Chasing Winners: The Appeal and the Risk

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Summary and Introduction

For the large majority of hedge fund investors, frequent and repeated manager turnover is neither a practical nor desirable approach to managing a hedge fund portfolio. However, experiments simulating such an approach can be useful in that they can illustrate potential long-term consequences of different selection strategies. In this paper, we present results of one such experiment that offer a strong caution against the practice of chasing winners, or hiring managers that have had the highest returns. The experiment results also suggest that alpha – in this case, return not accounted for by beta to the broad equity market, including from manager skill – consistently outperforms absolute return as a selection criterion.

Amid a prolonged bull market, there may be a natural tendency for hedge fund investors to gravitate toward managers that have captured a significant share of the market's upside; however, since such equity upside capture is statistically a relative rarity among hedge fund strategies, such a selection criterion may lead to adverse selection.

Hedge funds play diverse roles in institutional portfolios. They can provide targeted scenario-specific protection, such as inflation or tail risk hedging, act as conduits to complex or "hard-to-access" assets, or deliver exposure to uncorrelated market-neutral or data-driven strategies, among other roles. Perhaps most commonly, however, hedge fund mandates carry the broader objective of absolute return: positive return is both the goal for performance and implicitly the basis on which to evaluate individual portfolio line items over time.

Investors typically also expect that part of that return will be attributable to alpha. Statistically, alpha is a precise and well-defined measure: the contribution to return after accounting for systematic market risk, as represented by the intercept of a linear equation. In hedge fund vernacular, it is also often taken to represent the

somewhat harder to pin down "skill."

Whereas skill is relatively fixed, or is associated with qualities that accrete in a manager over years, alpha is highly time-varying, and fluctuates across windows in which it is measured. Alpha tends not, in other words, to mimic a bond-like coupon stream, even if rolling estimates may sometimes make it appear that way. For an allocator, that this relationship between observed alpha and skill is not necessarily certain may leave a door open for inferring a sort of skill even from beta-driven returns, perhaps on the basis of a hard to define but powerful argument that a manager is "seeing the ball."

There is a hypothetical basis for a presumption of hedge fund performance persistence, or that managers that have delivered strong positive returns in a sample period, whatever the source of those returns, should continue to do so. Prolonged bull or bear markets may even compound the difficulty, as even beta-driven results become all the more persuasive. With many hedge funds trailing the S&P 500 Index returns over recent years, for instance, a reader of the Annual Bloomberg 100 may feel encouraged to interpret the year-end run-down as "hedge funds you weren't invested in but should have been and certainly should be now."

Consider that if "seeing the ball" were a trait that generally described top performers, persistence of returns would be a regular and characteristic feature of hedge fund track records. However, our proprietary evaluation, coupled with a substantial body of research[1], generally finds that while there is evidence of positive performance persistence in hedge funds, statistically such persistence is confined to short windows. Too short, that is, to form the basis of a realistic investment strategy for the large majority of allocators, most of which would prefer not (or are structurally unable) to manage a hedge fund allocation with continual short-term turnover.

Cliff Asness suggests a compelling framework for performance persistence based partly on factors he describes in "Value and Momentum Everywhere": not only is positive persistence associated with short-term windows of within a year, but performance reversals of the opposite sign are associated with longer-term windows of about three-to-five years. Applying this concept to hedge funds, managers that may have been cast among a losers heap for failing to see the ball – that is, for pursuing strategies with beta properties that are out of favor – might very well demonstrate a sort of mean-reversion effect, on average, and subsequently outperform.

Asness writes, "Financial market data abounds showing short-run (within a year) momentum patterns and multiyear reversal (value) patterns. Yet investors often make asset-class allocation decisions and manager fire-hire decisions using a three-to-five-year evaluation period. In short, they act like momentum investors at reversal (value) frequencies."[2]

This provocative framework presents a powerful caution against return-chasing in hedge funds in particular, insofar as investors naturally place disproportionate weight on recent performance windows of about that length (3 to 5 years) in assessing whether a manager is, indeed, seeing the ball. In other words, the windows Asness describes are precisely the types of time periods to which hedge fund investors may gravitate in identifying attractive candidate investments.

