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Alternative Investments Observer

MORNINGSTAR®

The World Is Flat

Why the asset management world is converging.

by
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According to Thomas Friedman in his 2005 book, *The World Is Flat: A Brief History of the Twenty-First Century*, there's no denying globalization. So rather than fight it, people must adapt. Applying this same idea to investing, the playing field for asset management is leveling. The once distinct worlds of private equity, hedge funds, and mutual funds are converging, and at a pretty rapid pace. The goods and services, namely alternative investments, that were once offered only to large, sophisticated investors are now available to the masses, and the qualities once thought to be most appropriate for retail investors—namely transparency, liquidity, and low fees—are now sought by institutions.

The data supporting this trend are hard to deny. In 2000, there were only a handful of long-short equity mutual funds. At the end of 2012, there were more than 90. Before 2008, managed-futures mutual funds didn't exist, and now there are about 50. All told, there are now 375 mutual funds running the same alternative investment strategies found in hedge funds (see Exhibit 1), and the assets raised in these funds are taking a large share of the total inflows into mutual funds (see Exhibit 2).

Besides mutual funds, the types of vehicles by which retail investors can gain access to hedge fund and private equity strategies are proliferating. The first alternative exchange-traded product, SPDR Gold Shares **GLD**, which launched in 2004, is now accompanied by

Exhibit 1: Alternative Mutual Fund Launches by Inception Year

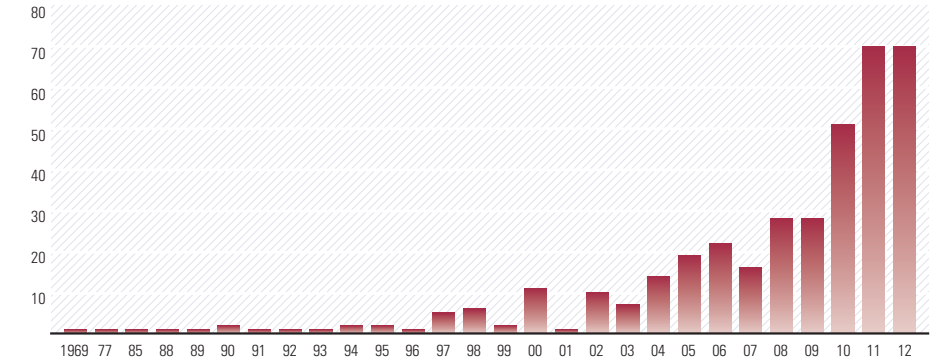


Exhibit 2: Alternative Mutual Fund Flows

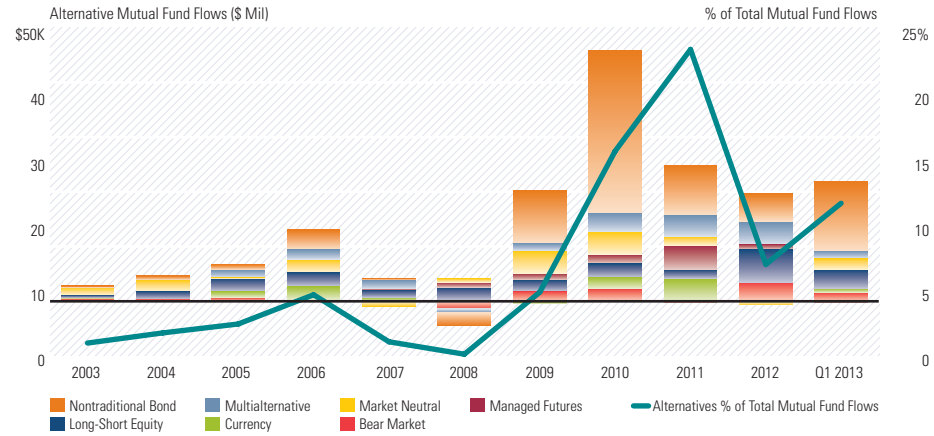


Exhibit 3: Number of U.S. Alternative ETF Offerings by Category

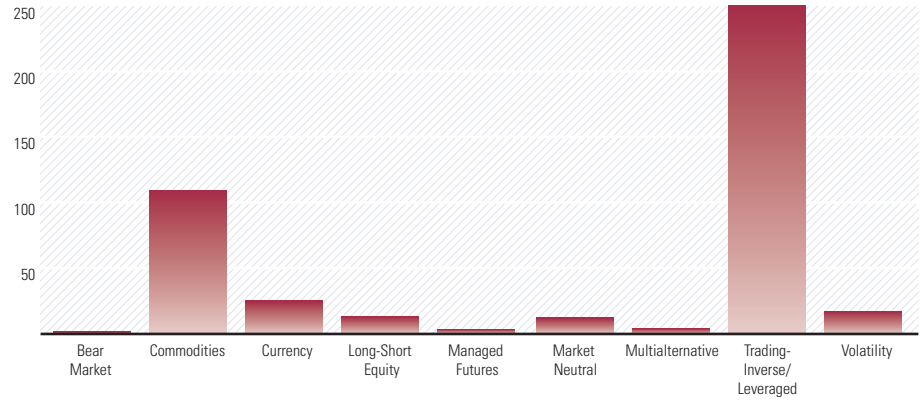
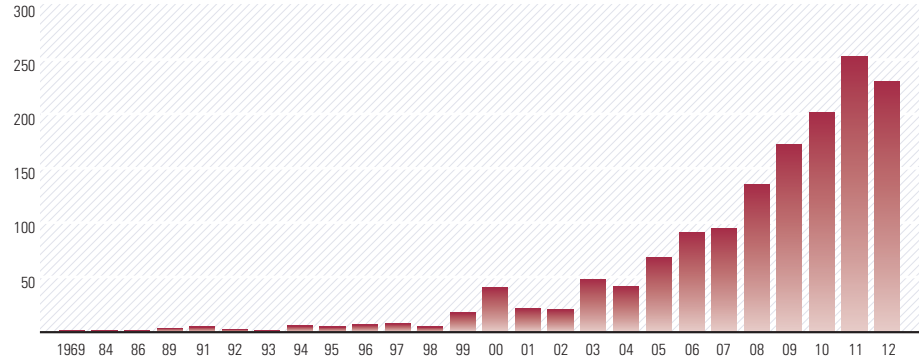


Exhibit 4: Europe Open-End Alternative Fund Launches by Inception Year



more than 400 others, following asset classes such as commodities, currencies, volatility, and distressed and defaulted bonds, as well as trading strategies such as long-short equity, market neutral, and managed futures (See Exhibit 3). Closed-end funds and business development companies, both traded and nontraded, seem to be the next wave.

Convergence in asset management is not limited to the United States, although the catalysts for change are primarily happening here. In Europe, for example, there were a few hundred alternative investment offerings packaged in vehicles similar to U.S. mutual funds prior to 2008. As of the end of 2012, this figure had tripled. (See Exhibit 4).

The multibillion-dollar question, then, is whether convergence is simply a fad driven by retail alternative investment offerings that are destined to fall out of favor or an inevitable shift to which asset management firms must adapt? The answer is most certainly the latter, and here's a look into why.

Fee-Based Advisory Business

Although most retail alternative products were born after 2008, financial advisors' demand for them is driven by a trend that started well before. Financial advisors come in two basic flavors: transaction-based broker-dealers, regulated by FINRA, and fee-based investment advisors, regulated by the SEC. Whereas transaction-based financial advisors were the norm 10 years ago, the pendulum is swinging toward fees. PriceMetrix released a study in August 2012 stating that fee-based accounts grew to 28% of industry assets from 21% during the three years ended May 2012. The reason is that fee-based compensation is better for both the advisor's business and the client's assets. The average fee-based account is larger than the average commission-based account, and it generates more than 3 times the revenue because of a higher asset base and higher returns, according to the study. Demographics also may be driving the trend, as the PriceMetrix study showed that clients aged 40–64 show a greater willingness to move to fee-based advising.[1]

Fee-based advisors like alternative investments for a few reasons. First, alternative investments, which are largely risk-reducing, tamp down the volatility of clients' returns. Morningstar's Investor Return studies have repeatedly shown that volatility hurts investors because it increases the likelihood of buying high and selling low. As fiduciaries, fee-based advisors must be more tuned in to volatility and risk than transaction-based advisors, who are held to less-strict suitability standards.

Second, lower volatility in an advisor's asset base means a steadier revenue stream. It's harder to run a business with unstable revenues and cash flows, in terms of meeting current liabilities (such as payroll) and planning for the future (hiring and other resource decisions, for example). Case in point: In early 2009, a Greenwich Associates survey found that U.S. investment managers' portfolio assets declined by an average of 31% in 2008, and as a result, profits were projected to drop 33% from 2007 levels. Managers slashed budgets by 14% on average.[2] Many of these same companies went on hiring sprees in 2010, as they realized that they had overreacted.

1 http://www.financial-planning.com/news/fee-based-advisors-find-success-with-clients-assets-2680391-1.html
2 http://www.thetradenews.com/news/Trading___Execution/Industry_issues/US_asset_managers_slash_costs_by_up_to_a_fifth.aspx

Exhibit 5: Annual Flows by Distribution Channel for Multialternative Mutual Funds

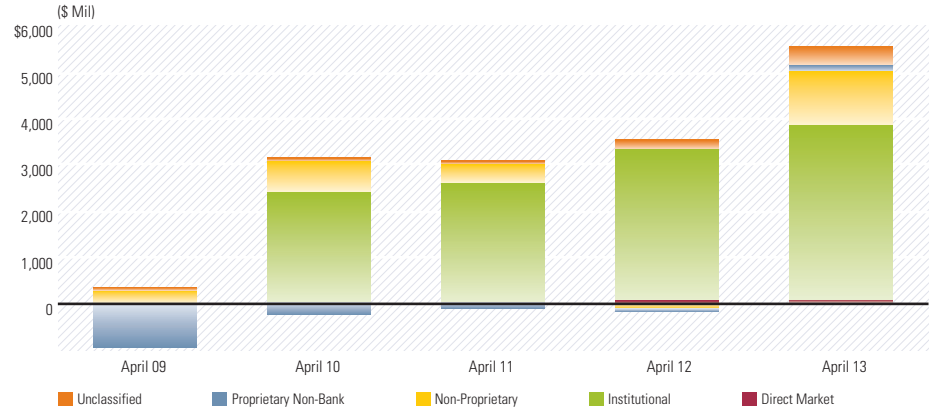
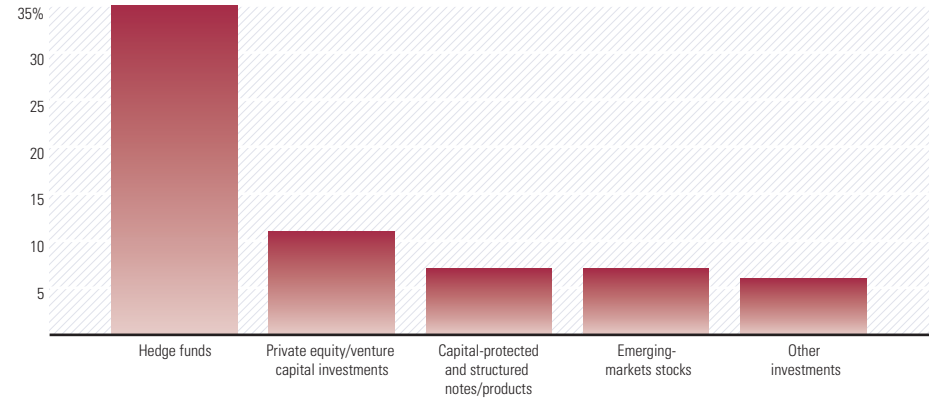


Exhibit 6: Institutions—Alternatives With Largest Proportion of Portfolio (2004–2009)



Finally, expertise in alternative investments gives advisors a leg up on the competition, which includes other advisors as well as online investment tools. The complexity of alternative investments keeps individual investors at bay, despite the fact that many could benefit from the diversification. Exhibit 5 shows that the direct market (individuals going directly to the fund companies) is virtually nonexistent in multialternative mutual funds. The trend is similar in the other alternative mutual fund categories.

The Great '08

Most people wouldn't characterize 2008 as great, except of course if you're trying to sell the benefits of alternative investments. A typical 60/40 (S&P 500/Barclays U.S. Aggregate Bond) portfolio lost more than 20% that year, while the average hedge fund lost only about 13%, and the average managed-futures hedge fund made more than 19%. It's true that most advisors prior to the financial crisis attempted to diversify across long-only investment styles (value versus growth, equity-market capitalization, credit quality, and duration), but high correlations during the crisis rendered that type of diversification meaningless. The results left advisors thirsty for true diversification. As evidence, one only has to look at the flows into managed-futures mutual funds, which have delivered negative returns since 2008, yet continue to see net inflows. (See Exhibit 2.)

Institutional investors, on the other hand, had wholeheartedly embraced the diversification benefits of alternative investments prior to the financial crisis. According to Morningstar and Barron's 2009 Alternative Investment Survey, more than 26% of institutional respondents had allocated more than 25% to alternative investments (in 2008), and very few (4%) had nothing allocated to alternatives. The types of alternatives they had invested in, though, were of the nontransparent, illiquid variety—namely private equity and hedge funds (see Exhibit 6). Many institutions espoused the David Swensen/Yale Endowment model, which suggested that better managers and higher returns existed in these limited-access, illiquid vehicles. What Swenson (and every other investor, for that matter) never anticipated was the massive liquidity crisis that culminated in September 2008, in which private equity funds initiated capital calls (cash that was committed by investors but not collected), hedge funds instituted redemption gates (investors who wanted to redeem could not and were charged fees nonetheless), all liquid equity and credit investments tanked, and endowment donors stopped donating (because their cash and wealth dried up as well). Despite the crisis, cash flow demands of pension liabilities and endowment spending remained. The average endowment lost 22.5% between July and November in 2008, triggering massive curbs in spending.[3]

If the September 2008 bomb wasn't enough to obliterate institutions' overreliance on illiquid private vehicles, Bernie Madoff dropped another in December 2008. Many large hedge funds of funds, banks, philanthropic foundations, pension funds, family offices, universities, and religious organizations were fleeced of hundreds of millions of dollars.[4] If these investors had simply required all of their money managers to have independent administrators, custodians, and auditors (all requirements of the 1940 Act), the Madoff catastrophe could have been avoided entirely.

3 2008 NACUBO—Commonfund Endowment Study
4 http://s.wsj.net/public/resources/documents/st_madoff_victims_20081215.html

It's no wonder that the paradigm shifted to liquid, transparent, and regulated alternative investments in 2009.

Changes in the Private Equity and Hedge Fund Industries

It would be nice to think that the democratization of alternative investments—that is, the plethora of liquid alternative investment choices available to retail investors today—is the result of asset management firms doing what's best for the investor. But as capitalists, we know better. The truth is that asset management firms—including private equity, hedge funds, and traditional mutual fund managers—are offering liquid, transparent, regulated, and lower-minimum alternative investments because it's in their best economic interests. Let's take a look at the history of this evolution.

Before there were alternative mutual funds, exchange-traded funds, and closed-end funds, there were private equity funds and hedge funds. These funds were similar, in that they charged a "2% and 20%" (management and incentive) fee structure, but their modus operandi differed. Private equity funds focused primarily on providing equity capital to startups and proven businesses that needed a little boost, with the hopes of going public or selling out at high multiples to a strategic buyer seven to 10 years down the road. The equity capital comes from cash gathered and committed to investors, as well as money borrowed from investment banks (leveraged buyouts). In 2006 and 2007, a record amount of capital was committed to private equity, and in 2006, almost all private equity transactions were leveraged buyouts,[5] which made sense given that leverage was easy to access and extraordinarily cheap.

Hedge funds, on the other hand, tended to focus on relatively more-liquid trading strategies involving all parts of the corporate structure and all types of financial instruments (and often leveraged). But throughout the 2000s, the lines between private equity firms and hedge funds started to blur. Private equity firms such as KKR **KKR**, Apollo **APO**, and Blackstone **BX**, for example, all established asset management (hedge fund) arms to take advantage of trading opportunities sourced through private equity and to grow their assets under management. Hedge funds, such as York Capital and Oaktree **OAK** started trading in sometimes leveraged and longer-term, illiquid equity and credit opportunities, mirroring private equity investments. As a result, the SEC, which was attempting to regulate hedge funds in 2006, had a difficult time defining the term "hedge fund." In the end, the SEC settled on a more than two-year lockup period as the delineating factor, as private equity funds tended to have longer lockups. Hedge funds reacted by increasing their lockup periods (and suing the SEC).

