

## Myth Busting: Hedge Funds Are Dead

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This white paper examines key arguments made against hedge funds, using empirical data to separate the facts from the sensationalism.

Similar to many active investments including mutual funds, hedge funds have seemingly fallen out of favor over the course of the second longest equity bull market in history. A policy of unprecedented quantitative easing (QE) has supported a rising tide environment, ripe for long-only passive (index) investing in traditional asset classes. As performance of hedge funds has lagged equity markets, a steady stream of news articles has sounded the death knell for the industry, often citing influential institutional investors that have reduced their exposure to hedge funds. The California Public Employees' Retirement System (CalPERS) exited its hedge fund positions in 2014, which led the way for other state pension funds in New York, New Jersey, Rhode Island and Kentucky to reduce or eliminate their allocations. To top it off, Warren Buffett is now months away from winning his 10-year bet against Ted Seides on the S&P 500 outperforming hedge funds.

Positive press coverage of hedge funds is hard to find these days, but is the industry truly on a path to extinction? Is the outlook as dire as the headlines suggest? The research team at Steben set out to examine the following key arguments made against hedge funds, using empirical data to separate the facts from the sensationalism:

- The "Smart Money" is Getting Out of Hedge Funds
- Hedge Funds Underperform the Equity Markets Over the Long Term
- Hedge Funds Don't Provide Diversification
- Fees are Too High and Liquidity is Too Low

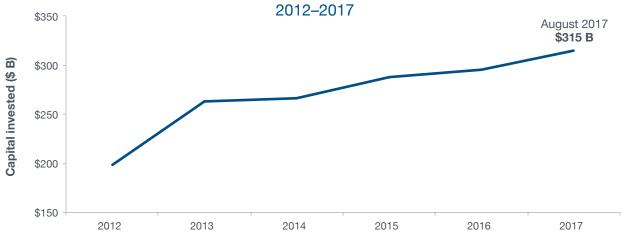
## Myth: The "Smart Money" is Getting Out of Hedge Funds

High profile investor departures have dominated headlines, such as the case of CalPERS<sup>1</sup>. But news outlets are often prone to cherry picking examples to support a sensational narrative, even when statistical evidence contradicts the story. That

is certainly the case here, as US public pension funds' allocations to hedge funds have actually grown steadily in dollar terms over the past 5 years (Chart 1).

<sup>1.</sup> In the case of CalPERS, the decision to redeem from hedge funds did not appear to be primarily motivated by a view on the future performance prospects of the investment class. Instead, the move seems to have been driven by the confluence of three factors unique to CalPERS: (1) the original allocation to hedge funds was only 1% of the portfolio, which was too small to be impactful; (2) the appearance of paying high fees was politically unpalatable; and (3) the newly appointed Chief Investment Officer, Ted Eliopoulos, had a legal and real estate background, with only limited experience in hedge funds.

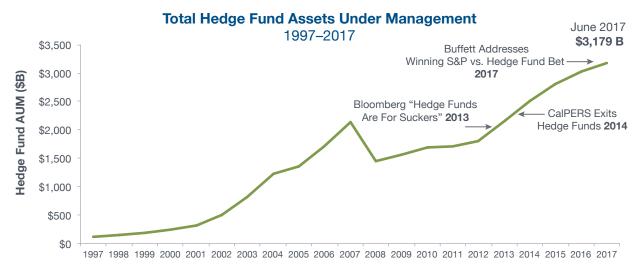




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**CHART 1** Source: Pregin

In fact, overall assets under management for the hedge fund industry (now over \$3 Trillion) have continued to grow quite steadily, with the only major deviation being a performance-related asset decline in 2008 (Chart 2).