Results consistent with such large-scale effects can be demonstrated in a simple experiment. Starting with the HFRI Fund Weighted Composite universe, a broadly representative universe of approximately 3,300 actively reporting managers from all four strategy groups - Equity Hedge, Event Driven, Macro, and Relative Value, we construct perpetual, actively-managed, multi-manager portfolios based on returns from the most recent rolling evaluation period. In one iteration parameters are set to 18-month evaluation periods, so that hires are made every month out of the database based on the last year-and-a-half of results at a rate of two hires and fires per month. In other words, managers are added to the portfolio on the basis of the highest returns in the evaluation period, held for the subsequent 18 months, and then redeemed and returned to the candidate pool.

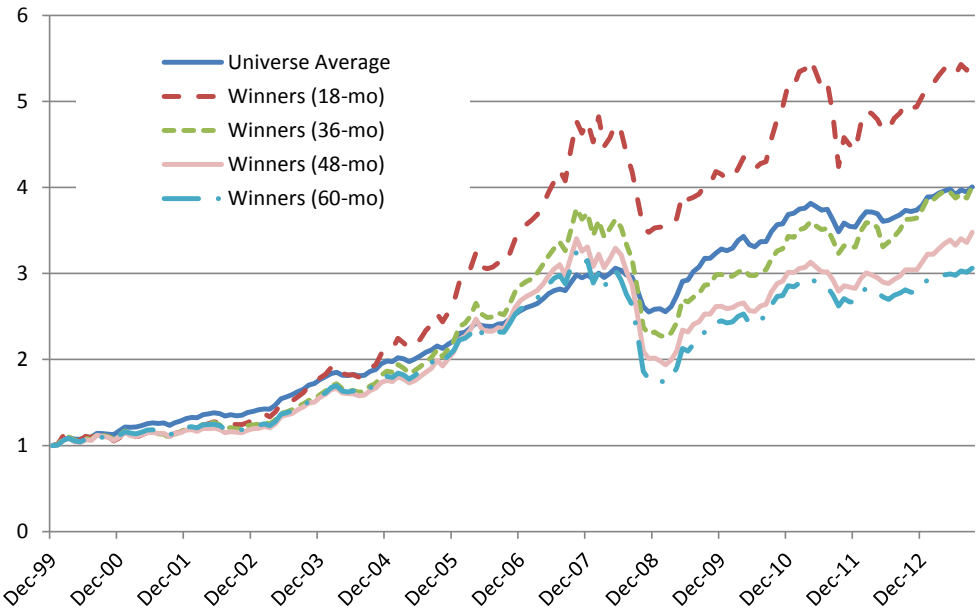

Exhibit 1: Experiment Results Chasing Winners (18-month hold period)
Source: HFRI, Commonfund

