

**A STUDY ON PERFORMANCE OF SELECTED TAX SAVING MUTUAL FUNDS AT  
ANGELONE, ANANTHAPUR**

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**ABSTRACT**

With the expansion of the capital market came a substantial institutional development for the Indian capital market in the form of a diverse structure of Mutual Funds. A unique kind of institution that facilitates investments is a mutual fund. Particularly for the relatively small investors, it pools their funds and invests them in a well-diversified portfolio of safe securities. Investor participation in the financial markets through mutual funds is now very common and successful. Under the direction of a portfolio manager who makes investment choices on behalf of holders of Mutual Fund units, it may be a key component of a person's investing plan. The performance of several tax-saving mutual fund schemes offered by various mutual fund firms has been investigated in the current study. One of the key components of mutual fund companies, tax-saving mutual fund schemes are in high demand due to their tax advantages. In this study, relative performance indices like Sharpe's Ratio, Jensen's Ratio and Treynor's Ratio are used to evaluate the success of different Mutual Fund tax-saving plans. It is found that MIRAE ASSET TAX SAVER FUND has highest risk when compared to other funds. Also, the study reveals that MIRAE ASSET TAX SAVER FUND has highest return compared to Benchmark NIFTY Index 500 similarly CANARA ROBECO EQUITY TAX SAVER FUND performing good compared to BSE Index 500. On comparing the performance of selected five funds, MIRAE ASSET TAX SAVER FUND is performing better. These results provide the investor with information on investing in mutual fund schemes as a financial advisor.

**KEYWORDS:** Mean, Standard Deviation, Sharpe Ratio, Treynor's Ratio and Jensen's Ratio.

**INTRODUCTION**

A mutual fund pools the savings of multiple investors who have comparable financial goals. The money is then invested in securities such as shares, debt securities, money market securities, or a combination of these, as well as other types of securities, on the capital market. Due to the fact that each investor owns a pro-rata share of the portfolio, they are each eligible for any gains from the sale of the assets but also vulnerable to any value losses. On behalf of the unit holders, these stocks are professionally managed. Unit owners receive a portion of the income and capital gains realized from these assets based on the number of units they own. Therefore, a mutual fund is the best type of investment for the average person because it offers the chance to invest in a diversified, well-managed basket of assets for a fair price

**III. REVIEW OF LITERATURE**

Mishra, et al., (2002) measured Mutual Fund performance using lower partial moment. This study develops measures for assessing portfolio performance based on lower partial moments. Only those conditions, such as those where return is less than a pre-specified "target rate" like the risk-free rate, are taken into consideration when calculating risk from the lower partial instant.

Ramesh Chander (2002) evaluated the performance of mutual funds in India according to the advice of Sharpe, Treynor, and Jensen. The study also examined the portfolio management practices of Mutual Fund managers with respect to portfolio construction, portfolio management, portfolio evaluation and disclosure practices.

Sapar and Narayan (2003) evaluates the performance of Indian mutual funds in a bear market using a sample of 269 open ended schemes (out of a total of 433), the Risk-return analysis, Treynor's ratio, Sharp's ratio, Sharp's measure, Jensen's measure, and Fama's measure are a few metrics to consider. According to performance indicators, the majority of the 58 mutual fund schemes in the sample were

able to meet investor expectations by providing excess returns over those predicted based on both the premium for systematic risk and total risk.

Sondhi H. J and Jain P. K.\_ (2005) examined the profitability of equity mutual funds and discovered that the private sector funds had higher returns than the public sector funds.

Rao D. N (2006) examined the financial performance of a few open-ended equity mutual fund schemes during the period of 1 April 2005 to 31 March 2006 in order to assess the statistical significance of the performance variances. Growth plans have produced larger returns than dividend plans, but at a higher risk, according to the analysis. The study divided the 419 open-ended equity mutual fund schemes into six distinct investment styles.