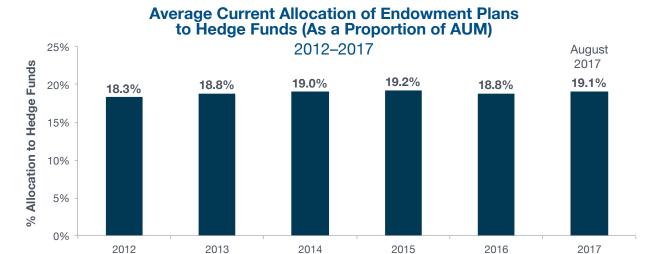


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#### CHART 2 Source: BarclayHedge

Whether all of this investor capital counts as "smart money" is debatable, but university endowments continue to be major allocators to hedge funds and related trading strategies. The five largest allocators (with more than \$5 Billion each invested in the space) are the University of Texas, Princeton, Harvard, Yale and Stanford, each of whom has

a reasonable claim to be considered a "smart" investor. For endowments in aggregate, hedge fund allocations as a percentage of their total portfolio have been remarkably stable at close to 20% in recent years, with a tick down in 2016 and a tick back up in 2017 (Chart 3). In sum, there are no signs of a widespread exodus from hedge funds.



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**CHART 3** Source: Pregin

## **Myth:** Hedge Funds Underperform the Equity Markets Over the Long Term

Over the course of the current equity bull market, from March 2009 through September 2017, the S&P 500 has enjoyed a 17.9% compounded annual rate of return, compared to 6.2% for the HFRI Fund Weighted Composite Index, an 11.7% average annual performance gap. As a result, Warren Buffett will certainly win his 10-year bet on the S&P 500 outperforming hedge funds. But is this evidence that stocks outperform over the long term, or is it just cyclical variation?

Before we dig into an analysis of the historical data, we should first ask whether it even makes sense to compare the performance of hedge funds and stocks. They are, after all, quite distinct investment classes, with very different risk and return profiles. As Ted Seides (the loser of the Warren Buffett bet) put it, "Comparing hedge funds and the S&P 500 is a little bit like asking which team is better, the Chicago Bulls or the Chicago Bears. Like the Bulls and the Bears in the Windy City, hedge funds and the S&P 500 play different sports<sup>2</sup>.

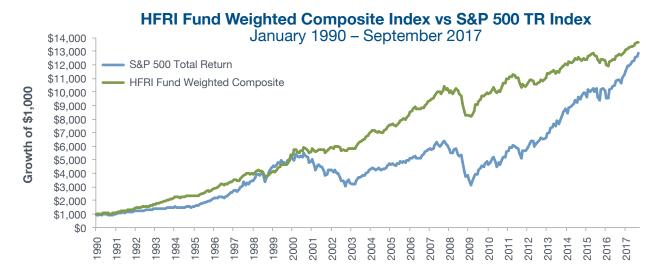
No one uses the S&P 500 as a benchmark to assess bond market returns, and it is arguably

just as inappropriate to use the S&P 500 to judge hedge fund returns.

For example, one key difference between hedge funds and stocks is that the volatility of a broad basket of hedge funds has historically been closer to that of a bond index than a stock index. From January 1990 to September 2017, the annualized standard deviation of the HFRI Fund Weighted Composite Index has been 6.6%, compared to 14.3% for the S&P 500 and 3.6% for the Barclays Aggregate Bond Index. One should not expect to see investments with such different volatilities have similar rates of return over any particular time span.

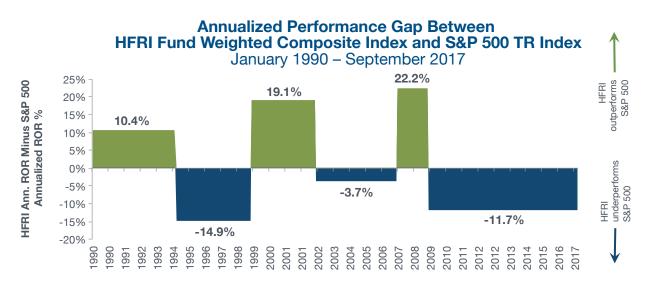
If, despite this objection, we nonetheless proceed with a performance comparison of hedge funds and stocks, we see evidence that the recent performance gap is likely cyclical rather than structural. Stocks have outperformed since 2009, but hedge funds remain marginally ahead over the long term. Between January 1990 and September 2017, the HFRI gained 9.9% per year on average versus 9.7% for the S&P 500 (Chart 4).

<sup>2. &</sup>quot;Why I Lost My Bet With Warren Buffett", Ted Seides, Bloomberg View, May 3, 2017



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CHART 4 Source: Bloomberg, HFR, Inc.



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CHART 5 Source: Bloomberg, HFR, Inc.

