

2

#### Investors Enthusiastic About Alternatives but No Longer Giddy

A closer look at Morningstar's 2011 alternatives survey.

6

#### **Quant Corner: How Normal Is Your Fund?**

Examining the non-normal characteristics of mutual fund and hedge fund returns.

10

### Morningstar Product Spotlight: Investor Return

Gauging the real investor experience in alternative funds.

13

#### **Industry Trends: Alternative Mutual Funds**

More multistrategy mutual fund solutions.

#### **Fund Reports**

- 14 Grant Park Managed Futures Strategy
- 16 QuantShares U.S. Market Neutral Momentum ETF
- 18 QuantShares U.S. Market Neutral Anti-Beta ETF
- 20 Ziegler Lotsoff Long/Short Credit Fund
- Quarterly Data Review: Q1 2012
- 29 Hedge Fund Database Overview



# Investors Enthusiastic About Alternatives but No Longer Giddy

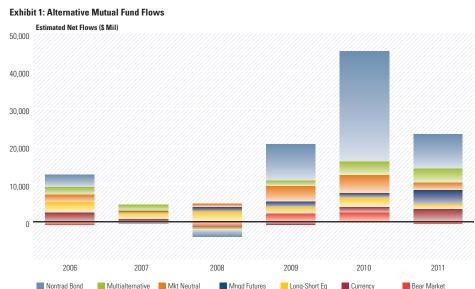
## A closer look at Morningstar's 2011 alternatives survey.

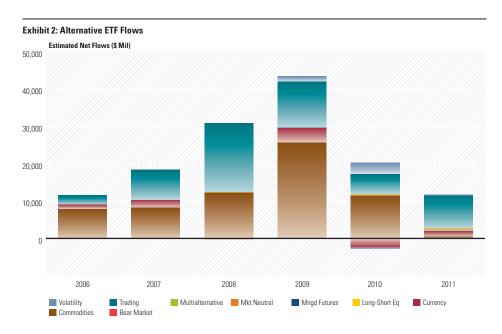


John Rekenthaler, CFA
Senior Vice President of Research

Advisors and institutional investors remain interested in alternative investments, but their fervor has cooled from the level of previous years, revealed *Morningstar and Barron's* 2011 Alternative Investment Survey of U.S. Institutions and Financial Advisors.

The survey, sixth in an annual series, examines investor attitudes toward a wide variety of alternative investments. It also measures cash flows into U.S. mutual funds and exchange-traded funds that follow alternative strategies. The figures show that after peaking at approximately \$45 billion in 2009 (for ETFs) and 2010 (for mutual funds), net inflows into alternative mutual funds and ETFs slid to \$23 billion and \$12 billion, respectively, in 2011. For ETFs, this figure matched what the industry managed in 2006 before entering into its boomlet. For mutual funds, the 2011 flows were still higher than in any preboom year. (See Exhibits 1 and 2.)





#### Following the Money

While disappointing when compared to the torrid rate of the previous two years, the inflows remain impressive by other measures. Total assets in mutual fund and ETF alternatives total approximately \$260 billion, so the 2011 inflows represent a healthy 13% of the area's accumulated assets. (See Exhibits 3 and 4.) And at least the figure is positive. In contrast, U.S. equity mutual funds suffered \$80 billion in net outflows on the year.

Mutual funds and ETFs compete directly in some market segments, but not with alternative investments. Last year, the vast majority of mutual-fund flows among alternatives went into nontraditional-bond, currency, and managed-future funds. However, among ETFs, only currency funds attracted assets, as nontraditional-bond and managed-future funds are typically actively managed and thus not structured as ETFs. The biggest seller among alternative ETFs

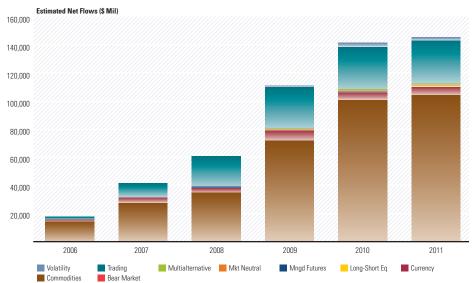
was what Morningstar calls "trading" funds—leveraged and inverse versions of market indexes. (See Exhibit 4.)

A similar pattern holds true for overall alternative fund assets. ETFs have the slightly larger market share, at just over \$140 billion. Of these monies, more than \$100 billion are in commodity funds (SPDR Gold Shares **GLD** held 65% of those assets), which investors backed away from last year but which were hugely popular in the preceding five years. (Even after being shunned in 2011, commodity funds make up almost 40% of all assets devoted to alternative mutual funds and ETFs.) Nearly everything else is in trading funds.

The allocation is very different with the \$120 billion devoted to alternative mutual funds. Nontraditional bond funds make up almost half of the assets, followed by long/short equity and market-neutral funds. A small but growing category of open-end alternatives consists of what Morningstar terms "multialternative" funds—that is, funds that attempt to offer a one-stop solution for alternative investing. These are often, but not always, organized as funds of funds.

#### **Exhibit 3: Alternative Mutual Fund Assets** Total Net Assets (\$ Mil) 140,000 120 000 100 000 80.000 60.000 40.000 20,000 2006\_12 2007\_12 2008-12 2009-12 2010-12 2011-12 Nontrad Bond Bear Market Multialternative Mkt Neutra Long-Short Eq Currency





#### To Be, or Not to Be, Alternative

Of course, this discussion of flows into alternative funds presupposes the definition of alternative—a moving target that is a constant source of debate. Although advisors and institutions as a whole answered the survey in much the same way, opinions differed sharply. Even though the 629 respondents were mostly likely to deem private equity, long/short equity, long/short debt, market-neutral, and managed-futures as being alternatives, those areas were not unanimously agreed upon, as indicated by 10%—15% of answers being either "not sure" or "no."

4

As evidenced by the above list, today's investors tend to define alternative investments as possessing one (or both) of two characteristics: illiquidity and long/short strategies. Examples of illiquidity include private equity, private real estate, distressed securities, private debt, collectibles, and infrastructure. Pretty much anything that was traded long/short met their approval, including equity, debt, futures, options, commodities, and currencies. Long-only commodity strategies, though, were still deemed alternative by a large group of institutional and advisor participants.

Other publicly traded, long-only strategies were consistently characterized as mainstream by the survey participants. The respondents felt that all varieties of foreign securities, including frontier markets, failed to qualify as alternative. TIPS, public real estate, commodity equities, and "go-anywhere" tactical-allocation funds were also nixed. The most controversial items were funds following 130/30 strategies and those employing leverage in a single direction. By a slim margin, those institutions surveyed felt that 130/30 funds were more alternative than leveraged funds, while advisors thought the opposite.

#### The Ebbing Flows

The decreased flow into alternative funds is consistent with the words of both advisors and institutions. When asked about their allocation to alternatives over the next five years, both parties backed away from their beliefs of the previous years. Among advisors, significantly more stated that they expected to see 1%–10% average annual growth in alternatives in their clients' portfolios, and fewer expected to see high growth rates of 21% or more. Indeed, the number of advisors forecasting the higher growth rates hit a four-year low, down from a peak of 23% in 2008 to 16% in the 2011 survey.

Institutions were asked a slightly different question about their plans for alternatives. Rather than the expected growth in alternatives, they were asked to forecast what their overall allocation would be five years out. Their answer was consistent with that of the advisors; that is, the institutions moved down from their more aggressive answers of the past toward more moderate ground. Whereas 36% of institutions in 2010 expected to invest more than one fourth of assets in alternatives, the figure dropped to 25% in the most recent survey.

While their definitions of alternatives and future investment plans are similar, advisors and institutions differ in their clients' current positioning. Institutions have a distinctly barbelled approach to alternatives. Half of all institutions have either a very large allocation in alternatives of more than 40%, or a negligible allocation of less than 5%. Clearly, there is a wide divergence of thought about alternatives in the institutional community. In contrast, the advisors answering the survey were of a like mind on the use of alternatives, with three fourths of them having moderate allocations ranging from 6% to 25%.

#### The Case for Alternatives

Both parties strongly concur that diversification is the most important attribute of alternatives. Almost 80% of respondents stated that diversification/low correlation is a critical reason to invest in alternatives. The next two most important rationales were to enhance the portfolio's risk-adjusted profile and to pursue absolute returns, with only 50%–60% of respondents agreeing, these items were clearly of lower priority than was diversification. The additional motivations of offering clients investments that they wouldn't find on their own, a poor outlook for the stock market (the so-called New Normal), and to enhance yield received paltry support.

In this instance at least, investors' actions matched their words. Whereas most early flows into alternatives funds went into categories that had moderately high correlations with the conventional stock market—that is, into long/ short equity funds, 130/30 investment strategies, and commodities that tended to rise in price as the global economic news improved—the 2011 flows found distinctly noncorrelated assets. Managed-futures and currency funds have highly idiosyncratic returns. And nontraditional bond funds, another 2011 winner in asset flows, typically carry the promise that they will outperform if other bond funds are hurt by rising interest rates.

Unusually, the flows came while the assets were performing poorly. All three categories of managed-futures, currency, and nontraditional bond funds saw losses last year, on average. For managed futures, 2011 was the second down year in three tries. Currency has fared even worse, finishing in the red in every calendar year since 2007. Typically, fund asset flows are positively correlated with intermediate-term performance, such that fund categories with good five-year numbers receive inflows, and those that have performed badly suffer redemptions. For the customary pattern to be strongly reversed suggests that investors are indeed buying alternatives for diversification rather than returns.

If they are selling them, the reasons primarily are cost and liquidity. Advisors and institutions agree that high fees and a lack of liquidity are the main drawbacks for alternative investments. That said, concern about liquidity has declined sharply since 2008, in part as memories of the 2008 lockups fade and in part because of the launch of so many easily traded mutual funds and ETFs. Nevertheless, liquidity remains one of two major drawbacks of alternatives in the eyes of the respondents.

Transparency also has slipped in importance, again due to the launch of so many publicly available funds. Institutions are more worried about transparency than are advisors, likely because institutions use more private funds, while advisors mostly usepublic mutual funds and ETFs.

The survey's institutions have only modest ability to negotiate price and liquidity terms with their alternative investments. After the 2008 market crash, the poor showing of hedge funds and the anger from investors who had been locked into declining assets led some to speculate that institutional investors would demand better terms from hedge funds in the future. That has not happened. By and large, the "2 and 20" pricing scheme remains intact, whereby hedge funds collect an annual management fee of 2% of assets and 20% of fund profits (usually over a hurdle rate). Institutions report that they can sometimes push the alternatives provider to get better liquidity terms, but only 22% of institutions were able to achieve even a single price concession. Advisors get neither.

#### **No Longer Succumbing to Gimmicks**

Only one third of the surveyed institutions report doing some form of tail-risk hedging, that is, explicitly structuring their portfolios to be protected against extreme market events. These strategies popped up post-2008, playing on investor's fears of a double-dip. Purchasing out-of-the-money puts was a popular option among those who proactively hedged tail risk; some also mentioned using volatility strategies. Most respondents, though, have not implemented tail-risk hedging due to cost concerns. The consensus believes that cash plus diversification should ease the effects of an extreme market event, and that any extra benefit from a tail-risk hedging

strategy would be fully consumed by the cost of implementation. Many also cited their clients' long time horizons as reasons not to spend on such a policy.

In summary, the sixth annual Morningstar Barron's Alternative Investment Survey of U.S. Institutions and Financial Advisors reveals that use of alternatives by institutions and advisors has moved into the second stage. The first stage was marked by rapid, enthusiastic adoption and the hope that portfolios that added alternatives would outgain portfolios that did not. (An example would be the 2007 adoption of 130/30 funds, which were sold to advisors explicitly on the promise of higher gains, not lower risk.) In contrast, the second stage swaps performance for diversification. Today's investors look to alternatives first and foremost to smooth portfolios, not to increase their returns.

## **Quant Corner: How Normal Is Your Fund?**

## Examining the non-normal characteristics of mutual fund and hedge fund returns.



by

Dario Castagna, CFA
Investment Consultant
Morningstar Investment Management

#### Introduction

Over the years, different practitioners and academics' studies have shown that the distribution of returns of most of the asset classes cannot be accurately described by the normal distribution and its parameters mean and variance. Much of the more recent research has therefore focused on developing more-robust portfolio optimization processes, which take into consideration other measures of risk. Xiong and Idzorek (2011), for example, found that mean-conditional value at risk optimization more adequately accounts for the "tail-risk" associated with traditional asset classes such as global high-yield bonds, commodities, and U.S. REITs than does mean-variance optimization.

Not as much research has been done on the distribution of returns of managers, however. While most institutional investors create a strategic asset allocation based on some form

of mean-variance optimization, which they generally review infrequently (every three to five years, for example), most institutions prefer to revisit their manager structure far more frequently (such as quarterly or annually). Even if institutions chose to incorporate the non-normality of the distribution of returns of many asset classes in their strategic asset allocation, they rarely do so in their manager selection.

