SelectAlts

Wisely Managed Absolute Return Portfolios

WHY DO I NEED ALTERNATIVE INVESTMENTS?

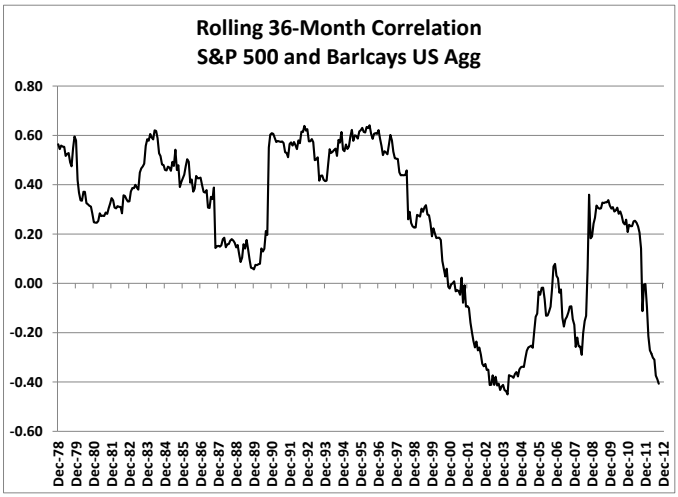
Most U.S. Portfolios Are Poorly Diversified

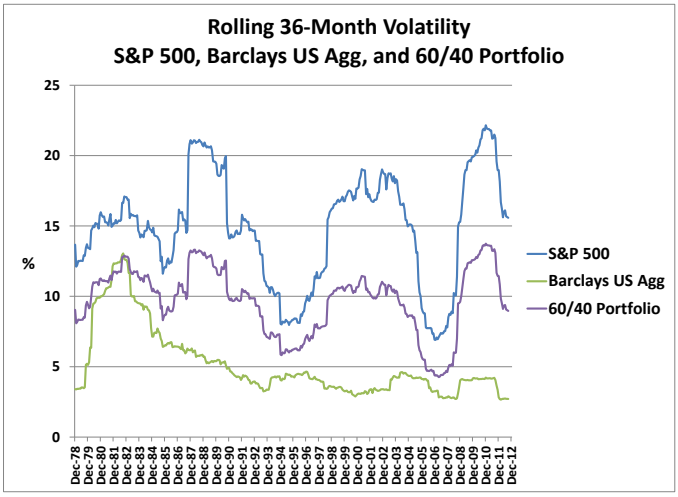
In another paper I showed that the expected returns for U.S. stocks and bonds are lower than many people expect. The paltry expected returns from traditional stocks and bonds alone should be enough to cause investors to look at alternatives.

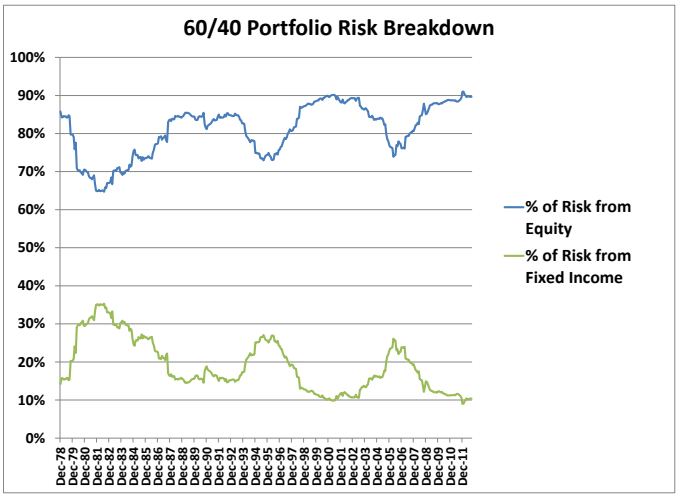
On top of that, most U.S. portfolios are poorly diversified. This is not because bonds are too highly correlated to stocks. As shown at right, over the past decade, the correlation of bonds with stocks has declined, so bonds have generally proven to be good diversifiers of stock risk.

However, because stock market volatility is so much higher than bond market volatility, **most portfolios are dominated by stock market risk**. The typical 60/40 stock/bond portfolio has 90% of its risk from its stock market exposure.

In order to better balance the risks between stocks and bonds, investors are faced with two unappealing choices: 1) substantially reallocate away from stocks towards bonds, accepting a much lower rate of expected return, or 2) use leverage to increase their bond market exposure, with a commensurate increase in risk, particularly interest rate risk. This approach, often labeled "risk parity," recognizes that to take advantage of the low correlation of stocks and bonds to each other, the allocation to bonds must be high relative to the allocation to stocks or the benefit of low correlation will be very limited.

