

SKYBRIDGE CAPITAL

SKYBRIDGEVIEWS

Why Investors Should Allocate To Hedge Funds

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SUMMER 2017 UPDATE

When we originally published this White Paper in January 2015, we laid out the many reasons why investors should consider allocating to hedge funds. Given current economic conditions and where we are in the market cycle, we believe more evidence has emerged for why investors, both large and small, should consider the asset class. In this update, we hope to articulate why, in our opinion, hedge funds are a prudent alternative investment suitable for both retail and institutional investors.

EXECUTIVE SUMMARY

For the past 65+ years since first emerging as an alternative investment, hedge funds, as a whole or as an asset class, have delivered on their objective: to provide a means of diversifying against or minimizing financial loss. So whether during a bull market, when hedge funds don't perform as well as, say, equities, or during a bear market, when they perform better than equities, this alternative investment *hedges* an investor's bets, tempering the highs but also the lows. That's argument enough for many investors – including wealthy individuals, institutional investors and pension funds – to hold hedge funds in their portfolios, which explains why the industry oversees \$3 trillion (TN) in assets under management. Additionally, the Federal Reserve's removal of Quantitative Easing (QE) and normalization of interest rates will likely spark asset class volatility from historically low levels, creating an environment where hedge funds can potentially outperform. *These reasons, and many more, underscore why investors should to allocate to hedge funds.*¹

INTRODUCTION

Despite the media's constant call for the demise of hedge funds over the past few years, the industry crossed the \$3TN mark in assets under management for the first time, ending the second quarter of 2017 with a record \$3.1TN in assets (reference the chart on page 2 for historical growth of the HF industry).² The industry's sheer size and continued growth display the integral role hedge funds play in the portfolios of both institutional and high net worth investors. However, underperformance relative to many traditional asset class benchmarks since the financial crisis have many pundits continuing to question the existence of hedge funds. *This white paper articulates our reasoning for why investors should continue to allocate to hedge funds.*

Table of Contents

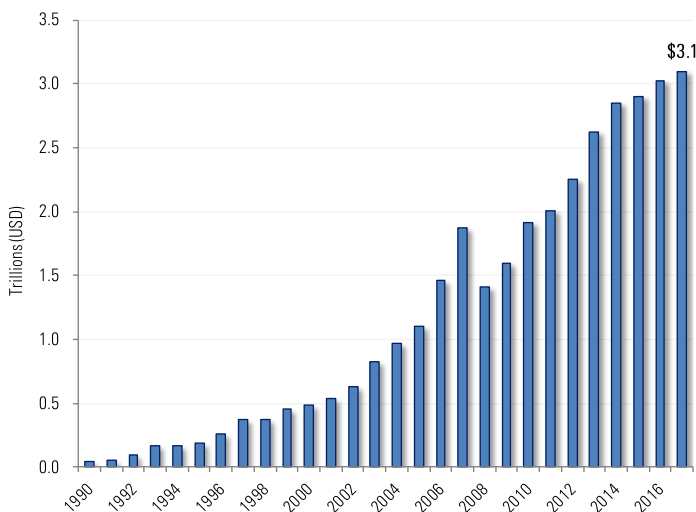
Executive Summary	1
Introduction	1-2
Why Hedge Funds? The Simple Explanation	3-4
Why the negative bias? Long/Short Equity and Macro Struggles	4-5
Where are the opportunities? Inefficient markets	5-6
Why hedge funds: The more complex explanation	6-11
Key Points, Conclusion & Notes	12-13

Introduction (Continued): Why Investors Should Allocate to Hedge Funds.

A simple and complex explanation.

Our viewpoint encompasses both a simple explanation and a more complex one. Both emphasize that, however, when the overall market is performing, hedge funds perform their duty generally well in reducing risk and adding diversification to an overall investment portfolio, especially when markets are unsettled. Globally, the geopolitical and economic environment is experiencing massive alterations. In the last twelve months, the world has witnessed dramatic regime shifts on the political front, and, in the U.S., the tightening of monetary policy is clearly underway. The changing political landscape and normalization of interest rates in the U.S. has increased the level of uncertainty for many market participants, both large and small. With this backdrop, we believe the potential for financial market volatility to increase from levels well below historical averages is high, which, in our opinion, will create an environment more conducive to hedge funds.

The Hedge Fund Industry Continues to Grow in Size²



Why have the last few years been so difficult?

Since the initial release of this White Paper (January 2015), active management, particularly hedge fund strategies, have significantly underperformed traditional equity and bond markets. Much like the previous six years, the last two years have been defined by low global growth, and as a result, highly accommodative central bank policy.

This accommodative stance has kept interest rates artificially low resulting in extremely low market volatility. In this environment, correlations on an asset class and single security level have been elevated relative to historical norms, providing little opportunity for active managers to benefit from asset class, sector, or individual security selection decisions. Additionally, portfolio hedging and short positions, exposures meant to lower portfolio risk and/or profit in periods of stress, have only compounded the underperformance problem for most hedge fund managers over the last two years as low rates, low volatility, and investors' increasing thirst for yield have driven both equity and bond markets higher.

The challenging market environment over the last two years has offered traditional equity based hedge fund strategies (typically includes long/short equity and event driven strategies) little opportunity to generate differentiated returns. Equity and event driven based managers represent a significant portion of the hedge fund universe and in an environment of limited opportunity the perceived best opportunities often become overcrowded.

Profiting from an increased level of corporate activity was one of these perceived areas of opportunity heading into 2015. The expectations of significant corporate activity ultimately came to fruition with global M&A volume hitting an all-time high. In previous market cycles, high levels of corporate activity have typically provided a robust setting for equity based managers. However, very few managers in these strategies were able to profit, and in many cases losses were incurred. The cause of this underperformance was a confluence of events from the summer of 2015 through the early part of 2016 that led to fears of a dramatic global growth slowdown. Equity based managers, particularly those focused on corporate events, were hard hit and the crowding effect took its toll on performance as the masses headed for the exits. This performance setback and economic growth scare had many in the industry on the back foot for most of 2016, shifting their portfolios to more defensive positions. However, equity and bond markets shrugged off these fears and rallied sharply through the rest of 2016, leaving the vast majority of the industry and their defensively positioned portfolios well behind the traditional equity and bond indices.

Is an industry turnaround on the horizon?

Over the last year, the global investment landscape has experienced a growing level of uncertainty. The rise of populism around the world, the Fed's tightening bias, concerns around protectionist policies and trade wars, and traditional geopolitical risks have the ability to lead to more volatility in global markets. Thus, we expect the coming years to be more conducive to hedge fund strategies.

