

A STUDY ON RISK & RETURN ANALYSIS OF THE SELECTED MUTUAL FUNDS SCHEMES IN INDIA

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ABSTRACT

The Indian mutual funds industry is witnessing a hasty growth as a result of infrastructural development, increase in personal financial assets, and rise in foreign participation. With the growing risk appetite, rising income, and increasing consciousness, mutual funds in India are becoming a preferred investment option. In the past a few years, we had seen a dramatic growth of the Indian MF industry with many private players bringing global expertise to the Indian MF Industry. The study focuses on the risk and return of the selected mutual funds schemes in India. Risk refers to relatively objective probabilities which can be computed on the basis of past experience or some prior principle. Risk may be defined as the chance of variations in actual return. Return is defined as the gain in the value of investment. The return on an investment portfolio helps an investor to evaluate the financial performance of the investment. The article main aim is to evaluate the performance of selected mutual funds in India.

Keywords: Industry, Mutual Funds, Risk, Return, Schemes

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1. INTRODUCTION

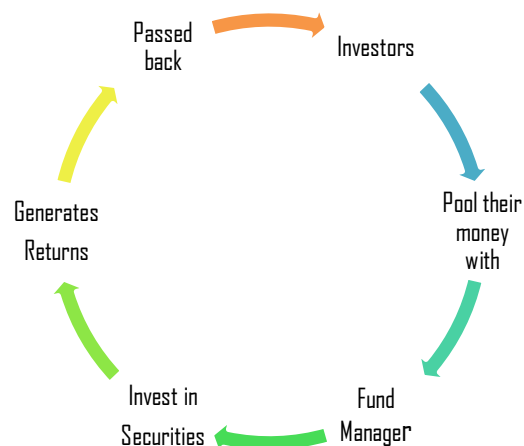
Risk is the probable measurement of uncertainty. When uncertainty is reduced to a number of possible results to alternative course of action, it is called risk. Risk is the possibility of loss or injury, the degree or probability of such loss. Risk is composed of the demand that brings in variations in return of income. The main forces contributing to risk are price and interest. All investments are risky, whether in stock or capital market or banking and financial sector, real estate, bullion gold etc. The mutual fund was introduced in Belgium in the year 1822. This investment shortly spread to Britain and France. Mutual funds very popular in US in the year 1920s, particularly open end mutual funds. Mutual funds experienced a period of excellent growth after World War II, particularly in the 1980s and 1990s.

1.1 Concept of Mutual Funds

A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debentures and other securities. The income earned through these investments and the capital appreciation realized is shared by its unit holders in proportion to the number of units owned by them. Thus a Mutual Fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost. The flow chart below describes broadly the working of a mutual fund.

Mutual Fund Operation

Flow Chart 1



2. REVIEW OF LITERATURE

- **Gupta and Sehgal (1998)** evaluated performance of 80 mutual fund schemes over a four years (1992-96). The study tested the proposition relating to fund diversification, consistency of performance, parameter of performance and risk-return relationship. The study noticed the existence of inadequate portfolio diversification and consistency in performance among the sample schemes
- **Trey nor (1965)** presents a new way of viewing performance results. He attempted to rate the performance of mutual funds on a characteristics line graphically. The steeper the line, the more systematic risk or volatility a fund possesses. By incorporating various concepts, he developed a single line index, T_n , called Treynor index.
- **Verma's book (1997)** 'Guide to mutual funds & Investment portfolios of Indian mutual funds with some statistical data guidelines to the investors in selection of schemes etc.
- **Bansal's book (1996)** "mutual fund management & working" included a descriptive study of concept of mutual funds, Management of mutual funds, accounting & disclosure standards, Mutual fund schemes etc.
- **S. Anand & V Murugaiah (2003)** indicates that the majority of schemes were showed underperformance in comparison with risk free return.
- **Cochran (2001)** has examined 'predictability' of stock returns. They suggested that stock returns are predictable. The degree of predictability increases as the time horizon lengthens. The author has examined the predictability of stock returns using international stock market data from 18 countries. Their results show that dividend yield can predict stock returns and the level of predictability increase as the return horizon increase from one month to 48 months.

3. NEED FOR THE STUDY

The principal objective of every investor is to maximize his investments and to earn more from his savings. Hence the key question of interest to us in this study is whether the mutual funds' investments will have more advantages when compared with other investments. This study is useful to the investors to taking decisions relating to investments in mutual funds. By comparing the Magnum contra fund with other equity funds like TATA, Kotak, UTI and L&T contra fund in the area of risk and returns investor will make decisions easily. The study has been done by using the statistical tools like Sharpe's and Treynor's Ratios.