Over shorter time frames, we have seen 6 cycles when performance leadership has flipped between hedge funds and stocks (Chart 5). For example, stocks outperformed hedge funds during the bull market phases from 1994 to 1999 and from 2002 to 2007, with each episode ending in a major bear market for stocks in which hedge funds then outperformed. Seeing S&P 500 outperformance in the current bull market from 2009 to the present should therefore not be surprising. The length of the recent cycle has been longer than past cycles, but this is likely explained by the extraordinary duration

and magnitude of central bank quantitative easing that has occurred globally since 2009.

Looking forward, there are reasons to believe that the pendulum may swing again in favor of hedge funds over stocks. Equities face significant headwinds over the coming years, with the combination of very rich valuations and the start of a central bank tightening cycle. Indeed, one major asset manager, Research Affiliates LLC, only expects US large cap stocks to achieve a real rate of return of 0.5% per annum over the next 10 years

in its asset allocation model. In comparison, many hedge fund strategies could potentially benefit from higher interest rates, wider risk premia spreads and greater market dispersion that may result from central bank policy normalization. It is perhaps noteworthy that Mr. Buffett declined a follow-up bet pitting stocks against hedge funds over the next 10 years, citing his age as the notional reason.

While cyclical factors will eventually correct, it is not a completely rosy picture for hedge funds. There are structural factors that may limit future hedge fund rates of return compared to the 1990s. We believe the four most important are as follows:

 Hedge funds have lowered their volatility targets as their investor base has shifted from risk tolerant high net worth individuals to riskaverse institutions. Lower risk usually means lower returns over the long run.

- Higher assets under management seeking to exploit a finite investment opportunity set have reduced returns.
- Many unskilled managers have entered the hedge fund industry, attracted by the potential for fees, thereby diluting the overall talent pool.
- Some sources of return have disappeared over time as markets have become more efficient and as regulations have tightened. For example, hedge funds' early access to corporate news diminished with the SEC's fair disclosure rules (Reg FD) in 2000.

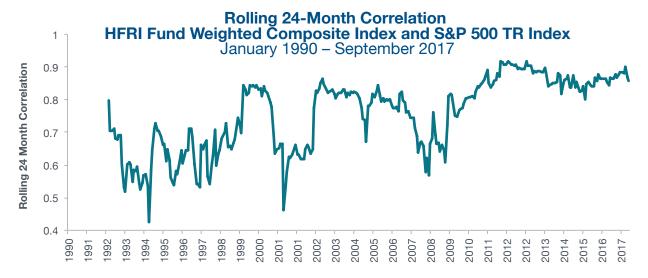
In sum, we believe hedge funds are likely to see another period of cyclical outperformance relative to stocks in the near future, but the absolute rate of return for hedge funds may not be as strong as in the past.

## Myth: Hedge Funds Don't Provide Diversification

For many investors, the goal of allocating to hedge funds is not so much to achieve a high standalone rate of return, but rather to improve their overall risk-adjusted returns or Sharpe ratio, with hedge funds acting as a diversifier to reduce portfolio risk. The diversification benefit of adding hedge funds to equity-heavy investor portfolios is strongest if hedge funds have a low correlation to stocks.

Unfortunately, hedge fund correlations to the S&P 500 have gone up over time (Chart 6). Prior to the 2008 financial crisis, that correlation ranged

between 0.4 and 0.8. But in the post-crisis bull market the correlation has floated at a higher level of 0.8 to 0.9, meaning the diversification benefit of a typical basket of hedge funds is more limited than in the past. This higher correlation has been due to a net long bias in many hedge funds' equity and credit exposures, as managers have sought to profit from the rise in stocks and risk assets since 2009. The danger however is that if stocks reverse, these same net long exposures could lead to hedge fund losses.



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The silver lining is that hedge funds have dynamically reduced their net exposures early in past crises. In 1999, the hedge fund index correlation to the S&P 500 dipped below 0.5, and in 2007, it dipped below 0.6. So it is possible that managers will be quick to react for the next crisis.

Most of the high equity correlation that you see in the broad hedge fund index is caused by two strategies: equity long/short and event driven (Chart 7). Investors who are less keen to test the timing skills of hedge fund managers may prefer to allocate to strategies that have lower average correlations to equities, such as fixed income relative value, global macro, equity market neutral and managed futures. Asset flow data from Preqin shows that this is in fact what many investors are now doing. According to Preqin, long-biased equity and credit strategies have had net outflows in the first half of 2017, while less correlated strategies have experienced net inflows.



