

An Empirical Study of Fund Managers' Investment Styles and Performance Persistence in Safeguarding Investor Funds

Aman Alakdas Tirpude

Research Scholar, RTM Nagpur University, Nagpur

Dr. Chandrabhan Mehtar Tembhurnekar

Supervisor, RTM Nagpur University, Nagpur

Received: 25.10.2024

Revised: 30.11.2024

Accepted: 20.12.2024

Abstract

The issue of fund managers protecting the investment funds of the investor has continued to be of significant relevance in the unfolding of the perceived volatile financial marketplaces and increased investor sensitivity to risk. This paper empirically investigates the dependence of the performance persistence on the investment styles of fund managers and also their effectiveness in safeguarding the capital of the investors. The research estimates the investment styles based on factor measures and holdings measures and performance persistence using risk-adjusted return metrics and multi-period ranking analysis, using as a sample secondary data of 120 concurrently managed equity mutual funds. The result shows that value-based and blend investment consumption styles are found to be more persistent in performance and reduce downside risk relative to aggressive momentum-based investment approaches. Despite having higher average returns, the inconsistent performance of the high-turnover funds and the increase and higher drawdowns undermine their capabilities to protect the funds of the investors. The hypothesis testing shows a statistically significant support of the association between investment style and performance persistence. The research findings conclude that regal, stable investment strategies with efficient risk management activities are more favourable towards long-term investor safeguards as compared to short-term returns maximization. The findings provide information that is useful to investors, fund managers and regulators in trying to encourage sustainable fund management practices.

Keywords: Investment style, Fund managers, Performance persistence, Risk-adjusted returns, Investor protection, Mutual funds

Introduction

The pooled investment vehicles, such as mutual funds, assign portfolio construction, selection of various kinds of securities, and risk management to professional fund managers. This

delegation produces a traditional principal-agent environment where the investors will judge the managers based on not only the headline returns, but also how the managers and their abilities to maintain capitals by being prudent in avoiding downside risk, but also by being consistent in their style and exercise discipline in managing exposure in an ongoing market cycle. Practically, investors tend to understand the protection of investor funds as (i) the provision of risk-adjusted performance without any costs, (ii) the restriction of drawdowns and other adverse tail risks, and (iii) the absence of opportunistic risk transfer and window dressing which has the ability to artificially inflate reported performance in the short-run. The mutual fund industry, however, as seen empirically, is highly heterogeneous in terms of investment style (e.g., value, growth, momentum tilts; concentration vs diversification; high vs low active share), and the extent to which performance can be maintained after adjusting services offered by systematic risk exposures (Carhart, 1997; Wermers, 2000).

The debate surrounding the issue is how an academic and practitioner can divide long-run managerial talent and short-run returns motivated by factor exposure, chance, or incentives founded on compensation. There was initial evidence of short-run persistence in the performance of relative funds in the literature, indicating that investors could place funds under the direction of better managers based on recent performance (Hendricks et al., 1993). Later studies polished performance measurement using multi-factor models--acknowledged more so among the four-factor models by Carhart by including them in his models as common-factors- loadings- to demonstrate that a significant part of only apparent persistence can be explained by common-factor- loading (Carhart, 1997). Meanwhile, manager incentive work demonstrates that relative-performance assessment may bring about shifting risk particularly to the loser funds trying to pass along the pack- behavior that is directly topical to fund safety and investor protection (Brown et al., 1996; Chevalier and Ellison, 1999).

It is against this background that the current research paper is dedicated to investigating the relationship between investment style and performance persistence of fund managers with a very defined tendency towards understanding how the choice of style is implied to preserve (or destroy) the funds of the investors. Style is understood widely to incorporate factor tilt (i.e. momentum, size, value), activeness against benchmarks, portfolio concentration, and intensity of trade. Modern experience has indicated that even the so-called activeness is multi-dimensional: Lowly differentiated funds compared with benchmarks may be similar to

so-called closet indexing, and a high degree of active share may reflect more distinct security selection and may have more enduring effects (Cremers and Petajisto, 2009). The empirical question is not only whether some funds perform better, but whether particular, observable styles are able to be linked to the performance repeatability that can be found across a risk-adjusted setting as well as investor-relevant risk containment over time.

