



‘Taking Stock’

Recent Developments in the
Equity Hedge Fund Landscape

October 2014

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I. Study overview

Equity Hedge Funds (HF) have traditionally accounted for a majority of the assets in the hedge fund industry. Many of the most storied names in the industry historically have been associated with Equity strategies. Over time, and more so in recent years, Equity strategies lost ground in terms of share of industry assets under management (AUM) to other HF strategies as investors cut their exposure to equities in the aftermath of the financial crisis – although that trend appears to be reversing itself. Recent investor interest in Equity HFs is likely driven, at least in part, by strong performance of global equity markets, resulting in strong net new flows to Equity HFs. In this paper we take a close look at key industry developments pertaining to Equity HF strategies with an eye toward understanding the opportunities and challenges for Equity HF managers, as well as current investor sentiment toward these strategies.

The main areas we address in this piece are the following:

1. Equity HF developments and drivers

- How has the Equity HF segment of the industry developed over time? What has been the evolution of AUM?
- How have Equity HFs performed in various market environments?
- Have Equity HFs delivered on their value proposition over time? What have been some challenges?

2. Analysis of Equity HF sub-strategies

- How have various Equity HF sub-strategies performed recently?
- How has the distribution of Equity HF AUM by sub-strategy changed over time?
- How have investor flows been distributed across sub-strategies?

3. Equity HFs' portfolio choices and their impact on performance

- What are some of the strategic choices Equity HFs have made recently that have led to better performance?
- How have certain portfolio management characteristics impacted returns?

4. Investor sentiment

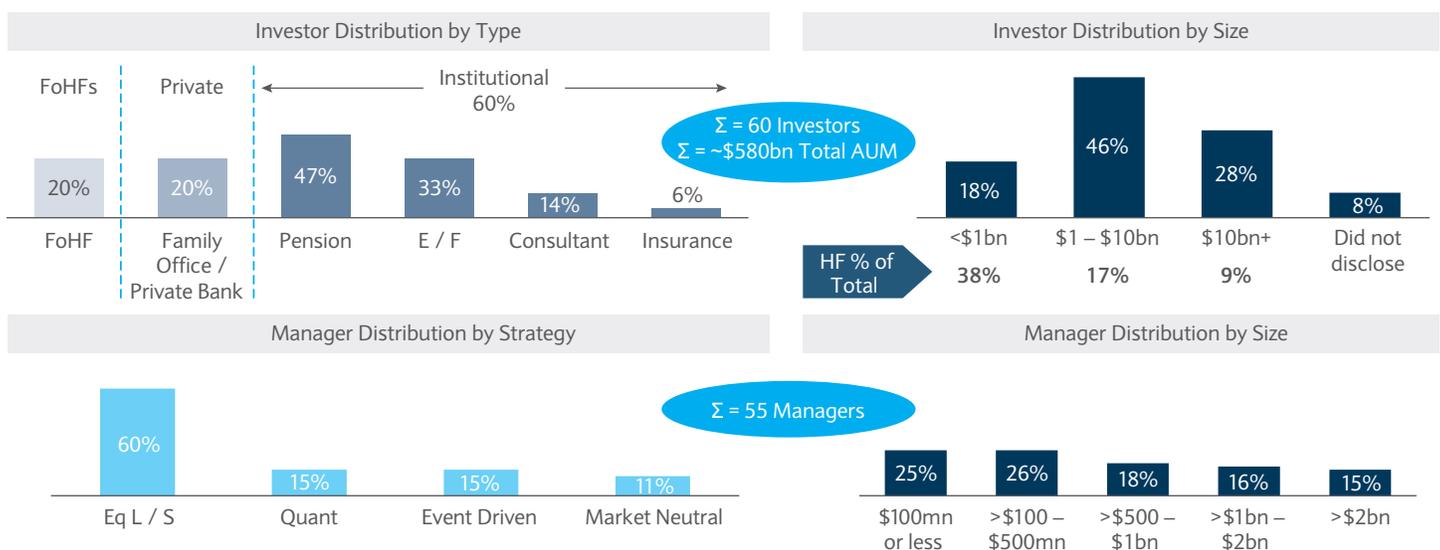
- Which Equity HF sub-strategies are investors currently allocated to?
- How are allocations to these sub-strategies expected to change over the next 12 months?
- What are some key investor preferences?

Methodology

With these questions in mind, the Barclays Strategic Consulting team tapped four sources to gather required information for the study:

- Conducted interviews and a survey with investors and managers, with the following breakdown (shown in Figure 1)
 - 60 investors
 - ~\$580bn in total AUM
 - 60% were institutional investors and their consultants, 20% were Fund of Hedge Funds (FoHFs), and 20% were private investors (Family Offices and Private Banks / Wealth Managers).
 - Approximately 75% of investors had over \$1bn in total AUM, of which ~40% had over \$10bn each.
 - The sample was dominated by North America (NA)-based investors; about 20% of investors in the sample were based outside of North America (not shown).

FIGURE 1: Study Participant Profile



Source: All figures refer to Strategic Consulting study results only. Survey / interviews were conducted in Q2 2014; Note: The results presented are from a relatively small number of respondents and therefore are indicative only and not meant to reflect conclusive industry trends. Data and other information presented are derived directly from respondents and we cannot confirm the accuracy of such information

- 55 Equity HF managers
 - 60% were Long / Short Equity HFs, with the balance relatively equally divided across Quantitative, Market Neutral, and Event Driven strategies.
 - ~50% had \$500mn or more in fund assets, with about a third of the sample having >\$1bn in AUM.
 - Two-thirds of the managers in our sample were based in NA, and the rest were mostly from the EU.
 - Two-thirds of them had more than five years of track record, the rest had less than five years.
- 2. Analyzed Equity HF data sourced from Novus¹
 - Returns and AUMs of >800 Equity HF managers from >60 countries
 - More than 100k positions, totaling ~\$1.7tn of market value
- 3. Analyzed data on >7,000 funds from the HFR, BarclayHedge, and HFN databases
- 4. Reviewed external research and publications

II. Executive summary

The following are high level takeaways from the study:

Equity HF developments and drivers

- The AUM of Equity HFs has grown more quickly than the AUM of non-Equity HFs recently, both due to Equity HFs delivering better performance in the aggregate as well as receiving a greater portion of net new flows.
- There appear to be several market environments that drive Equity HF returns.
 - When key indices, either Equities or Fixed Income, have had low to moderate returns – as projected for 2014 – Equity HFs have generally outperformed² the indices.
 - Additionally, Equity HFs have historically outperformed the S&P when volatility and / or dispersion within the index is higher, which has not occurred recently.
 - Since 2000, monthly equity HF returns have displayed ~80% correlation with the S&P 500, with an average beta of ~0.4 and monthly alpha of 0.43%.

Deep dive into Equity HF sub-strategies

- Distribution of AUM across Equity HF sub-strategies has remained relatively consistent, though Long / Short strategies have lost ground marginally to other Equity strategies recently.
- Equity HF sub-strategies collectively have received a greater portion of overall net new flows into the industry, over the last three years, with Activist and Equity Multi-strategy HFs getting a disproportionate share among Equity HFs.

- From a performance perspective, various Equity HF sub-strategies have all seen their returns improve and standard deviations decline recently, in line with broader equity markets; their upside capture ratio has improved in general but their downside capture ratio has also gone up significantly since 2008 – pointing to recent challenges.

Equity HFs' portfolio choices and their impact on performance

- Based on analysis of position and performance data, there appear to be certain strategic choices made by managers that have led to better performance.
 - Relative to the S&P 1500, HFs have historically been overweight micro / mid market cap stocks, where they have generated more alpha relative to large / mega cap stocks.
 - Equity HF managers have had ~4x better performance from their 'core' investments versus their overall portfolios (more on this in the document).
 - Similarly, Equity HFs with more concentrated portfolios had higher returns in 2013.
 - Additionally, it appears that the more strictly Equity HFs enforced stop loss limits in 2013, the lower the returns they were able to achieve.

Investor sentiment

- The vast majority of investors (~96%) in our sample felt that the Equity HFs in their portfolios had performed in line with or better than their expectations in 2013.
- Most investors indicated they expect to maintain or increase their allocations to Equity HFs over the next 12 months.
 - Currently the highest allocations are to Fundamental Long / Short, followed by Event Driven and Equity Market Neutral strategies.
 - Going forward, Event Driven, Activist, and Market Neutral strategies are expected to receive the largest portion of net new flows.
- A significant percentage of investors expressed concerns about HF managers in their portfolios managing '40 Act products.

III. Equity HF developments and drivers

The HF industry has grown consistently from 2001 through 1H14, with just one dislocation during the financial crisis of 2008 – although it is worth noting this interruption was significant as overall AUM declined by 25% (see Figure 2). The growth over the period came from both returns and net new flows, driven by various market forces. For a more detailed analysis of AUM growth drivers across the last decade-plus, see our paper 'Making It Big'.

1. Novus is a service provider (unaffiliated with Barclays) that provides industry intelligence to institutional investors and asset managers

2. The term "to outperform" refers to having higher returns

HF AUM

As shown in Figure 2, over the past 14 years there have been two distinct time periods in the HF industry based on AUM growth trajectory, separated by the decline in industry assets caused by the financial crisis. In the first period, HF AUM grew at a compound annual growth rate (CAGR) of 23%, whereas in the second period, AUM growth was more muted with a CAGR of 13%. While industry AUM growth rates across these two periods were dissimilar, the distribution of AUM across Equity HFs and non-Equity HFs has followed relatively similar paths in both periods. Equity HFs had a higher percentage of industry AUM at the beginning of each period before starting to lose share to non-Equity HFs. This trend reversed itself after about three years in both periods, when Equity HFs began to win back share.

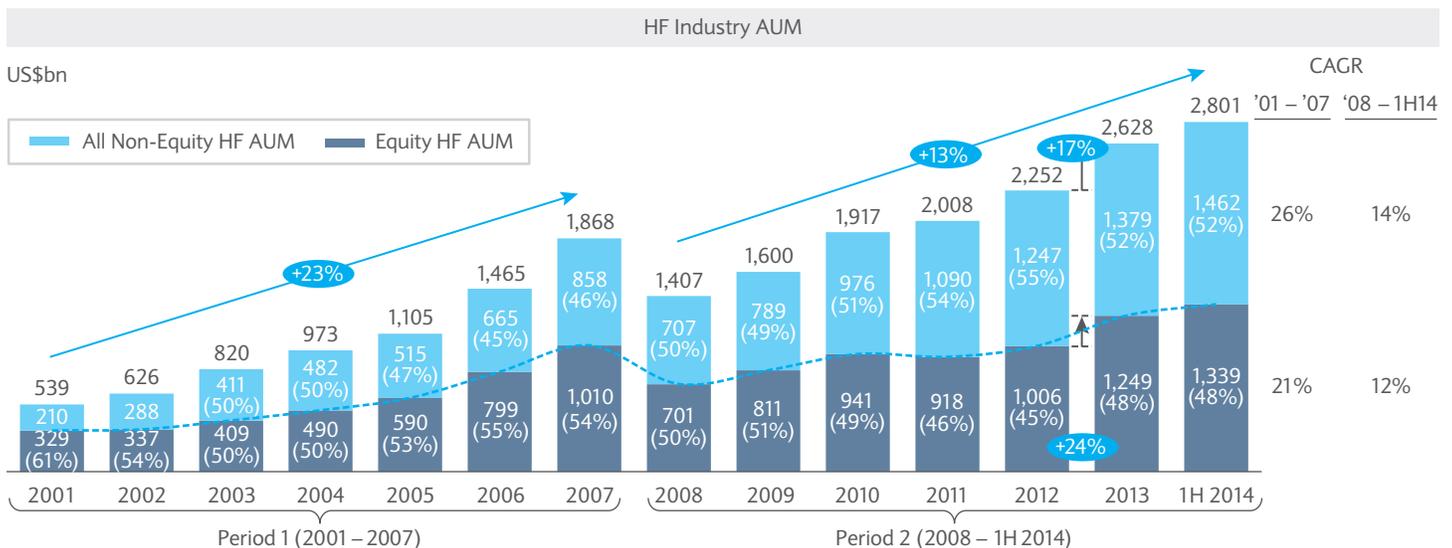
However, in neither period were they able to regain their previous highs with regard to share of the overall AUM.

In 2013, Equity HFs' AUM grew seven percentage points faster than non-Equity HFs, potentially driven both by investors correcting for under-allocations to Equity HFs after the financial crisis of 2008, and / or by the recent equity market rally which helped fuel Equity HF returns and may be bringing investor interest back to Equity HFs.