Babu M. and Indhumathi G. (2008), in their paper, examined the expansion and advancement of Indian mutual funds in their report. The authors discovered that India's financial market saw the emergence of mutual funds as a significant sector. In recent years, it has unveiled a variety of goods and initiatives.

Agrawal Deepak and Patidar Deepak (2009) studied the empirically testing on the basis of fund manager performance and analysing data at the fund-manager and fund-investor levels. The study found that the people's saving and investing behaviours and, on the flip side, the trust and fidelity of the fund manager and rewards- impact the performance of the MF sector in India.

Singh and Jha (2009) performed a study on the acceptance and understanding of mutual funds and discovered that customers, while generally favouring mutual funds because of their return potential, liquidity, and safety, were not entirely aware of systematic investing plans. Before investing in mutual funds, investors will also take into account a number of things.

Mehta and Sushil Kumar (2010) SBI's mutual fund schemes outperformed UTI's in the 2007–2008 period, according to an analysis of their respective performance.

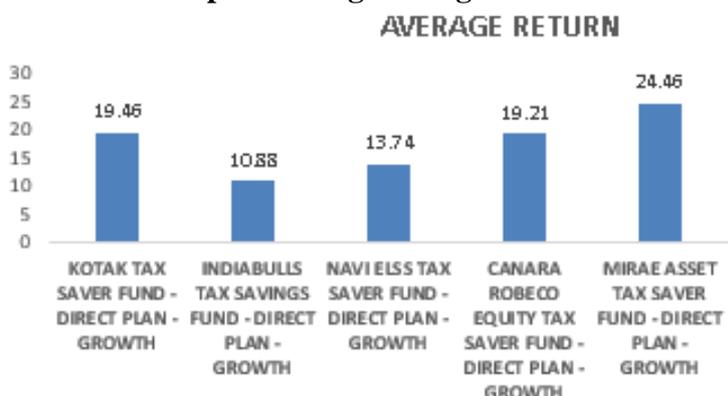
Singh (2012) analysed investor behaviour, opinion, and perception in relation to a variety of topics, including the type of mutual fund scheme, its goal, the role of financial advisors/brokers, information sources, shortcomings in the provision of services, investor perceptions of the factors that influence their decision to invest in mutual funds, challenges facing the Indian mutual fund industry, etc. Investors prefer liquidity, clear offer paperwork, online trading, regular updates through SMS, and rigorous adherence to AMFI laws, according to the poll

#### **IV.DATA ANALYSIS AND INTERPRETATION**

The returns, risk levels are measured to the selected tax saving mutual funds in order to analyse their performance. An investor should be aware of the returns, risk levels of a particular mutual fund. For the purpose of analysis various techniques i.e, Mean, Standard Deviation, Sharpe Ratio, Treynor's Ratio and Jensen's Ratio are used and the analysis for the study is done from 2018-19 to 2022-23. The analysis is as below:

**MEAN:** A mean return (also known as expected return) is the estimated profit or loss an investor expects to achieve from a portfolio of investments. It can also refer to monthly stock returns or the mean value of the probability distribution of possible returns.

