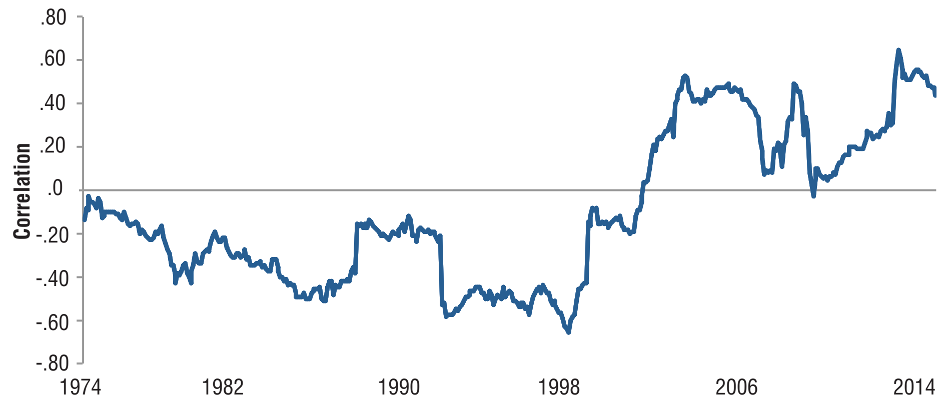
Diversification

You Don't Need It Until You Need It
The Case For Alternatives In Your Portfolio

Source: dilbert.com/strip/2008-12-13

Historically, a portfolio of 60% stocks and 40% bonds has been considered the gold standard of diversification – when stocks fell, bonds went up and vice versa. However as of late, the two assets classes have tended to move more closely with one another, especially during periods of high volatility when diversification is most desirable. In fact, as shown in Figure 1, for the past 13 years stocks and bonds have shown positive correlation, in contrast to the 1974-2001 period when negative correlations were evident. The stock versus bond correlation is currently near 40-year highs.

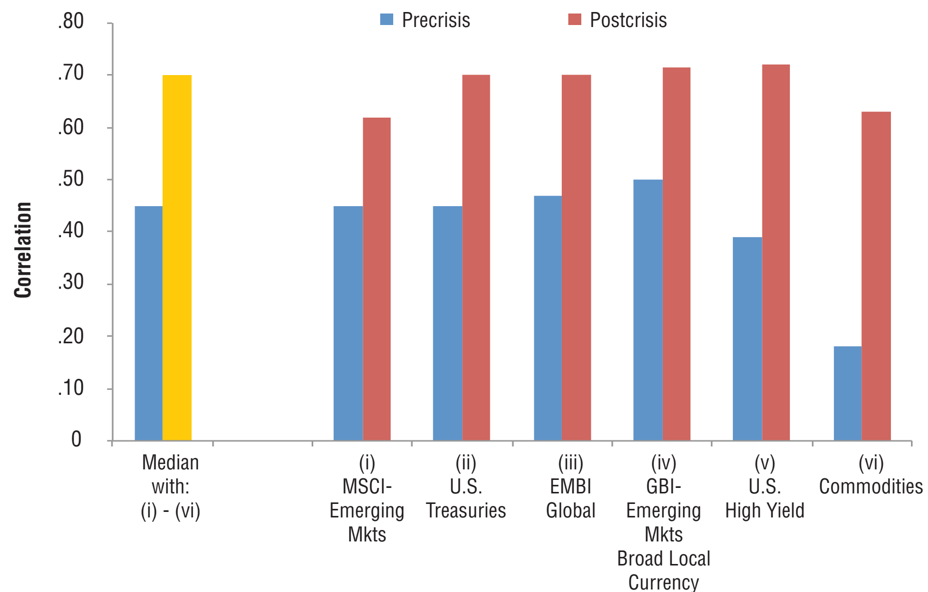
FIGURE 1 **Four-Year Rolling Correlations Between U.S. Equities and 10-Year Treasuries**



Source: Bloomberg

Post financial crisis, many asset classes have tended to move more in lockstep which makes diversifying in the "New Normal" that much more challenging.

FIGURE 2 **Asset Correlation: Correlations Among Major Asset Classes Have Risen Markedly Since 2010**



