

Taking Stock

Long/Short Hedge Funds and
“Equity Replacement”

Blackstone

January 2016

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Summary

By removing some of the constraints facing long-only equity managers, we believe long/short equity hedge funds may provide more “efficient” exposure to the stock market: They have historically offered equity-like returns with lower volatility and shallower peak-to-trough declines. This should render them attractive to investors looking to replace part of a traditional stock allocation. However, the proliferation of hedge funds and the range of return profiles for each can make it difficult to choose and combine them in a properly diversified long/short portfolio. This paper examines the performance of long/short equity hedge funds, defines the category’s varied investment universe, and outlines an approach to portfolio construction.[†]

*Note: With the term “Equity Replacement” we are not suggesting a wholesale substitution of an investor’s entire long-only equity allocation with hedge funds, but a partial or staged inclusion of long/short hedge funds for some portion of their long-only equity portfolio. Many considerations, including the cost and liquidity of some long-only portfolios, need to be weighed alongside the investment merits of long/short hedge funds in making this decision. See notes and disclaimers at the end of this paper.

† Hedge fund indices used in most analyses (including this one) have limitations that include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown). Therefore, these indices may not be complete or accurate representations of the hedge fund universe. In addition, constructing and managing a well-diversified long/short hedge fund portfolio is no simple task. Having the requisite knowledge of the vast number of funds, access to talented managers (and due diligence on each), plus robust insight on the markets to guide manager allocations is typically beyond the reach of most investors. Experienced financial advisors will generally have more conversance with the issues needed to successfully navigate this space.

Past performance is not indicative of future results. There can be no assurance that hedge funds will achieve their investment objectives or avoid significant losses. There is no assurance that any hedge fund will perform in a manner consistent with or even similar to HFRI Equity Hedge Index.

PART I

Examining the Performance of Long/Short Hedge Funds

Anxiety over Equities and the Appeal of a Long/Short Solution

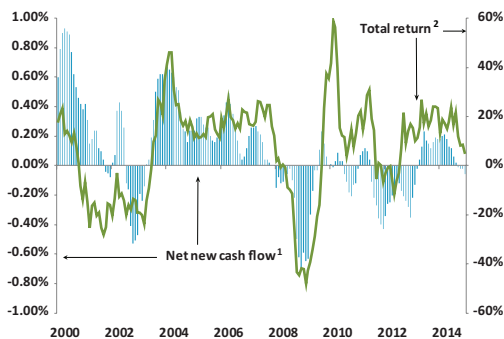
Advisors have traditionally allocated to equities to provide the growth needed to meet investors' inflation-linked spending needs. But through the dot.com bust, the global financial crisis, and the long, liquidity-driven recovery, equity investors have had to put up with a roller coaster of ongoing volatility and periodic steep declines (Display 1).

This prompted a series of misbehaviors, as reflected in net fund flows into and out of equities. Many investors ran for the exits as markets dropped in 2008, and then sat out the recovery that followed.

DISPLAY 1

Jittery Markets and Agitated Investors

Net New Cash Flow to Equity Funds
vs. World Equity Returns
(Monthly, 2000-2014)



1 Net new cash flow is the percentage of previous month-end equity fund assets, plotted as a six-month moving average.

2 The total return on equities is measured as the year-over-year percent change in the MSCI All Country World Daily Total Return Index.

Sources: Investment Company Institute and Morgan Stanley Capital International

Even today, long after the crisis, investors in general remain cautious about re-allocating to equities.

The timing of this shift could be inopportune, as yields on traditional fixed income are at historic lows while substantial interest rate risks may well lie ahead. In addition, most investors continue to face high return targets to fund retirement and other real liabilities, which a bond-tilted portfolio might be challenged to meet.

Rather than give up altogether on equities, many are reconsidering their long-term approach to the asset class. Some are looking at alternative investments, such as hedge funds, which tend to be less constrained than long-only funds (*see Glossary for any unfamiliar terms*).

Indeed, research has shown that by giving investment managers greater latitude, specifically by removing the commonplace prohibition against shorting stocks, they are generally able to provide better risk-adjusted performance than long-only managers.¹ Increasingly, advisors are seeing long/short funds as an attractive equity substitute.

An Attractive Alternative: Long/Short vs. Long-Only Equity

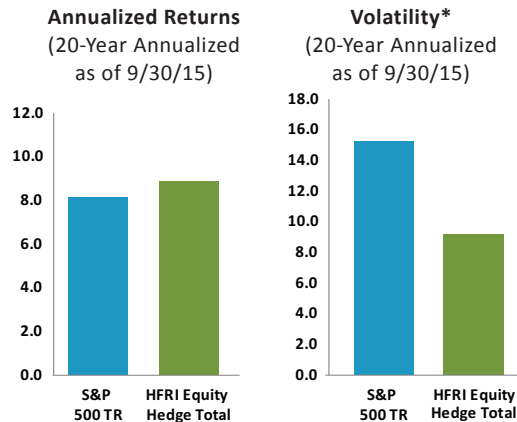
At a basic level, there are several appealing attributes of long/short equity hedge funds. One is that they tend to invest in publicly traded, liquid stocks—familiar territory for most investors. Another is that these managers are hardly upstarts: equity long/short is one of the oldest and most “traditional” of hedge fund strategies, and today makes up one of the largest single categories in the industry.²

1 For a useful chronology of the literature on long-short equity strategies see Grinold, R.C. and R. N. Kahn, “The Efficiency and Gains of Long-Short Investing,” *Financial Analysts Journal*, 56, (2000) pp. 40-53. Elsewhere see Grinold, R. C. “The fundamental Law of Active Management,” *Journal of Portfolio Management*, 15 (1989) pp. 30-38. Grinold, R.C. and R. N. Kahn. *Active Portfolio Management*. New York, NY: McGraw-Hill, 1999. Jacobs, B., and K. Levy, “The Long and Short on Long-Short,” *Journal of Investing*, 6 (1997), pp. 73-87.