**CHART 4.6**  
**Graph showing Average returns**

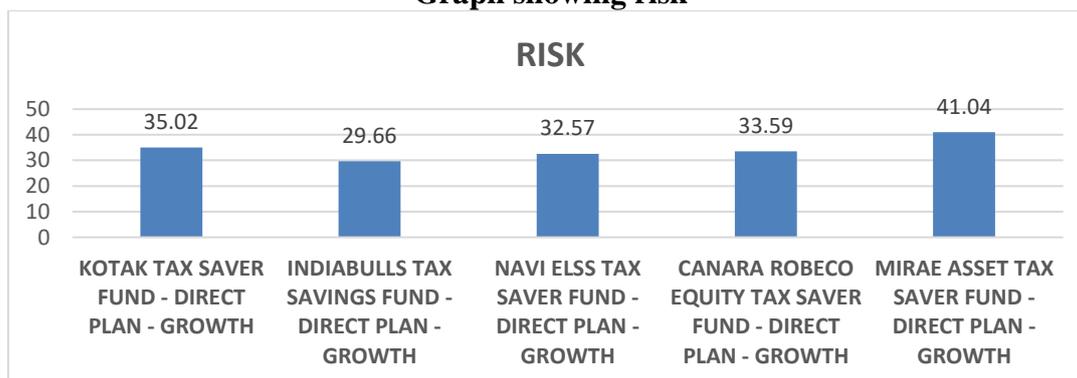


**INTERPRETATION:** The MIRAE ASSET TAX SAVER FUND has generated high average return (24.46) and INDIABULLS TAX SAVING FUND has generated lowest average return (10.88) when compared to other schemes.

**STANDARD DEVIATION:** A standard deviation is a statistical tool that helps measure the deviation in portfolio returns from its average. The standard deviation has wide use in determining the risk of an investment. It is an important metric to consider while investing in market-linked instruments. In other words, the standard deviation is used to determine the fund's risk. The formula below is used to compute it.

$$\text{Standard Deviation} = \sqrt{\Sigma(X-X)^2 \div n}$$

**CHART 4.7**  
**Graph showing risk**



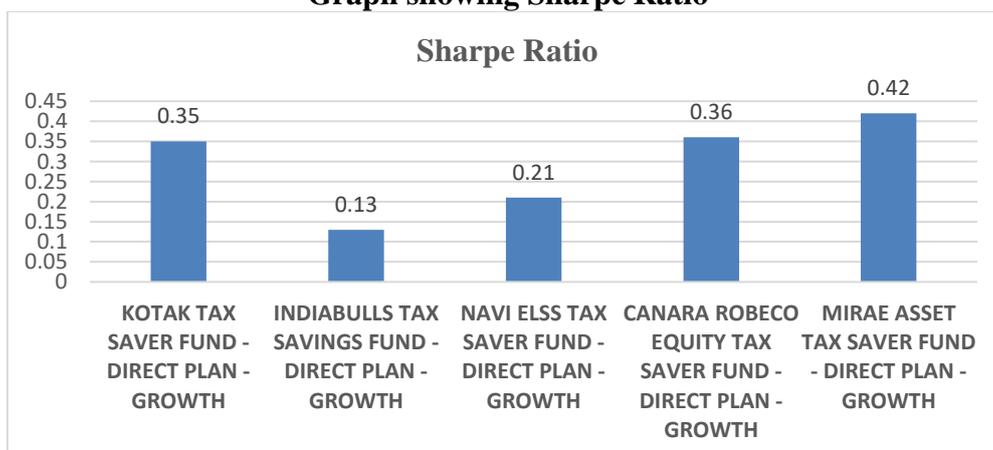
**INTERPRETATION:**

- The risk of MIRAE asset tax saver fund is very high compared to other schemes. i.e,41.04
- The risk of INDIABULLS tax saving fund is very low i.e,29.66.

**SHARPE’S RATIO:** Sharpe's is a summary performance indicator for a portfolio that accurately accounts for risk. The risk premiums of the portfolio are compared to the overall level of risk in the portfolio. Sharpe Index is provided by