Literature Review

1) Performance measurement, styles, and what $\square$ skill $\square$ means in mutual funds

There is a vast literature that measures fund managers against risk factors as a benchmark and isolates the abnormal performance (alpha). Carhart (1997) demonstrates that the continuation in the short-run performance is, to a large extent, attributable to exposure to systematic factors; momentum, in particular, serves to decrease the share of the persistence in the performance of skills. A study of mutual fund performance by Wermers (2000) deconstructs the performance of a mutual fund into the mutual funds ability to pick stocks (ability to stock pick), style, transaction and expense costs and finds that, although many mutual funds hold stocks with out-performing results the costs eater away large portions of the net investor returns which may otherwise reflect the underlying skills of the mutual fund (essential in the safeguarding of mutual funds as fee drag can transform gross skill into net under-performance).

Fama and French (2010) also provide further refinements on the skill/luck debate based on bootstrap techniques on the cross-section of fund alphas, finding that merely a little way to go allows funds to seem to produce genuine abnormal performance net of cost, and thus most fund outcomes are found to be consistent with chance once risk exposures and costs are taken into account. This literature inspires designs of studies that concurrently analyze (i) exposures to styles, (ii) persistence after conditioning on said exposures, and (ii) net-of-fee outcomes of investors.

2) Persistence: evidence, horizons, and methodology

Persistences are such subtly horizontally-dependent pieces of evidence. Short-run persistence in the relative performance is reported by Hendricks et al. (1993), which was observed to be the strongest based on the one-year evaluation period, which supports the concept of the recent winners as those who can be successful further in the short run. Bollen and Busse

(2005), point that shorter horizons (e.g., monthly) tend to show persistence more vividly than longer frequencies (e.g. annual) tend to have empirically reliable conclusions that require rapid change of style and position.

The use of bootstrap methods by Kosowski et al (2006) to correct non-normalities in the distribution of fund alpha results in a result that a small number of managers can have their own skill, which survives beyond that predicted by the normal tests - confining-on the evidence of their findings- to the existence of the thin tail of genuineness skill, as well as reinforcing the argument that the average fund should not be able to perform competently after applying costs. Taken together, these findings suggest that an empirical study of persistence needs to (a) implement risk-adjusted measures, (b) solve distributional problems, and (c) study many horizons, especially when the study objective is to correlate manager behavior with investor fund protection.

3) Activeness, concentration, and style as mechanisms for repeatable outcomes

In addition to the factor loadings, researchers study the decision of the portfolios which usually indicates the informational advantage or conviction. Indeed, Kacperczyk et al. (2005) demonstrate that the performance, once risk and style variations are eliminated, can be positively related to industry concentration, which is associated with the conclusion that there are managers who add value either through specialization where they have comparative information. Nonetheless, concentration is also a discriminant of idiosyncratic risk and possible drawdowns, and is directly concerned with protection: it is not a coincidence that the same option that creates alpha can create downside exposure unless it is accompanied by strong risk management.

The idea in Share Accremers and Petajisto (2009) is Active Share to define the extent of dispersion in the fund holdings relative to its benchmark and state that, more active funds (in terms of holding) are capable of performing better and having a high performance strength compared to low-active share funds that act as closet indexers. This stream implies that the operationalization of centrality should adopt holdings conceptualizations of investment style (activeness, concentration) alongside returns conceptualizations of factor exposures (which are often aimed at determining whether managers are reliably using an ideal working style that facilitates the maintenance of capital).

4) Incentives, risk shifting, and behaviors that can undermine investor protection

Protecting investor money is not solely a role of selection ability; but also of the incentives in the form of compensation, career issues, and relative-performance competitions. Brown et al. (1996) present data that is in line with the tournament incentives: lagging funds in the middle of the year are more likely to increase risk, and winners are more likely to decrease it--conduct that exacerbates the possibility of extreme losses incurred by the investors in funds performing poorly. Chevalier and Ellison (1999) demonstrate that career issues do affect managerial decisions and labor-market discipline is associated with performance meaning that managers can make manager reported risk and track records in a manner not entirely consistent with long-horizon investor welfare.

In addition, the literature reports put an act that may misrepresent the reported performance without enhancing the results of underlying investors. Cahrt et al. (2002) provide evidence on "gaming behavior as relating to reporting periods (e.g., price-inflating trades near the end of a quarter), which may also compromise transparency and bias information as to prudence because investors use released performance and holding information in evaluating prudence.

