

To Outperform

From November 5, 2018's WSJ:

Fund Success Really Is a Throw of the Dice

Thanks to volatility, investors often fail to beat the market with a proven strategy—even if they stick to it for as long as 10 years

By Mark Hulbert

When deciding how to invest, many investors pursue a number of well-known strategies that have been shown to outperform the market over the long haul. They figure, reasonably, that if they follow these strategies through thick and thin, they, too, will beat the market.

Well, it turns out that this isn't necessarily the case. When an investor sticks with one of these strategies well beyond 10 years, the odds of its outperforming the market, or its benchmark, do improve, though there is still no guarantee. Meanwhile, for periods even as long as 10 years—and increasingly so, the shorter the period—the investor has a pretty good chance of falling short, simply because of bad luck in their timing.

The culprit is volatility

To show this, University of Chicago finance professor and Nobel laureate Eugene Fama and Dartmouth professor Ken French set up an [experiment](#): What if an investment strategy's return in each of the next 120 months is equal to what it was in 120 randomly selected months from the past five decades? This is a generous assumption, of course, since it presumes that the distribution of possible future returns will be as good as actual past returns. They then ran this simulation 100,000 times, calculating the number of times a strategy lagged behind its benchmark.

Even with their generous assumption, they found that for each of the investment strategies they studied, there was a significant probability the strategy would lag behind its benchmark over a 10-year period. Consider value investing, a strategy that favors stocks that trade with the lowest price-to-book ratios over those with the highest ratios (the so-called growth stocks). Despite having one of the strongest historical pedigrees, the average value stock over the past decade has lagged significantly behind the average growth stock.

This should not have come as a complete surprise. Profs. Fama and French calculated there to be a 9% probability that the value strategy would lag over any given 10-year period.

'Statistical noise'

For this reason, Prof. French tells me in an interview, he is skeptical of all of the after-the-fact explanations that have cropped up in recent years for why value strategies have supposedly lost their touch.

“Statistical noise—luck, in other words—is always the first possibility to consider, especially when a compelling model says the expected premium is positive,” he says. “Our tests don't rule out other explanations for the missing value effect, but they do say bad luck is a likely possibility.”

Profs. Fama and French reached similar results when testing the strategy that favors small-cap stocks over larger caps. Even if small-caps over the long term live up to their impressive historical record over the past 50 years, the professors found there is a 24% probability that small-caps will nevertheless lag behind large-caps over any given decade.

In fact, Profs. Fama and French found that the same goes for an even more bedrock belief of stock-market investors: the notion that equities will outperform riskless T-bills for those who hold them long enough. Even if the holding period is 10 years, Profs. Fama and French calculated, there is still a 16% probability that you will have been better off holding T-bills. The chances of lagging come down as the holding period extends beyond 10 years, but even at 20 years, the odds are “nontrivial,” according to the professors—8%, to be precise.

Note carefully that these not-insignificant probabilities of lagging behind a benchmark are for a 10-year investment horizon. To the extent that horizon is shorter—say three or five years—then the probability of lagging becomes correspondingly greater. (See chart.)

Lady Luck’s Powerful Role

Probability of loss given strategies’ historical volatilities



Source: Eugene Fama and Ken French

The long, long haul

The investment implication of the professors’ finding is clear: You “cannot draw strong inferences” about a strategy’s potential from three, five or even 10 years of returns. The corollary is that, once you start following a strategy with impressive historical returns, you need to give it the benefit of the doubt for at least 10 years, even in the face of significant market-lagging performance.

To use a noninvestment analogy: The relationship with your chosen strategy is more akin to a marriage than a date.

If you don’t have the patience and discipline to ride out extended periods of market-lagging performance, then you should stick with an index fund that is benchmarked to the broad market. That way, of course, you will be guaranteed not to lag behind the market in each and every year.

Mr. Hulbert is the founder of the Hulbert Financial Digest and a senior columnist for MarketWatch.

The unedited version of the following Commentary is available here:

<https://blog.thinknewfound.com/2017/10/frustrating-law-active-management/>

The Frustrating Law of Active Management

BY COREY HOFFSTEIN

ON OCTOBER 2, 2017

Summary

- In an ideal world, all investors would outperform their benchmarks. In reality, outperformance is a zero-sum game: for one investor to outperform, another must underperform.
- If achieving outperformance with a certain strategy is perceived as being “easy,” enough investors will pursue that strategy such that its edge is driven towards zero.
- Rather, for a strategy to outperform in the long run, it has to be hard enough to stick with in the short run that it causes investors to “fold,” passing the alpha to those with the fortitude to “hold.”
- In other words, for a strategy to outperform in the long run, it must underperform in the short run. We call this *The Frustrating Law of Active Management*.