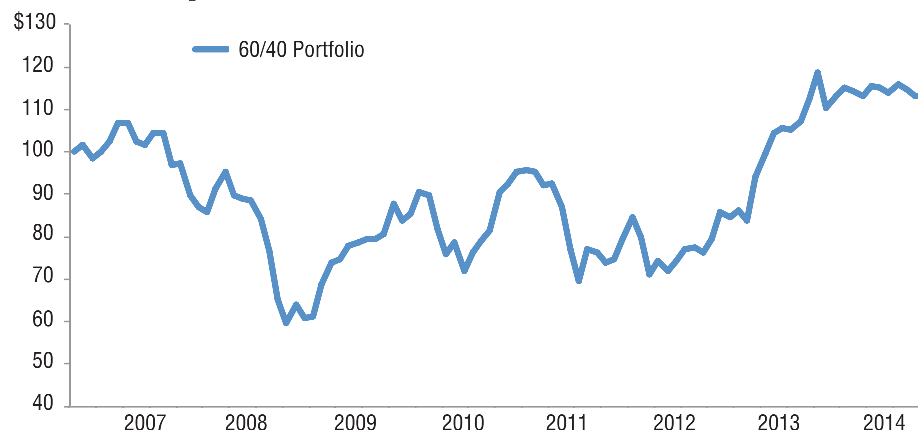
Sources: Bank of America Merrill Lynch; Bloomberg L.P.; Federal Reserve; JP Morgan Chase & Co.; and IMF staff calculations.

Note: Cross-asset correlation is measured as the median of the absolute values of pair-wise correlations over a 60-day window between the daily sharpe ratios of the asset classes listed, MSCI EM = MSCI Emerging Markets Equity Index; US Treasuries = 7-10 year US Treasury Index; EMBI Global = JPMorgan Emerging Markets Bond Index Global; GBI-EM broad loc cur = JPMorgan Government Bond Index-Emerging Markets in local currency; US HY = US High-Yield Index; Commodities = Credit Suisse Index

Source: IMF

Due to this shift in correlation, if an investor had put money to work in a 60/40* portfolio on December 31, 2006 (leading up to the financial crisis), he or she would not have broken even until October 2013, due in part to a lack of diversifiers in the portfolio.

FIGURE 3 **60/40 Portfolio Growth Of $100 Leading Up To The Financial Crisis And Through 2014**



Source: Bloomberg

*60/40 = 60% S&P 500 and 40% 10-year Treasury

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With asset prices once again rising to record levels, it's time to think about models that offer the potential to provide more diversification, efficiency and downside protection. The good news is that today's investors have access to a range of products that can offer this type of diversification and provide daily liquidity, such as liquid alternatives (aka "Liquid Alts").

Liquid Alts are alternative investment strategies meant to offer diversification away from traditional assets like stock and bonds and which are available through alternative investment vehicle that provides daily liquidity. They are typically available through mutual funds, ETFs and closed-end funds.

Liquid Alts For Diversification

Before getting into the diversification benefits of adding liquid alts to a portfolio, here's a review of some of the more diversifying liquid alts:

LIQUID ALTS	PROXY
Equity Long/Short	Credit Suisse Long/ Short Equity Index[1]
Global Macro	HFRI Macro Total Index[2]
Managed Futures	Credit Suisse Managed Futures Index[3]
Relative Value	HFRI Relative Value Index[4]
Event Driven	HFRI Event Driven Index[5]

1. **Equity Long/Short –** An investment strategy that takes long positions in stocks that the managers expect to appreciate and short positions in stocks they expect to decline.
2. **Global Macro –** An investment strategy that selects long and short positions in various equity, fixed income, currency, and futures markets, based primarily on macro economic and political views of various countries.
3. **Managed Futures –** An investment strategy in which futures contracts are used typically to implement trend-following or trend reversal strategies across financial indices and commodities. Managed futures strategies are thought to provide portfolio diversification to traditional equity and fixed incomes portfolios.
4. **Relative Value –** An investment strategy that seeks to exploit inefficiencies in the price or value of similar securities. This might include trading a spread between stocks of similar companies, bonds at various maturities along the same yield curve, bonds of like maturities across yield curves, or multiple instruments across a single company's capital structure.
5. **Event Driven –** An investment strategy that attempts to take advantage of events such as mergers, spin-outs and restructurings that can result in the short-term mispricing of a company's stock or bonds.

[1] The Credit Suisse Long/Short Equity Hedge Fund Index is a subset of the Credit Suisse Hedge Fund Index℠ that measures the aggregate performance of dedicated long/short funds.

[2] The HFRI Macro Total Index is an index of macro investment managers that trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets.

[3] The Credit Suisse Managed Futures Hedge Fund Index is a subset of the Credit Suisse Hedge Fund Index℠ that measures the aggregate performance of dedicated managed futures bias funds. Managed futures funds (often referred to as CTAs or Commodity Trading Advisors) typically focus on investing in listed bond, equity, commodity futures and currency markets, globally.

[4] The HFRI Relative Value Index is an index of investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types.

