



October 2017

FURTHER READING

September 2017

The Folly of Hiring Winners and Firing Losers

*Rob Arnott, Vitali Kalesnik, PhD, and
Lillian Wu*

July 2017

Cost and Capacity: Comparing Smart Beta Strategies

*Tzee-Man Chow, Yadwinder Garg,
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September 2016

Will Your Factor Deliver?

*Jason Hsu, PhD, Vitali Kalesnik, PhD,
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CONTACT US

Web: www.researchaffiliates.com

Americas

Phone: +1.949.325.8700

Email: info@researchaffiliates.com

Media: hewesteam@hewescomm.com

EMEA

Phone: +44.2036.401.770

Email: uk@researchaffiliates.com

Media: ra@jpespartners.com

In Defense of Alpha?!

Jason Hsu, PhD, Chairman & CIO, Rayliant Global Advisors

The theme emerging from the 2017 Advisory Panel presentations was really a defense of active management, a quite surprising outcome given that Research Affiliates is known as almost a quasi-index passive shop. I find that surprise is typically a good thing and can be a lot of fun, requiring that we rise to the challenge of processing the unexpected. Three main threads emerged from the presentations the attendees heard, all dealing with practitioners' ever-present concern: alpha.

Thread #1: Alpha is a zero-sum game. This assertion generated some lively debate. If we agree alpha is measured by the amount of excess profit generated relative to the market, then it is mathematically true that for any investor with a billion dollars who has earned a 5% excess return relative to the market, a billion dollars that has lost 5% has to exist on the other side of the trade. What's interesting about this observation is that we, as investors, really need to think

Key Points

1. *The theme that emerged from the Research Affiliates 2017 Advisory Panel was, somewhat surprisingly, a defense of active management, encompassing discussions and debate on whether alpha is a zero-sum game, which definition of alpha investors should be concerned with, and finding alpha in timing exposures.*
2. *Alpha through active management may not be as lost a cause as many proponents of pure passive management would have us believe, rather a key challenge appears to be in soundly assessing manager skill.*
3. *That being said, because manager performance appears to be mean reverting, the return-chasing tendency of the average investor has created much wealth destruction, irrespective of manager skill.*

about who exactly is consistently losing on the other side of the trade, and why they would keep playing a game they are so bad at.

By and large, retail investors, individual investors who are not very sophisticated, are in this losing position. Terry Odean walked us through a number of common human behaviors that help us understand how this continues to happen.

Joanne Hill's take on the zero-sum game was slightly different. She acknowledged that, from a dollar-profit perspective, the excess return of the market ought to add to zero, but from a utility perspective, this is not necessarily true. You and I could both be happier—perhaps you having a bit more risk and return, and I having a little less of each. So, in my view, this is the main thread we should be thinking about: from a dollar-profit perspective, alpha is a zero sum, but from a utility perspective, risk sharing makes that zero-sum game look less dire.

Thread #2: What exactly is alpha? Posing this question, we enter the philosophical realm. The alpha of Thread #1 deals with the excess return generated versus the market portfolio, which is real dollars and cents. But academics talk about CAPM alpha, Fama–French alpha, alpha compared to a particular factor model, or perhaps even against a holdings-based analysis. How are these measures of alpha helpful? Are they a measure of skill? Or are they a noisy mismeasurement for which we lack an accurate interpretation?

We have come to learn that all sorts of reputed alphas exist because of all the different ways alpha can be measured. It might not actually be true that the presence of “alpha”

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means you should buy this or that product from this or that manager, which in the end makes all of these academic definitions of alpha not terribly productive.

Thread #3: Alpha and timing. Clearly, if you can time, you can generate alpha. The requirement then is that we need to know the source of the market-timing alpha. Many of our speakers talked about the two components of return: the transient, or mean-reverting, component and the persistent component, otherwise known as the random-walk component. If returns are not predictable—that is, if they are just random fluctuations, then prices are just random walks. Empirically, fundamental shocks to a firm's cash flows and growth opportunities appear to be random and unpredictable. The discount rate applied to the cash flows does appear to be mean reverting, however, which makes returns predictable over appropriate horizons.

If you subscribe to that model, and I think the evidence suggests you should, then the corollary is that you might want to believe in mean reversion in asset classes, factor returns, and perhaps in manager performance. What this tells us is that a long-horizon investor should gain an advantage by simply ignoring short-term correlations and short-term spikes in volatility because these movements are related to transient shocks to the discount rate and will disperse over time.

