2012-13	2013-14	2014-15	2015-16	Avg
ICICI Prudential FMCG fund-G		2.44	1.81	1.16	2.62	-0.68	1.87
ICICI Prudential bal-G		0.42	0.80	1.47	2.47	-0.49	1.24
Kotak 50-regular-G		-0.41	0.75	1.06	2.63	-0.74	1.07
Kotak midcap fund-R-D		0.15	0.21	-2.86	3.91	-0.60	0.89
Reliance growth fund-G		-0.27	-0.06	0.95	3.44	-1.22	1.19
Reliance income fund-D		-0.17	-0.07	-0.02	-0.03	0.05	-0.02
HDFC top 200-G		-0.32	0.38	1.38	2.20	-1.21	1.21
HDFC income fund-R-D		-0.04	0.07	-0.62	-0.42	0.36	-0.07
Birla sun life adv-G		-0.73	0.21	1.92	3.20	-0.75	1.26
Birla sun life MIP- R-D		-0.15	-0.09	-0.14	0.51	-0.21	0.03
NSE Index Return		-0.76	0.91	1.30	2.32	-1.05	1.06

Source: Compiled from NSE Daily returns

The table reveals that out of 10 schemes, only 2 schemes i.e. Reliance Income Fund-Annual Dividend and HDFC Income Fund-Regular-Dividend provide negative returns of -0.02 percent and -0.07 percent. ICICI Prudential FMCG Fund-Growth scheme offered the highest return of 1.87 percent over 5 years followed by Birla sun Life Advantage Fund-Growth with 1.26 percent, ICICI Prudential Balanced –Growth with 1.24 percent .Kotak Mid Cap Fund-Regular-Dividend and Birla Sun life MIP-regular-dividend schemes are the low performing schemes in terms of returns .

The table below presents the standard deviation of the schemes

Table 2: Risk (σ) on Private Sector Mutual Fund Schemes

Year Scheme	2011-12	2012-13	2013-14	2014-15	2015-16	Avg
ICICI Prudential FMCG fund-G	7.47	3.94	4.3	2.34	3.6	4.81
ICICI Prudential bal-G	3.92	3.15	3.3	2.79	3.6	3.58
Kotak 50-regular-G	4.24	4.35	5.2	4.08	4.5	4.37
Kotak midcap fund-R-D	6.25	5.48	13	4.16	5.9	7.38
Reliance growth fund-G	6.60	5.49	4.7	4.89	5.2	5.90
Reliance income fund-D	2.58	3.09	1.9	4.36	0.9	2.15
HDFC top 200-G	6.46	5.45	5.8	5.17	5.5	4.13
HDFC income fund-R-D	1.17	1.19	2.3	3.04	1.2	1.57
Birla sun life adv-G	5.69	5.24	4.9	5.12	4.9	5.94
Birla sun life MIP- R-D	0.98	0.98	1.5	0.81	1.1	1.06

Source: calculated data

The above table shows that Kotak midcap fund-R-D & Birla sun life advantage fund-G are more risky schemes than others as these have the highest standard deviation of 7.38 percent and 5.94 percent. HDFC income fund-R-D and Birla sun life MIP- R-D schemes have minimum deviations in the returns.

The table 3 presents the Sharpe measure of selected schemes

Table 3: Private Sector Mutual Fund Schemes: Sharpe Index

Year Scheme	2011-12	2012-13	2013-14	2014-15	2015-16	Avg
ICICI Prudential FMCG fund-G	0.32	0.44	0.25	1.09	-0.21	0.40
ICICI Prudential bal-G	0.09	0.23	0.44	0.86	-0.16	0.33
Kotak 50-regular-G	-0.11	0.16	0.19	0.63	-0.18	0.18
Kotak midcap fund-R-D	0.01	0.03	-0.21	0.92	-0.11	0.16
Reliance growth fund-G	-0.05	-0.02	0.19	0.69	-0.25	0.16

Reliance income fund-D	-0.09	-0.05	-0.05	-0.02	-0.02	-0.04
HDFC top 200-G	-0.06	0.06	0.23	0.41	-0.21	0.17
HDFC income fund-R-D	-0.09	0.00	-0.29	-0.16	0.24	-0.04
Birla sun life adv-G	-0.14	0.03	0.37	0.61	-0.17	0.16
Birla sun life MIP- R-D	-0.22	-0.16	-0.14	0.54	-0.26	-0.02

Source: Calculated data

The above table shows that out of 10 schemes , 3 schemes i.e. Reliance income fund-dividend, HDFC income fund-R-D Birla sun life MIP- R-D have negative Sharpe value of -0.07 , -0.04 and -0.02. It means these schemes do not provide returns equal to risk free return. An ICICI Prudential FMCG Fund-Growth scheme has highest Sharpe value of 0.40, followed by ICICI Prudential balanced-growth with 0.33; all other schemes have positive Sharpe value.

The table below presents the Treynor measure of selected schemes

Table 4: Private Sector Mutual Fund Schemes: Treynor Index

Year Scheme	2011-12	2012-13	2013-14	2014-15	2015-16	Avg
ICICI Prudential FMCG fund-G	3.59	4.35	1.14	9.11	-0.88	14.19
ICICI Prudential bal-G	0.59	1.06	2.55	3.53	-0.73	2.31
Kotak 50-regular-G	-1.02	0.82	1.32	3.41	-0.88	1.38
Kotak midcap fund-R-D	0.09	0.12	12.74	3.37	-0.55	2.90
Reliance growth fund-G	-0.40	-0.12	1.57	2.96	-1.24	1.21
Reliance income fund-D	-12.00	-0.38	-0.43	-0.19	0.29	-1.70
HDFC top 200-G	-0.40	0.29	1.54	1.92	-1.05	1.29
HDFC income fund-R-D	0.03	-0.14	0.25	-0.02	0.12	0.01
Birla sun life adv-G	-1.23	0.13	2.47	2.59	-0.90	1.05
Birla sun life MIP- R-D	-2.00	-0.89	-1.17	3.38	-1.12	2.34

Source: Calculated data

The above table shows that out of 10 schemes only 1 scheme i.e. Reliance income fund-dividend has negative Treynor value of -1.70. It means it do not provide returns equal to risk free

return. ICICI Prudential FMCG Fund-Growth schemes has highest Treynor value of 14.19, followed by Kotak midcap fund-regular-dividend with 2.90, Birla sun life MIP- regular-dividend with 2.34, ICICI Prudential balanced-growth with 2.31.

6. CONCLUSION

Overall, all selected private sector mutual fund schemes have positive returns during the study period except 3 schemes i.e. Kotak Balanced Plan-Dividend, Reliance Income Fund-Annual Dividend and HDFC Income Fund-Regular-Dividend as these schemes provide negative returns of -0.21 percent, -0.02 percent and -0.07 percent. ICICI Prudential FMCG Fund-Growth scheme and Birla Sun Life Balanced 95-Growth scheme have performed well as compared to benchmark index return. Birla sun life advantage -g has highest risk in comparison to other schemes. ICICI Prudential FMCG Fund-Growth scheme has the highest Sharpe as well as Treynor value indicating that this scheme provides returns greater than risk free return. The above performance ratios are very much helpful for the evaluator to assess the fund's performance.

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