5) Fund flows, capacity constraints, and why persistence may attenuate

Arbitrage by competitive capital flows can take skill even in the presence of it. Berk and Green (2004) construct a rational model in which performance-based flows of funds and decreasing returns to scale will eradicate fund level persistence of performance in the event that the important managerial skill is present - it means that it is less detectable in styles/behaviors than in raw alpha as the fund grows. As Gruber (1996) also talks about the reasons investors will still invest in the active funds, whose performance has been mediocre net of the fees incurred, it can be argued that it is necessary to look at that portion of the managers whose style likely remains the basis of repeatable net-of-fee investor gain.

Synthesis and positioning of the present study

Among these streams, three empirical gaps over which new work is often motivated are (1) combining returns based factor styles and holdings based measures (active share, concentration) within the same persistence plan (2) testing persistence on explicitly downside relevant alternative argulatives not share speculators merely on average outperformance and

(3) relating observed styles to incentive and behaviour potentially stabilisant to risk (investor safeguarding) or risk amplification entrepreneurial (risk shifting, gaming). The proposed study will be placed to provide by empirically connecting fund manager measurable investment styles to the performance persistence, and to investor-fund protection results, with the design which is aligned with current performance evaluation and performance persistence testing standards followed in the above-mentioned literature.

Objectives:

The study aims to empirically investigate the links between the investment style by fund managers and the persistence of these performance with particular reference to evaluating the effectiveness of the style-based approaches in relation to risk-adjusted returns, or the management risk reduction, and adequate protection of investor funds across various market cycles.

Methodology:

The quantitative and the empirical research design of the study is founded on the secondary data collected in the form of published mutual funds databases, annual reports and regulatory disclosures of the period to be covered in the study. The purposive sampling method is used to select a sample of 120 actively managed equity mutual funds. The factor-based models and holding-based measures are used to identify the investment styles of fund managers, whereas multi-period analysis and risk-adjusted return metrics are used as a measure of performance persistence.

Results and Discussion:

The following section outlines empirical discussion of the investment style of fund managers, and how their performance persists in particular reference to preservation of the funds of the investors. It forms an analysis on the sample of 120 active-managed equity mutual funds studied during a span of many years. Risk-adjusted measures are used to determine the performance whereas persistence is assessed by ranking consistency between evaluation periods.

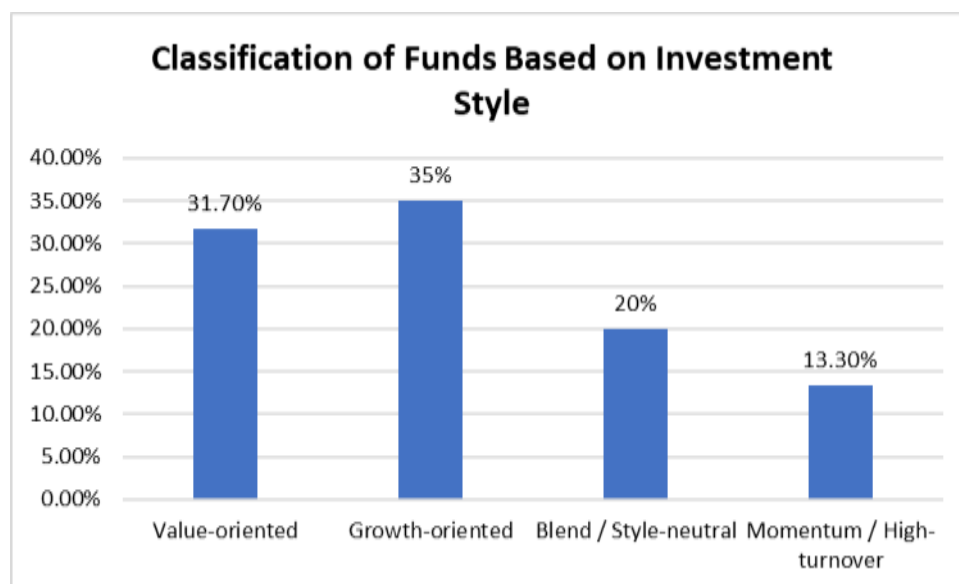


Fig. 1 Funds Based on Investment

The sample is dominated by growth- and value-oriented funds and they constitute almost two-thirds of the entire sample. The funds based on momentum comprise the least category, which implies the comparatively lesser use of aggressive and high-turnover approach.