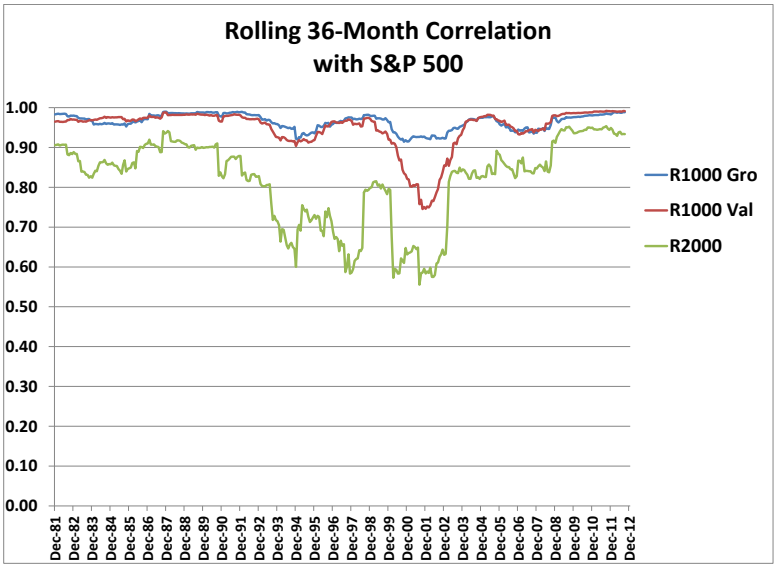




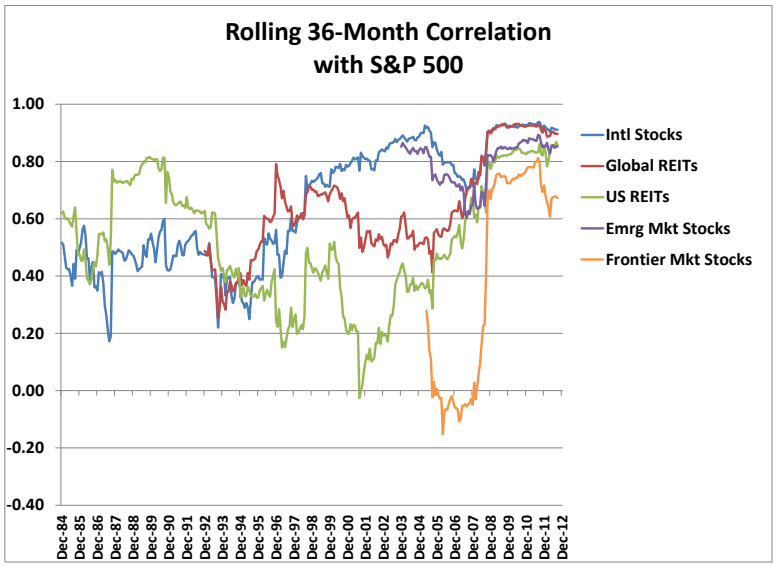


The Elusive Search for Diversifying Stocks

Some investors like to think that they are well diversified, at least within their stock investments, if they have a mix of large-cap, small-cap, growth, and value stocks in their portfolio. As shown at right, this is a fallacy. All of these categories have such a high correlation with the S&P 500 that they provide very little diversification benefit, particularly in recent years, when their correlations with the S&P 500 have all been over 90%.



Even those categories of stocks that have historically been good diversifiers have had their correlations with the S&P 500 skyrocket since 2008, as shown at right. The only exception has been the frontier market index, which includes countries, from Argentina and Bahrain to Vietnam and Zimbabwe, which are not in the emerging markets index.



It has been observed that **"in a crisis, all correlations go to one."** Looking at the graph at right, you can see that was certainly the case during 2008 and after. Clearly, investors now have to look harder to find low correlation assets that will diversify their stock investments.

Introducing Alternative Investments

According to Investopedia, an "alternative investment" is

> An investment that is not one of the three traditional asset types (stocks, bonds and cash). Most alternative investment assets are held by institutional investors or accredited, high-net-worth individuals because of their complex nature, limited regulations and relative lack of liquidity. Alternative investments include hedge funds, managed futures, real estate, commodities and derivatives contracts.

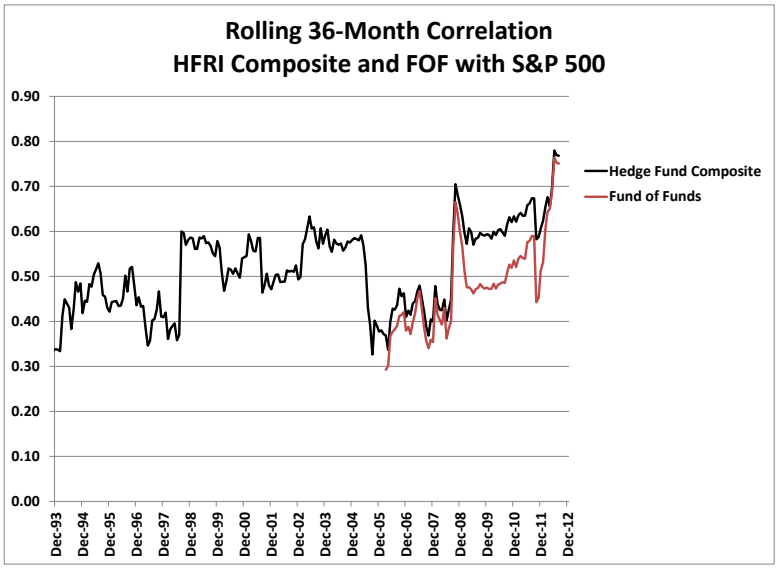
Many alternative investments also have high minimum investments and fee structures compared to mutual funds and ETFs. While they are subject to less regulation, they also have less opportunity to publish verifiable performance data and advertise to potential investors.

