Hedge Fund Existential

Richard Bookstaber

What makes a hedge fund a hedge fund? Do hedge funds share some common feature or quality? Or is the hedge fund category simply a catchall for a wide variety of disparate investment firms and trading strategies? Once we get past the obvious fact that various investment firms are labeled "hedge funds," do hedge funds really exist as a definable entity? Is there such a thing as "hedge-fundness"?

These questions have practical importance. We are in a period of mounting interest in hedge funds, interest that is backed by a growing demand for performance measurement, hedge fund indexes and tracking portfolios, hedge fund regulation, and appeals for hedge fund transparency. At the foundation of all these efforts is the unspoken assumption that hedge funds are a homogenous entity—that it makes sense to analyze, index, and manage the risk of hedge funds as a class.

If we step back for a moment and ask whether we can define this object of interest that we claim to be monitoring, indexing, and regulating, I believe we will find that the concept of hedge funds defies a meaningful definition. If we persist in trying to categorize hedge funds, we will discover that the result embraces the entire universe of possible investment trading strategies applied to the universe of tradable securities and financial instruments. We will have a definition that provides no distinction.

What Is a Hedge Fund?

I believe there is no such thing as a hedge fund. Hedge funds are not a homogeneous class that can be analyzed in a consistent way. The hedge funds/alternative investments moniker is a description of what an investment fund is *not* rather than what it is. The universe of alternative investments is just that—the universe. It encompasses all possible investment vehicles and all possible investment strategies minus the "traditional" investment funds and vehicles.

Richard Bookstaber is the founding partner of Scribe Reports, LLC, in New York City.

In terms of leverage, alternative investments are the entire universe except those funds that are restricted to leverage no greater than 1. In terms of positions, alternative investments are the entire universe except those funds that are restricted to be long only. In terms of securities, alternative investments are the entire universe except those funds that are restricted to a somewhat arbitrary and generally evolving set of "traditional" assets—domestic stocks and bonds or perhaps, in a recent extension of the definition of "traditional," the stocks and bonds of the developed countries.

Although the vast majority of investment wealth is held in traditional strategies, these assets constitute a small part of the overall investment universe—so small that if we back away from the amount of assets managed and the huge infrastructure that is devoted to them, we find that the difference between the overall investment universe and the investment universe less this subset is small indeed.

So, what we call alternative investments is really the wide world of investments minus a small slice. The perspective of the traditional investment world in viewing the burgeoning market of hedge funds must be like that of a castaway who has been building a life on an island only to discover that beyond the cragged outcrops lies an entire continent or like that of Saul Steinberg's famous *New Yorker* cover of New York City in which the land west of the Hudson River, from New Jersey to Japan, is sparsely sketched out as an afterthought.

Defining hedge funds as the complement of traditional investment funds, as the universe minus a subset rather than as a sideshow to traditional investment management, is more than an issue of semantics. It changes the way we must think about hedge funds. It changes the potential value of broad-scale studies of hedge funds, and it reorients our thinking on what it means to regulate hedge funds. The point of departure in discussing risk management changes once we concede that hedge funds are not a homogeneous class of investment strategies but, rather, an "everything but" class. If hedge funds as a class do not exist, we can never get our arms around them. If we think we have succeeded in doing so, then what we have really done is embrace the whole of investments.

Classification, Indexing, and Study of Hedge Funds

The problems I have sketched out become readily evident when we look at recent attempts to create a cogent classification of hedge funds.

The most common approach to classifying hedge funds—an approach used by Hedge Fund Research, Credit Swiss First Boston/Tremont, and Standard & Poor's—is to organize hedge funds based on trading styles. For example, the S&P hedge fund index has three styles—arbitrage, event driven, and directional/tactical. Each of these styles is further broken down into three strategy types—arbitrage has equity market neutral, fixed-income arbitrage, and convertible arbitrage; event driven has merger arbitrage, distressed, and special situations; directional/tactical has long–short equity, managed futures, and macro. The problem with this sort of classification is that it has to be revised over time as new strategies emerge and existing strategies fail.

