

An Empirical Study of Performance Evaluation of Selected ELSS Mutual Fund Schemes



Commerce

KEYWORDS : Equity linked savings scheme, Sharpe ratio, Treynor ratio, Jensen's Alpha measure.

J. Lilly

Assistant Professor, Department of Commerce and Computer Applications, PSGR Krishnammal College for Women (Autonomous), Coimbatore – 641 004

Dr. D.Anusuya

Associate Professor, Department of Commerce, PSG College of Arts and Science Coimbatore – 641 014

ABSTRACT

ELSS is a dedicated mutual fund scheme that allows investors to save tax. ELSS falls under section 80C, one can claim up to Rs. 1, 00,000 from his/her investment as a deduction from his/her gross total income. It also provides an opportunity for long term capital appreciation. Since it is an equity fund, the returns from this scheme are market determined. In this study performance of 49 open-ended tax saving ELSS schemes were examined for the period between April 2008 to March 2013. Sharpe ratio, Treynor ratio, Sortion ratio and Jensen's Alpha are used in performance evaluation of funds. It was found that LIC Nomura MF growth and dividend schemes has outperformed the market and are risk borne when compared to other schemes.

INTRODUCTION

Mutual Fund is an investment vehicle which is made up of pool of funds collected from many investors for the purpose of investing in securities such as stocks, bonds, money market instruments and similar assets. Mutual funds are operated by money managers, who invest the fund's capital and attempt to produce capital gains and income for the fund's investors. The mutual fund industry of India is continuously evolving. Along the way, several industry bodies are also investing towards investor education. Each mutual fund scheme has its own objective that determines its assets allocation and investment strategy.

The equity linked saving schemes is basically a scheme where in the amount invested in the units of the funds is invested in the equity shares of the companies. ELSS is a dedicated mutual fund scheme that allows investors to save tax. ELSS falls under section 80C, one can claim up to Rs. 1, 00,000 from his/her investment as a deduction from his/her gross total income. It also provides an opportunity for long term capital appreciation. An ELSS fund manager invests in a diversified portfolio, predominantly consisting of equity and equity related instruments that carry high-risk and have the potential to deliver high-returns. Since it is an equity fund, the returns from this scheme are market determined.

Objectives of the Study

- To examine the concept of Tax Saving ELSS in Indian stock market.
- To evaluate the performance of selected Tax Saving ELSS Schemes.
- To examine the relative performance among Tax saving ELSS by applying Sharpe ratio, Treynor ratio, Sortino ratio and Jensen's Alpha measure.

Methodology

The study is mainly based on secondary data which was collected from the data sources AMFI reports and its website. The study covers five year period of 1st April 2008 to 31st March 2013. The ELSS schemes were selected based on its availability of data throughout the study period. Therefore a sample of 49 open-ended tax saving ELSS schemes were selected from different mutual fund companies. The study employed the post office saving deposit interest rate of as the proxy risk-free rate of return. BSE 100 sensx is taken as a proxy for market index. This is because the BSE Sensex is broadly used by the investors to judge the performance of the portfolios. In this paper, Sharpe ratio, Treynor ratio, Sortion ratio and Jensen's Alpha are used in performance evaluation of funds.