Alternative investments are favored mainly because their returns have a low correlation with those of standard asset classes. Because of this, many large institutional funds such as pensions and private endowments have begun to allocate a small portion (typically less than 10%) of their portfolios to alternative investments such as hedge funds.

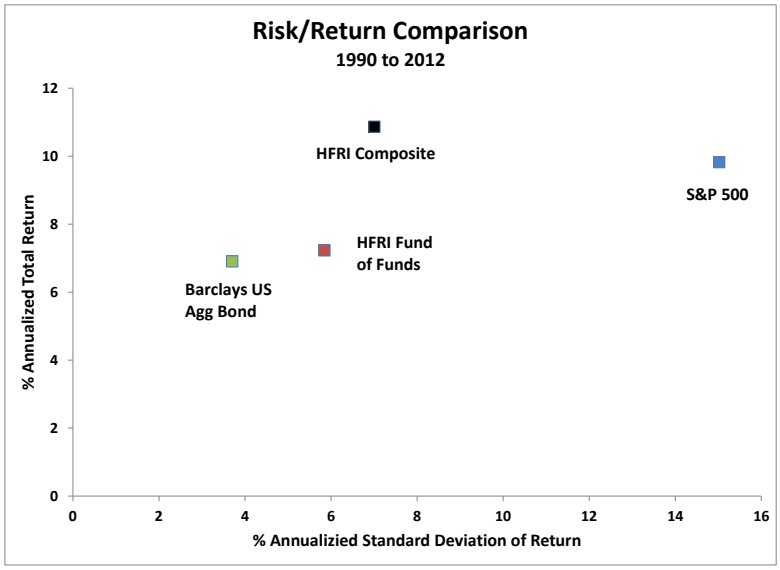
In point of fact, not all of the allocations to alternatives are "small." For example, the Yale endowment has amassed quite an attractive record by allocating a majority of its assets to alternatives. In fact, the "Yale model" has become so popular with university endowments that a Forbes article (citing a NACUBO-Common Fund Study of Endowments) observes that among 823 endowments studied, the average allocation to alternatives was 53%. (http://www.forbes.com/sites/rickferri/2012/04/16/the-curse-of-the-yale-model/.)

Hedge Funds' Historical Performance

As for their returns having a "low correlation with those of standard asset classes," that was once more true than it is today. As shown at right, **the correlation of hedge funds with the S&P 500 has been creeping up over time**, and now stands at a higher level than ever before. I use the HFRI Composite Index (in black), an equal-weighted index of over 2200 hedge funds, to measure this trend. Not surprisingly, the Fund of Funds Index (in red) hugs the Composite Index of all hedge funds closely, since the Composite Index represents the universe of hedge funds in which the fund of funds managers invests. Certainly from the perspective of lowering the correlation with stocks, there is not much value-added evident.



To compare the returns of funds of funds with hedge funds, I go back to the start of the indexes in 1990. From a return perspective, funds of funds (in red) have been an abysmal failure, vastly underperforming the average hedge fund, as represented