2 Some date the birth of hedge funds from the original 1949 long/short fund started by former *Fortune* magazine journalist Alfred Winslow Jones. Assets in the long/short equity hedge fund category today are around \$300 billion (HFRI).

DISPLAY 2

More Efficient Exposure: Long/Short Approaches Show Higher Returns & Lower Volatility



Note: *Measured by the indexes' Standard Deviation; see glossary for more detail. For illustrative purposes only. See "Notes and Disclaimers" section for description of such indices. Source: Morningstar Direct.

But it's the performance of long/short equity hedge funds that may make the most compelling case for long-only equity replacement. Among the universe of such funds as represented in the HFRI Equity Hedge Index (our proxy for long/short equity throughout this paper), returns compare well with the broad equity market, as represented by the S&P 500 Index, over the past 20 years (*Display 2*). What's more, these results have been achieved at roughly half the volatility level of the long-only index.³

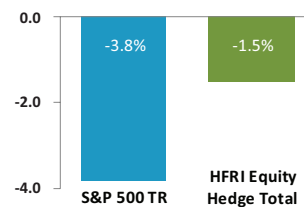
Even more important may be their performance during episodes of market stress: In down months for the S&P 500 over the last 20 years, long/short equity hedge funds suffered less than half of the broad equity market's decline, yet participated in almost two-thirds of the returns during positive months (*Display 3*).⁴

By historically mitigating the impact of steep market declines and reducing the jagged swings of normal market conditions, long/short managers may be able to provide a smoother investment ride, the advantages of which can be deceptive. Consider this example: If a \$1000 investment loses 50%, its value drops to \$500. But a corresponding gain of 50% would only bring it to \$750—the investor would still be in a deep hole. He would need to double that gain, a 100% return, just to reach breakeven. Precipitous losses of this kind are an investor's worst enemy, and what a long/short portfolio seeks to guard against.

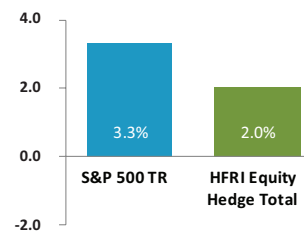
DISPLAY 3

Softening the Downside; Participating in Up Markets

Average Monthly Return for Months When S&P 500 TR was Negative⁽¹⁾⁽²⁾



Average Monthly Return for Months When S&P 500 TR was Positive⁽¹⁾⁽²⁾



Note: Past performance is not indicative of future results. There can be no assurance that hedge funds will achieve their investment objectives or avoid significant losses. There is no assurance that any hedge fund will perform in a manner consistent with or even similar to HFRI Equity Hedge. (1) For period from 10/1/95 to 9/30/15. (2) From 10/1/95 through 9/30/15 there were 85 months in which the S&P 500 TR Index was down and 155 months in which the S&P 500 TR Index was up. The S&P 500 TR Index is not a managed portfolio and does not include fees or expenses. See "Notes and Disclaimers" section for description of such indices.

³ Our proxy for the long/short equity hedge fund space is the HFRI Equity Hedge Index. While the HFRI Indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown). The HFRI Indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways.

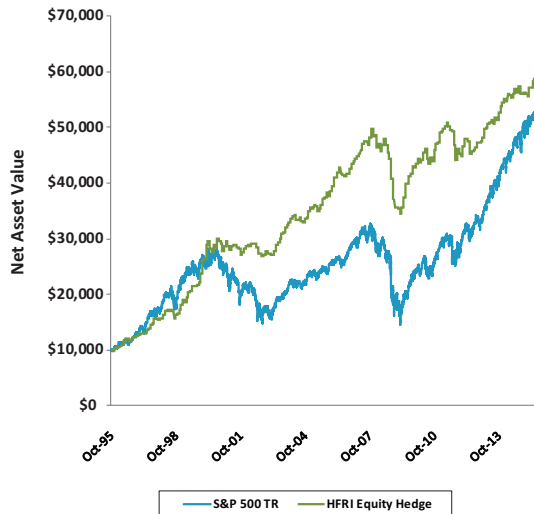
Past performance is not indicative of future results. There can be no assurance that hedge funds will achieve their investment objectives or avoid significant losses. There is no assurance that any hedge fund will perform in a manner consistent with or even similar to the HFRI Equity Hedge Index.

⁴ From 10/1/95 through 9/30/15, S&P was up 155 times over 20-year period and down 85 times and HFRI was up 159 times over 20-year period and down 81 times. The S&P 500 Total Return Index is not a managed portfolio and does not reflect fees or expenses, but does include dividends.

DISPLAY 4

A Smoother Ride Has Led to Better Wealth Outcomes

Cumulative Returns:⁽¹⁾ HFRI Fund
Equity Hedge Index vs. S&P 500 TR



Note: Past performance is not indicative of future results. There can be no assurance that hedge funds will achieve their investment objectives or avoid significant losses. There is no assurance that any hedge fund will perform in a manner consistent with or even similar to HFRI Equity Hedge. (1) This graph represents \$1,000 hypothetical investments that reflect the performance of the S&P 500 TR Index (including dividends) and the HFRI Equity Hedge Index from 10/1/95 through 9/30/15. See "Notes and Disclaimers" section for description of such indices.

This helps explain the difference in long-term wealth creation between a long/short and a long-only equity portfolio. Over the last 20 years, the HFRI Equity Hedge index compounded at a far better rate than the S&P 500, generating a substantial improvement in returns. (*Display 4*).

So what is it that may enable long/short funds to achieve more efficient exposure than traditional long-only approaches? We believe the answer lies right in its name.