Recent HF flows

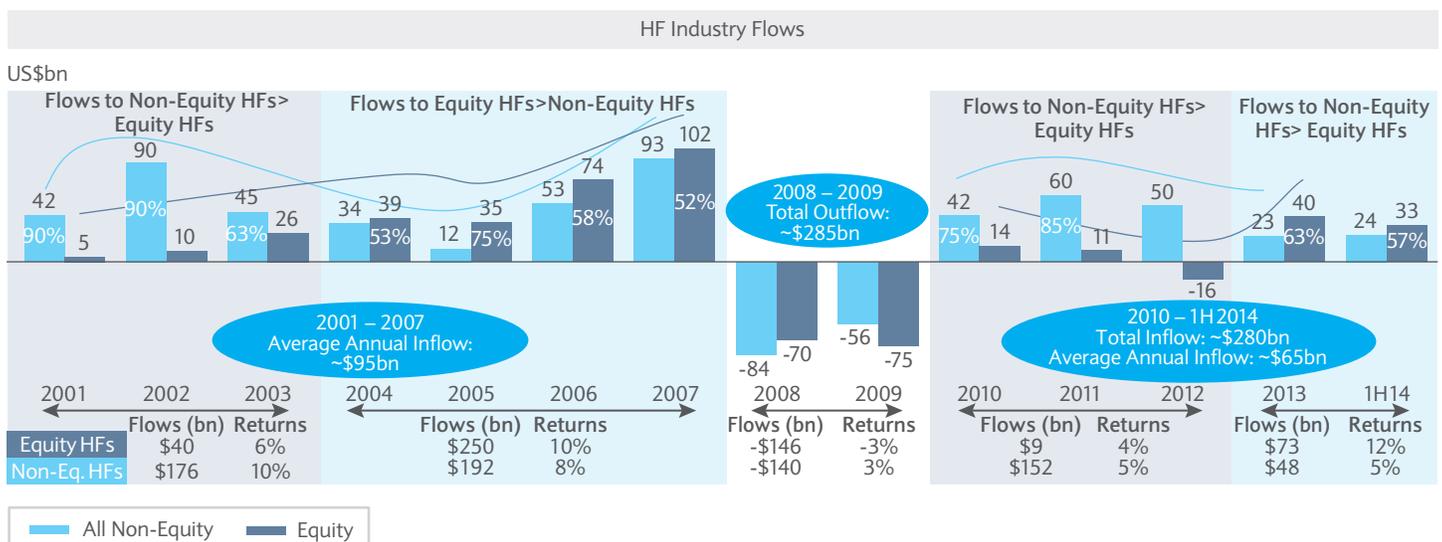
As described before, net new flows to Equity HFs have followed a seesaw pattern with Equity HFs losing ground to non-Equity HFs in the initial years of each of the last two cycles of AUM

FIGURE 2: Hedge Fund AUM



Source: HFR, BarclayHedge, HedgeFund.net
Equity HF sub-strategies include those designated as Equity Hedge and Event Driven, other than Credit Arbitrage and Distressed Restructuring

FIGURE 3: Recent HF Flows



Source: HFR, BarclayHedge, HedgeFund.net. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance; Note: Returns are annualized for the period shown (i.e., separated by color)

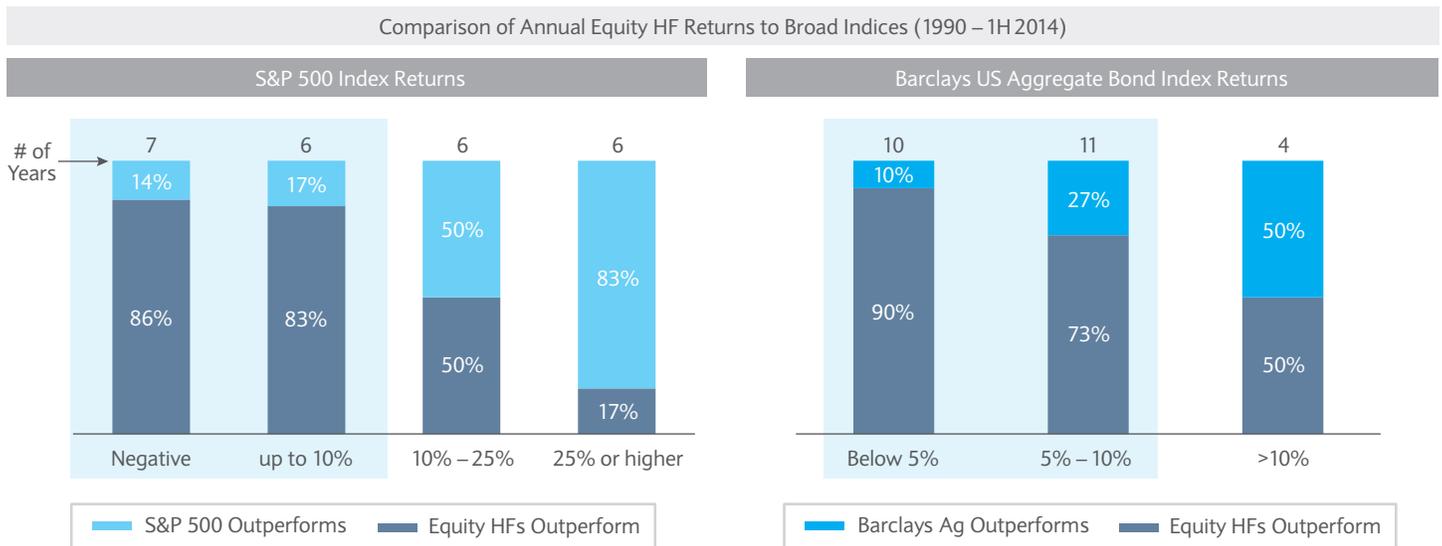
growth, only to start taking back share later (see Figure 3). When looking at the volume of flows, the recent annual average is only two-thirds of what it was from 2001 to 2007 (i.e., ~\$95bn versus ~\$65bn). Additionally, the total level of outflows during the financial crisis have not yet been recovered (i.e., 2008 – 2009 outflow of ~\$285bn versus 2010 – 1H14 inflow of \$280bn), whereas total industry AUM has increased significantly, proving that performance is driving recent AUM growth. Total Equity HF AUM was ~\$400bn higher at 1H14 relative to the 2010 level, although total Equity HF flows added up to only \$80bn over this time frame.

3. Barclays Equity Research – ‘Transitioning to lower returns,’ August 12, 2014

Equity HF returns vs. indices

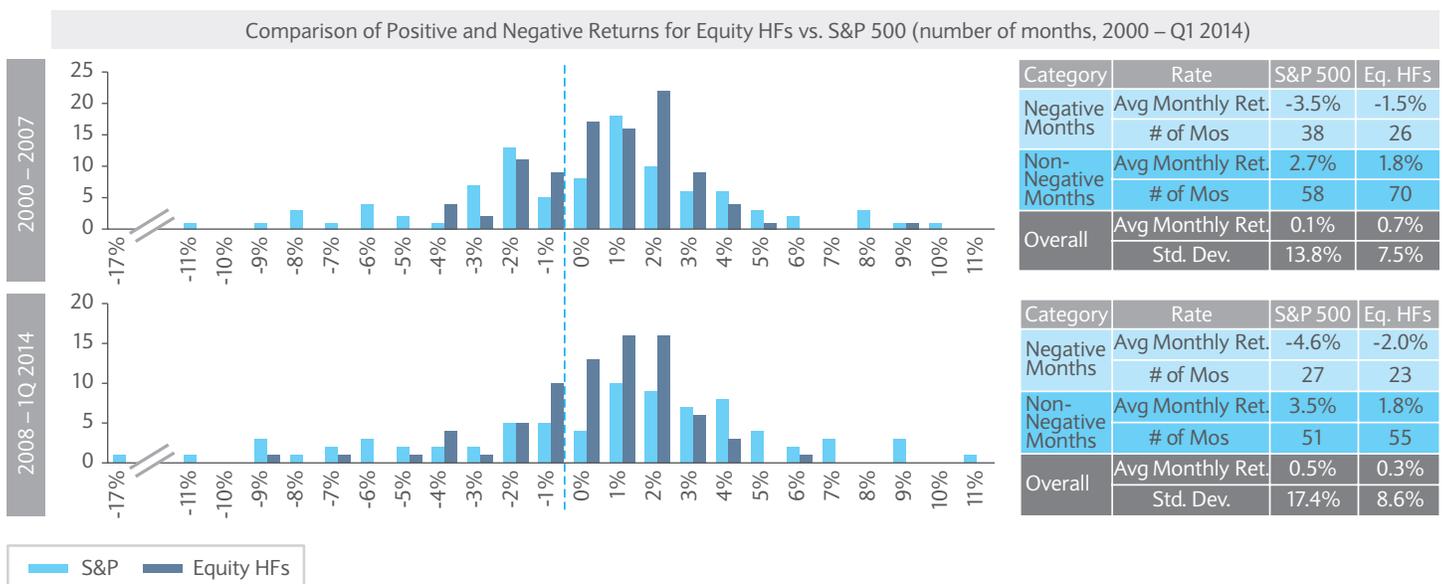
Figure 4 shows that when key indices, either for Equities or Fixed Income, have had low to moderate returns, Equity HFs have generally outperformed the indices. Since 1990, Equity HFs have outperformed the S&P 500 when it has returned less than 10% relatively consistently (i.e., 11 of 13 years). Nonetheless, Equity HFs have not outperformed the S&P since 2009, a trend that has continued through the first half of 2014. However, Barclays Research projects S&P 500 total return to be ~9% in 2014³, down from ~30% in 2013 (up 8.3% YTD Aug), which could help put an end to the relative underperformance of Equity HFs.

FIGURE 4: Equity HF Returns vs. Indices – I / II



Source: HFR, Strategic Consulting Analysis; Barclays Equity Research – ‘Transitioning to lower returns,’ August 12, 2014. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance; Note: Equity HF Returns refer to the weighted average (by AUM) of the HFRI Event Driven (Total) Index and the HFRI Equity Hedge (Total) Index

FIGURE 5: Equity HF Returns vs. Indices – II / II



Source: Strategic Consulting Analysis; Note: Equity HF Returns refer to the weighted average (by AUM) of the HFRI Event Driven (Total) Index and the HFRI Equity Hedge (Total) Index

Unlike the S&P 500, which returned >10% in ~50% of the years we considered, the Barclays Aggregate Bond Index only breached that level in four of 25 years. As a result, Equity HFs outperformed the Barclays Ag in 19 of 25 years over the period and 17 of 21 years (~85%) when the Barclays Ag returned 10% or less.

Versus Monthly S&P performance

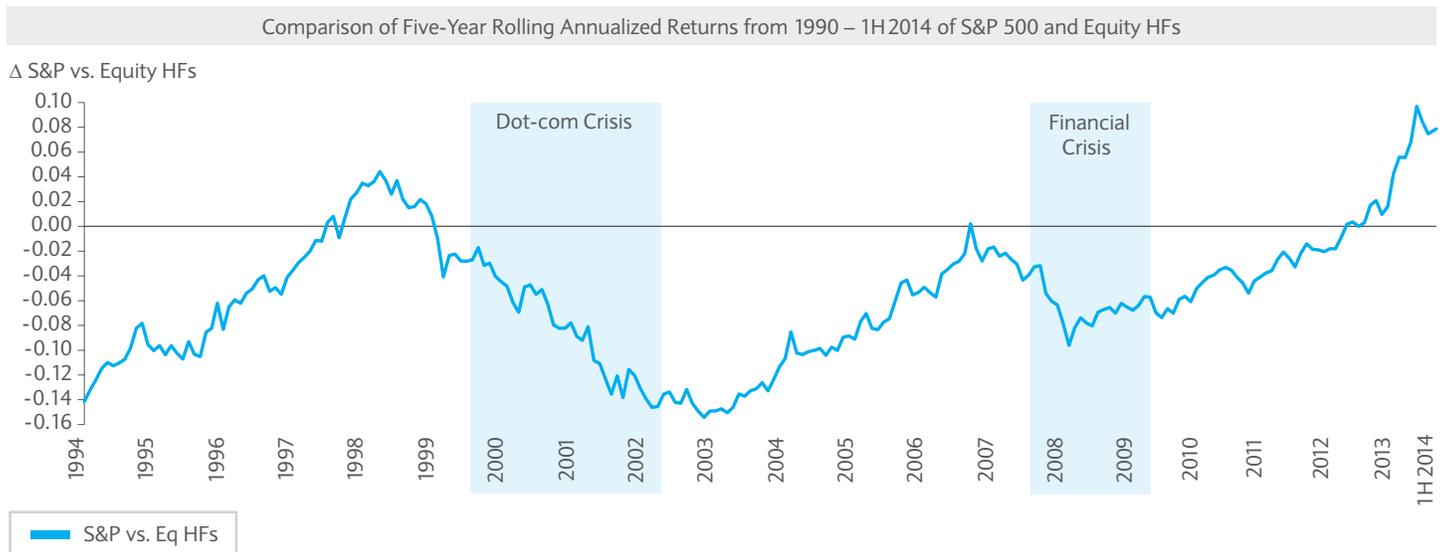
Figure 5 shows that, since 2000, Equity HFs had many fewer negative months and many more months of non-negative returns relative to the S&P. The S&P 500 also had more months in both tails – both the highest highs and the lowest lows, which contributed to it having a much higher standard deviation over the entire time period (i.e., S&P 500 – 15.4% versus Equity HFs – 7.8%, not shown). This suggests that Equity HFs have definitively

delivered on their value proposition of reducing volatility and providing lower drawdowns.

