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A Safer Ride?

A hedge fund manager explains the meaning of "market neutral"

By Andrew Pernambuco

Providing consistent returns on client portfolios has been a challenge for investment advisors over the past few years. While consistent, risk-averse performance is available, few investors are willing to pay management fees for returns paralleling those of money market funds. The quest for investment alternatives has thus led increasing numbers of advisors and their clients to the doorstep of hedge funds, in hopes of earning consistent returns, even if they are unspectacular, as well as diversification and lower overall portfolio risk.

Even institutional investors have been converted; they now account for nearly 40% of hedge fund assets globally, up from just 5% a decade ago. One reason is that hedge fund managers are free from regulations governing other types of funds, permitting them to use strategies unavailable to mutual fund managers to achieve greater leverage in their portfolios. Moreover, concerns that had deterred some advisors from embracing hedge funds, including fitting their strategies into conventional asset allocation matrices as well as a lack of portfolio transparency and benchmarking issues, have begun to abate as the industry has matured.

To be sure, the majority of hedge funds still do not provide much information beyond their performance numbers. And while it is not necessary for the manager to disclose every position—even mutual fund managers aren't obliged to do that in real time—investors should have access to key risk parameters, including leverage, concentration, hedge ratios, credit quality, and other vital statistics. Such information can be disclosed without jeopardizing the quality or performance of the portfolio, and can help advisors to understand and be able to explain the risks in a portfolio to their client investors.

There are now more than 7,000 hedge funds with diverse investment mandates ranging from simple long equities to esoteric derivatives to global macro strategies. While the uninitiated may regard hedge funds as a homogeneous universe, the opposite is true. Hedge funds vary greatly in terms of structure, volatility, investment strategy, market correlation, and performance. In fact, they are dissimilar in just about every meaningful way imaginable. Some, such as dedicated short bias and long/short equity, are accompanied by relatively high volatility; others, such as risk, fixed-income, and convertible arbitrage strategies, tend to be lower. In addition, individual funds within each strategy represent widely diverse risk elements.

A review of performance data for three different hedge fund strategies illustrates the significant impact these differences can have on investor portfolios. The CSFB/Tremont Arbitrage Index, which embraces all hedging strategies, was up 15.44% for 2003. However, the subindices varied wildly. Emerging Markets had a standout year, rising 28.75%; Convertible Arbitrage emulated the overall index, climbing 12.90%; but Dedicated Short Bias staggered in with a 32.59% loss.

Standard deviation, which measures historical volatility, is another hedge fund statistic worth comparing. The lower the standard deviation, the less volatility a fund will exhibit. Over the past five years, the average annualized return for Emerging Markets (up 15.86%) and Convertible Arbitrage (14.17%) are comparable. However, the annualized standard deviation for Emerging Markets (13.42) is about triple that of Convertible Arbitrage (4.03). Risk Arbitrage, another conservative hedging strategy, has standard deviation (4.19) comparable to Convertible Arb. But its five-year annualized returns (8.09%) are not comparable.

Over the past decade, the historical annualized average return, standard deviation, and best and worst months for various hedge fund subindices bears out the notion that the industry is hardly homogenous (see table, page 60). Among hedge funds displaying lower volatility, those that claim to deliver "market neutral" performance are generally chosen for more conservative portfolios and for those seeking performance uncorrelated to equity markets. Market neutral (MN) strategies seek to produce investment returns uncorrelated to the underlying equity markets by hedging—or arbitraging—long and short positions against one other in an effort to remove, or at least minimize, inefficiencies.

Constituting the most popular segment of the hedge fund industry, with some $344 billion in assets, market neutral funds are designed to outperform U.S. Treasuries while limiting portfolio exposure to equity market fluctuations. The perception that all MN strategies produce uncorrelated investment returns is inaccurate, however. Just as with the other subindices, there are critical differences between the various MN strategies, and investment advisors evaluating or recommending an MN strategy should be aware of these distinctions. The most important element contributing to true market neutral performance is convergence—that is, a discernable correlation between the long and short positions.

The MN strategies regarded as the most conservative include risk (or merger) arbitrage; fixed-income arbitrage; convertible arbitrage; and, to some extent, equity long/short strategies. Despite similar investment mandates, there is a noteworthy disparity between these strategies in terms of stability, volatility, noncorrelation to underlying markets, and true market neutral or absolute return performance.