The Short of It: Unleashing Manager Talent

Long/Short funds remove the one constraint—against shorting stocks—that we believe represents the greatest impediment to investors wishing to gain

more efficient exposure to the equity markets.⁵

If you think about it, long-only managers face particularly stiff odds. To outperform an index like the S&P 500, they must adjust their holdings relative to the stocks' neutral or benchmark weights—overweighting certain companies and underweighting others, depending on their research and convictions. But the constraints on underweight positions can be severe, eliminating much of a stock investor's potential tool set.

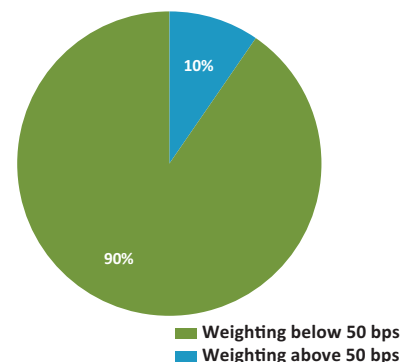
Here's why. Benchmarks are usually weighted by their stocks' market capitalizations, so in very large indexes like the S&P 500, few securities carry significant weights. The vast majority of component stocks are represented thinly at best—90% of the names in the S&P 500 have a weight of 50 basis points or fewer (*Display 5*).

This limits a long-only manager's ability to express a negative outlook, at least one of any import, for all but the very largest names. For most stocks, the most extreme position would be simply not to hold the shares at all.⁶

DISPLAY 5

The Long-Only Limitation: Traditional Mandate Constrains Over- and Under-Weights

Stock Weights in S&P 500
(As of 9/30/2015)



Source: Standard & Poor's as of September 30, 2015. See "Notes and Disclaimers" section for description of the index.

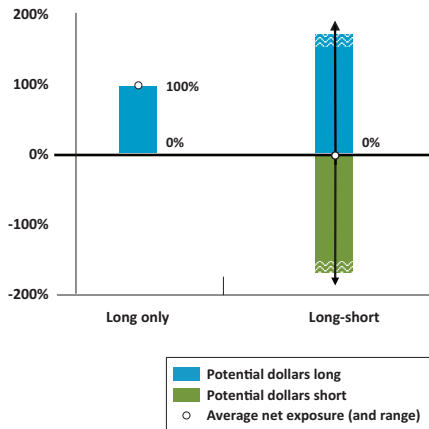
5 Shorting consists of selling borrowed shares with the expectation they will decline in value. If there is a price decline, the short investor can earn a profit on the difference between the selling price and the repurchase price, minus the cost of borrowing. If the price rises, the short investor incurs a loss. Short selling entails the risk of loss of more than the amount invested and that, under certain conditions, even if the strategy's long positions are rising, this could be offset by declining values in the strategy's short positions, and the converse is possible. Moreover in a market where the value of the strategy's long and short positions are declining, an investor may experience substantial losses.

6 See the work of Jacobs and Levy, specifically, "Long-Short Equity Investing," in *Journal of Portfolio Management*, 20 (1993), pp. 52-64, as well as Miller, E.M., "Why the Low Returns to 'Beta' and Other Forms of Risk?" *Journal of Portfolio Management*, 27 (2001), pp. 40-56.

DISPLAY 6

Manager Unbound: Removing Constraints Means Potential for Greater Opportunity

Hypothetical Comparison of Strategies with Long and Short Positions



Note: For illustrative purposes only.

Long/Short Hedge Fund as “Beta Blocker”

Eliminating the long-only constraint may also enable a potent risk-reducing benefit: less dependence on the market’s swings or “beta.”⁷

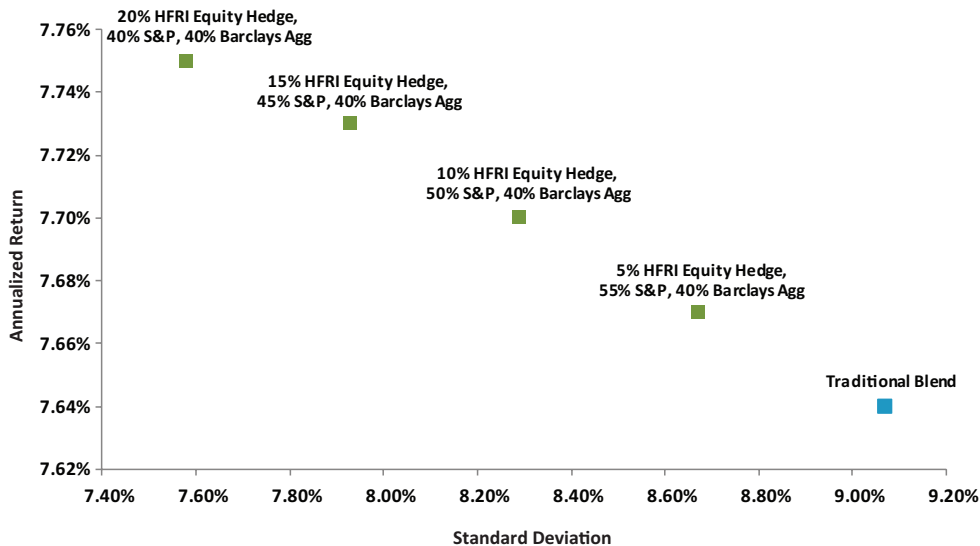
Long-only managers generally maintain a constant 100% exposure to the market, which all but tethers a portfolio to the market’s movements. That may feel fine when the market is headed up, but day-to-day volatility can create a bumpy ride, and few investors have the stomach for the kind of precipitous declines we’ve suffered over the past decade. Hedged positions and outright short bets can act as effective counterweights to these gyrations. (See sidebar “The Short Book: Edge or Hedge?”)