Versus S&P Returns over time

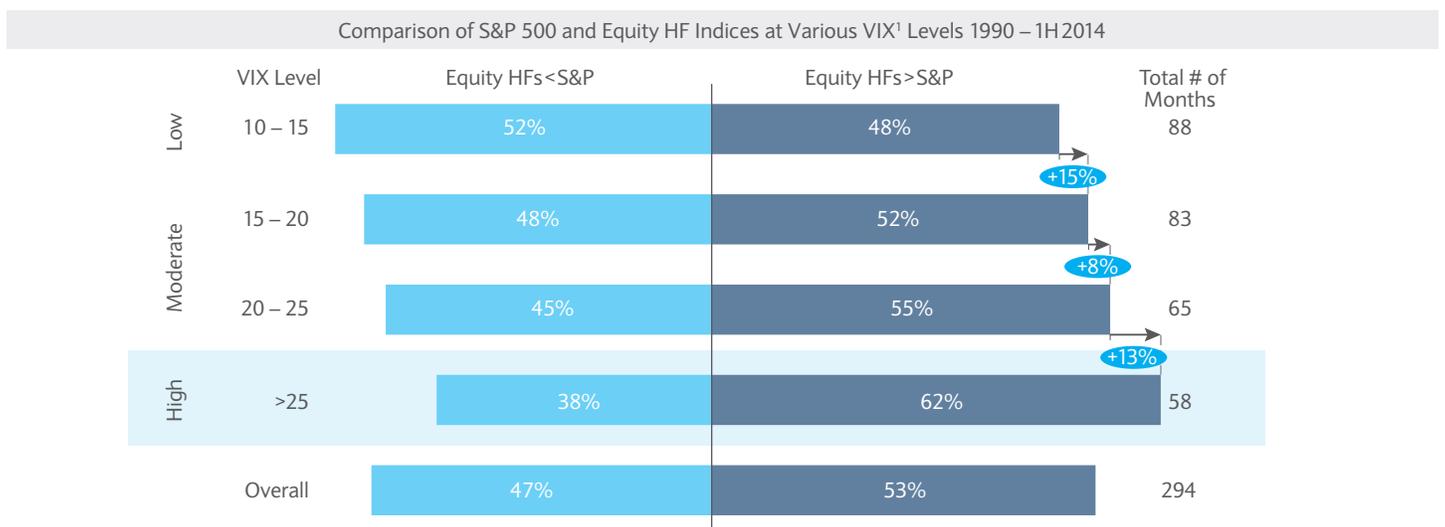
Figure 6 shows the difference between the five-year rolling annualized returns of the S&P 500 and Equity HFs (positive numbers represent outperformance by the S&P 500). There are two important things to note in this chart. One, over most of the time period under consideration, Equity HFs have done better on a returns basis than the S&P 500. Two, there have been two brief periods when Equity HFs have performed worse or come close to performing worse than the S&P 500 on a rolling five-year basis. Both of those periods have been followed by sharp corrections in the US equity markets (the crash after the dot-com bust and

FIGURE 6: S&P 500 vs. Equity HF Returns



Source: S&P Dow Jones Indices, HFR, Strategic Consulting analysis. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance; Note: Equity HF Returns refer to the weighted average (by AUM) of the HFRI Event Driven (Total) Index and the HFRI Equity Hedge (Total) Index

FIGURE 7: Performance Drivers – Volatility



Source: VIX, HFR, Strategic Consulting analysis. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance; Note: Equity HF Returns refer to the weighted average (by AUM) of the HFRI Event Driven (Total) Index and the HFRI Equity Hedge (Total) Index; 1. The Volatility Index (VIX), which shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options. Widely used as a measure of market risk and is often referred to as the "investor fear gauge"

the recent financial crisis). The current trend of the S&P 500 outperforming the broad Equity HF index has lasted about 5.5 years already, which is longer than either of the last two periods. Could this be a signal of an upcoming sharp stock market decline? We don't feel qualified to say but the chart definitely supports those who are concerned about equity valuations in general.

Volatility as a factor for Equity HF returns

Volatility is generally considered a positive factor for HF returns. Figure 7 depicts the number of months Equity HFs have outperformed or underperformed the S&P 500 between 1990 and H12014, depending on whether volatility levels (as represented by VIX)⁴ have been low (10 – 15), moderate or high (>25). The data on the chart shows that when volatility has been high, Equity HFs have outperformed the S&P 500 more often than not. For instance, when the VIX has been above 15, Equity HFs outperformed the S&P in 53% of the months and when it has been >25, Equity HFs outperformed the S&P in 62% of the months. At the end of 2013, futures contract prices showed that investors expected a gradual increase in volatility levels throughout 2014; however, the VIX has averaged only ~13.5 in 2014. Current levels are the lowest since the end of 2006, which helps at least partially explain the relative underperformance of Equity HFs in recent months.

Dispersion⁵ as a factor for Equity HF returns

Similar to Equity HFs' outperformance of the S&P when volatility has been high, Equity HFs have done well relative to broad equity indices when the level of dispersion has been high. Figure 8 shows that, more specifically, at higher levels of dispersion, Equity HF

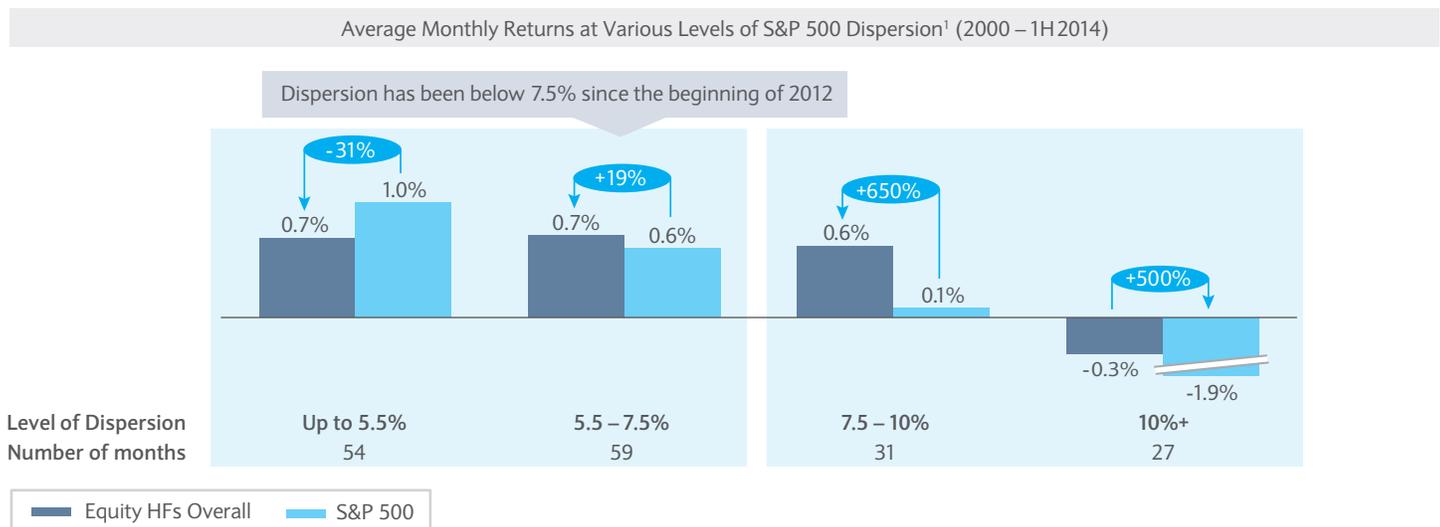
managers outperformed the S&P 500 by a factor of ~5 or more. When levels have fallen into the higher buckets, generally there has tended to be a prolonged period of higher dispersion due to the high autocorrelation of dispersion levels over time. However, higher levels have not occurred in a while – over the course of a full year, dispersion has not been higher than 7.5% on average since 2009, and has been declining steeply since 2012. In fact, the current level of dispersion is within 10% of the minimum level since 1991.

Correlation⁶ as a factor for Equity HF returns

Similar to how Equity HFs appear to have done better against broad indices in times of high volatility and / or dispersion, Figure 9 shows that correlation has also been a factor influencing Equity HF returns. From 2000 – H114, Equity HFs outperformed the S&P 500 by the largest margin when the level of correlation was below 30. Although this was the only correlation range where Equity HFs outperformed the index more often than not, it was not the only level where the average return was higher (i.e., average return was also higher when correlation was in the 40 – 50 range). It is important to note that correlation levels have been relatively high over the last seven years, and a floor of 30 has only been seen once over this period. Furthermore, since the beginning of 2013, the correlation level has been in the 30 – 40 range, which has been the most common range over the entire period. It is also the range where the average monthly performance of Equity HFs has been the closest to the S&P 500. This adds to the challenges facing Equity HFs in the current market environment.

4. The Volatility Index (VIX), which shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options. Widely used as a measure of market risk and is often referred to as the "investor fear gauge"
5. Dispersion is the degree of variation in the returns of a portfolio's components (on a weighted basis) and is used to measure the potential value of stock selection ability
6. Correlation refers to how the component stocks of the S&P 500 move in relation to each other

FIGURE 8: Performance Drivers – Dispersion



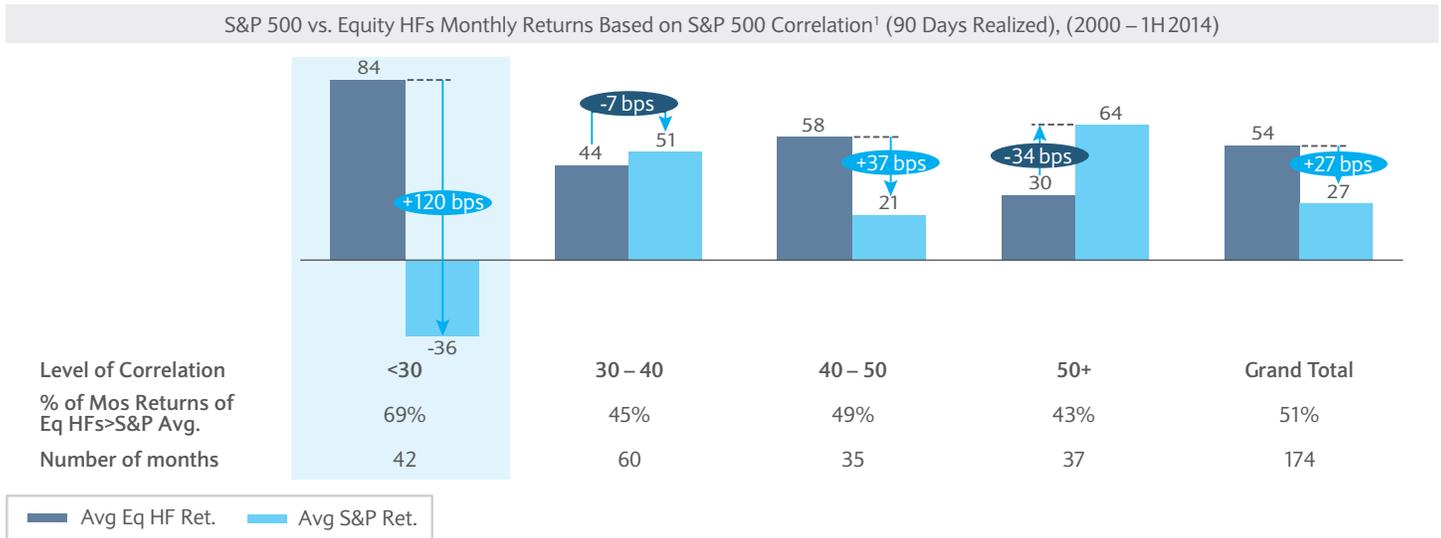
Source: Strategic Consulting Analysis, HFR, S&P Dow Jones Indices. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance; Note: Equity HF Returns refer to the weighted average (by AUM) of the HFRI Event Driven (Total) Index and the HFRI Equity Hedge (Total) Index; 1. Dispersion is the degree of variation in the returns of a portfolio's components (on a weighted basis) and is used to measure the potential value of stock selection ability

