

PERFORMANCE OF MUTUAL FUNDS IN INDIA

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Abstract:

Presence of mutual funds provides the expertise of professional managers to a common investor, which ensures high returns with low risk. But, performance of mutual funds always remains a perplexing issue for both academia and investors alike. This study is an attempt to explore the performance of the mutual funds in India.

Keywords: Performance, Return, Mutual Fund Schemes, Variability, India, Stock Market

1. INTRODUCTION

Mutual Funds have initiated a new era in the arena of personal finance, bringing the common man closer to the stock markets. Uncertain returns and numerous stock exchange issues dissuaded the common man from the stock markets. A common investor wishes to maximize his returns but views the securities market skeptically because of the vagaries of the market. Mutual funds offer a good solution to solve this paradox, by bridging the gap between the common investor and stock exchange.

Mutual Fund industry in India has witnessed tremendous growth (13.4 %, Source: www.finance.indiamart.com). Unit Trust of India (UTI) was established in 1963 by an Act of Parliament. The first scheme launched by UTI was Unit Scheme 1964. Entry of non-UTI mutual funds, SBI Mutual Fund was then followed by Canbank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92), LIC in 1989 and GIC in 1990. Entry of private sector funds in 1993 unleashed in the Indian mutual fund industry empowered the Indian Investors with more options. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993. The industry now functions under the SEBI (Mutual Fund) Regulations 1996. The number of mutual fund houses increased with time which included the new entries of many foreign mutual funds despite several mergers and acquisitions witnessed by the mutual funds industry. At the end of 2007, there were 35 mutual fund houses, which manage assets of more than Rs.3263 billion under 755 schemes. (Source: www.amfiindia.com)

1.1. Objective of the Study

Stock market exhibits unpredictable moves giving shocks to those concerned with it. In the first quarter of 2008, the stock market in India plummeted and showed the steep fall. Though, later it showed marginal recovery, but owing to extraneous factors like crude oil prices and inflation nothing substantial could be recovered.

It is easy to move in the direction of the tide but more difficult to move in the opposite direction. This aptly fits into the situation of rise and fall in the stock market. The performance of mutual funds looks normal as long as the market

gives positive and high growth returns, but no sooner than the market falls the real test of time comes to the fore for the mutual funds. At the time of fall only those fund managers who have actually done their job well achieve above average returns. This issue of performance becomes much more acute with different categories of the mutual funds having different objectives of investments. This study attempts to evaluate the relative performance of different categories of Mutual Fund and index (Nifty) during the rise and fall of the market.

1.2. Literature Review

Literature on the performance on mutual funds is enormous. The different dimensions used in the study of the performance of mutual funds basically revolve around three factors. First, funds specific factors related with the market efficiency of the market, second, active portfolio management and third, the performance measurement factors. The initial work on the mutual fund performance hovers around the issue that the returns are in harmony with the notion that active fund management could not provide more returns than the risk-adjusted index returns which was initially given by Jensen (1967). Later on it was reiterated in some other works by Malliel (1995) and Carhart (1997). These findings were later violated and led to the contradiction with the premise of market efficiency by the studies done by Ippolito (1993), Ibbotson (1994), Volkman and Wohar (1995) and Wermers (2000).

Besides, there were some unconventional studies also which concluded some other results. Sharpe (1996) gave the conclusion that low expense gives higher returns supported by Hook (1966), and contradicted by Dellva & Olson (1998). Some studies were also done to relate the turnover of the portfolio and return of the portfolio by Malkiel (1995), and Carhart (1997). The results were mixed regarding the relationship between turnover and returns given by Wermers (2000).

It was observed that the conclusions were lacking unanimity and the results have often been contradicting with one another. Moreover, the results were localized and sometimes country specific. Most of the studies are still of US mutual funds industry and less number of studies have been done of other countries.

This study is localized in the sense we have taken only the Indian mutual funds into consideration. The study is important because India happens to be the second largest growing

economy of the world (Wilson 2003). It is pertinent that this would have a major impact on the overall learning about the mutual funds, their evaluation and assessment all over the world.

1.3. Research Methodology

The mutual fund schemes have been divided into four categories in our study.

