

Single Manager vs. Multi-Manager Alternative Investment Funds

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Since the global financial crisis, many financial advisors and their clients have concluded that their portfolios have less downside protection and perhaps more risk than anticipated during periods of market stress. This has led many investors to embrace more sophisticated alternative investment strategies.

One important decision when considering alternative investments is whether to use single manager or multi-manager funds. In this white paper, we will discuss the relative benefits and drawbacks of each type of fund.

Historically, alternative investment strategies (including hedge funds, managed futures and real estate) were only available to institutional and select high net worth investors. Today, these alternative strategies are increasingly available to financial advisors and investors through a multitude of vehicles including mutual funds, closed-end funds and ETFs.

We believe this democratization is a positive development. However, investors that are new to alternative investments may have important questions as to which of the many available types of funds are most suitable for their needs.

Single manager funds may better suit larger investors that are capable of performing due diligence and are qualified to invest in the broad universe of privately offered hedge funds or managed futures funds. However, multi-manager funds may be the preferred option for smaller investors who do not have the resources to do their own due diligence and may not qualify for investing directly in privately offered funds.

Single Manager Funds



- Access to one alternative investment manager or trading advisor
- Often implement one core investment strategy
- Subject to cycles of relative outperformance and underperformance
- Some individual managers operate multiple strategies within a single investment program

Multi-Manager Funds



- · Managed by "fund of funds" (FoF) firms
- Portfolios consist of multiple underlying managers or trading advisors
- Seek diversification across investment strategies and managers or trading advisors
- Greater diversification may lead to more stable performance over market cycles compared to single manager funds
- May be more expensive than single manager funds; fund of funds firms receive an advisory fee for providing manager selection, due diligence, portfolio construction and risk monitoring

Multi-Manager Approach May Mitigate Dispersion Risk

The performance range among alternative investment managers is typically larger than what one sees in traditional investments as shown below. This high dispersion in performance creates a risk for investors allocating to a single manager

fund. While there is a chance that a given individual manager performs better than average, there is also a meaningful chance that a manager performs below average.

Study of Single Manager Return Dispersion

As of December 31, 2012 | Based on 10-Year Average Annual Compound Returns



Source: Hedge Funds: Cambridge Associates LLC, August 2013

The chart above does not reflect Fund performance, it reflects percentile rankings. Due to market fluctuations, return data will vary. Percentile rankings are based on a scale of 0–100, where 0 represents the highest value and 100 the lowest. Data are based on managers with a minimum of \$50 million in assets. Absolute return includes multi-strategy, event-driven, general arbitrage, and credit opportunities. For absolute return and hedge funds, returns are reported net of fees. For other strategies, Cambridge has subtracted a fee proxy from returns reported gross of fees as follows: US core / core plus bonds, 33 basis points (bps); emerging markets equity, 98 bps; US large cap, 69 bps; US small cap, 93 bps; and global ex US equity, 80 bps. Managers for which product asset data were unavailable were excluded. All of the manager universes have survivorship bias, so while the distribution may include better performance, the comparison across strategies is valid.

This dispersion risk is apparent even when the analysis is narrowed down to managers within a specific alternative strategy, such as managed futures. The chart below shows that the average yearly dispersion between a top quartile manager and a bottom quartile manager in the managed futures space averaged 30% between 2005 and 2014. This dispersion risk was highest

(52%) during the 2008 financial crisis, when investors relied heavily on potential gains in their managed futures investments to offset losses elsewhere. This shows that there is a real risk that investors could make the right call in their strategy allocation, but suffer the consequences of an ill-timed single manager fund choice.

High Dispersion Risk in Single Manager Programs Median Performance of Top & Bottom Quartile CTAs 50% Barclav CTA Universe | 2005-2014 Median Bottom Quartile Performer 40% 2008 Median Top Quartile Performer Spread = 52% 30% 20% 10% 0% -10% -20% 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Source: Steben & Company, HFR, Inc.