For long/short managers, it’s a matter of determining the appropriate level of market participation: they

DISPLAY 7

Efficiency Gains: Increasing Long/Short Allocation Has Improved Portfolio Performance

Risk/Reward Improvement by Adding HFRI Equity Hedge in 5% Increments
Traditional Blend=60% S&P 500 and 40% Barclays US Aggregate
 (20 Years Ending 9/30/15)



Note: Past performance is not indicative of future results. There can be no assurance that hedge funds will achieve their investment objectives or avoid significant losses. There is no assurance that any hedge fund will perform in a manner consistent with or even similar to HFRI Equity Hedge. See “Notes and Disclaimers” section for description of all indices used. Source: Morningstar Direct.

7 Beta is defined as the measure of sensitivity of a fund’s return to the return of an index. If the beta=1, then the return will move with that of the index. If the beta is > 1, the return is more volatile than the index whereas if the beta is < 1, the return is less volatile than the index.

can adjust their market exposure through shorts and an array of other tools, including leverage, to dodge volatile trends in equity pricing (*Display 6*). A manager's net market exposure (long positions less shorts)⁸ is generally a proxy of his appetite for market risk: the higher the net, the more willing the manager is to be exposed to the market's directional moves. And over the last twenty years, the Beta of the HFRI Equity Hedge Index to the S&P 500 has been .46, meaning it generally moves about half as much as the broad market.⁹

It's this flexibility that may enable long/short managers to gain more efficient exposure to equities (higher returns per amount of risk taken) than long-only funds. To demonstrate this we can gradually introduce increasing allocations of the

HFRI Equity Hedge Index to a portfolio of 60% long-only equities (the S&P 500), with a constant 40% bond allocation. With each 5% increase in long/short index exposure, both risk and return measures improve geometrically (*Display 7*).

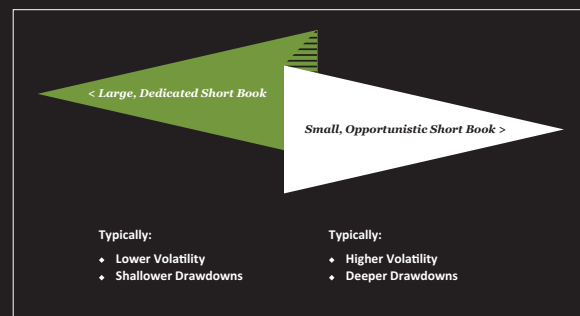
But there is a caveat: by lessening the dominance of the market as the primary driver of returns, long/short funds create risk-and-return profiles that are generally more dependent on the individual managers' decisions. For investors, this gives rise to a quandary: how to choose and combine superior *and* complementary managers in a long/short portfolio, a topic we explore in the second half of this paper.

The Short Book: Edge or Hedge?

Some long/short hedge fund managers use their collection of short positions, or short book, primarily to hedge against their long positions. Others treat their short book primarily as an alpha-generator. Still others use whichever of these strategies best suits the opportunity at hand. Knowing the objective of a short book, its size and the type of securities it contains can be critical factors in evaluating a long/short manager (*Display below*).

The short book's size is pivotal because it plays a determining role in the return and the volatility of a fund. In general, the larger the short book, the lower will be both the fund's volatility and its return. Conversely, a short book that is small relative to a fund's long portfolio is likely to produce a return profile closer to that of a long-only index.

Managers with "dedicated" short books tend to reduce beta, lower exposure to market volatility, and minimize the impact of market downturns. Often they achieve this by using broad or sector index hedges (for example, by shorting the entire S&P 500 or, say, the S&P Financials sector). But a short hedge can also be a complement to a specific long position. In a pairs trade, for example, a manager will typically identify two competitors whose stock-price movements tend to be correlated. By going long the one whose stock he deems to be underperforming and short the one whose stock he sees as outperforming, the manager positions himself to benefit when the spread between the two stocks ultimately converges.



8 Long/short managers' net market exposure takes into account their offsetting long and short positions, and is calculated by subtracting the capital invested in short sales from that in long positions. Long/short portfolios are typically managed with less than 100% net exposure.

9 Over the past 20 years ending 9/30/15, the beta for long/short hedge funds (as measured by the HFRI Equity Hedge Index) to the S&P 500 has been about 0.46. Source: Morningstar Direct.

PART II

Constructing a Long/Short Hedge Fund Portfolio

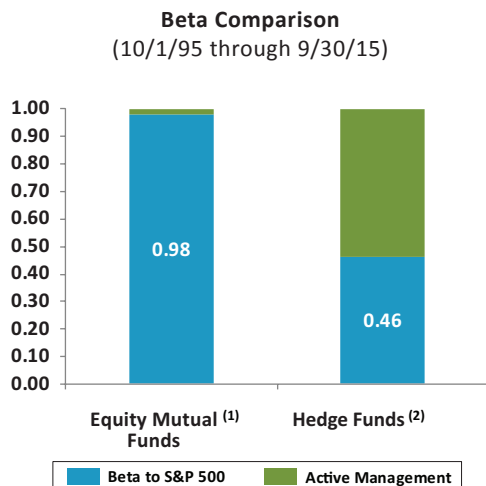
Alpha Bet: Putting Less Stock in Quirky Markets

We learned in the first section of this paper that the ability of any equity manager to selectively detach his performance from the market can result in important investor benefits. Hedge funds achieve this market independence on a regular basis: historically they owe about two thirds of their return (and also their risk characteristics) not to the market, but to the manager making the buy and sell decisions (*Display 8*).