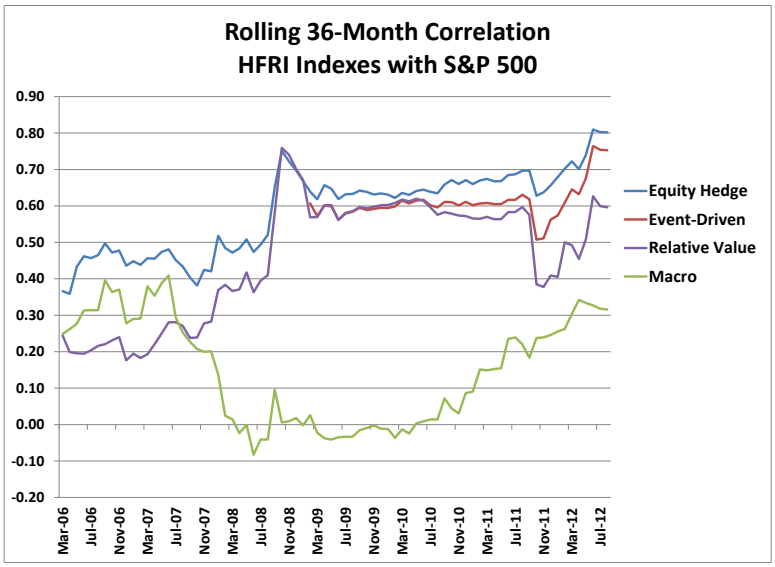


by the Composite Index (in black). Two effects may help explain the return disparity. The first is that there is a well-documented upward bias in the hedge fund databases, since only successful hedge funds will submit their historical performance to the database. Second, FOF managers add a layer of fees on top of those charged by the hedge funds, and it has proven difficult for them to add enough value in manager selection to overcome that drag. Indeed, the FOF index had only a slightly lower level of volatility than the Composite index, but had an average return that was 3.6% lower!

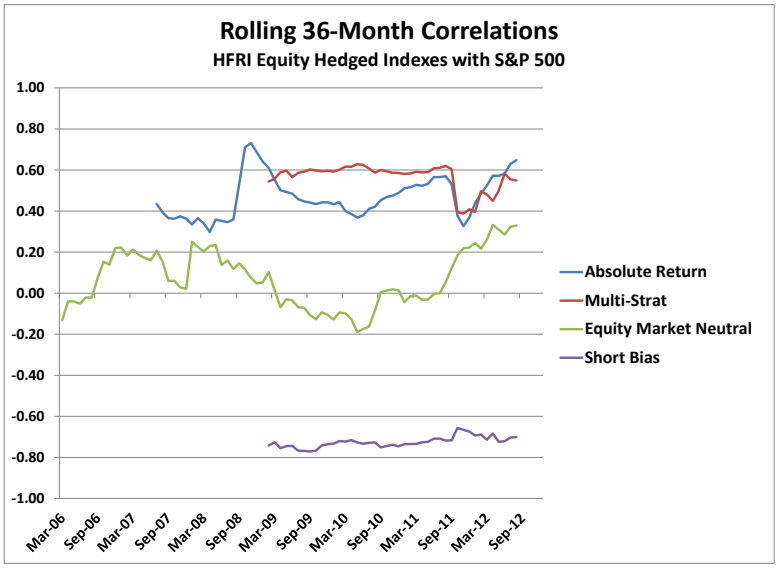
Decomposing HFRI Indexes

"Hedge funds" are not an asset class. **Hedge funds employ many diverse strategies** in many different asset classes. A hedge fund is mostly a form of pooled asset management that allows for the use of shorting and leverage and for the collection of incentive fees by the manager. Beyond those few characteristics, hedge funds share little in common.

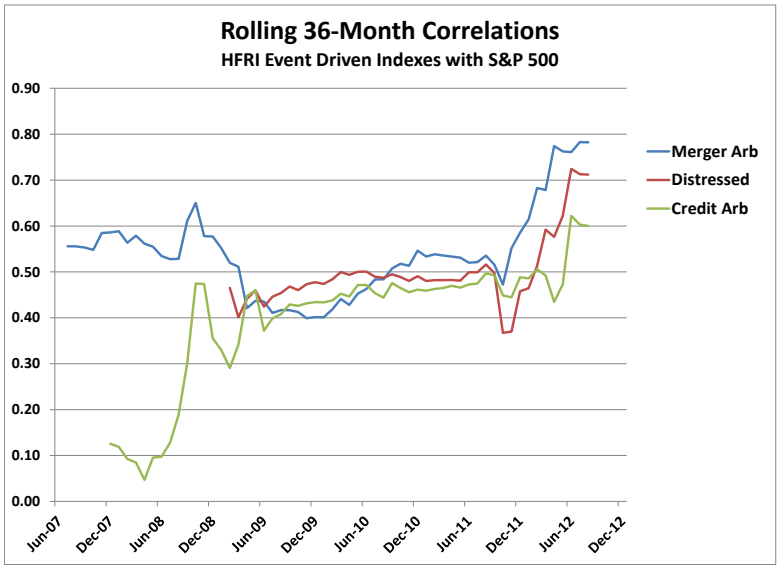
The **four major HFRI group indexes** (shown at right) start to present a more coherent picture of the behavior of particular strategies, though even these are far from homogeneous. Three of the four exhibit a very similar pattern, with only the Macro index exhibiting the desired low correlation with the S&P 500.



