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Invest Fallacy: Active management overall performs different than passive management

by Evan Inglis

We hear it in the media and from asset managers all the time, the idea that certain time periods or certain conditions are better suited to active management.

- "It's a stock pickers' market"
- "Active managers are underperforming the market"
- "Increased volatility is providing opportunity for active managers"
- "Active management outperforms in bear markets"
- "60% of active managers beat their benchmark"
- "Markets that aren't efficient are well-suited to active managers"

Some of these statements can be true, but most investors misunderstand the meaning. This essay will explore the illogic behind these statements and their common interpretation.

Active management does not outperform

There has been a lot of research done identifying that in general, actively managed strategies underperform passive index approaches. Studies also demonstrate that actively managed funds that outperform the market in one period are not likely to repeat that outperformance in the subsequent period. In fact, a prior period of outperformance may be more highly correlated with future underperformance relative to a benchmark[1]. The reasons that actively managed funds underperform simple market-weighted indices include:

- Highly efficient markets
- Higher fund management fees charged to investors
- Greater transaction costs
- Lack of investment discipline by managers
- Winning strategies are copied and lose their ability to generate alpha

When one takes these realities into account along with the realization that the stock market is a zero-sum game, the challenge facing an active manager becomes apparent. The zero-sum game concept means that the market return achieved by a benchmark is made up of all the returns achieved by active managers in the market. Overall gross returns for active managers must be equal to the gross return on an index. Then, because active management costs more, net returns on index funds will be higher.

Implications of the zero-sum game

The zero sum game has been described often enough (by John Bogle and William Sharpe, among others) but the investment world is full of experts and non-experts alike who seem ignorant about it or who choose to ignore it. This essay attempts to highlight the logical fallacy of making pronouncements that presume that there is potential for actively managed strategies, in general, to perform better or worse in certain periods relative to market benchmarks.

This essay is NOT about the simple question, described above, of whether active management outperforms passively managed index strategies over time. This essay tackles the fallacy that active managers, as a whole, have the potential to outperform (or underperform for that matter) a benchmark by choosing certain securities that will outperform the market. This is the fallacy that leaves the media, managers and investors with the impression active management will perform better during certain times, under certain conditions. Note that we will set aside active strategies where management consists primarily of moving in and out of markets, style categories, asset classes, geographies, etc.

Here are some illustrative questions, relevant to this issue:

1 The Case for index-fund investing, Vanguard, April 2013

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- "Can small cap managers outperform a small cap benchmark?
- "Can growth managers outperform a growth stock benchmark when the market is more volatile?"
- "Can emerging market managers outperform an emerging markets benchmark because these markets are inefficient?"

This fallacy is as much about what is unsaid as what is said. It is logically possible for active investment managers, as a whole, to outperform a benchmark, for a number of reasons, including:

- One universe of active managers could outperform at the expense of another universe of active managers that underperforms, as explored below.
- Active managers who select securities that deviate from the relevant benchmark, e.g. when a large cap fund includes some mid-cap stocks without a corresponding adjustment in benchmark.
- Investment managers may find ways to capitalize on illiquidity premiums or other risks for investors who can bear those risks, e.g. managers who overweight credit bonds against the Barclay's Aggregate index (this is very similar to previous bullet point).
- Different managers in the same market may use different benchmarks – e.g. due to differences in the Russell 2000 and the S&P Small Cap 600.

However, these explanations are not provided or even implied by the media or managers. Consumers of the media where these statements are made are left with the impression that certain market conditions allow any of those who search for mispriced securities to do this better or more easily.

Universes of investors

To understand this issue more thoroughly, let's split the universe of investors into three categories:

- Individual investors directly implementing their own strategies
- Institutional investors (pension funds, endowments, foundations, insurance companies, etc.) directly implementing their own strategies
- Fund managers (mutual funds, hedge funds, pooled trusts, separate accounts) investing on behalf of other investors

Together these three groups of investors make up the entire market. Or one can say that they make up the investor universe for any market we want to focus on – small cap, value, Canadian equities, etc. By definition, their combined returns will equal the relevant benchmark.

Better explanations of what happens in the market

Before clarifying how the zero-sum game makes the idea of better market conditions for active management irrelevant, we should acknowledge a few issues:

- Many strategies cannot be easily assigned a specific benchmark. Individual and institutional investors may consciously or unconsciously expose their portfolios to industries, risk factors, countries, etc. Fund managers may blend various approaches and strategies in a single fund such that identifying a true benchmark becomes difficult.
- Taking on exposure to risk factors, different from the benchmark, that generate higher returns can allow a fund to outperform. This can make comparisons to a benchmark almost irrelevant. This is often identified as the reason for the outperformance of so-called "smart beta" or "fundamental indexing" strategies.
- Fees for actively managed strategies may change from one period to another and this can cause differences in relative performance for actively managed funds from one period to another.
- Most actively managed strategies hold some low-yield cash investments.

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All of this makes the exercise of adding up all the investment returns in any one "market" somewhat hypothetical. However, the zero-sum game remains conceptually valid. If one identifies any benchmark, it is logically possible to identify all the various investments that make up that benchmark. By definition the sum of the returns for the actively managed money for which the benchmark is relevant will equal the benchmark return.

It is logically impossible for the sum of all active management to perform better than an index fund in any period. It is also impossible for active managers in one period to perform better than active managers in another period, relative to their benchmark (ignoring changes in fees and transaction costs).

Once we realize that the total return on a benchmark is made up of all the investors in that benchmark, we can identify some changes in active management results that actually will arise from period to period:

- The percentage of funds (or investors) that outperform the benchmark may change, but there will necessarily be a corresponding change in the average level of outperformance. If 50% of active managers outperform in one period and only 25% outperform in the next period, then the outperformance in the later period by those who outperform must be by twice as much.
- It is possible for one of the three universes of investors to perform better relative to the other two universes in different periods. For example, fund managers may perform better in one period, at the expense of individual investors who perform poorly in that period.

However, these underlying reasons for the statements commonly made to describe market conditions are not provided, and are almost certainly not understood, by those making the statements, let alone by those reading or hearing the statements.

Markets with more dispersion of returns (note that cross-sectional dispersion of returns should be distinguished from return volatility over time), could provide opportunities for some managers to outperform a benchmark by more than in markets with less dispersion. However, the logical complement to this is that the underperforming managers will also underperform by more. There are bigger potential rewards, but also more risk for active managers in such a market. This hardly seems like the definition of a better market for active management.

It seems unlikely that the media will refrain from continuing to make misleading statements, since this topic is common fodder for many in papers, online and on TV. However, experts should think carefully about this topic and be sure that their own public statements and their research is consistent with the basic logic of the zero-sum game. Otherwise, the investment world is left less able to make sound judgments about allocating their own investments to active and passive strategies.

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