Performance Evaluation Of Mutual Funds

Table 1- Average Return and Standard Deviation

SNo	Name of the Scheme	Avg Return	SD
1	Baroda pioneer ELSS96- Plan A-Dividend Payout Option	0.131	7.05
2	Birla SunLife Tax Plan Dividend Option	-0.171	6.36
3	Birla Sun Life Relief 96 - Dividend Option	-0.007	7.68
4	Birla SunLife Tax Plan Growth Option	0.484	6.50
5	Birla Sun Life Relief 96 - Growth Option	0.495	7.59
6	Canara Robeco TaxSaver- Regular Plan-Dividend	0.418	6.84
7	DWS Tax Saving Fund- Dividend	0.175	6.45
8	DWS TaxSaving Fund- Growth	0.174	6.45
9	DSP BlackRock Tax Saver Fund - Regular Plan - Dividend	0.461	6.73
10	DSP BlackRock Tax Saver Fund - Regular Plan - Growth	0.727	6.52
11	Escorts Tax Plan- Dividend	-0.042	14.13
12	Escorts Tax Plan- Growth	-0.542	8.03
13	Franklin India TaxShield- Dividend	0.024	6.44
14	Franklin India TaxShield- Growth	0.907	5.94
15	HDFCLong Term Advantage Fund - Dividend Option	-0.179	7.13
16	HDFC Long Term Advantage Fund - Growth Option	0.873	6.54
17	HDFC TaxSaver- Dividend plan	0.000	6.79
18	HDFC Tax saver- Growth Plan	0.900	6.49
19	HSBC TaxSaver Equity Fund- Dividend	0.659	5.84
20	HSBC TaxSaver Equity Fund- Growth	0.795	5.80
21	ICI Prudential Tax Plan - Regular Plan - Dividend	0.013	7.32
22	ICI Prudential Tax Plan - Regular Plan - Growth	0.958	7.06
23	Ing TaxSaving Fund- Bonus	0.485	7.45
24	ING TaxSaving Fund-Dividend	0.485	7.45
25	ING TaxSaving Fund- Growth	0.485	7.45
26	JM Tax Gain Fund- Dividend Option	-0.454	8.23
27	JM Tax Gain Fund- Growth Option	-0.454	8.23
28	Kotak Tax Saver- Scheme- Dividend	0.424	6.88
29	Kotak Tax Saver- Scheme- Growth	0.424	6.88

30	LIC Nomura MF Taxplan- Dividend	1.541	19.43
31	LIC Nomura MF Tax Plan- Growth	1.541	19.43
32	Principal Personal Tax Saver Fund	0.349	7.02
33	Principal Tax Savings Fund	0.110	6.72
34	Reliance Tax Saver (ELSS) Fund- Dividend Plan- Dividend Option	0.245	6.62
35	Reliance Tax Saver (ELSS) Fund- Growth Plan- Growth Option	0.908	6.41
36	Religare Invesco Tax Plan- Dividend	0.423	6.23
37	Religare Invesco Tax Plan- Growth	0.902	5.94
38	Sahara Tax Gain- Dividend	0.001	6.86
41	Sahara Tax Gain- Growth	0.814	6.50
42	SBI Magnum Tax Gain Scheme 1993- Regular Plan- Dividend	-0.210	6.24
43	SBI Magnum Tax Gain Scheme 1993- Regular Plan- Growth	0.541	6.42
44	Sundaram Tax Saver OE- Dividend	0.479	14.35
45	Sundaram Tax saver OE- App	1.181	14.03

46	TATA Tax Saving Fund Plan A	0.114	6.14
47	Taurus Tax Shield- Growth	0.786	7.03
48	UTI - ETSP- Growth Option	0.418	5.80
49	UTI - ETSP- Income Option	0.156	5.88

Table 1 depicts the performance of selected tax saving ELSS schemes average return and Standard deviation for a period of 1st April 2008 to 31st March 2013. The average return ranges between -0.542 to 1.541. The highest average return of 1.541 is earned by LIC Nomura MF Taxplan- Dividend and growth option schemes which is followed by Sundaram Tax saver OE- App with 1.181 and then by ICICI Prudential Tax Plan - Regular Plan - Growth with 0.958. The standard deviation of selected tax saving ELSS schemes ranges between 5.80 to 19.43. Highest standard deviation of 19.43 is from LIC Nomura MF Taxplan- Dividend and growth option schemes which is followed by Sundaram Tax Saver OE- Dividend with 14.35 and then by Escorts Tax Plan- Dividend with 14.13. Therefore during the study period LIC Nomura MF Taxplan- Dividend and growth schemes has performed well in the market when compared to other tax saving ELSS schemes.