4. OBJECTIVES OF THE STUDY

The basic objectives of this study are as follows:

- The basic objective of the present study is to evaluate the performance of selected mutual funds in India.
- To know whether the investments decisions have an impact on the investor who makes investments in mutual funds.
- To know the average returns and risk of each selected contra fund.
- To compare the SBI Magnum contra fund performance with others selected contra funds.

5. DATA ANALYSIS & INTERPRETATION

Performance in Terms of Risk and Return of SBI MSFU Contra Fund

Table 1

Risk and Return of SBI MSFU Contra Fund

Years	Returns	$(X - \bar{X})$	$(X - \bar{X})^2$
2011-2012	66.29	49.28	2428.52
2012-2013	-53.14	-70.15	4921.02
2013-2014	90.55	73.54	5408.13
2014-2015	9.59	-7.42	55.05
2015-2016	-28.24	45.25	2047.56
Total	85.05		14860.28

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{85.05}{5} = 17.01$$

$$\text{Standard Deviation} = \sqrt{\frac{\sum (X - \bar{X})^2}{n - 1}} = \sqrt{\frac{14,860.28}{4}} \quad \text{S.D} = 60.95$$

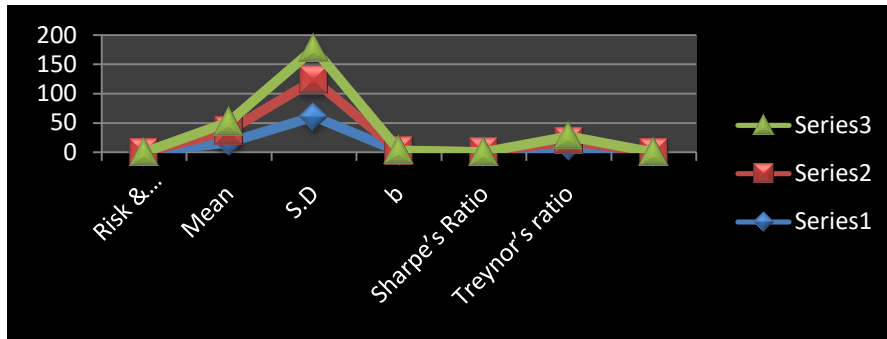
$$\text{Sharpe's Ratio} = \frac{R_i - R_F}{\text{Standard deviation}}$$

$$R_i = \text{Mean} = 17.01 \quad R_F = \text{Risk return} = 7$$

$$\text{Sharpe's Ratio} = \frac{17.01 - 7}{60.95} = \frac{10.01}{60.95} = 0.16$$

Performance of Magnum Contra Funds

	Mean	Standard Deviation	Sharpe's Ratio
Magnum Contra Fund	17.01	60.95	0.16

Graph 1

Interpretation: As per Sharpe's ratio calculation the Magnum Contra Fund has a Sharpe's ratio (reward risk ratio) of 0.16 which indicates moderate returns over a period of 5 years.

Comparison of SBI Magnum Contra Fund with Bench Mark**Table 2**

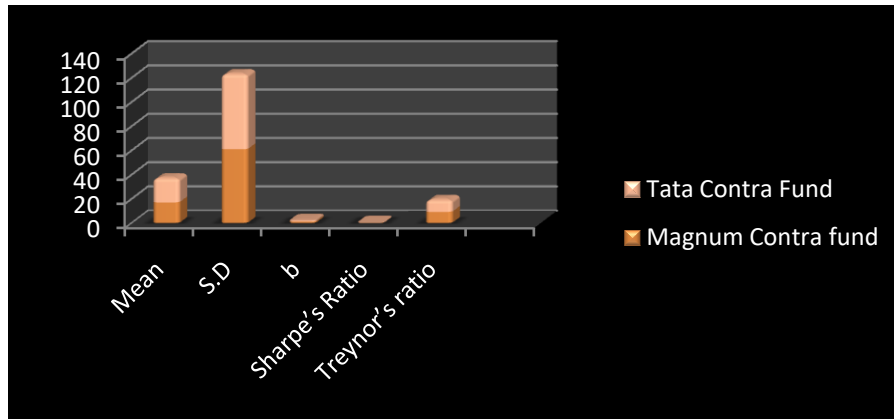
Years	Market Return	Fund Return
2011-2012	59.35	66.29
2012-2013	-55.41	-53.14
2013-2014	83.80	90.55
2014-2015	15.87	9.59
2015-2016	-26.06	-28.24
Total	77.55	85.05

$$\text{Beta} = \frac{n\sum XY - \sum X \sum Y}{n\sum X^2 - (\sum X)^2} \beta = 1.09$$

$$\text{Treynor's Ratio} = \frac{R_i - R_F}{\beta} = \frac{17.01 - 7}{1.09} = \frac{10.01}{1.09} = 9.18$$