The preferred scientific framework for combining investment managers into a portfolio to implement a target policy benchmark is best represented by the "manager structure optimization" procedure in Castille et al. (2000) and to a slightly lesser extent by Baierl and Chen (2000). Other names for a manager structure optimization include fund-of-funds optimization, alpha/tracking error optimization, and active return/active risk optimization. These powerful approaches still work best when the underlying managers' returns fit distributions that can be completely described by the first two moments (the mean and the variance). When the returns are skewed or fat-tailed, however, these optimized solutions can be suboptimal.

In this article we will examine the distributions of returns of open-end (mutual) funds and hedge funds to verify whether they can be described by the normal distribution.

Our hypothesis was that many could not for a

variety of reasons, although none of them would necessarily be sufficient a priori. First, institutions seek active managers who add alpha. Managers who attempt to produce alpha must necessarily have a portfolio that is different and often more concentrated than the index representing their asset class. This divergent portfolio will likely produce a different return profile than that of the index. Second, many traditional funds have started to implement more advanced investment strategies that use derivatives, instruments with optionlike, non-normal returns. Third, as alternative investments are becoming a larger and larger part of the portfolios of institutional investors, many studies (Malkiel and Saha 2005, for example) have highlighted the non-normal characteristics of these products.

#### **Data Description**

We used monthly returns from January 1972 to February 2012 for the more than 39,000 open-end funds domiciled in the U.S. with at least 20 months of returns in Morningstar's database. The data set is survivorship bias-free (we included dead funds). An upward survivorship bias occurs when funds with poor performance are closed by management and subsequently fall out of any aggregate statistics.

Similarly, we use a survivorship bias-free data set of more than 17,000 hedge funds with at least 20 months of returns in Morningstar's database, including all live and dead funds, from January 1972 to February 2012.

Survivorship bias for hedge funds is even more pronounced because hedge funds tend to have a shorter lifespan than mutual funds (on average), and when their recent performance has been poor, many simply stop reporting returns (and are considered "dead").

There is a natural trade-off between the number of observations necessary to calculate certain statistics and survivorship bias. Limiting the data set to only those funds with a large number of observations (more than 30 for example) would exclude most of the funds with the extreme return characteristics we are trying to identify.

#### **Skewness and Kurtosis**

For each of the mutual funds and hedge funds in our sample, we calculated the third and fourth moments of the returns distribution, or the skewness and kurtosis. Skewness describes asymmetry and can be negative or positive depending on whether data points are skewed to the left (negative skew) or to the

right (positive skew) of the data average.

A distribution with negative skewness indicates that the frequency of returns below the mean is higher than what is suggested by the normal distribution. The normal or Gaussian distribution, of course, has a skewness of zero.

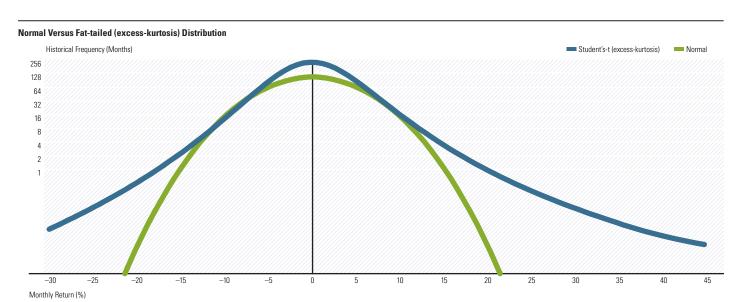
Excess kurtosis describes the degree of peakedness or flatness in a return distribution relative to the normal distribution with the same variance. A normal distribution has a kurtosis of 3. Therefore a kurtosis larger than 3 indicates that the probability of extreme returns (positive or negative) is higher than what is suggested by the normal distribution. The tables below report excess-kurtosis, i.e., the level of kurtosis in excess to the level expected on the basis of the normal distribution. The combination of negative skewness and high kurtosis is the least desirable scenario for the investor because it suggests the presence of frequent negative extreme observations.

#### **CVaR**

We also calculated the 5% confidence level CVaR for each fund in our sample. CVaR is related to the better-known measure, value at risk, or VaR, which estimates the loss

that is expected to be exceeded with a given level of probability over a specified period. Wheras VaR is a statement about only one particular point on the distribution, CVaR takes a probability-weighted average of all of the possible losses, conditional on the losses being equal to or exceeding the specified VaR. Other terms for CVaR include mean shortfall, tail VaR, and expected tail loss. Because CVaR is a comprehensive measure of the entire part of the tail risk of a distribution, it is the preferred measurement of downside risk for many.

Studies have shown that CVaR has more attractive properties than VaR (see, for example, Rockafellar and Uryasev 2001; Pflug 2000). Therefore, asset-allocation optimization frameworks that use a risk input, such as CVaR, that accounts for non-normal return properties are preferable. Our preferred definition of risk is CVaR and our preferred approach for setting asset-allocation policy is mean-CVaR optimization as developed in Xiong and Idzorek (2011). However, because it is very difficult to interpret CVaR in isolation, we must also calculate the excess-CVaR—a fund's CVaR in excess of the implied CVaR with a normal distribution.



#### Results Mutual Funds

Table 1 shows the risk parameters for our entire sample of open-end funds, sorted by return percentile. The median fund, at the 50th percentile, shows a higher negative skewness than what is suggested by the normal distribution, meaning the number of returns below the average is higher. Similarly the excess kurtosis, or the number of extreme returns, is higher than what is predicted by the normal distribution. Neither of these results is surprising because academic literature has shown a similar tendency for most asset classes, and the average fund is likely to closely track its asset class.

More active funds, those having portfolio holdings that diverge from the median fund in an attempt to outperform, show even more non-normal characteristics. For example, the fifth-percentile fund shows a very high level of kurtosis, more than 3 times that of a normal distribution. Even funds with less extreme returns, the 25th percentile fund for example, exhibit non-normal characteristics. The excess-CVaR results, which in some ways summarize the four moments, support the previous findings. Up until the 75th percentile fund, the excess CVaR (the historical CVaR less the CVaR assuming a normal distribution) is large and negative.

These statistics have important implications for investors who use a mean-variance optimization approach to create a portfolio of active managers. Investors are not accounting for and most likely underestimating the probability of extreme negative events in their portfolios.

#### **Hedge Funds**

Similar to our mutual fund results, the median hedge fund's return distribution is skewed to the left, indicating a higher frequency of returns below the average than what is suggested by the normal distribution.

Table 1: Return and Risk Statistics of Open-End Mutual Funds (January 1972 to February 2012)

Percentile	Mean	Standard Deviation	Skewness	Excess Kurtosis	Excess 5% CVaR
1st	-1.87	0.42	-2.53	15.68	-5.75
5th	-0.46	0.91	-1.45	6.66	-3.66
25th	0.28	2.27	-0.8	2.44	-2.08
50th	0.46	4.62	-0.56	1.35	-1.27
75th	0.7	5.83	-0.27	0.55	-0.39
95th	1.22	8.29	0.25	-0.44	0.79
99th	1.82	11.67	0.86	-0.87	2.79

Table 2: Return and Risk Statistics of Hedge Funds (January 1972 to February 2012)

Percentile	Mean	Standard Deviation	Skewness	Excess Kurtosis	Excess 5% CVaR
1st	-1.44	0.36	-4.99	3.30	-8.81
5th	-0.50	0.81	-2.58	1.84	-4.44
25th	0.20	1.65	-0.94	0.90	-1.51
50th	0.53	2.68	-0.28	0.53	-0.46
75th	0.90	4.51	0.28	0.20	0.20
95th	1.84	9.00	1.47	-0.50	1.96
99th	3.30	14.21	3.26	-0.86	5.27

Table 3: Return and Risk Statistics of Selected Mutual Fund Categories 5th Percentile (January 1972 to February 2012)

Open-End Category	Mean	Standard Deviation	Skewness	Excess Kurtosis	Excess 5% CVaR
Large Blend	-0.53	2.98	-1.17	-0.59	-3.27
Foreign Large Blend	-0.59	4.15	-0.96	-0.55	-3.42
Intermediate Government	0.27	0.74	-0.91	-0.12	-0.58
Latin America Stock	0.21	7.23	-1.26	0.4	-9.32
Emerging Markets Bond	0.18	2.21	-3.76	0.85	-6.08
Natural Resources	-0.44	4.96	-1.16	0.2	-6.08
Bank Loan	-0.04	1.1	-3.86	3.91	-5.03
High Yield Muni	0.15	1.35	-1.89	1.32	-2.72
Diversified Emerging Mkts	-0.33	5.49	-1.09	-0.24	-5.76

(See Table 2.) Likewise, the 50th percentile hedge fund's kurtosis is higher than a normal distribution's. Intuitively, those hedge funds with more extreme return characteristics display negative skewness and excess kurtosis. (For the fifth-percentile fund, these figures are negative 2.5 and 1.8, respectively.) The CVaR calculated using a normal distribution underestimates the historical realized CVaR by 4.4 percentage points.

#### **Open-End Funds Versus Hedge Funds**

Overall, the results are consistent between open-end funds and hedge funds. Managers' returns in both vehicles show a clear deviation from normality. Surprisingly, though, the data suggest that hedge fund returns are less extreme than those of mutual funds (as implied by their lower excess-kurtosis levels). This could be due to the fact that many hedge fund strategies are absolute or quasi-absolute returns, while most of the open-end funds are

•

total return and benchmark-oriented strategies. However, more research is necessary to arrive at such a conclusion.

In our analysis we compared all the dead and alive open-end and hedge funds available in Morningstar's database since 1972. Because we saw an exponential increase in the number of hedge funds over the past decade, it is possible that our sample is time-dependent, making comparisons between open-end and hedge funds more difficult. An analysis of the different subperiods would be necessary to derive a more meaningful comparison between the two universes.

Using the monthly category average return for mutual fund categories over the January 1972-February 2012 time period, we calculated mean, standard deviation, skewness, kurtosis, and excess 5% CVaR (selected results for the fifth percentile are reported in Table 3). The results varied across the board, but one clear trend did emerge. Funds in more inefficient asset classes exhibited returns with higher deviations from normality. For example, the domestic large blend category's excess 5% CVaR was negative 3.27 percentage points, which is less extreme than the same statistic for the emerging-markets stock category (negative 5.76%). Similarly, while government bonds' third and fourth moments are relatively similar to those expected on the basis of the normal distribution (a small negative excess 5% CVaR), emerging-markets bonds as well as bank loans are very different (these categories exhibited large negative excess 5% CVaR).

The implication of these results is that investors using active managers in less efficient asset classes could experience returns that significantly deviate from normality. Many investors use a mix of active and passive managers. Often investors use passive managers for those asset classes that are

believed to have fewer alpha opportunities (like domestic government bond or domestic and foreign developed large-capitalization stocks) while they use active managers for asset classes believed to be more inefficient (like emerging-markets bond and stock as well as high-yield municipals). Therefore, investors who selectively use active managers may seriously underestimate the risk of their portfolios.

#### **Conclusions**

We investigated the third and fourth moments of the distribution of returns of a large survivorship bias-free data set of open-end funds and hedge funds and discovered that managers' returns can be far from normal, especially among the more active open-end funds as well as nontraditional strategies in hedge funds. Our analysis implies that investors using mean-variance optimization to select managers, or more generally, investors who don't take into account the non-normal qualities of investment products, may underestimate the probability of negative extreme events and may allocate too much to these managers. To resolve this situation, we recommend using a manager structure optimization technique that incorporates non-normal return qualities. IIII

#### References

- Xiong, James X. and Thomas Idzorek. 2011.
   "The Impact of Skewness and Fat Tails on the Asset Allocation Decision." *Financial Analysts Journal*, vol. 67, No. 2. Ibbotson Associates, Inc.
- 2 Castille, Charles, John Pirone, M. Barton Waring, and Duane Whitney. 2000. "Optimizing Manager Structure and Budgeting Manager Risk," *Journal of Portfolio Management*, Spring 2000: 90–104.
- 3 Bairel, G. T. and Peng Chen. 2000. "Choosing managers and funds." *Journal of Portfolio Management*, Winter 2000: 47–53.
- 4 Malkiel, Burton G. and Atanu Saha. 2005. "Hedge Funds: Risk and Return." Financial Analysts Journal, vol. 61, No. 6, November/December 2005: pp. 80–88. Princeton University—Bendheim Center for Finance and Micronomics Inc.
- 5 Rockafellar, Tyrrell R. and Stanislav P. Uryasev 2001. "Conditional Value-at-Risk for General Loss Distributions." EFA 2001 Barcelona Meetings, EFMA 2001 Lugano Meetings; U of Florida, ISE Dept. Working Paper No. 2001–5 University of Washington—Department of Applied Mathematics and University of Florida
- 6 Pflug, Georg Ch. 2000. "Some Remarks on the Value-at-Risk and the Conditional Value-at-Risk." in "Probabilistic Constrained Optimization: Methodology and Applications", S. Uryasev; pp. 272–281. Kluwer Academic Publishers.