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CHART 7 Source: Bloomberg, HFR, Inc.

It is a fair statement that many hedge funds may be less effective as diversifiers today than in the past, particularly those that run long-biased equity long/ short and event driven strategies. However, there are a number of other strategies with lower equity correlations that can still play a diversification role in a portfolio.

## Myth: Fees are Too High and Liquidity is Too Low

It has long been a complaint against hedge funds that their fees are too high. Much public indignation has been directed at the widely quoted 2/20 fee structure, in which investors pay a 2% annual management fee plus an incentive fee equal to 20% of profits.

Hedge fund fees have evolved in recent years in response to the current environment. Manager fees are essentially the market price of investment services, which respond to the forces of supply and demand like in any other market. Increased competition and more modest net performance by

hedge funds in recent years have led to a reduction in fees. Hedge Fund Research (HFR) reports that as of mid-2017, the average management fee is now less than 1.5% per year, while the average incentive fee on profits has fallen to 17%. This is still more expensive than traditional active long-only mutual funds, but the gap is narrower than one may think.

Part of the reason hedge funds are more expensive is that they run more active risk (or non-benchmark risk) than traditional actively managed mutual funds. For example, the five largest actively

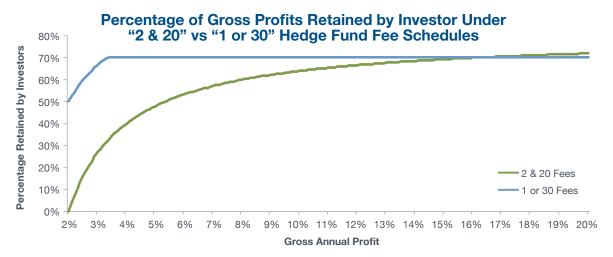
managed US large cap mutual funds have an average management fee of 0.56%, but they only generate 4.3% per year in active risk<sup>3</sup>.

A typical hedge fund might run 10% in active risk per year with a management fee of 1.5% (plus an incentive fee). In this case the mutual fund charges 0.13% in management fees for every 1% in active risk, while the hedge fund charges 0.15% in management fees for every 1% in active risk. The management fee gap is not that large once accounting for the amount of active risk being taken. Of course, hedge funds are still more expensive because they charge an incentive fee as well. The point is simply that the fee gap between hedge funds and traditional active funds has narrowed meaningfully, especially in recent years.

What is perhaps more notable than the decline in average hedge fund fees is the growing dispersion in fees charged by different managers. Those hedge funds with unique, capacity-constrained and consistently profitable strategies continue to be able to command premium fees, sometimes in excess of the historical 2/20 standard. Investors who value net returns after fees may be quite happy to invest at a higher cost in these cases. In contrast, fees have been significantly compressed in high capacity strategies that trade well-known risk premia, where large capital inflows have diluted expected returns. Increasingly, it's likely you get what you pay for in the hedge fund world.

Managers are also becoming more flexible in offering different fee structures and unique versions of their trading strategies to investors with alternate fee preferences. For investors only willing to pay low management fees with no incentive fees, managers have made available simplified versions of their strategies, which might use less leverage and focus on a liquid subset of their investable universe compared to the flagship strategy. These flat fee strategies have often been rolled out in a mutual fund format, making them available to a mass audience. A Bloomberg screen of the US mutual fund universe in October 2017 shows there are now 469 alternative mutual funds that trade hedge fund-like strategies with a flat fee structure.

Hedge funds have also become increasingly open to innovative new fee structures. Large institutional investors who access hedge funds through separately managed accounts or "funds of one" can often negotiate cheaper fees and a different split between management and incentive fees. For example, the Teacher Retirement System of Texas, which has over \$10 Billion allocated to hedge funds, has recently popularized a "1 or 30" structure in which the hedge fund charges the higher of a 1% flat fee or a 30% share of profits. The advantage of this new structure over traditional 2/20 fees is that it maintains what Texas Teachers sees as an equitable 70/30 split of gross profits between the investor and the manager over a wider range of gross profit levels (Chart 8).