The combination of illiquidity and leverage, however, proved detrimental for both private equity and hedge fund firms toward the end of 2008. Private equity funds invoked capital calls because of financing needs for their underlying portfolio companies—PricewaterhouseCoopers cited that 75% of the international private equity firms it surveyed in 2010 breached covenants and/or were forced to enter into financing negotiations during 2009.[6] At the same time, many private equity investors reneged on or delayed meeting their capital obligations because of their own liquidity crises (Washington Mutual and Calpers, for example[7]). Several years later, the industry has still not recovered. According to Bain Capital's 2012 Global Private Equity Report, there is more than $1 trillion in private equity "dry powder" still looking for a home, and of the $2 trillion that is invested, 75% is still below the hurdle rates required to charge incentive fees.[8] According to Cambridge Associates, about 28% of the money raised between 2006 and 2008 has been paid back to investors because of a lack of investment opportunities.[9] The lower revenues from charging management fees on smaller pools of capital without incentive fees is causing private equity firms to seek diversification in their business models, and traditional asset management is one area they are targeting.[10]

The financial crisis took an even larger toll on the hedge fund industry. As hedge funds generally offered better liquidity terms than private equity funds, the last quarter of 2008 and first quarter of 2009 saw the largest outflows in the history of Morningstar's hedge fund database; investors pulled out more than $108 billion, greater than 15 times the outflows seen in 2001, which was the only other period with net outflows. (Keep in mind that Morningstar's database is only a subset of the entire world of hedge funds, so the actual outflows were likely much larger). At the same time, hedge funds struggled with their own performance. Many overleveraged hedge funds were forced to sell their investments at deep discounts in order to meet margin calls. Additionally, hedge funds using Lehman Brothers for prime brokerage saw their assets frozen. The net result was that a large chunk of the hedge fund industry went belly up. More than 3,100 hedge funds, or 37% of the total 8,400-plus funds in Morningstar's database as of December 2008, stopped reporting in 2009.

The hedge fund industry survived the financial crisis, but the dynamics have changed, causing hedge funds to look elsewhere for business.

5 http://faculty.chicagobooth.edu/steven.kaplan/research/ksjep.pdf
6 http://www.pwc.de/de_DE/de/finanzinvestoren/assets/Pr_Equity_Trend_Report_2010.pdf
7 http://www.signallake.com/innovation/VCDefault120808.pdf
8 http://www.bain.com/bainweb/pdfs/Bain_and_Company_Global_Private_Equity_Report_2012.pdf
9 http://www.bloomberg.com/news/2013-02-12/buyout-boom-shakeout-seen-leaving-one-in-four-to-starve.html
10 http://www.ey.com/Publication/vwLUAssets/Private_equity_evolution_of_the_operating_model/$FILE/PE_evltn_of_oprtng_model.pdf

Exhibit 7: Flows in Morningstar's Hedge Fund Database

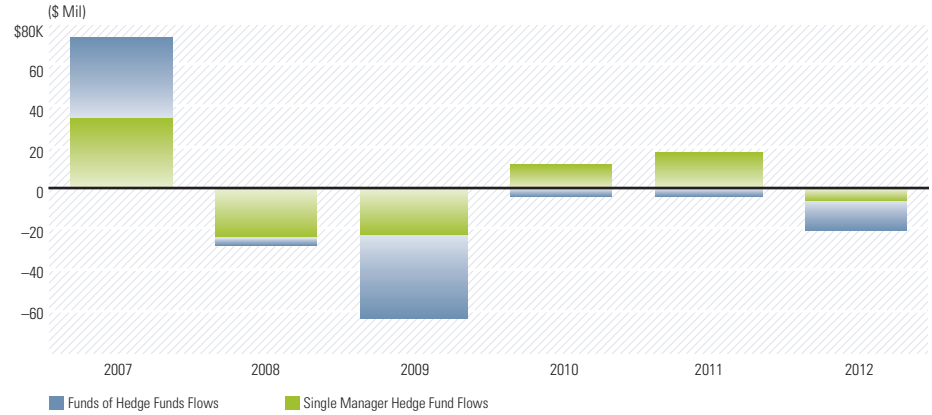
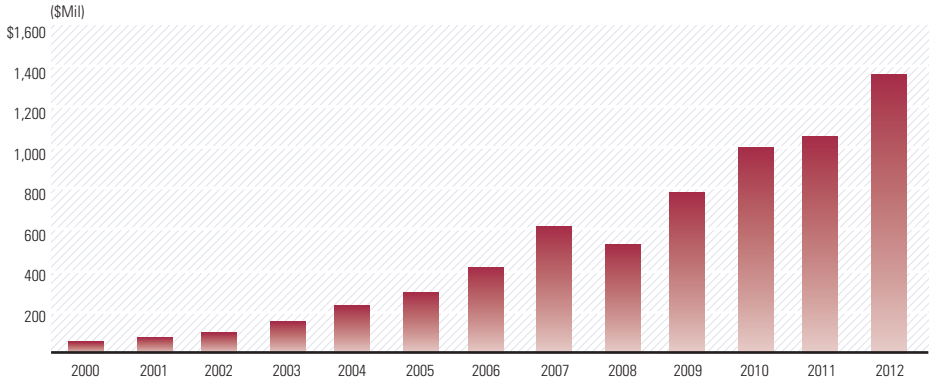


Exhibit 8: Total U.S. ETF Assets



High net worth and smaller institutional investors have largely fled from hedge funds, and the large institutions that are still willing to invest in illiquid hedge fund vehicles are focused on the larger, well-established funds.[11] The rest of the industry seems to be hanging on by a thread. About 60% of the 2,560 single-manager funds and funds of hedge funds with five years of performance data in Morningstar's database have not yet recovered from their financial crisis drawdowns (using Morningstar's monthly maximum drawdown and recovery calculations), and thus are unable to charge performance fees. And although single-manager hedge funds' outflows have slowed, hedge funds of funds are still hemorrhaging assets (see Exhibit 7) as investors seem to have grown tired of poor performance (helped by a double layer of management and incentive fees), gating provisions (funds of funds have a double-layer liquidity problem, requiring liquidity from the underlying managers in order to fund investors' redemption requests), and insufficient operational due diligence (many hedge funds of funds were exposed to Madoff). As the hedge fund field, which was only a couple of trillion dollars globally at its peak, doesn't seem to be growing, hedge funds are moving on to much larger pastures: the $10 trillion world of U.S. mutual funds. This figure doesn't even include the $4.6 trillion in mutual fundlike vehicles in Europe or the $2 trillion in global ETFs.

What the Long Haul Means for Long-Only

Despite the multitrillions of dollars under management, it would be smart for traditional active long-only asset managers, namely mutual fund shops, to adapt and participate in this convergence trend as well. For these businesses, the paradigm really shifted in the mid- to late-2000s with the proliferation and adoption of the exchange-traded product (funds and notes—see Exhibit 8). Exchange-traded products have squeezed the profit margins of traditional, long-only asset managers. According to McKinsey & Company, the net revenue yield (revenues/AUM) in retail products has dropped by more than 25% between 2001 and 2009, and most of the drop happened in the boom years,[12] which also happens to be when ETFs took over and as the fiduciary, fee-based advisory trend emerged. To compete, traditional active asset managers need to be more active and must prove to fiduciaries that the fees they charge add value over much cheaper ETFs. Alternative strategies, which are inherently more active than traditional strategies, are one way for managers to justify their fees. Although Morningstar's data suggests this number is largely inflated, McKinsey expects that by 2015, retail alternative investments are expected to account for one fourth of revenues and a majority of revenue growth.[13]

It's About Portfolio Solutions, Not Products

There are now dozens of traditional long-only mutual fund managers, alternative hedge fund managers, and private equity managers that have crossed the lines between private and public, unregulated and regulated, and liquid and illiquid. The managers approached the transition in myriad ways with mixed success. The ones who did the best were focused on solutions to advisors' asset-allocation problems.

AQR Capital Management, for example, which managed long-only and alternative assets for institutional clients prior to 2008, launched 21 U.S. long-only and alternative mutual funds totaling $11.5 billion in assets during the past four years without the help of a distribution

11 http://www.preqin.com/docs/reports/preqin_global_investor_report_hedge_funds.pdf
12 McKinsey & Company Financial Services Practice. "The Asset Management Industry: Now It's About Picking Your Spots." September 2010.
13 http://www.mckinsey.com/clientservice/financial_services/knowledge_highlights/recent_reports/~/media/reports/financial_services/altinvest_web.ashx

partner. Much to the surprise of its competitors, AQR didn't cannibalize its existing institutional business, which grew about $40 billion in that time frame. AQR focuses on educating advisors on portfolio construction and the academic theories behind its investment process (at its AQR University seminars, for example) rather than the merits of its individual products. This approach gets advisors to buy in to the firm's investment processes in general, which apply to many products. The products are well-priced to boot.

BlackRock **BLK** is another portfolio-solution-oriented asset manager that has seen much success with its retail alternative products. The marketing materials for this firm's alternative mutual funds don't even really address the term "alternative" at all, which perhaps makes BlackRock the most forward-thinking of the bunch. Rather, the strategy is to offer solutions to advisors' problems, such as fixed-income investing in a low-rate environment and the costly volatility of emerging-markets equities.

For firms with more niche strategies or less capital, partnering with a fund of funds or a larger traditional asset management firm could be the answer. Arden Alternative Strategies **ARDNX**, which launched in December 2012, for example, partnered with Fidelity's Portfolio Advisory Service to offer what is probably the best-built hedge fund of funds in a retail vehicle to date. For only 2.3%, the fund offers access to well-known hedge fund managers, such as CQS, PEAK6, JANA Partners, and York Capital. Arden, a 20-year-old firm managing $7.5 billion, was able to convince brand-name hedge fund managers to carve out parts of existing hedge fund strategies in order to attempt to deliver retail investors an alpha-generating product without cannibalizing hedge funds' existing business.

Even alternative investment managers that have already launched as mutual funds can benefit from partnering with traditional asset management firms in order to offer clients a full spectrum of portfolio solutions. MainStay Marketfield **MFLDX**, which rebranded under the MainStay (New York Life) umbrella in October 2012, appears to be one of the most successful partnerships. The fund has almost tripled its assets in a matter of months, to $8.6 billion from $3.3 billion.

Back to the Future

The world of asset management is clearly changing. Ten years from now, it certainly will be flatter, with more full-service firms offering traditional long-only as well as alternative products in a variety of investment vehicle formats. The most useful, and therefore the most successful, asset managers will be those that offer holistic portfolio solutions, which include what are now considered alternative investments, to all types of clientele.

Quant Corner: Check Six—Protecting Your Tail

Using options to hedge equity tail risk.

by
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Alternative Investments Strategist

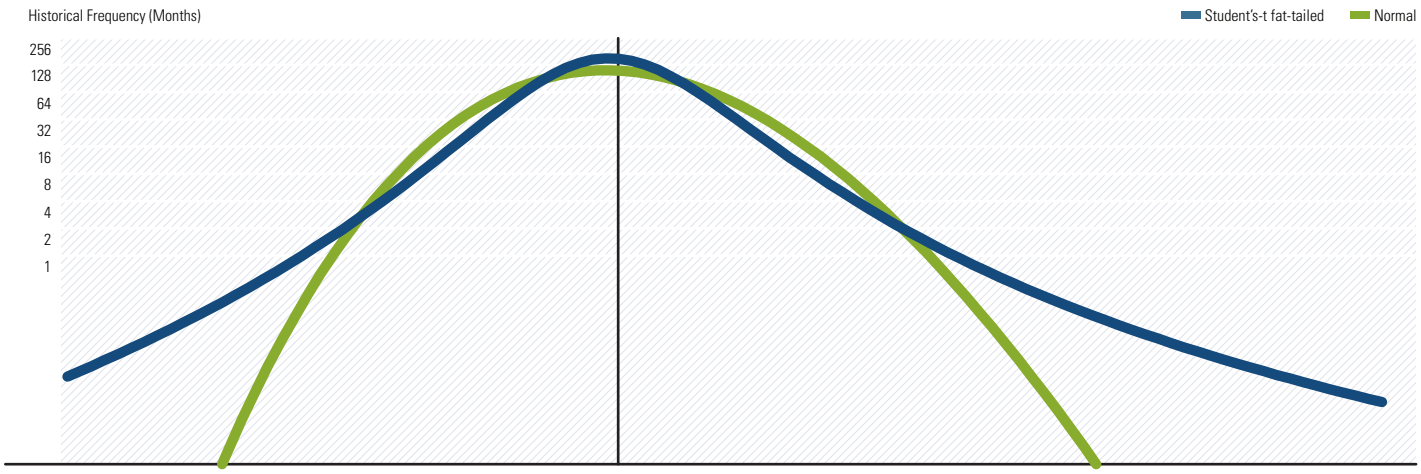
In the jargon of fighter pilots, the term "check six" refers to looking behind you for a risk on your tail. In investing, the concept of tail risk refers not to threats from behind, but to rare and devastating hazards in the future. Protecting one's portfolio from these tail risks is a complex task, and the cost-benefit relationship is probably the most important consideration, as insurance policies aren't free. There are also various ways to implement a tail hedge, depending on one's objectives. The goal of this guide is to provide enough understanding of this challenging task so investors will be able to ask intelligent questions of potential providers of tail-risk protection for their portfolios.

Option Tail Hedges, Deconstructed

Exhibit 1 below depicts a theoretical "normal" return distribution of an investment over a specific time horizon. The term "tail" stems from the way this distribution gets long and skinny as the outcome deviates from the average of the distribution, which is the expected return of an investment. A return distribution is a handy framework for visualizing and discussing the probability of different types of returns. For example, if a particular stock's monthly returns are normally distributed with an expected return of zero and a standard deviation of 10%, there's a 2.5% chance of a monthly loss exceeding 20%. This probability distribution concept is also a great framework for explaining how to use options to "cover" your tail.

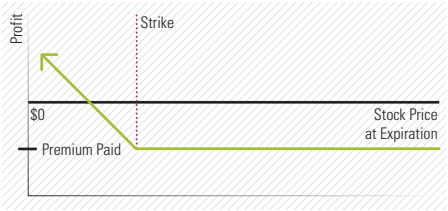
While most investors learn about options through images such as the put-option payoff diagram in Exhibit 2 (next page), a more intuitive way is to think about how options change the distribution of the price outcomes for a particular investment. Price distributions for investments are slightly different than return distributions, in that they are bounded at zero on the left side; but price distributions are similar to return distributions in that there

Exhibit 1: Fat Tails and Skinny Tails



is a probability of each possible outcome. Options allow investors to "split" the probability distribution and buy and sell exposure to only a portion of the outcome distribution. By purchasing a put option, for example, an investor is "splitting off" and profiting only from the left side (the downside) of the underlying investment's price outcomes, the portion that is below the strike price. Therefore, buying an investment and then buying a put option on that investment removes or "hedges" the left side—or the left tail—of the price probability distribution. However, there is always a cost. In the case of a tail hedge, an investor pays the certain market price of the option to hedge away the uncertain downside tail of the investment. Additional option strategies, such as collars, can mitigate the cash cost of hedging, but at a different cost; these strategies forgo some gains to fund the purchase of the hedge. In short, there is no free lunch.

Exhibit 2: Long Put-Option Payoff Diagram



Let's solidify these concepts using an example portfolio consisting of an equity-market index and options on that index. Using the concept of "splitting" the probability distribution, we can bound the wide range of price outcomes over that one-year period by selling the upside (selling call options) and using the proceeds (premium received) to buy protection from the downside (buying put options) to create an option position known as a collar. As one can see in Exhibit 3, we've given up the potential return to the upside above the strike price of the call option to fund our hedge that protects the downside below the strike price of the put option.