### Morningstar Product Spotlight: Investor Return

## Gauging the real investor experience in alternative funds.



Terry Tian
Alternative Investments Analyst

The return an investor gets from a mutual fund does not only depend on the fund's published total return, but also on the timing of the investor's buy and sell decisions. To better gauge the real experience of average investors, Morningstar introduced the Investor Return data point in 2006, and it is now found in all major Morningstar products-Morningstar.com®, Morningstar Office<sup>sM</sup>, and Morningstar Direct<sup>sM</sup>. The data point usually resides near the standard (total) return data points in most products. Investor Returns can be calculated for funds with complete monthly total net asset (TNA) data over trailing one-, three-, five-, and 10-year periods and for each calendar year time period.

Our studies on Investor Returns, conducted in 2007 and 2010, have shown that Investor Returns generally fall short of total returns in most traditional mutual funds, some more than others. Typically, investors' experience in gimmicky or niche strategies, such as

technology and natural resources, tend to lag the Investor Returns in more core holdings. With the rapid growth of alternative mutual funds in recent years, we are now examining investor behavior and returns in these nontraditional investments to see if they are any better or worse than in traditional investments.

#### What Is Investor Return?

Morningstar's Investor Return datapoint is designed to examine a fund's past performance from a different angle than its published total return. The traditional total return calculation measures the change in a fund's net asset value, or NAV, over a given time frame. This methodology assumes that investors hold the fund throughout the entire period without any additions or redemptions. In reality, however, this is hardly the case, as mutual funds allow daily subscriptions or redemptions.

Morningstar's Investor Return datapoint attempts to tackle this issue by taking into account a fund's total net assets at each month end. Returns achieved during months with larger asset bases will be overweighted relative to those months with large redemptions. For example, suppose a fund with beginning net assets of \$50 million returned 10%, 1%, and negative 5% in three consecutive months, respectively. Also, suppose the fund received \$10 million, \$100 million, and \$20 million of inflows over

those three months, respectively. The fund's Investor Return will be the constant monthly rate of return (or internal rate of return) that makes the beginning assets equal to the ending assets with all monthly flows accounted for. The result will be a 2.9% loss over the three-month period, a far cry from the 5.6% total return.

A fund's Investor Return can also be higher than its total return (although this is very rare), which is a sign that investors managed to buy low and sell high during the measured period.

Morningstar often cites Investor Return figures as evidence that investors tend to time their purchases and sales of traditional stock and bond funds badly. Do investors handle alternative mutual funds better? Our research shows that alternative mutual funds have achieved poorer Investor Returns compared to long-only stock and bond funds. In other words, a typical alternative mutual fund investor has a worse investment experience than a traditional stock- or bond-fund investor.

#### **Our Findings for Alternative Funds**

In our study, we examined funds in six of the seven alternative mutual fund categories. We excluded funds with incomplete net asset data, funds with less than one-year track records, and bear-market funds. The small asset bases and the leveraged nature of bear-market funds make investor returns highly sensitive

to asset flows. The gaps between their total returns and Investor Returns are abnormally large (the gap can easily go up to 20% or 30%), and are off-the-chart outliers when compared with other alternative categories.

We then calculated Investor Returns on funds in the six categories over one-, three-, five-, and 10-year periods (as of June 30, 2012), based on monthly returns and TNA data for the oldest share classes of each fund in each category (so as to obtain a larger sample of funds with five- and 10-year returns). We equally weighted the returns of each fund in a category to reach category averages. The total numbers of alternative mutual funds we studied are shown below.

Table 1: Total Number of Alternative Funds by Period

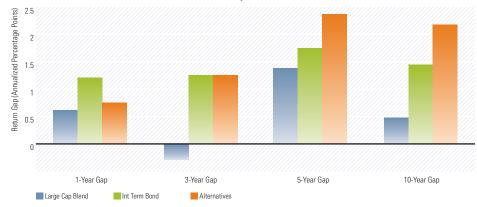
	1-Yr	3-Yr	5-Yr	10-Yr
***************************************				
Sample Size	213	110	57	17

A positive return gap in a fund indicates that Investor Return is worse than total return, while a negative gap suggests that investors actually made more than the fund's total return over a particular period of time.

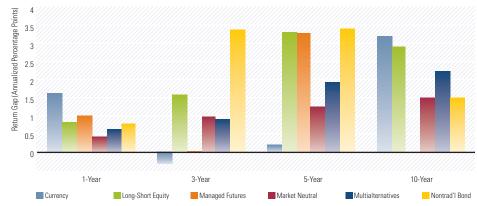
#### **Worse Investor Returns**

We selected the large blend and intermediateterm bond to represent traditional stock and bond categories, respectively. We found that alternative fund investors behaved roughly the same as traditional stock and bond fund investors over the one-year period ended June 30, 2012. Over a longer time frame, however, alternative investors fell behind significantly. For example, over the past 10 years, the gap between total return and Investor Return for alternative funds increased to 2.13 percentage points (annualized), while the gaps for the large blend and intermediate-term bond categories were 0.48 and 1.45 percentage points, respectively. (See Exhibit 1).

**Exhibit 1: Investor Returns for Alternative Mutual Funds Compared to Traditional Mutual Funds** 



**Exhibit 2: Investor Returns for Alternative Categories** 



Within the alternative categories, long/short equity and nontraditional bond funds exhibited the worst Investor Returns in most of the time frames measured. Market-neutral and multialternative funds had relatively narrow and consistent gaps. (See Exhibit 2).

Our results show that alternative mutual funds have worse Investor Returns compared with traditional stock and bond funds most likely because alternative funds have much shorter histories marked by a very volatile market environment. Massive inflows to alternative funds occurred after the 2008 financial crisis, when the performance of many of these strategies lagged. Investors poured almost \$90 billion into alternative mutual funds between 2009 and 2011, when total assets in these funds stood at only \$34 billion

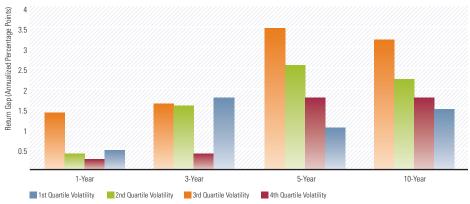
at the end of 2008. On the contrary, flows into traditional stock and bond funds have been smoother and less reactive to category performance over the long run.

#### **Link with Volatility**

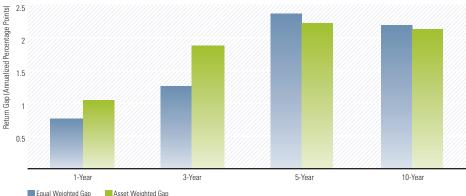
Our studies seem to indicate that one important determinant factor of Investor Returns is a fund's volatility. We ranked all alternative funds based on their monthly standard deviation in descending order and divided them into four quartiles. Funds in the first quartile have the highest standard deviation, while funds in the fourth quartile have the lowest. As Exhibit 3 demonstrates, funds in the most volatile quartile almost always have the largest Investor Return gaps. The gaps are particularly

<sup>1</sup> For the three-year period, the least volatile quartile surprisingly got the highest investor return gap (1.77%). The primary reason is that the least volatile quartile has a good number of nontraditional bond funds. Some of these funds (launched in the second half of 2008) had extraordinary performance during the 2009 "junk rally" when they had small asset bases, but most investors flew into these funds after 2010 and thus missed the majority of the three-year returns.

Exhibit 3: Strong Links between Alternative Mutual Funds' Investor Return Gaps and Volatility







prominent over the last five- and 10-year periods. For example, over a 10-year period, although the first quartile alternative funds achieved a total return of 3.82% (annualized), the average investor in these funds only made a dismal 0.64% (annualized), a 3.18 percentage point return gap.

There are a couple of reasons investor returns could be worse in more volatile funds. First, assuming an investor is rational and does not attempt to time his investment, he still must enter and exit the fund at some point in time. In a more volatile fund, these entry and exit points are more likely to coincide with peaks and troughs than in a less volatile fund, making investor return worse. Second, more volatile funds are more likely to attract irrational behavior and timing, as the potential for profits is larger.

#### **Asset-Weighted Investor Returns**

We also tested whether investors behave differently in large versus small alternative funds. Larger funds are likely to have drawn more assets due to better performance and are also more likely to survive over the long run. But is it easier for investors to deal with larger investments than smaller offerings?

To address this problem, we asset-weighted all alternative funds, which means that large funds, such as Gateway **GATEX** (with \$5.9 billion in assets as of June 30) and Merger **MERFX** (\$4.8 billion), will carry more weight in the calculation than small funds such as ICON Long/Short **IOLCX** (\$17 million). Exhibit 4 demonstrates that the gaps between total returns and investor returns are virtually the same for large and small funds over the five- and 10-year periods but different over one- and three-year periods.

The reason for asset-weighted gaps to be wider than equal-weighted gaps in the past one-and three-year periods is most likely because of the massive inflows into nontraditional bond funds (more than \$48 billion from 2009 to 2011). Unfortunately, these giant funds had worse investor returns than other alternative funds in the past three years. Over a long time frame, it becomes apparent that investors exhibit similar behavior regardless of fund sizes.

#### Mind the Gap

It is helpful for investors to keep an eye on investor returns, which demonstrate how other investors have been handling the fund historically. A large gap between investor returns and total returns should serve as a red flag—if so many investors failed to buy and sell the fund at right times, chances are you could make a similar mistake.

## **Industry Trends: Alternative Mutual Funds**

### More multistrategy mutual fund solutions.



by
Mallory Horejs
Alternative Investments Analyst

#### Alternative Mutual Funds

Fourteen new alternative mutual funds came to market during the second quarter of 2012, bringing the universe up to 322 offerings. Although the new products launched were fewer in number than in previous quarters, the total number of liquid alternative mutual funds has more than doubled over the past three years. The second quarter's 14 new products (three long/short equity funds, two managed-futures funds, two market-neutral funds, and seven multialternative funds) aren't vastly different from what exists already, but their strategies boast some unique qualities.

For example, Catalyst Insider Long/Short CIAAX invests solely in a portfolio of companies experiencing substantial insider buying and sells short stocks with large clusters of insider trading. And Palmer Square SSI Alternative Income PSCAX, a new addition to the marketneutral category, is the first mutual fund dedicated solely to convertible arbitrage.

Finally, Longboard Managed Futures Strategy **WAVIX** represents the latest in a new breed of managed-futures funds, which invest directly in a single commodity trading advisor, or CTA.

All of these new alternative products and their nuances have advisors confused. It's no surprise, then, that the greatest product proliferation in the second quarter happened in the multialternative category, a category of one-stop-shop alternative solutions. In total, seven new funds came to the market: WOA All Asset WOAIX, Stadion Trilogy STTGX, Orinda SkyView Macro Opportunities OMOAX, Neuberger Berman Absolute Return Multi-Manager **NABAX**, Collins Alternative Solutions **CLLIX**, Bridgehampton Value Strategies BVSFX, and Active Portfolio Multi-Manager Alternative Strategies CPASX. This brings the category's constituent count up to 83, making multialternative the largest alternative category tracked by Morningstar. The majority of these new products employed multimanager structures, which result in hefty fees—more than half have prospectus net expense ratios of more than 2.00%.

So far this year, no new currency or bear market funds have joined the alternative mutual fund ranks. With 21 and 28 funds, respectively, these two categories remain the smallest alternative mutual fund buckets. While three new nontraditional bond funds appeared in the first quarter of the year, the constituent

list did not expand in the second quarter. Furthermore, dismal flow data show that investors have steadily shied away from these funds, which short credit or duration risk, over the past year. More recently, the category leaked \$685 million in the second quarter and \$2.8 billion for the year to date.

While overall flows into alternative mutual funds remain healthy (the seven alternative categories have received net inflows of \$2.8 billion year-to-date through June), there's no denying the sharp decline in flows relative to last year. Alternative mutual funds netted a staggering \$24 billion in new assets in the first half of 2011. This slowdown isn't startling given the recent headwinds alternatives have faced. Many alternative strategies' performance struggled in 2011, as managed-futures funds were stung by strong momentum reversals, and equity-based strategies, such as long/short equity and market-neutral, were hindered by record high correlations among stocks. Inflows of last year's magnitude are unlikely moving forward, but considering the steady string of fund launches and overall positive inflows, it's safe to say that the alternatives story continues to resonate well with both investors and advisors M

#### **Fund Reports**

### Grant Park Managed Futures Strategy

#### by Nadia Papagiannis, CFA

#### Advisor

Knollwood Investment Advisors, LLC

#### **Advisor Location**

Chicago, Illinois

#### **Assets Under Management**

\$106.2 million

#### **Inception Date**

March 4, 2011

#### **Investment Type**

Mutual fund

#### **Morningstar Category**

Managed futures

#### Management

David Kavanagh, chairman of Knollwood Investment Advisors, is the fund's portfolio manager. Kavanagh has more than 30 years of experience in the managed-futures and fixed-income markets. Since 1989, he and his investment team have operated the Grant Park Futures Fund, a publicly available managed-futures fund, registered under the Securities Act of 1933. The mutual fund follows the same investment process and manager due diligence as does the limited partnership but is managed to a lower volatility level.