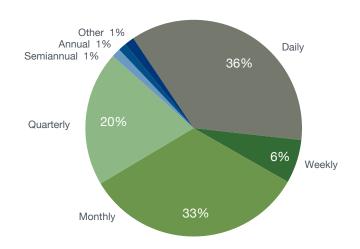


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CHART 8 Source: Steben & Company, Inc.

<sup>3.</sup> Using Bloomberg data over 5 years from October 2012 to September 2017, we looked at fees and active risk for the following 5 mutual funds identified here by their tickers: FCNTX, DODGX, TRBCX, FDGRX, HACAX. Active risk is defined as the annualized standard deviation of the residuals from a linear regression of mutual fund returns against their stated benchmarks.

Redemption
Frequency of
Hedge Funds,
Alternative
Mutual Funds
and UCITS Funds
October 2017



PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. DIVERSIFICATION DOES NOT ASSURE A PROFIT OR GUARANTEE AGAINST A LOSS. Includes all funds in the BarclayHedge database, but excludes funds or firms smaller than \$50M in assets and excludes all fund of funds. Only one share class per fund was included in the analysis. See Glossary for definitions.

#### CHART 9 Source: BarclayHedge

However, not all hedge fund strategies are available in the most liquid fund formats. Daily liquidity vehicles (such as mutual funds) are only appropriate for strategies that trade liquid underlying securities and derivatives. These include equity long/short, global macro, managed futures and more liquid event-driven strategies. In contrast, there are very few funds with daily redemptions that trade credit, distressed and activist strategies, because this would introduce a potential asset-liability liquidity mismatch for the funds. In such a case, departing investors could force the funds at short notice to sell illiquid securities at disadvantageous prices for the remaining investors. It is far more appropriate

for illiquid strategies to be housed in less liquid vehicles.

Hedge fund managers are generally sensible business people. As they have seen the investment landscape and investor demand for fees and liquidity change, they have adapted old products and rolled out new products to meet that demand. Investors seeking low-fee alternative products in liquid vehicles have a large number of choices today (Chart 9). However, they should be aware that there is no free lunch. Managers with highly profitable and capacity-constrained strategies feel no pressure to cut fees, while less liquid strategies cannot fit in a daily liquidity mutual fund.

## Key Take-Away

Widespread reports of the slow demise of hedge funds are, we believe, greatly exaggerated. It is true that they have fallen out of favor over the course of the second longest US equity bull market in history, but that is not unexpected. The relative performance of active and passive investments tends to be cyclical. Hedge funds, which are the ultimate form of active management, will get their day in the sun once more as traditional stock and bond investments now face the twin risks of high valuations and central bank tightening.

Assets under management for the hedge fund industry continue to grow, albeit at a slower

pace than ETFs and other passive investments. University endowments and other sophisticated institutional investors continue to allocate to the space. There is also a wider range of options with respect to fees and liquidity than ever before. The one area where we believe critics of hedge funds have a legitimate complaint is that their correlation to equities has risen significantly since the financial crisis, thus making them less effective as diversifiers in a portfolio. One way for investors to avoid this is to seek less correlated strategies within the hedge fund universe, which is our specialty here at Steben & Company.

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movements may result in large changes in the value of a leveraged investment. The potential loss on such leveraged investment may be substantial relative to the initial investment therein. In addition, they can be highly illiquid; are not required to provide periodic pricing or valuation information to investors; may involve complex tax structures and delays in distributing important tax information; are not subject to the same regulatory requirements as mutual funds; and often charge high fees which may offset any trading profits. Diversification does not ensure a profit or guarantee against a loss. Alternative investment managers typically exercise broad investment discretion and may apply similar strategies across multiple investment vehicles, resulting in less diversification. Trading may occur outside the United States, which may pose greater risks than trading on US exchanges and in US markets.

Additionally, alternative investments often entail futures, forwards contracts and swaps trading, which involves substantial risk of loss and may be volatile. Other risks inherent in an investment in alternatives include short sales, options, derivatives, junk bonds, emerging markets and limited regulatory oversight.

There may not be a secondary market for an investor's interest in alternative investments, and none may develop. There may be restrictions on transferring interests in some types of alternative investments.