Market Returns versus Magnum Contra Fund Return

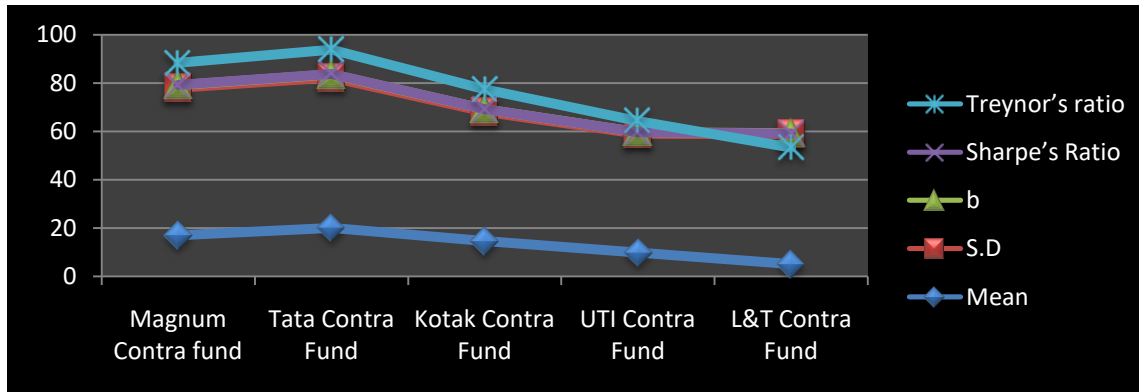
Company	Beta	Treynor's Ratio
Magnum contra fund	1.09	9.18

Graph 2

Interpretation From the above table we came to know that the SBI Magnum Contra Fund is showing the beta (β) of 1.09 Treynor's ratio of 9.18 indicates that is a defensive stock.

PERFORMANCE OF ALL SELECTED MUTUAL FUNDS**Table 3**

Risk & Returns Measurable	Magnum Contra Fund	Tata Contra Fund	Kotak Contra Fund	UTI Contra Fund	L&T Contra Fund
Mean	17.01	20.07	14.65	9.87	5.10
S.D	60.95	62.17	53.51	49.17	53.79
β	1.09	1.30	0.94	0.63	0.32
Sharpe's Ratio	0.16	0.21	0.14	0.05	-0.03
Treynor's ratio	9.18	10.05	8.13	4.5	-5.93

Graph 3

6. FINDINGS

- 1. Average Returns:** According to Arithmetic mean Tata Contra Fund is yielding high average returns (20.07) when compared other contra funds like Magnum contra fund (17.07), Kotak contra fund (14.65), UTI contra fund (9.87) and L & T contra fund (5.10).
- 2. Standard Deviation:** Higher the standard deviation higher the risk. According to standard deviation UTI contra fund (49.17) is having low risk, when compared to other contra funds like Kotak contra fund (53.15), L & T contra fund (53.79), Magnum contra fund (60.95) and Tata contra fund (62.17).
- 3. Beta:** According to Beta calculation Tata contra fund (1.30) is having high risk when compared to other contra fund Magnum contra fund (1.09), Kotak contra fund (0.94), UTI contra fund (0.63) and L&T contra fund (0.32).
- 4. Sharpe's Ratio:** As per Sharpe ratio the performance of Tata contra fund (0.21) is high when compared to other contra fund Magnum contra fund (0.16), Kotak contra fund (0.14), UTI contra fund (0.05) and L&T contra fund (0.03).
- 5. Treynor's Ratio:** According to Treynor's ratio Tata contra fund (10.05) is yielding high returns when compared to other contra funds like Magnum contra fund (9.18), Kotak contra fund (8.13), L&T contra fund (-5.93) and UTI contra fund (4.5).

7. SUGGESTIONS

The following suggestions are as follows:

- Risk takers can go for TATA contra fund which is yielding high average returns.

- Risk averages can go for SBI Magnum contra fund because its performance is high and average returns also moderate.
- The fund manager has to select good scripts in the portfolio for good returns.
- The investor has to think their investment objectives and to take high risk for getting high returns.

8. CONCLUSION

Risk refers to the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of organizations objectives. Risk is unavoidable and present in virtually every human situation. It is present in our daily lives, public and private sector organizations. Mutual fund industry nowadays is one of the most favored investment options all over the world. It plays a vital role in the economic expansion of a country. Mutual funds mainly depend on capital market performance. If the market performance is good, it will give good returns and vice –versa. The study concludes that the Mutual Fund is a secure speculation tool. Mutual Fund is the only chance many investors have for investing in an intellectual diversified approach after studying and analyzing dissimilar mutual fund schemes the subsequent conclusion can be made. The article can be concluded that the risk is less in L & T contra fund and risk high in TATA contra fund. Return is high in TATA contra fund and low in L&T contra fund. High performance fund is Tata contra fund and low performance is L&T contra fund.

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