



Performance Evaluation of Income Mutual Funds and Tax Planning Mutual Funds in India: an Empirical Investigation

KEYWORDS

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ABSTRACT The year 2014, is going to be an important year considering all the avenues of investments. After the introduction of new Government in India, the sentiment of potential and existing investor is going to change significantly. Nevertheless, investment in mutual funds is still a key segment for any kind investors. During the last few years, the mutual funds in India, has contributed significantly for the growth of Indian capital markets. For this purpose the researcher was intended to measure the performance of various schemes of mutual fund in India. So with the intention to prove efficiency of various schemes of mutual funds, the researcher has undertaken the Income Mutual Funds and Tax Planning Mutual Funds to ensure small investors and enable them to have clear insights about the performance of mutual funds and its sensitivity for stock markets.

OBJECTIVES:

1. To evaluate the performance of Income and Tax Planning Mutual Funds
2. To judge the volatility of NAVs of Income and Tax Planning Mutual Funds, considering its quarter performance.
3. To compare the volatilities of NAVs within the same category.
4. To judge the performance using some key performance measurement tools.

RESEARCH METHODOLOGY:

Research Period: The researcher has undertaken period of three year i.e. from 2011 to 2013.

Base for Data Collection:

Top star rated schemes show high quality schemes which are assigned 5 stars by Value Research, based on different qualitative and quantitative parameters. **5 stars rated** schemes are considered as the best schemes from historical risk return point of view.

Top 10% of the funds obtained using Value Research Risk – adjusting Rating methodology.

Selected Sectors of Mutual Funds:

The researcher has taken only sectors i.e. **Income and Tax-Planning Mutual Funds** which is consists of 3 mutual funds schemes respectively.

Criteria for Funds' Rating:

For equity and hybrid funds, the Fund Ratings for the two time periods (3 and 5 years) are combined to give a single assessment of each fund's risk rating vis-à-vis other funds in each fund category. For debt funds, the Fund Ratings are based on 18-month weekly risk-adjusted performance, relative to the other funds in category.

Source and Nature of Data Collection:

The researcher has collected data from Value Research Online Ltd. Website which is one of leading institute for mutual fund analysis and nature of data collection is secondary as it is being used researcher from the website of Value Research Online Ltd.

Tools and Techniques for Data Analysis:

Mean: Average return generated by the fund during a specified period of time.

Standard Deviation: Deviation of the fund's return around mean.

BETA (Systematic Risk): The Beta describes the relationship between the stock's return and the Market index return. This can be positive and negative. It is the percentage change in the price of the stock regressed (or related) to the percentage changes in the market index.

Sharpe Ratio: It is a risk adjusted performance measure. A fund with a higher Sharpe ratio is considered better than a fund with a lower Sharpe ratio.

Treynor: It is a risk adjusted performance measure. A fund with a higher Treynor ratio is considered better than a fund with a low Treynor ratio.

TECHNICAL ANALYSIS INCOME MUTUAL FUNDS

Table No. 1: Technical Analysis:-

MUTUAL FUNDS	MEAN	SD (RISK)	BETA	SHARPE MEASURE	TREYNOR MEASURE
ICICI Prudential Long-Term Regular Fund	9.01%	0.44%	0.01	5.51	413.96
ICICI Prudential Long-Term Premium Fund	8.76%	0.44%	0.01	4.94	359.97
Birla Sun Life Medium Term Institution Fund	9.78%	1.91%	0.35	1.66	9.14

The above table represents that during the year 2011 to 2013, the high degree of risk was measured for Birla Sun Life Medium Term Institution Fund as 1.91% simultaneously it has produced highest returns i.e. 9.78% but this scheme is more volatile as compare to the other schemes of mutual funds as its beta value is 1.91%. But considering the Treynor measure its performance is poor due impact of

high risk.

TECHNICAL ANALYSIS TAX PLANNING MUTUAL FUNDS

Table No. 2: Technical Analysis:-

MUTUAL FUNDS	MEAN	SD (RISK)	BETA	SHARPE MEASURE	TREYNOR MEASURE
Axis Long Term Equity Fund	15.68%	15.33%	0.82	0.59	11.03
ICICI Prudential Tax Plan Regular Fund	10.92%	17.42%	0.92	0.24	4.64
Reliance Tax Saver Fund	12.42%	21.94%	1.08	0.26	5.35

The above clearly indicates that Axis Long Term Equity Fund has produced best returns i.e. 15.68% and considering Sharpe and Treynor Measures it the best performer among all these schemes of tax planning mutual funds. The highest risk it associated with ICICI Prudential Tax Plan Regular Fund which is measured as 17.42% and highest beta is measured for Reliance Tax Saver Fund with 1.08 which proves that this schemes is sensitive against the fluctuation of its benchmark index.

HYPOTHESIS TESTINGS OF INCOME MUTUAL FUNDS

(1) ICICI Prudential Long-term Regular Fund

Table No. 3 - Quarter Wise Performance:

YEAR	Quarter-1	Quarter-2	Quarter-3	Quarter-4	Avg. NAV	Max. NAV	Min. NAV
2013	1.93	2.27	2.41	2.69	2.33	2.69	1.93
2012	2.13	2.62	2.71	2.41	2.40	2.71	2.13
2011	1.78	2.28	2.15	2.41	2.16	2.41	1.78

In 2011, the average NAV of ICICI Prudential Long-Term Regular is 2.16 and the quarter no. 4 has produced highest returns for this schemes. In 2012, the average NAV of this scheme is 2.40 which is marginally higher than the average NAV of previous year. For this year, the quarter which has produced highest result is quarter no. 3. The year 2013 has performed almost similar to 2012 but the performance of quarter no. 4 is better and the quarter no. 1 is weaker performance as compared to other quarters.