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}$$

**CHART 4.8**  
**Graph showing Sharpe Ratio**



**INTEPRETATION**

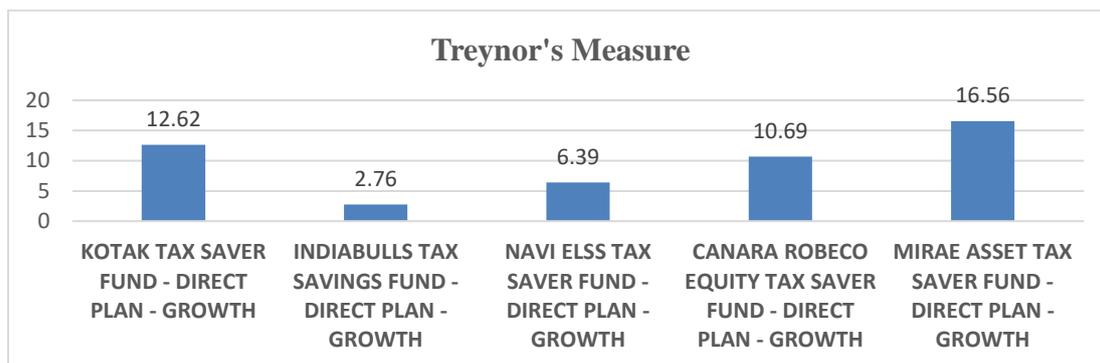
- The performance level of MIRAE asset tax saver fund is high i.e,0.42
- The performance level of INDIABULLS saving fund is low i.e,0.13
- According to the Sharpe index ratio the MIRAE asset tax saver fund has got the first rank whereas the CANARA Robeco tax saver fund is at second rank following by KOTAK tax saver

fund is at third rank, NAVI Elss tax saver fund is at fourth rank and lastly, the INDIABULLS tax saver fund stood at fifth rank.

**TREYNOR’S RATIO:** Treynor’s Ratio also known as reward-to-volatility ratio. It is a performance indicator for calculating how much extra return a portfolio created for each unit of risk it assumed. Treynor’s Ratio is provided by

$$\text{Treynor Ratio} = \frac{r_p - r_f}{\beta_p}$$

**CHART 4.9**  
**Graph showing Treynor’s Measure**



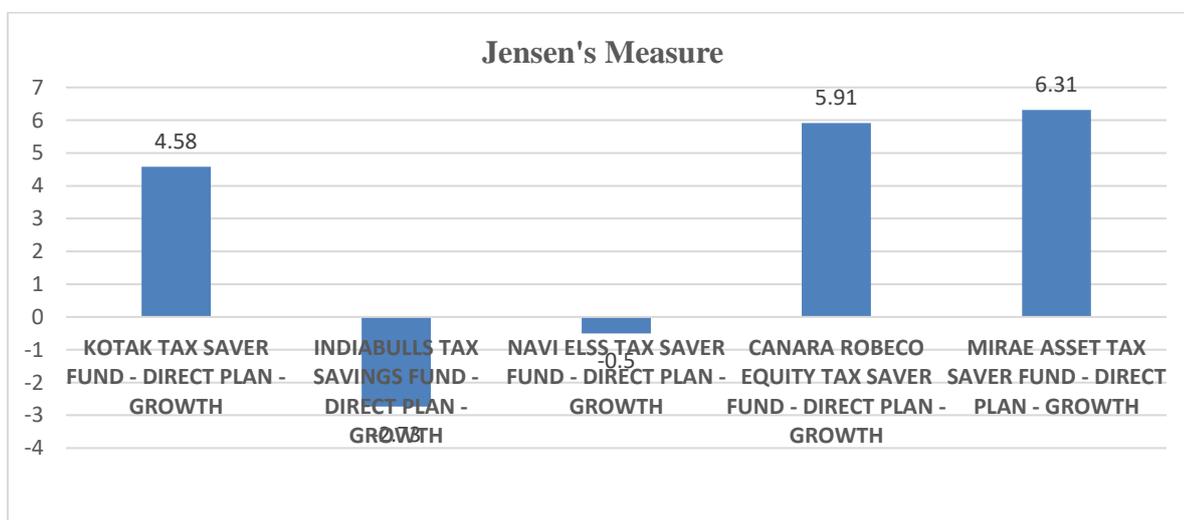
**INTEPRETATION**

- The performance level of MIRAE asset tax saver fund is high i.e,16.56
- The performance level of INDIABULLS saving fund is low i.e,2.76
- According to the Treynor’s index ratio the MIRAE asset tax saver fund has got the first rank whereas the KOTAK tax saver fund is at second rank following by CANARA Robeco tax saver fund is at third rank, NAVI Elss tax saver fund is at fourth rank and lastly, the INDIABULLS tax saver fund stood at fifth rank.