Beta in Equity HF Returns

The previous analysis compares the absolute returns of both Equity HFs and the S&P 500. However, it is well known that a portion of Equity HF returns can be explained simply by market returns (e.g., the S&P 500, if used as a proxy). In order to establish how much of HFs' returns are simply driven by their exposure to the market (beta) versus what can be called 'alpha', we ran a regression using Equity HF returns and the S&P 500 returns to better understand the relationship between the two. As shown in Figure 10, the correlation between the two sets of returns between 2000 and 1H2014 is ~0.8, suggesting that the two sets of returns mostly move in the same direction. The R-squared for this simplistic regression model is 0.6, which suggests that the

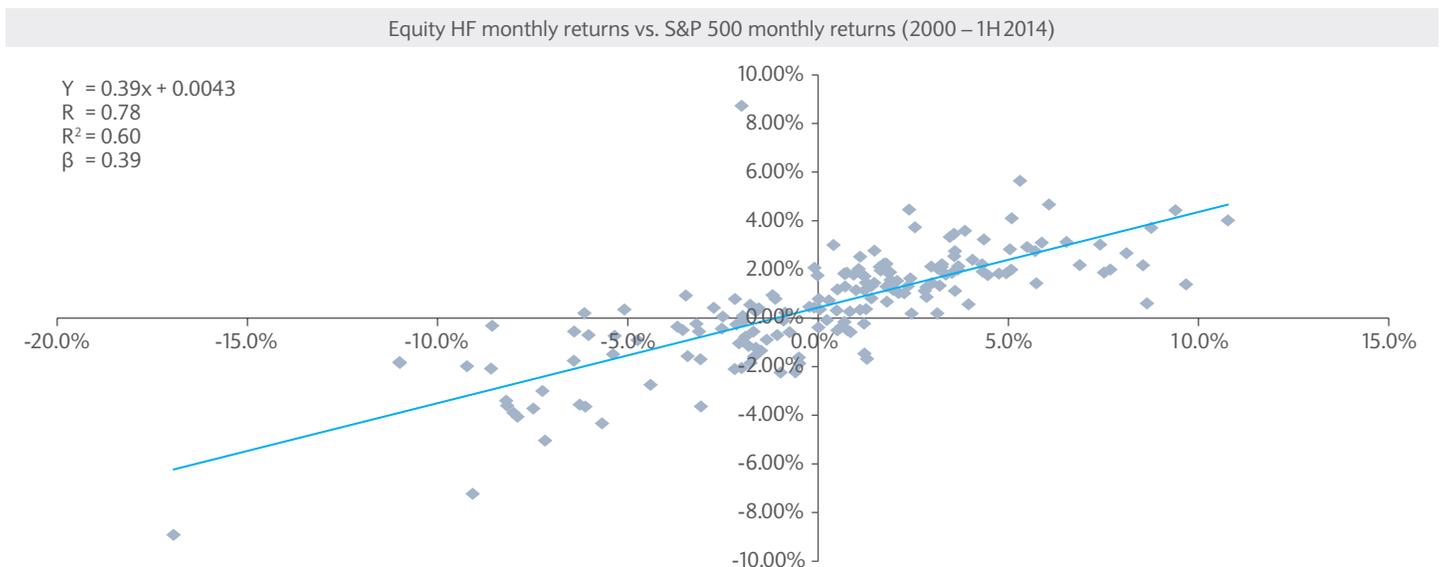
model explains 60% of where Equity HF returns are derived from. While the Beta at 0.4 suggests that the average Equity HF has significant exposure to market returns, the Y-intercept at 0.43% is positive. This positive intercept is an indication that positive alpha has been generated by Equity HFs on average over this time period. Annualizing the monthly alpha of 0.43% suggests that equity HFs have generated ~5.3% of alpha on average annually. Given the simplicity of our model this value very likely overstates the actual alpha generated by equity HFs, since we have not explicitly accounted for factors such as leverage or risk premia (e.g., market cap) in our regression model. Elsewhere in this paper we show that equity HFs in a large database maintained by NOVUS have generated about 170 bps of annualized alpha over a fairly long period of time.

FIGURE 9: Performance Drivers – Correlation



Source: Barclays Research, HFR, Strategic Consulting analysis. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance; Note: Equity HF Returns refer to the weighted average (by AUM) of the HFRI Event Driven (Total) Index and the HFRI Equity Hedge (Total) Index; 1. Correlation is based on 90-day intervals for all 500 names in the S&P 500 index.

FIGURE 10: Correlation of Equity HF Returns to the S&P 500



Source: S&P Dow Jones Indices, HFR, Strategic Consulting analysis. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance

IV. Analysis of Equity HF sub-strategies

The Equity HF segment is obviously fairly broad and includes a set of disparate strategies. We have taken a close look at these various sub-strategies, which each have their own unique characteristics and appeal to investors. We describe these sub-strategies in this section and attempt to show their performance and net new flows.

Equity HF AUM split by strategy

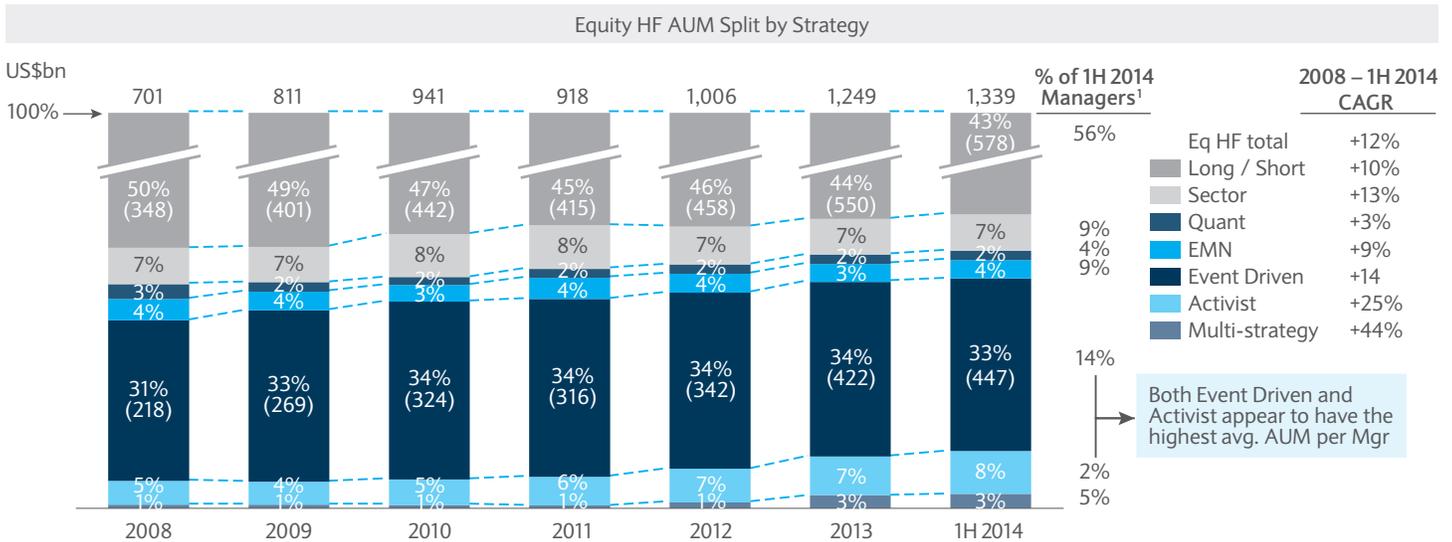
Figure 11 shows that while Equity HFs overall have experienced AUM growth, the various sub-strategies within this segment

have grown at different rates. As previously mentioned, the overall Equities AUM CAGR was 12% between 2008 – 1H14 but the underlying sub-strategies fall into three different AUM growth categories:

1. High growth: Activist and Multi-strategy
2. Moderate growth: Long / Short, Sector Focused, Market Neutral, and Event Driven
3. Slow growth: Quant

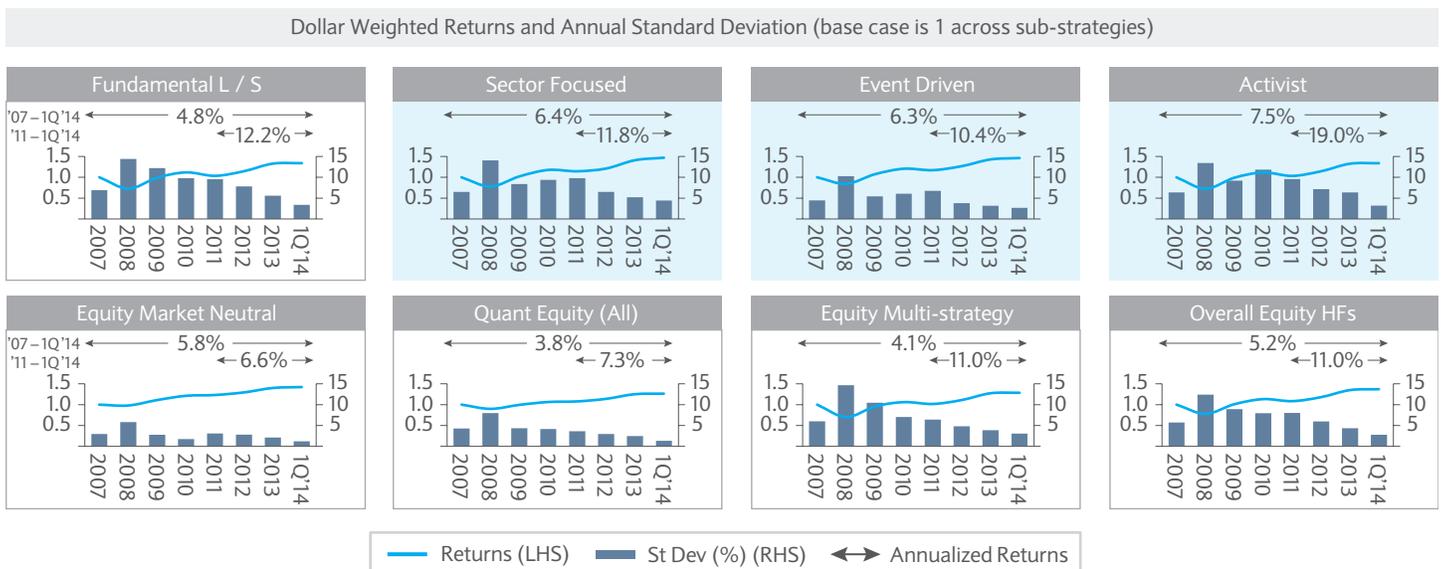
It is also interesting to note that only Activist and Event Driven HFs appear to have an average AUM that is greater than the overall average AUM for all Equity HFs.