An alternative classification scheme overcomes this problem but in so doing, reveals the existential issue for hedge funds. This approach, which I developed a few years ago and which has been adopted by the International Association of Financial Engineers in its hedge fund disclosure for institutional investors and is used by Morgan Stanley Capital International in its hedge fund classification standard, classifies hedge funds by five characteristics:

- *Asset class.* The asset class is the broadest category and defines the market in which the fund operates. Classes include fixed income, equities, currencies, and commodities. A "multi-class" category may also capture "none or some of the above," and it specifically includes global macro funds.
- *Direction.* The direction of the manager's activity in the asset means long, short, long–short, or neutral. Another category for direction that is useful is "event," which depicts strategies that usually have low correlations with the relevant index but on occasion (i.e., during a liquidity or credit crisis), can have high correlations with the index.
- *Type.* This classification provides information about the specifics of the investment process or strategy. For example, the neutral classification contains relative value and statistical arbitrage strategies; the event classification includes merger arb, credit arb, and distressed debt. The type is the one component of the analysis that will vary over time with the introduction of new investment strategies.
- *Geographical region.* The region provides information about where the fund is trading. This classification may be limited to "developed markets" and "emerging markets," or the region may be broken out in more detail.
- *Liquidity.* Some funds trade short term and are in instruments that can be traded easily. Other funds are less liquid because of their strategies, the types of instruments they hold, or the size of their holdings. A second approach to classifying liquidity is turnover, which addresses the percentage of portfolio turnover on a monthly or annual basis.

With this categorization scheme, one technology fund might be "stocks/long–short/U.S./highly liquid" while another technology fund might be classified as "stocks/long/U.S./illiquid." A fund investing in Japanese distressed debt might be "bonds/event/distressed/Japan/illiquid," and a U.S. corporate bond fund might be "bonds/event/credit/U.S./liquid."

This classification scheme provides a stable and robust framework for hedge funds. But it leads to a critical question: What, then, is the classification scheme for "non hedge funds"? What is the difference between the set of strategies embraced by these classifications and the universe of all strategies? If these classifications categorize alternative investments, what is the categorization for the alternative to this alternative? Put another way, what investment strategy is *not* operating in some general asset class, typified by some direction (especially because "neutral" is one choice), and focused on some geographical region?

The same questions arise when we consider hedge funds as a subject of study and research. At least two institutes focus on the study of alternative investments (one at the London School of Business and one at the University of Massachusetts), and several journals focus on hedge funds and alternative investments. But if hedge funds are heterogeneous to the point of being the entire investment world less a small subset, then hedge funds are a questionable topic for study. An institute focused on hedge funds would be like a program to study all objects made of materials other than wood or like initiating research on contemporary history for every place but France. You could do so, but I do not know how that study would be much different from simply having a study of all materials or of all modern history.

Consider the following scan of articles from various issues of the *Journal of Alternative Investments*: "Currency Market Trading Performance," "Timber Investment," "Current Attitudes to Private Equity," "Convertible Arbitrage: A Manager's

Perspective," "Macro Trading and Investment Strategies," "Commodity Trading Advisor Survey," "Stock Selection in Eastern European Markets," "Market Neutral versus Long/Short Equity," "Merger Arbitrage: Evidence of Profitability," "Analysis of Real Estate Investments in the U.S.," "Benefits of International Small Cap Stocks." What common ground do all these topics share—other than being related to investments? If this is a sampling of articles specific to hedge funds, what would articles on the broader world of investments outside of hedge funds look like?

In fact, the proper study of hedge funds cannot be differentiated from a general study of investments. Issues of risk, return, and liquidity apply not only to all hedge fund strategies but, indeed, to the whole range of possible investments.

Risk Management

The very categorization of hedge funds makes it hard to say anything that is deep or definitive about standardized risk management or the sources of risk for hedge funds as a distinct class. Consider the following analysis of hedge fund risk—which is really nothing more than a risk analysis of virtually all investment strategies for all tradable instruments: On one extreme, we can put the analytically driven funds. This group would include option and volatility trading and some of the fixed-income strategies, such as relative-value trading and the trading of the complex of mortgage products. It could also include statistical arbitrage strategies, which are usually computer driven, often short term, and generally tightly controlled to maintain market neutrality. On another extreme are the strategies that are driven by market or economic events. This group would include distressed debt, merger arb, and opportunistic emerging market funds (funds that trade in countries that are on the precipice of crisis).

Related to the diverse sources of risk is the relationship between the availability of risk management tools and the ability of the fund to measure and manage risk. The more complex strategies—option arbitrage and fixed-income relative value, to name two—usually have risk management as an integral part of their trading. Success in trading options is difficult without good option-pricing models, and these models provide the measures for volatility and gamma risk. In relative-value trading, the margin of success comes from understanding convergence and model risk and from sizing trades properly for the opportunity. In these cases, the risk measurement is quantitative and the tools for that measurement are usually tied directly into the trading business.