Why hedge funds? The simple explanation

Very simply, modern portfolio theory (MPT) and asset allocation illuminate why hedge funds are important investments to consider. Developed in the early 1950s by economist Harry Markowitz, MPT holds that instead of putting an entire nest egg in a single stock or investment, it is best to diversify and spread the right combination of investment eggs in one's basket.

MPT and asset allocation, in part, reflects the concept that the more moderate-to-noncorrelated exposures there are in a portfolio, the lower the aggregate portfolio's risk and volatility. Clearly some trade-off exists between expected returns and lower risk because exposures with lower correlation to equities, for instance, tend to deliver lower returns.

MPT has influenced how investors perceive risk, return and management of their portfolios and, in turn, money managers routinely adopt and follow its principles. To be sure, MPT possesses some warts, including requiring investors often to rethink their concept of risks and to determine what truly constitutes diversification. Some investment professionals, for instance, say a portfolio comprised of just stocks and bonds is sufficient. Others argue that a portfolio of stocks, bonds, hedge funds, private equity, venture capital, real estate and commodities is superior.

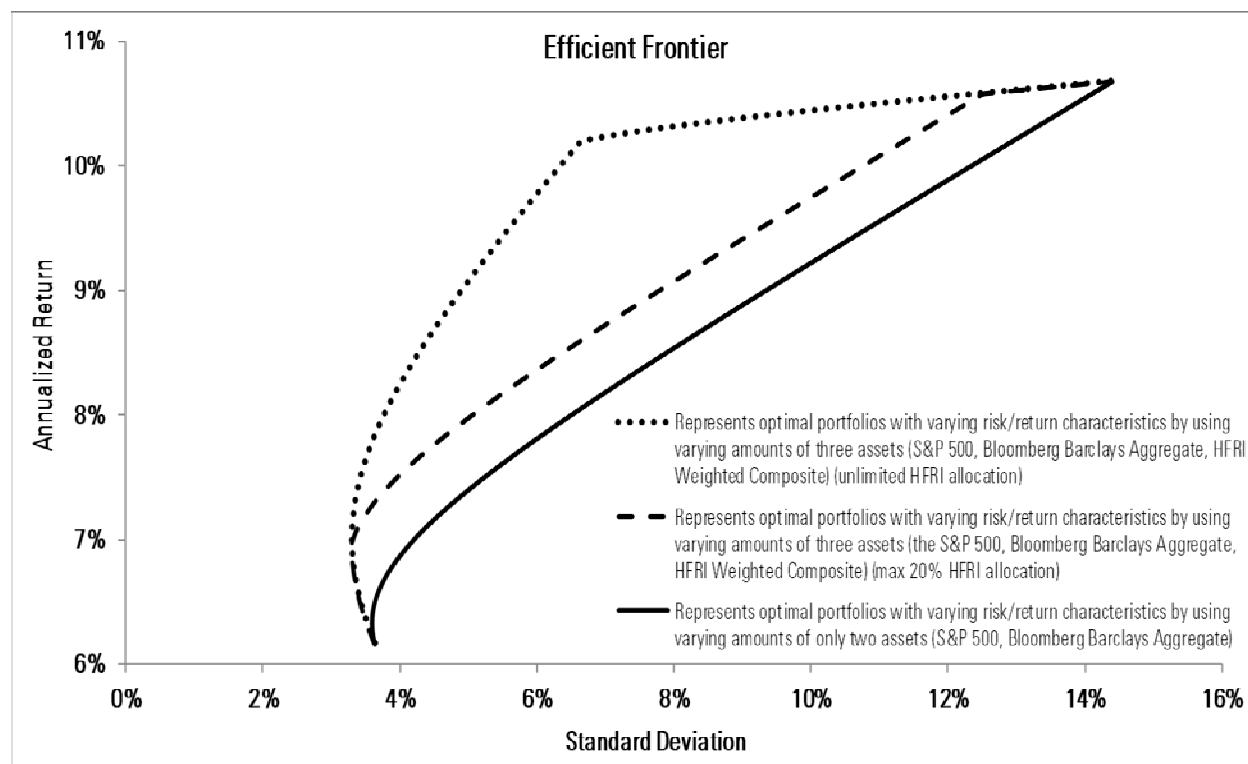


Chart source: SkyBridge. Period: 1/1/90 (HFRI index inception) through 3/31/17. Data source: HFR for HFRI index, Bloomberg for S&P 500 and Bloomberg Barclays Aggregate indices (total returns used in both cases). As described by HFR: "The HFRI Fund Weighted Composite Index is a global, equal-weighted 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." Indices are unmanaged and not available for direct investment. Past Performance is no guarantee of future results. The graphs were prepared using historical results and there is no guarantee that the historical return, standard deviation or correlation characteristics of the S&P 500, Barclays Aggregate, and HFRI index will persist in the future. In particular, we believe that the future returns of bonds in will probably be lower than the historical time period presented which could significantly change the slope of these various efficient frontiers (they would become steeper). Furthermore, one could argue that both traditional stocks' and the HFRI index's return will be lower as well, which could lead to lower returns per unit of risk for all efficient portfolio returns.

Consider this example: a portfolio divided equally between cash and equities would deliver substantially lower risk and return than an all-equity portfolio. The methodology for modeling out these trade-offs between the risk, return and correlation properties of underlying portfolio exposures and the aggregate portfolio's risk-and-return profile is termed the *efficient frontier*.

In brief, the efficient frontier is a set of optimal portfolios that offers the highest expected return for a defined level of risk or the lowest risk for a given level of expected return. Portfolios below the efficient frontier are sub-optimal since they don't deliver enough return for the level of risk. Portfolios above the efficient frontier also are

sub-optimal because they possess a higher level of risk for the defined rate of return. This approach limits the riskiness of the portfolio. As you can see in the chart above, adding hedge fund exposure to a traditional stock and bond portfolio has historically enhanced the efficiency by increasing the unit of return per unit of risk.

In general, successful investors and hedge fund managers embrace MPT because they also embrace these precepts:

No investor can predict the future with precision. How many investors anticipated the financial crisis? Of those who did, how many profited from it? How many investors called the ensuing bull

market? How many experts have been predicting the dollar's demise over the years or have braced for a surge in interest rates and have been dead wrong?

The near term or even more distant past often turns out to be a lousy predictor of the future. All was quiet on the western front in late 2006 and, suddenly, the U.S. housing market and equity markets were collapsing, the financial crisis was unleashed and then the world economy buckled. Yet, soon after the darkest days of the the financial crisis, one of the most powerful bull markets in history began despite a very modest economic rebound.

The more non-correlated exposures in a portfolio, the more resilient it proves to be to permanent capital impairment if a certain exposure goes terribly wrong. The proof: Just imagine what happened to investors who were 100 percent allocated to equities at the end of 1999 or 2007, or if all of an investor's wealth was allocated to gold at the end of August of 2011, or levered in U.S. housing equity at the end of 2006.