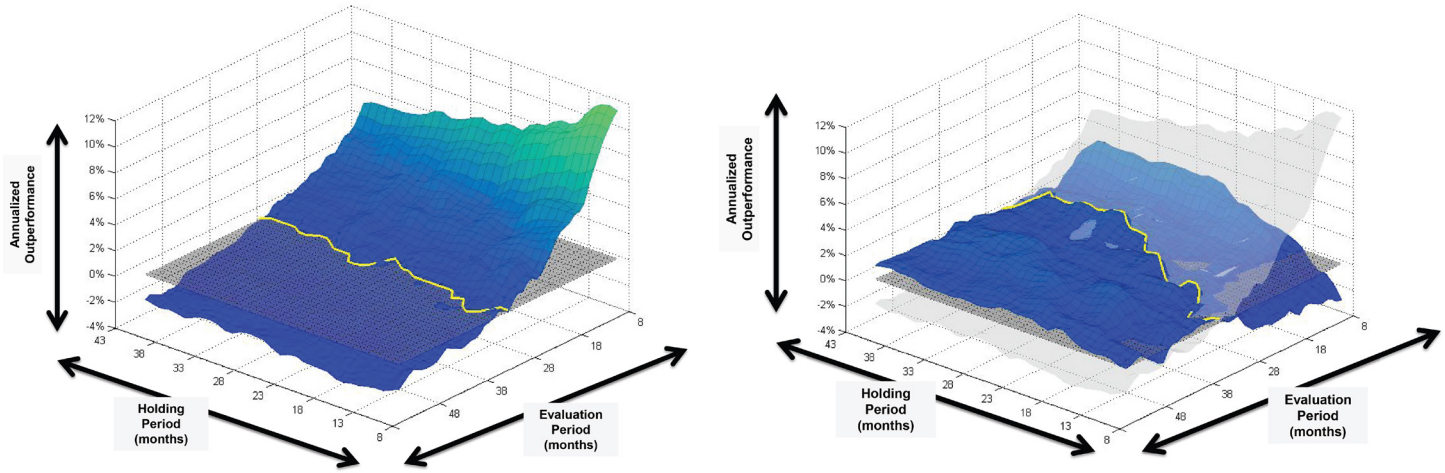

Exhibit 2: Experiment Results Chasing Winners vs Chasing Losers
Source: HFRI, Commonfund
Note: Performance reflects hypothetical portfolio returns created using HFRI Fund-Weighted Composite

The initial result may at first glance seem promising: portfolios comprised of recent winners (from the last 18 months) do indeed subsequently outperform the universe average, though not by a consistent margin. So far, results are aligned with a satisfyingly intuitive "seeing the ball" selection strategy.

What happens if we repeat the same experiment but extend the 18-month evaluation period to longer windows of 36, 48, and 60 months? Results for the winners-chasing selection strategy start to deteriorate. In fact, as the window gets longer and extends to five years, the winners rule takes on a negative sign, meaning it underperforms the strategy of drawing at random from the candidate manager universe. These results establish some basis of comparison for evaluating a chasing winners strategy across time windows. However, they are also based on arbitrary evaluation and holding periods. What if both are allowed to vary?

Annualized returns for all combinations of holding and evaluation periods from 8 to 60 months are presented in the surface diagram below (averaged with surrounding return to smooth out the surface). The y-axis represents holding period, or how long each slot is occupied by any manager, while the x-axis is the evaluation period, or how far back performance evaluation extends. Finally, the z-axis represents annualized return for the strategy relative to random selection for 13 years from January 2000.

The surface's shape suggests two large-scale effects: first, allocating to hot hands among managers in the very recent past seems to work well, as long as they are discarded shortly thereafter. In fact, like many momentum strategies that exist in hypothetical trading worlds, it produces exceptionally strong results.

Beyond these impractically short windows, however, there is little evidence that absolute performance-based manager selection is a strategy worth pursuing. In fact, the surface more strongly suggests the opposite: at longer windows, chasing winners tends to lead to below-average returns, whereas chasing "losers" actually demonstrates a slightly positive relative performance. Thus,

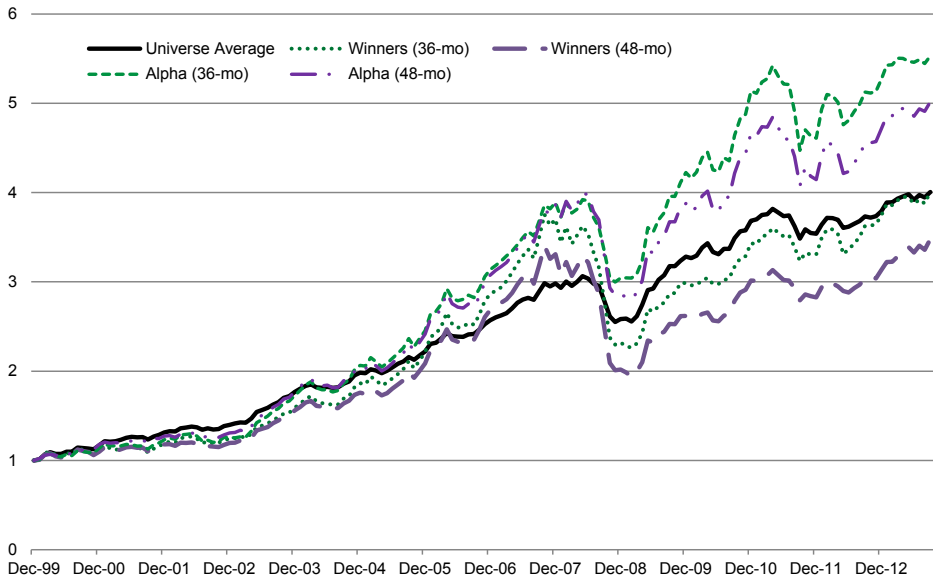

Exhibit 3: Performance of Return-based vs. Alpha-based Portfolio (18-month hold period)
Source: HFRI, Commonfund