#### Strategy

This fund invests in commodity trading advisors, or CTAs, which seek to profit from price trends in the commodity, equity, interest-rate, and currency markets. While the firm's long-established hedge fund relies primarily on systematic (automated) price trend following, the mutual fund is constructed to offer wider diversification across investment strategies (Including discretionary and nontrend), and price-trend time frames. The mutual fund targets an annualized volatility of 7%–10%. This offering has a lower volatility profile than does the firm's related limited partnership and therefore does not incorporate all the same underlying managers. As of June 30, 2012, the fund was invested in five CTAs, and that number is expected to grow over time. The fund's 3.55% net expense ratio includes all management and performance fees paid to the underlying managers.

Management does not disclose the names of the fund's underlying managers and trading programs. Rather it describes their strategies, which include arbitrage, countertrend, global macro, predictive modeling, and trend-following. As of June 30, the portfolio was allocated to both commodity (30%) and financial futures (70%) and long futures/forwards sector exposures were as follows: grains/foods (9%), currencies (19%), equities (32%), and fixed income (19%). Short sector positions were held in energy (–10%) and metals (–11%).

#### **Process**

The investment process begins with a quantitative screening of the CTA universe (roughly 3,000 programs, according to management). Screening parameters include performance during up equity markets, drawdown statistics, alpha net of fees and expenses, as well as correlation characteristics. When selecting managers, Kavanagh and his team look specifically for traders with long track records who have avoided or have quickly recovered from any significant drawdowns. Grant Park prefers to invest in larger commodity trading advisors that have access to more resources—three of the five subadvisors manage more than \$1 billion. Overall, the manager selection process requires roughly six to nine months of due diligence. After selecting the subadvisors, management uses a five-factor proprietary model to make the portfolio allocations. The model is run daily and considers diversification, momentum, reversal, historical performance, and qualitative factors.

#### **Risk Management**

Management reviews daily portfolio risk management reports that track margin/equity ratios and VaR breaches for potential strategy deviations. There are no sector or net exposure limitations on the overall portfolio, but management does have full daily transparency with each of its subadvisors. The fund's seven-person investment committee meets twice per month to discuss which CTAs may out- or underperform given the current market environment. Based on these discussions and the recommendations of the portfolio allocation model, Kavanagh tweaks the allocations every two weeks and intends to make one or two larger shifts in allocation on an annual basis. Because futures contracts are leveraged, 75% of the fund's assets are allocated to a fixed-income strategy. Kavanagh does not use leverage or take signifiacant duration risk with the fund's collateral. Approximately 75% of the fixed-income portfolio is invested in U.S. government and agency obligations and the weighted average duration is approximately one year (as of June 30).

## Grant Park Managed Futures Strategy A (USD)

3		•	•														TR USD	
Performance 07																		Investment Style Equity
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Utr	Total %	_	_	-	_	-	-	_	_	_	—	25	25	Stock %
2010	_	_	_	_	_												100k 80k	
2011		-4.14	3.49	-1.29	_												80k	Growth of \$10,000
2012	-2.72	0.83	_		-1.11												·····40k	Grant Park Managed Futures Strategy A
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept												20k	9,685 — Category Average
Load-adj Mthly	-6.32	_	_	_	-5.27												ZUK	9,159
Std 06-30-2012	-5.56	_	_	_	-6.18						]						10k	<ul> <li>Standard Index</li> </ul>
Total Return	-0.61				-1.21											-	TUK	10,702
+/- Std Index	-9.74	_	_	_	_													
+/- Cat Index	8.60	_	_	_	_												4k	
% Rank Cat	15																	Performance Quartile (within category)
No. in Cat	57	_	_	_		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	07-12	History
7-day Yield	_						_	_	_	_	_	_	_	_	_	9.94	9.83	NAV/Price
Performance Discl						_	_	_	_	_	_	_	_	_	_	_	-1.11	Total Return %
The Overall Mornin		na is hase	ed on risk-	adiusted	returns	_	_	l _	_	_	_	_	_	_	_	_	-12.12	+/- Standard Index
derived from a weigh	_	0		,		_	l _	l _	_	_	l _	_		_	_		3.01	+/- Category Index
(if applicable) Morn		-			,			· · · · · · · · · · · · · · · · · · ·		·····								% Rank Cat
The performance da	ata quoted	l represen	its past pe	erformand	e and												00	
does not quarantee	nes not guarantee future results. The investment return and						-	-	-	-	-	-	-	-	_	-	89	No. of Funds in Cat

Net %

61.09

0.00

24.66

Long %

61.09

0.00

24.66

Short %

0.00

0.00

0.00

Portfolio Analysis 04-30-2012

Asset Allocation %

Non-US Stocks

Cash

US Stocks

Standard Index

S&P 500 TR

Share Chg

Total Assets:

01-2012

Share Holdings:

1 Total Stocks, 8 Total Fixed-Income,

20 mil Invesco Short Term Inv Treasury Pr

16% Turnover Ratio

**Category Index** 

Diversified Futures Futures

Morningstar

**Morningstar Cat** 

US OE Managed

25 55

principal value of an investment will fluctuate; thus an investor's
shares, when sold or redeemed, may be worth more or less than
their original cost.
Current performance may be lower or higher than return data
quoted herein. For performance data current to the most recent

month-end, please call 855-501-4758 or visit

Growth and Income

Objective:

month-end, please call 855-5 www.grantparkstrategy.com.			Non-US Stocks Bonds	24.66 14.24 0.00	24.66 0.00 14.24 0.00 0.00 0.00	⊕ 214,278 Gra	ant Park Mfs Fund Ltd	24.66 10.39
Fees and Expenses			Other/Not Clsfd Total	100.00	100.00 0.00	2 mil 110	Treasury Note 0.25%	3.85
Sales Charges Front-End Load % Deferred Load %		5.7! N <i>A</i>	Equity Style  Value Blend Growth	Portfolio Statistics P/E Ratio TTM	Port Rel Rel Avg Index Cat	© 0 US  Sector Weightings	Treasury Bill Stocks %	0.00
Fund Expenses Management Fees % 12b1 Expense % Gross Expense Ratio %	)	1.40 0.25 <b>4.83</b>	Small	Geo Avg Mkt Cap \$mil	= = =	Cyclical Basic Materials Consumer Cyclical Financial Services Real Estate	_ _ _ _ _	_ _ _ _ _
Risk and Return Profile	3 Yr 15 funds 4	5 Yr 10 Y	9	Avg Eff Maturity	  0.21	Sensitive  Communication Se	ervices —	
Morningstar Rating™ Morningstar Risk Morningstar Return	——————————————————————————————————————		Med	Avg Wtd Price	99.98	C =		
Standard Deviation Mean Sharpe Ratio	3 Yr — —	5 Yr 10 Y	Credit Quality Brea AAA AA A BBB	kdown —	Bond %	→ <b>Defensive</b> ☐ Consumer Defensi ☐ Healthcare ☐ Utilities	ve	_ _ _ _
MPT Statistics Alpha Beta R-Squared	Standard Index	Best Fit Inde.	BB B Below B NR/NA					
12-Month Yield 30-day SEC Yield Potential Cap Gains Exp		-0.08%		Stock %	Rel Std Index			
Manager: D	rant Park avid Kavanagh .4 Years		Base Currency: Ticker: Minimum Initial I	USD GPFAX Purchase: \$2,500		Purchase Constraints: Incept: Type:	 03-04-2011 MF	



\$106.16 mil

Min Auto Investment Plan: \$2,500

#### **Fund Reports**

## QuantShares U.S. Market Neutral Momentum ETF

#### by Josh Charney

#### Advisor

FFCM LLC

#### **Advisor Location**

Boston, Massachusetts

#### **Assets Under Management**

\$5.3 million

#### **Inception Date**

Sept. 7, 2011

#### **Investment Type**

Exchange-traded fund

#### **Morningstar Category**

Market neutral

#### Management

This quantitative fund is overseen by Bill DeRoche, CFA, chairman and chief executive officer; Kishore
Karunakaran, president and chief operating officer; and
Chuck Martin, CFA, chief investment officer and
chief financial officer. DeRoche joined FFCM from State
Street Global Advisors, where he headed the U.S.
enhanced equities team. Karunakaran previously worked
at Platinum Grove Asset Management, LP, where
he directed the quantitative equities stock selection
group. Prior to that, he was a vice president in AQR
Capital Management's global stock selection team.
Martin served as a vice president at State Street Global
Advisors and as a senior portfolio manager in the
global enhanced equities group.

#### Strategy

This U.S. market meutral equity momentum fund provides investors with the return differential between stocks with positive momentum and those with negative momentum, attempting to capture the momentum factor risk premium. The ETF takes long positions in primarily large-capitalization equities that have exhibited a strong upward price trend and takes short positions in an equal number of large-capitalization stocks that have exhibited a downward price trend. The strategy is meant to offer investors a return stream that is neutral to broad equity market risk exposure. The benchmark index's correlation to the Dow Jones U.S. Index has been negative 0.45 (using 10 years of weekly data through June) as the index tends to move counter to the market. This strategy has also registered a negative 0.50 beta during the last 10 years.

#### **Process**

This fund tracks the Dow Jones U.S. Thematic Market Neutral Momentum Index. The index's calculation starts with the approximately 1,350 stocks in the Dow Jones U.S. Index. It then filters out stocks with less than \$10 million in average daily trading volume (leaving about 1,200 names) and selects the top 1,000 names by market capitalization. From this investable universe, the index calculates the best and worst trailing 12-month total returns and sorts them by quintiles in each of the 10 sectors. The fund takes long positions in the top 20% of stocks in each sector and short positions in the bottom 20%. The index's constituent changes are announced one day before month-end trading occurs, and the ETF is rebalanced the following day.

There are at least 10 authorized participants that can create and redeem shares. Short positions are redeemed and created through cash.

#### **Risk Management**

Even though the fund can rebalance throughout the last trading day of the month, it typically trades in the last 30 minutes of the day to minimize tracking error. Also to minimize tracking error, the fund may gain exposure to certain stocks (approximately 10% in assets) through swaps. Though swaps tend to be more expensive relative to direct security purchases, the cash collateral serves as a buffer for short stock coverage rules. Because counterparty risk is a concern for swaps, management spreads the contracts across three large institutions: JPMorgan, Morgan Stanley, and UBS.

If the ETF experiences severe losses, meaning the short stock positions rise in value and/or the long positions fall in value, management could be forced cover short positions in order to comply with regulations requiring full collateralization of short positions. Because the index is not bound by this trading restriction, in times of severe strain, the ETF could fail to track the index. The cost to borrow short positions also could cause the ETF to imperfectly track the index. This ETF is relatively illiquid. That means it could trade at a wide bid-ask spread, which could increase trading costs for investors (who should use limit orders to trade this ETF).