Economic, business, equity market, interest rate, inflation, commodity, and risk premia cycles still exist – and always will. Economists not that long ago debated the “great moderation” to explain the low macroeconomic volatility and remarkable gains and resilience of developed markets in the 1990s. Over the following decade, two of the worst equity bear markets in history occurred. By the end of the 1970s, investors would have been ridiculed if they had predicted that at some point the Fed Funds Rate would be at zero for nearly six years and would subsequently embrace something called Quantitative Easing (QE). And when gold was at its 2001 low of \$256, anyone contending it would surge over 600 percent to \$1,900 in 2011 would have been laughed out of the room³.

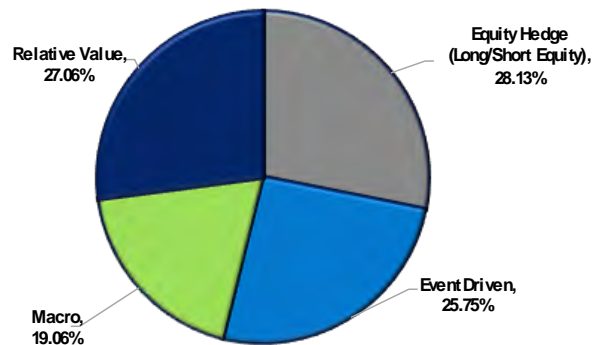
Few investors operate with an infinite investment time horizon and even though endowments and a few other entities can, in theory, they're still subject to loss constraints and cash outlays. No matter how long term an investment time horizon, a market loss of 30 percent, 40 percent or 50 percent or more can spark frightful consequences to future spending patterns, wealth and near term cash flow needs.

Why the negative bias?

Long/Short Equity struggles

While we believe the industry will continue to grow for the reasons cited in this paper, there are valid reasons for the media cabal of negativity toward hedge funds. It is true that, since the crisis, weighted average hedge fund returns have compressed in comparison to pre-crisis returns. There are a variety of reasons for this, but we think the most critical driver has been that a significant amount of capital in the hedge fund industry is invested in two strategies that have struggled due to secular and cyclical headwinds: Long/Short (L/S) Equity and Macro. Here are some of the secular reasons for L/S Equity's struggles:

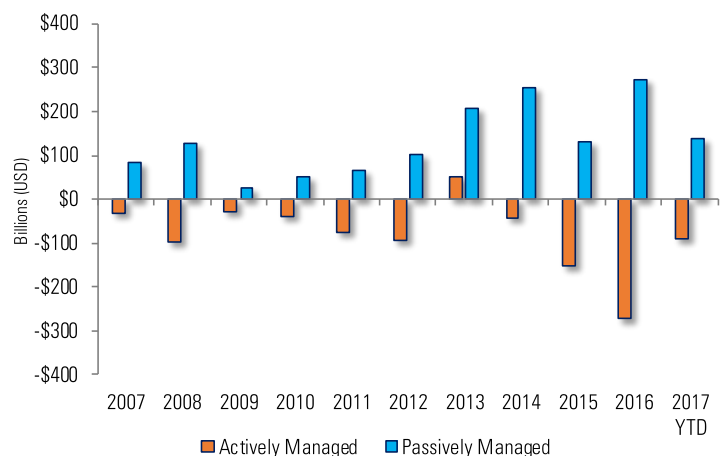
Hedge Fund AUM by Strategy (% of Total Industry Assets)⁴



Regulation Fair Disclosure (Reg FD): An enhanced focus on timely dissemination of fundamental security information to all investors after Reg FD was passed and the receding dominance of long only active management via mutual funds has weighed on L/S Equity managers. It used to be much easier for them to gain an information edge because critical fundamental security information was disseminated in a more disparate manner.

Change in Equity Market Constituency: Prior to the substantial decline in long only active management and shift of AUM as a percentage of equity market capitalization in favor of passive strategies and exchange-traded funds (ETFs), thoughtful mutual fund managers were the final arbiter of an equity security's fair value. L/S Equity managers had far more flexibility than mandate constrained long only managers, but long only active managers cared about stock fundamentals and would drive convergence to fair value with their buying and selling decisions. As their dominance has waned and passive investments have flourished, markets in general care far less about underlying stock fundamentals (which were already a minor driver of security returns in the first place prior to this market constituency shift).

Active vs. Passive Management: Asset Flows in US Equity Based Mutual Funds & ETFs⁵



Quantitative Easing: L/S Equity has also suffered from several cyclical issues, including the Fed's stated mission of deploying more than \$4 trillion in QE to reflate assets, such as equities and housing, in an effort to aid the economy. When the world's most powerful economic institution does everything possible to boost asset prices, shorting securities and hedging bets to reduce equity market risk are not going to be winning strategies.

Changes in monetary policy moving forward?: Extremely loose monetary policy, the change in equity market participation and other factors have caused equity market correlations to go higher and equity market dispersion to be lower than in previous cycles. Without lower correlations and higher fundamentally driven dispersion, it will always be more challenging for L/S Equity managers to generate alpha. However, the good news for the industry going forward is that with the end of QE in the US and only less potent Bank of Japan and Europe's Central Bank QE left, short positions will not face such powerful headwinds and at some point could become profitable again, particularly during the next bear market. Additionally, with the removal of QE and a Fed in tightening mode, it is possible correlations will decline and dispersion will increase, which should be supportive of the strategy.

Lack of short rebate: With risk free at zero for the past six years, there has been no short rebate to provide a modest return to L/S equity managers and to help offset the cost of borrowing shares. As the Fed gradually raises interest rates, this modest tailwind should return again. We are not arguing that L/S Equity will once again become a great strategy because we still believe there are far better options for hedge fund investors. However, some of the cyclical headwinds they have faced over the past five years are beginning to recede.

