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COMPARATIVE PERFORMANCE EVALUATION OF MUTUAL FUNDS THROUGH REWARD-RISK RATIO

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ABSTRACT

Mutual Fund industry is growing at a very faster rate in India but still it is to go a long way. Mutual Fund Industry is not able to attract many of the investors due to lack of awareness and myths and thus they are still relying on traditional modes of investments. Performance evaluation of Mutual Funds is a challenge for a common person. There are many ratios and other performance parameters through which a common person may evaluate the performance of a Mutual Fund. The Author in this paper has discussed in detail about the performance parameters for Mutual Fund Evaluation. One new, Reward – Risk Ratio has been developed which the Author believes that it will prove a mile stone in performance evaluation of Mutual Funds. To illustrate the things in a better way a case study of top five large cap equity fund has been taken.

Key words: Liquidity, Risk, Return, NAV, Beta, Index

I. Introduction

Mutual fund Industry originated in India since 1963. Mutual Fund is a common pull of resources invested in specified assets as per the objective of the fund. Since being managed by professional managers, is a better mode of investing for common investors than entering directly into the stock market. Mutual Funds may be classified into many types depending on maturity period, investment objective, Liquidity, tax investing, sector specific etc. While investing in mutual Fund investors should make their own investment objective, time frame, investible amount and risk tolerance capacity

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II. Objectives of the study

1. To discuss the different parameters for evaluating the performance of Mutual Fund
2. To introduce one new, Reward – Risk Ratio and elaborate its role in evaluating the performance of Mutual Fund with the case study of top five Large Cap Equity funds in India.

III. Literature review

Syed Husain Ashrafand Dhanraj Sharma (2014) concluded that that performance of the majority of sample mutual fund schemes outperformed the market benchmark indexes in term of Treynor and Sharpe ratio based on historical monthly returns.

Md. Qamruzzaman (2014) concluded that mutual funds having low diversified portfolio are having more risk and growth oriented mutual funds are expected to offer the advantages of diversification, market timing and selectivity.

Sharad Panwar and Dr. R Madhumathi. (2006) concluded that mutual funds both Public-sector sponsored and Private-sector foreign sponsored mutual funds had outperformed.

Dr Vikas Choudhary and Preeti Sehgal Chawla (2016) found that performance of selected mutual fund in terms of average returns of large cap schemes shown higher and superior returns and In terms of standard deviation the funds were less risky than the market.

Dr Roshna Varghese and Krishna Murthy (2009) found that there is a considerable amount of risk involved, while investing in equity diversified schemes.

Dr. J K Raju, Mr.Manjunath B R, and Mr.Nagaraja G M (2015) did research study on Performance Evaluation of Indian Equity Mutual Fund Schemes. Their major finding revealed that mutual funds are better investment avenue to trade-off between risk and return.

Poonam M Lohana (2013) emphasized on selected risk-return relationship models and measures. She found that Returns of all funds were more than market index returns.

Alka Solanki (2016) arrived on a conclusion that Mutual funds were supposed to protect small investors against vagaries of stock market and the fund managers of these schemes had done well to protect them.

IV. Mutual fund performance evaluation through Reward-Risk Ratio

Reward-Risk ratio: By reward we mean return generated by fund in excess of index return and by risk we mean respective risks of fund and index in terms of standard deviation. So Reward-Risk ratio denotes excess return generated by fund per percent of risk over index return per percentage of risk. It is a good indicator of performance evaluation of mutual funds.

$$\frac{\frac{\text{FundReturn}}{\text{FundStandardDevation}} - \frac{\text{IndexReturn}}{\text{IndexStandardDevaition}}}{\frac{\text{FundReturn}}{\text{FundStandardDevation}}} \times 100$$

If we simplify the above equation then we get Reward Risk ratio stands the following:

$$(1 - \frac{\text{IndexRetrn} \times \text{FundStandard Deviation}}{\text{FundReturn} \times \text{IndexStandard Deviation}}) \times 100$$

Table -1: Showing Sharpe Ratio for all five Funds and Nifty on annualised basis

Financial Year	SBI Blue Chip Fund - Growth	Kotak Select Focus Fund - Regular (G)	ICICI Pru Top 100 Fund (G)	Birla Sunlife Top 100 (G)	ICICI Pru Focused Bluechip Equity (G)	Nifty
2012-13	0.85	0.23	-0.01	0.29	0.18	0.43
2013-14	0.62	0.91	1.06	0.97	1.18	-0.01
2014-15	3.27	3.06	1.76	2.35	2.48	2.52
2015-16	0.57	1.29	1.35	0.97	1.52	0.89
2016-17	0.76	0.11	0.07	0.22	0.13	0.15
2012-17 (Average)	1.43	1.60	1.05	1.24	1.01	0.42
Rank	II	I	IV	III	V	VI