## Glossary

This glossary is intended as a reference for commonly used investment terms but does not contain all relevant terms nor all possible definitions of any individual term. You may wish to contact your investment professional for additional information. The information set forth was obtained from sources believed to be reliable, but we do not guarantee its accuracy or completeness.

Barclay Systematic Traders Index (BSTI)1: An equal weighted composite of managed futures programs whose approach is at least 95% systematic. In 2017 there are 409 systematic programs included in the index. The performance of the index is net of management and incentive fees from the individual trading managers. Bond investments are subject to risks, including: interest rate risk, call risk, credit risk and reinvestment risk. Bonds rated below investment grade may have speculative characteristics and present additional risks. Performance Source: BarclayHedge

Barclays US Aggregate Bond Index¹: Provides a measure of the performance of the US investment grade bond market, which includes investment grade US Government bonds, investment grade corporate bonds, mortgage pass-through securities and asset-backed securities that are publicly offered for sale in the United States. The securities in the Index must have at least 1 year remaining to maturity. In addition, the securities must be denominated in US dollars and must be fixed rate, nonconvertible and taxable.

**Correlation:** A measure of the degree to which two variables relate to each other.

HFRI Equity Hedge (Equity Long/Short) Index1,2: Investment Managers who 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. EH managers would typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.

HFRI Equity Market Neutral Index1,2: Equity Market Neutral strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement relationships between securities for purchase and sale. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies in which the investment thesis is predicated on the systematic analysis of common relationships between securities. Statistical Arbitrage/ Trading strategies consist of strategies in which the investment thesis is predicated on exploiting pricing anomalies. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

HFRI Event-Driven Index1,2: Investment Managers who maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

HFRI Fund Weighted Composite Index1,2: 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 US Dollar 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. The current month and the prior three months returns of the Index are estimates and are subject to change. All performance prior to that is locked and is no longer subject to change.

HFRI Macro (Global Macro) Index1,2: 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. 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.

HFRI Relative Value Index1,2: Investment Managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager.

Leverage: The use of various financial instruments or borrowed capital, such as

margin, to increase the potential return of an investment.

**Long:** A position that will profit from an increase in a security's price.

Quantitative Easing (QE): An expansionary monetary policy whereby a central bank buys predetermined amounts of government bonds or other financial assets in order to stimulate the economy. The goal of this policy is to facilitate an expansion of private bank lending, which would increase money supply.

Standard & Poor's 500 Total Return Index with Dividends Reinvested': The 500 stocks in the S&P 500 are chosen by Standard and Poor's based on market size, industry representation, liquidity and stability. The stocks in the S&P 500 are not the 500 largest companies; rather the Index is designed to be a leading indicator of US equities and is meant to reflect the risk/return characteristics of the large cap universe. US equity index investments are subject to risks, including price fluctuations in response to news on companies, industries, government policies and the general economic environment. Performance Source: Standard & Poor's

Sharpe Ratio: A calculation meant to illustrate the amount of return one is achieving per unit of risk. It is derived by dividing the average annual return by the standard deviation of an investment. A higher number tends to signify a better return/risk relationship, whereas a lower number may be seen as unfavorable.

**Short:** A position that will profit from a decrease in a security's price.

**Standard Deviation:** Measures the dispersal or uncertainty in a random variable (in this case, investment returns). It measures the degree of variation of returns around the mean (average) return. The higher the volatility of the investment returns, the higher the standard deviation will be.

**UCITS Fund:** UCITS (Undertakings for the Collective Investment of Transferable Securities) is an open-ended European investment fund established in accordance with the UCITS Directive. UCITS must be organized under the laws of an EU member state and subject to regulation by the EU member state in which it is domiciled. Once registered in one EU country, the fund can be marketed throughout the EU and other jurisdictions that recognize UCITS, subject to local marketing requirements.

**Volatility:** The relative rate at which the price of a security moves up and down.

1. It is not possible to invest directly in an index. 2. HFRI Index Source: Hedge Fund Research. Investments in hedge funds involve the risk of (i) loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices of hedge funds, (ii) lack of liquidity of their shares, (iii) volatility of returns, (iv) limited information regarding valuations and pricing, and (v) complex tax structures and delays in tax reporting. Hedge funds are generally subject to less regulation and higher fees than mutual funds.

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