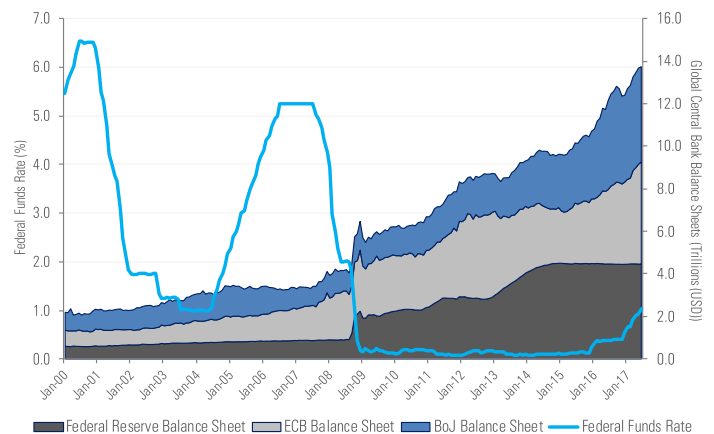
Macro struggles

Macro managers have also suffered from a confluence of detrimental factors since the crisis. After being the stars of the crisis (in general, discretionary macro managers lost less than other strategies and systematic CTAs (Commodity Trading Advisors) were one of the only strategies that made money in '08), macro managers have been snake bit from political and central bank market intervention. For example, the European Union (EU) instituted policies and made other strong moves, including fighting the settlement of the Greek debt default, which many would argue prevented investors from profiting off of short European sovereign debt positions. Furthermore, during the years since the crisis we have experienced fairly synchronized hyper loose monetary policy, arguably contributing to higher geographical asset correlations than in the past. This has generally diminished macro managers' ability to express more discrete geographically focused themes as correlations between asset classes have been high and dispersions between asset classes have been

low. Also, it is typical at this stage of a market cycle that there is not a sufficient amount of explosive market trends for macro managers to capture or follow. The dominant trend present in the current market is equity beta related, which is highly correlated to investors' existing equity exposure.

However, there has recently been welcome news for macro managers. Central banks and governments may have shifted from being a secular headwind to a tailwind. While the Fed ended QE in late 2015, the BOJ and ECB have since expanded and extended their stimulus programs as global central banks continued to increase their balance sheets. However, it appears that moving forward, the pace of balance sheet expansion amongst global central banks will at least moderate if not start to decline as the Fed looks to reduce the size of its balance sheet and other global central banks potentially start to become less accommodative over the medium term. These changes in global central bank monetary policy and a new administration in Washington could potentially lead to more asset class dispersion going forward. Thus, from a secular standpoint, the tide may be starting to turn more in favor of macro managers; however, we believe that the best relative days for macro managers will likely be some time from now when the next bear market takes place.

Federal Funds Rate (%) vs. Global Central Bank Balance Sheets (Trillions \$) Since 2000⁶



Where are the opportunities?

As noted on page 4, two broadly defined strategies (long/short equity and macro) represent nearly half of the assets in the hedge fund universe. One is left to wonder where are the opportunities for hedge funds to make money if over half of the industry is faced with

secular and/or cyclical headwinds? One of the unique characteristics of hedge funds is the broad mandates in which they are able to operate within. More degrees of freedom provide hedge funds the ability to move to the parts of the market where the greatest inefficiencies lie. The average investor has access to traditional equity and fixed income markets which arguably are the most efficient and liquid markets in the world. With the significant growth of low cost, liquid investment vehicles focused on these markets, hedge funds that are focused on markets that are difficult to access via traditional accounts are more likely to generate return streams that truly diversify an investor’s portfolio. In today’s market, we believe greater inefficiencies exist in non-traditional, complex fixed income, and other relative value arbitrage strategies that are historically associated with proprietary trading desks of Wall Street banks. The disintermediation of the banking system due to post financial crisis regulatory reform has reshaped the trading landscape for many strategies. For example, the implementation of Dodd Frank and Basel III have essentially eliminated proprietary trading desks and increased capital requirements for banks, resulting in less risk taking, less market making operations, less inventory on dealer balance sheets, and ultimately the removal of a major “shock absorber” in markets. As a result, hedge funds have the ability to fill the void left by the banks and be liquidity providers in times of distress as well as take advantage of mispriced assets (that don’t meet traditional account mandates) that now have a significantly smaller buyer base with the removal of the risk taking Wall Street banks. With a vast array of hedge fund sub-strategies to choose from, we remind investors that asset class and hedge fund strategy performance will vary greatly throughout a market cycle. All hedge fund strategies are NOT created equally, therefore, understanding which strategies perform best/worst at different parts of the cycle and identifying strategies that have a secular tailwind rather than headwind will likely yield better results. *In our opinion a diversified portfolio of hedge funds that is dynamically managed throughout the market cycle has the highest probability to fulfill the role of generating competitive returns with low volatility and low correlation to traditional equity and bond portfolios.*

Why Hedge Funds? The more complex explanation:

Accepting MPT and asset allocation doesn’t necessarily mean investors should continue to allocate to hedge funds. So why should one invest in them?

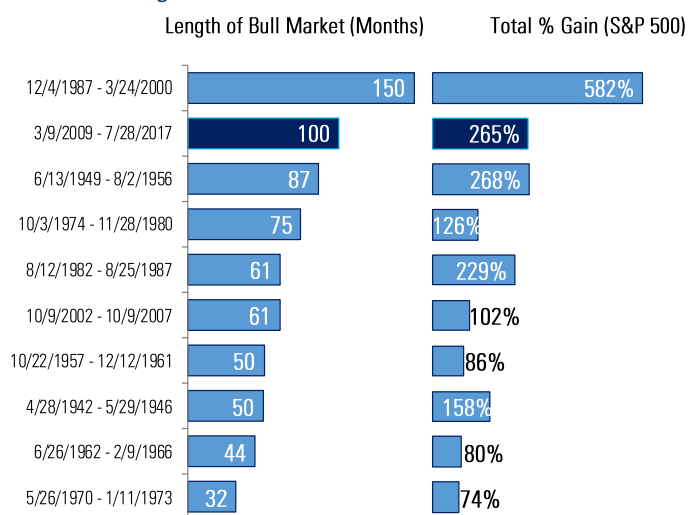
Competitive full market-cycle returns: Over a full market cycle, equity markets tend to annualize 5-to-10%.⁷ Rarely do they do better or worse. Consider it a near-given that because this asset class possesses the highest risk, it will generate the highest returns over a full cycle. Meanwhile, bonds tend to produce whatever return over the maturity of the bond that corresponds to the current yield to maturity. Commodities, typically, have deflated in value over time,

although they have enjoyed a few super cycles of positive performance. As for cash, central banks’ interest-rate policy dictates its return. In this section, we will take a closer look at the outlook for these asset classes and why we believe we are entering an environment that is conducive to relative hedge fund outperformance.

Outlook for Equities: Muted Future Return Expectations?