Table 2- Sharpe ratio, treynor ratio, Sortino Ratio & Jensen's Alpha

SNo	Name of the Scheme	Sharpe ratio	Treynor ratio	Jensen's Alpha	Sortino Ratio
1	Baroda pioneer ELSS96- Plan A- Dividend Payout Option	-0.081	-0.564	-0.360	-0.108
2	Birla SunLife Tax Plan Dividend Option	-0.137	-1.019	-0.694	-0.179
3	Birla Sun Life Relief 96 - Dividend Option	-0.092	-0.650	-0.481	-0.127
4	Birla SunLife Tax Plan Growth Option	-0.033	-0.232	-0.023	-0.047
5	Birla Sun Life Relief 96 - Growth Option	-0.027	-0.187	0.022	-0.039
6	Canara Robeco TaxSaver- Regular Plan- Dividend	-0.041	-0.299	-0.086	-0.063
7	DWS Tax Saving Fund- Dividend	-0.081	-0.574	-0.335	-0.104
8	DWS Tax Saving Fund- Growth	-0.081	-0.574	-0.335	-0.104
9	DSP BlackRock Tax Saver Fund - Regular Plan - Dividend	-0.036	-0.255	-0.044	-0.049
10	DSP BlackRock Tax Saver Fund - Regular Plan - Growth	0.004	0.028	0.221	0.006
11	Escorts Tax Plan- Dividend	-0.053	-1.006	-0.589	-0.089
12	Escorts Tax Plan- Growth	-0.155	-1.362	-1.052	-0.212
13	Franklin India TaxShield- Dividend	-0.105	-0.773	-0.494	-0.140
14	Franklin India TaxShield- Growth	0.035	0.243	0.385	0.052
15	HDFC Long Term Advantage Fund - Dividend Option	-0.123	-0.934	-0.684	-0.160
16	HDFC Long Term Advantage Fund - Growth Option	0.026	0.186	0.367	0.039
17	HDFC TaxSaver- Dividend plan	-0.103	-0.801	-0.519	-0.138
18	HDFC TaxSaver- Growth Plan	0.031	0.219	0.389	0.046
19	HSBC TaxSaver Equity Fund- Dividend	-0.007	-0.049	0.130	-0.010
20	HSBC TaxSaver Equity Fund- Growth	0.016	0.115	0.267	0.024
21	ICICI Prudential Tax Plan - Regular Plan - Dividend	-0.094	-0.689	-0.480	-0.124
22	ICICI Prudential Tax Plan - Regular Plan - Growth	0.036	0.257	0.466	0.053
23	Ing Tax Saving Fund- Bonus	-0.029	-0.202	0.006	-0.039
24	ING Tax Saving Fund- Dividend	-0.029	-0.202	0.006	-0.039
25	ING Tax Saving Fund- Growth	-0.029	-0.202	0.006	-0.039
26	JM Tax Gain Fund- Dividend Option	-0.140	-1.008	-0.916	-0.178
27	JM Tax Gain Fund- Growth Option	-0.140	-1.008	-0.916	-0.178
28	Kotak Tax Saver- Scheme- Dividend	-0.040	-0.279	-0.071	-0.055

29	Kotak Tax Saver- Scheme- Growth	-0.040	-0.279	-0.071	-0.055
30	LIC Nomura MF Taxplan- Dividend	0.043	1.290	0.977	0.094
31	LIC Nomura MF Tax Plan- Growth	0.043	1.290	0.977	0.094
32	Principal Personal Tax Saver Fund	-0.050	-0.349	-0.142	-0.067
33	Principal Tax Savings Fund	-0.088	-0.625	-0.394	-0.111
34	Reliance Tax Saver (ELSS) Fund- Dividend Plan-Dividend Option	-0.069	-0.523	-0.274	-0.098
35	Reliance Tax Saver (ELSS) Fund- Growth Plan- GrowthOption	0.032	0.236	0.391	0.049
36	Religare Invesco Tax Plan- Dividend	-0.044	-0.329	-0.102	-0.059
37	Religare InvescoTax Plan- Growth	0.034	0.243	0.375	0.049
38	SaharaTax Gain-Dividend	-0.102	-0.813	-0.521	-0.145
41	SaharaTax Gain-Growth	0.018	0.125	0.304	0.028
42	SBI Magnum Tax Gain Scheme 1993- Regular Plan- Dividend	-0.146	-1.055	-0.731	-0.190
43	SBI Magnum Tax Gain Scheme 1993- Regular Plan- Growth	-0.025	-0.172	0.033	-0.035
44	Sundaram Tax Saver OE- Dividend	-0.015	-0.311	-0.074	-0.035
45	Sundaram Tax saver OE- App	0.034	0.692	0.626	0.087
46	TATA Tax Saving Fund Plan A	-0.096	-0.683	-0.408	-0.128
47	Taurus Tax Shield- Growth	0.012	0.086	0.293	0.018
48	UTI - ETSP-Growth Option	-0.049	-0.339	-0.109	-0.065
49	UTI - ETSP-Income Option	-0.092	-0.653	-0.371	-0.121