Ho: There is no significant difference between the performances of quarters for ICICI Prudential Long-term Regular Fund

F Cal = 0.69

F Tab = 4.26

Ho: Accepted as F-Cal < F-Tab

The acceptance of null hypothesis proves that ICICI Prudential Long-term Regular has produced consistent returns during research period. An investor will receive regular returns from this fund.

(2) ICICI Prudential Long-term Premium Fund

Table No.4 - Quarter Wise Performance:

YEAR	Quarter-1	Quarter-2	Quarter-3	Quarter-4	Avg. NAV	Max. NAV	Min. NAV
2013	1.87	2.21	2.34	2.63	2.2625	2.63	1.87
2012	2.08	2.57	2.63	2.07	2.3375	2.63	2.07
2011	1.73	2.23	2.1	2.36	2.105	2.105	1.73

Ho: There is no significant difference between the performances of quarters for ICICI Prudential Long-term Premium Fund

F Cal = 0.64

F Tab = 4.26

Ho: Accepted as F-Cal < F-Tab

ICICI Prudential Long-term Premium has also produced consistent returns. The acceptance of null hypothesis enables the researcher to prove that this scheme has less fluctuation in its NAVs.

(3) Birla Sun Life Medium Term Institution Fund

Table No. 5 - Quarter Wise Performance:

YEAR	Quarter-1	Quarter-2	Quarter-3	Quarter-4	Avg. NAV	Max. NAV	Min. NAV
2013	2.56	3.85	0.45	3.05	2.4775	3.85	0.45
2012	2.46	3.03	2.9	2.28	2.6675	3.03	2.28
2011	2.1	2.55	2.15	2.27	2.2675	2.55	2.10

Ho: There is no significant difference between the performances of quarters for Birla Sun Life Medium Term Institution Fund

F Cal = 0.21

F Tab = 4.26

Ho: Accepted as F-Cal < F-Tab

The null hypothesis indicates that there is no significant difference between the NAVs of Birla Sun Life Medium Term Institution Fund and in its quarter wise performance during the research period.

HYPOTHESIS TESTINGS OF TAX PLANNING MUTUAL FUNDS:

(1) Axis Long Term Equity Fund

Table No. 6 - Quarter Wise Performance:

YEAR	Quarter-1	Quarter-2	Quarter-3	Quarter-4	Avg. NAV	Max. NAV	Min. NAV
2013	-4.45	4.87	-0.85	17.27	4.21	17.27	-4.45
2012	12.9	2.39	11.27	3.93	7.62	12.9	2.39
2011	-4.46	3.6	-6.89	-7.51	-3.81	3.6	-7.51

Ho: There is no significant difference between the performances of quarters for Axis Long Term Equity Fund

F Cal = 2.87

F Tab = 4.26

Ho: Accepted as F-Cal < F-Tab

There is no significant difference between the NAVs of Axis Long Term Equity Fund.

(2) ICICI Prudential Tax Plan Regular Fund

Table No. 7 - Quarter Wise Performance

YEAR	Quarter-1	Quarter-2	Quarter-3	Quarter-4	Avg. NAV	Max. NAV	Min. NAV
2013	-8.31	-0.28	3.01	16.95	2.8425	16.95	-8.31
2012	18.28	0.13	8.18	7.42	8.5025	18.28	0.13
2011	-6.69	0.56	-10.47	-9.48	-6.52	0.56	10.47

Ho: There is no significant difference between the performances of quarters for ICICI Prudential Tax Plan Regular Fund

F Cal = 3.61

F Tab = 4.26

Ho: Accepted as F-Cal < F-Tab

Comparatively there is less volatility in the values of NAVs of ICICI Prudential Tax Plan Regular Fund.

(3) Reliance Tax Saver Fund**Table No. 8 - Quarter Wise Performance**

YEAR	Quarter-1	Quarter-2	Quarter-3	Quarter-4	Avg. NAV	Max. NAV	Min. NAV
2013	-13.2	2.2	-5.68	23.68	1.75	23.68	-13.2
2012	26.07	-0.75	9.98	6.14	10.36	26.07	-0.75
2011	-5.22	-0.52	-8.03	-12.62	-6.5975	-0.52	12.62

Ho: There is no significant difference between the performances of quarters for Reliance Tax Saver Fund

F Cal = 2.11

F Tab = 4.26

Ho: Accepted as F-Cal < F-Tab

Even though this scheme has produced volatile returns but there is no significant difference in the returns of Reliance Tax Saver Fund.

FINDINGS:

1. Amongst all Income Mutual funds, ICICI Prudential Long-Term Regular Fund has shown best performance during the years 2011 to 2013.
2. Axis Long Term Equity Fund is best scheme among all Tax Planning Mutual Funds.
3. Birla Sun Life Medium Term Institution Fund has shown much volatility among all Income Mutual Funds.
4. From all three Tax Planning Mutual Funds, Axis Long Term Equity Fund has produced volatile returns as compared to other mutual fund schemes.

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