PERFORMANCE EVALUATION OF EQUITY MUTUAL FUNDS IN INDIA: AN EMPIRICAL EXPLORATION

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ABSTRACT

The mutual fund industry in India has registered significant growth during the past decade or so, and has emerged as a significant financial intermediary. The growing importance of Indian mutual funds may be noted, in terms of the increased mobilization of funds and the increasing number of schemes and investors in the industry. To fulfill the expectations of millions of account holders, the mutual funds are required to function as successful institutional investors. Evaluating performance for mutual fund managers vis-à-vis such a goal, is important for both the investors as well as the portfolio managers. Fund managers in India, periodically publish various performance reports using standard measures, which may not actually reflect the true investment performance of the funds. The present study evaluated the performance of the equity mutual funds in India over a period of last six years or so, using a new framework. A number of performance indicators are used for the purpose, which are not a part of the performance evaluation framework currently in vogue. We hope that our

The analysis part of the study begins with chapter 4, wherin we discuss the performance of the equity mutual funds in our sample with respect to eight **conventional performance measures**. These measures are raw return,excess return over benchmark, information ratio,Treynor's ratio,Sharpe's ratio,Jensen's Alpha,Appraisal ratio and M^2 measure.Although we use the term 'conventional',the measures most commmonly used in India are raw return,tracking error,Treynor's ratio, Sharpe's ratio and at the most Jensen's Alpha. Our study have used additional measures like in management' or frequent changing of the portfolio taking into consideration various factors that they feel, may affect the portfolio return. To take into account that dynamic or 'active' style of managing their portfolios by the fund managers we need to perhaps penetrate deeper into the aspect of performance evaluation. That brought us to our next area of focus in this study ---evaluation of active management skills of the fund managers, which we explored in the next chapter(Chapter 5). Two possible components of active management skills of fund managers, that enables them to generate returns superior to the general market are believed to be "**market timing ''** and "**stock selection**". The pioneering works for determining the market timing and stock selection abilities of managed portfolios, were done by Treynor Mazuy(1966) and Henriksson Merton(1981), and later modified by proponents of the conditional approach(Ferson and Scadt, 1996). Globally the literature on this issue is rich and spans several decades, but not many studies exist on this, using emerging market data. Our attempt in this paper has been to find the stock selection and market timing abilities of Indian mutual fund managers using unconditional models (Treynor Mazuy model and Henriksson Merton model) as well as conditional models (Ferson and Scadt framework). Our study modified the conditional models, by incorporating one additional variable, relevant for the Indian Scenario. With a sample of 96 Indian Mutual fund schemes we observe generally, lack of market timing ability and presence of stock selection ability among Indian Funds managers in both the approaches.

Next(Chapter 6), we explore **persistence** in performance of equity mutual funds in India.Persistence refers to the ability of a fund to maintain its relative performance ranking over time . Globally numerous studies have tested the persistence of mutual fund performance and their findings have generally been mixed in nature. To the best of our knowledge no studies have been made in India, to address this important issue of persistence in mutual fund performance across time. This prompted us to explore this area. We investigated the persistence in performance of equity mutual funds in India, using different performance proxies and time horizons, and to find out, if any, the impact of length of the time horizon on the persistence of a fund. We used a regression approach and a contingency table approach for testing the persistence and the results were further substantiated with a Spearman Rank Correlation Coefficient test. Our analysis shows moderate evidence of persistence. It is found that with shorter time horizons like three months or six months a lot of cases of 'reversals' are observed but if the time horizon is one year, persistence exhibited is quite prominent particularly for the growth funds. Again when the time horizon is increased beyond one year evidence of persistence weakens. Too many reversals occurring during a very short period (3 months or six months), before an 'equilibrium' is reached, may cause lowering of proportional persistence over such time horizons. Presence of short term (one year) persistence and absence of long term (more than thirty months) persistence give the impression of market efficiency in the long run. On the whole, the results of this analysis suggest, that the past performance of a fund is hardly a reliable guide to future performy tortiowth iencInd general benchmarks. To the extent our analysis pointed out the weakness of fund managers vis-à-vis the style benchmarks of the funds they manage, we hope that our attempt could augment the performance evaluation framewo[redacted]rrently used i[redacted]ia. [redacted]

The concept of **Value at-risk (VaR)** as a single risk measure summarizing all sources of downward risk, has gained popularity in recent years, globally among finance fraternity in general. Despite such increasing acceptance of VaR globally, it has not found adequate