Risk Arbitrage

Risk or merger arbitrage falls within the event-driven category, and involves evaluating the probable outcomes of announced mergers and acquisitions. Risk arbitrageurs access the probability of all relevant factors in a proposed transaction. They also look for a combination of trades that will be profitable, assuming their assumptions are correct. According to data from the CSFB/Tremont Hedge Fund Index, over the past 10 years, the average annualized return for risk arb is 8.39%. Its best month was 3.81%, the worst, a 6.96% decline. Its standard deviation is 4.48.

Typically, risk arb specialists invest simultaneously in long and short positions of companies involved in an announced merger or acquisition, generally going long on the stock of the company being acquired and shorting the stock of the acquiring company. The hedge here is that companies frequently finance takeovers by issuing more stock, diluting the value of existing shares, and offer a premium over the current share price of the company they seek to acquire. Shareholders of the takeover candidate benefit from the premium they receive for the shares they hold, while the acquiring company faces the operational cost and risk of integrating the acquired company's business. The best scenario is when the deal is completed, subject to regulatory review, antitrust laws, unforeseen or undisclosed debt in the company being acquired, and similar issues. The principal risk is the uncertainty as to whether the deal will close. Should the deal come apart, the share price of the takeover candidate often plummets, while the stock of the acquiring company can rise. This exposes merger arbitrage to the risk of high losses. The strategy is also reliant on a healthy mergers-and-acquisitions environment, as well as economic cycles and prolonged bear markets.

In a recent article for Harvard Business School's Working Knowledge Web site (hbsworkingknowledge.hbs.edu) author Emily Plishner discusses the risk arbitrage models developed by Harvard Business School Professor Mark Mitchell and Todd Pulvino, an assistant professor of finance at Northwestern University's Kellogg School of Management. The two researchers, she says, "did not assume that returns on arbitrage investments were independent of overall market trends. What they found was that market-related risk is small when the stock market as a whole is rising, but considerable when it is falling." Indeed, Plishner notes that Mitchell and Pulvino discovered that the overall excess returns for risk arbitrage transactions were only about 4% annually, "a far cry from the conclusions of other studies that had put that number anywhere from 12% to several hundred percent."

Risk arbitrageurs also frequently invest in equity restructurings, commonly known as spinoffs or "stub trades." Here, an opportunity for arbitrage occurs when the market value of an entire company is less than the market value of its publicly traded subsidiaries. The company, hoping to boost value for its investors, offers a portion of assets it determines to be undervalued to the investing public.

Fixed-Income Arbitrage

Fixed-income arbitrage attempts to profit from opportunities to leverage interest rate securities, such as government and non-government bonds, interest rate swaps or futures, and other securities. Fixed-income arbs seek to achieve consistent returns through a relative value approach by exploiting opportunities on the yield curve. For example, an arb may try to profit from price anomalies between related securities. Many managers trade globally within the market neutral mandate of generating steady returns with low volatility. Positions are generally based on technical or fundamental views. The primary risks lie in the amount of leverage employed, which can be significant, and, in some market conditions, a lack of liquidity.

A related arena is mortgage arbitrage, which exploits inefficiencies in the mortgage-backed securities market by playing the spread between short- and long-term interest rates. Mortgage arb managers typically buy one maturity and sell the other, expecting the two rates to eventually converge. As maturity approaches, the short-term rate will approach the long-term rate, much like bonds. Interest-only, principal-only, and other tranches are utilized in the strategy.

Long/Short Equity

With $205 billion in assets, Long/Short Equity is the largest hedge fund category. Managers can shift positions between various sectors, styles, and capitalizations. They may also hedge using futures and options. The emphasis may be geographic or industry-specific.

Despite evidence to the contrary, many advisors and investors continue to regard long/short equity funds as a market neutral play. The Long Term Capital Management debacle in 1998 should have convinced the market that this assumption is false. At LTCM, the risk of its short positions failed to offset the risk of its long ones. LTCM managers also employed inappropriately high leverage. It took a massive rescue operation organized by the Federal Reserve to sort things out.

The long/short play involves buying stocks deemed undervalued while simultaneously selling stocks perceived as overvalued. It can be a valid strategy if a link exists between the two groups, but most funds employing the strategy hold stocks with no real relationship. Typically, the two groups are merely companies within the same industry or ones that share some similarities, but that does not mean they will converge. They are merely a collection of stocks the fund manager believes may go up or down.