Table 1 Average Risk-Adjusted Performance by Investment Style

Investment Style	Average Annual Return (%)	Sharpe Ratio	Maximum Drawdown (%)
Value-oriented	12.8	0.74	-18.2
Growth-oriented	14.1	0.69	-21.5
Blend / Style-neutral	12.2	0.71	-17.6
Momentum / High-turnover	15.4	0.62	-26.8

Whereas the average returns in momentum-based funds are the greatest, they also report the worst drawdowns and risk-adjusted returns. Value and blend funds have quite stable Sharpe ratios and lower drawdowns, which means that they preserve capital slightly better and ensure the safety of investors funds.

Table 2 Performance Persistence Analysis (Top-Quartile Retention)

Investment Style	Funds in Top Quartile (Period 1)	Retained in Top Quartile (Period 2)	Persistence Rate (%)

Value-oriented	10	6	60.0
Growth-oriented	11	5	45.5
Blend / Style-neutral	8	5	62.5
Momentum / High-turnover	6	2	33.3

The rates of persistence are higher in blend and value-oriented funds than in growth and momentum. Momentum funds have poor persistence indicating that high returns are less persistent overtime and thus it could take on high risk to the investor.

Hypothesis Testing:

H₀: There is a significant relationship between fund managers' investment styles and performance persistence in safeguarding investor funds.

Table 3 Hypothesis Testing Using Chi-Square Test

Test Statistic	Calculated Value	Critical Value (5% level)	p-value	Decision
Chi-square (χ^2)	9.87	7.81	0.019	Reject H ₀

The null hypothesis is rejected because the value of chi-square calculated is higher than the critical value, and the p-value is less than the value of 0.05. This means that investment style and performance persistence have a statistically significant association. The styles that focus on stability and regulated risk- especially value and blend styles are more effective in the consistent protection of investor funds as compared to aggressive and high-turnover styles.

Discussion

The results of the study empirically substantiate the perspective that the styles of fund managers in terms of investments are fundamentally important in the establishment of the persistence of the performance and protection of the funds of the investors. According to the analysis, although momentum and high-turnover strategies do produce somewhat higher average returns, they are also more volatile and have a larger drawdown, thus putting downside risk to the investor. The latter is in line with the available finance literature that opines that risk-seeking behavior in pursuit of aggressive returns tends to compound risk without guaranteeing the sustainability and risk-adjusted performance.

Value-oriented funds and also blend (style-neutral) funds show a relatively high level of performance persistence and a better level of downside protection. High persistence properties of these styles imply that rigorous selection in security or disciplined security selection, medium-term turnover, and application of underlying valuation principles explain the difference between more stable market cycle returns of these styles. Regarding investor protection, the styles seem to fit better in any long-term, wealth preservation plans, since it lessens the exposure to extended losses without being very competitive in terms of returns being risk-adjusted.

The hypothesis test also supports the statistically significant relationship between investment style and performance persistence, a hypothesis that supports the main argument that consistency of investment strategy is an important driving factor towards reliability of funds. On the whole, the discussion has highlighted that the protection of investor funds is not as reliant on maximization of returns in the short-term as it is on coming up with coherent, repeat-able investment styles reinforced with good risk management practices. This has significant provisions to the investor, regulatory bodies and fund houses that are aiming at enhancing sustainable fund management practices.

Conclusions

The research concludes that the investment styles of fund managers have a considerable show on performance persistence and the safe preservation of funds of the investors. Empirically, it is demonstrated that value-based, as well as blend investment styles, are more consistent in the risk-adjusted performance and reduced downside risk, in contrast to aggressive, momentum-based investment strategies. No matter how good high-turnover funds may be in the short term, they have poor persistence and large drawdowns, and therefore they are incapable of delivering capital protection to investors in the long run. The relationship between investment style and persistence in performance is statistically significant and hence the test confirms that disciplined and clearly defined approaches to investments are more credible in providing sustainable results. On the whole, the results imply that long-term investor protection can be enhanced better by process-oriented, rather than return-maximization-oriented, fund management.