QuantS ETF (US		es l	JS I	Vlar	ket	Neu	t M	omo	entı	1111	<b>Overall N</b> — Marke				<b>andard</b> &P 500 T		Category BofAML U 3 Mon CN	JSD LIBOR Market Ne	
Performance 07-																		Investment Style	
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %			_					_		_		51	Equity Stock %	
2010	_	_	_	_	_												100k 80k		
2011	_	_	_	1.01	_												60k	Growth of \$10,000	
2012	-1.02	7.40	_	_	10.40												40k	— QuantShares US Momentum ETF	Market Nei
railing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept													11,152	
Std Mkt 06-30-12	_	_	_	_	3.77												·····20k	— Category Average	е
Std NAV 06-30-12	·				4.06											_	~=	9,810 Standard Index	
Mkt Total Ret	_	_	_	_	7.86												···· 10k	12,413	
VAV Total Ret				<del></del> .	8.07														
+/- Std Index	_	_	_	_	_												·····4k		
⊦/- Cat Index																		Performance Quartile	
% Rank Cat	_	_	_	_														(within category)	
No. in Cat	_	_	_	_		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	07-12	History	
Performance Disclo	sure					_	_	_	_	_	-	-	_	_	_	_	19.83	Mkt Total Ret %	
The Overall Morning		0		,		_	_	_	_	_	-	-	_	_	_	_	10.40	NAV Total Ret %	
derived from a weigl		0	three-, f	ive-, and	10-year	_	_	_	_	_	-	_	_	_	_	_	-0.61	+/- Standard Index	
if applicable) Mornii The performance dat	-		ts nast ne	erformanc	e and				ļ		ļ						10.07	+/- Category Index	
does not guarantee t									ļ <del></del>		ļ <u>-</u>							% Rank Cat	
principal value of an											ļ <u>-</u>					1 21	12	No. of Funds in Cat	
shares, when sold or their original cost.	redeeme	d, may bi	worth m	ore or les	s than	_	_	_	_	_	-	_	_	_	_	-1.21	_	Avg Prem/Discount %	1
chen onginal cost. Current performance	may be l	ower or h	igher tha	n return d	ata	Portfol	io Analy	<b>sis</b> 08-0	1-2012										
quoted herein. For pe	erformano	e data cı	-			Asset All	ocation %	6 07-26-20	012	Net %	Long %	Short %	Shar since	e Chg	Share	Holdings:	ocks , O Total Fix	ad Incomo	% N Asse
month-end, please co	all 202-55	1-8090.				Cash			Ć	94.51	95.38	0.87	07-2		anount .	— Turnov	er Ratio	su-income,	Asse
Fees and Expens	es					US Stoc Non-US				5.30 0.19	85.05 11.31	79.75 11.12	_	W.:b	41			Canalia 0/	Dal Cad lad
und Expenses						Bonds	SIUCKS			0.00	0.00	0.00		or Weigh Cyclica	-			Stocks % <b>40.1</b>	Rel Std Inde
Management Fees	s %				0.50	Other/N	ot Clsfd			0.00	0.00	0.00		Basic M				6.5	2.4
12b1 Expense %					0.00 2.79	Total			10	00.00	191.74	91.74		Consum				15.4	1.6
Expense Ratio %					2.79								. 0	Financia	,			10.1	0.7
Risk and Return	Profile		.V.	E.V.	10 1/	Equity St Value Bler	<b>yle</b> nd Growth	Porti	olio Stati	istics	Port Avg Ind	Rel Rel dex Cat		Real Es		00		8.1	4.0
		٠	Yr —	5 Yr —	10 Yr	value biei	id Glowill		Ratio TTN		19.2 1.			Sensiti	ve			36.4	0.8
Morningstar Ratin	$g^{TM}$		_	_	_				Ratio TTN Ratio TTN			36 1.48 40 5.63		Commu		Service	S	3.5	0.7
Morningstar Risk					_		_	Gen	Avg Mkt		8086 0.			Energy		0011100		6.6	0.5
Morningstar Retur	'n			_			1	smil		очь			_	Industri	als			14.3	1.2
		3	Yr	5 Yr	10 Yr									Technol				12.1	0.6
Standard Deviatio			_	_	_	Fixed-Inc	-		Eff Matu	rity		_	<b>→</b>	Defens	ive			23.5	0.8
Standard Deviatio	n MK I		_	_	_	Ltd Mo	d Ext	Λ	Eff Durat			_		Consum		nsive		8.0	0.6
Mean NAV			_	_	_			Avg	Wtd Cou	pon		_		Healtho				9.9	0.8
Mean MKT Sharpe Ratio					_			€ Avg	Wtd Pric	е		_		Utilities				5.5	1.4
							1	Ē											
MPT Statistics NAV		Standa	rd Index	Best	Fit Index							D 141							
					_	Credit Qu AAA	iality Bre	akdown -	_			Bond %							
			_		_	AAA													
Alpha					_	A						_							
Alpha Beta						BBB													
Alpha Beta R-Squared					_	BB						_							
Alpha Beta R-Squared 12-Month Yield						-						_							
Alpha Beta R-Squared 12-Month Yield 30-day SEC Yield	ns Exp				_	В													
Alpha Beta R-Squared 12-Month Yield 30-day SEC Yield Potential Cap Gair	ns Exp				No	Below B													
Alpha Beta R-Squared 12-Month Yield 80-day SEC Yield Potential Cap Gair Leveraged	ns Exp				No							_							
Alpha Beta R-Squared 12-Month Yield 30-day SEC Yield Potential Cap Gair Leveraged Leverage Type	ns Exp				No — 100.00	Below B NR/NA			r	Stock o/	D-	L Std Indo-							
Alpha Beta R-Squared 12-Month Yield 80-day SEC Yield Potential Cap Gair Leveraged Leverage Type Leverage %	•	nark		J US Th	100.00 ematic	Below B NR/NA Regional	Exposure	<b>e</b>	5	Stock %	Re	I Std Index							
Alpha Beta R-Squared 12-Month Yield 80-day SEC Yield Potential Cap Gair Leveraged Leverage Type Leverage %	•	mark		J US Th Marke	100.00 ematic et Neut	Below B NR/NA Regional America	<b>Exposur</b>	B		98.0	Re	0.99							
Alpha Beta R-Squared 12-Month Yield 80-day SEC Yield Potential Cap Gair Leveraged Leverage Type Leverage %	•	mark		J US Th	100.00 ematic et Neut	Below B NR/NA Regional America Greater	<b>Exposur</b> ossis Europe	Ð	\$	98.0 2.0	Re								
Alpha Beta R-Squared 12-Month Yield 80-day SEC Yield Potential Cap Gair Leveraged Leverage Type Leverage % Primary Prospectu	•	mark		J US Th Marke	100.00 ematic et Neut	Below B NR/NA Regional America	<b>Exposur</b> ossis Europe	3	?	98.0	Re	0.99							
Alpha Beta Beta Beta Beta Beta Beta Beta Bet	s Bench	IF TRUS	N	J US Th Marke	100.00 ematic et Neut	Below B NR/NA Regional America Greater	<b>Exposur</b> ossis Europe		MOM	98.0 2.0 0.0	Re	0.99	Prei	m/Discou	unt:				
Alpha Beta R-Squared 12-Month Yield 30-day SEC Yield Potential Cap Gair Leveraged Leverage Type Leverage % Primary Prospectu  Operations Family: Manager:	s Bench FC M	IF TRUS ultiple	N	J US Th Marke	100.00 ematic et Neut	Below B NR/NA Regional America Greater Greater Ticker: Incept:	<b>Exposur</b> ons Is Europe Asia			98.0 2.0 0.0	Re	0.99	Prei Mkt	Price:		 26.3			
Alpha Beta R-Squared  12-Month Yield 30-day SEC Yield Potential Cap Gain Leveraged Leverage Type Leverage % Primary Prospectu  Operations Family: Manager: Tenure:	s Bench FC M 0.	IF TRUS ultiple 9 Year	N	J US Th Marke	100.00 ematic et Neut	Below B NR/NA Regional America Greater Greater Ticker: Incept: Expiration	Exposuro is Europe Asia		MOM 09-07-20	98.0 2.0 0.0	Re	0.99	Prei Mkt Bas	Price: e Curren	су:	USE	)		
Alpha Beta R-Squared 12-Month Yield 30-day SEC Yield Potential Cap Gair Leveraged Leverage Type Leverage % Primary Prospectu  Operations Family: Manager:	s Bench FC M 0.	IF TRUS ultiple	N	J US Th Marke	100.00 ematic et Neut	Below B NR/NA Regional America Greater Greater Ticker: Incept:	Exposuro is Europe Asia		MOM	98.0 2.0 0.0	Re	0.99	Prei Mkt Bas Leg	Price:	cy: ure:	USE Ope	)	stment Company	



#### **Fund Reports**

## QuantShares U.S. Market Neutral Anti-Beta ETF

#### by Josh Charney

#### Advisor

FFCM LLC

#### **Advisor Location**

Boston, Massachusetts

#### **Assets Under Management**

\$30.6 million

#### **Inception Date**

Sept. 13, 2011

#### **Investment Type**

Exchange-traded fund

#### **Morningstar Category**

Market neutral

#### Management

This quantitative fund is overseen by Bill DeRoche, CFA, chairman and chief executive officer; Kishore
Karunakaran, president and chief operating officer; and
Chuck Martin, CFA, chief investment officer and
chief financial officer. DeRoche joined FFCM from State
Street Global Advisors, where he headed the U.S.
enhanced equities team. Karunakaran previously worked
at Platinum Grove Asset Management, LP, where
he directed the quantitative equities stock selection
group. Prior to that, he was a vice president in
AQR Capital Management's global stock selection team.
Martin served as a vice president at State Street
Global Advisors and as a senior portfolio manager in the
firm's global enhanced equities group.

#### Strategy

This U.S. market neutral equity anti-beta fund provides investors with the return differential between low-beta and high-beta stocks. The ETF takes long positions in primarily large-capitalization stocks with low market betas and shorts an equal dollar amount of equities with high betas. The strategy is meant to offer investors the factor risk premium from low-beta stocks outperforming high-beta stocks without exposure to the general market. Low-beta stocks exhibit less volatility to the market than high-beta stocks and can deliver better risk-adjusted returns over the long term. This strategy is likely to perform well during down markets, as was the case in 2008, but it may also perform poorly during a high-beta rally. The benchmark index has exhibited a negative 0.81 correlation to the Dow Jones U.S. Index during the last 10 years (using weekly data through June 30) as the index tends to move counter to the market. Because the strategy bets against beta, the index's beta is also negative, registering at negative 0.90 during the last 10 years.

#### **Process**

The ETF tracks the Dow Jones U.S. Thematic Market Neutral Anti-Beta Index, which is constructed by taking the approximately 1,350 stocks in the Dow Jones U.S. Index and weeding out names with less than \$10 million in average daily trading volume (leaving about 1,200 stocks). Then, the index calculates beta for the teo p 1,000 names by market capitalization and sector. Beta is calculated using weekly data for the trailing 52 weeks relative the Dow Jones U.S. Index. The index will take long positions in the bottom 20% and short positions in the top 20% of each 10 sectors, equally weighting each position. The index is rebalanced and reconstituted at the end of each month. The index provider will announce the new constituents one day before the changes are made so that the ETF has one full day to trade. To minimize tracking error, however, it typically trades in the last 30 minutes of that day. The ETF is fully invested primarily in individual stocks. Some of its equity exposure is gained through swaps, which are more expensive, but the cash collateral serves as a buffer for short-stock coverage rules.

There are at least 10 authorized participants that can create and redeem shares. Short positions are created and redeemed through cash.

#### **Risk Management**

To manage the tracking error and shorting risks, management allocates roughly 10% of its available cash to swaps. Because counterparty risk is a concern for swaps, management spreads the contracts across three large institutions: JPMorgan, Morgan Stanley, and UBS. If the ETF experiences severe losses, meaning the short stock positions rise in value and/or the long positions fall in value, management could be forced to cover short positions in order to comply with regulations requiring full collateralization of short positions. Because the index is not bound by this trading restriction, in times of severe strain, the ETF could fail to track the index. The cost to borrow short positions could also cause the ETF to imperfectly track the index. This ETF is relatively illiquid, meaning it could trade at a wide bid-ask spread, which could increase trading costs for investors (who should use limit orders to trade this ETF).

QuantSI ETF (US		es l	JS I	Vlar	ket	Neu	t Aı	nti-l	Beta		<b>Overall N</b> — Marke				<b>andard</b> &P 500 T		Category BofAML U 3 Mon CN	ISD LIBOR Market Ne	
Performance 07-3																		Investment Style	
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %												50	Equity Stock %	
2010	_	_	_	_	_												100k 80k		
2011	_	_	_	-8.58	_													Growth of \$10,000	
2012	-9.76	11.70	_	_	2.00												40k	QuantShares US  Anti Pote FTF	Market Ne
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept												TOR	Anti-Beta ETF 9,326	
Std Mkt 06-30-12	_	_	_	_	-2.47						.						·····20k	<ul> <li>Category Average</li> </ul>	е
Std NAV 06-30-12	_	_	_	_	-2.19												0.1	9,810	
Mkt Total Ret					-1.55				ļ							6	····· 10k	<ul> <li>Standard Index 12,413</li> </ul>	
NAV Total Ret	_	_	_	_	-1.02											_		12,413	
+/- Std Index																	· · · · · 4k		
+/- Cat Index	_		_	_	_												4K	Performance Quartile	
																		(within category)	
% Rank Cat No. in Cat	_		_	_		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	07-12	History	
No. In Cat																		•	
Performance Disclos						_	_	_	-	_	-	_	_	_	_	_	0.97 2.00	Mkt Total Ret % NAV Total Ret %	
The Overall Mornings derived from a weigh						_	_	_	_	_		_	_	_		_	-9.01	+/- Standard Index	
uenveu nom a weryn (if applicable) Mornin		-	e unee-, i	ive-, anu	то-уват	_	_	_	_	_	_	_	_	_	_	_	1.68	•	
The performance data			nts past p	erformand	ce and				l	····	· · · · · · · · · · · · · · · · · · ·						1.00	+/- Category Index % Rank Cat	
does not guarantee f	ıture res	ults. The	investme	nt return a	and		l	ļ	ļ <u> </u>	ļ	ļ <u>.</u>			<del></del>		ļ <del></del>	12	No. of Funds in Cat	
principal value of an									ļ	ļ	ļ			ļ		0.42	12		
shares, when sold or their original cost.	redeeme	a, may b	e worth r	nore or les	ss than	_	-	_	-	-	-	_	_	_	_	-0.42	_	Avg Prem/Discount %	
their original cost. Current performance	mav he l	ower or	hiaher tha	ın return d	lata	Portfol	io Analy	ysis 08-0	01-2012										
quoted herein. For pe	,		-			Asset All				Net %	Long %	Short %		e Chg	Share	Holdings:			%
month-end, please ca						Cash				97.57	97.69	0.12	cince			) Total Sto — Turnove	icks , O Total Fix er Ratio	ed-Income,	Ass
Fees and Expens	es					US Stoc				3.06	85.96	82.90							
Fund Expenses						Non-US	Stocks			-0.63	10.97	11.60		tor Weigl	ntings			Stocks %	Rel Std In
Management Fees	%				0.50	Bonds	I - 4 OI - C-I			0.00	0.00	0.00		Cyclica				33.5	1.
12b1 Expense %					0.00	Other/N	iot Gisiu			0.00	0.00	0.00		Basic N				6.0	2.3
Expense Ratio %					1.92	Total			1	00.00	194.62	94.62	_		ner Cycli			8.9	0.9
Risk and Return I	rofile					Equity St	yle	Port	folio Stat	istics		Rel Rel		Financi		es		11.6	0.8
			3 Yr	5 Yr	10 Yr	Value Bler	nd Growth	P/F	Ratio TT	M	Avg In 16.4 1.	dex Cat 11 1.10		Real Es	tate			7.0	3.
	TM		_	_	_			₽ .	Ratio TT			05 1.14		Sensiti	ve			35.0	0.
Morningstar Rating	J		_	_	_			, -	Ratio TT		2.1 0		214	Commu	nication	Service	S	3.0	0.
Morningstar Risk			_	_	_				Avg Mk	t Cap	9936 0	18 0.87		Energy				6.0	0.
Morningstar Retur	1		-					≝ \$mi	l					Industri				15.9	1.
Standard Deviation	- NIA\/		3 Yr	5 Yr	10 Yr	Fixed-Inc	ama Ctu	lo.						Techno	logy			10.0	0.
			_	_	_	Ltd Mo	-		Eff Matu	urity		_	. →	Defens	ive			31.5	1.
Standard Deviation	I IVIK I		_	_	_	Liu Wi			Eff Dura	,		_	E	Consun	ner Defe	nsive		16.0	1.
Mean NAV Mean MKT			_	_	_		+	_ Avg	Wtd Cou			_		Healtho	are			9.5	0.
Sharpe Ratio								Avg	Wtd Prid	ce		_	Ω	Utilities	3			6.0	1.
								Low											
MPT Statistics		Stand	ard Index	Best	Fit Index														
NAV Alpha						Credit Qu	iality Bre	akdown	_			Bond %							
Aipila Beta						AAA							•						
R-Squared						AA A													
12-Month Yield					_	BBB BB													
30-day SEC Yield	_					В													
Potential Cap Gain	s EXP																		
Leveraged					No	Below E NR/NA	)												
LUVOrano Ivno					100.00														
	Б.		D.111	0. TI	100.00	Regional	Exposur	e		Stock %	Re	Std Index							
Leverage %	Rench	mark		S Thema ut Anti-l		America	as .			98.5		0.99	l						
Leverage Type Leverage % Primary Prospectus			140	witi-t	USD	Greater	Europe			1.5		1.90	l						
Leverage %						Greater	Asia			0.0									
Leverage %													_	er :					
Leverage % Primary Prospectus  Operations			_						BTAL				Prei	m/Disco	unt:	_			
Leverage % Primary Prospectus  Operations Family:		OF TRUS	ST			Ticker:				044									
Leverage % Primary Prospectus  Operations Family: Manager:	M	lultiple	ST.			Incept:	D :		09-13-2	011				t Price:		23.9			
Leverage % Primary Prospectus  Operations Family: Manager: Tenure:	M 0.	lultiple 9 Year	ST			Incept: Expiration			09-13-2 —				Bas	e Currer		USD	)	atanant Canana	
Leverage % Primary Prospectus  Operations Family: Manager:	M 0. \$3	lultiple	ST			Incept:							Bas Leg		ure:	USE Ope	)	stment Company	