Tightening the bounds on the outcomes of our market-index portfolio illustrates the problem with hedging. As we buy puts at higher and higher strike prices to protect ourselves from the downside tail, we must sell the calls at lower and lower strike prices to fund the hedge, giving up more and more upside potential. If we sell call options at the current index price and use the proceeds to buy put options below the current index price, we generate only a risk-free return on the investment, minus the very significant trading costs typical of option markets. Said differently, as we remove the risk from our investment, we remove the return from the investment, and removing all risk generates a risk-free rate of return. This riskless investment is illustrated in Exhibit 4.

Even if we shift around the strike prices of our collar to generate some cash, we are still giving up something. For example, we could sell a call on the upside above some price, use some of the cash proceeds to hedge the downside at a much lower price, and pocket the cash difference. We've traded a portion of the upside for cash. As we can see in Exhibit 5, options allow investors to tailor the risk/return profile and cash flows of a portfolio, but the instruments simply exchange certain cash flows for uncertain cash flows, and as risk is reduced, so is potential return.

Characteristics of Downside Tail Hedges Using Options

Now that we have established that removing risk through a hedge also removes the return associated with that risk, we understand why hedges are expensive. Exhibit 6 (next page) shows data for put options on the S&P 500 on March 25, 2013, when the index closed at 1551.69 and the CBOE Volatility Index (VIX) was 13.74, near historic lows. We chose an expiration date closest to one year in order to approximate annual rates of return.

The (ask) price of a put option struck at 1550, almost exactly the value of the index, is $107.10, which translates, when annualized,

Exhibit 3: Option Collar Position on Stock Index

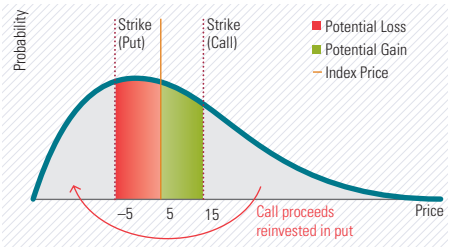


Exhibit 4: Riskless Option Collar Position on Stock Index

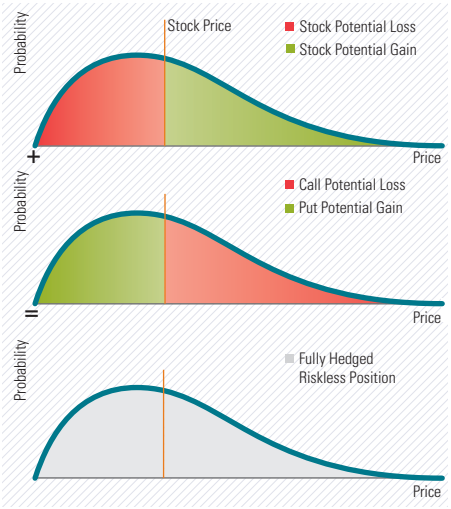
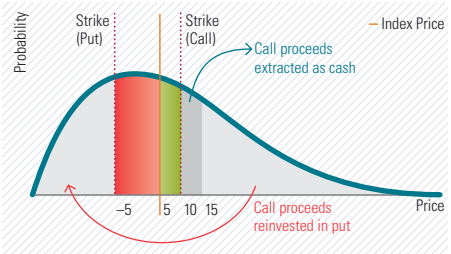


Exhibit 5: Income Generating Collar Position



to 7.0% of the index value protected at a price of 1500 or below. Even though this price is relatively low on a historical basis (as evidenced by a relatively low VIX of 14%, compared with approximately 20% long-run realized volatility of the S&P 500), the 7% cost of the one-year hedge removes most of the approximately 10% long-run historical return associated with the S&P 500. Repeatedly buying shorter-term options to generate a similar hedge over the course of a year is typically even more expensive. To reduce

Exhibit 6: S&P 500 Option Prices (361-day Expiration) on March 25, 2013

Calls

Strike	Bid	Mid	Ask	Implied Volatility	Delta ($/$)	Vega ($/pp)	Strike/ Stock
1250	306.4	308.85	311.3	15.6	0.93	2.06	81
1275	284.9	287.35	289.8	15.9	0.91	2.56	82
1300	263.7	266.25	268.8	16.1	0.88	3.04	84
1325	242.7	246.1	249.5	16.6	0.85	3.56	85
1350	222.6	225.1	227.6	16	0.83	3.89	87
1375	203	205.5	208	16	0.8	4.3	89
1400	184.6	186.5	188.4	15.7	0.77	4.67	90
1425	164.5	167.8	171.1	15.8	0.74	5.05	92
1450	147.7	149.95	152.2	15.3	0.7	5.36	93
1475	129.7	132.85	136	15.2	0.66	5.65	95
1500	114.2	116.4	118.6	14.7	0.62	5.87	97
1525	98.9	101.1	103.3	14.4	0.58	6.04	98
1550	84.5	86.6	88.7	14.1	0.54	6.14	100
1575	71.8	73.45	75.1	13.7	0.49	6.16	102
1600	**58.7**	61.4	64.1	13.6	0.44	6.1	103
1625	48.6	50.4	52.2	13.2	0.39	5.93	105
1650	39	40.6	42.2	12.8	0.34	5.68	106
1675	30.8	32.35	33.9	12.6	0.3	5.33	108
1700	23.7	25.65	27.6	12.5	0.25	4.95	110
1725	18.4	19.7	21	12.1	0.21	4.45	111
1750	13.7	15.15	16.6	12	0.18	3.99	113
1775	10	11.35	12.7	11.9	0.14	3.48	114
1800	7.4	8.5	9.6	11.7	0.11	2.99	116
1850	3.7	4.3	4.9	11.3	0.07	2.01	119
1900	1.6	2.45	3.3	11.6	0.05	1.5	122

Puts

Strike	Bid	Mid	Ask	Implied Volatility	Delta ($/$)	Vega ($/pp)	Strike/ Stock
1250	25.4	27.55	**29.7**	23.2	–0.15	3.52	81
1275	29.1	31.1	33.1	22.7	–0.16	3.78	82
1300	33.9	35.4	36.9	22.1	–0.18	4.04	84
1325	37.2	39.15	41.1	21.6	–0.2	4.31	85
1350	42	43.85	45.7	21.1	–0.22	4.57	87
1375	47.2	49.1	51	20.7	–0.24	4.84	89
1400	51.9	54.8	**57.7**	20.4	**–0.27**	**5.1**	90
1425	59.8	61.45	63.1	19.7	–0.29	5.33	92
1450	65.2	68.2	71.2	19.5	–0.32	5.56	93
1475	74.6	76.3	78	18.8	–0.36	5.75	95
1500	82.6	84.85	87.1	18.5	**–0.39**	5.92	97
1525	90.4	93.45	96.5	18.1	–0.42	6.05	98
1550	102.9	105	**107.1**	17.7	–0.46	6.13	100
1575	114.5	116.55	118.6	17.4	–0.5	6.16	102
1600	127	129.1	131.2	17.1	–0.53	6.14	103
1625	141	143.15	145.3	16.8	–0.57	6.06	105
1650	155.5	158	160.5	16.6	–0.61	5.93	106
1675	172.2	174.55	176.9	16.5	–0.65	5.75	108
1700	189.8	192.2	194.6	16.5	–0.68	5.53	110
1725	208.8	211	213.2	16.4	–0.71	5.28	111
1750	228.8	231.15	233.5	16.6	–0.74	5.04	113
1775	249.7	252.1	254.5	16.8	–0.76	4.79	114
1800	272.3	274.3	276.3	17.1	–0.78	4.55	116
1850	318.4	320.2	322	17.9	–0.81	4.16	119
1900	366.1	367.75	369.4	19	–0.83	3.85	122

some of this cost, one could buy a put to protect against a larger but less likely 10% decline (the 1400 strike). This is more representative of a tail hedge, but at $57.70, it would still cost 4.1% of the value of the position being hedged at a 1400 index level, or 3.7% of the 1552 index value on March 25. Note that the implied volatility, the common measure of the relative price of an option, gets higher as the strike prices decline. In tail-hedging terms, the options price in a "fat tail" to the downside; the option market thinks that big declines are more likely than what is predicted by the normal distribution. Therefore, to fund the tail protection below 1400 (ask price $57.70), one would need to sell a call option at 1600 (bid price of $58.70), which gives up all gains above 3.1% (1600–1552/1552)! Capping one's gains at 3% to protect against a 10% decline doesn't seem like a very appealing proposition.

Performance of Option Tail Hedges

The analysis of the tail hedge above pertains to the value of the index at its expiration. In real life, however, the performance of a put option hedge is more complex. The complex performance of an option hedge stems from the way that options are valued, which is determined by the strike price, underlying investment price, time to expiration, implied volatility, interest rate, and dividend yield. The passage of time causes the value of the option to decay, and changes in both the price of the underlying investment and in the market-determined implied volatility of the option drive changes in the value of the hedge. (Changes due to movements in interest rate and dividend yield are typically minimal.) The complexity comes from the interaction of all of these variables.

In practice, a long put option will increase and decrease in value with the respective fall and rise in the price of the underlying investment, but less so as time passes, unless the price of the underlying investment falls close to the strike price of the option (when the option

is at-the-money). Note the "delta" of the options in Exhibit 6 is far less than 1, meaning the price of the option moves by less than one dollar for every dollar move in the index. For example, on March 25, the value of the 1500 strike put option was expected to move $0.39 for every whole dollar decline in the index (delta of negative 0.39, with a small move in the S&P 500 index, all else equal), but the 1400 strike put option was estimated to move only $0.27 for each dollar decline in the index. The delta of a tail hedge (a further out-of-the-money long put option) increases as the index falls, but only approaches a one-for-one relationship when the options are in the money and very close to the expiration date. So, a long put position will only act as a perfect hedge to the movement of the underlying investment when it is in the money and close to expiration. Otherwise, many other factors cause the option price to move.

More appealing, however, is the way the option hedge reacts in a sudden market decline. When the value of the underlying index declines dramatically, the price of tail-hedge insurance (implied volatility) rises quickly, as the option market often fears and expects further future declines. This change in value with changing implied volatility can be seen in the "vega" column of Exhibit 6; for the 1400 strike put option, a 1-percentage-point increase in implied volatility would result in a $5.10 increase in the price of the option. The negative correlation between implied volatility and short-term market movements makes the option tail hedge very effective when markets move suddenly downward. The implied volatility spike fades rapidly, though, if the market settles down, significantly reducing the value of the hedge. This is why passively buying and holding the hedge is usually suboptimal.

Implementing a Tail-Hedging Strategy

Clearly, there is a lot to consider when implementing a tail-risk hedging strategy. It is best, therefore, to figure out one's objective for the tail hedge and then implement the hedging strategy systematically. If the objective is to reduce the volatility of one's investment, buying and holding an out-of-the-money, longer-dated put option will perform well, particularly for the risk of large downside moves. If the hedges (in isolation) are fairly priced such that they generate no long-run positive expected return, then the benefits may do little to enhance long-run total return, regardless of the volatility reduction. Still, for the right investor, having losses capped at, say, 15% in any given year might have significant psychological value and may be well worth the cost.

Tail hedges begin to get more interesting when pursuing the objective of return enhancement. Imagine a skilled active equity manager with a tail hedge in place. In the event of a market correction, the manager can unwind the hedge (selling the long put option) after it has spiked in value and use the proceeds to purchase cheap securities. Even if the market continues to decline, the manager has a buffer relative to the performance of the benchmark in the amount of the profit from unwinding the hedge. Having cash when cash is in short supply, when the stock market as a whole is cheap, and when certain securities are grossly mispriced is like dying and going to stock-picking heaven. Of course, skilled active managers are hard to come by, and expensive.

Real-World Hedging

An investor can use options on individual stocks to hedge tail risk, but this is difficult. First, the investor must have an idea of the upside and downside he/she would like to bound on each individual stock. Second, single-name stock options are more expensive than index options because the lack of diversification of each underlying stock makes the outcome more uncertain. Also, single-name options are not as liquid and bid-ask spreads are wider, adding to the trading costs.

In reality, most investors will use index options to manage the risk and returns of a portfolio of individual stocks or funds. A dominant risk with index options is that the hedge is not a perfect match to the underlying portfolio. But if an investor is willing to accept an imperfect hedge, there are many sources for potential tail-risk hedging. In a recent talk at Morningstar, Neel Kashkari, then the managing director and head of global equities at PIMCO, discussed how spiking correlations across asset classes during periods of crisis gave PIMCO a wide range of tail-hedging alternatives, from put options on securities and indexes throughout the world to other securities with put-like characteristics, such as credit default swaps and options on credit spreads.

Here's an example of an imperfect, rules-based tail-hedge strategy for the equity portion of a portfolio of a broad mix of U.S.-listed stocks: First, set a target cost for the tail hedge as a percentage of the equity portfolio's current value—say approximately 50 basis points. Next, choose the level of decline in the index that one would like to hedge—say 20%—and set the strike price at that level. The closest listed expiration to one year will protect a great deal of notional exposure for the amount spent on hedging. Finally, commit to a preset strategy of rebalancing the portfolio if the index hits the strike price of the option. For example, in the event of a 20% decline in the equity holdings, an investor could rebalance by selling the option, use the proceeds to purchase a new option with a one-year horizon that is 20% below the new index price, and reinvest any remaining proceeds in equities.

For example, using the option prices in Exhibit 6, the 1250 strike puts are closest to 80% of the S&P 500's value of 1551 at the close on March 25, 2013. For a $1 million equity portfolio, two contracts of the 1250 strike puts would cost $5,940 (2 contracts* 100 shares per contract *$29.70), or 59 basis points of the $1 million portfolio. Those puts would protect $310,200 (2*100*$1,551), or 31.0% of the portfolio, from a decline of more than 19.4% (1–1250/1551) at expiration. Under the strategy of liquidating the options in the event of a market correction, the options would provide a capital infusion if the market fell to

1250 before expiration. Using the Black-Scholes model, if the S&P 500 dropped to 1250 immediately after we bought the hedge and the implied volatility didn't change, the options would trade for $114. However, when the market corrects, the implied volatility of options typically rises dramatically. If the implied volatility of these options increased to 40% from current levels of 23%, the value of the option hedge would rise by 563% from $29.70 to $197, or from $5,940 to a total of $39,400. Unwinding the hedge at this point would mitigate 3.4 percentage points of the approximate 20% decline in our equity portfolio, and it would allow us to purchase a new hedge and more equities at depressed prices.

Because the effectiveness of the hedge will decline as time passes, rebalancing the hedge every six months is a reasonable enhancement to the strategy (assuming the 20% stock market decline did not occur). After the initial expense of approximately 50 basis points (59 basis points in the example above), the investor could rebalance the portfolio so that the 20% out-of-the-money hedge would be valued at approximately 50 basis points of the portfolio every six months. (Such a strategy may see significant variability in the hedge expense, however, from 50 basis points twice a year if the market rallies dramatically, to a couple of percentage points if the market declines and becomes volatile.) The real challenge in implementing such a tail strategy, though, lies in investor discipline. By definition, a tail hedge is insurance against rare events, meaning that the 50 basis points of insurance premium will bear no fruit in most years. Human beings do not always respond well to repeated small losses, so anyone considering a tail-hedge strategy should imagine, for example, spending 50 basis points for 11 straight years with no payoff. A tail-hedge investor also should consider whether he or she would have the discipline to purchase that insurance yet one more time.

The Diversification Option

In the end, put option tail hedges can be effective, but they are challenging to understand and implement. Advisors may leave hedging to a skilled manager, or they may choose to avoid it completely. Diversification is a simpler solution for reducing volatility or capitalizing on tail-risk events. If one can find an investment that's expected to maintain low correlation of returns during extreme negative events, it will reduce the portfolio's exposure to those events. Managed futures are one example; the Morningstar MSCI Systematic Trading Hedge Fund Index, which represents price-trend-following managed-futures strategies in Morningstar's hedge fund database, returned 19.3% in 2008, compared with a 37% decline for the S&P 500. Further, with a disciplined rebalancing strategy, assets with low or negative correlation can enhance returns by forcing investment out of the tail hedge and into the most relatively distressed asset classes, which are likely to rebound. However, even uncorrelated strategies can come at a cost. Managed-futures strategies, for example, significantly underperformed equities postcrisis, posting only 0.4% in 2009, compared with 26.5% for the S&P 500. Finally, one must not forget about the ultimate uncorrelated asset—cash. Increasing a portfolio's weighting to cash has the effect of both reducing portfolio volatility and preserving the option of capitalizing on extreme events by rebalancing from cash into distressed assets. Cash, however, has less potential upside than a managed-futures strategy in the long run. In the end, every hedging strategy is a cost-benefit trade-off, and each investor must determine the risk/return profile that is optimal for them.