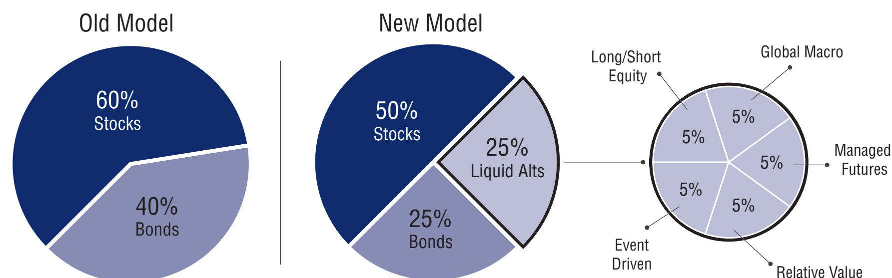
[5] The HFRI Event Driven Index is an index of event-driven investment managers who maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments.

A theme common to all of these styles is that managers are given added flexibility versus traditional strategies by being able to take short positions and use leverage and sometimes derivatives instruments such as futures, forwards, swaps, and options.

Benefits of Diversification

Investors can construct a more diversified portfolio by replacing the 60/40 stocks/bonds model with a more efficient mix that includes liquid alts.

Adding just a 25% allocation to liquid alts by constructing a portfolio that consists of 50% stocks, 25% bonds and 25% liquid alts (composed of 5% long/short equity, 5% global macro, 5% managed futures, 5% relative value, 5% event driven) investors can improve their risk/return ratio and move further out on the efficient frontier.



Below we compare the performance of the 50/25/25 portfolio to the 60/40 model from 2007 through 2014 which includes the storm in 2008. Across the board it is clear that a small allocation to liquid alts diversifies and enhances the old 60/40* model.

FIGURE 4 **Model Portfolios Performance**

	50/25/25	60/40	Ratio
Return (12/06-12/14)	3.33%	1.54%	2.2x
Std Deviation Annualized	13.87%	18.57%	0.7x
Sharpe Ratio	0.31	0.18	1.7x
Annualized Downside Dev.	0.99%	1.34%	0.7x
Annualized Sortino Ratio	0.36	0.20	1.8x
Max Drawdown	-36%	-44%	0.8x

Source: Bloomberg

*60/40 = 60% S&P 500 and 40% 10-year Treasury

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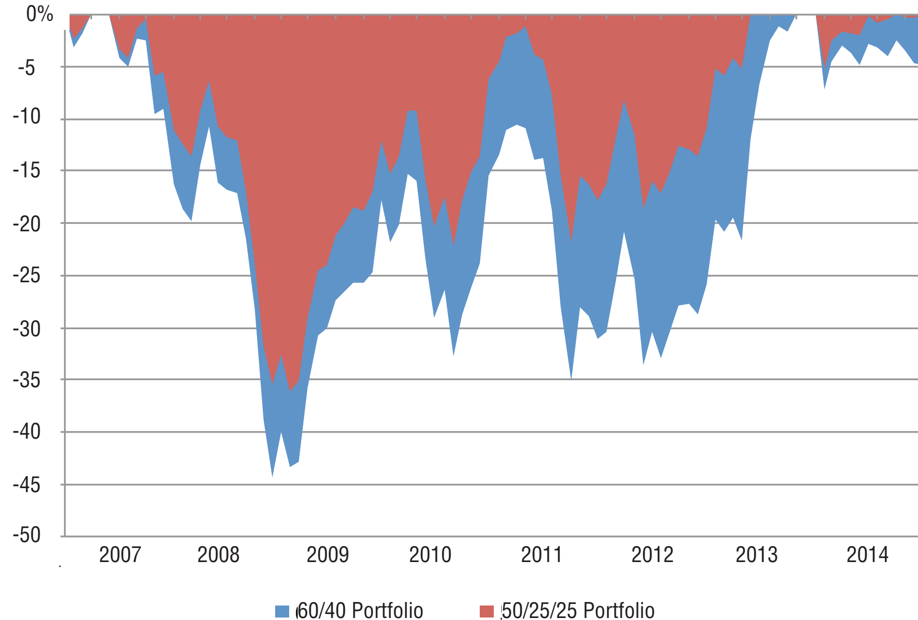
"While flourishing in an up market is wonderful, surviving a bear market by losing less (or not at all) is equally desirable"

- Chuck Royce

One of the main benefits of a more diversified portfolio that includes liquid alts is the potential for considerably shallower drawdowns as shown in Figure 5 below.

