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Quarterly Investment News from **BlackRock**

Show Me the Alpha

Breaking down hedge fund returns to achieve portfolio objectives

by MARK WOOLLEY

MARK WOOLLEY
Member of BlackRock Alternative Advisors, the firm's Hedge Fund Solutions team

The role that hedge funds play in institutional investor portfolios is changing. For many years, they have typically been regarded as homogeneous, high risk/high return investments directly comparable with risky asset classes such as equities. But this view is being challenged as some institutions are once again seeking to use hedge funds as sources of both differentiated risk exposure and returns that are uncorrelated to traditional markets.

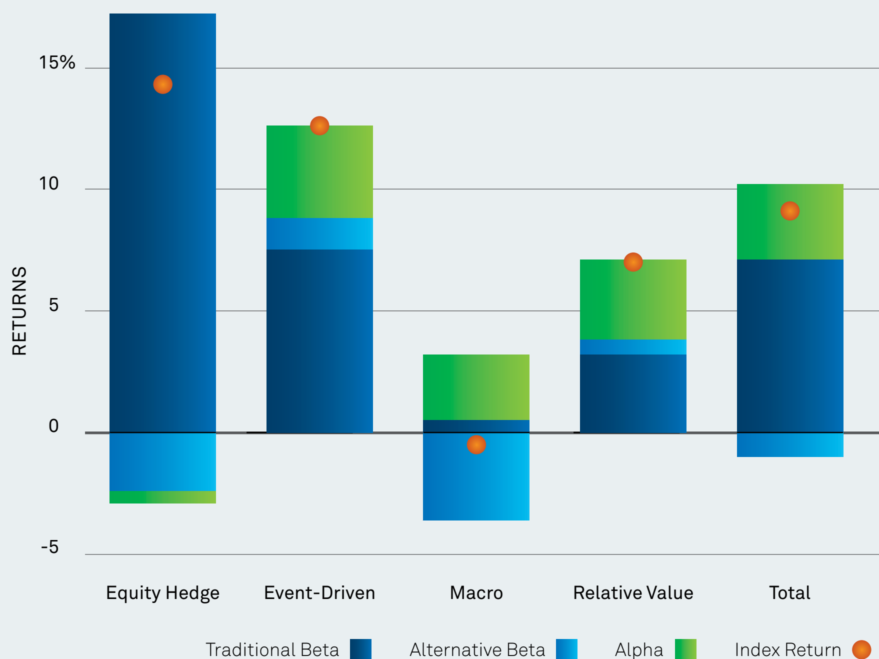
Underpinning this is the growing understanding of the need to dig deeper into portfolio performance in order to understand more clearly the *types* of risks taken to generate returns. The overall performance of two investments may be broadly similar, but there could be significant differences in the risk factor exposures that each provides. This is important because risk factor exposures are a key determinant of the "quality" of an investment's returns over the long term. An investment with significant primary market (or beta) risk exposures will typically be highly correlated with equity or fixed income market movements, whereas one with a differentiated risk exposure may be more likely to deliver uncorrelated returns. Idiosyncratic risk exposures (those that are unique to a particular security, company, trade or model) can be a key source of alpha.

For example, the decision of a ratings agency to downgrade or upgrade a company's credit rating due to a small change in its fundamentals is likely to disproportionately impact the price of that company's bonds (many investors have strict constraints on the ratings of bonds they can hold, and may buy or sell en masse following a change). Such a dislocation of asset prices from fundamentals or broader bond market movements can be a source of idiosyncratic risk (and of alpha).

Skill-based investment strategies (such as those pursued by many hedge funds)

IN SEARCH OF THE UNEXPLAINED

Decomposition of 2013 Hedge Fund Returns by Strategy



Sources: Blackrock, HFRI, December 31, 2013.