Morningstar Product Spotlight: Alternative Fund Quick Rank

A quick and easy tool to filter through the liquid alternatives universe.

by
Mallory Horejs
Alternative Investments Analyst

The liquid alternatives world continues to grow, and it has become increasingly difficult to navigate. To make the search process simpler, Morningstar created the Alternative Fund Quick Rank tool, which allows users to screen through the universe of analyst-rated funds across a variety of metrics, such as category, historical performance, and fees. Investors who register can gain access to this new tool for free on the Morningstar Advisor website: http://advisor.morningstar.com/alternative-fund-screener?advt=true

Identifying Each Category's Standout Funds

The Alternative Fund Quick Rank tool displays all the alternative mutual funds that have received Morningstar Analyst Ratings™ so far—45 distinct funds, which amount to roughly 75% of the total assets invested in alternative mutual funds. The analyst ratings universe is expanding; soon, 80 funds covering 85% of the total alternative mutual fund assets will be searchable on the quick rank tool. The tool also displays all share classes of each fund (institutional, no-load, or front-load, for example), bringing the total number of offerings currently displayed to 139. Morningstar Analyst Ratings for alternatives funds debuted in June 2012 as forward-looking, qualitative ratings designed to complement our original 1–5 star Morningstar Ratings™, which is quantitative and historical in nature.

The most logical place to start a search is with the second column—"Category." The "Alternatives" bucket is fairly big, and an investor may only be interested in one part of it. For example, long-short equity funds are ideal for investors seeking some downside protection but who want to take on some stock market risk in order to capture some upside. Currency and market-neutral funds are better suited for more conservative investors trying to diversify their fixed-income portfolio. Each investor has unique portfolio needs and circumstances, and narrowing down the search process right off the bat will simplify things.

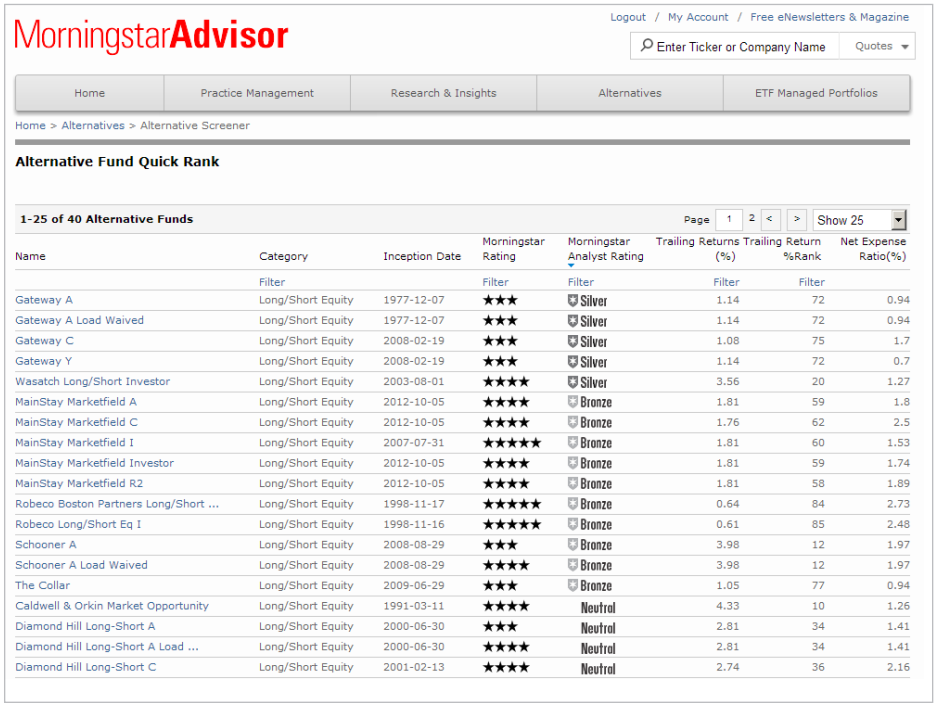
Morningstar currently rates funds in six categories: long-short equity, managed futures, market neutral, multialternative, multicurrency, and nontraditional bond. Selecting one or multiple categories in the second column will allow users to see the rated funds in those peer groups. The fifth column, "Morningstar Analyst Rating," allows users to sort by or filter through the ratings in each category. For example, Exhibit 1 shows all rated share classes in the long-short equity category, sorted by their Morningstar Analyst Rating.

Analyzing Performance Records

Since it debuted in 1985, the original Morningstar Rating, often called the star rating, has become one of the most well-known metrics in the mutual fund industry. Investors and advisors have embraced the rating—1 to 5 stars based on a fund's historical risk-adjusted returns relative to peers—as a quick and easy way to evaluate a fund's past performance. The metric is a purely quantitative rating, and funds must have at least a three-year track record to receive the star rating. The "Morningstar Rating" column allows users to sort by star ratings, either within a category or for the entire group of funds.

Users can dig deeper into performance, though, by evaluating returns over a variety of time periods as well. The "Trailing Returns (%)" column includes a filter setting that allows users to toggle between the trailing returns for different time periods—anything from one month to 10 years. The "Trailing Return %Rank" column will display the rank of that trailing return relative to the fund's entire category. For alternative mutual funds that do not yet have the three-year track record required for a star rating, or for multicurrency funds that do not yet receive star ratings (at just 22 constituents,

Exhibit 1: Morningstar Analyst Ratings in the Long-Short Equity Category



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Alternative Fund Quick Rank

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Name	Category	Inception Date	Morningstar Rating	Morningstar Analyst Rating	Trailing Returns (%)	Trailing Return %Rank	Net Expense Ratio(%)
	Filter		Filter	Filter	Filter	Filter	
Gateway A	Long/Short Equity	1977-12-07	★★★	Silver	1.14	72	0.94
Gateway A Load Waived	Long/Short Equity	1977-12-07	★★★	Silver	1.14	72	0.94
Gateway C	Long/Short Equity	2008-02-19	★★★	Silver	1.08	75	1.7
Gateway Y	Long/Short Equity	2008-02-19	★★★	Silver	1.14	72	0.7
Wasatch Long/Short Investor	Long/Short Equity	2003-08-01	★★★★	Silver	3.56	20	1.27
MainStay Marketfield A	Long/Short Equity	2012-10-05	★★★★	Bronze	1.81	59	1.8
MainStay Marketfield C	Long/Short Equity	2012-10-05	★★★★	Bronze	1.76	62	2.5
MainStay Marketfield I	Long/Short Equity	2007-07-31	★★★★★	Bronze	1.81	60	1.53
MainStay Marketfield Investor	Long/Short Equity	2012-10-05	★★★★	Bronze	1.81	59	1.74
MainStay Marketfield R2	Long/Short Equity	2012-10-05	★★★★	Bronze	1.81	58	1.89
Robeco Boston Partners Long/Short ...	Long/Short Equity	1998-11-17	★★★★★	Bronze	0.64	84	2.73
Robeco Long/Short Eq I	Long/Short Equity	1998-11-16	★★★★★	Bronze	0.61	85	2.48
Schooner A	Long/Short Equity	2008-08-29	★★★	Bronze	3.98	12	1.97
Schooner A Load Waived	Long/Short Equity	2008-08-29	★★★★	Bronze	3.98	12	1.97
The Collar	Long/Short Equity	2009-06-29	★★★	Bronze	1.05	77	0.94
Caldwell & Orkin Market Opportunity	Long/Short Equity	1991-03-11	★★★★	Neutral	4.33	10	1.26
Diamond Hill Long-Short A	Long/Short Equity	2000-06-30	★★★	Neutral	2.81	34	1.41
Diamond Hill Long-Short A Load ...	Long/Short Equity	2000-06-30	★★★★	Neutral	2.81	34	1.41
Diamond Hill Long-Short C	Long/Short Equity	2001-02-13	★★★★	Neutral	2.74	36	2.16

Exhibit 2: Snapshot of JPMorgan Research Market Neutral A (JMNAX)

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Name	Category	Inception Date	Morningstar Rating	Morningstar Analyst Rating	Trailing Returns (%)	Trailing Return %Rank	Net Expense Ratio(%)
	Filter		Filter	Filter	Filter	Filter	
TFS Market Neutral	Market Neutral	2004-09-07	★★★★★	Gold	5.13	7	2.42
AQR Diversified Arbitrage I	Market Neutral	2009-01-15	★★★★	Silver	3.21	17	1.21
AQR Diversified Arbitrage N	Market Neutral	2009-01-15	★★★★	Silver	2.91	19	1.52
Merger	Market Neutral	1989-01-31	★★★★	Silver	3.24	16	1.27
Arbitrage C	Market Neutral	2012-05-31	★★★	Bronze			
Arbitrage I	Market Neutral	2003-10-17	★★★★	Bronze	2.49	24	1.2
Arbitrage R	Market Neutral	2000-09-18	★★★	Bronze	2.21	29	1.44
Calamos Market Neutral Income A	Market Neutral	1990-09-04	★★★	Bronze	5.57	2	1.13
Calamos Market Neutral Income A LW	Market Neutral	1990-09-04	★★★★	Bronze	5.57	2	1.13
Calamos Market Neutral Income B	Market Neutral	2000-09-11	★★★	Bronze	4.79	9	1.89
Calamos Market Neutral Income C	Market Neutral	2000-02-16	★★★	Bronze	4.76	11	1.88
Calamos Market Neutral Income I	Market Neutral	2000-05-10	★★★★	Bronze	5.81	1	0.88
Calamos Market Neutral Income R	Market Neutral	2007-03-01	★★★★	Bronze	5.27	6	1.38
JPMorgan Research Market Neutral A	Market Neutral	2002-02-28	★★	Bronze	-0.96	63	1.49
JPMorgan Research Market Neutral A ...	Market Neutral	2002-02-28	★★	Bronze	-0.96	63	1.49
JPMorgan Research Market Neutral B	Market Neutral	2002-02-28	★★	Bronze	-1.48	74	1.99
JPMorgan Research Market Neutral C	Market Neutral	2009-11-02	★★	Bronze	-1.48	74	1.99
JPMorgan Research Market Neutral ...	Market Neutral	1998-12-31	★★★	Bronze	-0.48	59	0.99
JPMorgan Research Market Neutral ...	Market Neutral	2009-11-02	★★	Bronze	-0.72	61	1.24

the category size is not sufficient), this tool helps users to better evaluate performance.

While this quick snapshot of performance is certainly helpful, users may notice that the overall Morningstar Analyst Rating (Gold, Silver, Bronze, Neutral, or Negative) may not always seem to correlate with the fund's trailing-return rank or star rating. That's because the Morningstar Analyst Rating incorporates a variety of factors, including manager experience and tenure, quality and repeatability of the investment process, as well as fees, in addition to historical performance. Though the goal of the Morningstar Analyst Rating is to predict future performance relative to peers, these more qualitative factors may give an analyst conviction that a poor performing fund will improve going forward or that a strong performer's returns are not sustainable.

For example, Exhibit 2 shows all the rated share classes in the market-neutral category. Users will notice that Bronze-rated JPMorgan Research Market Neutral A **JMNAX** has earned only a 2-star rating relative to its peers. The fund's annualized three-year return of negative 0.96% ranks in the category's 63rd percentile. But despite recent performance woes, this fund remains a Morningstar Medalist because its long track record, strong management team, and repeatable investment process give Morningstar confidence it will produce good long-term results.

Evaluating the Costs

Though fees are listed in the last column, they're an equally important piece of the puzzle. In August 2010, Morningstar released a study showing that in aggregate, low-cost and long-only mutual funds experienced better returns than high-cost funds across all asset classes during various periods from 2005 through March 2010. Though alternative mutual funds charge higher prices across the board than long-only products (average net expense ratios in the managed-futures and multialternative categories exceed 2.00%, for example), it's reasonable to expect the same is true with alternative mutual funds. Furthermore, given the current difficult return environment for many of these alternative strategies, portfolio managers will struggle to overcome large fee hurdles.

Users can sort the "Net Expense Ratio (%)" column to find the most attractively priced alternative offerings. When analyzing fees, it's best to focus on fees relative to the category (a more similar comparison) as well as relative to similarly distributed share classes (all no-load alternative funds, for example). Although cheaper is usually better over the long term, it's not always the way to go. A fund's cost should always be viewed in light of its performance.

Industry Trends: Alternative Mutual Funds

Investors flock to the largest mutual funds.

by
Josh Charney
Alternative Investments Analyst

Alternative Mutual Funds

Flows into alternative funds started the year off strong. Total flows for all seven categories registered an astounding $21.8 billion, compared with the previous record of $12.6 billion in the third quarter of 2010. Alternative mutual fund assets now stand at $180.4 billion, representing 1.8% of mutual funds. Three categories saw record inflows last quarter—nontraditional bond ($12.5 billion), long-short equity ($3.6 billion), and market neutral ($2.2 billion). The non-traditional-bond category, already the largest at $80.4 billion, beat its previous quarterly inflow record by a whopping 50%, thanks to inflows at three already sizable funds.

PIMCO Unconstrained Bond **PUBAX**, JPMorgan Strategic Income Opportunities **JSOAX**, and BlackRock Strategic Income Opportunities **BASIX** experienced inflows of $1.6 billion, $536.0 million, and $427.0 million, respectively. These funds all employ tactics such as interest-rate hedging and speculation and long and short credit bets. The benefit to owning these funds is that managers have many levers to pull to generate outsized returns, but investors should be cognizant that each one takes on significantly different risks. The PIMCO offering's duration can range from between negative three to positive eight years, and in terms of credit bets, it can invest up to 40% in high-yield debt and up to 50% in emerging markets. The JPMorgan fund goes a step further; it doesn't cap its interest-rate sensitivity (although its average duration as of March 31, 2013, was 0.9 years) and actively shorts bonds, such as emerging-markets and sovereign debt (as of March, its short exposure was 24%). Finally, the BlackRock fund is heavily exposed to structured products (28.2% as of March 31) such as: commercial mortgage-backed securities (9.8%), asset-backed securities (6.6%), and nonagency MBS (7.8%).

In the long-short equity category, MainStay Marketfield **MFLDX**, already one of the largest contenders, gained a whopping $2.8 billion in new assets in the first quarter of 2013. The fund now stands at $8.3 billion, more than 6 times the size it was one year ago. Subadvisor Marketfield Asset Management handed the fund over to MainStay, now the advisor, last fall. MainStay's distribution channels, along with the fund's solid track record, are responsible for the fund's massive inflows. In 2008, for instance, the fund lost 13.1%, less than the category's 15.4% average loss. In 2009, when most long-short funds lagged, MainStay Marketfield outpaced the S&P 500 (30.7% versus 26.5%). Gateway **GATEX**, once the largest and still the oldest fund in the long-short equity category, earned second place for the most assets gathered last quarter, with $383 million.

The bulk of the market-neutral category's inflows in the first quarter of 2013 went to one of the newest funds, PIMCO's Worldwide Fundamental Advantage Absolute Return Strategy **PWWAX** ($2.0 billion), which launched in November 2012. For this offering, PIMCO employs the same "bonds plus" strategy available in many of its products, with a market-neutral global-stock portfolio overlay (accessed through a swap). The market-neutral stock-selection sleeve is subadvised by Research Affiliates, which follows a quantitative "fundamental weighting" approach also available in other PIMCO products. Investors, it seems, can't get enough of PIMCO.

Fund Reports

Allianz Global Investors Structured Alpha

by **Nadia Papagiannis, CFA**

Advisor
Allianz Global Investors Fund Management LLC

Advisor Location
New York, New York

Assets Under Management
$8.3 million

Inception Date
Dec. 4, 2012

Investment Type
Mutual fund

Morningstar Category
Market neutral

Management
The fund is managed by Greg Tournant, Stephen Bond-Nelson, and Trevor Taylor. Tournant heads the structured products team at Allianz, a team which he created in 2005 at Oppenheimer Capital, a subsidiary of Allianz at the time. Prior to 2005, Tournant managed equity option-based hedge funds as well as option sleeves of mutual funds. Bond-Nelson has been with the structured products team since its beginning, following a 12-year equity research career. Taylor has worked with Tournant and Bond-Nelson since 2005. He has 14 years of experience in investment management. The team is supported by two research analysts and a product specialist, Jeff Sheran.