In contrast, the event risk for distressed debt and merger arb is simply not objective and quantifiable. That is not to say that some hedge funds or investment houses do not push each position from these portfolios into a risk model and come out with statistics on the other side. But the results cannot be taken too seriously because the main risks are based on idiosyncratic events, which can be assessed only through experience and study of the particulars. Mathematical tools are of little value for measuring risk for distressed debt and merger arb because the principal risks come from one-time events that cannot be anticipated. For such funds, any sort of population for statistical analysis is hard to come by. Probabilities might be useful, but they come from a subjective feel for the likelihood and impact of one-off political events and business decisions.

The ability to carry out risk management clearly varies from one end of the spectrum to the other. Fortunately, those strategies with the most complex and quantitative risks also have the best tools available to deal with those risks. For those strategies with more subjective risks, such tools are not available, but then, having them would not do the managers much good. That is, along this spectrum, the capability to manage risk is in phase with the meaningfulness of the results. The level of detail to which risk management can reasonably be performed is in line with the degree to which that detail would have any value. Hedge funds that can measure risk already do, and those that do not probably cannot.

Because the nature of the risks varies so greatly from one extreme to the other, I would hate to be the person assigned to develop one risk management system to deal with the entire spectrum of hedge fund (or any fund) risks. Clearly, from a risk management perspective, the hedge fund classification provides no unification, not even a common thread.

Regulation

The topic of hedge fund regulation has reached a crescendo since the Long-Term Capital Management (LTCM) debacle. The question is whether much success can come to the effort to regulate hedge funds as "hedge funds." With so broad a classification, seeking a uniform approach for regulating hedge funds would be like getting a committee together to develop a single set of traffic rules to apply to all modes of transportation from walking to commercial jets. Or, actually, because

alternative investments exclude traditional unlevered long-only investments, it would be like regulating all modes of transportation except, say, passenger sedans.

It may be fruitful to impose regulations on leverage, add to the rules imposed on short sales, or discuss approaches to regulate offshore entities. But starting down the regulatory path with hedge funds as the objective is to fail before beginning because you cannot regulate an entity that is not well defined.

One widely discussed aspect of regulation is the need for transparency in hedge funds. For some hedge funds, anything approaching position-level transparency increases risk because these funds are in illiquid positions or have large, long-term exposure. In either case, knowledge of their positions could, in even the most favorable circumstance, increase the difficulty of exiting their positions, and it could even lead other firms to trade against them. For other hedge funds, transparency is all but irrelevant because they carry out very short term strategies. By the time any report came out, their positions would be long gone. The only risk for them is that transparency would provide insight into their trading philosophies and methods. For yet other hedge funds, transparency would be difficult to execute. For a large relative-value fund that holds swaps or esoteric mortgage instruments, for example, a full listing of positions would give little insight into its strategy and risk because it would not illuminate what positions are being paired against one another and because many of the instruments have complex terms and indicatives that make them difficult to model in isolation.

Hedge Fund Morphology

Karl Marx observed that the capitalist system requires an ever-expanding market to maintain profits. For capitalism to succeed, it must move forward by developing new products or opening up markets in "backward" colonies. Innovation creates a product that is ahead of the market; foreign expansion pushes the current products on new markets. The Marxist view applies both literally and metaphorically to the penchant for innovation in financial products.

Back before the 1980s, the U.S. Treasury market was filled with bare-knuckled traders whose gaze never moved past the price–yield relationships of their yield books. They were fresh fodder for the complex of fixed-income options and swaps. Investors in the conventional 30-year mortgage bonds were a Marxist "backward" market, a market easily "exploited" by trading desks that could use sophisticated models and specialized expertise to develop collateralized mortgage obligations and other mortgage derivatives. Each new innovation added complexity to the market for the simple reason that complexity is what sold and what made the most money.

A large segment of the firms in the hedge fund/alternative investment universe use opportunistic strategies that feed off of inefficiencies born of such complexity. These firms pose a problem beyond the existential—a changing reality of existence. The half-life of most innovation-driven inefficiencies is three or four years. It takes a while for the decline in opportunities to be detected in fund performance, so opportunistic hedge funds may survive a bit longer, but whatever classification scheme or regulation structure is put in place will be operating against a morphing objective. And because future innovations cannot be predicted, the objective will be changing in a way that is difficult to anticipate. The most successful strategies fade away, and two or three years down the road, new ones prevail—strategies often based on securities that are new to the market.