Considering historical averages, it is hard to argue that equities will earn more than a 10 percent annualized return over the next decade. Equity markets, particularly in the U.S., have experienced a significant run since the lows in March 2009. The current bull market run is now the second longest (approx. 100 months) in terms of duration and third largest in terms of return at 265%. The only bull market in history that lasted longer was that of the 1990s Tech Bubble with a duration of approximately 150 months and a return of 582%.⁸

10 Largest S&P 500 Bull Markets since WWII⁸



While equities have posted a spectacular return over the last eight plus years they do not appear to be in bubble territory like they were in the late 1990s. However, it is hard to argue that current equity valuations are not elevated relative to their historical average. According to Bloomberg data, the historical average P/E ratio using trailing twelve months earnings for the S&P 500 is 16.5x while the current P/E is 21.75x. Additionally, when looking at Bloomberg’s P/E based on forward earnings estimates the S&P 500 currently trades at 18.4X versus a historical average of 16.8X.⁹

More recently, equities have responded favorably to the Trump victory in the US Presidential Election on expectations of pro-growth policy and reforms. To the extent the new administration can execute on its campaign promises, the US economy could quite possibly experience a higher level of growth and assets perceived to benefit from this higher growth such as equities could continue their already impressive bull run. So as is usually the case, equities remain a tough asset class to call over the near-term. However, an asset class that has historically annualized in the 5-10% range over a cycle is likely to be hard pressed to continue to annualize at 18% over the next several years like it has since March of 2009.¹⁰ Rational

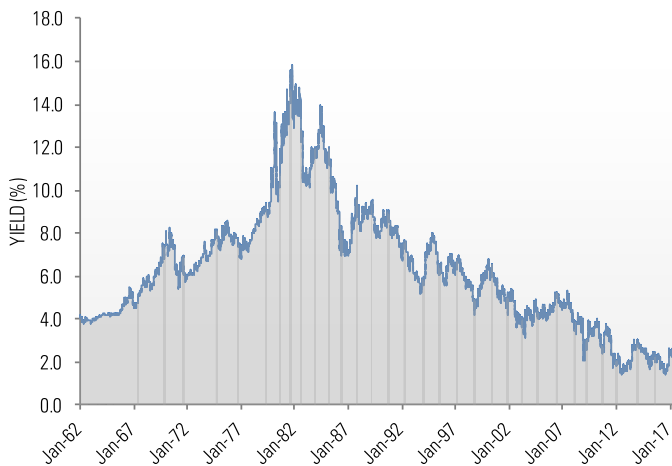
investors should expect more muted upside in equities over the next several years if history is any indication of return expectations for the asset class.

Outlook for Fixed Income: Will the 30 Year Bull Market Continue?

It is difficult to believe that bonds will continue to appreciate in value at anywhere near the pace they have enjoyed the past 30 years. After all, if you buy a 10 year treasury at 2.29 percent yield to maturity, and you hold it to maturity, that will be your nominal return.

US Treasuries: According to JPMorgan research, the average yield of the US 10 Year treasury from 1958 through 2016 is 6.15% with a peak of 15.84% on September 30th 1981 and low of 1.37% on July 5th 2016. Since the volatile summer of 2011n the 10 Year yield has been below 3%, which has conditioned many investors to believe 3% “risk free” money is as good as it gets. Many investors forget that in the early stages of the post-financial crisis market recovery the 10 Year yield spent considerable time in the 3.5% - 4% range and prior to the financial crisis the 10 year yield sat above 5%. While we are not calling for the yield on the 10 year treasury to go back to its long term average of over 6%, or even to get back to the pre-financial crisis levels in the 5% range, we do not rule out the possibility that yields move higher as the US economy continues to experience modest growth and the Fed continues on a gradual tightening path.¹¹

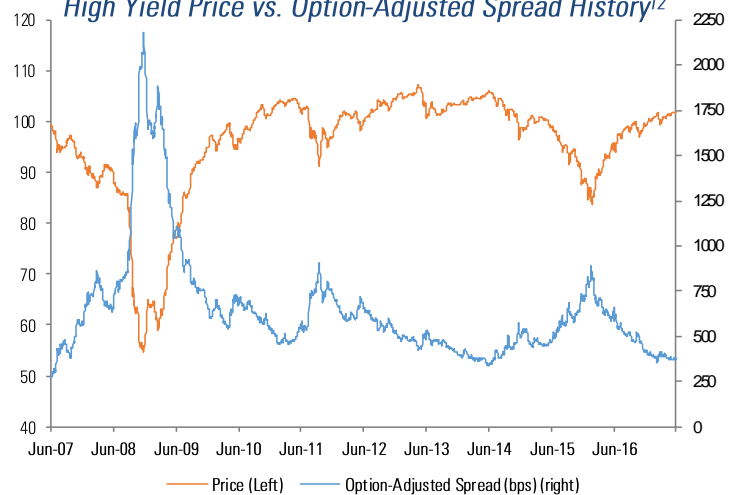
US 10 Year Treasury : Historical Yield¹¹



To put into context the impact a modest increase in interest rates can have on a government bond portfolio consider this: A 1% move higher in interest rates results in an approximate 8.5% loss in price of a 10 Year US Treasury, or said another way, it will take over three years at the current coupon rate (2.29% as of 7/28/17) to make back the loss assuming no further change in price. The bottom-line is this: While interest rates have moved higher from their lows in the summer of 2016, they remain historically low. While rates can clearly go lower, the expected upside going forward in government bonds is limited while the downside is significant if rates go higher.

Will High Yield’s Strong Run Continue? Looking at the credit side of fixed income, high yield bonds have been a popular way for investors to collect attractive yields in a low yield world. After an energy driven dislocation in the second half of 2015 through the first quarter of 2016, US High Yield markets have rallied back to post financial crisis lows in yield and tightness in credit spreads above government bonds. At the end of Q1, the ML HY Master II Index offers a yield of approximately 6% with a spread of just under 4% over government bonds of similar duration. To put this in historical context, the average spread for the ML HY Master II Index over the last 20 years is approximately 5.8% with an all time high in spread of just over 21% in the depths of the financial crisis. Prior to the financial crisis, the all time low on a spread basis for the index was 2.4%. Furthermore, when taking into consideration expected defaults (Moody’s expects 4.5% by mid-2017) and the historical recovery rates on defaulted bonds, the loss adjusted yield is more like 3.5%.¹² Like government bonds, High Yield bonds can clearly appreciate further (spreads tighten), particularly if US economic growth picks up and corporate profits rise. However, with a loss adjusted yield of approximately 3.5%, the asset class looks to be priced close to perfection, therefore, ones upside expectations should be tempered.

High Yield Price vs. Option-Adjusted Spread History¹²



Outlook for Commodities¹³

As for the outlook for commodities, it appears that the last great global commodity supercycle of this century’s first decade ended in mid-2008 to 2010. Commodity bulls have fought a losing battle since. This shouldn’t be such a surprise since throughout recorded history, they have deflated in value. The cause is twofold. First, new supplies from alternative resources almost always develop if sufficient economic incentives emerge from transitory price increases. Second, decreased demand for traditional commodities due to diminished Chinese economic growth expectations. The commodity-intensive nature of Chinese economic growth was bound to slow once such imaginative technologies as solar power became competitive and new farming technologies enhanced crop yields, among other factors. For the sake of argument, though, let’s imagine that commodities are flat over the next 10 years.