Strategy

The fund puts together vertical option spreads on the S&P 500 Index, the Russell 2000 Index, and the Nasdaq in an attempt to generate small but steady returns regardless of the equity markets' movement. The return target is equal to the 90-day U.S. Treasuries plus 5%, net of fees. The fund does best in sustained bear markets with high volatility. The strategy fares worse in sustained bull markets with low volatility.

The fund's 80–100 spread positions take long and short positions in both put and call options. The spreads have multiple legs, but all options expire on the same date, and management hopes to hold all positions to expiration. The fund uses CBOE FLEX options, giving management the ability to customize and ladder option expirations, which are typically 40–60 days out. The fund will completely rotate its positions seven to eight times per year. Management attempts to structure each spread such that there is a wide range of outcomes in which the fund will collect premium on the net position, but in the event of a large downside move, the position is also protected, without having to do any trading. For the approximately 25% of the portfolio that does not have a built-in downside tail-risk hedge, management overlays long put options. Approximately 20% of portfolio assets are dedicated to options margin, while the remainder is invested in U.S. Treasury bills.

Process

The investment process, which is both quantitative and qualitative in nature, attempts to model the three stock markets' return distributions over the short term (up to 90 calendar days), based upon historical returns of the stock markets, historical volatility environments, and the current volatility environment. For example, if the team's current volatility model indicates a high volatility environment, the stock market distribution model will overweight historical time periods in which volatility was high. Management qualitatively assesses if the volatility environment has shifted and if the stock market distribution models should be re-run. Based upon the expected stock market return distributions and current volatility model, the model suggests a variety of option spread positions (there are about 15–20 different configurations programmed into the model). Manager Greg Tournant and his team tweak those configurations and put them together into a portfolio.

Risk Management

Although the fund attempts to hold all spread positions to expiration, the fund may close out of a position when the model indicates the position is at its break-even point (and therefore risks losing money). If the position is at break-even because the market has gone down and volatility has gone up, the fund will close out of the position and use the cash to enter into another position with a much wider range of profit outcomes (because volatility is higher). If a position is near break-even because the market has gone up, the fund will close out of the position, but the ability to replace the position is more limited (because volatility is generally low). Management says that it has historically closed out of only 15% of the strategy's positions prior to expiration.

Management has stated that it spends approximately 3.00% annualized on put protection. The fund's expenses (per the prospectus) also cost the strategy approximately 1.75% annualized.

Release date 04-30-2013

AllianzGI Structured Alpha A (USD)

Standard Index	Category Index	Morningstar Cat
S&P 500 TR	BofAML USD LIBOR 3 Mon CM	US OE Market Neutral

Performance 04-30-2013

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2011	—	—	—	—	—
2012	—	—	—	—	—
2013	2.01	—	—	—	2.41

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	—	—	—	—	-3.55
Std 03-31-2013	—	—	—	—	-3.93
Total Return	—	—	—	—	2.07
+/- Std Index	—	—	—	—	—
+/- Cat Index	—	—	—	—	—
% Rank Cat	—	—	—	—	
No. in Cat	—	—	—	—	
7-day Yield	—				

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 800-988-8380 or visit www.allianzinvestors.com.

Fees and Expenses

Sales Charges

Front-End Load %	**5.50**
Deferred Load %	**NA**

Fund Expenses

Management Fees %	1.25
12b1 Expense %	0.25
Gross Expense Ratio %	**5.28**

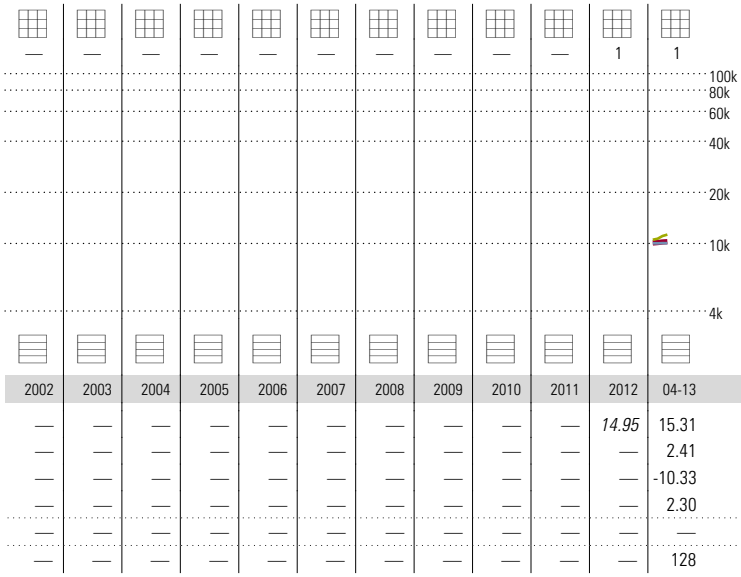
Risk and Return Profile

	3 Yr *60 funds*	5 Yr *46 funds*	10 Yr *19 funds*
Morningstar Rating™	—	—	—
Morningstar Risk	—	—	—
Morningstar Return	—	—	—

	3 Yr	5 Yr	10 Yr
Standard Deviation	—	—	—
Mean	—	—	—
Sharpe Ratio	—	—	—

MPT Statistics	Standard Index	Best Fit Index
Alpha	—	—
Beta	—	—
R-Squared	—	—

12-Month Yield	—
30-day SEC Yield	—
Potential Cap Gains Exp	—



2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	04-13	History
—	—	—	—	—	—	—	—	—	—	*14.95*	15.31	NAV/Price
—	—	—	—	—	—	—	—	—	—	—	2.41	Total Return %
—	—	—	—	—	—	—	—	—	—	—	-10.33	+/- Standard Index
—	—	—	—	—	—	—	—	—	—	—	2.30	+/- Category Index
—	—	—	—	—	—	—	—	—	—	—	—	% Rank Cat
—	—	—	—	—	—	—	—	—	—	—	128	No. of Funds in Cat

Investment Style
Equity
Stock %

Growth of $10,000
- AllianzGI Structured Alpha A 10,241
- Category Average 10,033
- Standard Index 11,274

Performance Quartile
(within category)

Portfolio Analysis 04-30-2013

Asset Allocation % 03-31-2013	Net %	Long %	Short %
Cash	99.85	99.85	0.00
US Stocks	0.00	0.00	0.00
Non-US Stocks	0.15	1.21	1.06
Bonds	0.00	0.00	0.00
Other/Not Clsfd	0.00	0.00	0.00
Total	100.00	101.06	1.06

Equity Style

Value	Blend	Growth	
			Large
			Mid
			Small

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	—	—	—
P/C Ratio TTM	—	—	—
P/B Ratio TTM	—	—	—
Geo Avg Mkt Cap $mil	—	—	—

Fixed-Income Style

Ltd	Mod	Ext	
			High
			Med
			Low

Avg Eff Maturity	—
Avg Eff Duration	—
Avg Wtd Coupon	—
Avg Wtd Price	—

Credit Quality Breakdown —	Bond %
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure	Stock %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Top Holdings 03-31-2013

Share Chg since 03-2013	Share Amount	Holdings: 0 Total Stocks , 1 Total Fixed-Income, — Turnover Ratio	% Net Assets
	600	Russell 2000 Index Flex May13 969	-0.06
✲	600	Russell 2000 Index Flex May13 971	-0.06
✲	600	Russell 2000 Index Flex May13 976	-0.05
	200	Russell 2000 Index Flex May13 946	0.05
✲	1,000	S+p 500 Index May13 1420 Put	-0.04
✲	200	Russell 2000 Index Flex May13 950	0.04
	600	Russell 2000 Index Flex Apr13 972	-0.04
✲	800	S+p 500 Index Apr13 1490 Put	-0.04
✲	200	Russell 2000 Index Flex May13 955	0.04
	200	Russell 2000 Index Flex Apr13 950	0.04
	800	Russell 2000 Index Flex Apr13 980	-0.04
	200	Russell 2000 Index Flex Apr13 950	0.04
	800	Russell 2000 Index Apr13 970 Call	-0.04
✲	1,000	S+p 500 Index Apr13 1470 Put	-0.04
	500	S+p 500 Index Apr13 1590 Call	-0.04

Sector Weightings	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

Operations

Family:	Allianz Funds	Base Currency:	USD	Incept:	12-04-2012
Manager:	Multiple	Ticker:	AZIAX	Type:	MF
Tenure:	0.4 Year	Minimum Initial Purchase:	$1,000	Total Assets:	$8.29 mil
Objective:	Growth and Income	Purchase Constraints:	—		

MORNINGSTAR®

Fund Reports

ALPS/Red Rocks Listed Private Equity

by **Nadia Papagiannis, CFA**

Advisor
ALPS Advisors Inc.

Advisor Location
Denver, Colorado

Assets Under Management
$250 million (fund)

Inception Date
Dec. 31, 2007

Investment Type
Mutual fund

Morningstar Category
Miscellaneous sector

Management
Red Rocks Capital, this fund's subadvisor, was founded in 2003 by Adam Goldman and Mark Sunderhuse. Prior to Red Rocks, Goldman worked in venture capital as the general partner of Centennial Ventures. He has 30 years of experience investing in alternatives and public and private equity. Sunderhuse was a former partner and portfolio manager at Berger Financial Group (now part of Janus Capital Group). He also founded Crestone Capital Advisors (bought by Wells Fargo), where he managed small-capitalization growth equity products, and managed the Fire and Police Pension Association of Colorado.

Strategy

The fund takes long positions in 30–50 listed private equity securities, selected from a universe of approximately 200. This universe includes publicly listed stocks of private equity general partners (firms such as Blackstone Group **BX**, Carlyle Group **CG**, and KKR & Co. **KKR** comprised 16% of the portfolio as of Dec. 31, 2012), as well as equity business development companies (0% as of Dec. 31) and listed private equity funds of funds/private-equitylike holding companies (HgCapital Trust **HGT** or Electra **ELTA**—about 84% of the portfolio as of Dec. 31) that trade primarily on European exchanges. The minimum market capitalization is typically $100 million. The fund seeks to outperform broad stock market indexes as well as management's self-developed Global Listed Private Equity Index, which is investable via the exchange-traded fund PowerShares Global Listed Private Equity **PSP** and tracks the largest 60 securities in the firm's coverage universe by capitalization. Most of the securities in the index trade in the United States and in Europe, but a few are listed in South Africa, South America, and Asia. The fund primarily invests in equities, although a small portion of the portfolio (15% as of Dec. 31, 2012) is invested in debt.

Process

An investment team of six conducts both quantitative and qualitative research on the stocks in its universe to find securities that will appreciate. For listed private equity general partners, the management team values securities using multiples of economic net income (recurring management fees plus carry, which the firm estimates). Direct private equity funds or funds of funds are required to value their underlying portfolio companies (which are generally published quarterly) using a discount to public-company comparables. The valuation process must be approved by an audit committee. The fund attempts to add value by investing in securities that are trading at a discount to net asset value (listed private equity funds can trade at premiums or discounts to NAV) and which the firm believes will increase in price (this typically happens at a liquidity event, when a portfolio company goes public or is sold). When evaluating these securities, the fund's management talks to the private equity managers and assesses how they add value to the portfolio companies (through operational improvements rather than leverage, for example). The fund's management also looks at the historical NAV performance of the private equity funds, the funds' valuation standards, the age of the portfolio (the average vintage year in which the fund started investing), and the outlook for a liquidity event for those investments. The firm revisits its valuations quarterly.

Risk Management

The fund attempts to be diversified by position size (10% maximum), geography, industry, vintage year, and stage of investment. As of Dec, 31, 2012, the fund was 52% invested in European securities and 40% invested in U.S.- and Canadian-listed securities. As of the same date, the fund's largest industry exposure was industrials at 26%, consumer discretionary at 18%, and financial services at 17%. In terms of vintage year, 18% of the fund is invested in pre-2002 funds, and 20% was invested in 2007 funds. In terms of the stage of investment, 63% of the portfolio was later-stage investments—companies that are more viable in terms of revenue, as opposed to venture capital or early growth funds. Management also attempts to ensure, prior to investment, that there is minimal overlap in terms of underlying portfolio companies.

Release date 04-30-2013

ALPS | Red Rocks Listed Private Equity A (USD)

Standard Index	Category Index	Morningstar Cat
MSCI World NR USD	Russell 3000 TR USD	US OE Miscellaneous Sector

Performance 04-30-2013

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2011	10.26	0.66	-26.40	0.09	-18.24
2012	18.36	-6.50	8.52	8.00	29.70
2013	13.23	—	—	—	17.70

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	24.50	10.03	-3.93	—	-4.67
Std 03-31-2013	17.26	—	-4.16	—	-5.44
Total Return	31.75	12.13	-2.84	—	-3.66
+/- Std Index	15.05	2.54	-4.65	—	—
+/- Cat Index	14.54	-0.65	-8.47	—	—
% Rank Cat	25	15	15	—	
No. in Cat	9	8	8	—	
7-day Yield	—				

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 866-759-5679 or visit www.alpsfunds.com.

Fees and Expenses

Sales Charges

Front-End Load %	**5.50**
Deferred Load %	**NA**

Fund Expenses

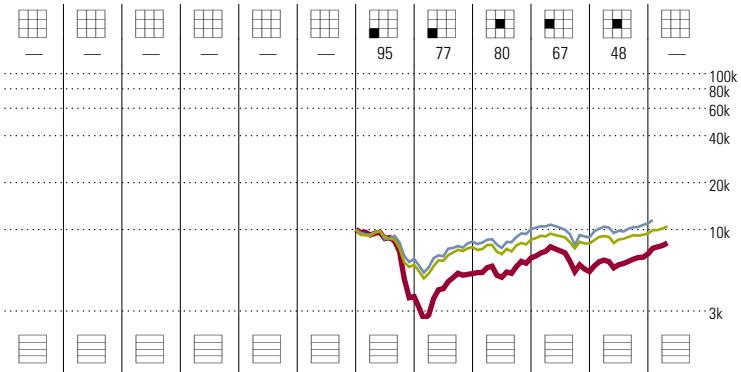
Management Fees %	0.85
12b1 Expense %	0.25
Gross Expense Ratio %	**3.34**

Risk and Return Profile

	3 Yr 8 funds	5 Yr 8 funds	10 Yr —
Morningstar Rating™	—	—	—
Morningstar Risk	—	—	—
Morningstar Return	—	—	—

	3 Yr	5 Yr	10 Yr
Standard Deviation	22.08	32.55	—
Mean	12.13	-2.84	—
Sharpe Ratio	0.63	0.08	—

MPT Statistics	Standard Index	Best Fit Index MSCI ACWI NR USD
Alpha	0.69	1.76
Beta	1.26	1.24
R-Squared	90.38	91.44
12-Month Yield		—
30-day SEC Yield		—
Potential Cap Gains Exp		16.27%



Investment Style
Equity
Stock %

Growth of $10,000
- ALPS | Red Rocks Listed Private Equity A 8,199
- Category Average 11,509
- Standard Index 10,472

Performance Quartile (within category)

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	04-13	History
—	—	—	—	—	*10.00*	3.67	4.64	5.46	4.03	5.14	6.05	NAV/Price
—	—	—	—	—	—	-62.92	40.76	25.85	-18.24	29.70	17.70	Total Return %
—	—	—	—	—	—	-22.20	10.77	14.09	-12.70	13.88	6.58	+/- Standard Index
—	—	—	—	—	—	-25.61	12.42	8.92	-19.27	13.29	4.81	+/- Category Index
—	—	—	—	—	—	—	—	—	—	—	—	% Rank Cat
—	—	—	—	—	—	—	—	—	—	—	9	No. of Funds in Cat

Portfolio Analysis 12-31-2012

Asset Allocation %	Net %	Long %	Short %
Cash	1.99	1.99	0.00
US Stocks	20.73	20.73	0.00
Non-US Stocks	27.73	27.73	0.00
Bonds	0.00	0.00	0.00
Other/Not Clsfd	49.55	49.99	0.44
Total	100.00	100.44	0.44

Equity Style

Value	Blend	Growth
			Large
	■		Mid
			Small

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	10.1	0.65	0.67
P/C Ratio TTM	—	—	—
P/B Ratio TTM	1.1	0.56	0.58
Geo Avg Mkt Cap $mil	2500	0.06	0.36