Insurance for Return

An investor can create excess return in their portfolio by selling insurance. Joanne Hill reviewed this fairly well-known concept. The story warrants re-telling, however, because we see over and over again that those engaging in this strategy occasionally suffer a major loss at the sudden onset of a short-term shock. If you are insuring someone against a negative event, most of the time you are going to collect the payment for doing so until the black swan event happens and you are wiped out.

But as we see, short-term shocks are, by definition, transitory, so the risk is actually worth taking if you budget risk correctly and are a long-horizon investor. Academia refers

to this as the volatility risk premium and volatility smile. The volatility risk premium occurs because implied volatility in broad equity index options is higher than actual volatility, and the implied volatility for out-of-the-money put options is higher than that for at-the-money options, creating the volatility smile. Intuitively, selling out-of-the-money put options is like selling an insurance policy against a skewed downside outcome. For long-horizon investors who can ignore short-term transient shocks, this is perhaps not a bad strategy if you budget risk properly.

The Limits of Our Attention

After listening to Terry Odean's presentation, I realized that almost all the interesting people I know used to drive a cab, and they tell great stories. Terry walked us through a laundry list of things that we normal human beings do very poorly. Investing happens to be one of them. All of our behavioral affects tend to lead to the wrong outcome when it comes to investing. Not only are we emotional, fearful, mentally lazy, and inconsistent, but we are faced with so much information we must choose how we process it—and we tend to make this decision based on what gets our attention, not necessarily what *needs* our attention.

From empirical studies we know that the average fund underperforms by about 1.0% to 1.5% net of fees. Worse yet, investors, with the help of financial advisors and fund ratings, appear to destroy about 1.5% in returns due to their propensity to trade funds and pick managers based on short-term performance. This has been demonstrated through various research on the value of investment advice, and again in publications by Rob Arnott and Vitali Kalesnik. But despite that, investors are probably still much better off paying for financial advice and professional management. Evidence from individual trading accounts shows that if you trade yourself, you are, on average, 6.5% worse off than if you bought mutual funds.

According to Terry's research, if you are a manager who needs to earn alpha to make a living, you should look for markets with a lot of retail investors. Therefore, for managers who want to apply Terry's finding, the United States—where only a small part of the equity market is composed

of retail trading—is probably not the best place to do so. Asia is a better pond for fishing, where roughly 85% of the market is retail trading, and in China the fraction is closer to 90%. Therefore, it is perhaps no surprise that Chinese managers report an easier time outperforming, despite charging meaningfully higher fees.

Changes Are Coming in the Bond Market

Larry Harris's presentation was fairly straightforward: the long-term corporate bond market is essentially a collusion against humanity. Based on Larry's research, for the year ended March 31, 2015, total corporate bond transaction costs were \$26B to the end investors. Of that, \$700M could be classified as pure fat, meaning they were mark-ups that wouldn't have otherwise been possible if price transparency was present in the bond market. Larry finds the price disimprovement is much greater than the normal commission; of the 31% of trades with a price disimprovement greater than 10 bps, the average disimprovement is 77 bps.

This lack of price and cost transparency is making the market less liquid, making liquidity more expensive, and making financing costs higher—all bad things. This suggests that the bond market is ripe for disruption, and we pray that soon an Uber-type disruption to bond trading will change the system.

The situation Larry outlines—professionals acting not as fiduciaries, but as conflicted agents—may explain many other phenomena in our industry. The growing interest in robo-advisors may reflect a distrust in the financial advisor community and the often-documented conflict of interests they have in peddling high-fee and high-load products. I think, in some respects, the massive flow of funds from active to passive strategies isn't necessarily about the belief that markets are perfectly efficient and

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skilled managers cannot outperform. I think there has been a growing awareness of the lack of alignment between managers and their clients—that skilled managers often focus on asset gathering or switch to hedge fund fees to maximize personal profit instead of focusing on delivering good results to their clients.

Identifying skilled managers may not be where the challenge is; the true challenge may be in finding skilled managers who are unskilled at profit maximization. Perhaps what we are seeing today is clients rebelling against active managers by moving to low-cost passive strategies. As an industry, we need to explore a deeper philosophical question: Are we fiduciaries, and thus need to hold ourselves to a higher standard of conduct, or are we no different than any other purveyor of consumer products, worrying about our own profit maximization, and buyers beware?

The Time-Varying Discount Factor

Luis Viceira talked about something I can summarize with three letters: SDF, the stochastic discount factor—the centerpiece to the first-year PhD curriculum for all finance programs. The SDF is time varying and mean reverting: It is higher when we find ourselves in a bad state of the world (say, in a recession or in a market crisis) and lower in a good state of the world (in an expansion or in a stock market euphoria).