Outlook for Cash

With the state of the global economy, as well as heavy debt levels and deteriorating demographics in the developed world, it is difficult to imagine cash yielding anything meaningfully above two to five percent over the next decade. If it does, it probably will reflect central banks once again trying to return the inflation genie into the bottle. Such a scenario would prove disastrous for bonds and, at best, challenging for equities; thus, a return from cash of anything above two to five percent is highly improbable.

Why we believe Hedge Funds will have competitive market-cycle returns.

Clearly, these forecasts are highly speculative. A great deal can happen within three years, let alone a decade. But following the logic above, it's plain that if hedge funds can produce returns of two-to-six percent over the next 10 years, they will most likely outperform bonds and be competitive with equities and other major asset classes, likely emerging second or third. (To argue that hedge funds will be number one is a bit foolhardy since that outcome isn't supported by history, logic, or current and expected future capital market opportunities.) However, given the aforementioned environment

and outlook for equities, fixed income, commodities and cash, it is of our opinion that hedge funds will continue to produce competitive full market-cycle returns compared to these major asset classes, which is one of the many reasons investors should consider hedge funds.

Mitigating drawdown or risk of portfolio loss

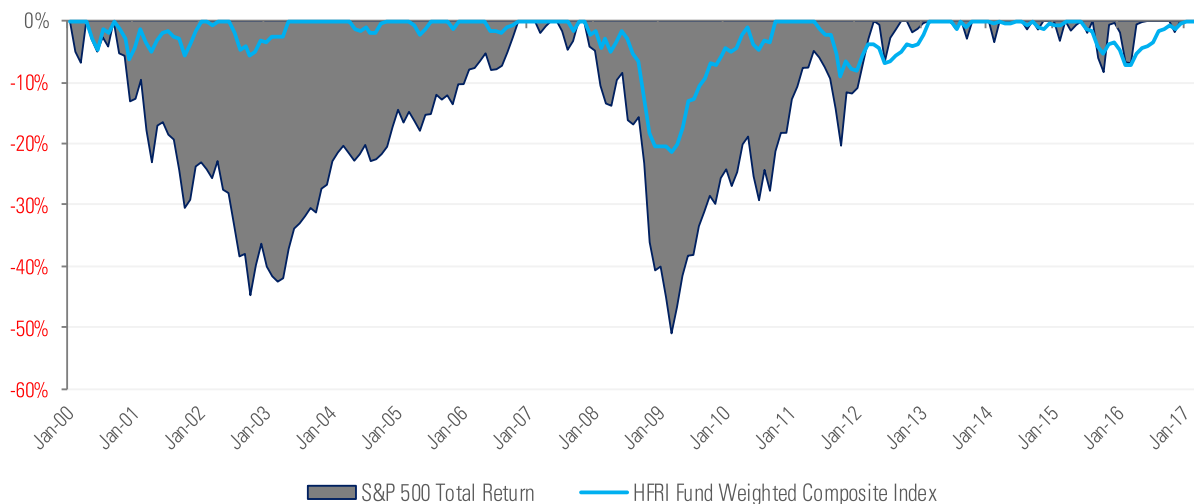
During powerful equity bull markets, it is easy to forget that one of the best ways to compound capital over time is to lose as little as possible – or just a lot less than other asset classes such as equities – in major bear markets or dislocations. The math is fairly simple: If you lose 10 percent, you must make 11 percent to get back to your high water mark. If you lose 20 percent, you must make 25 percent, and if you lose 50 percent, you must make 100 percent to break even.

Typically, that's a tall order over a period of less than three years. As can be seen in **Figure 1** below, hedge funds have consistently lost less than equities in bear markets or corrections such as the 2000-2002 period, the financial crisis from October 2007 through March 2009, and in the third quarter of 2011.¹⁴

	Full Period return (i.e., not annualized):		
	1/1/00-12/31/02	10/1/07-3/31/09	7/1/11-9/30/2011
HFRI Fund Weighted Composite Index ¹⁴	8.2%	(17.8%)	(6.8%)
S&P 500 Total Return Index	(37.6%)	(45.8%)	(13.9%)

Data source: HFR for HFRI index, Bloomberg for S&P 500. Past performance is no guarantee of future results.

Drawdown Magnitude of HFRI Fund Weighted Composite Index vs. S&P 500 (TR) since



Of course, as can be seen in the [Figure 2](#) below, during bull market periods such as the 1990s, 2003-2007 and March 2009-present, hedge funds have sometimes significantly underperformed equities. (However, since the inception of the HFRI Fund Weighted Composite Index, hedge funds have had competitive returns compared to equities (S&P 500 Total Return) with roughly half the volatility—see [Figure 3](#) below).

Thus, assuming another bear market occurs at some point in the future, holding a portion of one’s portfolio in an investment other than bonds and cash and that’s not hemorrhaging capital like equi-

ties potentially could during that period can produce more rational decision-making in terms of actually taking advantage of the bear market’s dislocation.

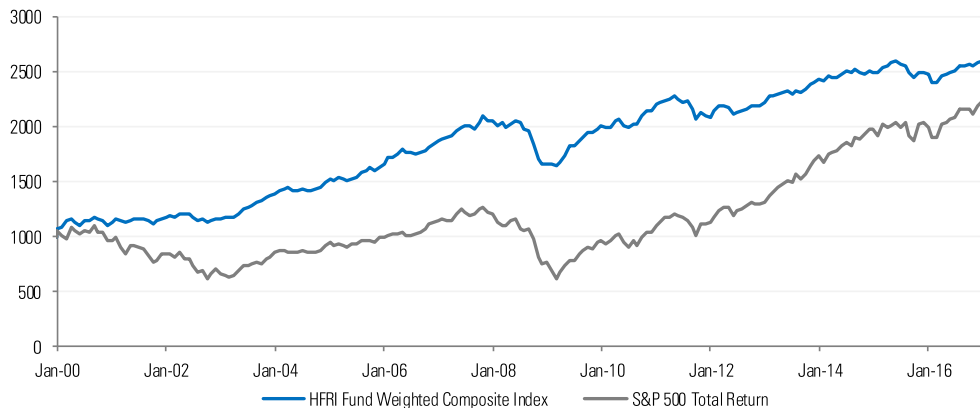
If hedge funds can generate competitive returns to those of most assets classes and even trail equities substantially over a full market cycle, it makes sense to hold at least a modest allocation in them if they can reduce risk and help to moderate losses in the next bear market. Remember, one of the best ways to build wealth is not to lose it in the first place.