Fixed-Income Style

Ltd	Mod	Ext
			High
			Med
			Low

Avg Eff Maturity	—
Avg Eff Duration	—
Avg Wtd Coupon	—
Avg Wtd Price	—

Credit Quality Breakdown —	Bond %
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure	Stock %	Rel Std Index
Americas	53.3	0.94
Greater Europe	46.4	1.67
Greater Asia	0.3	0.02

Share Chg since 09-2012	Share Amount	Holdings: 32 Total Stocks , 0 Total Fixed-Income, 72% Turnover Ratio	% Net Assets
⊕	465,370	Conversus Capital Ord	5.00
⊕	594,300	Blackstone Group LP	4.92
⊕	290,935	Electra Private Equity Ord/Inc	4.81
⊕	575,500	KKR & Co LP	4.65
⊖	2 mil	SVG Capital Ord	4.35
⊕	530,724	AP Alternative Assets Ord	4.17
⊖	76,100	Wendel Ord	4.15
⊕	155,600	Eurazeo Ord	3.95
⊕	425,000	Apollo Global Management LLC	3.92
✲	783,790	Princess Private Equity Ord	3.75
⊖	167,700	Onex Corp.	3.75
⊕	929,000	Graphite Enterprise Trust Ord	3.55
⊕	715,200	HarbourVest Global Priv Equity Ord	2.94
⊖	66,931	Ackermans & van Haaren	2.92
⊕	206,073	Schouw & Co.	2.88

Sector Weightings	Stocks %	Rel Std Index
Cyclical	**71.3**	**1.87**
Basic Materials	0.0	0.00
Consumer Cyclical	0.0	0.00
Financial Services	65.0	3.63
Real Estate	6.3	2.00
Sensitive	**28.7**	**0.79**
Communication Services	0.0	0.00
Energy	0.0	0.00
Industrials	23.4	2.26
Technology	5.3	0.47
Defensive	**0.0**	**0.00**
Consumer Defensive	0.0	0.00
Healthcare	0.0	0.00
Utilities	0.0	0.00

Operations

Family:	ALPS	Base Currency:	USD	Incept:	12-31-2007
Manager:	Multiple	Ticker:	LPEFX	Type:	MF
Tenure:	5.4 Years	Minimum Initial Purchase:	$2,500	Total Assets:	$249.88 mil
Objective:	Growth and Income	Purchase Constraints:	—		

MORNINGSTAR®

Fund Reports

Eagle MLP Strategy

by **Nadia Papagiannis, CFA**

Advisor
Eagle Global Advisors
Princeton Fund Advisors LLC

Advisor Location
Houston, Texas
Hartford, Connecticut

Assets Under Management
$156.6 million (fund)

Inception Date
Sept. 14, 2012

Investment Type
Mutual fund

Morningstar Category
Equity energy

Management
This fund's named managers are the three senior partners of Eagle Global Advisors (Edward R. Allen III, Thomas Hunt III, and Steven Russo) and three managing members of Princeton Fund Advisors, Eagle's distribution partner. Eagle Global Advisors was founded in 1996 by the three senior partners. Allen started his career as an assistant professor of economics at the University of Houston. Allen left academia to work at Eagle Management and Trust Company, where he worked with Hunt and Russo. Prior to Eagle, Hunt worked for Ernst & Young, and Russo worked for Criterion Investment Management Company. The team is supported by a research team of four and manages a total of $3 billion.

Strategy
This fund invests in publicly traded master limited partnerships (up to 25% of assets), MLP-related exchange-traded notes (20%–25%), corporations that only own interests in MLPs (Kinder Morgan Management **KMR**, for example—10%–15% of assets), shipping company stocks (10%–15%), and stocks of companies that own MLP assets (Williams Companies **WMB**, for example—25%–30% of assets). The fund limits its investments in public MLPs to 25% in order to avoid paying taxes at the mutual fund level. The fund does not short and does not leverage (it does, however, invest in leveraged ETNs).

For several reasons, management believes MLPs and other energy infrastructure stocks are attractively valued relative to other securities that generate yield. First, the MLP market is relatively inefficient because of its size and limited institutional investor presence. Second, management believes MLPs and energy infrastructure stocks have a long-term ability to generate stable cash flows. And finally, management believes these securities' distributions are growing and could serve as an inflation hedge.

Process
Malcolm Day, David Chiaro, Kunal Nainani, and Will Shen constitute the research team. Day runs the fund on a daily basis and ultimately is responsible for security selection. Day's team covers a universe of approximately 60 primarily midstream companies, which act as intermediaries between producers and consumers (transportation and storage, pipeline, and treating and processing companies, for example). Approximately 35 of those securities wind up in the portfolio. The team meets with the management of the companies and models multiyear discounted cash flows to arrive at a fundamental valuation for each company. In valuing companies, management considers all of the assets owned by the company; how the assets generate cash flows; the volumes of energy transported or produced by the assets; contract terms; how management adds value (for example, reversing pipelines or adding pumps); the fees of the partnerships; and how much is paid out to investors. Management also models risks such as commodity prices rising or falling, volumes rising and falling, if the contracts are take-or-pay (payment is required regardless if delivery is accepted), and counterparty credit risk.

Risk Management
One of the primary risks of owning MLPs is liquidity risk. The fund attempts to mitigate this risk by trading in securities with market capitalizations of at least $100 million and by limiting position sizes to 10 days' trading volume and 10% in any one name. Management believes the liquidity of MLPs is improving as there have been several MLP IPOs.

In terms of taxes, the fund will generate a single 1099 and expects the distributions received by the fund to be classified and passed through to investors as follows: 55%–65% return of capital (which reduces the cost basis of a position, until it is sold and then taxed as ordinary income), 10%–25% qualified dividends (taxed at long-term capital gains tax rates), and 15%–25% interest income (taxed at ordinary rates).

Eagle MLP Strategy A (USD)

Standard Index	Category Index	Morningstar Cat
MSCI World NR USD	S&P 1500 Energy TR	US OE Equity Energy

Performance 04-30-2013

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2011	—	—	—	—	—
2012	—	—	—	-1.01	—
2013	18.78	—	—	—	20.46

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	—	—	—	—	12.94
Std 03-31-2013	—	—	—	—	11.37
Total Return	—	—	—	—	19.84
+/- Std Index	—	—	—	—	—
+/- Cat Index	—	—	—	—	—
% Rank Cat	—	—	—	—	
No. in Cat	—	—	—	—	
7-day Yield	—				

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 888-868-9501 or visit www.eaglemlpfund.com.

Fees and Expenses

Sales Charges

Front-End Load %	**5.75**
Deferred Load %	**NA**

Fund Expenses

Management Fees %	1.25
12b1 Expense %	0.25
Gross Expense Ratio %	**1.76**

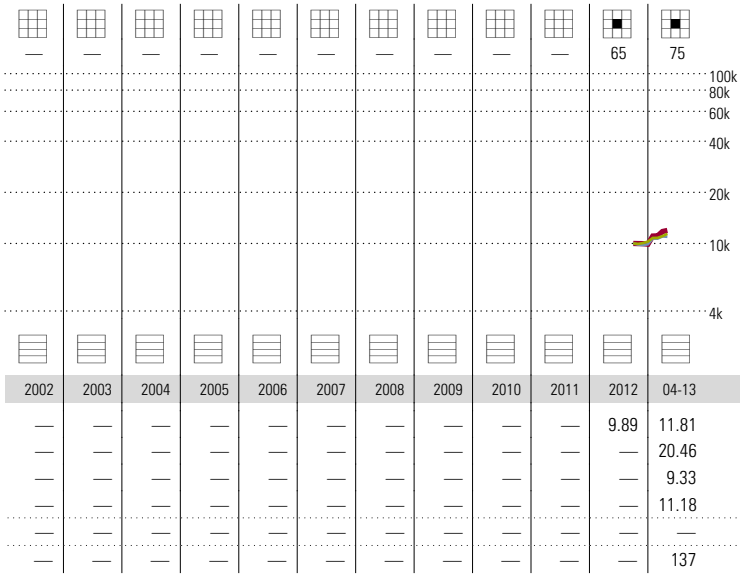
Risk and Return Profile

	3 Yr *88 funds*	5 Yr *69 funds*	10 Yr *38 funds*
Morningstar Rating™	—	—	—
Morningstar Risk	—	—	—
Morningstar Return	—	—	—

	3 Yr	5 Yr	10 Yr
Standard Deviation	—	—	—
Mean	—	—	—
Sharpe Ratio	—	—	—

MPT Statistics	Standard Index	Best Fit Index
Alpha	—	—
Beta	—	—
R-Squared	—	—

12-Month Yield	—
30-day SEC Yield	—
Potential Cap Gains Exp	—



2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	04-13	History
—	—	—	—	—	—	—	—	—	—	9.89	11.81	NAV/Price
—	—	—	—	—	—	—	—	—	—	—	20.46	Total Return %
—	—	—	—	—	—	—	—	—	—	—	9.33	+/- Standard Index
—	—	—	—	—	—	—	—	—	—	—	11.18	+/- Category Index
—	—	—	—	—	—	—	—	—	—	—	—	% Rank Cat
—	—	—	—	—	—	—	—	—	—	—	137	No. of Funds in Cat

Investment Style
Equity
Stock %

Growth of $10,000
- Eagle MLP Strategy A 11,924
- Category Average 10,945
- Standard Index 11,389

Performance Quartile
(within category)

Portfolio Analysis 01-31-2013

Asset Allocation %	Net %	Long %	Short %
Cash	8.25	8.25	0.00
US Stocks	67.68	67.68	0.00
Non-US Stocks	7.74	7.74	0.00
Bonds	0.00	0.00	0.00
Other/Not Clsfd	16.34	16.34	0.00
Total	100.00	100.00	0.00

Equity Style

Value	Blend	Growth	
			Large
	■		Mid
			Small

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	26.6	1.71	1.46
P/C Ratio TTM	10.2	1.11	1.07
P/B Ratio TTM	1.9	0.98	0.84
Geo Avg Mkt Cap $mil	4584	0.11	0.31

Fixed-Income Style

Ltd	Mod	Ext	
			High
			Med
			Low

Avg Eff Maturity	—
Avg Eff Duration	—
Avg Wtd Coupon	—
Avg Wtd Price	—

Credit Quality Breakdown —	Bond %
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure	Stock %	Rel Std Index
Americas	89.7	1.58
Greater Europe	10.3	0.37
Greater Asia	0.0	0.00

Top Holdings 10-31-2012

Share Chg since 10-2012	Share Amount	Holdings: 28 Total Stocks , 0 Total Fixed-Income, — Turnover Ratio	% Net Assets
⊕	5,730	Kinder Morgan Management LLC	4.13
⊕	15,300	Teekay Offshore Partners L.P.	3.79
⊕	11,590	Williams Companies Inc	3.78
⊕	11,530	Kinder Morgan, Inc.	3.75
⊕	8,480	ONEOK, Inc.	3.75
⊕	23,990	Morgan Stanley Cushing MLP Hi Inco	3.74
⊕	9,800	JPMorgan Alerian MLP Index ETN	3.73
⊕	15,790	Credit Suisse Cushing 30 MLP Index	3.73
⊕	12,700	Enbridge Energy Management LLC	3.73
⊕	9,460	UBS E-TRACS 2x Long Alerian MLP In	3.67
✲	9,600	LinnCo LLC	3.51
⊖	16,700	First Trust North American Energy	3.33
⊕	7,820	Energy Transfer Equity LP	3.23
⊕	6,380	Buckeye Partners, L.P.	2.89
⊕	5,695	Targa Resources Corp	2.73

Sector Weightings	Stocks %	Rel Std Index
Cyclical	**0.0**	**0.00**
Basic Materials	0.0	0.00
Consumer Cyclical	0.0	0.00
Financial Services	0.0	0.00
Real Estate	0.0	0.00
Sensitive	**93.0**	**2.56**
Communication Services	0.0	0.00
Energy	76.0	7.80
Industrials	17.0	1.64
Technology	0.0	0.00
Defensive	**7.0**	**0.27**
Consumer Defensive	0.0	0.00
Healthcare	0.0	0.00
Utilities	7.0	2.00

Operations

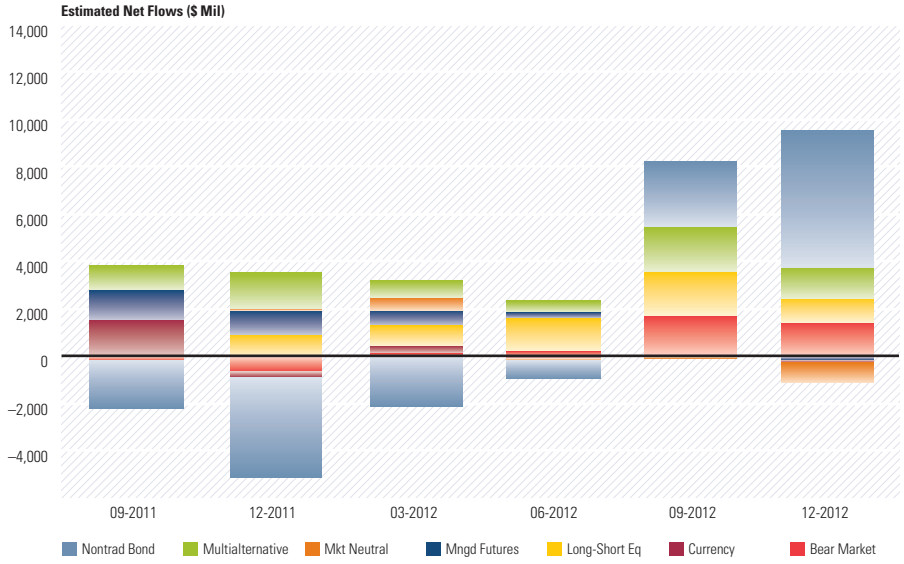
Family:	Eagle	Base Currency:	USD	Purchase Constraints:	—
Manager:	Multiple	Ticker:	EGLAX	Incept:	09-14-2012
Tenure:	0.7 Year	Minimum Initial Purchase:	$2,500	Type:	MF
Objective:	Growth and Income	Min Auto Investment Plan:	$100	Total Assets:	$155.58 mil

MORNINGSTAR®

Flows and Assets Under Management: Alternative Mutual Funds

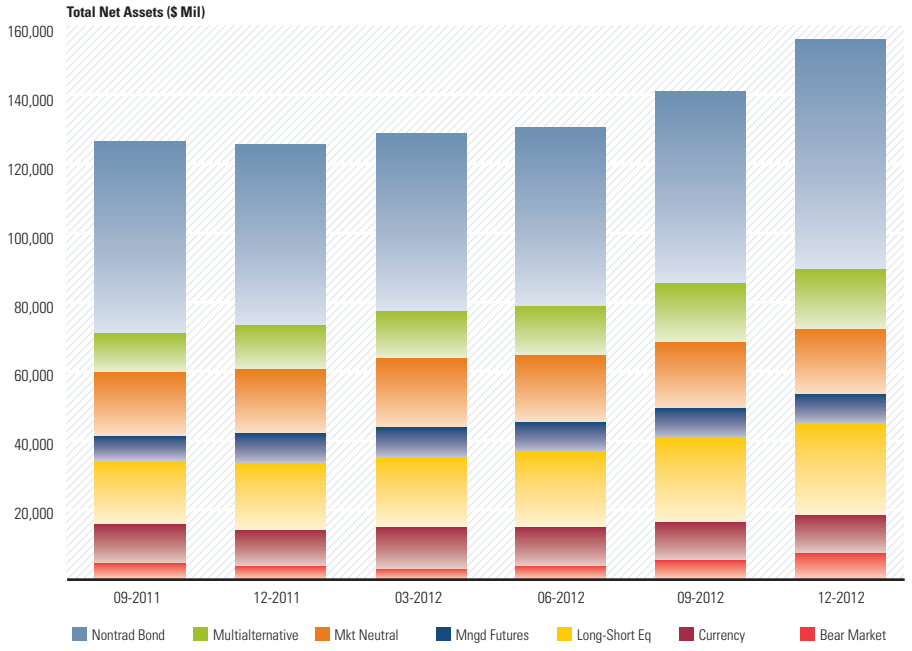
Quarterly Alternative Mutual Fund Flows

During the fourth quarter of 2012, alternative mutual funds' net inflows amounted to nearly $8.6 billion, an increase of $343 million over the previous quarter and $10 billion over the fourth quarter of 2011. The non-traditional-bond category led the fourth quarter with the largest inflows ($5.4 billion), adding to the previous inflow of $3.0 billion in the third quarter of 2012. The multialternative and long-short equity categories also saw substantial net inflows of $1.1 billion and $1.8 billion, respectively, as did the bear-market category ($1.4 billion). The market-neutral, currency, and managed-futures categories all lost assets in the fourth quarter with outflows of $927 million, $191 million, and $88 million, respectively.