The discount rate is in the denominator of every valuation equation, so when the discount rate is high, assets are cheap, and when the discount rate is low, assets are expensive. Higher levels of volatility in the equity market, including increasing correlations across equity markets, are related to a large negative shock that drives the discount rates higher and asset prices lower, but these shocks reliably dissipate over time.

Investors should decompose realized returns into the portion that is due to news about fundamentals, and the portion that is due to movements in the SDF, or discount rate shocks. The first type of shock tends to lead to perma-

nent changes in valuations, while the second type leads to temporary changes.

Luis shows that increasing correlations of discount rate shocks across markets is the main driver of the secular increase in global correlations of equity markets in recent decades. An increase in the correlations of inflation is also an important driver of the equally significant increase in the global correlations of bond markets. Why are discount rates more correlated across global markets? According to Luis, this is the result of financial globalization, which makes capital freely move across the globe and therefore facilitates the contagion of shocks to investor sentiment and risk aversion.

Luis notes there is a silver lining in all of this: Long-run correlations of global equity markets have not increased because they are driven by the correlations of fundamentals, not discount rates, and these correlations have remained fairly stable over time. Therefore, the benefits of global diversification have remained very healthy for long-horizon investors who should care only about long-run correlations and volatility.

Decomposing Performance

We entered the philosophical realm with Wayne Ferson's presentation. Wayne asked: What is alpha when we try to slice and dice it? He explored the implications of measuring alpha from different perspectives and using different models. The struggle, however, is that no natural linkage exists between the different alphas we measure and the investment advice we give to clients. For example, it is rarely the case that clients should invest in high-alpha managers; this is true regardless of how we measure or risk-adjust alpha. I think this surfaces a very fundamental issue in our industry, which doesn't get addressed much.

“The return-chasing tendency of the average investor has created much wealth destruction.”

We disagree on the interpretation of what alpha is and isn't, and on how useful the various measures are to investors. In some sense, it makes a lot of the literature on manager outperformance (often in the context of multi-factor risk adjustment) more academic than is relevant.

To make matters worse, most reported and computed alphas are just short-term excess returns over the fund's stated benchmark. Empirically, we know that flows respond to short-term outperformance, which produces performance chasing. Substantial evidence shows that short-term outperformance tends to mean revert; the standard approach of buying past winners actually ends up being precisely the wrong thing to do.

Factor Timing

I am sure few people have missed Rob's writing on factor timing (Arnott, Beck, and Kalesnik, 2016) and the ensuing debates between Cliff Asness and Rob on the subject. I have been pinged by many friends in the pension community to provide added color on the content and the context of the disagreement. Before I review Rob's presentation here, let me simply state that Cliff and Rob largely agree qualitatively on the content. In fact, I don't think they are far apart quantitatively on the net-of-cost benefit from factor timing—largely the quantifiable effect is economically and statistically weak.

With that out of the way, let me distill Rob's take on factor timing down to the following two points:

1. When a factor has become much more expensive versus other factors as measured by the book-to-market ratio (B/M), for instance, that factor is likely

to underperform other factors. This is just a way to express that the value effect exists in the cross-section of factors.

2. A factor, which has substantially outperformed other factors in the recent past, is likely to have become expensive as measured by B/M, and thus likely to subsequently underperform. This could be experienced as long-horizon return mean-reversion in factors.

Conclusion

Not surprisingly, a wide-ranging examination of alpha was woven throughout the Advisory Panel presentations. Alpha, after all, is at the center of what we as practitioners continually strive to achieve for our clients. The surprising bit, however, was that alpha through active management may not be as lost a cause as many proponents of passive management would have us believe—there are willing losers (noneconomic participants such as central banks), there are uninformed speculators, and there are reliable patterns in expected returns due to transient shocks.

The challenge appears to be in accessing manager skill in a productive way. Investors have thus far been less than successful at finding skilled managers who charge low fees. Investors have also been unsuccessful at buying and holding onto good managers. Because manager performance appears to be mean reverting, the return-chasing tendency of the average investor, fueled by our industry's desire for churn, has created much wealth destruction, irrespective of manager skill. In many ways, manager skill may be a side show when we speak on the topic of adding value for our clients. I therefore end with the following question: Are we fiduciaries held to a higher standard, or are we no different than other profit maximizers peddling a consumer product?

Reference

Arnott, Rob, Noah Beck, and Vitali Kalesnik. 2016. "Timing 'Smart Beta' Strategies? Of Course! Buy Low, Sell High!" Research Affiliates newsletter (September).

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