FIGURE 11: Equity HF AUM Split by Sub-Strategy



Source HFR, BarclayHedge, HedgeFund.net
1. Percent of managers self-identified to be in the particular sub-strategies described

FIGURE 12: Return and Standard Deviation by Sub-Strategy



Source: HFR, BarclayHedge, HedgeFund.net. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance

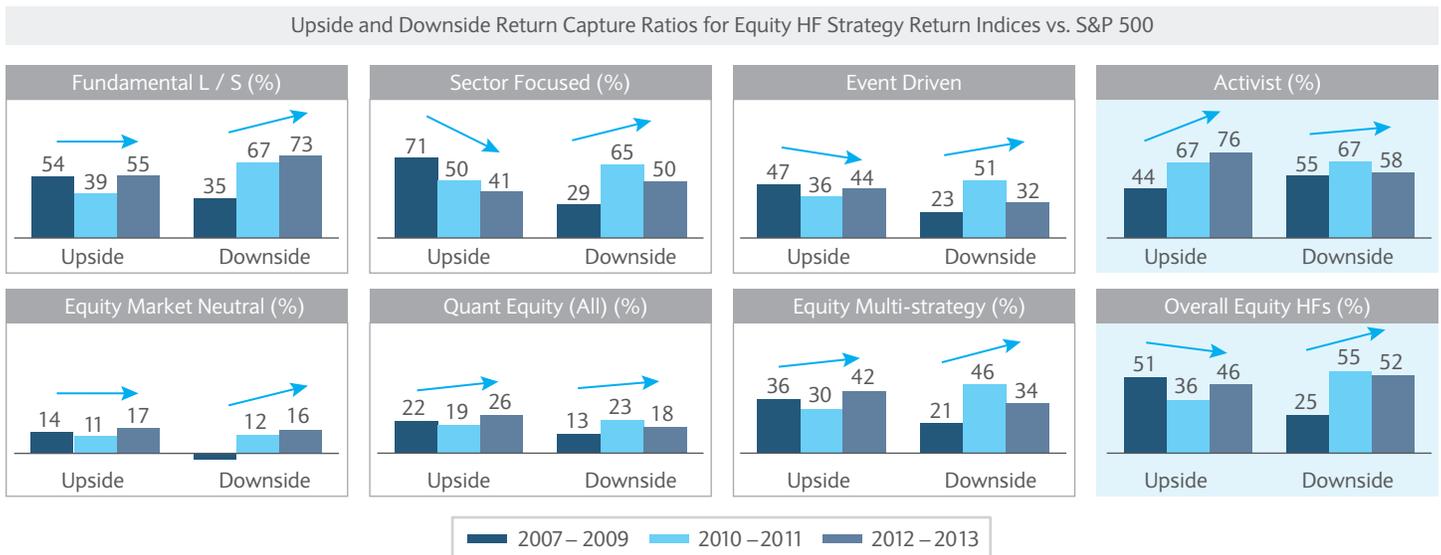
Return and standard deviation by Equity HF sub-strategy

Figure 12 shows that Equity HF sub-strategies had varying level of losses in 2008 and have since had equally disparate levels of gains. For instance, Equity Market Neutral (EMN) and Quantitative Equity (Quant) experienced the smallest declines in 2008, but have had the lowest returns recently. The other sub-strategies each had steeper declines in 2008 and have seen varying levels of recovery since then, as Activist, Event Driven, and Sector Focused strategies have been well ahead of Fundamental L / S and Multi-strategy, though recently these two sub-strategies have shown improved

performance. It is worth pointing out that although the returns of the individual sub-strategies showed significant variation, from 2007 – 1Q14 each sub-strategy had a higher annualized growth rate than the S&P 500 (i.e., 4%) other than Quant, and from 2011 – 1Q14, each sub-strategy had a lower return (i.e., S&P 500 was 19.3%).

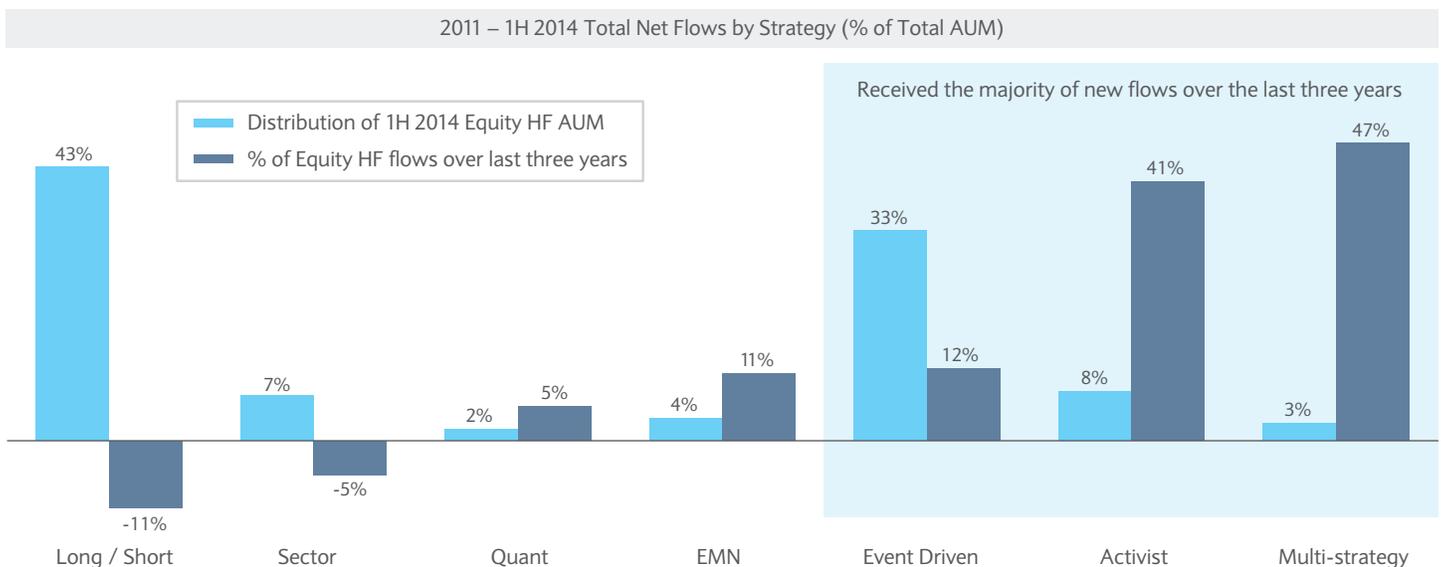
Similarly, the various sub-strategies' annual standard deviations differed in absolute terms; however, the general direction has been the same across the board with consistent decreases since 2011. This is in line with the broader equity market, which has also seen lower volatility of returns.

FIGURE 13: Upside vs. Downside Capture



Source: Hedge Fund Research, Inc. www.hedgefundresearch.com, © 2012 Hedge Fund Research, Inc. All rights reserved., Strategic Consulting analysis; Note: The higher the upside capture is the better, conversely, the lower the downside capture is the better. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance

FIGURE 14: Flows by Sub-Strategy



Source: HFR, Strategic Consulting Analysis

Upside vs. downside capture⁷

Most Equity HF managers we spoke with indicated that they seek to capture somewhere between two-thirds and three-quarters of the upside and one-quarter to one-third of the downside of the S&P 500. However, according to HFR data, Equity HFs have been closer to 50:50 on both sides recently, as depicted in Figure 13. It appears that select Equity strategies have captured more of the upside relative to the S&P 500 recently (i.e., 2012 – 2013 versus 2007 – 2009), especially Activist strategies (improved by ~70%). However, each sub-strategy also captured more of the downside over the same time period, especially Long / Short (L / S) where downside capture increased by over 100% – potentially due to macro factors, stock selection and / or market timing challenges. Some of the sub-strategies, such as L / S, saw their 2012 – 2013 results improve significantly from 2010 – 2011, suggesting that they may be righting the ship. Event Driven and Activist also showed improvement as they exhibited the highest positive disparity between their upside and downside capture ratios.

Comparison of flows to AUM by Equity HF sub-strategy

Obviously, investors did not allocate to various Equity HF strategies in a pro rata way over the last three years. As Figure 14 shows, Activist and Equity Multi-strategy HFs received a significant portion of recent net new flows (i.e., Activist HFs received 41% and Multi-strats received 47% of net new flows, respectively) despite collectively accounting for just over 10% of total Equity HF AUM. Activist, the strategy with the highest recent returns as described above, as well as Event Driven, which was the recipient of the third highest amount of net new flows, are strategies generally perceived as being less market dependent and more catalyst driven, which may explain why they were among the winners of net new flows. Investor sentiment may be changing though – Long / Short was the largest gainer in 1H14, winning ~33% of all net new flows to the Equity HF space.

7. Upside / downside capture in a period is a measure of an investment's compound return when the benchmark was up or down divided by the benchmark's compound return when the benchmark was up or down, respectively

V. Equity HFs' portfolio choices and their impact on performance

In order to get an understanding of the strategic choices Equity HFs have made that may have impacted their performance, we looked closely at return data across a large number of Equity HFs in addition to our interview / survey data. Novus, a service provider (unaffiliated with Barclays) that provides industry intelligence to institutional investors and asset managers, was generous enough to share with us specific analyses carried out on their HF database which consists of over 800 Equity HF managers. The total number of positions analyzed was over 100k in number and added up to about \$1.7tn of market value. The following sections highlight some of the key findings.

Portfolio construction and management – Position factors

An analysis of the returns of the HFs in the Novus sample is shown in Figure 15. Using the S&P 1500 as a benchmark, it is clear that the HFs in the sample had better returns over the last 10 years (+9.4% versus +7.7%) in the aggregate than the S&P, though they did have a slightly higher annualized standard deviation also (+16.5% versus +14.9%). Figure 15 shows that, when we categorize the holdings of these HFs based on a number of different factors, the results are quite insightful. For instance, when you look at just the investments that account for 5% or more of a manager's portfolio (i.e., 'conviction' positions) or investments where HFs have the highest proportion of a stock's outstanding shares (i.e., 'concentration'), both these types of positions significantly outperformed the S&P 1500 (>5% of annualized alpha in both cases). On the other hand, the most popular investments among

FIGURE 15: Portfolio Construction and Mgmt – Positioning

Indices	Description	Returns since 1Q04 ¹	Annualized Return	Cumulative Alpha ²	Annualized Alpha	Annualized SD	
S&P 1500	Covers approximately 90% of the US equity market	111.2%	7.7%			14.9%	
HFU	Hedge Fund Universe: 830 HF Mgrs that invest in >120k positions collectively, market value weighted	147.3%	9.4%	36.1%	1.7%	16.5%	
'Core' Positions	Conviction	Stocks that account for 5% or more of a manager's portfolio	250.0%	13.2%	138.8%	5.5%	14.4%
	Concentration	Stocks with the highest aggregate % of shares outstanding for each specific security among hedge funds ³	262.7%	13.6%	151.4%	5.9%	23.3%
	Size	Stocks with the largest aggregate holding value / allocation size invested	136.5%	8.9%	25.3%	1.2%	16.3%
	Consensus	Stocks with the highest participation among all the selected hedge fund managers (i.e., most frequently bought names)	60.1%	4.8%	-51.1%	-2.9%	16.1%

Source: Novus; 1. Data is from January 2004 through May 16, 2014; 2. Alpha is calculated as the difference between the HF index and the S&P 1500; 3. Also called HF interest. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance

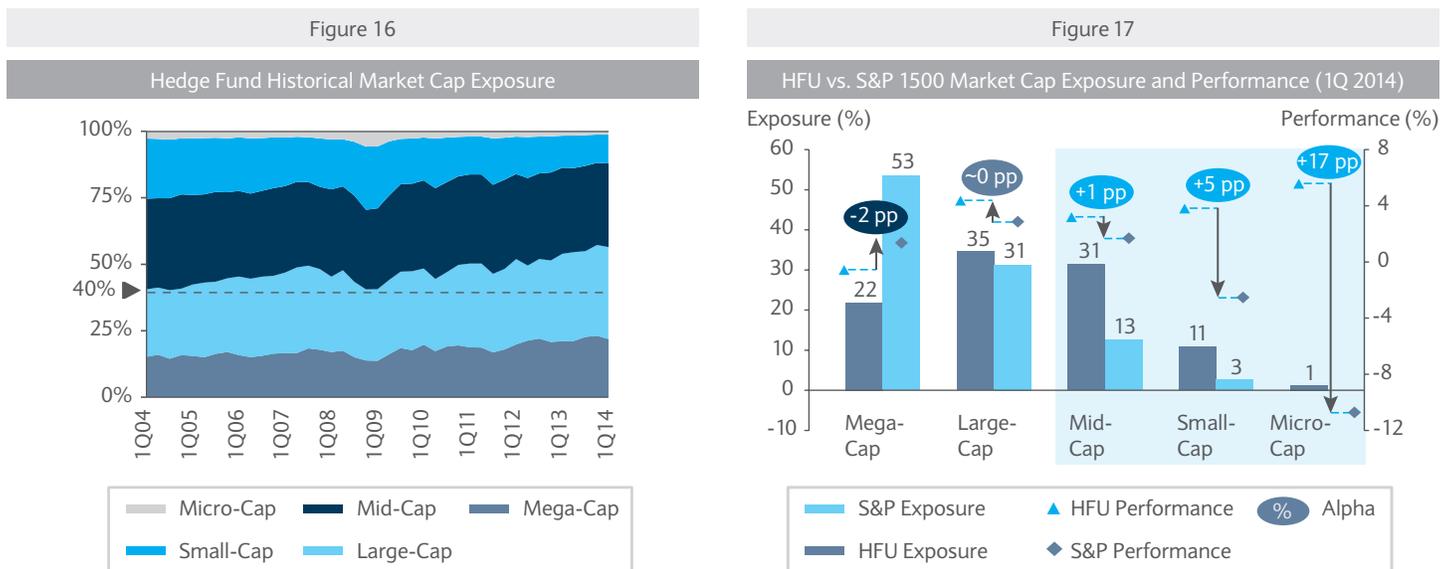
the HF managers in the sample (i.e., 'consensus' positions) and the largest overall investments (i.e., 'size' positions) for these managers either only achieved parity with or underperformed relative to the S&P 1500, while having a slightly higher annualized standard deviation in both cases. This suggests that HF managers have benefited from taking positions based on their fundamental research and have been penalized for groupthink.