Figure 2			
Full Period Return (i.e., not annualized):			
	1/1/90-12/31/99	1/1/03-12/31/07	3/1/09-6/30/17
HFRI Fund Weighted Composite Index ¹⁴	434.9%	76.9%	64.0%
S&P 500 Total Return Index	432.8%	82.9%	293.5%

Figure 3	
Full Period Return (Cumulative)	
1/1/1990 - 6/30/2017	
HFRI Fund Weighted Composite Index ¹⁴ (Cumulative return %)	1242.0%
S&P 500 Total Return Index (Cumulative return %)	1133.1%
Full Period Return (Annualized)	
1/1/1990 - 6/30/2017	
HFRI Fund Weighted Composite Index ¹⁴ (Annualized return %)	9.9%
S&P 500 Total Return Index (Annualized return %)	9.6%

Data source: HFR for HFRI index, Bloomberg for S&P 500. Past performance is no guarantee of future results.

VAMI Index – HFRI Fund Weighted Index vs. S&P 500 (TR) Since 1990
(HFRI Fund Weighted Index Inception)



“VAMI” is an index that tracks the monthly performance of a hypothetical \$1000 investment.

Data source: HFR for HFRI index, Bloomberg for S&P 500. Past performance is no guarantee of future results.

Reasonably low volatility

As can be seen in [Figure 4](#) below, over the long-term, hedge fund volatility tends to be less than half of equities' volatility and about double that of bonds. Clearly, fluctuations in net asset value of hedge funds are substantially less than that of equities. However, why should an investor care about volatility? Two primary reasons exist that are similar, yet distinct, from the drawdown risk – that peak-to-trough decline during an investment's specific record period.

Figure 4			
	Annualized standard deviation of monthly returns from 1/1/90 (HFRI inception) - 6/30/17	Multiple of S&P 500 standard deviation	Multiple of Bloomberg Barclays Agg standard deviation
HFRI Fund Weighted Composite Index ¹⁴	6.6%	0.5x	1.8x
S&P 500 Total Return Index	14.3%	-	-
Bloomberg Barclays Agg Bond Index	3.6%	-	-

Data source: HFR for HFRI index, Bloomberg for S&P 500 and Barclays Aggregate indices. Past performance is no guarantee of future results.

Reason #1 involves *maximizing* the probability of a positive investment outcome. Reason #2 encompasses *minimizing* the risk of timing a cash flow incorrectly. These are very similar points, but subtleties exist.

A major problem associated with investing in highly volatile asset classes reflects this: Whether an investor records a profitable outcome or not depends almost completely on successful timing of both entry *and* exit. This is very hard to do repeatedly. Think of it this way: The burden of timing is an investor's full responsibility. One example of this – equities in emerging markets – illustrates the point well. Emerging market equities had a stellar run from 2002 thru 2007.¹⁵ When those lofty returns finally caught investors' attention, they piled in. Since then, emerging market equities have significantly underperformed US equities and one-quarter of that capital has since fled.

The bottom line is that in highly volatile assets, success or failure can be entirely a function of timing. Skeptics of this argument can point to various techniques to mitigate this risk, such as averaging down. Still, possessing the discipline to average down systematically over years to potentially make back losses or relative underperformance proves very taxing and unpopular with investors. It's also extremely challenging to execute with rigorous discipline.

Therefore, a principal advantage of investing in an asset class with competitive returns and lower volatility is that an investor's ultimate outcome depends much less on successfully timing the entry and exit points.

Additionally, mitigating volatility and portfolio losses minimizes the probability that an investor will make a rash decision at an inopportune time. Investor psychology and behavior are inextricably linked. A certain percentage of the population is more likely to make poor decisions when under extreme duress. Inevitably, during times of stress or significant broad market losses, there are investors who panic and sell near or at a market bottom. Whether it was the recent Q1 '16 correction, the more significant one of Q3 '11, or during the more devastating bear markets of '00 to '02 or the financial crisis, having a percentage of one's portfolio in hedge funds lowers the probability of an investor making a rash untimely investment decision while under duress. This is because their drawdown likely wouldn't have been as severe as a portfolio holding all equities.

The second point of minimizing cash flow timing clearly ties to the first. Again, a skeptic could argue that in a perfectly rational world, cash flow timing is not that critical within broader asset allocation; this is true. However, in the real world, investors tend to care about entering an investment and then incurring substantial losses in a short period of time.

Additionally, unpredictable cash flow needs can arise – recall the fall of 2008 – for economic or personal reasons, and the risk of that need occurring at an inopportune time is far greater with highly volatile assets than lower volatility assets. Consequently, a main advantage of investing in an asset class with competitive returns and lower volatility, such as hedge funds, is that cash flow timing risk is far lower.

Moderate-to-no correlation and beta to other major asset classes

Investors tend to try to minimize risk and maximize return -- and exposures with low-to-no correlation to one another are vital in this endeavor. A skeptic might argue that all investors should care about are long-term returns. That may be true for some. However, even for this minority, they cannot escape the efficient frontier. To generate greater and greater returns, an investor has to take even greater and greater risk and, at some point, it becomes self-defeating. Why? Because substantial losses can devastate a portfolio's ability to compound capital over time.

Hedge funds can benefit a portfolio's risk/reward profile by providing low-to-no correlation to other asset classes. While the majority of hedge funds have a positive correlation to other risk assets such as equities, at least a minor portfolio benefit emerges as long as the correlation to equities falls below one.

As can be seen in **Figure 5**¹⁶ below, in comparison to other asset classes such as bonds, commodities, or real estate, hedge funds have exhibited little-to-no correlation. That should continue over reasonable time horizons.

Figure 5¹⁶

	HFRI Fund Weighted Composite Index
HFRI Fund Weighted Composite Index ¹⁴	1.00
S&P 500 TR	0.77
FTSE NAREIT Equity REIT TR	0.47
S&P GSCI Spot TR	0.21
NCREIF Property Index	(0.04)
Bloomberg Barclays Aggregate Index TR	(0.10)

Period: 1Q 1990 through 2Q 2017 (quarterly return data is used as NCREIF returns are only reported quarterly, period start date corresponds to HFRI index inception). Index returns data source: Bloomberg

Reasonable liquidity

Unlike other major alternative assets of investors – private equity and direct real estate investments – hedge funds offer reasonable liquidity. Most of the industry registers at least annual and, in many cases, quarterly liquidity. As a result, investors can access this liquidity if they need to rebalance their portfolio or if they simply have a cash flow need; private equity and real estate don't possess that advantage.

It is true that during certain instances in the financial crisis, a minority of hedge funds had to raise gates or issue special purpose vehicles (SPVs) because of a dramatic decline in liquidity. This risk must be taken into account, particularly if a repeat of the financial crisis or other liquidity event occurs. That said, based on SkyBridge's experience referring to the over 1,000 hedge funds tracked by our research team, only a minority of hedge funds "gated" or "SPV'd" their investors during this difficult period. The majority of investor capital was available if needed on the appropriate liquidity date. Even in this situation, however, the liquidity profile of hedge funds proved significantly better than other structurally less-liquid alternatives such as private equity or real estate.