A natural consequence of this is that hedge fund performance can vary enormously from

DISPLAY 8

Absolute Performance: Hedge Fund Returns Historically Less Driven by Market Movements

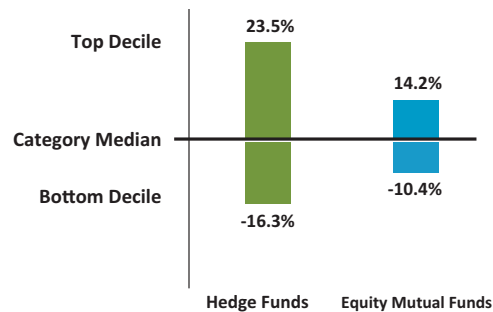


Source: (1) Morningstar Large Cap Blend Category Index's beta to the S&P 500 Total Return Index; (2) HFRI Fund-Weighted Composite Index's beta to the S&P 500 Total Return Index. Note: Past performance is not indicative of future results. There can be no assurance that hedge funds will achieve their investment objectives or avoid significant losses. There is no assurance that any hedge fund will perform in a manner consistent with or even similar to HFRI composite. See "Notes and Disclaimers" section for description of such indices.

DISPLAY 9

Higher Performance Dispersion among Hedge Funds Makes Diversification Key

Dispersion of Fund Performance (Calendar Year Average, 2002-2011)



Source: Lipper TASS, Morningstar Direct, and Blackrock (*The Importance of Manager Selection*, in "Weighing the Alternatives," September 2012). Utilized Lipper TASS dataset of hedge fund performance to calculate dispersion between top and bottom decile for all hedge funds. Similar approach using Morningstar database of all equity mutual funds. See "Notes and Disclaimers" section for description of such indices.

manager to manager. The spread between the best- and the worst-performing decile of hedge funds can be 40 percentage points, almost twice that of traditional equity mutual funds (*Display 9*).¹⁰ More complicating still for long/short investors is that the performance dispersion among equity long/short managers tends to be higher than just about any other category of hedge funds.¹¹

This disparity may increase the risk of not finding the "right" manager. It also underlines the importance of allocating to a diversified¹² portfolio of funds rather than to any single fund, an investing axiom that is perhaps more true for hedge funds than

¹⁰ Various studies have shown that dispersion among hedge fund managers tends to be greater than that of traditional equities managers. Two studies of note include research by Bernstein in 2006 (*Hedge Funds: Too Much of a Good Thing?*) and by Blackrock, "*Hedge Fund Breakthrough: Three Common Myths Exposed*," in June 2012.

¹¹ DeSouza, C., and S. Gokcan. 2004. "Hedge Fund Investing: A Quantitative Approach to Hedge Fund Selection and De-Selection." *The Journal of Wealth Management*, Spring. P. 52-73.

¹² Asset allocation and diversification do not assure a profit or protect against loss in declining markets.

traditional long-only managers.¹³ Indeed, getting manager selection and portfolio construction right with long/short hedge funds is critical. But that is no simple task, given the large and growing number of funds in the market and the variety of approaches that each one may take.

If You've Met One Long/Short Manager, You've Met One Long/Short Manager

The long/short hedge fund category is anything but homogenous. There are over 1100 long/short funds in the commonly used Hedge Fund Research (HFRI) Equity Hedge index, and five or six subcategories of funds underneath that. But however we may try to dimension these funds, they defy the easy classification offered by the convenient style box in long-only space. Hedge fund characteristics will instead be determined more by the expertise and approach of the individual manager. Nevertheless there are some

essential guideposts we can use to help map the long/short landscape.

Fundamentalists and Opportunists

We can divide long/short managers broadly into two philosophical camps: fundamental bottom-up investors and tactical, or opportunistic traders (*Display 10*). A number of differences flow from that primary distinction.

In general, for fundamental managers, the core skill set and value driver is an ability to determine the attractiveness of industries and companies based on their growth characteristics, revenue sources, competitive positioning, and financial attributes. They aim to own quality businesses experiencing strong growth prospects, financial flexibility, and operating conditions that will drive their securities' performance. The idea is to acquire these assets at attractive valuations and sell them when valuations reach the manager's target level.

DISPLAY 10

Fundamentalists and Opportunists: Two Key Categories of Long/Short Managers

	Fundamental Investors	Opportunistic Traders
Philosophy	Focus on bottom-up company valuation or catalysts that alter valuation	Focus on short-term price movements and technical factors
Identify Opportunities	Based on stocks selling at a discount to historical valuation, vs. sector or peers or intrinsic value	Based on prices relative to trend lines or peer group comparisons; technical-driven mis-pricings or inefficiencies
Initiate Positions	From toe-hold to maximum position size, based on timing, risk/return analysis, relative attractiveness and diversification	From toe-hold to maximum position size, based on timing, risk/return analysis, relative attractiveness and diversification
Position Management	More buy-and-hold based on value reassessment or through periodic rebalancing	Change position size based on technical factors and company news
Sell Discipline	Use fundamentals to set expectations for future exit	Rely on stock or market specific technical factors to determine exit

Note: For illustrative purposes only.

13 "Hedge Fund Diversification: How Much is Enough" François-Serge Lhabitant and Michelle Learned Research Paper N° 52. International Center for Financial Asset Management and Engineering, July 2002. Billingsley, R.S., and D.M. Chance. "Benefits and limitations of diversification among commodity trading advisors." *The Journal of Portfolio Management*, Fall (1996), pp. 65-80. Henker, T. and G. Martin. "Naïve and Optimal Diversification for Managed Futures", *The Journal of Alternative Investments*, Fall (1998), pp. 25-39.

DISPLAY 11

Generalists and Specialists: The Differing Arenas of Long/Short Managers

	Style	Market Cap	Geography	Market Exposure	Sector
	Value	Micro	US	Net Short	Generalist
	Growth	Small	Global	Neutral	Financials
	Momentum	Mid	Regional	Net Long	Health Care
	Activist	Large	Emerging	Variable	Technology

Note: For illustrative purposes only.

