



Mutual Fund Performance: A Review

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Abstract

One of the successful recent financial innovations is the mutual funds. Mutual fund industry has evolved in to a market that caters to every investment objective of the investor, as the products offered provide a range of benefits like, retirement savings, investment products for tax, deferred individual retirement plans, capital appreciation, regular savings and return. The most important evaluation criterion an individual investor considers for investing in a fund is its past performance. The individual investors need to understand that past performance of a fund is not be read independently but jointly with investment style, expense ratios, minimum investment, fund manager and his personal investment, governance structure etc. An attempt has been made in the paper to understand the different facets of mutual fund performance by reviewing research works of different authors on mutual fund performance.

Key Words: Mutual funds, Mutual Fund Performance, Review, Ranking of funds, Ethical investments.

Introduction

A significant shift has occurred in the personal investment environment, affecting investors as well as investment firms. Understanding the affective basis of investing behavior of investors requires an in depth comprehension of various factors involved in investment decisions. The most apparent consideration of investors is the monetary factor (Rao and Saikia, 2006) constituted of liquidity,

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regular income, tax benefits (Panda and Tripathy, 2001), and performance of the mutual fund (Singh and Vanita, 2002) interpreted by investors as past returns of the fund. But the individual investor is likely to be unaware that the performance of the fund is impacted by many variables which may be endogenous or exogenous to fund performance. Understanding mutual fund performance is important for the investor, investment firms and the market as positive risk adjusted returns has an implication for all the stakeholders and affects market efficiency.

Over a period of time the shift in preferences of an individual investor from traditional forms of investing to innovative investments has resulted in mutual funds being sought after as the next best alternative to conservative instruments due to the moderate level of risk in comparison with stock market investments. Investing may be described as a function of science, math, art, luck and intuition. The common need for investors is to outperform either the markets or other individuals or both. The analysis of facts traditionally depended on Economic theory, which states that markets are always efficient and investors make rational choice of their investment (according to efficient market hypothesis). The major factor considered by individual investor before the ultimate decision of choice of investment alternatives is the risk involved in an investment. Another dimension is the past and future performance of the fund which depends upon many other factors of a few are - fund managers' performance in terms of selection, investment and timing of investment, change in investors' preferences, informational advantage and application of advanced measures of risk adjusted performance evaluation.

How the above factors influence the mutual fund performance needs to be understood by the individual investor to make an optimum investment decision. The objective of the present research is to understand the different dimensions of mutual fund performance from the perspective of an individual mutual fund investor. With this objective the paper is organized as follows: Section II discusses the

various articles reviewed with focus on mutual fund performance: and Section III– Conclusion.

Mutual Fund Performance – A Review

Mutual Fund Performance and Ranking of Funds

Blake and Morrey (1999) have examined the predictive qualities with those of a “naïve” alternative predictor: simple historical average monthly returns by using parametric and non parametric tests. The data are examined at different time horizons i.e. one-year, three-years and five years, to arrive at short- and long-term analyses of the predictive qualities of Morningstar ratings and the “naïve” predictor. The measurement of performance is done by using several well-known performance metrics including the Sharpe Ratio (1966), mean monthly excess returns, a modified version of Jensen’s alpha (1968) and a 4-index alpha. They have empirically evidenced that mutual funds that were having five star ratings during the period of study were receiving higher cash inflows where as funds with a three star rating experienced a higher cash outflow during the same period.

This may be interpreted as the investor understanding past performance of the fund in relation with the rating given to the fund. This may be a reason as to why a highly rated fund has a higher level of cash inflows than other low rated fund. The investor may be unaware of the game plan that a high rated fund may invest the cash flows in high risk investments in order to maintain at the least a level of equilibrium in comparison with past performance. It is well established in financial literature, higher the risk; higher are the returns until the point of optimal is reached. The best rated funds would have already exhausted the best alternatives for investments and as a result would have to settle for next best alternatives which may lead to normal returns on the basis of averaging returns earned of all investments. This point of the view of the researcher is further strengthened by the paper finding that five rated fund do not out perform the market. The paper clearly suggests

that ratings do not predict future performance but are only a record of achievements.