We define The Frustrating Law of Active Management as:

For any disciplined investment approach to outperform over the long run, it must experience periods of underperformance in the short run.

For it to work, it has to be hard.

Let's say we approach you with a new investment strategy. We've discovered the holy grail: a strategy that *always* outperforms. It returns an extra 2% over the market, consistently, every year, after fees.

Ignoring reasonable skepticism for a moment, would you invest? *Of course* you would. This is free money we're talking about here!

In fact, everyone we pitch to would invest. Who wouldn't want to be invested in such a strategy? And here, we hit a roadblock.

Everyone can't invest. Relative performance is, after all, zero sum: for some to outperform, others must underperform. Our extra return has to come from somewhere.

If we do continue to accept money into our strategy, we will begin to approach and eventually exceed capacity. As we put money to work, we will create impact and inform the market, driving prices away from us. As we try to buy, prices will be driven up and as we try to sell, prices will be driven down. By chasing price, our outperformance will deteriorate.

... Once people *learn* about what we are doing – and how easy it is to make money – others will begin to employ the same approach. Increasing capital flow will continue to erode the efficacy of the edge as more and more money chases the same, limited opportunities. The growth is likely to be exponential, quickly grinding our money machine to a halt.

So, the only hope of keeping a consistent edge is in a mixture of: (1) keeping the methodology secret, (2) keeping our deployed capital well below capacity, and (3) having a structural moat (e.g. first-mover advantage, relationship-driven flow, regulatory edge, non-profit-seeking counter-party, etc).

While we believe that all asset managers have the duty to ensure #2 remains true (we highly recommend reading *Alpha or Assets* by Patrick O'Shaughnessy), #1 pretty much precludes any manager actually trying to raise assets (with, perhaps, a few limited exceptions in the hedge fund world that can raise assets on brand alone).

The takeaway here is that if an edge is perceived as being easy to implement (i.e. not case #3 above) and easy to achieve, enough people will do it to the point that the edge is driven to zero.

Therefore, if an edge is *known* by many (e.g. most style premia **[Factors]** like value, momentum, carry, defensive, trend, etc), then for it to persist over the long run, the outperformance must be difficult to capture. Remember: for outperformance to exist, weak hands must at some point “fold” (be it for behavioral or risk-based reasons), passing the alpha to strong hands that can “hold.”

This is not just a case of perception, either. Financial theory tells us that a strategy cannot always outperform its benchmark with certainty. After all, if it did, we would have an arbitrage: we could go long the strategy, short the benchmark, and lock in certain profit. As markets loathe (or, perhaps, *love*) arbitrage, such an opportunity should be rapidly chased away. Thus, for a disciplined strategy to generate alpha over the long run, it *must* go through periods of underperformance in the short-run.

Math tells us that we should be able to stack the benefits of multiple, independent alpha sources on top of each other and simultaneously benefit from potentially reduced tracking error due to diversification.

Indeed, mathematically, this is true. It is why diversification is known as the only free lunch in finance.

Alpha, **unlike Beta**, is explicitly captured from the hands of other investors. ...

Consider three strategies that all outperform over the long run: strategy A, strategy B, and strategy C. Does our logic change if we learn that strategy C is simply 50% strategy A plus 50% strategy B? Of course not! For C to continue to outperform over the long run, it must remain sufficiently difficult to stick with in the short-run that it causes weak hands to fold.

Conclusion

For a strategy to outperform in the long run, it has to be perceived as hard: hard to implement or hard to hold. For public, liquid investment styles that most investors have access to, it is usually a case of the latter.

This law is underpinned by two facts. First, relative performance is zero-sum, requiring some investors to underperform for others to outperform. Second, consistent outperformance violates basic arbitrage theories.

While coined somewhat tongue-in-cheek, we think this law provides an important reminder to investors about reasonable expectations. ...

And that’s why we call it The *Frustrating* Law of Active Management. For investors and asset managers alike, there is little more frustrating than knowing that to continue working over the long run, good strategies have to do poorly, and poor strategies have to do well over shorter timeframes.

Our thoughts

This is why at HCM we emphasize at least a 5 year commitment, as well as diversifying across factors. A sufficiently long time horizon allows investors to make up for periods of inevitable short-term underperformance, while diversification dampens the impact of any one given factor going through a period of underperformance.