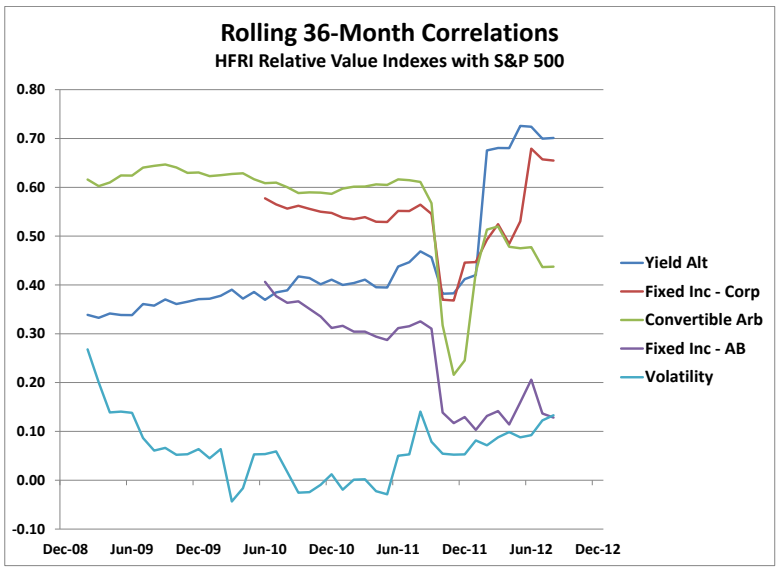
The four major HFRI group indexes can be further broken down into their **component indexes**, where the homogeneity starts to get a bit better. In a few of the HFRI **Equity Hedged** component indexes (shown at right) we find some attractive diversifying return patterns, with very low correlations with the S&P 500. The Absolute Return and Multi-Strategy indexes both have a low enough correlation with the S&P 500 to provide meaningful diversification. The Equity Market Neutral index is decidedly better, exhibiting an average correlation that appears to vary around an average of close to zero, which is of course the intent of these funds. Finally, Short Bias funds display the expected negative correlation with the S&P 500.



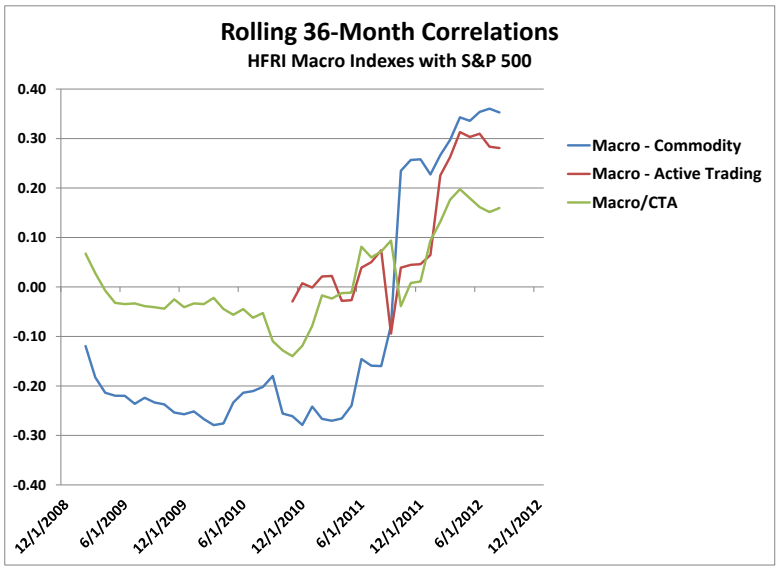
The HFRI **Event Driven** Indexes follow the pattern of generally increasing correlation with the S&P 500 over time. Although the diversification benefits of these strategies are not as attractive as the Equity Hedged group above, they are still somewhat attractive. Not surprisingly, the Credit Arbitrage index displays the lowest correlation, since these funds tend to invest in fixed income instruments rather than equities.



The **Relative Value** group includes a wide spectrum of strategies. Recently, the S&P 500 has been driven by credit and economic concerns, so not surprisingly the Yield Alternative and Corporate Fixed Income indexes have shown a high correlation with the S&P 500. Since most Convertible Arbitrage managers short the stock and own the convertible long, their somewhat lower correlation to the S&P 500 is to be expected. Asset-backed Fixed Income funds show a low correlation to the S&P 500, as do Volatility funds. VIX Index instruments are important to the strategies of volatility fund managers, and the VIX is very negatively correlated to the S&P 500.