Hedge funds are not as liquid as exchange-traded securities or those traded over the counter. Investors must be willing to concede some liquidity if hedge funds are to have any chance of fulfilling their role in a broader portfolio. That said, the liquidity profiles of the majority of the hedge fund industry's products are significantly better than other true alternative investments (e.g., private equity, real estate).

The Fee Discussion

SkyBridge believes that for investors considering hedge funds, another hot button relates to fees. It's not compelling to dig deep into the various conflicting arguments. The only thing that should matter is the broader portfolio benefits net of fees and expenses, a similar approach used by investors for all other asset classes. Still, the hedge fund industry is moving toward lower fees and that trend will continue. Over the past three years, we believe SkyBridge Capital has delivered meaningful fee savings to its investors by leveraging our buying power to negotiate lower fees; this trend should also continue.

Key Points

To recap a few broader points, over a full equity market cycle (i.e. the start of a bull market to end of a bear market), using the HFRI index as a proxy for “hedge funds”:

- If hedge funds are added to a portfolio exclusively of equities, the main benefit is reduced risk and volatility because hedge funds tend to have less of both vs. equities.
 - A modest portfolio benefit would also develop from a lower-than-perfect correlation. The trade-off is that expected returns would arguably be lower.
 - If hedge funds join a portfolio of stocks, bonds, commodities and real estate, a portfolio benefit arises from lowering risk, volatility, and having a low correlation with three of the four asset classes.
 - Depending on how heavily the portfolio tilts towards bonds and commodities, no reduction will occur in expected returns and they may even be enhanced.
-

Conclusion

Many hedge fund investors have been disappointed with performance over the last 4-5 years, yet, the hedge fund industry’s assets under management continue to rise and are currently at a record level, with investments increasing from individual investors and institutional investors alike.

What this white paper articulates is that hedge funds in broad strokes strive to deliver consistent risk-adjusted returns with minimal correlation to the performance of the broader markets. To achieve this, they typically follow fairly broad investment mandates that let them invest in a variety of markets and instruments while reducing downside risk through hedging. This approach has resulted in a steadier performance relative to the overall market during bear markets, as evidenced in 2000 to 2002 and in 2008, and in downside protection at the expense of limited upside during bull markets, seen in 2003, 2009 and particularly from 2013 through 2016.

The market environment of the last few years has proven particularly challenging for many hedge fund managers, reflecting the high level of correlation among asset classes and individual securities. Unprecedented and accommodative central-bank policies and a relatively calm economic environment have dampened market volatility. However, the potential for volatility to increase from the current low levels is increased with a Federal Reserve in tightening mode combined with a new administration in Washington.

If an unsettling investing environment develops, hedge fund managers should perform their role well. In the process, they will interest and remind investors that hedge funds employ sophisticated risk-management and reporting systems, and seek to provide downside protection in rough times and moderate the ups-and-downs during better times. *This is why investors should allocate to hedge funds.*

Notes

¹Throughout this white paper, statistical references based on the HFRI Fund Weighted Composite Index are used as a proxy for typical “hedge funds” risk, return and performance attributes.

²Hedge Fund Research (HFR), as of 6/30/17 (see press release dated 7/20/17).

³Spot gold (Bloomberg ticker: XAU). From 1/1/2001 through 06/30/17, low was \$255.55 on 4/2/01, high was \$1,900.20 on 9/5/11. At the time of writing, the price was \$1,269.64 on 7/28/17.

⁴Source: HFR Global Hedge Fund Industry Report—Fourth Quarter 2016

⁵Data for Active vs. Passive Net Asset flows in US Equity Based Mutual Funds and ETFs is from Morningstar, Inc., as of 5/31/2017. The chart depicts asset flows of active vs. passive management of US Equity Open-end Mutual Funds and ETFs. The data includes the following Morningstar US Equity categories as a proxy of the asset flows of the overall US equity Market: US Equity and Sector Equity. For more information on these categories, please visit www.morningstar.com.

⁶Source: Bloomberg. This chart depicts the Federal Funds Rate (Ticker: FEDL01) vs. the Federal Reserve Balance Sheet (Ticker: FARBAST), the ECB Balance Sheet (Ticker: EBBSTOTA Index) and the Bank of Japan Balance Sheet (Ticker: BJACTOTL Index). Assets for the ECB and BOJ balance sheets are denominated in USD.

⁷An “equity market cycle” is generally accepted to be start of bull market to end of bear market. There have arguably been 2.75 in the recent past (using month-end periods): from January 1992 through September 2002 (8.6% annualized return), from October 2003 through February 2009, (-3.6% annualized return) and from March 2009 until the end of the next bear market (cycle currently underway, i.e., full cycle annualized return not yet available). Source: Bloomberg

⁸Source: BofAMerrill Lynch Global Research, Bloomberg. This chart depicts the S&P 500 Bull Markets of 20% or more without a 20% correction - closing basis data.

⁹Source: Bloomberg, S&P 500 Index (Ticker: SPX).

¹⁰ The Trailing Twelve Month Performance of the S&P 500 Total Return Index (Ticker: SPXT) as of 6/30/2017 is 17.9%. Source: Bloomberg.

¹¹ Source: Bloomberg. This chart depicts the historical yield of the US 10 Year Treasury (Ticker: USGG10YR).

¹²Source: Bloomberg, Merrill Lynch High Yield Master II Index (Ticker: HOA0), St. Louis Federal Reserve Economic Research (FRED). This chart depicts the price of High Yield Bonds vs. the Option-Adjusted Spread over government bonds of similar duration.

¹³An approximately 10 year period, ending in 2008, of double-digit returns in many commodity prices, including oil. Generally attributed to emerging markets demand growth over the same period.

¹⁴The HFRI Fund Weighted Composite Index is used throughout as a proxy for “hedge funds,” in these examples for the time periods presented. Strategy specific hedge funds may or may not have had the return and volatility characteristics set forth herein. Data source: HFR for HFRI Fund Weighted Composite index, Bloomberg for S&P 500 and Barclays Aggregate indices. Past performance is no guarantee of future results.

¹⁵The MSCI Emerging Market index posted a total return (with dividends reinvested into the index) of 353% from 12/31/01 through 12/31/07. Over the same period, the total return for the S&P 500 TR was 42%. Source: Bloomberg

¹⁶Source: Bloomberg; S&P 500 TR is used as a proxy for equities (Ticker: SPXT Index), FTSE NAREIT Equity REIT TR is used as a proxy for REITs (Ticker: FNRETR Index), S&P GSCI Spot TR is used as a proxy for commodities (Ticker: SPGSCITR Index), NCREIF Property Index is used as a proxy for commercial real estate (NPNCRE Index), and the Bloomberg Barclays Aggregate Bond Index is used as a proxy for investment grade bonds (LBSTRUU Index)

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