This analysis is the result of 2013 returns for the HFRI Fund Weighted Index and HFRI indices for each hedge fund strategy, having been decomposed into risk-free, factor (both traditional and hedge fund–specific) and unexplained components using BlackRock's proprietary hedge fund risk factor attribution model. Returns were regressed against 9 traditional market risk factors and over 30 nontraditional risk factors (as defined by BlackRock). The "unexplained" portion is typically interpreted as the returns attributable to alpha. Note that factor timing can be a significant alpha contributor for certain strategies, but is not captured here. Index returns are for illustrative purposes only and do not represent actual BlackRock products or strategies. Index performance returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.

seek to focus on opportunities arising from market complexity, lopsided incentives or other inefficiencies, while hedging other risks. As a result, hedge funds may represent an effective means of accessing these idiosyncratic (or alpha-generative) risk exposures.

The view that the primary objective of hedge funds should be to deliver a different risk profile than those of traditional investments is, of course, nothing new. As recounted in histories such as Sebastian Mallaby's *More Money Than God* (Penguin Press, 2010) the earliest recognizable hedge funds sought to disaggregate individual share performance from market movements by buying undervalued stocks and selling overvalued ones while minimizing overall market exposure—the classic long/short equity hedge fund model. Today, in an environment characterized by aggressive equity multiple expansion and very low interest rates, we believe such risk profiles are increasingly relevant for institutional investors seeking something different from their portfolios.

FILTERING OUT THE BETA

So do hedge funds actually generate alpha, in practice? To answer this question, BlackRock decomposed the 2013 returns of a popular hedge fund index (the HFRI Fund Weighted Index) and its component sub-strategy indices. Using our proprietary risk systems, we ran regression analyses of each track record against a set of specific risk factors to identify the factor exposures driving performance. We then compared the actual performance against that expected from the factor exposures to determine the proportion of returns that were factor-based (traditional or alternative beta) and the proportion of returns that were unexplained by factor-exposures (idiosyncratic exposures, or alpha). The results are shown in the chart above, "In Search of the Unexplained."

We discovered that, overall, approximately one third of the 9.1% total returns of the hedge funds in the index appear to be derived from alpha. We also discovered that this varied from strategy to strategy, as follows:

Equity Hedge

Equity hedge strategies delivered the highest overall return of 14.3%. Funds gained an average 17.2% from traditional beta, but alternative beta detracted 2% from performance. The median equity hedge manager actually showed negative alpha (-0.5%).

Event-Driven

The total return of the average event-driven fund was 12.6%. Traditional beta (+7.5%), alternative beta (+1.3%) and alpha (+3.8%) event-driven strategies were all additive.

Macro

Macro managers generated the lowest total return of all strategies at -0.5%. Traditional beta (+0.5%) was additive, alternative beta was detractive (-3.6%) and alpha was additive at +2.7%.