**JENSEN’S RATIO:** The Jensen's measure, often known as Jensen's alpha, is a risk-adjusted performance metric that measures whether the average return on an investment or portfolio is higher or lower than the return forecasted by the capital asset pricing model (CAPM), given the portfolio's beta and the market's overall return. This statistic is also frequently known by the name alpha. Jensen’s Ratio is given below

$$\text{Alpha} = R(i) - (R(f) + B \times (R(m) - R(f)))$$

**CHART 4.10**  
**Graph showing Jensen’s Measure**



**INTEPRETATION**

- The performance level of MIRAE asset tax saver fund is high i.e,16.56
- The performance level of INDIABULLS saving fund is low i.e,2.76
- According to the Jensen’s index ratio the MIRAE asset tax saver fund has got the first rank whereas the CANARA Robeco tax saver fund is at second rank following by KOTAK tax saver fund is at third rank, INDIABULLS tax saver fund is at fourth rank and lastly, NAVI Elss tax saver fund stood at fifth rank.

**V.HYPOTHESIS TESTING**

The above descriptive tables clears that there is a difference in the risk and returns of the five selected funds. Therefore, it is tried to test whether such difference is statistically significant or not, One-way Anova has been performed and the results are as follows:

Anova: Single Factor

SUMMARY				
Groups	Count	Sum	Average	Variance
INDIABULLS TAX SAVING FUND	5	54.44	10.888	1099.981
KOTAK TAX SAVER FUND	5	97.33	19.466	1533.687
NAVI ELSS TAX SAVER FUND	5	68.77	13.754	1326.209
CANARA ROBECO EQUITY TAX SAVER FUND	5	96.05	19.21	1410.643
MIRAE ASSET TAX SAVER FUND	5	112.31	24.462	2106.303

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	442.8504	4	110.7126	0.074037	0.989272	2.866081402
Within Groups	29907.29	20	1495.365			
Total	30350.14	24				

**INTERPRETATION:**

One-Way Anova is performed to test the difference between returns of selected tax saving mutual funds. The significance value is 0.074 which is greater than 0.05, Hence null hypothesis is accepted and Alternative Hypothesis is rejected. We can conclude that there is no significant difference between risk and returns of selected tax saving mutual funds. In other words, though there is difference in the returns, such difference is not statistically significant. On the whole, it can be inferred that the variance in the returns is very negligible and more or less all funds are performing equally.

**VI.FINDINGS**

- MIRAE ASSET TAX SAVER FUND has generated high average return (24.46) with a risk level of (41.04).
- Kotak Tax Saver Fund has generated the average return of 19.46 with a risk level of 35.02.
- Canara Robeco has generated the average return of 19.21 with a risk level of 33.59.
- Navi Elss Tax Saver Fund has generated the average return of 13.74 with a risk level of 32.57.
- Indiabulls Tax Saving Fund has generated the average return of 10.88 with a risk level of 29.66.
- The performance level of MIRAE asset tax saver fund is high when compared to the other funds it stood in first place according to the Sharpe, Jensen’s and Treynor’s Ratio.
- The performance level of INDIABULLS saving fund is low when compared to the other funds it stood in last place according to the Sharpe, Jensen’s and Treynor’s Ratio.

**VII.CONCLUSTION**

It is concluded that MIRAE asset tax saver fund has the maximum Sharpe’s Ratio, Treynor’s Ratio and Jensen’s Ratio. The Standard deviation levels (risk) of various schemes, indicates the schemes volatility in terms of their returns. MIRAE asset tax saver fund is having highest volatility in returns therefore it is more risky but profitable because it gives the highest returns. MIRAE asset tax saver fund is a best-performing and ranked at first place in Sharpe’s Ratio, Treynor’s Ratio and Jensen’s

Ratio whereas the INDIABULLS saving fund is worst-performing and ranked at last place. Canara Robeco Equity Tax Saver Fund, KOTAK Tax Saver Fund and Navi Elss Tax Saver Fund are ranked at second, third and fourth Place respectively.

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