Mutual Fund Performance and Ethical Investment

Socially responsible firms are introducing new funds that undertake ethical investment. The paper by Bauer et al. (2002) has studied the international performance and style of ethical mutual funds versus conventional mutual funds by constructing a database with at least 12 months of data relating to 103 ethical open-ended equity funds and 4384 conventional funds of United States, United Kingdom and Germany markets. The empirical analysis was done by using Capital Asset Pricing Model, Multi Factor Model, and Conditional Multi Factor Model. The findings of the study revealed that 1. German and US ethical funds under-perform both their relevant indices and conventional peers, while UK ethical funds show a slight out-performance. 2. Ethical indices perform worse than standard indices in explaining ethical fund performance. 3. Ethical funds exhibit distinct investment styles if compared to conventional funds. 4. All ethical funds are more growth-oriented than value-oriented, if compared to conventional funds. Finally when the relative returns of ethical and conventional funds were investigated through 3 sub periods revealed a profound age impact where the older ethical funds out performed conventional funds. On the other hand recently launched ethical funds were low performers when compared with conventional funds.

Investors will be willing to accept suboptimal financial performance if their personal values on social responsibility are satisfied. But the acceptance of fund performance is not limited to a single investor. Socially Responsible Investing (SRI) may lead to a clash of interest between stake holder and stock holder. Pragmatically, the interest of both the aforesaid parties cannot be optimal. The screening of the investment opportunity may limit the diversification possibilities resulting in a shift of the mean variance frontier toward less favorable risk return trade off than the conventional funds. On the other hand, screening may generate value relevant information which can be

utilized by the fund managers to generate better returns on the ethical funds than the conventional funds.

Mutual Fund Performance and Business Cycles

Lynch, Wachter, and Boudry (2002) have developed a new methodology that allows conditional performance to be a function of information available at the start of the period using Euler equation providing direct information about time variation in conditional performance. The dataset and time period used is the same as in the study of Elton, Gruber and Blake (1996) which uses 188 common stock funds in the 1977 edition of Wiesenberger's Investment Companies with total Net Assets of \$ 15 million for the time period January 1977 to December 1993. The authors using dividend yield to track business cycle estimate conditional CAPM, the conditional Fama-French three-factor model, and the conditional Carhart (1997) four-factor model and arrive at the finding that all funds except growth funds register an abnormal performance during slump season regardless of the factor model used.

On conditionally evaluating the mutual fund performance with available business cycle information may provide the investor with a reflection of short run performance impacted hugely by the fluctuations in the business cycle. It would be preferable if the investor were to assess performance over longer periods (e.g., 3 to 5 years) to smooth out very short term fluctuations in performance and the influence of the business cycle. Changes in mutual fund performance during periods of decline in business cycle is due to the shift in asset allocations made by the institutions between bonds and stocks where fewer investments are made into stock funds when there is a trough of a business cycle and allocate more into stock funds during the peak season of the business cycle (Luo, 2003) by doing so the mutual funds reduce their exposure to market risk (Cederburg, 2008). Asset allocation decision ensures liquidity, less volatility and better performance for the mutual fund during decline in the business cycle. The investment decision to change the composition of portfolio during different stages of business cycle is

also due to the irrational decision making of the investor who exhibits 'economic trend chasing behavior' and negative reaction (Luo, 2008) to high levels of volatility in stock market.

Mutual Fund Performance and Competition in the Sector

Keswani and Stolin (2005) have examined the influence of competition on investment performance persistence by focusing on the UK unit trust (open-ended mutual fund) industry. The authors have investigated the competition within the sector by constructing several variables intended to capture the intensity of competition like the number of funds in a sector, the proportion of mature funds, and the Herfindahl index of asset concentration. The study has evidenced the existence of higher persistence in sectors where concentration of assets under management is higher. The results of the study also suggest that the degree of persistence exhibited by a sector's investment managers depends on how competitive that sector is.