Market cap of holdings

Another factor we looked at was how the distribution of market cap of the stocks in HF managers' portfolios has potentially had an impact on Equity HF performance. Figure 16 shows the distribution of HF managers' holdings by market cap. In

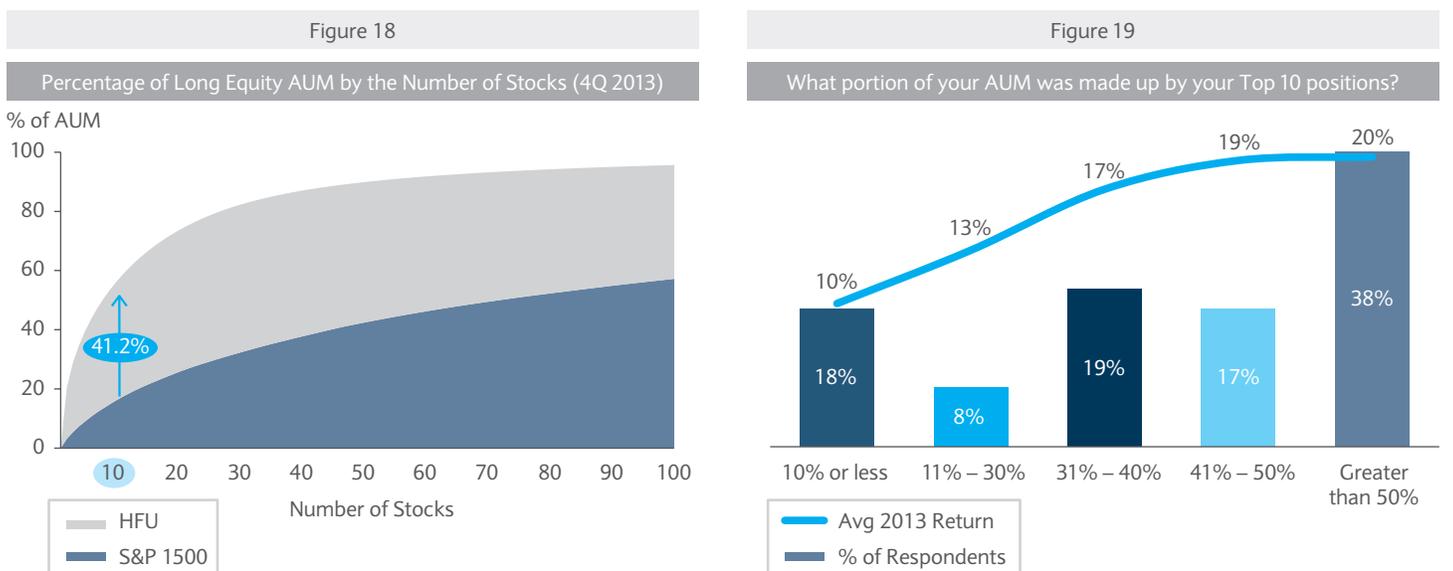
2004, large and mega cap stocks represented only 40% of HF investments in the Novus database. This proportion has gradually increased to about 57% today. This is possibly because many Equity HFs have grown significantly in size, and investing in small cap stocks may be increasingly difficult for them. The difficulty that these HF managers and their investors could potentially face down the road unfortunately is that, as Figure 17 shows, at least in Q1 2014, the same HFs generated most of their alpha from their investments in micro and small cap stocks, and not from their larger cap holdings. If this continues to hold going forward, the trend toward holding larger cap stocks may be detrimental to Equity HF performance in the future.

FIGURE 16 and FIGURE 17: Portfolio Construction and Management – Market Cap



Source Novus, Strategic Consulting Analysis; Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance

FIGURE 18 and FIGURE 19: Portfolio Construction and Management – Concentration



Source: Survey analysis, Barclays Strategic Consulting; Novus

Concentration of top positions

Just as there was a skew in the positions held by HFs in the Novus database toward smaller cap stocks relative to the S&P 1500, Figure 18 shows that these HFs also tended to hold more concentrated positions relative to the S&P 1500. While this conclusion might seem trivial, we found that HFs in the Novus sample had almost 60% of their Long Equity AUM concentrated in their Top 10 positions, whereas the S&P had far less concentration (at less than 20% – a difference of more than 40 percentage points). An analysis of the concentration levels and returns of the hedge funds in our sample shows that, at least for this group, the HFs with higher concentration levels among their Top 10 positions had the highest levels of returns (see Figure 19). In fact, the group that had 50% or more of their long AUM concentrated within their Top 10 positions had twice the return of those that had 10% or less (i.e., 20% versus 10%, respectively). Although this seemingly goes against the mantra of diversification, the hedge funds we interviewed indicated they have robust risk management systems in place to help protect against potential downside losses should their top positions start to go south. It is also worth acknowledging that market conditions recently (i.e., in 2013) may have been particularly conducive to more concentration of positions being rewarded by the market.

Stop loss impact on returns

Another factor we wanted to examine was the potential impact on returns of using a strict stop loss methodology. In Figure 20, we show the distribution of managers in our sample, based on whether and how they use stop loss methodologies (horizontal axis) as well as their 2013 returns (vertical axis). The chart

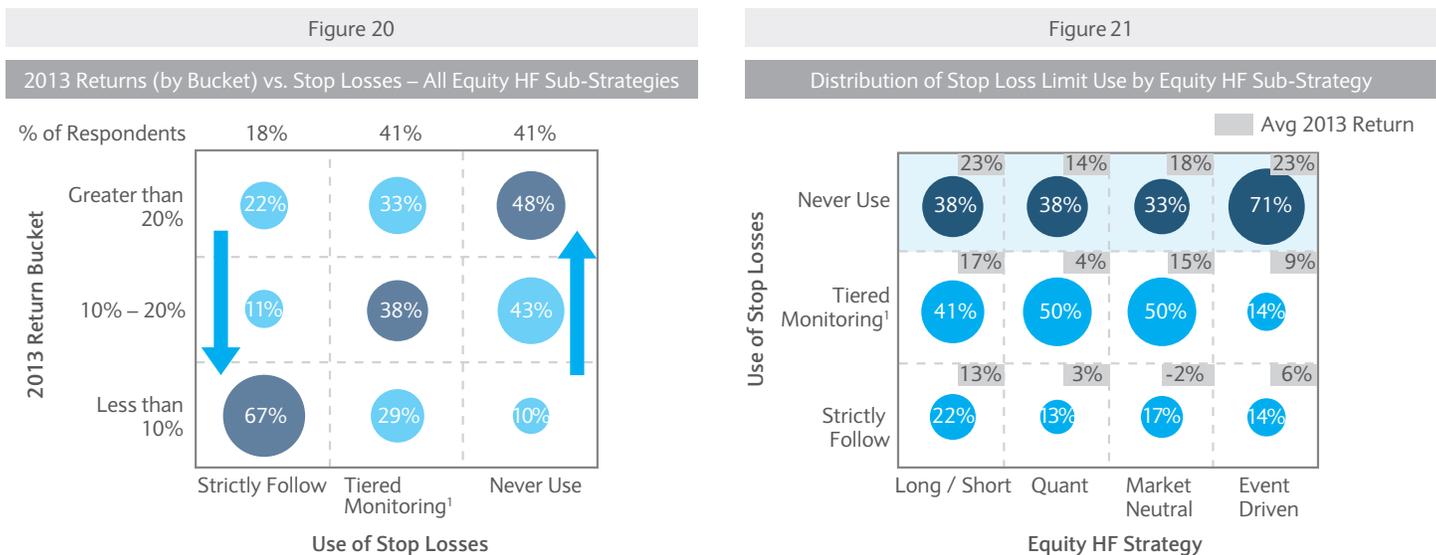
shows that less than 20% of the HFs in our sample indicated that they follow a strict stop loss methodology⁸ while the remainder were equally split between those that do some type of tiered monitoring (i.e., monitor and reevaluate positions as each stop loss level is breached) and those that do not use stop losses to monitor their positions. The chart also shows that the respondents that either used tiered monitoring⁹ or never used stop losses actually performed better in 2013 relative to those HFs that strictly followed stop loss protocols. Looking at just the respondents that never used stop losses, the largest percentage of these managers had better than 20% average returns in 2013, whereas the largest segment among HFs in our sample that strictly use stop losses had less than 10% returns on average in 2013.

Figure 21 shows the adoption of stop loss methodologies by sub-strategy among the Equity HFs in our sample, along with their average 2013 returns. It is interesting that the average returns in 2013 of HFs in our sample went up significantly as we went from managers that strictly follow stop loss methodologies, to those that prefer tiered monitoring, ending with the highest average returns accruing to those managers that never use stop losses – for instance, the range of performance improvement from ‘tiered monitoring’ to ‘never use’ was +20 percentage points for Market Neutral HFs. It is interesting to note that the distribution of respondents by their use of stop losses was relatively consistent across Long / Short, Quant, and Market Neutral, while Event Driven was a significant outlier. Among these managers, 71% are more likely to never use stop losses than use either tiered monitoring (14%) or to strictly follow stop losses (14%).

8. A stop loss limit is designed to limit an investor’s loss on a position in a security when a threshold is breached

9. Tiered monitoring refers to establishing different levels of manager attention for tiers based on cascading levels of loss

FIGURE 20 and FIGURE 21: Portfolio Construction and Management – Stop Losses



Source: Strategic Consulting Analysis based on survey / interviews conducted during Q2 2014, Barclays Strategic Consulting. Any past or simulated past performance (including back-testing) contained herein is no indication as to future performance; 1. Tiered monitoring refers to managers that establish tiers for the amount of loss that require different levels of attention as each is breached

VI. Investor sentiment

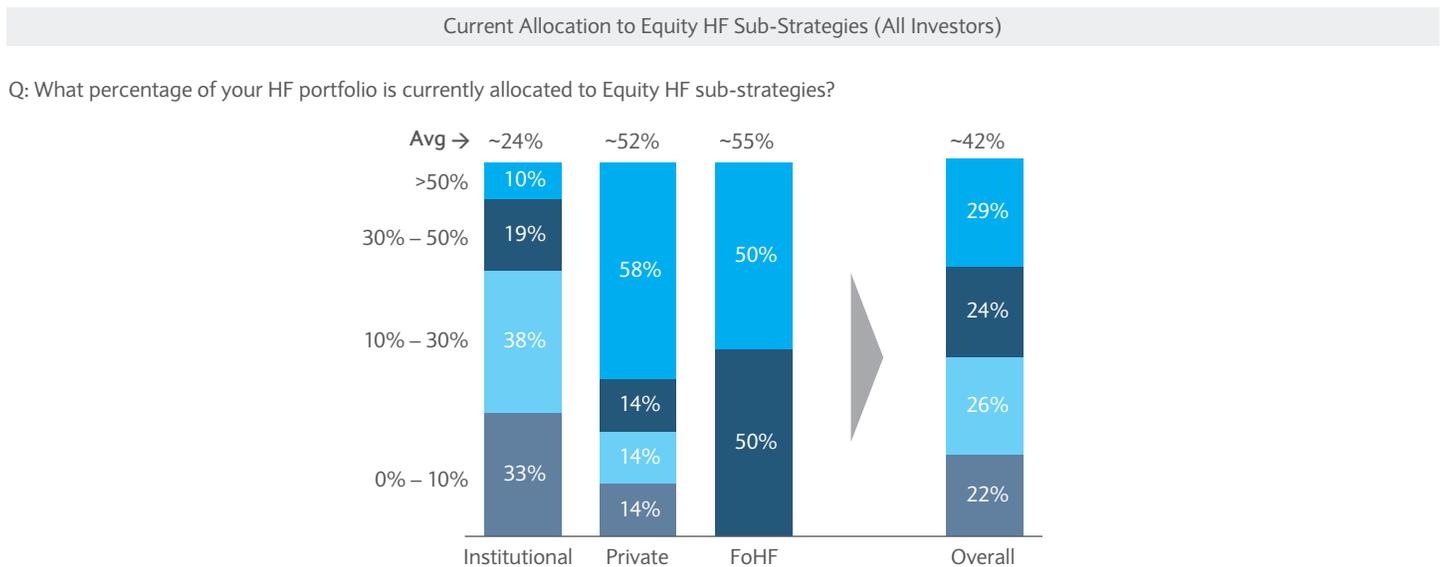
In the final section of this study, we tried to assess investor sentiment toward Equity HF over the next six to 12 months. Based on our survey / interview of investors, we highlight in the next couple of pages our expectations for how investor allocations to Equity HFs might evolve over the next several months.