Being long Dell stock and short Gateway stock in no way shields investors from adverse market moves. This position simply amounts to two independent bets on computer retailers. Dell's share price moves may or may not be related to moves in Gateway stock. Hoping that because two stocks have had some sort of historic correlation and may once again interconnect does not present an assured outcome and is not a true market neutral strategy.

Convertible Arbitrage

Convertible arbitrage involves hedging convertible securities, which are corporate fixed-income instruments that may be converted into a fixed number of the issuer's shares. The equity embedded in a convertible bond is issued at a premium to the prevailing market price. Convertible securities are hybrid securities and their debt obligations hold a senior position to common stock in terms of repayment.

To the investor, convertible bonds offer the downside protection of a fixed-income security combined with the unlimited upside potential of an equity investment. They also have a conversion value equal to the market value of the shares obtainable by bond conversion.

Convertible bond investors assume an inherent credit risk in that there is no absolute certainty the issuing company will still be in business when the bond matures, which means informed credit analysis is vital in selecting convertible issues. Since most convertible bonds are not otherwise rated, an arbitrary credit rating that quantifies the amount of credit risk must be established, and the risk then hedged in some way in order to enhance the probability that the coupons will be paid and the security will mature.

In convertible arbitrage, a manager typically goes long a company's convertible bond and shorts its common stock. Positions are designed to generate profits from the fixed-income security as well as the short sale of stock, while protecting principal from market moves.

Convertible securities and their underlying equity share a contractual relationship; this represents a true market neutral play. The two securities are related through a conversion option. The interrelationship between the two securities provides assurance that at some future point, the two securities will become fairly priced in relation to each other. This eventual convergence of the two securities is vital because it establishes the underpinning for market neutral performance and separates true market neutral funds from those that are not.

Typically, convertible arbitrage funds contain positions with an expected convergence of at least three to five years. As the fund moves toward the convergence, it is possible it will experience interim mark-to-market losses. This mismatch between the expected time of position convergence and the time frame of the investor is perhaps the most significant risk advisors should carefully monitor. For example, a market neutral fund with a three-year convergence is inappropriate as a short-term cash-flow vehicle. But if an investor's intermediate- to long-term investment objectives mirrors those of a fund's convergence, the expected return to convergence can be easily estimated. An appropriate investment horizon and the financial stability to withstand interim market movements can eliminate the danger of being forced to sell at an inopportune time, that is, before convergence can occur.

While investors generally can expect to be able to cash out quarterly or monthly, some funds impose a lockup period. For example, if a fund has a two-year lockup, investors cannot redeem their interest for the first two years. If the fund offers "quarterly liquidity" after the lockup period, investors can get out of the fund every quarter. Other funds, especially those with three- to five-year investment horizons, feature "gated liquidity." This places a cap on the total amount of any quarterly redemption. It also seeks to protect long-term investors by preventing forced sales of positions in the middle of a dip in market valuations. Advisors should thoroughly investigate any fund being considered to ensure it not only has an appropriate convergence period, but also that the fund manager scrutinizes the client's portfolio objectives and accepts only sophisticated, financially stable investors with a thorough understanding of the strategy.

Unlike other strategies discussed here that, despite their upside potential, offer only the hope or expectation of convergence, convertible arbitrage must converge because of its contractual obligation for one position to eventually become the other. Even in the case of a plunging stock price that falls below the bond's conversion value, an arb can make up any losses on his bonds from the profits gained on shorting the issuer's shares. And even if the shorting strategy generates nothing, as long as the investor has a bond coupon, he will be paid until the convergence point. The caveat is that the investor must have a minimum time frame of three to five years, or one matching that of the issue's convergence.

This is why convertible arb is the only strategy with convergence and hence, the only true market neutral strategy. However, convertible arbitrage should be viewed not as a standalone strategy, but rather as one relatively small element of a conservative, risk-averse portfolio.

A number of databases and benchmarking services can provide a comprehensive overview of long-term performance by hedge fund managers. In evaluating performance, advisors should pay particular attention to 12-month rolling volatility. Managers who achieve a huge gain one month and a corresponding loss the next are not candidates for conservative portfolio management. Beware the manager who is up 7% in a single month. Convertible arbitrage should deliver consistency and monthly performance should not display wide variance. If an investor's time horizon matches that of a true market neutral fund's convergence, and he or she understands there may be temporary mark-to-market losses, the reward can be a return that is as close to being assured as possible in the world of finance.

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