#### **Fund Reports**

### Ziegler Lotsoff Long/Short Credit Fund

#### by Mallory Horejs

#### Advisor

Ziegler Lotsoff Capital Management

#### **Advisor Location**

Chicago, Illinois

#### **Assets Under Management**

\$26.5 million (fund)

#### **Inception Date**

Jan. 31, 2012

#### **Investment Type**

Mutual fund

#### **Morningstar Category**

Nontraditional bond

#### Management

This fund is run by Paula Horn, Stephen Bossu, and Jon Thomas. Horn serves as the firm's chief investment officer, and Bossu and Thomas serve as senior portfolio managers, specializing in macro/government trading and fundamental credit analysis, respectively. The management team is supported by two analysts: Michael Sanders, who assists with statistical screening, and Michael Hurley, who focuses on the portfolio's risk management. Management has run this long/short credit strategy in a hedge fund since 2006 but converted it to a mutual fund in January 2012.

#### Strategy

This fund can take both long and short positions in a wide range of credit securities, including corporate bonds, convertibles, preferred stock, floating-rate debt, and hedging instruments (treasuries, futures, and ETFs), but it concentrates in corporate bonds. Management invests opportunistically based on a top-down macroeconomic assessment of the market environment and a bottom-up fundamental security selection process. When bullish, management increases credit market exposure and moves toward higher-yielding securities. In bearish environments, it decreases exposure and focuses on investment-grade. The team also adjusts the fund's interest rate exposure based upon their macroeconomic outlook—portfolio duration typically ranges from 0 to 2.5 years and cannot exceed five years. The fund typically holds 40–60 positions with an average holding period of three to nine months. Managers Horn, Bossu, and Thomas target an annualized return of 6%–10% with half of the volatility of the S&P 500 Index. They expect two thirds of the return to come from the portfolio's yield component and one third to come from capital appreciation.

As of June 30, 2012, the portfolio held 75 individual positions and duration was 1.9 years. Net market exposure (including both credit and equity) was 64.6%, and the portfolio's long asset allocation was as follows: corporate bonds (48.2%), preferred securities (19.3%), high-yielding equities/REITs (5.7%), convertible securities (3.8%), and index ETFs and CEFs (1.2%). Management hedged a small portion of the equity exposure in convertible bonds and chose to hedge approximately half of the fund's interest rate duration by shorting Treasury notes (negative 13.1% position).

#### **Process**

Management begins the portfolio construction process with a macroeconomic assessment, looking at interest rates, default rates, spreads, and credit quality levels, as well as overall flows. Next comes quantitative screening (performed weekly), during which the team screens the universe of credit securities (roughly 800 securities from 600 companies) to identify those most likely to outperform in the current macro environment. Based on relative movement within the list (rather than on an absolute ranking), management selects 10–15 securities each week for further fundamental research. This analysis includes a full company valuation and restructuring analysis. In the final stage, management selects which securities to add to the portfolio.

#### **Risk Management**

Risk exposures are evaluated on both an individual security and aggregate portfolio basis, and unintended risk exposures are hedged whenever possible. Management limits industry exposures to 25%, and individual positions generally range from 3% to 5%. Net leverage exposure is capped at 140%, and gross leverage cannot exceed 200%. Portfolio hedges help to maintain optimal credit market exposure, sector exposure, and single-name exposure, as well as the duration target of the overall fund. To hedge, management uses listed options, equities, ETFs, single-name corporate bonds, or Treasuries. To monitor liquidity risk, management assigns an internal liquidity rating to each position in the portfolio based on a ratio of average daily trading volume divided by total volume outstanding for the issue.

**Performance** 07-31-2012

1st Qtr

1 Yr

Quarterly Returns

Trailing Returns

Load-adj Mthly

Std 06-30-2012

Total Return

+/- Std Index +/- Cat Index

% Rank Cat

No. in Cat

7-day Yield

2010

2011

2012

## Ziegler Lotsoff Cptl Mgmt L/S Crdt (USD)

3rd Qtr

5 Yr

4th Qtr Tota

10 Yr

2nd Qtr

0.47

3 Yr

									$\blacksquare$		$\blacksquare$
Total %									_		
_											
_											
_											
Incept											
3.20											
2.08											
3.20											
·····											
_											
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	_	_	_	_	_	_	_	_	_	_	_

Performance	Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 877-568-7633 or visit www.zieglerlotsoff.com.

NA
NA
0.65
NA
2.77

<b>Risk and Return Profile</b>			
	3 Yr	5 Yr	10 Yr
	70 funds	29 funds	5 funds
Morningstar Rating™	_	_	
Morningstar Risk	_	_	_
Morningstar Return	_	_	_
	3 Yr	5 Yr	10 Yr
Standard Deviation	_	_	_
Mean	_		
Sharpe Ratio	_	_	_
MPT Statistics	Standard In	dex Be	st Fit Index
Alpha			_
Beta		_	_
R-Squared		_	_
12-Month Yield			_
30-day SEC Yield			_

Portfolio Analysi	<b>s</b> 06-30-2012					
Asset Allocation % Cash US Stocks	Net % 35.72 5.44	35.88	ort % Share Chg 0.15 since 03-2012	Share Amount	Holdings: 10 Total Stocks , 1,025 Total Fixed-Income, — Turnover Ratio	% Net Assets
Non-US Stocks	-0.13		0.13 <sup>数</sup>	6 mil	Money Market Fiduciary	26.61
Bonds	36.60		3.14 ⊕	3 mil	US Treasury Note 2%	-13.14
Other/Not Clsfd	22.36	23.13	0.76 🕀	700,000	Seitel 9.75%	2.94
Total	100.00	114.45 1	4.45 ±	530,000 500.000	Apria Healthcare Grp 11.25% Kratos Defense & Sec Solutions 10%	2.29 2.25
Equity Style	Portfolio Statistics	Port Rel Avg Index	Rel	500,000	Hca 5.875%	2.18
Value Blend Growth	P/E Ratio TTM	11.5 —	0.80 ①	500,000	Chrysler Grp Llc / Cg Co-Iss 8%	2.14
Large	P/C Ratio TTM		— <b>(</b>	500,000	Saratoga Res Inc Tex 12.5%	2.07
Mid	P/B Ratio TTM		0.52	500,000	Nortek 8.5%	2.04
Small	Geo Avg Mkt Cap \$mil	2162 —	0.05	500,000	Niska Gas Strge Us Llc/Fin Cp 8.87	2.03
			⊕	500,000	Atkore Intl 9.875%	2.02
Fixed-Income Style			***	500,000	Forbes Engy Svcs 9%	1.97
Ltd Mod Ext	Avg Eff Maturity			452,748	First Data 10.55%	1.93
High	Avg Eff Duration Avg Wtd Coupon		— 8.71 <sup>禁</sup>	450,000	Norcraft Cos Lp / Norcraft Fin 10.	1.86
Med	Avg Wtd Price		18.20 <b>⊕</b>	16,902	Dupont Fabros Tech Pfd	1.84
Low			Sector We	eightings	Stocks %	Rel Std Index
					100.0	

**Standard Index** 

Barclays US Agg

Bond TR USD

**Category Index** 

Govt/Credit 5-10 Yr Bond

Investment Style

Growth of \$10,000

Crdt

10,320

10,264

10,288

Performance Quartile

+/- Standard Index

+/- Category Index

No. of Funds in Cat

(within category)

History

NAV/Price Total Return %

% Rank Cat

Category Average

Standard Index

Fixed-Income

Barclays US

· 100k

· 60k

· 40k

...10k

07-12

10.17

TR USD

43

**Morningstar Cat** 

Ziegler Lotsoff Cptl Mgmt L/S

US OE Nontraditional

Credit Quality Breakdown —	_	Bond %
AAA		_
AA		_
A		_
BBB		_
BB		_
В		_
Below B		_
NR/NA		_
Regional Exposure	Stock %	Rel Std Index
Americas	100.0	_
Greater Europe	0.0	_
Greater Asia	0.0	_

<sub>Մ</sub>	Cyclical	100.0	_
À.	Basic Materials	0.0	_
A	Consumer Cyclical	0.0	_
Ę.	Financial Services	43.6	_
û	Real Estate	56.4	_
w	Sensitive	0.0	_
9	Communication Services	0.0	_
0	Energy	0.0	_
٥	Industrials	0.0	_
	Technology	0.0	_
<b>→</b>	Defensive	0.0	_
$\equiv$	Consumer Defensive	0.0	_
	Healthcare	0.0	_
Q	Utilities	0.0	_

Onerati	one

Potential Cap Gains Exp

Family: Ziegler Lotsoff Capital Management Multiple
Tenure: 0.6 Year
Objective: Income

Base Currency: USD
Ticker: ZLSCX
Minimum Initial Purchase: \$2,500
Min Auto Investment Plan: \$1,000

 Purchase Constraints:
 —

 Incept:
 01-31-2012

 Type:
 MF

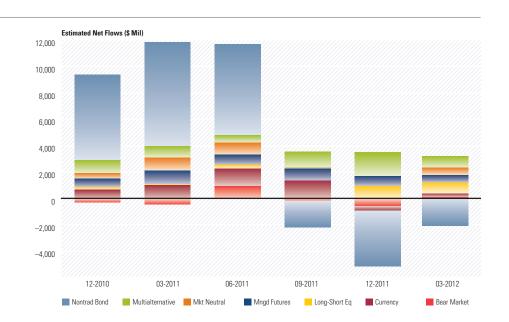
 Total Assets:
 \$26.45 mil



#### Flows and Assets Under Management: Alternative Mutual Funds

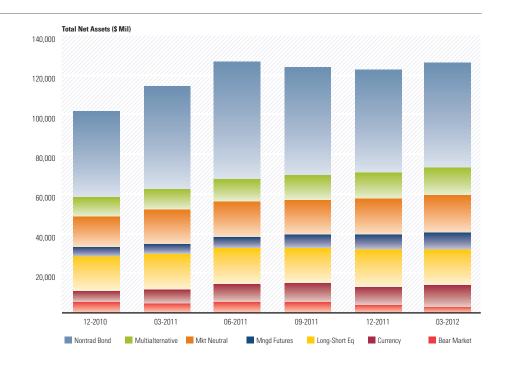
#### **Quarterly Alternative Mutual Fund Flows**

During the first quarter of 2012, alternative mutual funds experienced net inflows of more than \$1.1 billion, a significant turnaround from the \$1.6 billion in outflows seen in the fourth quarter of last year. The inflows were strong across all alternative categories, except for the nontraditional-bond category, which bled \$2.1 billion in the first quarter after losing almost \$4.2 billion in the fourth quarter. Two other alternative mutual fund categories, bear-market and currency, also experienced sharp reversals in flows from the previous quarter. These categories gathered \$141 million and \$273 million, respectively, in the first three months of the year. Funds in the long/short equity, multialternative, and market-neutral categories saw substantial net inflows of \$853 million, \$820 million, and \$599 million, respectively.