Investors' current allocation to Equity HFs

As Figure 22 shows, we start by examining investors' portfolios to gauge their current allocation to Equity HFs as a percentage of their overall HF portfolios. As the chart shows, in our sample the average allocation to Equity HFs across all investor types was ~42%, which is bit less than the percentage of HF industry AUM

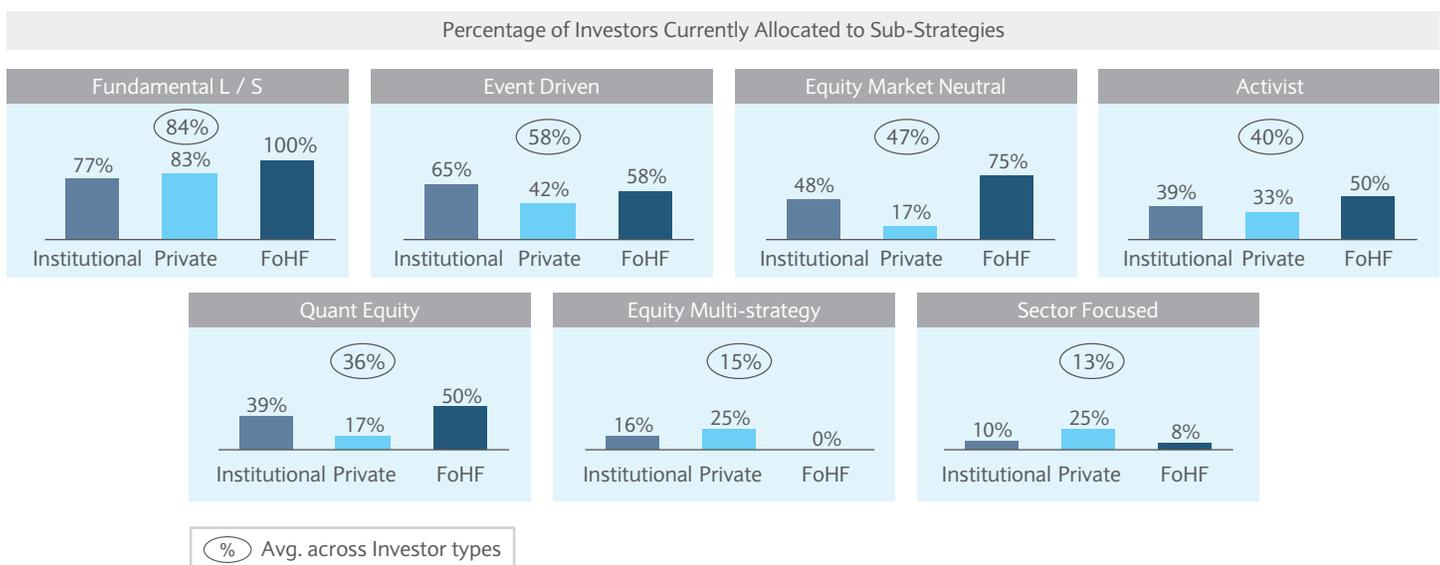
represented by Equity HFs. Private investors (Family Offices and Private Banks) and FoHFs tend to be the most aggressive in their Equity HF allocations, with on average >50% allocated to Equity HF strategies, while institutional investors appear to be most conservative with an average ~24% allocation. This suggests that private investors and FoHFs both have a higher risk appetite and / or are looking for greater exposure to growth factors relative to institutional investors. Among the institutional investor group, E / Fs and Pensions indicated they have the least allocated to Equity HFs, with averages of ~13% and ~20% of their HF portfolios, respectively.

FIGURE 22: Investors' Current Allocation to Equity HFs



Source: Strategic Consulting Analysis based on survey / interviews conducted during Q2 2014

FIGURE 23: Investors Allocated to Equity HFs by Sub-Strategy



Source: Strategic Consulting Analysis based on survey / interviews conducted during Q2 2014

Investors' current allocation to Equity HFs by sub-strategy

Taking a more granular look at the allocations to the various Equity HF sub-strategies, Figure 23 shows that our respondents were most often allocated to Fundamental L / S strategies (~84%), followed by Event Driven strategies (58%), and then Equity Market Neutral strategies (47%), which round out the top three most allocated to sub-strategies. The significant lead enjoyed by Fundamental L / S may be explained by the fact that it was one of the earliest strategies offered by HFs and one that continues to be a mainstay within many investors' HF portfolios. Among institutional investors, Pensions tend to favor Equity Market Neutral strategies (71% are currently allocated), followed by Fundamental L / S and Event Driven strategies (both with 65%).

Equity HF performance relative to expectations

We then asked investors about their assessment of the performance of Equity HFs in their portfolios relative to their own expectations – a key driver of HF demand. As Figure 24 illustrates, almost all investors (~96% of respondents) felt that their Equity HF managers performed in line with or better than their expectations in 2013. While this is a highly positive review of Equity HFs, it may seem fitting given the major equity market rally in 2013, which may have helped Equity HFs perform more than twice as well as non-Equity HFs in 2013 (~12% versus ~5%). The underperformance of Equity HFs, in general, relative to the broader equity markets also may not pose a challenge to sophisticated investors as this would align with their expectations regarding how HFs perform during market rallies.

FoHFs were the most satisfied with the performance of their Equity HFs (~67% said performance was better than expectations), followed by Private (~57%) and Institutional investors (~46%). This may be because, as previously mentioned, FoHFs and Private investors are more comfortable with higher risk

/ growth exposure in their portfolios, as well as their potentially more realistic expectations regarding HF performance during market rallies.

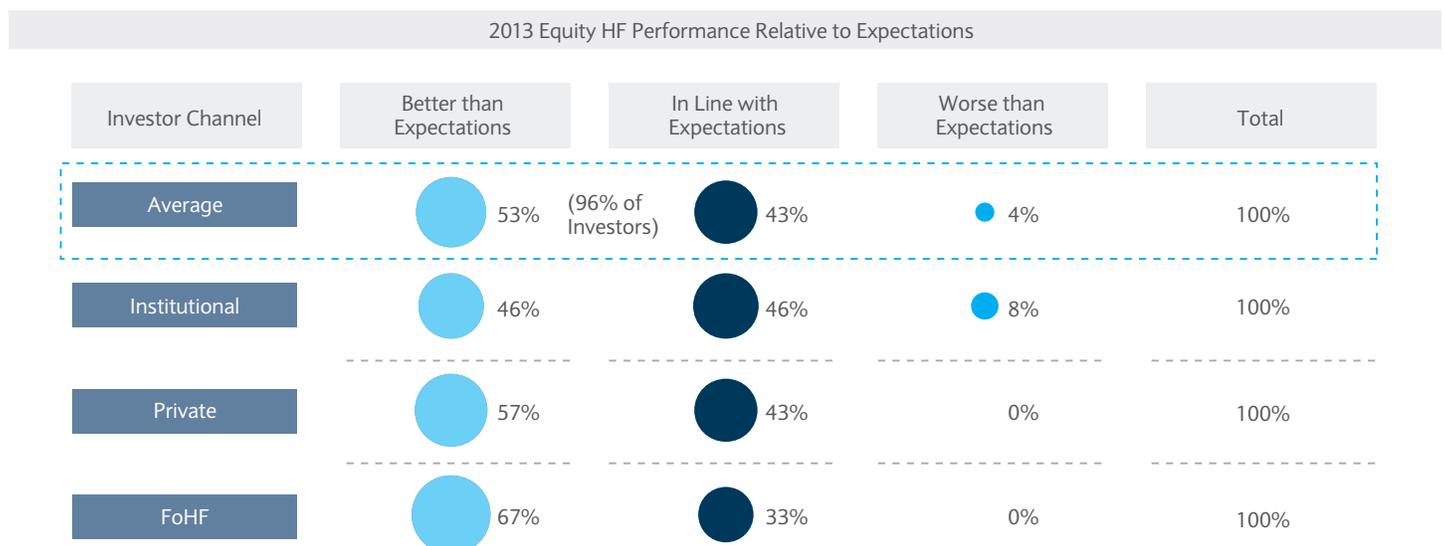
Among Institutional investors, Pensions were the most satisfied (67% said performance was better than expectations). However, Pensions were also the only investor type where some of them felt that Equity HFs had performed worse than expectations. This suggests that different Pensions may have differing expectations regarding the role that Equity HFs are expected to play in their portfolios.

Expected changes to equity HF allocation

When asked about their plans regarding changing Equity HF allocations, although ~96% of respondents had stated before that their Equity HF portfolio performed in line with or better than expectations in 2013, a majority of investors in our sample (~64%) said they do not plan on changing their Equity HF allocation over the next 12 months, as shown Figure 25. For instance, within the different investor channels, ~73% of Institutional investors and ~60% of Private investors do not plan on changing their Equity HF allocations. Many Institutional investors, particularly Pensions, noted in interviews that they felt that they were already fully allocated to equities and did not want to further increase equity exposure and / or volatility in the overall portfolio. Some investors also had the view that they were unsure when the equity market rally would end and thus were not yet ready to take a directional view at the time we spoke with them regarding any adjustments to their exposure.

However, some investors are still bullish on the space, as ~32% of our respondents indicated that they plan to increase allocations to Equity HFs over the next 12 months, while only ~4.5% plan to decrease them, representing a ~7x difference between these views. All FoHFs indicated they would increase allocations, indicating again that they are most likely the investor group most bullish on the space.

FIGURE 24: Equity HF Performance Relative to Expectations



Source: Strategic Consulting Analysis based on survey / interviews conducted during Q2 2014

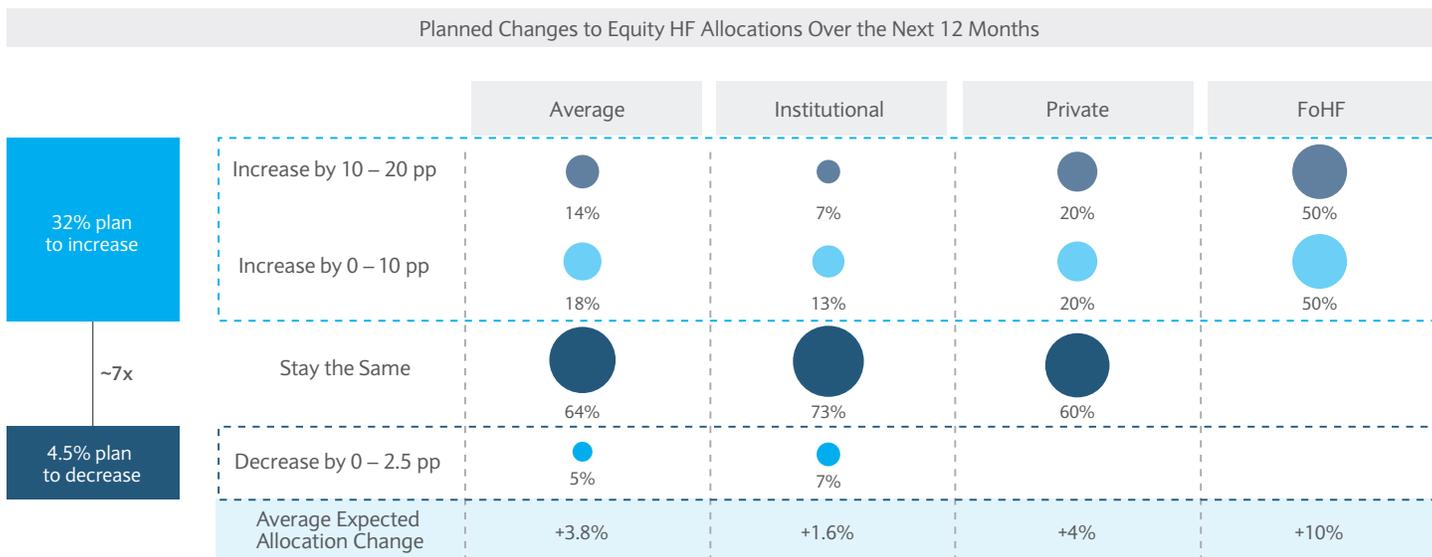
Potential investor adjustments by Equity HF sub-strategy

For the ~36% of investors who intend to change their Equity HF allocations, we probed further to understand which sub-strategies were most likely to see allocations versus redemptions. In Figure 26, we show that the most in-favor Equity HF sub-strategies over the next 12 months are projected to be Event Driven, followed by Activist and Equity Market Neutral, with broad interest in these strategies coming from all three main investor types. This represents a shift in sentiment from our 2014 Outlook piece, 'Waiting to Exhale,' (published in January 2014), in which the most preferred strategy appeared to be Fundamental L / S, followed by Event Driven. The main reasons investors gave for this

shift include a good opportunity set for Event Driven strategies (given the pickup in global M&A activity, a shift in investor focus toward catalyst-driven / market neutral strategies after the recent strong equity rally, and a preference for more concentrated strategies like Activist versus traditional L / S strategies).