Table -2: Showing Sortino Ratio for all five Funds on annualised basis					
Financial Year	**SBI Blue Chip Fund - Growth**	**Kotak Select Focus Fund - Regular (G)**	**ICICI Pru Top 100 Fund (G)**	**Birla Sunlife Top 100 (G)**	**ICICI Pru Focused Bluechip Equity (G)**
2012-13	1.09	0.40	0.02	0.49	0.32
2013-14	1.20	1.12	1.87	1.17	1.10
2014-15	5.09	5.10	4.51	3.92	3.85
2015-16	-0.84	-0.88	-0.77	-1.03	-1.20
2016-17	0.96	1.66	3.06	1.48	1.70
2012-17 (Average)	0.57	0.65	0.37	0.52	0.47
Rank	II	I	V	III	IV

Table -3: Showing Information Ratio for all five Funds on annualised basis					
Financial Year	**SBI Blue Chip Fund - Growth**	**Kotak Select Focus Fund - Regular (G)**	**ICICI Pru Top 100 Fund (G)**	**Birla Sunlife Top 100 (G)**	**ICICI Pru Focused Bluechip Equity (G)**
2012-13	0.30	-0.09	-0.27	-0.05	-0.16
2013-14	0.42	0.52	0.60	0.57	0.49
2014-15	0.27	0.36	-0.38	0.01	-0.19
2015-16	0.63	0.64	0.43	0.56	0.48
2016-17	0.01	0.60	0.68	0.38	0.44
2012-17 (Average)	0.80	0.90	0.51	0.69	0.50
Rank	ii	i	iv	iii	v

Table -4: Showing Reward Risk Ratio for all five Funds on annualised basis					
Financial Year	**SBI Blue Chip Fund - Growth**	**Kotak Select Focus Fund - Regular (G)**	**ICICI Pru Top 100 Fund (G)**	**Birla Sunlife Top 100 (G)**	**ICICI Pru Focused Bluechip Equity (G)**
2012-13	0.35	-0.16	-0.51	-0.11	-0.16
2013-14	0.46	0.58	0.62	0.58	0.68
2014-15	0.20	0.13	-0.32	-0.07	0.02
2015-16	-0.38	0.16	0.19	-0.03	0.33
2016-17	0.49	-0.03	-0.01	0.14	0.10

2012-17 (Average)	0.53	0.56	0.41	0.46	0.40
Rank	II	I	IV	III	V

V. Major findings

a) Mutual fund investment in India is increasing very rapidly. Since it has better returns as compared to conventional modes like PPF, Bank FD and lesser risk as compared to
b) All five large cap funds selected under the study have generated more than 20% returns on yearly basis over five years period of time as against Nifty index which has given only 14%.
c) Kotak Select Focus Fund - Regular (G) and SBI Blue Chip Fund (Growth), are the best performers among the large cap equity funds as per the present study
d) There is no yard stick for evaluating the performance of mutual funds in India. There are many ratios for measuring their risk and return, however from a common investor's point of view the usefulness of the ratios are not clearly defined.
e) In between Sharpe Ratio and Sortino Ratio, the Author prefers the latter because it takes into consideration standard deviation of negative returns only which portrays a more realistic picture.
f) The information ratio and reward risk ratio both take index return into consideration and both have given the same ranking to the funds.
g) There is no system of insuring against losses occurred in mutual fund investment because returns in the mutual funds are never guaranteed and they are subject to market risk.
h) There are many varieties of mutual funds are available. It is a very tedious task for a common investor to select most suitable fund for him.
i) Large cap equity funds are less risky as compared to small and mid cap. However, as far as returns are concerned, small and mid cap offers better returns in comparison to large cap equity funds.

VI. Recommendations and Conclusions

a) The mutual funds are good investment options due to its better return generating capacity. However a time horizon of at least 3 years should be selected.
b) The investors who want to reduce risk should go for debt fund or large cap equity funds.

c) Along with important ratios as discussed in this article, the expenses ratio and exit load should also be taken into consideration before making investment in mutual funds.
d) Higher or lower NAV does not matter. What matters is return generated consistently over long period of time. So lower NAV neither means cheaper nor higher NAV reflects dearer.
e) Selection of mutual fund should be selected based on invidual's investment goals.
f) Systematic investment plans may be taken on regular basis; however lumpsum amount should be invested only be invested when market index is on the lower side.
g) Selection of funds should be made based on risk adjusted returns rather than simply looking into the returns generated.
h) While selecting the particular fund, the reputation of the fund house, their investment objectives, systems and processes should also be looked into.
i) From taxation point of view long term capital gains on equity oriented mutual funds are exempt from tax while debt funds are liable to long term capital gains. So if investor is making investment in equity oriented fund, he should hold it for at least one year before disposing.
j) Before investing, investors should give due regard to ratings assigned to the fund by different rating agencies.
k) Investors can create wealth in the long run only when they are careful, cautious, targeted and well disciplined.

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