Traders, by contrast, home in on short-term price movements and exhibit a more defensive posture. For them, the market zigs and zags, often without any definite reason. Their typical holding period could be as short as one hour and usually does not extend beyond a few months. Technical factors, whether related to the market, an industry, or a company, primarily drive their investment decisions. These can include such arcane markers as stock-price momentum, resistance, and support levels as well as price changes driven by macro events.

But within these two broad categories, there are many more distinctions to be made. Fundamental investors may be “activists,” and seek to directly influence investment outcomes via their communications to company management. Others may be “market neutral,” with a zero beta to the market, or “short-biased,” with a persistent negative net exposure.

More differences lie in their target markets (*Display 11*). Some managers, whether fundamental or opportunistic, work in emerging markets, others in developed, while others confine themselves to global regions or particular countries. Some invest across industries, others focus on specific

sectors, like financials or health care. And all pursue different mandates regarding investment style, market capitalization, and net market exposure.

Taking Aim at the Target Portfolio: The Alchemy of Mixing Manager Exposures

Rightly judging the virtues of this broad universe of individual managers is half the story; the other half is analyzing how each will fare alongside the others, in the context of a diversified portfolio mix. Getting that right generally means avoiding funds with undue overlap across sector, geography, and style. It also requires advisors to identify synergies among funds—those with complementary factor exposures, betas, and volatility.

Overlap can occur at any level, even with individual holdings. For example, newly required quarterly SEC disclosures of long stock positions held by hedge funds often show crowded trades in the same key names even among very different hedge fund styles. But to find the right mix of managers in the overall portfolio, advisors must extend this scrutiny well beyond individual stocks to find managers with complementary risk and return profiles.

DISPLAY 12

The Alchemy of Portfolio Construction: Building to an Objective

- ◆ Less Market Participation
- ◆ Lower Volatility
- ◆ Shallower Drawdowns

- ◆ Greater Market Participation
- ◆ Higher Volatility
- ◆ Deeper Drawdowns

Note: For illustrative purposes only. Reflects typical characteristics of each category.

High-beta managers tend to run long-biased portfolios without dedicated short books, and may even use leverage to increase net market exposure to above 100% of capital. If they go short, they probably do so selectively, as an alpha strategy, and less to hedge their long book. Typically, these managers have higher volatility, higher market beta, and are exposed to significant potential draw-downs (*Display 12*).

Flexible and directional managers, while also long-biased, tend to maintain short books for both alpha-generation and hedging purposes. They are flexible enough to reduce exposure in rough markets and increase it in supportive ones. By contrast, managers with more risk-averse mandates will maintain short books at all times, and may view their short book more exclusively as a hedge or volatility damper—they tend to have net exposures below 50%.

Finally, traders depend more on ephemeral market opportunities, often stemming from fears about the economy or some sector or company. Volatility is a trader's friend, and their funds rarely take the form of directional or higher beta approaches.

In the end, the right manager mix should not be static. In turbulent times an investor might prefer to have greater exposure to low-beta, opportunistic traders. On the other hand, amid relative calm and

buoyant growth, he would likely fare better picking a more directional, fundamental manager. For this reason some may prefer to tactically shift the balance of their long/short managers in response to changing market conditions.

Reducing Headwinds in Stormy Markets: Adding Defensive Ballast to the Portfolio

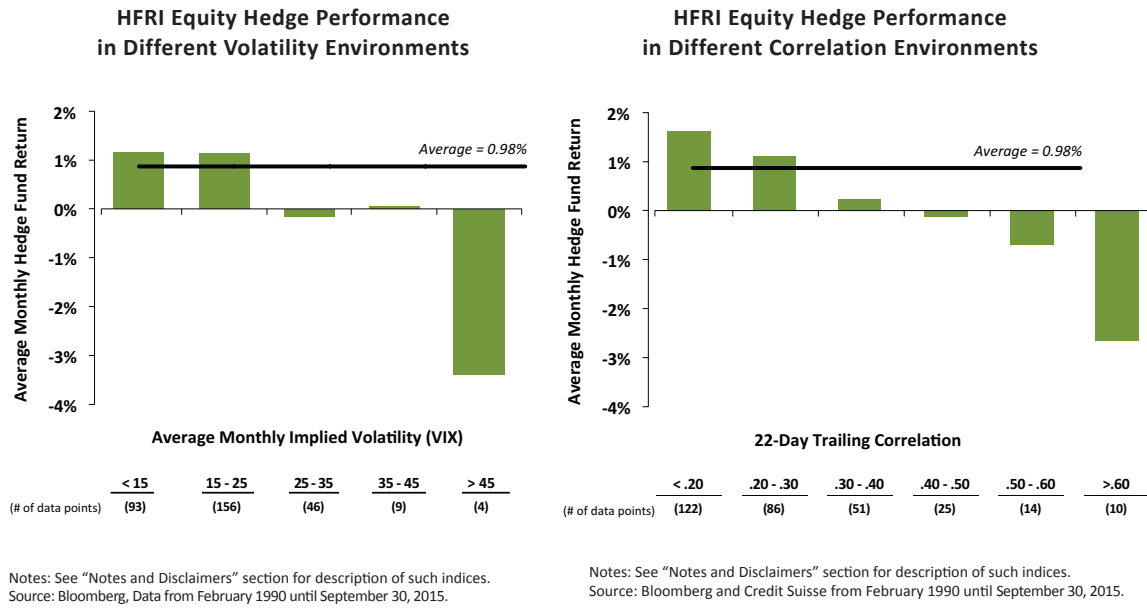
But not even the most rapid shifts across managers can fully insulate a long/short portfolio from the sort of market turbulence we've seen over the last several years, characterized by high volatility and low dispersion across stocks.