Dispersion risk would not be such a challenge for investors in single manager funds if manager performance rankings were relatively stable from year to year. But they are not. In fact, in managed futures, the table below shows that a top quartile performer one year has almost the same chance of falling into the bottom quartile in the subsequent year as they have of staying in the top quartile. This lack of persistence in the relative performance of managers means that dispersion risk remains, even when investing with a manager that was a top performer in the prior year.

What Happens to Top Quartile Performers in the Following Year

Barclay CTA Universe | 2005-2014

Remain in	Move to Second	Move to Third	Move to Bottom	Leave Barclay
Top Quartile	Quartile	Quartile	Quartile	Database
27%	21%	16%	26%	10%

- Single manager dispersion risk may not be mitigated by simply picking winners from the previous year.
- Past top quartile performers are as likely to move to the bottom quartile as they are to stay
 in the top quartile.
- A multi-manager fund may help mitigate this risk.

A solution to dispersion and manager selection risk is for a fund to allocate its assets to a mix of different managers, so that diversification reduces the likelihood of extreme positive or negative performance compared to the average for the strategy. With a number of managers in a fund, it is likely some will outperform while others underperform the average. This results in a more steady return than a single manager fund.

Beware of Over-Diversification

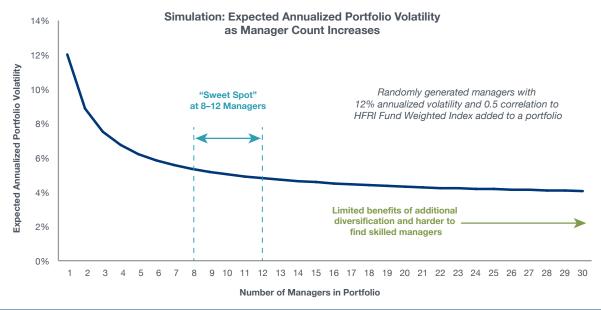
Multi-manager funds have a clear advantage over single manager funds when it comes to diversification. However, there can be a limit to the benefits realized from additional diversification in the portfolio.

As shown below, when more managers are added within a multi-manager fund, volatility does continue to come down, but at a diminishing rate. However, investors care about more than just volatility. They also want a good chance of making a high return on their investment. This is where the risk of over-diversification comes in. Typically the first few managers that are added to a multi-manager fund are the highest conviction, which the fund of funds firm thinks will offer the best chance of achieving high risk-adjusted returns. However as more managers are added to the mix, they begin to add lower conviction managers with perhaps lower return expectations. These additional managers can add diversification, but at the potential cost of

reducing expected returns for the multi-manager fund as a whole.

Multi-manager portfolios can be diversified with as little as 3 to 5 managers in a single strategy fund and 8 to 12 managers in a multi-strategy fund if managers are carefully chosen to have low correlations with each other. More managers than that will still add modest diversification but, as illustrated in the chart below, if you include 20 or more managers, volatility reduction is minimal and you may begin to see performance degradation as a result of lower conviction managers being included. After all, it becomes increasingly difficult to beat an alternative investment strategy benchmark if you start to look like the benchmark as a result of the high manager count. We believe that portfolios consisting of a more limited number of high conviction managers strike the right balance between diversification and return generation.

Including More Than 20 Managers Adds Marginal Diversification Benefits But Risks Diluting Manager Quality



Source: Steben & Company, Inc., PerTrac

Note: The chart above is not an indication of the performance of any investment product.

Single Manager Funds May Target Narrow Investment Themes

Sometimes investors have a strong belief in a particular investment thesis. For example, they may think there will be trading opportunities in agricultural markets as a result of climate change. Those investors may be best served by investing in a single manager fund that focuses on that specific area, in this case agricultural stocks and commodity futures. In comparison, multi-manager

funds are generally built for diversification and rarely express just a single investment theme.

Single manager funds may provide investors with exposure to a high conviction investment thesis. This level of concentration is generally not available through multi-manager funds.