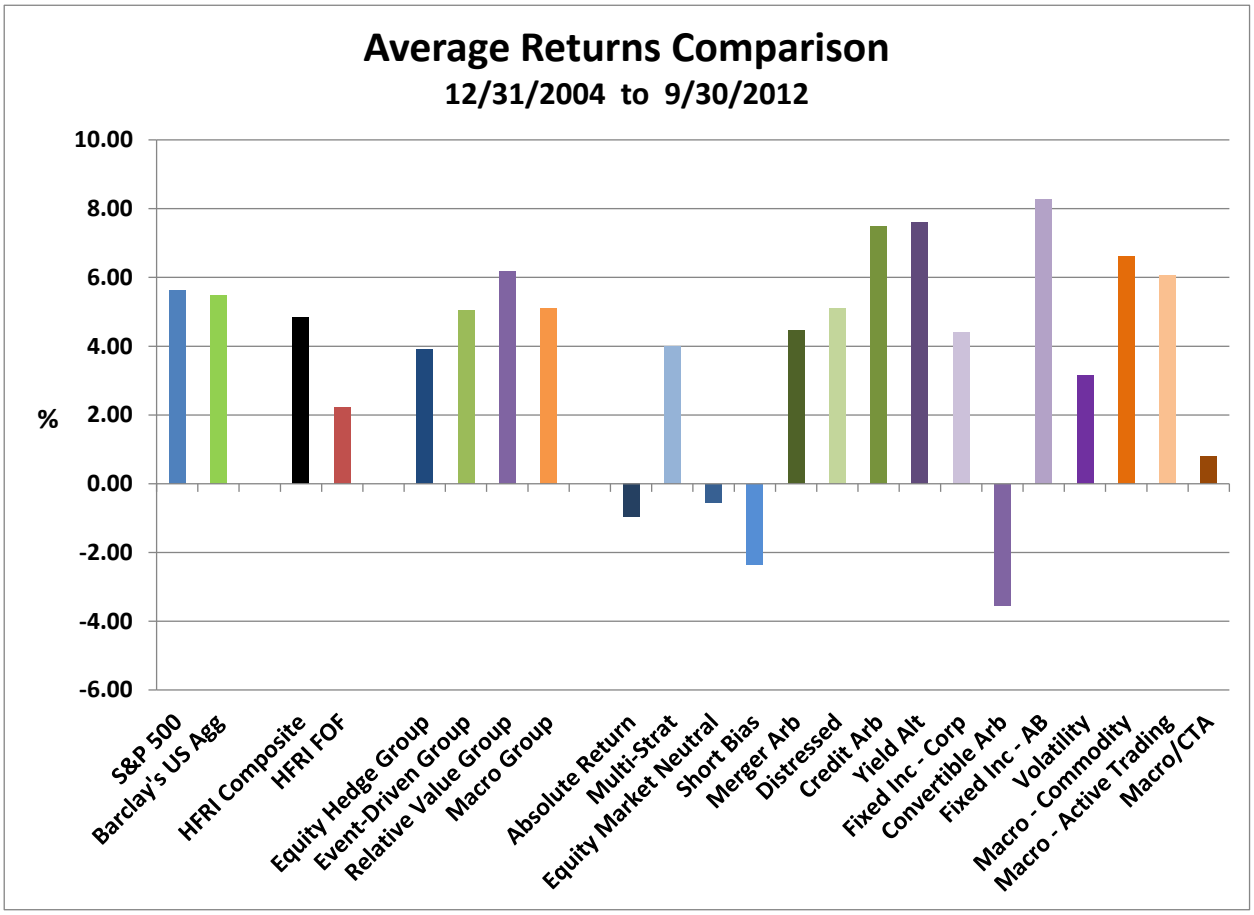
We saw above that the HFRI **Macro** Index group exhibited a decidedly lower correlation with the S&P 500 than the other three, and this characteristic is also evident in the component indexes. Macro hedge funds and commodity trading advisors (CTAs) generally take positions in various futures and other derivatives. Perhaps because commodity prices tend to be tied to economic growth expectations, there has been a recent increase in correlation with the S&P 500 as economic concerns have increased.



The Returns of Alternative Investments

Most portfolios are dominated by equity market risk. Investments with low correlations to the S&P 500 will tend to reduce overall portfolio risk. However, so will betting at a casino. Just as important as correlation is the question of whether diversifying investments will raise or lower overall portfolio return.

The returns presented in the graph below start on 12/31/2004 because that is the earliest date for which information is available on all of the HFRI hedge fund indexes discussed above. For some of the graphs above, we used the much longer history that is available for some of the HFRI indexes, such as the Composite and the Fund of Funds indexes. When we went back to 12/31/1989, the risk/return for the Composite Index was well above the line between what stocks and bonds produced over that time period. Since 2004, however, both stocks and bonds have outperformed the average hedge fund, and fund of funds performance has been nothing short of abysmal, subtracting 2.6% from the 4.8% return of the average hedge fund for a net return of 2.2%.



Even long-term average returns are a very poor forecast of future performance, much less a time period as short as eight years. The results above merely illustrate the underlying structural problem inherent in funds of funds—they add an additional layer of fees. It would appear that they have failed to deliver on their promises of adding value through careful fund selection,

sophisticated risk management, and dynamic rebalancing. For both the post-1989 period and the post-2004 period, investors would have been far better off with a simple average of all hedge funds.

As for the returns of the other HFRI indexes ("selected" because of their low historical correlation to the S&P 500), one should not be too quick to draw conclusions. Forecasting the future returns for these strategies is extremely difficult.

As shown below, leadership among the strategies rotates quite a bit, sometimes very quickly. The period leading up to and including 2008 seem to have been a different era compared to the return patterns since then.