Analysis of long/short equity returns over the past twenty years shows that as volatility increases, hedge fund returns have tended to decline (*Display 13*). That's because violent swings in equity prices often indicate a market driven by macroeconomic headlines, political unrest, and general investor fear rather than fundamental factors—the basis for the investment decisions of fundamental long/short managers.

Stock pickers face a similar problem with high correlations, which likely have risen due to increased interdependence among global markets, greater use of ETFs, and a persistent risk on/risk off environment. As a result, stocks generally have tended to move in tandem, with very little differentiation between high-quality and low-quality businesses, making it more difficult for

DISPLAY 13

Performance of Long/Short Managers in Different Volatility and Correlation Environments



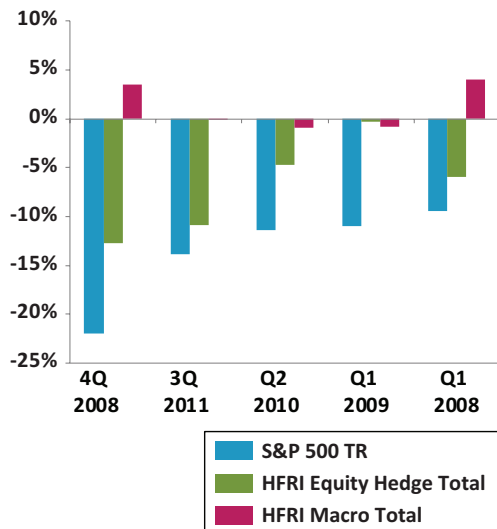
long/short managers to realize value in portfolios based on fundamental principles. (Display 13) shows average monthly equity hedge fund returns in six different correlation environments: historically the higher the correlation the worse they perform.

To build a long/short portfolio that has the potential to successfully navigate such challenging market conditions, advisors may want to incorporate managers whose returns are even more independent of equity market beta than those of long/short funds. For example, while the HFRI Equity Hedge index has a beta to the S&P 500 of 0.46 over the last twenty years, the HFRI Macro Index (including Global Macro, Commodity Trading Advisors (CTAs) and other strategies with a focus on non-equity markets) has a beta to the S&P 500 of 0.06 over the same period. And in terms of actual performance, the HFRI Macro index offered more protection than even the HFRI Equity Hedge index during the most volatile peak-to-trough declines in the S&P 500 over the last ten or so years—even producing positive returns in three of them (Display 14).

DISPLAY 14

Diversifying Exposures Provide Defensive Ballast in Turbulent Markets

Performance in Most Turbulent Markets (2005–2015)



Note: Past performance is not indicative of future results. There can be no assurance that hedge funds will achieve their investment objectives or avoid significant losses. There is no assurance that diversification will provide protection or that any hedge fund will perform in a manner consistent with or even similar to HFRI Equity Hedge or HFRI Macro USD indices. See "Notes and Disclaimers" section for description of such indices. Source: Hedge Fund Research Index and Morningstar Direct.

Including some allocation to these less equity-oriented strategies can provide diversifying ballast, enabling a portfolio of long/short hedge funds to potentially weather more hostile equity markets with less downside risk.

Questioning the Exodus From Equities

Over the last several years investors have become increasingly anxious about their stock allocations for a variety of reasons. They may acknowledge the need for growth in their portfolio to fund their financial goals but, as fund flows suggest (see page 2, Display 1), investors have instead sought out the presumed safe haven of bonds just as they appear to be reaching the end of a secular bull market.

Financial advisors are in a position to potentially help guide investors to a more prudent decision, and

the possibility of shifting some of their long-only allocation to long/short equity strategies may present an interesting solution.

Historically long/short equity hedge funds have provided returns that compare favorably with those of the broad equity market with about half the volatility and smaller peak-to-trough declines. That is, these funds may achieve stronger risk-adjusted performance.

But the challenges of this approach are not trivial. Long/short equity constitutes a large and varied category of funds encompassing a wide array of styles, managers, and risk-and-return characteristics. Another question is how many funds, and which funds together, would represent an appropriately diversified long/short portfolio. These issues and others require careful analysis before considering such an “equity replacement” strategy.

Glossary

Alpha: A measure of risk-adjusted performance which captures risk attributable to the specific security (or manager) rather than the overall market. A high alpha value implies that the investment has performed better than would have been expected relative to the overall market (beta). It is often called the “excess return” on an investment above a benchmark index or “risk free” rate of return.

Alternative investments: Investment categories other than traditional securities or long-only stock and bond portfolios. This includes private equity, venture capital, real estate, hedge funds, and many illiquid investments.

Beta: The measure of sensitivity of a fund’s return to the return of an index. If the beta=1, then the return will move with that of the index. If the beta is > 1 , the return is more volatile than the index, whereas if the beta is < 1 , the return is less volatile than the index.

Correlation: A measure of how the returns of two or more assets perform in relation to one another. Assets with a correlation of 1.0 move in lock step. Those with a correlation of 0 have a random relationship to each other.

Drawdown: The peak-to-trough decline during a specific time period of an investment. A drawdown is usually quoted as the percentage between the peak and the trough. Drawdowns help determine an investment’s financial risk.

Due Diligence: An investor’s analysis of a manager to ensure he has a credible strategy, established processes, a culture of integrity, and sufficient controls to prevent fraud and manage liquidity.

Fund of Funds: An investment fund that invests in other funds, allowing the investor to gain exposure to a variety of fund strategies while outsourcing manager selection and due diligence.

Global Macro: Strategy includes managers who opportunistically allocate risk to the range of other strategies in the Directional Trading & Fixed Income cluster based on fundamentals. Alpha is generated by identifying relative mispricing of future events across asset classes and time horizons and determining the optimal market in which to reflect their investment views.