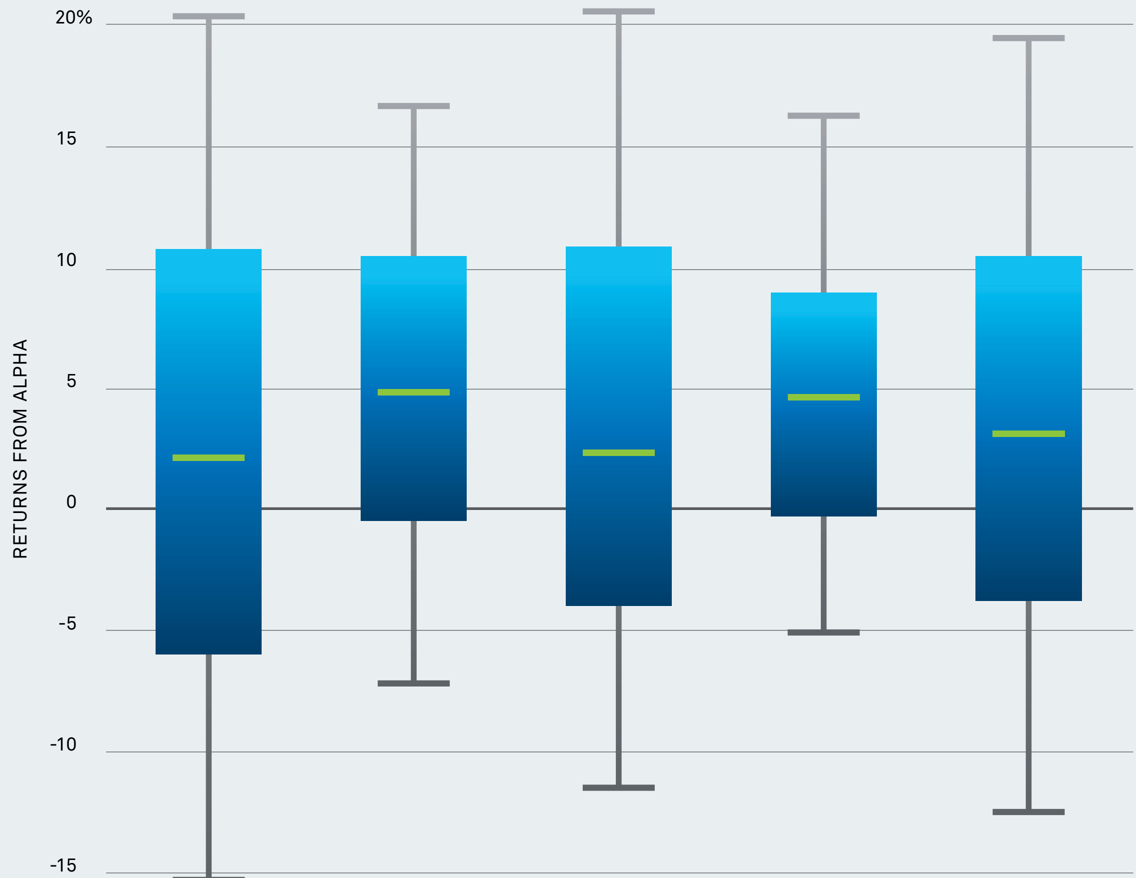
Relative Value

Total return of the average relative value fund was 7.0%. Traditional beta (3.2%), alternative beta (0.6%) and alpha (3.3%) were all additive. Among all strategies, the contribution of alpha to returns was greatest among relative value managers, at around 50%.

The first conclusion we can draw from this is that while many hedge funds do indeed offer idiosyncratic risk exposures, the level of alpha is distinct

NO "AVERAGE" HEDGE FUNDS

Dispersion of returns from alpha by strategy



	Equity Hedge	Event Driven	Macro	Relative Value	Index Universe Total
90%—1st Decile	20.3%	16.6%	20.5%	16.2%	19.4%
75%—1st Quartile	10.7%	10.4%	10.8%	8.9%	10.4%
50%—Median	2.1%	4.8%	2.3%	4.6%	3.1%
25%—3rd Quartile	-6%	-0.5%	-4%	-0.3%	-3.8%
10%—9th Decile	-15.3%	-7.2%	-11.5%	-5.1%	-12.5%
Interdecile Range	35.6%	23.8%	32%	21.4%	31.9%
Interquartile Range	16.7%	10.9%	14.8%	9.2%	14.2%
Fund Count	751	165	350	297	1563

Sources: BlackRock, HFRI, December 31, 2013.

This analysis is the result of 2013 returns for the individual hedge funds comprising the HFRI Fund Weighted Index and HFRI indices for each hedge fund strategy having been decomposed into risk-free, factor (both traditional and hedge fund-specific) and unexplained components using BlackRock's proprietary hedge fund risk factor attribution model. Returns were regressed against nine traditional market risk factors and over 30 non-traditional risk factors (as defined by BlackRock). The "unexplained" portion is typically interpreted as the returns attributable to alpha. What is shown here is a summary of the dispersion of the returns attributable to alpha, defined by percentile rank. Note that factor timing can be a significant alpha contributor for certain strategies, but is not captured here. Index returns are for illustrative purposes only and do not represent actual BlackRock products or strategies. Index performance returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.

from the level of total returns. For example, as we would expect in a year when the MSCI ACWI returned 23%, equity hedge managers achieved the highest overall returns in 2013. But they did so as a result of beta exposures and were among the lowest alpha generators (as a percentage of returns) across the industry. Similarly, relative value managers derived a much higher proportion of returns from idiosyncratic sources.