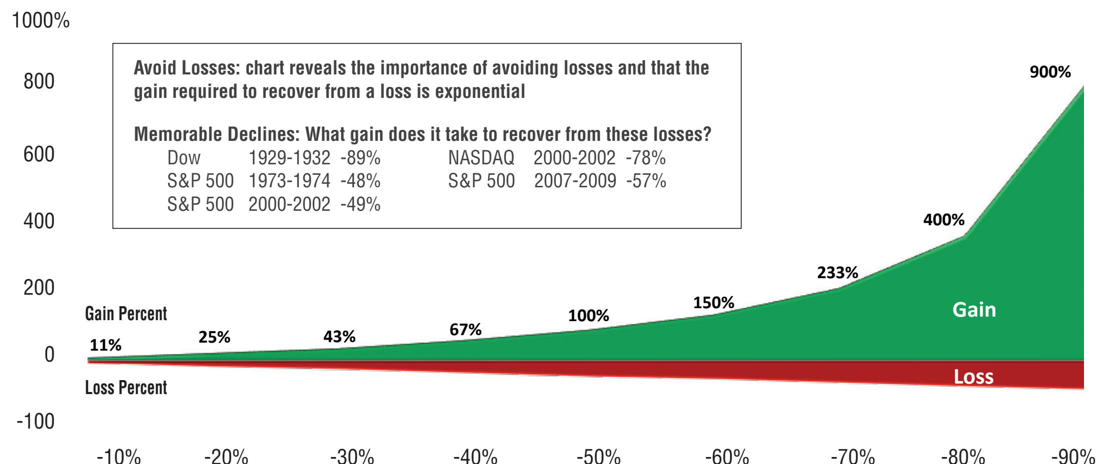
FIGURE 5 **Max Drawdowns**



Source: Bloomberg

Limiting drawdowns through diversification helps drive long-term outperformance. The figure below reveals the return an investor must generate in order to recoup his wealth after a drawdown.

FIGURE 6 **The Break Even Curve: Gain Required To Recover From A Loss**



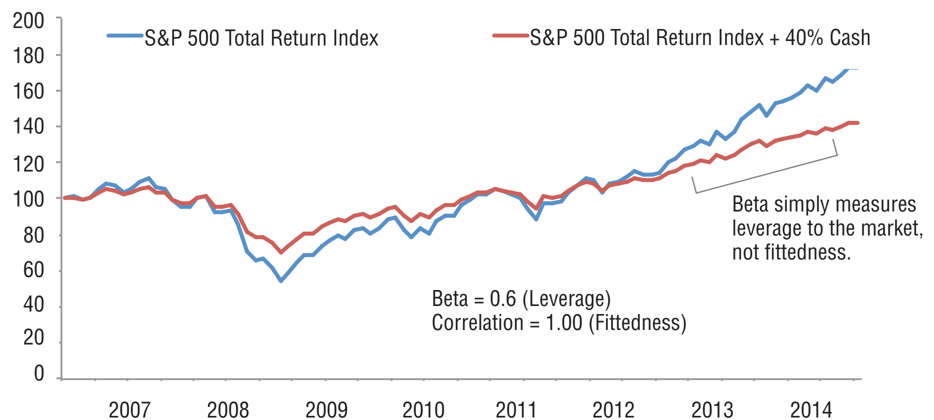
Source: Crestmont Research

Evaluating Liquid Alts

When investors are evaluating different investment opportunities in the liquid alt space, there a few key factors to consider:

1. **Look at Correlations, not Beta**
    - A low beta does not tell you much about how well most strategies will diversify a portfolio. It tells you only how leveraged a strategy is to the market.
    - A low beta can be produced by a strategy that holds lots of cash and some of the S&P 500; it reduces risk at the cost of reducing returns, but otherwise offers no diversification.
    - Therefore focus on correlations. Constructing a portfolio of uncorrelated assets is the key to diversification.

FIGURE 7 **Beta Not A "Diversifier"**



Source: Bloomberg

2. **Quantify how much "Market Risk" versus "Specific Risk" a Fund is taking**
    - As shown in Figure 8, an effective way to evaluate what kind of risk a Fund is taking is by taking its gross/net ratio (simply its gross market exposure – which includes leverage – to its net market exposure).
        - When evaluating a Fund, we believe a higher gross/net ratio is desirable because the Fund is emphasizing "Specific Risk" which relies on its manager's specialized skill in position selection rather than on taking "Market Risk," which can be accessed more cost-effectively through ETFs and Index funds.
        - "Specific Risk" is also the kind of risk that can be hedged away through diversification, whereas "Market Risk" cannot.

Barrow Street Advisors Leadership

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FIGURE 8 **Gross/Net Ratio**

For Equity Long/Short Funds the Gross/Net Ratio reveals their power to diversify.

Gross/Net Ratio of our example: 190%/50% = 3.8

3. **Evaluate the fundamental drivers of performance**
   - Investigate the underlying economic fundamentals that drive a Fund's performance. For example, does the strategy work or not work when:
     - volatility is high
     - liquidity increases
     - markets are choppy
     - trends are in place
     - regulations are in flux
     - inflation is at hand

Consider Adding Liquid Alts For Diversification

In the "New Normal" many asset classes are highly correlated. As a result, diversifying an investment portfolio has become much more challenging.

At Barrow, we believe liquid alternatives offer a compelling solution as a non-correlated asset class that can help to diversify an investment portfolio and limit the impact of portfolio drawdowns.

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