

**MUTUAL FUNDS – PERFORMANCE APPRAISAL
AND ORGANISATIONAL FACTORS:
AN ANALYSIS BASED ON RISK-ADJUSTED RETURNS**

ABSTRACT

This study examined some of the major issues pertaining to mutual funds in India. The excess returns provided by the mutual funds and their market timing ability were statistically evaluated. The influence of organisational factors on the excess returns were also examined. The major findings from the analysis are discussed below. Later, the limitations of the study and suggestions for further research are given.

We have in all considered 97 schemes for the period of 1987-1994. Out of these 97 schemes we have considered 82 schemes for analysis after removing the schemes for which less than 15 monthly returns were available. Of these 82 schemes, we had data on market prices for 20 schemes, Net Asset Values (NAVs) for 73 schemes and repurchase prices for 9 schemes. Of the 82 schemes, 18 were growth schemes, 28 were income and growth schemes, 20 were income schemes and 16 were tax planning schemes. Each option of a scheme was considered a separate scheme. We used market prices, NAVs and repurchase prices for returns and used Sensex, Natex, ET Index as market proxies.

The analysis indicates that monthly returns of the market indices and schemes are normally distributed and hence statistical conclusions based on normality can be made.

The results indicate that mutual funds, in general, do not provide excess risk-adjusted returns, i.e., they do not provide return appropriate to their risk class. In fact, when market prices were used, none of the series (i.e. schemes) showed positive risk-adjusted excess returns. This means that their return was less than the return appropriate for their risk class.

Many fund managers suggest the use of NAVs to evaluate performance. However, even when NAVs were used, very few schemes of the mutual funds studied exhibited statistically significant excess returns.

This result may be surprising, given the popular perception about mutual funds. But, evidence shows that the world over, mutual funds, as a group, do not provide excess returns.

When the analysis was done using Sharpe measure, given by $(R_1 - R_f) / \sigma_1$, which does not require the assumption of the capital asset pricing model (CAPM), then also a similar result was obtained. That is, mutual funds do not provide excess returns than the market.

The annualised returns were also compared directly with the returns from the indices without adjusting for risk. The results were similar.

The consistency of fund performance was also examined. It was found that Mastershare performed consistently better than the market only in the earlier years, i.e., upto 1990-91. All others were found to be not consistent in the study period.

Further, the market timing ability of mutual funds was examined. Market timing is defined as the ability to predict the movements of the market (based on the indices) and shuffle the portfolio to gain benefit from the movements in the market. It was found that mutual funds do not have market timing ability. This result is not completely surprising. Mutual funds cannot keep more than 25% in cash equivalents. Further, to implement a timing strategy it is necessary to switch between equity and debt and among different risk-levels of equity. Given that the debt market is extremely illiquid in India and that there are very few liquid scrips among listed scrips, implementing a timing strategy may be difficult. The mutual fund executives have said that they would try to time their entry into specific stocks. However, this is not the meaning in which 'market timing' was used in this study. Timing entry into a specific stock would be more in line with stock selection. It is possible to implement a timing strategy by reshuffling the stock portfolio itself. Lack of this ability could mean that either the mutual funds do not attempt timing or that they are not successful at it.

It appears that functionally organised mutual funds are less riskier. That is, schemes from those funds which do not have any specific personnel identified to manage a single scheme or a group of schemes tend to exhibit less risk. But many of the product-structured mutual funds in our sample have proportionally more growth and income & growth schemes. This could also be a reason why they exhibit more risk compared to functionally organised mutual funds which have more income schemes. Moreover, in functionally organised mutual funds, inter-scheme transfers could be used to reduce risk. However, it requires to be stressed that inter-scheme transfers are expected to be undertaken at market prices by mutual funds.

The risk of a fund is expected to be in line with its investment objective. An income fund is expected to have low risk and a growth scheme is expected to have a higher risk since equity is associated with greater risk and fixed income securities with lesser risk. It is assumed that income schemes will have a larger proportion of investments in fixed income securities and growth schemes more in equity instruments. The issue was examined and it was found that, broadly, the risk levels of the funds are as expected.

The effect of organisational characteristics such as structure, size, portfolio turnover, expenses and the number of research personnel was also studied. Turnover seems to have a positive influence on excess returns.

We also conducted a survey among executives of mutual funds (covering 10 mutual funds). We used a structured questionnaire and also conducted interviews/discussions with these executives. Some the survey findings are given below.

- Mutual fund executives feel that portfolio analysis techniques are not useful in the Indian context, given the stage of development of the capital market. In the case of bond markets, 'duration', etc. are not considered by the mutual funds. Again it was felt that the bond market is underdeveloped and illiquid. Bonds are usually held till maturity.
- It was also mentioned that the funds do not have a quantitative risk target for the schemes. There is a quantified return target when the scheme assures a minimum return.
- In the case of inter-scheme transfers, liquidity requirements seem to be the major reason. Other reasons include the instrument becoming out of tune with the objectives of the scheme and investments exceeding the statutory limits in a scrip.
- Several mutual funds do not have separate fund managers and decisions are taken by committees. Most executives felt that lack of awareness is the major reason for the currently prevailing high discounts to the NAVs.

At this juncture it is pertinent to ask that if mutual funds do not outperform the market, then why do people invest in mutual funds? Convenience is perhaps the most important reason. Small investors are being crowded out of the primary and secondary market and mutual funds are becoming the only way for small investors to invest in the capital market. Also tax incentives offered by many schemes (particularly the Equity Linked Savings Schemes) have also enthused the investors since they provide greater return on a post-tax basis. We have not analysed return on post-tax basis because the implication is different for different classes of investors. Further, there is no tax deduction at source for the returns from many of the mutual funds for the ordinary investors (this has been changed in the 1995-96 budget). The investor need not worry about the administrative problems and monitoring problems of investing directly in the capital market, if he invests in mutual funds. It is also to be noted that some of the schemes did give excess return than the market till 1990-91. This also would have given the initial impetus.

The returns computed by us using net asset values (NAVs) are returns net of expenses since NAVs are computed after excluding expenses. Hence, it may be argued that gross returns are to be used for comparison. We feel that taking net returns is appropriate from an investors' point of view, since the value of the scheme is computed using only net figures.

It may be noted that we have used data from the date from which it was available upto June 1994. Some of the schemes were not quoted for quite some time after their launch. In the case of some other schemes NAVs were not made available for the initial periods after the launch. The initial appreciation, if any, is thus not fully captured by our analysis.

We observe that many open ended schemes are getting floated of late. They provide convenience for the investors from the point of view of liquidity. We did not have many such schemes in our analysis.

In the context of increasing competition among mutual funds, in addition to expected returns, factors like liquidity, marketability, convenience and service to investors are also expected to play an important role in the choice of funds by the investors. This also needs to be kept in mind by the mutual funds for their future operations.