When new entrants enter the market there is always a change in the economics and the strategic plans of existing players in the mutual fund industry. The degree of change in the existing businesses will depend upon the entrants' family and asset class for investments. The effects of competition would influence the current players' prices, revenues, costs, profitability, and potentially even survival (Wahal and Wang, 2008). Incumbents that have a high overlap in their portfolios with entrants subsequently engage in price competition by waiving fees, and experience quantity competition through lower investor flows (ibid). This sharing of investor flows reduces the assets under management of a mutual fund impacting the effective allocation of assets. The overlapping of portfolio does not provide a competitive edge for any fund. On the other hand, competition may offer added value to the investor as the companies devise new plans of survival by retaining the existing customer and taking measures to expand the customer base. For the investor the value does not mean returns generated by the funds.

Mutual Fund Performance and Minimum Investment

Levitt (2005) have evidenced in the study to support the claim that minimum initial purchases in mutual funds are indirectly proportional to expense ratios. The author has examined the relationship between different levels of minimum initial purchases and the following variables: expense ratio, front-end load, deferred load, five year mean (gross) returns, the fund's turnover ratio, average manager tenure, and assets under management. The study uses 1132 funds that includes equities (domestic and international, and all Morningstar style boxes), fixed income funds that include short and long-term maturities of US Treasury securities, corporate securities, and municipal bonds, and a few asset allocation funds. The author set up four regression equations to see if minimum investment purchase levels are dependent on expense ratio, front-end load, deferred load, five year mean (gross) returns, the fund's turnover ratio, average manager tenure, and assets under management. Correlations between the variables broken down into minimum investment bin categories, and by retail and institutional categories was also investigated to find any differences existing between them. The findings of the study reveal that minimum investment amounts do have a stronger relationship with expense components. As minimum investments increase, expense ratios, front and deferred loads decrease. There is a stronger negative correlation between institutional minimum purchase amounts and expense ratios.

Karceski and James (2002) find institutional investors are more informed than retail investors and less likely to chase past returns. Institutional investors are more analytical, and invest in multiple strategies, while retail investors focus on past performance and fund rankings (as quoted in Levitt, 2005). Sirri and Tuffano (1998) conclude that retail investors tend to invest new money in mutual funds that have higher returns from the prior year (as quoted in Levitt, 2005). When a retail investor wants to make an investment a common behavior exhibited is to consider the past return history of the fund before making an investment decision. It would be prudent if the investor would look at expenses of the fund and performance of a fund. The

questions to be answered would be 1. What would the investor achieve by investing in low expense fund that under perform? 2. What would the investor achieve by investing in high expense fund that under perform? If the investor has to select from two funds for investing which have the same time horizon and growth rate, then it would be beneficial for the retail investor to select low cost funds for investments with longer time horizons as there is a differential in performance due to the advantage of cost effectiveness.

Mutual Fund Performance and Fund Managers

If managers play an important role in generating fund performance, then the quality of governance of a fund may be very important to that fund's performance. It is this dimension that is investigated in the study by Ding and Wermers (2005). The research paper analyzes the relation between the governance structure and portfolio performance of U.S. open-end, domestic-equity mutual funds existing anytime between January 1975 to December 2002 with specific reference to manager characteristics (experience and performance track-record, predict future fund Performance) and structure of the fund board of directors and its impact on performance, both in the ongoing operations of the fund and in their role in replacing underperforming managers. The career track record of the fund manager was measured using Characteristic Selectivity measure of Daniel, Grinblatt, Titman, and Wermers (1997) and the fund manager's risk attitude was measured by the standard deviation of monthly excess return and the standard deviation of monthly investment objective-adjusted return. It was found that experienced managers tend to manage much larger funds, and exhibit lower levels of trading activity than inexperienced managers. Stock picking skills of fund managers did not largely improve over their careers. Managers with the best track records did not have substantially more experience (4.9 years) than those with the worst track records (5.0 years). Thus, experience, by itself, does not signify better performance. The paper also show evidences that manager with extreme stock picking track records (either good or poor) tend to exhibit higher levels of portfolio turnover than other managers.