Why does this matter? If alpha is the key to a differentiated risk profile from equity and bond markets, then we believe looking only at total returns will not reveal the full picture. In any given period, a strategy may out- or under-perform another strategy or asset class. But that alone will not provide insight into whether the risks taken to generate those returns are beneficial, because they diversify, or potentially harmful, because they create unwanted concentrations in the portfolio.

By deconstructing the alpha and beta drivers of returns across their portfolio allocations, we believe investors can make more-informed portfolio management decisions. For example, an investor with a large allocation to equities in a traditional portfolio may have elected in 2013 to reduce the equity hedge exposure in their hedge fund allocation in favor of relative value managers. The risk profile of the latter would have been more "idiosyncratic" on average, with access to returns that were less correlated to the traditional allocation. So despite strong equity performance over the period, the overall portfolio may have benefited from better risk-adjusted returns through diversification.

However, the analysis above uses data from an index, and therefore only takes the "average" hedge fund into account. In order to understand the intra-index dynamics underpinning these results, we took the 1,548 hedge funds that comprise the index and decomposed their returns as well. In doing so, we uncovered a significant degree of dispersion in both alpha generation and overall performance within and across hedge fund strategies (see the chart "No 'Average' Hedge Funds"). For example, while the median hedge fund might have offered 3.1% of alpha during 2013, the top 25% generated at least 10.4% of alpha over the same period. This means that even investors with the time, resources and ability to identify only the best manager out of every four could gain a significant advantage over a "scattershot" approach.

Successful investment programs treat risk as input when making asset allocation decisions, with returns as the output.

Even the most robust top-down analysis can be undermined through poor manager selection. Taking last year's data, the top decile equity hedge managers generated significantly more alpha than their relative-value counterparts, even though relative value performed better on average. Clearly, no two hedge funds are created equal. Moreover, given that the total number of hedge funds open for investment significantly exceeds the 1,548 included in this analysis, and that popular hedge fund indices tend to suffer from certain selection biases in the hedge fund managers who report to them, we believe it is likely that in reality the degree of dispersion could be much larger. Consequently, the benefits of selecting the right managers (and avoiding the worst) are even greater.

MANAGER SELECTION: PEELING THE ONION

One of the most effective approaches to finding and selecting the best managers begins with casting the widest net to find potential investments. It also relies on an in-depth and fundamental understanding of each manager's investment program. Dependence on historical track records or superficial due diligence is likely to result in investments that are not well understood. Instead, investment due diligence should be underpinned by a robust, repeatable process that clearly identifies the alpha generation and risk factor exposure, as well as the overall returns, of all managers under consideration. Only through such analysis will it be possible to gain access to the information required to construct hedge fund portfolios that consistently provide uncorrelated returns.

Successful investment programs treat risk as an input when making asset allocation decisions, with returns as the output. For this reason, an active risk management approach can help to identify valuable idiosyncratic risk factors (the most reliable sources of alpha returns). Adding alpha to portfolios dominated by beta-type sources of risk is an effective approach to diversification that does not rely on equating often-incomparable return streams.

As our research shows, hedge funds offer this type of diversification, but in varying degrees over different time periods. By "peeling the onion" on each manager's returns and developing a fundamental understanding of the risks taken to generate those returns, an investor can distinguish hedge fund managers with high alpha-generative qualities from those with unwanted beta exposure. They can compare managers within and across strategies to focus on those with skill rather than those who have been lucky, and can avoid doubling risks that may already exist elsewhere in their portfolios. ♦

BLACKROCK, INC.
55 East 52nd Street
New York NY 10055

blackrock.com

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Please direct story ideas,
comments and questions to:
Kenneth Klee, editor
Telephone 212-810-5681
ken.klee@blackrock.com

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