Multi-Manager Funds Access a Broader Universe of Managers

Multi-manager funds can include managers from a much larger universe than what is available to the average individual investor directly. This is because most privately offered hedge funds require investors to be "qualified purchasers" and privately offered managed futures funds require investors to be "accredited". Many individual investors do not meet these requirements. Furthermore, the minimum investment size for direct access to these single manager funds is often high, at \$1 million or more, making it infeasible for all but

the wealthiest individual investors to make an appropriately sized allocation. Smaller investors may only be able to access "liquid alternative" single manager funds, which represent just a small fraction of what is available in the privately offered fund world. In contrast, multi-manager funds, with their larger capital base, can generally access a broader range of manager talent, and make that access available in minimum investment sizes that suit smaller investors.

	Liquid Alternative Investment Funds	Hedge Funds (Private)
Number of Funds	621	10,149

Source: HFR, Inc. Q1 2015 Industry Report, Goldman Sachs

Lower Fees in Single Manager Funds

Single manager funds generally have lower fees than multi-manager funds. This is because the operator of the multi-manager fund charges an advisory fee in addition to the underlying managers' fees. The result is a higher performance hurdle that multi-manager funds must beat with gross performance or trading profits before the investor makes their profit. For cost conscious investors, this is an important issue to consider.

Among alternative investment funds that pay incentive fees on trading profits, multi-manager funds are also at a subtle disadvantage in being subject to "netting risk". This is defined as the risk that an incentive fee would be paid to any individually profitable managers even if the overall portfolio makes a net trading loss. Single manager funds typically do not have this "netting risk", since incentive fees are only charged if the single manager is profitable.

Due Diligence and the Added Value of Fund of Funds Firms

Alternative investment strategies are typically less constrained in their risk taking than traditional investments, and different managers and funds can take very different risks. This includes varying degrees of market risk, factor risk, illiquidity risk, concentration risk, option risk and leverage risk. It is thus critically important for investment due diligence and risk monitoring to be done on managers. Operational due diligence also needs to be performed on each manager's back and middle office functions, since many manager failures have arisen from operational rather than investment weaknesses. Fund of funds firms typically have analysts with expertise and experience in evaluating these risks. Individual investors may lack this expertise or find it too arduous and time consuming.

The fund of funds firm is also active in portfolio construction: selecting managers, weighting them

appropriately and replacing them with new managers if deemed appropriate. In addition, fund of funds firms make strategic or tactical decisions for strategy weightings and overall leverage. This is all part of the value proposition of the multimanager fund that helps to justify higher fees. For investors allocating to single manager funds, the burden of oversight is taken on directly.

A core function of fund of funds firms is to perform due diligence and monitoring, which may be too costly or beyond the expertise of the individual investor. This consideration may trump the ostensible fee savings of investing in single manager funds.

Summary

Single manager and multi-manager funds each have characteristics that appeal to different investors. Single manager funds may better suit large investors who have the resources to do their own due diligence, who qualify to invest in the broad universe of privately offered hedge funds or managed futures funds, and who have the capital to diversify themselves by allocating to several individual managers. Single manager funds may also suit investors who are cost conscious or want to invest in a specific theme. However, for many investors, particularly smaller investors who do not

have the expertise or resources to do their own due diligence, multi-manager funds may be the preferred option.

Multi-manager funds seek to provide diversification for a low minimum investment and may offer access to managers who are unavailable directly in single manager funds.

In summary, the significant differences between single manager and multi-manager funds are highlighted below.

Single Manager Funds Lower fees

No netting risk
Target narrow investment themes (concentration)

Multi-Manager Funds

Diversification
Reduced dispersion risk
Possible over-diversification
Access to a broader universe of managers
Specialized due diligence and risk monitoring
Portfolio construction, manager hiring/firing

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RISK CONSIDERATIONS: Managed futures, hedge funds, and funds of hedge funds and other alternative investments are not suitable for all investors. Their investment programs are speculative and performance can be volatile. An investor could lose all or a substantial amount of their investment. They involve a high degree of risk and often engage in leveraging and other

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

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

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

For more information and insight on alternative investments, please visit

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