The reason cited is that the managers with the best track records may know that their talents will persist, and, therefore, may trade frequently to capitalize on their talent. Alternatively, these managers may be exhibiting overconfidence based on their past success, which would result in unnecessary costly trading of stocks in the future. On the other hand, managers with poor track records also exhibit higher levels of turnover during the test year, which indicates that they may be trading frequently in order to try to reverse their fortunes. Managers with good track records have only slightly higher net returns than other managers. Managers are replaced during years when their stock picking talents are significantly worse than those of all other managers in the industry.

Mutual Fund Performance and Governance

Ding and Wermers (2005) also investigate into the board characteristics and its impact on mutual fund performance focusing on board size, independence, compensation, and activeness. The relationship between board characteristics and fund performance is that a fund with more effective board monitoring performs better than a fund with less effective board monitoring, because managers are more likely to work hard for the shareholders. Hypothesis testing was done and simple linear regressions of fund annual net return and following year fund performance measure in 2002 on board characteristics variables for all funds was done. A comparison was made between two fund groups. Firstly, mutual fund database that experience manager replacement in 2002 and secondly, mutual fund database that experience no manager replacement in 2002. A cross-sectional logit regression of the probability of manager replacement was done to test how the incidence of manager replacement is related to the board characteristics. The findings reveal that the managers are replaced frequently when the board has higher independent directors and have a better monitoring system when the insiders' representation is higher on the board perhaps because these inside directors have necessary experience and expertise in monitoring.

Mutual Fund Performance and Personal investment of the fund manager

Evans (2006) has examined the whether a fund managers personal ownership of mutual fund shares is associated with differences in mutual fund performance where it states that mutual funds with higher levels of managerial ownership experience higher returns and/or lower fund turnover. The study is done by testing hypothesis for a sample of 237 actively-managed fund portfolios. The hypotheses were 1. Managerial fund ownership is positively related to fund returns and 2. Higher levels of managerial ownership are associated with lower levels of fund turnover. The Regression analyses reveal that higher managerial ownership is positively associated with mutual fund returns and negatively related to fund turnover.

Higher returns may be generated due to the reduced agency cost. It may also be due to the managers' individual attitude to earn more on personal investment or the compensation structure of the manager may be coupled with fund performance. The fund performance depends upon the manager's skill, personal investment of the manager in the fund and a host of other related factors which may be read along the risk taking attitude of the manager.

Mutual Fund Performance and Fund flows

Lynch and Musto (2003) have empirically tested the assumptions that 1.Past returns do not reflect future performance and 2. Bad performers change their strategy and perform at a better rate than their current performance levels. The authors developed a model to test the assumptions and empirically proved that the relationship between past and future performance is also convex and money management strategies of bad performers are extremely successful than the good performers in the context of institutional investors. Cashman et al. (2007) have examined the relation between fund performance, and the subsequent gross flows (outflows and inflows) to the fund to understand what drives the nonlinearity in the performance–net flow

relation that is already established by researches. The authors have empirically proved that investors respond to poor and good performance. The current investors punish poorly performing mutual funds by withdrawing money from those funds and increase their purchases of funds with good performance in a symmetric fashion. The finding of the paper establishes that the asymmetry in the relationship between performance and net flows is driven by asymmetry in the response of new investors to performance and not the existing investor.

Understanding the inflows and outflows of the existing investors does not provide an investor a clear picture of fund performance as is proven that potential investors react differently and this influences fund flows.

Conclusion

Familiarity breeds investment (Huberman, 2001). This statement displays the sentiment of confidence that is built within an investor, armed with informational resources to be able to take financial decisions in volatile markets. There is an increase in the supply of complex financial products over the years which require financial knowledge and skills to navigate the emerging financial environment (Rooij, Lusardi and Alessie, 2007). Levels of financial sophistication can be only obtained by increase of financial knowledge. Retail investors need to understand that past performance is not the sole and independent criteria for evaluating an investment decision. Mutual fund performance needs to be investigated into by considering the aforesaid variables to select a fund that would provide optimal returns in the long run. There is a need to address the gap between financial literacy and financial participation as the robustness of an economy depends upon ability of its citizens to participate in the financial markets.

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