Quarterly Alternative Mutual Fund Assets Under Management

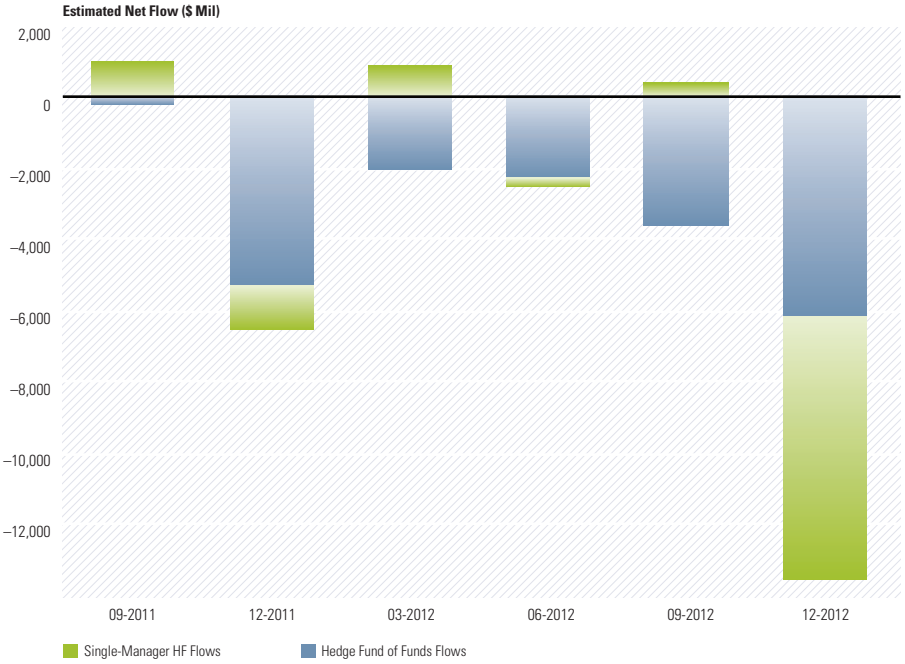
Assets under management for all alternative mutual funds increased 6.7% quarter over quarter, totaling more than $156 billion at the end of December 2012. Four of the seven alternative mutual fund categories gained assets in the fourth quarter. Bear-market funds again experienced the largest quarter-over-quarter percentage gains in assets despite another quarter of poor returns. The bear-market category still remains the smallest among all of the alternative mutual fund categories, however, at $6.8 billion as of Dec. 31, 2012. The managed-futures, market-neutral, and currency categories all lost assets in the fourth quarter of 2012.



Flows and Assets Under Management: Hedge Funds

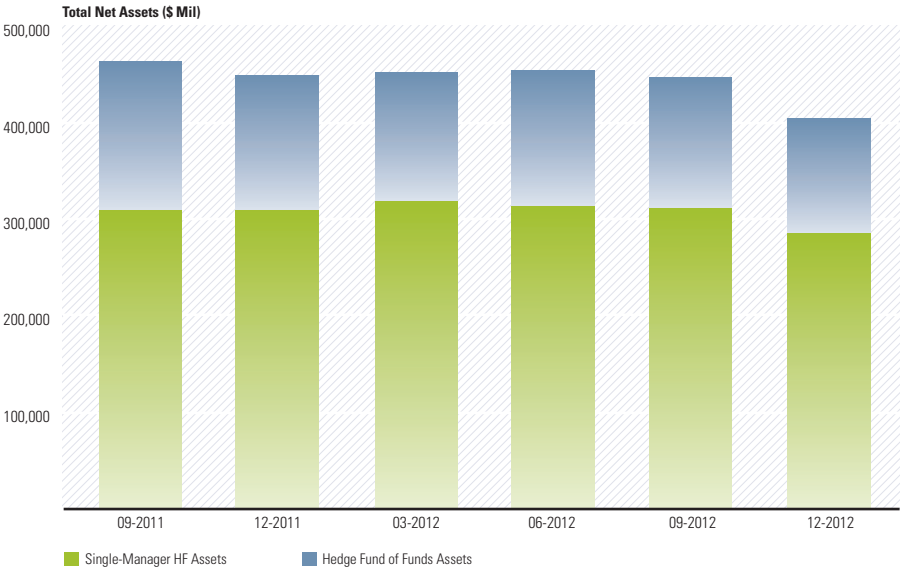
Quarterly Hedge Fund Flows

During the fourth quarter of 2012, single-manager hedge funds in Morningstar's database experienced large outflows, totaling $7.4 billion, and funds of hedge funds recorded outflows of almost $6.2 billion. The outflows in the funds of hedge funds universe continued for a sixth consecutive quarter, amounting to more than $19 billion since the second quarter of 2011. Debt-arbitrage single-manager hedge funds received the most inflows ($288 million), while multistrategy and systematic-futures single-manager hedge funds experienced the largest outflows, of $2.7 billion and $1.89 billion, respectively. Multistrategy funds of hedge funds experienced the greatest outflows ($3.0 billion) in the fourth quarter, as they have over the previous five quarters.



Quarterly Hedge Fund Assets Under Management

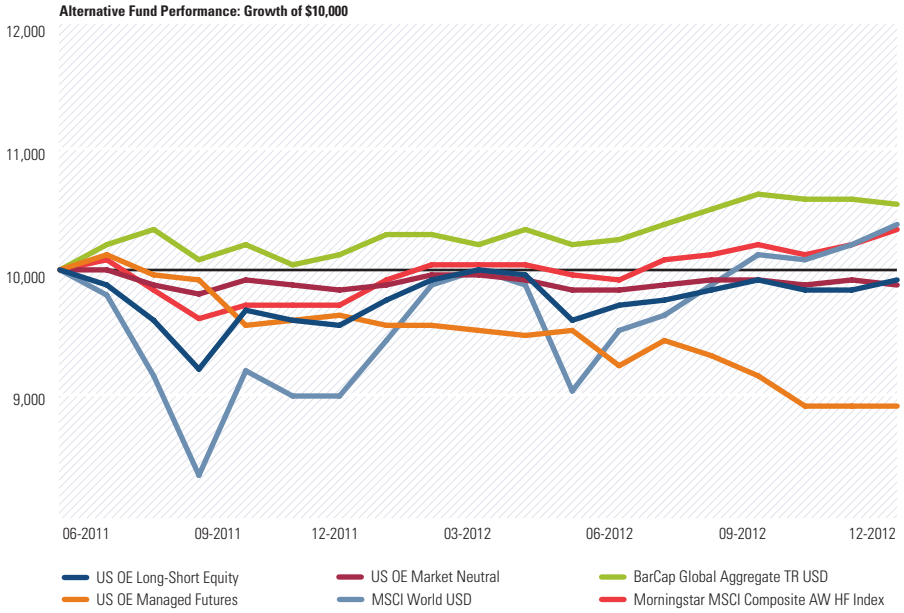
In the fourth quarter of 2012, single-manager hedge fund assets under management in Morningstar's database decreased 2.3% quarter over quarter, to $287 billion. Over the last year (through Dec. 31, 2012), single-manager assets under management have decreased by a small margin (1.4%). Hedge funds of funds in Morningstar's database managed 17.2% fewer assets than in the prior quarter, with $114 million in assets recorded as of Dec. 31, 2012. Assets under management of hedge fund of funds also dropped nearly 17% year over year (through December).



Alternative Investment Performance

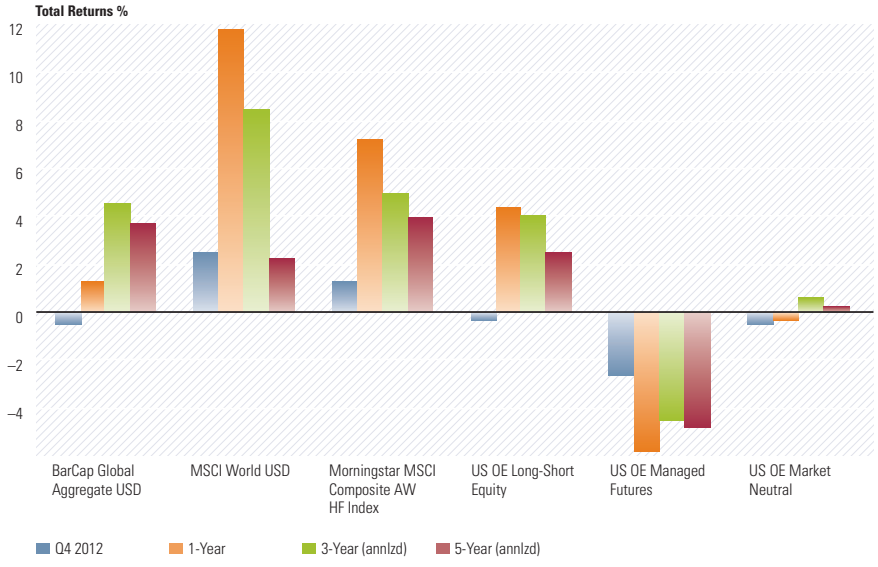
Growth of a $10,000 Alternative Investment

Hedge funds, as proxied by the Morningstar MSCI Composite AW Hedge Fund Index, gained 1.3% in the fourth quarter, while global stocks, as represented by the MSCI World NR Index, gained 2.5%. Global bonds, as tracked by the Barclays Global Aggregate TR USD, recorded a loss of 0.5%. Over the 18 months ended December 2012, the Barclays Global Aggregate Bond Index continued to outperform both global stocks and hedge funds with a 5.6% return. Over the same period, the MSCI World NR Index ended up with a 3.9% gain, while the Morningstar MSCI Composite AW Hedge Fund Index gained 3.3%. Global stocks, bonds, and hedge funds continued to outperform the long-short equity, managed-futures, and market-neutral mutual fund category averages over the past 18 months.



Performance of Alternative Investments Over Time

Hedge funds, as represented by the Morningstar MSCI Composite AW Hedge Fund Index, outperformed global bonds (as represented by the Barclays Global Aggregate TR USD Index) as well as the long-short equity, managed-futures, and market-neutral mutual fund category averages, over the past quarter, one-year, and five-year time frames (ended Dec. 31). Global stocks, as represented by the MSCI World NR USD Index, outperformed hedge funds over a three-year time frame by a wide margin, however. The average managed-futures mutual fund lost money in all four time periods (ended Dec. 31, 2012).

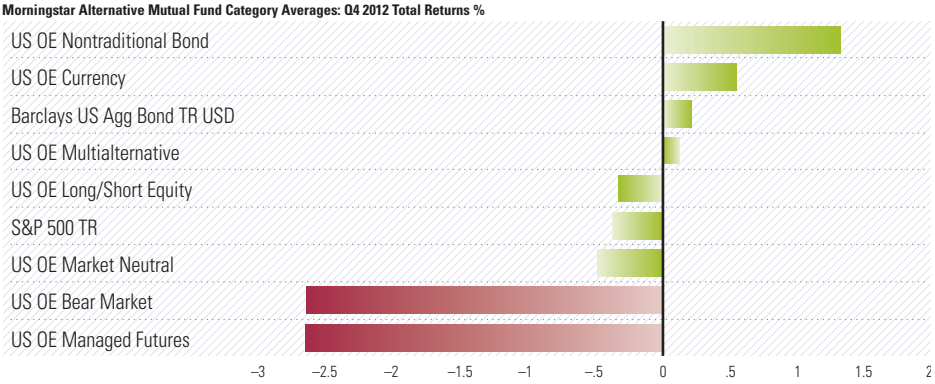


Q4 Performance by Category

Alternative Mutual Funds

U.S. equities posted a small loss (0.38%) during the fourth quarter of 2012, reversing their third-quarter gains primarily because of political uncertainty. Long-short equity mutual funds, which hedge out some stock market exposure, lost only 0.33% that quarter. The average bear-market mutual fund, which aims to profit during weak equity markets, surprisingly dropped 2.7% in the fourth quarter of 2012. Bonds recorded modest gains in the fourth quarter (0.2%), and the non-traditional-bond fund category average outperformed (1.3%). Currency mutual funds gained 0.6% on average while the multialternative category average posted gains of 0.1% in the fourth quarter. The average managed-futures and market-neutral mutual funds declined 2.7% and 0.5%, respectively.

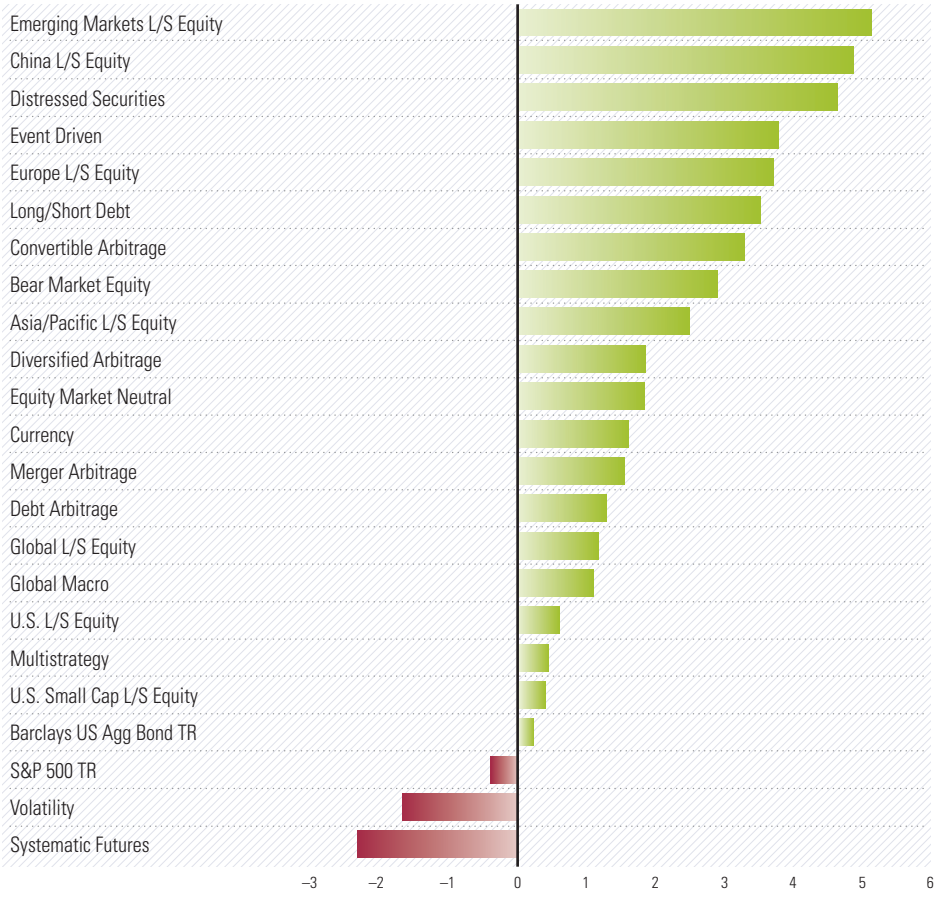
Morningstar Alternative Mutual Fund Category Averages: Q4 2012 Total Returns %



Hedge Funds

Overall, hedge funds posted gains in the fourth quarter of 2012. All but two hedge fund categories recorded positive returns on average, despite the fact that U.S. equities (as represented by the S&P 500 Index) declined. Emerging-markets long-short equity, China long-short equity, and distressed securities hedge funds topped the charts, with returns of 5.1%, 4.9% and 4.6%, respectively, on average. The two hedge fund categories that did not beat the S&P 500 Index (which declined 0.4% in the fourth quarter) were systematic futures and volatility, which lost 2.3% and 1.7%, respectively, on average.