Hedge Fund: A private investment portfolio using nontraditional techniques (including short sales and leverage). They are more loosely regulated than long-only portfolios and are restricted to larger or more sophisticated investors.

Hedge: An investment position intended to offset potential losses that may be incurred by a companion investment. A hedge can be constructed from many types of financial instruments, including stocks, exchange-traded funds, insurance, forward contracts, swaps, options, many types of over-the-counter and derivative products, and futures contracts.

Leverage: The use of financial instruments or borrowed capital to increase expected returns. Leverage can amplify a portfolio’s gains or losses.

Long-only: A term used to describe investment strategies that buy assets but do not sell any assets short or employ leverage.

Glossary (cont.)

Opportunistic Trading Equity: Alpha and idea generation result from a strong understanding of the short-term dynamics driving individual stock dynamics. Managers leverage insights on short-term sentiment or supply/demand imbalances and position their portfolio to capture short-term price volatility.

Sharpe Ratio: Measures risk-adjusted return as a ratio of returns to risk. The Sharpe ratio (i) is used to express how much return is achieved for the amount of risk taken in an investment and (ii) is an effective way to compare hedge funds with similar return characteristics. When analyzing Sharpe ratios, the higher the ratio, the better. The Sharpe ratio formula is the (hedge fund return less the risk free return) divided by the standard deviation of the hedge fund.

Short Selling: Selling borrowed shares with the expectation they will decline in value. If there is a price decline, the short investor can earn a profit on the difference between the selling price and the repurchase price, minus the cost of borrowing. If the price rises, the short investor incurs a loss. Short selling entails the risk of loss of more than the amount invested and that, under certain conditions, even if the strategy's long positions are rising, this could be offset by declining values in the strategy's short positions, and the converse is possible. Moreover, in a market where the value of the strategy's long and short positions are declining, an investor may experience substantial losses.

Volatility (Standard Deviation): Volatility measures how far returns stray from an average. The higher the standard deviation, the larger the difference among individual returns and the greater the financial risk. Volatility indicates the dispersion of the range of returns where low volatility means the returns are tightly clustered around the average return and higher volatility means the returns are dispersed at greater distances from the average.

Notes and Disclaimers

The information contained herein reflects, as of the date hereof, the views of Blackstone Private Wealth Management (“Blackstone”) and sources believed by Blackstone to be reliable. No representation or warranty is made concerning the accuracy of any data compiled herein. In addition, there can be no guarantee that any projection, forecast, or opinion in these materials will be realized. Past performance is neither indicative of, nor a guarantee of, future results. The views expressed herein may change at any time subsequent to the date of issue hereof.

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Alternative investments can be highly illiquid, are speculative, and may not be suitable for all investors. Investing in alternative investments is only intended for experienced and sophisticated investors who are willing to bear the high economic risks associated with such an investment. Investors should carefully review and consider potential risks before investing. Certain of these risks may include:

- Loss of all or a substantial portion of the investment due to leverage, short-selling, or other speculative practices;
- Lack of liquidity in that there may be no secondary market for a fund;
- Volatility of returns;
- Restrictions on transferring interests in a fund;
- Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;
- Absence of information regarding valuations and pricing;
- Complex tax structures and delays in tax reporting;
- Less regulation and higher fees than mutual funds; and
- Risks associated with the operations, personnel and processes of the manager.

Prospective investors of any alternative investment should refer to the specific fund’s offering memorandum and operative documents, which will fully describe the specific risks and considerations associated with a specific alternative investment.

Glossary of Indices

Market Indices include S&P 500 Total Return Index, Barclays Capital Aggregate Bond Index, CBOE Market Volatility Index, HFRI, and other Indexes. These indices are provided by Bloomberg Financial Markets, Morningstar Direct, and Hedge Fund Research, Inc. (HFRI), and are used for comparison purposes only.

S&P 500 Total Return Index. Capital-weighted index that includes 500 stocks representing all major industries. Returns are denominated in USD and include dividends. The Index is a proxy of the performance of the broad US economy through changes in aggregate market value. This is not a managed portfolio and does not reflect fees or expenses.

VIX (Chicago Board Options Exchange Market Volatility Index). Measure of the implied volatility of S&P 500 index options, representing one measure of the market’s expectation of stock market volatility over the next 30-day period. The VIX is quoted in percentage points and translates, roughly, to the expected movement in the S&P 500 index over the next 30-day period, which is then annualized.

Notes and Disclaimers (cont.)

Barclays Capital Aggregate Bond Index. Represents securities that are U.S. domestic, taxable, and dollar-denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. It is not possible to invest directly in an index.

HFRI Equity Hedge Index. Equity Hedge strategies maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations, and valuation ranges of typical portfolios.

HFRI Fund Weighted Composite Index. A global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in USD and have a minimum of \$50 million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

HFRI Global Macro Index. Investment Managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency, and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top-down and bottom-up theses, quantitative and fundamental approaches and long- and short-term holding periods. Although some strategies employ Relative Value (RV) techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to Equity Hedge, in which the fundamental characteristics of the company are the most significant and integral to investment thesis.

Morningstar Large Cap Blend Category Index. Large-blend funds have portfolios that are fairly representative of the overall stock market in size, growth rates, and price. They tend to invest across the spectrum of U.S. industries and owing to their broad exposure, the funds returns are often similar to those of the S&P 500 Index.

Note: While the HFRI Indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and, therefore, the index may omit funds, the inclusion of which might significantly affect the performance shown.) The HFRI Indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Returns of the underlying hedge funds are net of fees and are denominated in USD. Source: Hedge Fund Research, Inc., © HFR, Inc. June 15, 2011, www.hedgefundresearch.com.

Indices are unmanaged and investors cannot directly invest in them. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment.

