

Caveat Emptor – The Problems with Hedge Fund Benchmarks and Indices

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It goes without saying that the hedge fund industry has grown in recent years at an exponential rate. With so many hedge funds now occupying the alternative investment universe, it is imperative for investors to separate the talented money managers from the rest of the crowd. As such, a notable side effect of this relentless growth has been the increased need for investors to compare the performance of hedge fund managers. One of the most appropriate ways to do this is by comparing an investment manager's risk-adjusted returns to those of a pre-determined benchmark.

Historically, many investment managers were evaluated in comparison to a readily available index such as the S&P 500, but for many obvious reasons this is inadequate for hedge funds. First, the S&P 500 is a static benchmark subject to minimal rebalancing of the portfolio on an infrequent basis. This certainly does not mirror the active component found in the vast majority of hedge funds. Indeed, the proposed benefit of hedge funds is the skill-based component found in the ability of the investment manager to generate excess positive returns (or "alpha" to borrow from the infamous Capital Asset Pricing Model), so a benchmark that lacks a dynamic component is substandard. Second, the S&P 500 is a long-only index consisting of a buy-and-hold portfolio of publicly-traded equities, which again does not mimic the bulk of hedge fund strategies.

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Short selling, derivative positions, over-the-counter assets, and other non-traditional investments and asset allocation techniques are just some of the alternative methods available to hedge fund managers which are not tracked by the S&P 500. A final difficulty is that the S&P 500 index is an unlevered portfolio. Given the borrowing employed by many hedge funds in order to heighten return, a benchmark lacking this characteristic does not adequately map the true risk/reward relationship found in hedge funds today.

In answer to these concerns, the industry has attempted to establish benchmarks in the form of indices designed to more completely and accurately track the performance of the hedge fund world. A wide variety of performance benchmarks have been developed with different characteristics and components, each seeking to serve as a gauge for performance in the hedge fund industry. What follows is a presentation of some of the larger, more established indices as well as a brief overview of their associated traits:

ABN Amro – Publishes equally-weighted indices tracking Asian hedge funds

Altvest – Maintains fourteen indices, covering a wide variety of trading strategies

CSFB/Tremont – Unique in that it features capitalization-weighted indices, rather than equally-weighted indices, placing a greater emphasis on the performance of larger funds

EACM – Evaluation Associates Capital Markets maintains the EACM100, composed of five main strategies and thirteen sub-strategies

HFR – Hedge Fund Research maintains one composite index and eight primary indices

Hennessee – Publishes twenty-three sub-indices and four composite indices

LJH Global Investments – Maintains sixteen equally-weighted indices with regular rebalancing

Morgan Stanley Capital International – Widely considered to be the most sophisticated network for hedge funds, breaking down indices by asset class, investment process, and other factors

Standard & Poor's – Maintains indices covering nine distinct hedge fund investment styles

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While these newly-established indices are an improvement on the S&P 500 and other similar benchmarks, they are still accompanied by a variety of hazards. Careful manipulation and interpretation of hedge fund indices is entirely necessary and, without proper care, an investor can easily misuse an index, leading to a potentially incorrect conclusion regarding performance of a given fund when comparisons are made. Indeed, there are a variety of issues a user must take into account before charging ahead with performance comparisons, most notably the underlying problems associated with the databases driving the aforementioned indices.

Almost by definition, all indices are built upon the use of databases. These represent collections of information regarding many hedge funds drawn from any number of sources. While different database vendors may contain different pieces of select information, there is a fair amount of commonality as far as the areas in which data is gathered. Most importantly, a number of key facts and figures are collected, including:

- Risk, as measured by a variety of methods including the Sharpe ratio, standard deviation, variance, drawdown, etc.
- Return, generally over a specified period of time (such as month-to-date, year-to-date, inception-to-date, and so forth)
- Value of assets under management at a certain date
- Hedge fund trading style, etc.

Each of these, once collected, can then be used to feed an index based on parameters established by whoever is constructing the index. There are many databases currently in use today; some of the larger ones include Hedge Fund Research, TASS, Financial Risk Management and Altvest. However, there are a number of database biases that distort the risk and returns exhibited by the funds in those databases. What follows is a discussion of three typical biases. It should be noted that there are additional biases in hedge fund databases, however the three presented below are the most common and influential.

Survivorship Bias

In essence, this results when certain funds are simply not included in a database because they no longer exist. Hedge funds close their doors for a variety of reasons, such as poor performance, acquisition by another hedge fund or company, or simply because the investment manager wishes to shut down the fund. However, depending on the policies of the database vendor, the performance of a fund that previously reported to the database and no longer exists may or may not be included in the historical results, leading to a distortion in the database.

Self-Selection Bias

Given the private nature of the hedge fund industry and the lack of strict regulations, hedge fund managers are not required to report anything to an overseeing body; reporting to any database is done on a voluntary basis only. As such, hedge funds which are performing poorly have little incentive to report their performance to a database, whereas the opposite is true for funds which are earning above-average returns, all else being equal. This would generally mean that the returns for a hedge fund database are biased upwards and the risk is biased downwards, since the database will be composed more of high-performing funds than low-performing funds.

Backfill Bias

This is often referred to as “instant history” bias. Often, when a hedge fund first reports to a database, it is allowed to provide returns for periods prior to their initial reporting date. For example, on the date that a hedge fund initially provides key statistics to a database, it may also provide the same statistics for the 6 months, 1 year, or more previous to that date. Given the self-selection bias, it is reasonable to expect that the returns in previous periods were above-average and, since these figures will be included in the database going forward, there will be an upward bias for returns and a downward bias in relation to risk for the given database.

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It is worthwhile to note that hedge fund indices are not without use or merit, despite these biases. Indeed, they can serve as useful benchmarks for comparing investment managers. In addition, the concept of a hedge fund index is still in its infancy and, over time, there is no doubt that the databases that drive the benchmarks, and the indices themselves, will improve dramatically. An example is the formulation of the EDHEC Index, named for the well-known research center devoted to risk and asset management. Created in tandem with researchers, this index is, in reality, an index of indices which combines the relevant information from some of the indices listed here plus many more. Using principal component analysis, variability is explained in this model by adding successive components until as much of the “noise” from biases is removed. While this index is not used at the present time in a meaningful way and still requires further development, it could potentially serve as a more accurate index to mirror the hedge fund universe as a whole. Additionally, the framework for the EDHEC Index may serve as a starting point for future improvement on benchmarks and indices.

In short, the hedge fund indices currently used as benchmarks by investors to compare hedge fund managers are created using databases which exhibit biases, some of which are presented above. By extension,

the indices themselves will be subject to these biases to varying degrees. Investors must use caution when utilizing these benchmarks and should have a thorough understanding of the composition of a chosen index as well as its inherent biases. There are a wide variety of indices published today and each one has its own unique characteristics and components. It is imperative that an investor seeking to compare an investment manager to a benchmark do so only within a carefully chosen framework. Database and index error in the form of biases could jeopardize the due diligence process and lead to a misallocation of investment capital. The presence of the biases noted previously does not necessarily render a particular database or index useless; it is simply a factor which an interested user must take into account. As always, a thorough understanding of the source and derivation of information is paramount when making investment comparisons. ■

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