Table 2 represents the sharpe ratio, Treynor ratio, Sortino ratio and Jensen's Alpha for the selected tax saving ELSS schemes.

- From Table 2 it is clear that sharpe ratio ranges between -0.155 to 0.043. The highest sharpe measure is obtained by LIC Nomura MF Tax Plan- Growth and Dividend schemes and lowest sharpe measure is obtained by Escorts Tax Plan-Growth.
- The higher the treynor ratio, the better the compensation for the risk borne. Treynor ratio ranges between -1.362 to 1.290. Highest treynor ratio of 1.290 is earned by LIC Nomura MF Tax plan- Dividend and growth schemes. Therefore LIC Nomura MF Tax plan has better compensation for the risk borne when compared to other schemes.
- LIC Nomura MF Tax plan- Dividend and growth schemes seems to be a good plan, it has given highest alpha measure of 0.977 with the comparison of all other tax saving ELSS mutual fund schemes during the period of 2008-09 to 2012-13.
- Sortino ratio ranges between -0.212 to 0.094. Highest sortino ratio is acquired by LIC Nomura MF Tax plan- Dividend and growth schemes which indicates that these schemes has low risk of large losses when compared to other schemes.

CONCLUSION

In this study performance of 49 open-ended tax saving ELSS schemes were examined for the period between April 2008 to March 2013. Out of the 49 schemes selected for the study, LIC Nomura MF growth and dividend schemes has the highest return. The performance of the selected schemes was evaluated using Sharpe ratio, Treynor ratio, Sortino ratio and Jensen's Alpha Measure. It was concluded that LIC Nomura MF growth and dividend schemes has outperformed the market and are risk borne when compared to other schemes.

REFERENCE

- Conrad S.Ciccotello and Terry Grant.C, "Information pricing: The Evidence from equity mutual funds", The Financial Review, Vol 31, No:2, May 1996, pp 365-380. | • Kalpesh P.Prajapati and Mahesh K.Patel, "Comparative study on performance evaluation of mutual fund schemes of Indian companies", Researchers World, Vol III, Issue 3(3), July 2012, pp 47-59. | • Mark Grinblatt and Sheridan Titman, "Mutual fund performance: An analysis of quarterly portfolio holdings", Journal of Business, Vol 62, No:3, 1989, pp 393-416. | • Meenakshi Garg and S.L.Gupta "An Emprical Study of Performance Evaluation of Selected Equity Linked Saving Schemes (ELSS) of India", International Journal of Research in IT & Management, Volume 4, Issue 1, Jan 2014, pp 32-48. | • Mohammed Zaheeruddin, Pinniti Sivakumar, Srinivas Reddy.K, "Perormance evaluation of mutual funds in India with special reference to selected financial intermediaries", IOSR Journal of Business and Management, Vol 7, Issue 2, Jan-Feb 2013, pp 34-40. | • Navdeep Aggarwal and Mohit Gupta, "Performance of mutual funds in India: An Emprical Study", The ICAFI Journal of Applied Finance, Vol 13, No:9, September 2009, pp 15-16. |