- Debt Funds
- Balanced Funds
- ELSS
- Equity Funds

These four categories are clearly defined and do not overlap with each other. In each category five randomly selected mutual funds schemes have been taken on the basis of performance, representation of the category and availability of data. Besides the mutual funds the market index, S&P CNX Nifty has also been used in the study. The evaluation of performance of mutual funds and index is done on three parameters

- Returns
- Variability
- Consistency.

Monthly returns have been calculated for the comparison of returns in the following manner.

C_{Pt} = Closing Price at time 't'

C_{Pt-1} = Closing Price at time 't-1'

The 't' represents a particular date of a month and 't-1' means that particular date but of previous month. One way ANOVA has been calculated to find out the difference in the mean returns of all the four categories of the mutual funds and Nifty. The variability in data is being compared with the help of standard deviation and coefficient of variation. Consistency in return is being taken care of by five-point summary which includes minimum, first quartile, median, third quartile and maximum. The five point summary of all the categories of the mutual funds and index has been depicted well with the help of box-plot which gives the pictorial view of the distribution.

1.4. Data

The data source was online database provided by AMFI (The Association of Mutual Funds of India). The data of last three years has been collected (from September 2005 to August 2008) of all the Mutual Fund schemes. NAV (Net Asset Values) have been taken for the sake of simplicity and availability of the data. The official website of NSE has been used to take the monthly values of the index S&P CNX Nifty of the same duration.

1.5. Hypothesis

The study has following hypotheses.

Hypothesis 1: Equity funds have performed better than all the other categories of mutual funds

Hypothesis 2: Equity funds have highest variability of returns among all the categories.

Hypothesis 3: Debt funds have performed below all the other categories of mutual funds.

Hypothesis 4: Debt funds are the safest in terms of variability of the returns.

Hypothesis 5: The performance as well as risk of the balanced mutual funds is moderate as compared to all the other categories of the mutual funds.

2. DATA ANALYSIS

As expected the average monthly returns are found to be the highest on the equity funds but coefficient of variation is highest on the debt category (which is beyond expectation) (Table-1). The debt funds have performed as expected, except its variation. Balanced funds have also performed as per the expectation, somewhere in between debt and equity funds. Coefficient of variation has been the least on ELSS. ELSS can thus be considered as the safest option among all the categories of mutual funds.

Table: 1 Descriptive

	Mean	Std. Deviation	Coefficient of Variation (%)
Balanced Funds	.0136	.06026	22.56
Debt Funds	.0065	.01509	43.07
ELSS	.0102	.08969	11.37
Equity Funds	.0246	.08100	30.37
S&P NIFTY	.0213	.07041	30.25

Table-2 gives the impression that the values of monthly returns of different categories of mutual funds and the index are marginally significantly different as the value of F-Statistics and p-value are 1.893 and .075 respectively.

Table: 2 ANOVA

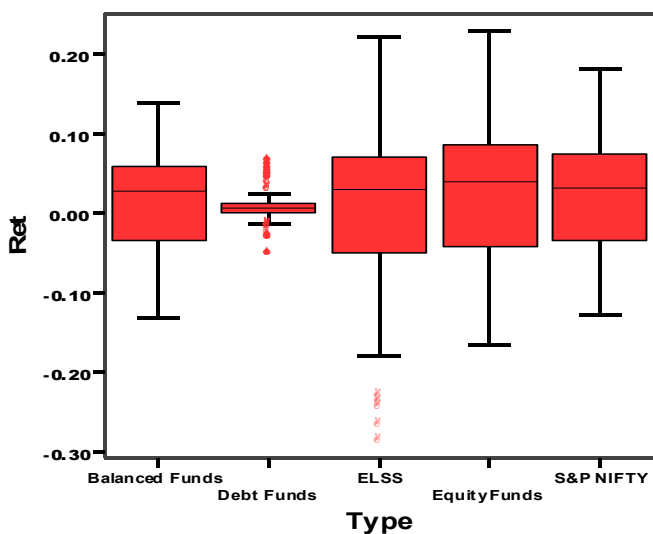
	Sum of Squares	Degree of freedom	Mean Square	F	p-value
Between Groups	.035	4	.009	1.893	.075
Within Groups	3.479	751	.005		
Total	3.514	755			