Returns of Selected HFR Indexes

	Eqty Hdg Absolute Return	Eqty Hdg Multi-Strat	Eqty Hdg Equity Market Neutral	Eqty Hdg Short Bias	Evnt Drvn Merger Arb	Evnt Drvn Distressed	Evnt Drvn Credit Arb	Rel Val Yield Alt	Rel Val Fixed Inc - Corp	Rel Val Convertible Arb	Rel Val Fixed Inc - AB	Rel Val Volatility	Macro Macro - Commodity	Macro Macro - Active Trading	Macro Macro/CTA
2005	-0.02%	5.66%	0.21%	7.28%	3.72%	8.27%	5.33%	10.45%	5.27%	-5.69%	7.86%	9.60%	23.00%	7.51%	6.67%
2006	7.43%	8.99%	4.76%	-2.65%	10.73%	15.94%	12.60%	25.11%	10.78%	9.57%	8.70%	12.17%	15.56%	14.65%	5.61%
2007	6.68%	1.81%	3.11%	4.72%	4.85%	5.08%	2.93%	12.95%	-0.74%	-0.95%	1.11%	1.22%	13.42%	14.88%	3.19%
2008	-13.09%	-20.30%	-1.16%	28.41%	3.69%	-25.20%	-6.55%	-26.49%	-24.18%	-58.37%	-3.42%	1.98%	14.73%	9.19%	5.61%
2009	-3.58%	24.67%	-5.56%	-24.03%	8.14%	28.14%	25.96%	26.72%	30.71%	42.46%	23.92%	-3.19%	-3.01%	0.56%	-8.78%
2010	-0.12%	13.16%	2.64%	-18.01%	5.69%	12.12%	10.91%	13.85%	11.80%	8.76%	12.95%	-4.36%	-5.01%	4.36%	-1.73%
2011	-3.71%	-2.44%	-2.92%	0.35%	-2.09%	-1.79%	4.10%	-2.53%	0.82%	-3.07%	6.01%	1.42%	-9.80%	-6.80%	-4.88%
2012 (9 mos)	0.01%	4.68%	-5.38%	-10.09%	0.68%	4.50%	6.66%	6.74%	6.75%	5.62%	11.13%	5.87%	6.07%	4.74%	-0.89%

Return Rank Order of Selected HFR Indexes

	Eqty Hdg Absolute Return	Eqty Hdg Multi-Strat	Eqty Hdg Equity Market Neutral	Eqty Hdg Short Bias	Evnt Drvn Merger Arb	Evnt Drvn Distressed	Evnt Drvn Credit Arb	Rel Val Yield Alt	Rel Val Fixed Inc - Corp	Rel Val Convertible Arb	Rel Val Fixed Inc - AB	Rel Val Vola-tility	Macro Macro - Commo-dity	Macro Macro - Active Trading	Macro Macro/CTA
2005	14	9	13	7	12	4	10	2	11	15	5	3	1	6	8
2006	12	10	14	15	8	2	5	1	7	9	11	6	3	4	13
2007	4	11	9	7	6	5	10	3	14	15	13	12	2	1	8
2008	10	11	7	1	5	13	9	14	12	15	8	6	2	3	4
2009	12	6	13	15	8	3	5	4	2	1	7	11	10	9	14
2010	11	2	10	15	8	4	6	1	5	7	3	13	14	9	12
2011	12	8	10	5	7	6	2	9	4	11	1	3	15	14	13
2012 (9 mos)	12	9	14	15	11	10	4	3	2	7	1	6	5	8	13

We believe that it is important to understand the economic fundamentals behind a hedge fund strategy. One key consideration is to what extent the strategy employed exploits a true market inefficiency (alpha) or provides specialized risk capital where a return for that risk is unusually high (alternative beta).

Many hedge fund strategies attempt to exploit a number of market inefficiencies simultaneously. For example, equity market neutral funds typically employ techniques to concentrate the portfolio on one or more of these inefficiencies while attempting to neutralize unwanted exposure to equity market risk and other systematic risks. These portfolios often focus on such themes as attractive value, positive momentum, rising investor or analyst sentiment, insider buying, net stock buybacks, high quality, low volatility, and low beta, to name

but a few. Many of these could also be described as taking specialized risks in the form of "alternative betas" that are relatively uncorrelated to overall market risk.

Alternatively, some hedge funds are focused on a single type of inefficiency or alternative beta. For example, merger arbitrage funds typically buy long the stock of companies to be acquired and short the stock of the acquirers. These positions entail a considerable amount of "deal risk," since even friendly mergers may not happen for a variety of reasons. After a merger is announced the stock of the company to be acquired typically jumps in price. Many of its stockholders are anxious to sell their stock and realize their gains. They are willing to forego further appreciation because they want to avoid deal risk. The potential gains for holding the stock until the deal closes are usually quite attractive, however, if the deal in fact goes through. This is one example of what might be called an "alternative beta," in the sense that exposure to this risk can be expected to earn a return that is not correlated to the overall market.