To see this point, consider the history of opportunistic strategies. Although these strategies were not executed within the traditional hedge fund structure, in the early 1980s, following the introduction of the T-bond futures contract on the Chicago Board of Trade, we saw such opportunistic strategies as basis trading on the cheapest-to-deliver and on the futures contract. A few years later, after the introduction of the S&P and Value Line futures, cash/futures index arbitrage emerged. Both strategies peaked within a few years of the introduction of their respective markets, and a decade later, the strategies amounted to little more than background radiation in the trading firmament. Even earlier, in the late 1970s, O'Connor's Partnership was making hundreds of millions of dollars by applying the Black–Scholes formula to the options on the nascent Chicago Board Options Exchange; a cadre of young traders would grab their pricing sheets at the start of the trading day and take up their posts along the CBOE trading floor to apply delta hedges to mispriced options. By the mid-1980s, O'Connor's saw the writing on the wall for contractions in profit margins in this floor market-making business and sold itself to Swiss Bank Corporation.

On the heels of the cash futures and index arb opportunities came statistical arbitrage, the first of such strategies to emerge in a hedge fund structure. In 1985, Jerry Bamberger, a young programmer at Morgan Stanley developed the first stat arb strategy. Bamberger, who had been assigned to work on

some hedging issues on the equity trading floor, discovered that a method for pairwise hedging of equity positions on the desk not only was effective but could turn profits because similar stocks that diverge tend to converge again. The result was a burgeoning business for Morgan Stanley that also spawned D.E. Shaw and a host of other stat arb firms. Although this strategy survived longer than some others, its returns have dissipated over the last few years.

Meanwhile, at Salomon Brothers, the focus was on fixed-income relative-value trading. Starting with the "two-plus" yield-curve model (a two-factor yield-curve model that explicitly accounted for the effects of U.S. Federal Reserve action), Salomon's legendary fixed-income arbitrage group generated billions for the firm. This group then left Salomon to form LTCM. A few years thereafter, relative-value opportunities collapsed and LTCM, straining to maintain outsized returns in an increasingly competitive market, became the most visible of any hedge fund supernova.

The birth-and-death cycle for opportunistic strategies will no doubt continue. Macro hedge fund strategies now face a world that has compressed into just three major markets, with central banks that are no longer ripe to be gamed. With concentrated demand for convertible bonds and default swaps, convertible bond arbitrage funds are spring-loaded for crisis. Merger arb appears to be dead in its tracks; time will tell whether it is in a cyclical or a permanent state.

Most of what remains beyond the hedge funds engaged in opportunistic strategies are long–short equity funds. These funds, which make up more than half of all hedge funds, are essentially traditional equity managers in a different guise. Add an S&P futures position to the long–short equity fund and you have a fund that is hard to distinguish from a traditional long-only asset management fund. The only differences are that long–short equity funds have more amplitude in their risk levels and, because of their ability to short, more freedom in their ability to underweight positions. But once an index overlay is added, the end result is that the long–short equity hedge funds do not look much different from an active asset management fund. The hedge funds simply concentrate the active component of decision making. Once the appropriate adjustments are made, the remuneration to the long–short equity hedge is also similar to that of its long-only cousins. A 20 percent incentive fee leads to the same ballpark return for the run-of-the-mill hedge fund manager as a 100 bp fee will for the manager of a larger but unlevered long-only fund.

Conclusion

A clergyman interviewing a parishioner asks, "Do you believe in baptism by immersion?" to which the parishioner unhesitatingly replies, "Do I believe in it? Why, I've actually seen it!" Well, I have seen hedge funds and worked in hedge funds, but like the clergyman's, my question is not simply about seeing hedge funds but about seeing what qualities exist beyond the name. From one hedge fund to another, we may observe, as Ludwig Wittgenstein put it, a "family resemblance" but not enough to grasp, to study, to risk-manage, or to regulate. To study hedge funds is to study the world of investment strategies. As for risk management and regulation of hedge funds, what more can one say, faced with so general a task, than "Be careful"? I believe that we will discover—as we continue our attempts to study, categorize, manage, and regulate hedge funds—either that we have failed or that we have enveloped the entire world of investments under a different name.