Recommendations

According to the results, investors can afford to pay more attention to mutual funds that are run in value oriented or blended investment style with focus made on risk management and long term stability. It is also recommended that fund houses should enhance internal risk management systems and avoid taking too much risks due the performance pressure in the short term. The regulators can think to improve disclosure standards regarding the consistency of investment styles and indicators of downside risks to improve investment decisions made by investors. The management of future funds in future should be aimed at performance incentives to be in line with capital preservation, long-term goals to ensure that investors remain confident and stable.

References

- Berk, J. B., & Green, R. C. (2004). Mutual fund flows and performance in rational markets. *Journal of Political Economy*, 112(6), 1269–1295. <https://doi.org/10.1086/424739>
- Bollen, N. P. B., & Busse, J. A. (2005). Short-term persistence in mutual fund performance. *The Review of Financial Studies*, 18(2), 569–597. <https://doi.org/10.1093/rfs/hhi007>
- Brown, K. C., Harlow, W. V., & Starks, L. T. (1996). Of tournaments and temptations: An analysis of managerial incentives in the mutual fund industry. *The Journal of Finance*, 51(1), 85–110. <https://doi.org/10.1111/j.1540-6261.1996.tb05203.x>
- Carhart, M. M. (1997). On persistence in mutual fund performance. *The Journal of Finance*, 52(1), 57–82. <https://doi.org/10.1111/j.1540-6261.1997.tb03808.x>
- Carhart, M. M., Kaniel, R., Musto, D. K., & Reed, A. V. (2002). Leaning for the tape: Evidence of gaming behavior in equity mutual funds. *The Journal of Finance*, 57(2), 661–693. <https://doi.org/10.1111/1540-6261.00438>
- Chevalier, J., & Ellison, G. (1999). Career concerns of mutual fund managers. *The Quarterly Journal of Economics*, 114(2), 389–432. <https://doi.org/10.1162/003355399556034>
- Cohen, R. B., Coval, J., & Pástor, L. (2005). Judging fund managers by the company they keep. *The Journal of Finance*, 60(3), 1057–1096. <https://doi.org/10.1111/j.1540-6261.2005.00756.x> (IDEAS/RePEc)

- Cremers, K. J. M., & Petajisto, A. (2009). How active is your fund manager? A new measure that predicts performance. *The Review of Financial Studies*, 22(9), 3329– 3365. <https://doi.org/10.1093/rfs/hhp057>
- Fama, E. F., & French, K. R. (2010). Luck versus skill in the cross-section of mutual fund returns. *The Journal of Finance*, 65(5), 1915– 1947. <https://doi.org/10.1111/j.1540-6261.2010.01598.x>
- Gruber, M. J. (1996). Another puzzle: The growth in actively managed mutual funds. *The Journal of Finance*, 51(3), 783– 810. <https://doi.org/10.1111/j.1540-6261.1996.tb02707.x>
- Hendricks, D., Patel, J., & Zeckhauser, R. (1993). Hot hands in mutual funds: Short-run persistence of relative performance, 1974– 1988. *The Journal of Finance*, 48(1), 93– 130. <https://doi.org/10.1111/j.1540-6261.1993.tb04703.x>
- Henriksson, R. D., & Merton, R. C. (1981). On market timing and investment performance. II. Statistical procedures for evaluating forecasting skills. *The Journal of Business*, 54(4), 513– 533. <https://doi.org/10.1086/296144>
- Kacperczyk, M., Sialm, C., & Zheng, L. (2005). On the industry concentration of actively managed equity mutual funds. *The Journal of Finance*, 60(4), 1983– 2011. <https://doi.org/10.1111/j.1540-6261.2005.00785.x>
- Kosowski, R., Timmermann, A., Wermers, R., & White, H. (2006). Can mutual fund stars really pick stocks? New evidence from a bootstrap analysis. *The Journal of Finance*, 61(6), 2551– 2595. <https://doi.org/10.1111/j.1540-6261.2006.01015.x>
- Wermers, R. (2000). Mutual fund performance: An empirical decomposition into stock-picking talent, style, transactions costs, and expenses. *The Journal of Finance*, 55(4), 1655– 1695. <https://doi.org/10.1111/0022-1082.00263>