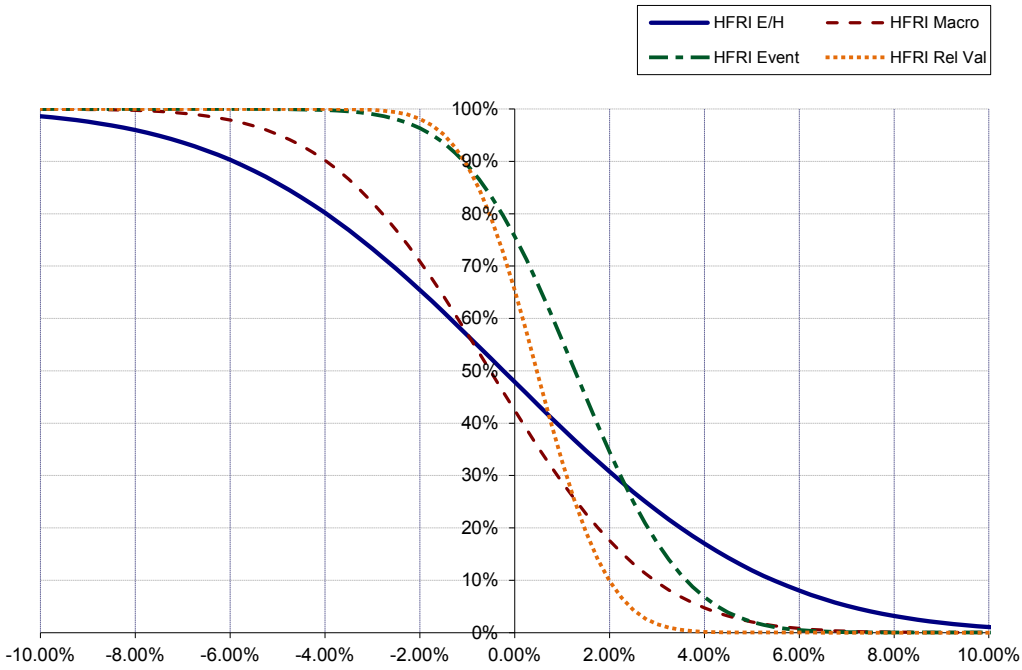

Exhibit 4: Probability of Outperforming Endowment Liquid Pro Forma by S&P 500 Return
Source: Hypothetical liquid portfolio pro forma based on survey data from the 2013 Commonfund/NACUBO Study of Endowments.
Reflects dollar-weighted, average asset allocations for all participant institutions. Uses liquid proxies for international equities, domestic equities, fixed income, commodities, and distressed debt and excludes both liquid and illiquid alternative strategies.

not only does positive-return persistence tend not to work as a selection strategy, but it is especially ineffective in those medium-to-long-range horizons that institutional investors may prefer, and indistinguishable from a strategy of selecting losers.

At most windows, then, simulation results confirm that return is an unreliable basis for manager evaluation. However, the experiment does not suggest that hedge fund investors find themselves armed with only a dartboard. Consider how results improve when "winners" are defined by alpha instead of absolute return. In nearly all time windows, portfolios comprised of top alpha-based performers outperform return-based portfolios out-of sample (i.e., in periods not included in the experiment). Importantly, the relative result for alpha also holds for evaluation lengths of the otherwise treacherous three-to five-year window, so that selecting managers based on alpha – even single-factor alpha to the MSCI World Index – generates a significant improvement relative to winners. In all periods alpha-based selection effectively offsets much of the adverse effects of return-chasing.

Thus, while a certain form of skill may very well be evident in managers that have produced positive returns in the recent past, there is evidence of a statistical benefit of pursuing managers that have produced alpha: the selection strategy outperforms mean hedge fund universe returns in nearly every window, and wards off some of the most pernicious effects of those windows that leave absolute return chasers most vulnerable.

Finally, there is a reason why a chasing winners strategy may have a particular appeal now, as an equity bull market turns several years old. However, it is important to recognize that choosing from those managers that have tracked or kept up with an equity bull market is, in a sense, vulnerable to a "seeing the ball" fallacy, and can be a form of adverse selection in that it selects from a narrow subset of hedge funds.