The output given in the table-3 corroborates the result given by ANOVA. The monthly returns of the balanced mutual funds are not significantly different from any other category of the mutual funds. The debt funds are found to be having significantly different results as compared to the equity funds. The debt funds have insignificantly different results from any other category of the mutual funds. The ELSS has significantly different relationship with only the equity funds and with all the other category funds it has got insignificantly different relationship. Surprisingly, with Nifty all the categories of mutual funds have the insignificantly different results. (table-3)

Table-3 Multiple Comparisons

(I) Type	(J) Type	Mean Difference (I-J)	Std. Error	p-value
Balanced Funds	Debt Funds	.00717	.00717	.318
	ELSS	.00342	.00717	.634
	Equity Funds	-.01100	.00717	.126
	S&P NIFTY	-.00766	.01243	.538
Debt Funds	Balanced Funds	-.00717	.00717	.318
	ELSS	-.00374	.00717	.602
	Equity Funds	-.01817(*)	.00717	.012
	S&P NIFTY	-.01482	.01243	.233
ELSS	Balanced Funds	-.00342	.00717	.634
	Debt Funds	.00374	.00717	.602
	Equity Funds	-.01442(*)	.00717	.045
	S&P NIFTY	-.01108	.01243	.373
Equity Funds	Balanced Funds	.01100	.00717	.126
	Debt Funds	.01817(*)	.00717	.012
	ELSS	.01442(*)	.00717	.045
	S&P NIFTY	.00335	.01243	.788
S&P NIFTY	Balanced Funds	.00766	.01243	.538
	Debt Funds	.01482	.01243	.233
	ELSS	.01108	.01243	.373
	Equity Funds	-.00335	.01243	.788

* The mean difference is significant at the .05 level.



3. RESULTS

The analysis of ANOVA (table-1) has the marginally significant p-value (.075) of the F-statistics which rejects the hypothesis that the results of all the categories of mutual funds and of Nifty are same. But out of ten possible combinations of all the categories of mutual funds and index, only three combinations had the significantly different returns. This defines the logic behind such marginally significant result of ANOVA. The average returns of equity fund (median and mean) are maximum among all the other categories of mutual funds and Nifty. The returns of equity funds are significantly different from the debt funds and ELSS. Though, the returns from equity funds are not significantly different from balanced funds and Nifty. It could be concluded that the returns of equity funds are ahead of other categories of mutual funds and Nifty and is significantly different. This proves that the hypothesis first is correct that is, the equity funds have performed better than all the other categories of mutual funds and Nifty.

Equity funds do not have the highest variability which is second to the debt funds. The in-depth analysis of returns of debt

fund makes the issue clear because of the presence of some of the outliers in the returns of the debt funds. This has made the coefficient of variation of the debt funds quite high even more than the coefficient of variation of the equity funds. Despite all this, we found sufficient evidence to reject the hypothesis two that the variability of equity funds is maximum.

The hypothesis three, that the performance of debt fund is the lowest proves to be correct. The returns are the lowest but variability was unexpectedly the highest among all the categories and index returns. But such variations were well understandable with the help of box-plot (Figure 1), where debt funds have some outliers, which gave such high values of the coefficient of variation. Therefore, no other conclusive result could have been drawn regarding hypothesis four except rejecting it.

The fifth hypotheses that the balanced funds have moderate level of returns and also have moderate level of variability, holds true.

Hypotheses two and four were rejected and one, three and five did not have the sufficient evidence to reject them.

4. CONCLUDING OBSERVATIONS

The following conclusions could be drawn from the study.

- Different categories of the mutual funds, debt funds, equity funds, balanced funds ELSS and Nifty have performed differently during the period of study.
- Debt funds did have the lowest returns among all the other mutual funds categories and index under study. Variability wise debt funds showed significant variation from the expectation. The debt funds, contrary to the expectation, showed highest variation during the period of the study.
- Equity funds have given the highest returns during the period of study irrespective of the market conditions. It was found that equity funds fared well during the rise as well as fall of the market.
- Balanced funds had been moderate and balanced in both returns and variability of the returns.

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