#### Quarterly Alternative Mutual Fund Assets Under Management

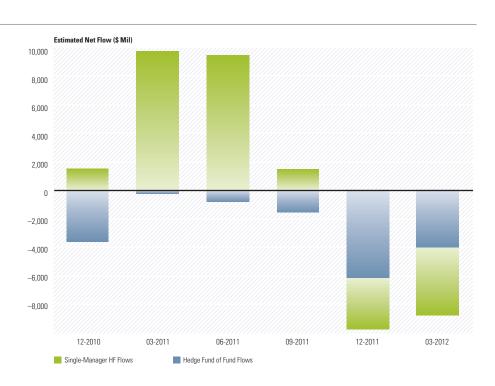
Assets under management of all alternative mutual funds increased by 2.6% during the first quarter of 2012 to \$126 billion. Five of the seven alternative mutual fund categories gained assets during the first quarter. Currency and multialternative funds experienced the most significant percentage gains in assets (8.2% and 7.4%, respectively) due to inflows and strong performance. Bear-market equity funds saw the largest percentage drop in assets during the first quarter (8.7%), and total assets in this category remain the smallest of all the alternative mutual fund categories at \$3.6 billion as of March 31. The largest alternative mutual fund category, nontraditional bond, lost 1.1% of its total assets quarter over quarter.



#### Flows and Assets Under Management: Hedge Funds

#### **Quarterly Hedge Fund Flows**

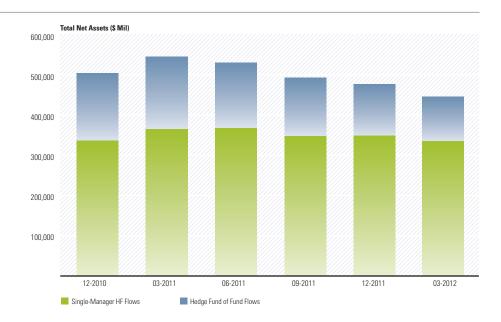
During the first quarter of 2012, single-manager hedge funds in Morningstar's database experienced outflows of \$4.9 billion, more than double the \$2.1 billion of inflows gathered in all of 2011. Global macro and U.S. long/short equity hedge funds in the database bled more than any other category during the first quarter, suffering outflows of \$1.9 billion and \$1.7 billion, respectively. The majority of the global macro outflows can be attributed to a few funds with very large asset bases. Diversified arbitrage and long/short debt hedge funds experienced the largest inflows in the first three months of the year: \$883.5 million and \$734.9 million, respectively. Hedge funds of funds in Morningstar's database leaked \$4.0 billion in the first quarter, continuing their multiquarter losing streak.



#### Quarterly Hedge Fund Assets Under Management

Single-manager hedge fund assets under management in Morningstar's database decreased 2.7% during the first quarter. Over the past year (through March 31, 2012) assets under management of single-manager hedge funds fell by 7.2%, primarily because of outflows. In the first quarter, hedge funds of funds in Morningstar's database managed 14.3% fewer assets than in the prior quarter and are down 30.7% from one year ago.

Morningstar does not report total hedge fund industry flows or assets, as these figures are based on estimates and projections of voluntarily reported information.

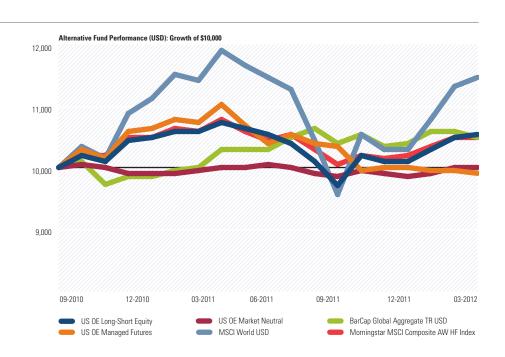


#### **Alternative Investment Performance**

#### Growth of a \$10,000 Alternative Investment

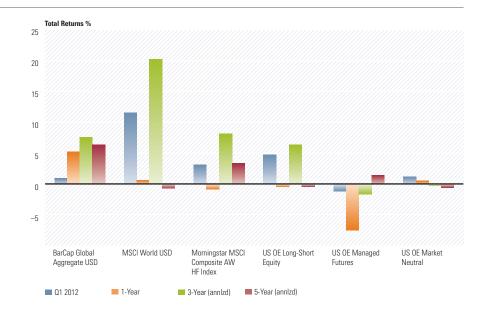
Hedge funds, as proxied by the Morningstar MSCI Composite AW Hedge Fund Index, grew 3.1% in the first quarter, while global stocks, as represented by the MSCI World NR Index, jumped 11.6%. The MSCI World NR Index surged 14.8% over the 18 months ended March 31, while the Morningstar MSCI Composite AW Hedge Fund Index lagged over the same period with a 5.1% increase. Long-short equity mutual funds outperformed the average hedge fund during the first quarter of 2012 and over the past 18 months. Managed futures mutual funds have lost money on average over the past 18-month period.

Morningstar calculates the Morningstar MSCI series of indexes, which includes the Morningstar MSCI Composite AW, a currency-hedged assets-weighted index of almost 1,000 single-manager hedge funds.



#### Performance of Alternative Investments Over Time

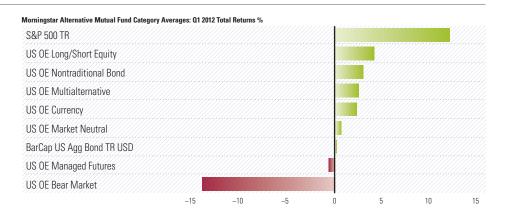
Global stocks, as represented by the MSCI World NR Index, significantly outperformed the average hedge fund (as proxied by the Morningstar MSCI Composite AW Hedge Fund Index) in the quarter ended March 31. Hedge funds have provided better returns than equities, however, over the past one and five years. Global bonds (per the Barclays Global Aggregate index) have fared better than both stocks and hedge funds have over the past one and five years. Alternative mutual funds (as represented by the long-short equity, managed-futures, and market-neutral category averages) underperformed hedge funds over the past three and five years ended March 31.



#### **Q1 Performance by Category**

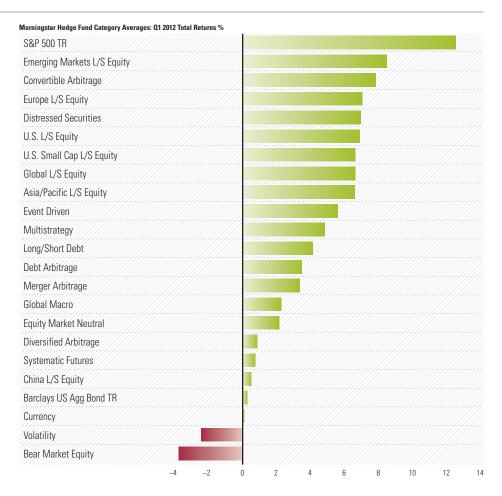
#### **Alternative Mutual Funds**

The average managed-futures mutual fund lost 1.2% in the first quarter of 2012 due to price-trend reversals in several markets. The average bear-market fund plunged 14.0%, in sharp contrast to the S&P 500's 12.6% advance. Long-short equity mutual funds underperformed the broad stock market but still posted relatively strong results, of 4.7%. Currency mutual funds ended the quarter up on average as the U.S. dollar depreciated. These funds tend to take bets against the dollar.



#### **Hedge Funds**

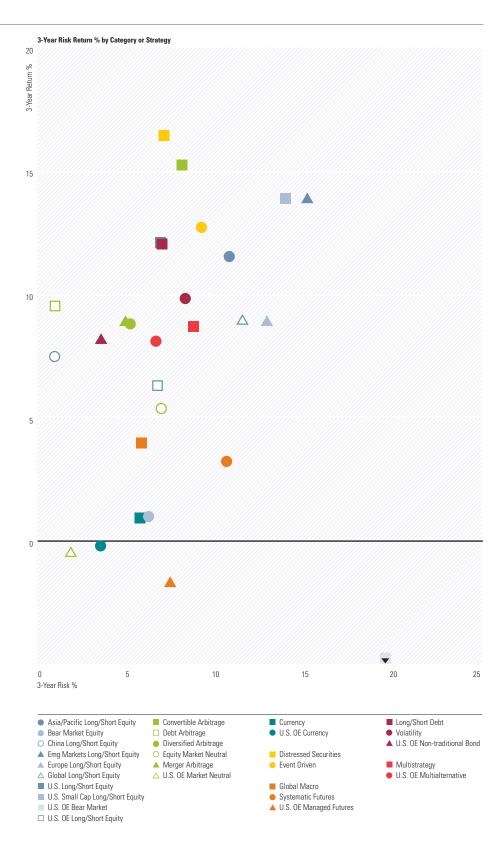
In the first quarter of 2012, every hedge fund category average rose, except volatility and bear market. Funds in the emerging-markets long-short equity and convertible arbitrage categories experienced the largest gains, averaging returns of 8.5% and 8.0%, respectively. Funds in Morningstar's distressed securities and Europe long/short categories also posted substantial gains of 7.3% and 7.2%, respectively.



#### Risk Versus Return: Alternative Mutual Funds and Hedge Funds

#### Three-Year Standard Deviation and Return

Of the 28 alternative mutual fund and hedge fund category averages, 23 exhibited positive returns over the three years ended March 31. Funds in the convertible arbitrage, distressed securities, and U.S. small-cap longshort equity hedge fund categories showed the best annualized three-year total returns on average of 15.2%, 16.5%, and 19.1%, respectively. In terms of risk-adjusted returns, however, distressed securities hedge funds and nontraditional bond mutual funds averaged the best results over the past three years. In contrast, funds in the U.S. bear-market mutual fund category saw a 30.4% annualized decline on average over the three-year period ended March 31 while also exhibiting the highest standard deviation of all alternative mutual fund and hedge fund categories (19.3% annualized). The average managedfutures mutual fund also exhibited a poor three-year risk-adjusted return profile as well, losing 1.7% annualized with an 7.5% annualized standard deviation.



#### **Correlations by Alternative Fund Strategy**

Three–Year Correlations: Alternative Mutual Fund Categ	ories 1	2	3	4	5	6	7
1 US OE Bear Market	1.00						
2 US OE Currency	-0.70	1.00					
3 US OE Long/Short Equity	-0.95	0.76	1.00				
4 US OE Managed Futures	-0.29	0.30	0.33	1.00			
5 US OE Market Neutral	-0.21	0.43	0.35	-0.16	1.00		
6 US OE Multialternative	-0.94	0.64	0.92	0.45	0.15	1.00	
7 US OE Nontraditional Bond	-0.66	0.43	0.71	0.13	0.14	0.76	1.00

hree–Year Correlations: Hedge Fund Categories	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1 HF Asia/Pacific Long/Short Equity	1.00																				
2 HF Bear Market Equity	-0.07	1.00																			
3 HF China Long/Short Equity	0.40	-0.31	1.00																		
4 HF Convertible Arbitrage	0.82 -	-0.11	0.49	1.00																	
5 HF Currency	0.62	0.13	0.33	0.53	1.00																
6 HF Debt Arbitrage	0.81 -	-0.05	0.42	0.92	0.65	1.00															
7 HF Distressed Securities	0.85 -	-0.17	0.38	0.87	0.56	0.83	1.00														
8 HF Diversified Arbitrage	0.70 -	-0.07	0.48	0.76	0.42	0.77	0.70	1.00													
9 HF Emer Markets Long/Short Equity	0.79 -	-0.20	0.73	0.84	0.57	0.79	0.78	0.65	1.00												
0 HF Equity Market Neutral	0.82 -	-0.04	0.43	0.81	0.64	0.89	0.75	0.67	0.78	1.00											
1 HF Europe Long/Short Equity	0.88	-0.08	0.36	0.88	0.73	0.93	0.86	0.70	0.78	0.94	1.00										
2 HF Event Driven	0.89	-0.21	0.46	0.89	0.58	0.85	0.92	0.70	0.88	0.86	0.90	1.00									
3 HF Global Long/Short Equity	0.92 -	-0.13	0.46	0.89	0.67	0.91	0.89	0.69	0.86	0.93	0.96	0.96	1.00								
4 HF Global Macro	0.75	0.12	0.39	0.68	0.86	0.77	0.61	0.48	0.68	0.83	0.83	0.71	0.81	1.00							
5 HF Long/Short Debt	0.85	0.05	0.43	0.93	0.68	0.96	0.83	0.77	0.81	0.91	0.94	0.87	0.91	0.81	1.00						
6 HF Merger Arbitrage	0.83 -	-0.20	0.39	0.87	0.60	0.90	0.82	0.70	0.78	0.93	0.95	0.90	0.94	0.75	0.89	1.00					
7 HF Multistrategy	0.89	-0.04	0.45	0.89	0.73	0.93	0.85	0.70	0.82	0.95	0.98	0.91	0.98	0.87	0.95	0.92	1.00				
8 HF Systematic Futures	0.61	0.22	0.30	0.49	0.80	0.59	0.50	0.35	0.47	0.62	0.65	0.52	0.65	0.87	0.63	0.54	0.72	1.00			
9 HF U.S. Long/Short Equity	0.89	-0.26	0.48	0.85	0.54	0.80	0.90	0.65	0.86	0.84	0.87	0.97	0.95	0.68	0.80	0.87	0.88	0.52	1.00		
O HF U.S. Small Cap Long/Short Equity	0.88	-0.21	0.51	0.83	0.55	0.78	0.88	0.64	0.86	0.83	0.84	0.95	0.94	0.70	0.79	0.84	0.88	0.56	0.98	1.00	
	0.05	0.31	n ng	0.13	0.16	0.23	-0.05	0.19	0.01	0.23	0.17	0.01	0.12	0.35	0.24	0.16	0.23	0.41	-0.02	0.05	1.