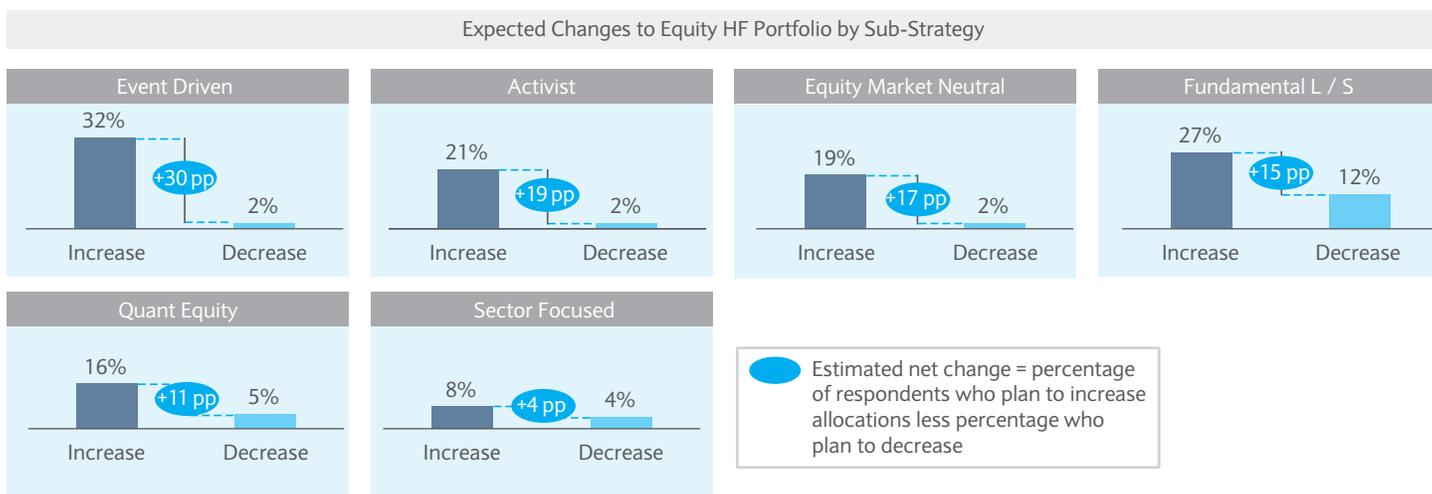
The sub-strategies that appear most likely to be out of favor in the coming months are Sector Focused followed by Quant Equity. Some investors in our sample said they did not want to take sector views and preferred a broader investment mandate when it came to L / S strategies. For Quant Equity, some investors were unhappy with recent performance, while others have never embraced quantitative HF strategies.

FIGURE 25: Expected Changes to Equity HF Allocation



Source: Strategic Consulting Analysis based on survey / interviews conducted during Q2 2014

FIGURE 26: Allocation Changes by Equity HF Sub-Strategy



Source: Strategic Consulting Analysis based on survey / interviews conducted during Q2 2014

Investor views on equity-oriented '40 Act funds

As discussed earlier, '40 Act products managed by Equity HFs have become one of the most talked about topics in the industry recently. We spoke to investors about their current approach toward these products. Figure 27 shows that ~46% of all investors are concerned with or disapprove of HFs managing '40 Act Equity products, whereas only ~12% indicated an interest in potentially allocating to them, representing a ~4x difference between these views. Additionally, none of the institutional investors we spoke with indicated an interest in potentially allocating to these products. Even a significant percentage of FoHFs in our sample expressed concern / disapproval regarding these products. This is surprising given that FoHFs are at the forefront of championing these products in general. Our explanation of this counterintuitive result is that the FoHFs in our sample disproportionately represent skeptics among their peers. The investor quotes in Figure 28 illustrate some of the main reasons for these opposing views. For those investors concerned about the space, the main challenge appears to be the perception that '40 Act products may be an asset-gathering scheme that can potentially distract managers from focusing on the core HF product.

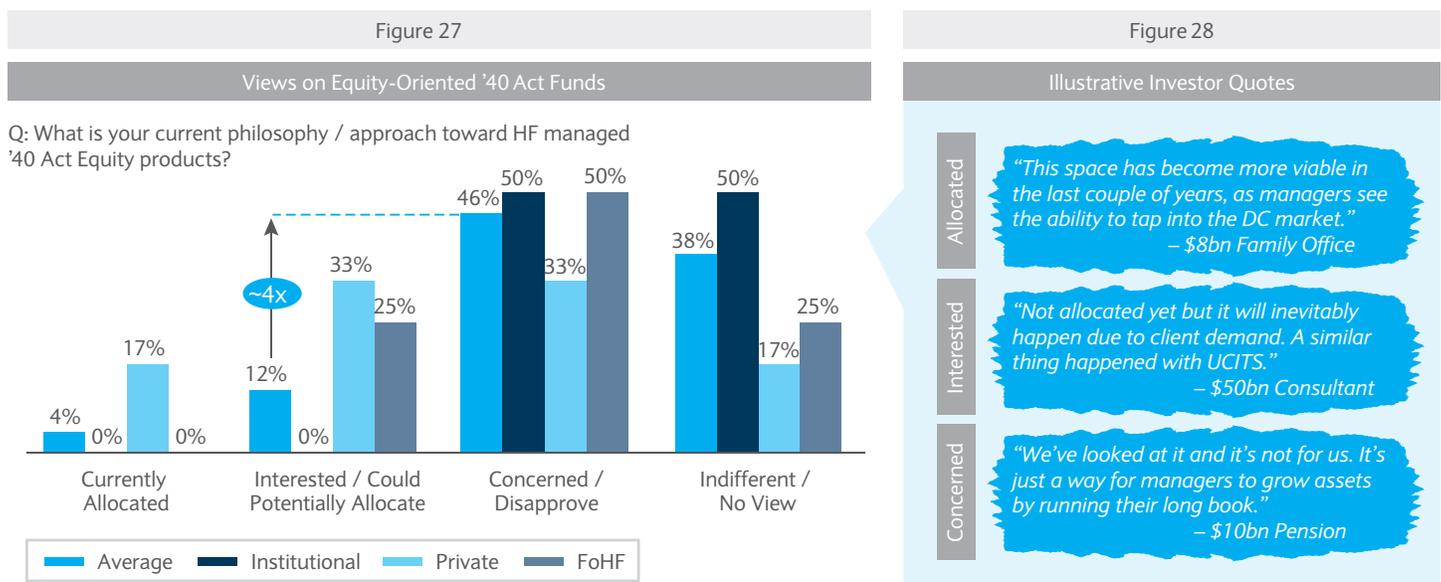
We also found it interesting that ~48% of investors in our sample said they were indifferent to or had no view on these products, which means nearly half of the investors in our sample are either unconcerned about the space or do not feel that they understand it well enough yet to have a view. Only ~4% of our total sample, all of whom are Family Offices, are investors with current allocations to '40 Act Equity products. These trends suggest that managers thinking about entering this space may want to come to grips with their investors' concerns highlighted here, as well as keep in mind that only a small portion of investors, primarily private, are interested in allocating to these products.

VII. Conclusions

Current Equity HF landscape

- Growth has been faster for Equity HFs than non-Equity HFs in recent years, reversing the previous trend.
 - Equity HFs make up ~48% of the current HF industry by AUM, up from ~45% in 2012.
 - From 2013 through 1Q14, Equity HFs received ~2x the amount of net new flows as non-Equity HFs, which coincides with Equity HFs performing 3x better than non-Equity HFs (i.e., 12% versus 4%), likely reflecting a change in sentiment on the part of investors.
- Performance of Equity HFs has been impacted by the broader market environment in a variety of ways. While returns have been impacted by beta, Equity HFs overall are still able to generate alpha.
 - Historically, Equity HFs have outperformed the S&P 500 and (Barclays Ag. Index) when the indices have had low to moderate returns.
 - Recent years have been challenging because of the S&P 500 rally, and low levels of volatility and dispersion.
 - Generally, Equity HFs have captured more of the upside but also more of the downside relative to the S&P 500 since 2007.
 - Although Equity HFs have had their returns boosted by beta to the S&P, they still generated alpha overall.
- Across the various Equity HF sub-strategies, performance and flows have been relatively disparate.
 - Since 2008, Activist and Equity Multi-strategy managers have seen their AUM grow the most.
 - Activist, Sector Focused, and Event Driven managers have had the best annualized returns since 2007.

FIGURE 27 and FIGURE 28: Investor Views on Equity-Oriented '40 Act Funds



Source: Strategic Consulting Analysis based on survey / interviews conducted during Q2 2014

Strategic takeaways for managers / investors

1. Focused investment has provided significantly more alpha.
 - a. Core positions where managers showed the most ‘conviction’ (e.g., have more than 5% of their assets invested in one position) or ‘concentration’ (e.g., stocks where HFs own a high percentage of shares outstanding) generated more alpha compared to other positions.
 - b. Managers generated more alpha from smaller market cap positions.
 - However, the average market cap exposure of Equity HF managers has increased over the last five years, due in large part to the increasing size of Equity HFs.
 - Consequently, higher portfolio allocations to larger cap stocks could potentially hurt future HF returns.
2. Event Driven and Activist HFs will likely be the most ‘in favor’ strategies over the next year, which could further diminish interest in traditional L / S HFs (already, L / S has gone from accounting for 50% of Equity HF AUM in 2008 to 43% in 1Q14).
 - a. Investor respondents are currently most often allocated to Fundamental L / S, followed by Event Driven and Equity Market Neutral.
 - b. Going forward, we expect Event Driven and Activist to receive the most net new flows – highlighting investor preference for more opportunistic / concentrated / catalyst-driven strategies.
3. Managers and investors seem to have differing views of the liquid alternatives market.
 - a. While about half of manager respondents said they would consider offering a ‘40 Act product, only 16% of investor respondents are currently allocated or interested in allocating to these products; half of investors we surveyed were concerned / disapprove of the space.
 - b. Managers thinking about offering ‘40 Act products may want to address investors’ concerns first.

VIII. Capital Solutions

The Capital Solutions team within Prime Services offers a unique blend of industry insights and tailored client solutions for a broad range of issues.

Capital Introductions

- Maintaining investor dialogue to provide valuable feedback to HF managers.
- Introducing HF managers to a select number of interested investors.
- Hosting events that provide a forum for knowledge transfer and discussion / debate on industry issues that helps educate and inform both clients and investors.

Strategic Consulting

- Development of industry-leading content, driven by primary analysis, on the HF industry and its participants (e.g., HF and FoHF managers, institutional investors, investment consultants).
- Provision of management consulting services to HFs and asset managers on business topics such as the launch of a new strategy, marketing effectiveness, product development and organizational efficiency.
- Acting as an HF competence center internally for Barclays.

Contacts

Louis Molinari

Managing Director, Global Head of Capital Solutions
louis.molinari@barclays.com | +1 212 526 0742

Ermanno Dal Pont

Director, Head of Capital Solutions Europe
ermanno.dalpont@barclays.com | +44 20 3134 8649

Roark Stahler

Director
roark.stahler@barclays.com | +1 212 526 9065

Freddie Parker

Analyst
freddie.parker@barclays.com | + 44 20 3134 5132

Anurag Bhardwaj, CFA

Managing Director, Global Head of Strategic Consulting
anurag.bhardwaj@barclays.com | +1 212 526 5766

Shelly Li

Director
shelly.li@barclays.com | +1 212 526 7657

Shagufah Nazaar

Vice President
shagufah.nazaar@barclays.com | +1 212 528 6348

Jennifer Bai

Analyst
jennifer.bai@barclays.com | +1 212 526 4655

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