Consider that in a probabilistic sense, tracking or beating rallying markets is not what most hedge funds are ideally suited for. To illustrate, the chart below demonstrates, for each of four hedge fund strategy indices, the probability of outperforming a hypothetical liquid institutional portfolio[3], by monthly return of the S&P 500. In other words, as the equity market rallies, how likely is it that the Macro Index (or Equity Hedge, Event, or Relative Value) will outperform the broad portfolio?

The probability is not very high, and for outsized positive market returns, it becomes remote, illustrating on a comparative basis that downside protection is more aligned with most hedge funds' return profile. In that sense, while attractive alpha producers can certainly emerge in bull markets, they also compete for investor attention with many that are beta-driven, creating conditions for a potential adverse selection problem: narrowing a selection to a subset of managers that have delivered outsized returns along with the market may strongly color hire/fire decisions.

Thus, the lesson from the simulation experiments, however, is to be cautious: alpha works better.

*In the hypothetical hire/fire experiment, the MSCI World acts as a single beta factor. In a manager selection context, that is almost certainly too simplistic a model. It is, nevertheless, a significant improvement even in simple form.

Conclusions

Although hiring top-performing hedge funds appears to be an effective portfolio strategy within certain short time windows, it is typically ineffective in the longer windows which allocators generally use to evaluate managers.

In fact, in most such longer evaluation windows, "loser" portfolios outperform winners.

Within our experiment, selection strategies based on alpha – even single-factor alpha to the broad equity market – offset the negative "chasing winners" effect to a significant degree, and generally outperform random selection.

It may benefit hedge fund investors (who base hire and fire decisions on whether managers have captured a significant portion of the equity market's upside) to be particularly diligent about identifying beta-driven returns as an equity bull market turns several years old.

At Commonfund, our long-standing relationships with managers and extensive quantitative toolsets allow us to use alpha-based selection when building portfolios for investors, or provide access to the tools and analytical support to investors who build bespoke portfolios using our hedge fund advisory services.

For more information, please contact Commonfund Hedge Fund Strategies Group at HFS@commonfund.org or by calling 203-563-5000.

Endnotes

1. See especially Agarwal and Naik, 1999, Edwards and Caglayan (2001), and Jagannathan, Malakhov, and Novikov (2006)],
2. "The Five Percent Solution," Institutional Investor, May 2012
3. **A pro forma allocated approximately in accordance with Commonfund/NACUBO survey data**

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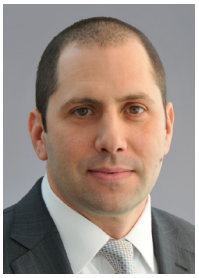
Authors' Bios



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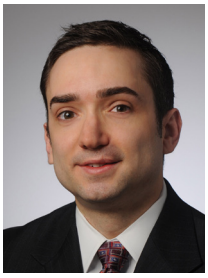
Kristofer Kwait, Managing Director, Head of Hedge Fund Strategies is responsible for leading all investment and operational aspects of the hedge fund business. In this capacity, Kris is also a member of the Commonfund Senior Investment Committee. Prior to his current role, Kris was head of hedge fund research with responsibility for overseeing the design and implementation of proprietary models for manager selection, portfolio construction, and risk management. Kris has been a portfolio manager on the team since 2002. Before joining Commonfund in 2001, Kris was a proprietary trader at both Andover L.L.C. and A.B. Watley where he managed relative value equity strategies. Prior to his experiences as a trader, he was a stockbroker at Smith Barney. Kris attended pre-college at Juilliard School of Music, has a B.S. from Purdue University and an M.B.A. from the Yale School of Management.



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John Delano, Director, is responsible for quantitative analysis of our funds and managers. Prior to joining Commonfund in 2005, John had been a consultant in Global Public Opinion Research at Altria Corporate Services, and a research assistant at Columbia University's Institute of Social and Economic Research and Policy. Prior to that, he worked as a media buyer at Horizon Media, using statistical analysis to forecast audience deliveries for television commercials. John has a B.A. in Political Science from the University of Chicago and an M.A. in Quantitative Methods in the Social Sciences from Columbia University. He also holds the Certificate in Quantitative Finance (CQF).