#### **Correlations of Alternative Funds to Traditional Asset Classes**

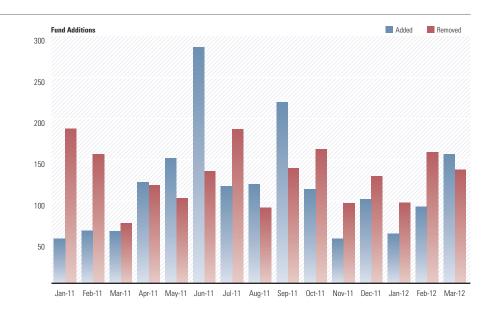
Correlation of Mutual Funds to U.S. Stocks and Bonds	S&P 500 Correlation (USD	))		BarCap US Agg Correlation (USD)			
	3-Year	5-Year	10-Year	3-Year	5-Year	10-Year	
US OE Bear Market	-0.98	-0.97	-0.97	0.22	-0.20	-0.02	
US OE Currency	0.66	0.50	0.19	-0.07	0.01	0.26	
US OE Long/Short Equity	0.96	0.95	0.84	-0.27	0.11	0.07	
US OE Managed Futures	0.29	-0.24	N/A	-0.05	-0.33	N/A	
US OE Market Neutral	0.24	0.13	-0.18	-0.04	0.05	0.17	
US OE Multialternative	0.92	0.94	0.87	-0.12	0.21	-0.03	
US OE Nontraditional Bond	0.63	0.73	0.60	0.05	0.22	0.32	

Correlation of Hedge Funds to U.S. Stocks and Bonds	S&P 500 Correlation (USD	)	BarCap US Agg Correlation (USD)				
	3-Year	5-Year	10-Year	3-Year	5-Year	10-Year	
Morningstar MSCI Composite AW HF Index	0.80	0.70	0.65	-0.12	0.08	0.04	
HF Asia/Pacific Long/Short Equity	0.80	0.80	0.67	-0.14	0.24	0.13	
HF Bear Market Equity	-0.46	-0.50	-0.52	0.22	0.03	0.08	
HF China Long/Short Equity	0.42	0.34	N/A	-0.05	0.05	N/A	
HF Convertible Arbitrage	0.79	0.74	0.65	-0.02	0.32	0.23	
HF Currency	0.51	0.38	0.22	0.07	0.18	0.24	
HF Debt Arbitrage	0.77	0.77	0.63	0.02	0.29	0.25	
HF Distressed Securities	0.82	0.81	0.73	-0.24	0.03	-0.02	
HF Diversified Arbitrage	0.60	0.63	0.52	0.02	0.26	0.22	
HF Emerging Markets Long/Short Equity	0.75	0.75	0.72	-0.06	0.15	0.10	
HF Equity Market Neutral	0.79	0.73	0.59	-0.08	0.21	0.20	
HF Europe Long/Short Equity	0.85	0.81	0.72	-0.13	0.19	0.13	
HF Event Driven	0.90	0.85	0.79	-0.15	0.13	0.06	
HF Global Long/Short Equity	0.90	0.84	0.75	-0.14	0.17	0.09	
HF Global Macro	0.64	0.54	0.46	0.10	0.25	0.20	
HF Long/Short Debt	0.72	0.77	0.65	0.06	0.35	0.32	
HF Merger Arbitrage	0.86	0.82	0.75	-0.11	0.31	0.19	
HF Multistrategy	0.83	0.77	0.72	-0.04	0.20	0.10	
HF Systematic Futures	0.47	0.12	0.03	0.11	0.04	0.17	
HF U.S. Long/Short Equity	0.94	0.90	0.87	-0.27	0.04	-0.04	
HF U.S. Small Cap Long/Short Equity	0.90	0.88	0.85	-0.25	0.04	-0.06	
HF Volatility	0.02	0.27	0.13	0.23	0.47	0.32	

#### Morningstar Hedge Fund Database Overview as of 03-31-2011

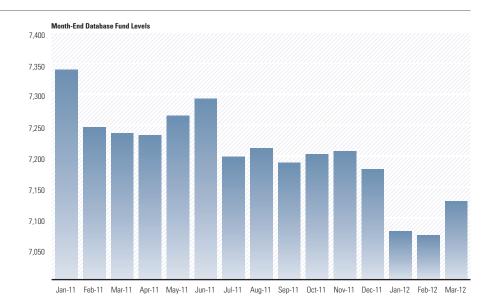
#### **Net Fund Additions by Month**

Morningstar's hedge fund database experienced a net withdrawal of 85 funds during the first quarter of 2012. The database saw 310 additions and 395 fund removals during the quarter. Funds drop out because they have liquidated or because they cease sharing performance data, typically because of poor performance. Fund additions occur as a result of new fund launches or a recent decision to supply data to Morningstar.



#### **Month-End Database Fund Levels**

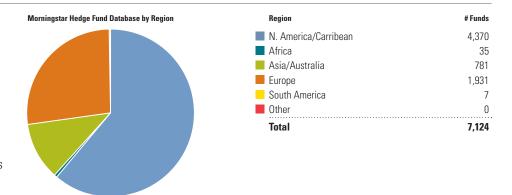
As of March 31, the Morningstar hedge fund database contained 7,127 funds that actively report performance and assets-undermanagement data. This figure includes approximately 5,000 single-manager hedge funds and 2,000 funds of hedge funds. As of quarter-end, the number of funds in the database had dropped approximately 3.1% from December 2010 levels.



#### Morningstar Hedge Fund Database Overview as of 12-31-2011

#### **Hedge Funds by Region**

Approximately 61.3% of hedge funds in the Morningstar database are legally domiciled in the North American/Caribbean region, primarily in the U.S. and the Cayman Islands. A large percentage of United Kingdom hedge funds are also domiciled in the Cayman Islands for tax and regulatory purposes. Approximately 27.1% of funds in Morningstar's database are domiciled in Europe, including both European Union and non-EU jurisdictions, and 11.0% of funds are domiciled in Asia and Australia, primarily in China.



#### **Hedge Funds by Location**

Approximately 78.0% of the hedge funds in Morningstar's database are domiciled in the U.S., the Cayman Islands, China, the British Virgin Islands, Bermuda, and Luxembourg. Both France and Ireland continue to domicile a large portion of European hedge funds, trailing Luxembourg. China is one of the largest and fastest-growing hedge fund domiciles.

North America and Surrounding	4,370
Cayman Islands	1,946
United States	1,354
British Virgin Islands	461
Bermuda	328
Canada	201
Curacao	46
Bahamas	27
St. Vincent & the Grenadines	3
Panama	1
Barbados	1
Anguilla	1
St. Kitts & Nevis	1
Africa	35
Mauritius	19
South Africa	15
Swaziland	1
Asia and Australia	781
China	737
Australia	30
Hong Kong	7
Japan	2
Christmas Island	1
Singapore	1
Bahrain	1
Marshall Islands	1
Vanuatu	1

Europo	1,931
Europe Luxembourg	726
France	196
Ireland	177
Guernsey	143
Switzerland	124
Italy	121
Sweden	75
Jersey	69
Malta	66
Liechtenstein	50
Netherlands	48
Spain	35
United Kingdom	22
Finland	16
Germany	11
Channel Islands	10
Austria	9
Denmark	9
Isle of Man	7
Gibraltar	5
Cyprus	3
Norway	3
Portugal	2
Macedonia	1
Belgium	1
Andorra	1
Greece	1
South America	7
Brazil	7

#### Morningstar Hedge Fund Database Overview as of 12-31-2011

#### **Service Providers** Morgan Stanley and Goldman Sachs are the largest prime brokerage-service providers to hedge funds in Morningstar's database, serving a 33.8% share combined. The big four accounting firms are employed by approximately 75.5% of hedge funds listing auditors in the database, with PricewaterhouseCoopers leading the pack. Citco Fund Services provides administration services to 8.4% of funds in Morningstar's database, significantly more than the next-largest administrator, State Street/IFS. Walkers, Maples & Calder, and Dechert are the three largest legal-counsel providers to hedge funds in the database, with a combined 27.0% market share.

Туре	Rank	Service Provider	% of Database
Prime Broker	1	Morgan Stanley	17.67
	2	Goldman Sachs	16.13
	3	Deutsche Bank	8.69
	4	UBS	8.66
	5	Credit Suisse	7.68
	6	JPMorgan	6.32
	7	Bank of America / Merrill Lynch	4.11
	8	Newedge	3.96
	9	Citigroup	2.78
	10	BNP Paribas	2.66
Legal Counsel	1	Walkers	10.37
	2	Maples & Calder	10.19
	3	Dechert LLP	6.42
	4	Seward & Kissel	6.29
	5	Elvinger, Hoss & Prussen	5.44
	6	Simmons & Simmons	4.48
	7	Schulte Roth & Zabel	3.62
	8	Sidley & Austin	3.17
	9	Ogier	2.79
	10	Conyers Dill & Pearman	2.16
Auditor	1	Pricewaterhouse Coopers	23.45
	2	Ernst & Young	21.28
	3	KPMG	17.12
	4	Deloitte	13.62
	5	Rothstein Kass	5.39
	6	RSM / McGladery & Pullen	2.67
	7	Grant Thornton	2.17
	8	BDO	2.17
	9	Eisner	0.98
	10	Arthur Bell	0.75
Administrator	1	Citco	8.37
	2	State Street / IFS	3.86
	3	Citigroup / BISYS	3.83
	4	HSBC	3.54
	5	CIBC / BNY Mellon	3.15
	6	Credit Suisse / Fortis	2.58
	7	UBS	2.47
	8	CACEIS Fastnet	2.43
	9	Northern Trust	2.06
	10	Apex	1.96



#### **Editor**

Nadia Papagiannis, CFA

#### **Contributors**

Nadia Papagiannis, CFA; John Rekenthaler, CFA; Terry Tian; Dario Castagna, CFA; Mallory Horejs; Josh Charney

#### **Copy Editors**

Thad Doria; Jennifer Ferone Gierat; Elizabeth Knapik

#### Design

Data Division Design Services

#### Data Team

Jeremy Liao

#### Publisher/Director of Fund Research N.A.

Scott Burns

#### Vice President of Research

John Rekenthaler, CFA

#### President of Research/Managing Director

Don Phillips

©2012 Morningstar. All Rights Reserved. The information contained in the Alternative Investments Observer ("Report"): (1) is proprietary to Morningstar Inc., and its affiliates (collectively, "Morningstar") and/or their content providers; (2) may not be copied or distributed by any means; and (3) is not warranted to be accurate, complete, or timely. For certain types of investment vehicles (e.g., hedge funds) Morningstar depends on the investment vehicle itself to provide Morningstar with accurate and complete data. To the extent that one or more of these investment vehicles do not provide Morningstar with data or these data are deficient in any way, the data and statistics provided by Morningstar may be compromised. In addition, because the data contained in Morningstar's database are primarily backward looking (i.e., they're comprised of historical performance statistics), neither the data nor Morningstar's analysis of them can be relied upon to predict or assess future performance—whether of an individual investment (each, a "Fund"), any particular Fund industry segment or the totality of all Funds in the industry. Unless otherwise specified, the data set out in this Report represent summary data for those reporting Funds comprising the applicable industry segment or the industry as a whole (to the extent included in Morningstar's database). Please note that, as a general matter, any return or related statistics that are based upon a limited number of data points are considered statistically suspect and, therefore, may be of limited value. By making the Report available, Morningstar is not providing investment advice or acting as an investment advisor to anyone in any jurisdiction. All data, information, and opinions are subject to change without notice. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of the content of this Report or any information contained in or derived from it. "Morningstar" and the Morningstar logo are registered marks of Morningstar, Inc. All other marks are the property of their respective owners

For inquiries contact: newslettersupport@morningstar.com or nadia.papagiannis@morningstar.com