Morningstar Hedge Fund Category Averages: Q4 2012 Total Returns %



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, 22 exhibited positive returns over the three years ended Dec. 31, 2012. For the third consecutive quarter, funds in the distressed securities, U.S. small-cap long-short equity, long-short debt, and convertible arbitrage hedge fund category averages produced the best three-year total returns—9.3%, 6.3%, 6.5%, and 6.5%, respectively. Nontraditional bond mutual funds provided the best risk-adjusted returns, however, on average, along with distressed securities and long-short debt hedge funds. In contrast, the U.S. bear-market mutual fund category average fell 18.8% annualized over the three-year period ended Dec. 31, 2012, with the highest standard deviation (19.0% annualized). Bear-market hedge funds performed better, losing 2.9% on average with a 5.9% annualized standard deviation.

Correlations by Alternative Fund Strategy

Three–Year Correlations: Alternative Mutual Fund Categories	1	2	3	4	5	6	7
1 US OE Bear Market	1.00						
2 US OE Multicurrency	–0.82	1.00					
3 US OE Long-Short Equity	–0.96	0.84	1.00				
4 US OE Managed Futures	–0.21	0.14	0.24	1.00			
5 US OE Market Neutral	–0.39	0.50	0.46	–0.25	1.00		
6 US OE Multialternative	–0.92	0.76	0.90	0.47	0.25	1.00	
7 US OE Nontraditional Bond	–0.64	0.70	0.73	0.15	0.27	0.68	1.00

Three–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	21
1 HF Asia/Pacific Long-Short Equity	1.00																				
2 HF Bear Market Equity	–0.24	1.00																			
3 HF China Long-Short Equity	0.47	–0.20	1.00																		
4 HF Convertible Arbitrage	0.83	–0.15	0.56	1.00																	
5 HF Currency	0.59	–0.05	0.39	0.51	1.00																
6 HF Debt Arbitrage	0.80	–0.11	0.42	0.92	0.59	1.00															
7 HF Distressed Securities	0.88	–0.17	0.48	0.88	0.54	0.80	1.00														
8 HF Diversified Arbitrage	0.64	–0.08	0.43	0.68	0.35	0.73	0.66	1.00													
9 HF Emerging Markets Long-Short Equity	0.80	–0.23	0.70	0.87	0.57	0.78	0.81	0.53	1.00												
10 HF Equity Market Neutral	0.81	–0.15	0.50	0.87	0.56	0.91	0.78	0.69	0.82	1.00											
11 HF Europe Long-Short Equity	0.88	–0.16	0.46	0.92	0.67	0.94	0.88	0.70	0.83	0.94	1.00										
12 HF Event Driven	0.88	–0.28	0.51	0.89	0.54	0.82	0.92	0.60	0.89	0.88	0.90	1.00									
13 HF Global Long-Short Equity	0.92	–0.20	0.51	0.92	0.63	0.92	0.89	0.66	0.89	0.94	0.97	0.95	1.00								
14 HF Global Macro	0.76	–0.05	0.48	0.76	0.81	0.81	0.68	0.49	0.73	0.82	0.84	0.74	0.84	1.00							
15 HF Long-Short Debt	0.86	–0.06	0.48	0.94	0.59	0.95	0.86	0.74	0.84	0.93	0.96	0.87	0.94	0.81	1.00						
16 HF Merger Arbitrage	0.80	–0.29	0.47	0.88	0.58	0.90	0.79	0.70	0.78	0.91	0.91	0.86	0.90	0.77	0.88	1.00					
17 HF Multistrategy	0.90	–0.15	0.51	0.93	0.66	0.94	0.87	0.69	0.85	0.94	0.97	0.91	0.99	0.88	0.96	0.90	1.00				
18 HF Systematic Futures	0.58	–0.02	0.45	0.52	0.78	0.55	0.47	0.30	0.49	0.53	0.56	0.48	0.59	0.83	0.55	0.53	0.65	1.00			
19 HF U.S. Long-Short Equity	0.90	–0.29	0.48	0.86	0.52	0.82	0.89	0.59	0.86	0.88	0.89	0.96	0.96	0.74	0.84	0.85	0.91	0.50	1.00		
20 HF U.S. Small Cap Long-Short Equity	0.88	–0.28	0.52	0.84	0.54	0.79	0.85	0.56	0.86	0.85	0.85	0.93	0.94	0.76	0.80	0.82	0.90	0.56	0.97	1.00	
21 HF Volatility	–0.12	0.17	0.15	0.05	0.05	0.09	–0.20	0.04	–0.15	0.06	0.02	–0.16	–0.03	0.22	0.06	0.07	0.08	0.34	–0.16	–0.08	1.00

1.00 to 0.76 | 0.75 to 0.51 | 0.50 to 0.26 | 0.25 to 0.00
0.00 to –0.24 | –0.25 to –0.49 | –0.50 to –0.74 | –0.75 to –1.00

Correlations of Alternative Funds to Traditional Asset Classes

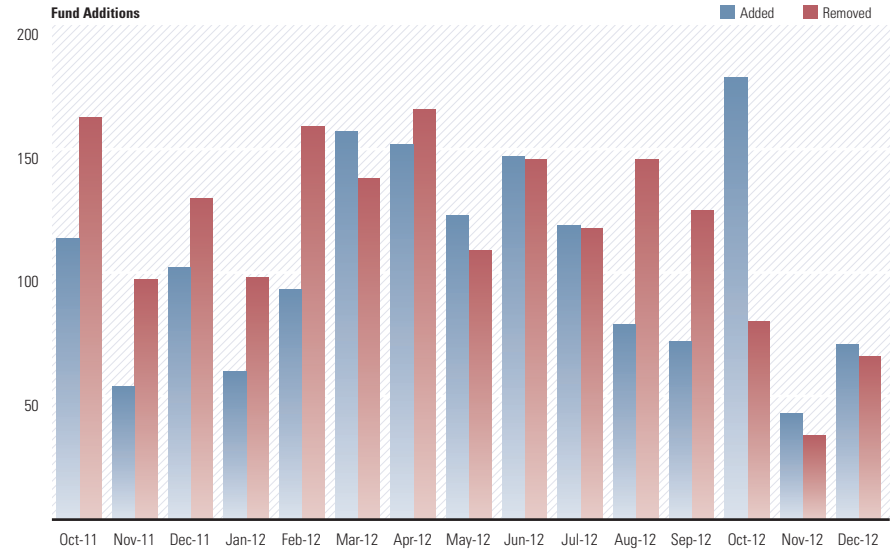
Correlation of Mutual Funds to U.S. Stocks and Bonds	S&P 500 Correlation (USD)			BarCap US Agg Correlation (USD)		
	3-Year	5-Year	10-Year	3-Year	5-Year	10-Year
US OE Bear Market	–0.97	–0.96	–0.96	0.42	–0.19	–0.11
US OE Currency	0.75	0.53	0.37	–0.20	–0.04	0.19
US OE Long-Short Equity	0.96	0.95	0.92	–0.45	0.11	0.05
US OE Managed Futures	0.23	–0.25	N/A	–0.13	–0.31	N/A
US OE Market Neutral	0.38	0.18	0.08	–0.11	0.04	0.04
US OE Multialternative	0.93	0.94	0.92	–0.31	0.23	0.15
US OE Nontraditional Bond	0.66	0.73	0.63	–0.07	0.23	0.37

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	0.76	0.70	0.68	–0.24	0.14	0.05
HF Asia/Pacific Long-Short Equity	0.83	0.82	0.72	–0.34	0.24	0.13
HF Bear Market Equity	–0.47	–0.50	–0.48	0.10	–0.04	0.02
HF China Long-Short Equity	0.40	0.37	N/A	–0.22	0.13	N/A
HF Convertible Arbitrage	0.81	0.74	0.69	–0.29	0.31	0.22
HF Currency	0.53	0.38	0.38	–0.10	0.23	0.22
HF Debt Arbitrage	0.82	0.79	0.73	–0.17	0.29	0.22
HF Distressed Securities	0.81	0.80	0.77	–0.41	0.02	–0.04
HF Diversified Arbitrage	0.57	0.64	0.59	–0.21	0.25	0.19
HF Emerging Markets Long-Short Equity	0.76	0.78	0.72	–0.26	0.18	0.11
HF Equity Market Neutral	0.85	0.75	0.70	–0.26	0.21	0.15
HF Europe Long-Short Equity	0.88	0.82	0.78	–0.35	0.18	0.11
HF Event Driven	0.89	0.85	0.82	–0.38	0.14	0.06
HF Global Long-Short Equity	0.91	0.86	0.80	–0.33	0.20	0.08
HF Global Macro	0.72	0.58	0.53	–0.11	0.28	0.19
HF Long-Short Debt	0.79	0.78	0.73	–0.21	0.34	0.28
HF Merger Arbitrage	0.85	0.82	0.79	–0.25	0.33	0.20
HF Multistrategy	0.88	0.78	0.75	–0.26	0.20	0.11
HF Systematic Futures	0.44	0.08	0.17	0.00	0.09	0.12
HF U.S. Long-Short Equity	0.95	0.90	0.89	–0.44	0.05	–0.01
HF U.S. Small Cap Long-Short Equity	0.91	0.88	0.86	–0.43	0.05	–0.01
HF Volatility	–0.08	0.25	0.22	0.26	0.47	0.30

Morningstar Hedge Fund Database Overview as of 12-31-2012

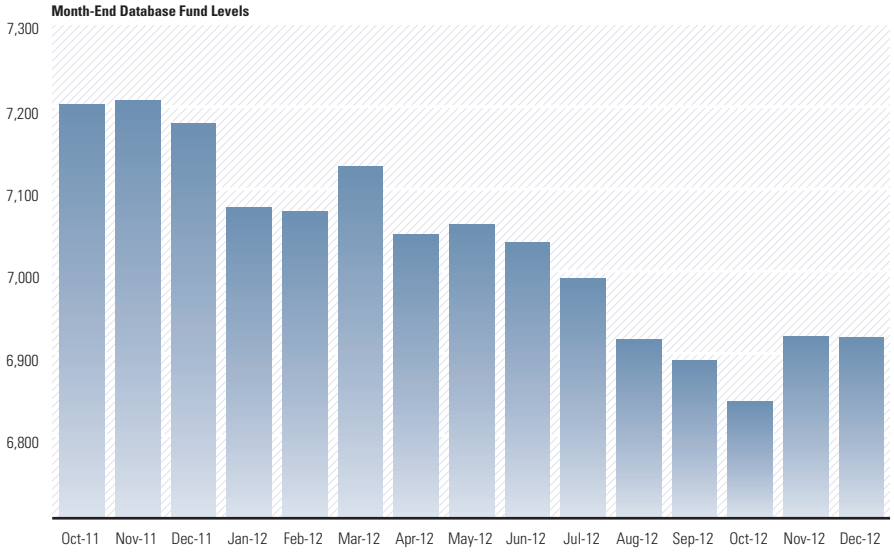
Net Fund Additions by Month

Morningstar's hedge fund database experienced a net addition of 113 funds during the fourth quarter of 2012. The database saw 293 additions and 180 fund withdrawals 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 Dec. 31, 2012, the Morningstar hedge fund database contained 6,919 funds that actively reported performance and assets-under-management data. This figure includes about 4,700 single-manager hedge funds and about 2,200 funds of hedge funds. As of quarter-end, the number of active funds in the database had dropped approximately 3.8% from September 2011 levels.

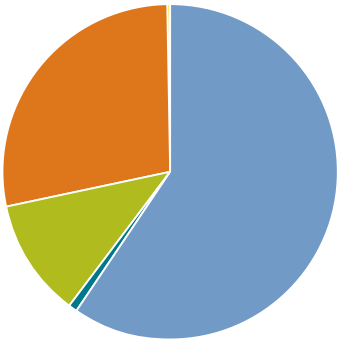


Morningstar Hedge Fund Database Overview as of 12-31-2012

Hedge Funds by Region

Approximately 58% of hedge funds in the Morningstar database are legally domiciled in the North American/Caribbean region, primarily in the Cayman Islands and United States. A large percentage of U.K. hedge funds are also domiciled in the Cayman Islands for tax and regulatory purposes. Approximately 27% of funds in Morningstar's database are domiciled in Europe, including both European Union and non-EU jurisdictions, and 11% of funds are domiciled in Asia and Australia, primarily in China (95%). All figures are as of Dec. 31, 2012.

Morningstar Hedge Fund Database by Region



Region	# Funds
N. America/Caribbean	3,976
Africa	50
Asia/Australia	754
Europe	1,876
South America	6
Other	0
Total	**6,885**

Hedge Funds by Location

Approximately 78% of the hedge funds in Morningstar's database are domiciled in the U.S. and the Cayman Islands, China, the British Virgin Islands, Bermuda, and Luxembourg. Luxembourg, France, Switzerland, and Ireland continue to domicile a large portion of European hedge funds.

North America and Surrounding	**3,976**
Cayman Islands	1724
United States	1322
British Virgin Islands	400
Bermuda	284
Canada	169
Curaçao	50
Bahamas	23
Anguilla	1
Barbados	1
Panama	1
St Kitts and Nevis	1
St Vincent-Grenadines	0

Africa	**50**
Mauritius	21
South Africa	27
Swaziland	1
United Arab Emirates	1

Asia and Australia	**754**
Australia	20
Bahrain	1
China	721
Christmas Island	1
Hong Kong	5
Japan	2
Marshall Islands	1
Singapore	1
Vanuatu	1
Israel	1

Europe	**1,876**
Luxembourg	736
Ireland	226
France	154
Switzerland	167
Guernsey	130
Italy	92
Jersey	56
Sweden	67
Malta	54
Liechtenstein	36
Netherlands	35
Spain	33
United Kingdom	22
Finland	17
Germany	9
Channel Islands	3
Austria	6
Isle of Man	6
Denmark	4
Cyprus	3
Norway	7
Gibraltar	4
Macedonia	5
Portugal	2
Andorra	1
Belgium	1
Greece	0

South America	**6**
Brazil	4
Chile	1

Morningstar Hedge Fund Database Overview as of 12-31-2012

Service Providers

Morgan Stanley **MS** and Goldman Sachs **GS** are the largest prime brokerage-service providers to hedge funds in Morningstar's database, serving a 30% share combined.

The big four accounting firms are employed by approximately 75% of the hedge funds listed in Morningstar's database, with PricewaterhouseCoopers leading the pack. Citco Fund Services provides administration services to more than 8% of funds in Morningstar's database, significantly more than the next-largest administrator, State Street/IFS, which services about 3.7% of funds in the database. Maples & Calder, Seward & Kissel, and Walkers are the three largest legal-counsel service providers to hedge funds in the database, with a combined 25% market share.

Type	Rank	Service Provider	% of Database
Prime Broker	1	Morgan Stanley	15.96
	2	Goldman Sachs	13.89
	3	UBS	8.07
	4	Credit Suisse	6.59
	5	Bank of America/Merrill Lynch	5.30
	6	Deutsche Bank	5.23
	7	JPMorgan	3.88
	8	Newedge	3.49
	9	Interactive Brokers	2.39
	10	Jeffries Group	2.07
Legal Counsel	1	Maples & Calder	12.29
	2	Seward & Kissel	6.73
	3	Walkers	5.85
	4	Dechert LLP	5.76
	5	Elvinger, Hoss & Prussen	5.37
	6	Sidley Austin	4.10
	7	Schulte Roth & Zabel	3.51
	8	Ogier	3.46
	9	Shearman & Sterling LLP	2.98
	10	Simmons & Simmons	2.68
Auditor	1	Pricewaterhouse Coopers	22.56
	2	Ernst & Young	21.15
	3	KPMG	18.12
	4	Deloitte	13.48
	5	Rothstein Kass	5.30
	6	BDO	2.50
	7	RSM / McGladery & Pullen	2.37
	8	Grant Thornton	2.10
	9	Eisner	1.67
	10	Arthur Bell	0.80
Administrator	1	Citco	8.26
	2	State Street / IFS	3.71
	3	Citigroup / BISYS	3.68
	4	CIBC / BNY Mellon	3.56
	5	Credit Suisse / Fortis	3.37
	6	HSBC	3.02
	7	UBS	2.84
	8	Northern Trust	2.28
	9	APEX	2.09
	10	CACEIS Fastnet	2.02

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