Convertible arbitrage funds buy convertible bonds and short the underlying stock in order to hedge their risk. They take advantage of mispricing opportunities between the convertible debt and the common stock—historically the former has often been cheap relative to the latter. A specialized expertise is required to adequately analyze the value of the convertible bond, which typically comes with rather complicated embedded options. Many investors avoid convertibles because they do not have adequate analytical firepower, and this may explain the persistent undervaluation of convertibles.

Commodity investors provide risk capital so that hedgers (producers and buyers of the commodity) are able to lay off their forward price risk. This is another example of an "alternative beta."

Most hedge funds purport to be dependent upon the skill of the portfolio manager(s) to some extent. Past success may be no guarantee of future success, but hedge fund investors seem willing to behave as if it is, given the fees they are willing to pay! However, history has amply demonstrated that betting on the continued genius of a hedge fund manager is often perilous as well as expensive.

Given the difficulty of forecasting their returns, a logical approach to investing in alternative strategies may be to invest in as many sources of "alternative beta" as seem reasonably sound, emphasizing those that have a low correlation with the S&P 500 and with each other. Lower cost sources of return should, of course, be preferred.

Summary and Conclusion

Traditional investments in stocks and bonds have provided very attractive returns for investors since the early 1980s. For the last two decades of the 20th century, stock returns were nothing short of phenomenal. Since then, bond returns have been very attractive. Going forward, however, the return from neither of these appears likely to be nearly as attractive, especially on a risk-adjusted basis.

Equity market risk dominates most portfolios. Even asset classes that have historically provided a meaningful diversification benefit, such as small cap stocks, foreign stocks, and real estate

stocks, have all seen their correlations to the S&P 500 rise to the point where they provide no meaningful diversification benefit.

Even hedge funds have seen their correlations with the S&P 500 rise on average in recent years. However, many alternative strategies continue to provide a meaningful level of diversification, making them attractive as potential portfolio risk-reducers.

A much more difficult question is whether the returns of these alternative strategies will be attractive, particularly net of all costs and fees. Not only do most of the strategies require heavy transaction costs, but the management and incentive fees typically assessed weigh heavily on the net return. Since 2004, the return of the average hedge fund has fallen short of the return available in both U.S. stocks and U.S. bonds.

Investors in funds of funds have fared quite poorly on average, no doubt in large part because of the additional fee layer that such funds add to the fees charged by the underlying hedge funds. The purported value-added from manager selection, risk control, and dynamic rebalancing has been elusive.

Though alternative strategies appear to offer the potential for diversifying sources of return ("alternative betas"), forecasting the returns from alternative strategies is extremely difficult. Selecting a number of different strategies with low correlation with the S&P 500 that have a reasonable basis for their return-generating mechanism is a sound approach, particularly if such strategies can be obtained at a reasonable cost.

Kevin Means, CFA
Principal
Select Alternative Investments LLC

October 30, 2012

SELECT ALTERNATIVE INVESTMENTS LLC

GENERAL DISCLAIMER

THIS DOCUMENT IS BEING PROVIDED ON A CONFIDENTIAL BASIS SOLELY TO ITS DIRECT RECIPIENT AND SHALL NOT BE REPRODUCED, QUOTED FROM OR DISTRIBUTED WITHOUT THE EXPRESS CONSENT OF SELECT ALTERNATIVE INVESTMENTS LLC AND IN ANY EVENT IS NOT INTENDED FOR PUBLIC USE OR DISTRIBUTION. THE INFORMATION CONTAINED HEREIN IS SUMMARY IN NATURE AND INCOMPLETE AND IS SUBJECT TO CHANGE OR ADDITION WITHOUT NOTICE. SUCH INFORMATION HAS BEEN PREPARED WITH REASONABLE CARE BUT DOES NOT CONSTITUTE ANY REPRESENTATION OR WARRANTY BY SELECT ALTERNATIVE INVESTMENTS LLC, THE INVESTMENT MANAGER OR ANY OF THEIR AFFILIATES. PAST INVESTMENT PERFORMANCE IS NO ASSURANCE OF FUTURE RESULTS. THERE ARE IMPORTANT MATTERS (INCLUDING RISK FACTORS, TAX CONSEQUENCES AND RELEVANT INVESTMENT CONSIDERATIONS) TO BE CONSIDERED IN CONNECTION WITH BECOMING A CLIENT THAT ARE NOT DISCUSSED HEREIN AND PROSPECTIVE CLIENTS ARE RESPONSIBLE FOR REVIEWING THE SAME WITH THEIR PERSONAL ADVISORS. PROSPECTIVE CLIENTS ARE NOT BEING SOLICITED AS SUCH IN ANY JURISDICTION IN WHICH SUCH SOLICITATION WOULD BE UNLAWFUL UNLESS AND UNTIL THE REQUIREMENTS OF THE LAWS OF SUCH JURISDICTION HAVE BEEN SATISFIED. THIS DOCUMENT IS NOT INTENDED FOR USE BY BROKER-DEALERS, MARKETERS OR OTHER THIRD PARTIES.