Why You Should Care About **Correlation**

March 2022

If asset flows continue to increase into alternative strategies that have exhibited high correlation to stocks, many investors may be surprised at how exposed they are to an equity market downturn. In 2021, the five funds garnering the most new assets within Morningstar's Alternatives Category had an average correlation[1] to the S&P 500 Index of 0.75. What's more, the five largest funds in the Category also demonstrated the same average correlation to the S&P of 0.75.[2]

Whether that is a bad thing or not depends on why an investor is allocating to alternatives.

Key Takeaways

- Alternative strategies with high correlations to equity markets received the highest inflows in 2021.
- With this in mind, many investors may be surprised at how exposed they are to an equity market downturn.
- Those using alternatives for diversification should consider correlation, and seek strategies that move independently from stocks and bonds.

Role That Alternatives Play

Many investors seeking alternatives do so for their ability to perform independently from stocks and bonds.

If investors view their alternative allocation primarily as a source of growth for their portfolio, then a hedged equity strategy or other fund that has a higher correlation to equities may be an appropriate fit. But many investors seek alternatives for diversification purposes – to have something in the portfolio that moves independently of stocks and bonds. That need is even more important today, as the performance of stocks and bonds (the traditional diversifier within portfolios) both seem inextricably tied to the direction of interest rates.

For those seeking diversification, an alternative strategy with a 0.75 correlation to the S&P 500 Index could prove counterproductive. The table below shows the difference high- and low-correlating strategies can make within a portfolio.

The first row represents portfolio characteristics for a hypothetical asset allocation of 60% stocks, 20% bonds, and 20% highly-correlated alternatives (as measured by the U.S. Fund Options Trading Category[3], which has a correlation of 0.91 to the S&P 500).

The second row shows characteristics of a hypothetical portfolio with a 60/20 stock and bond allocation and a 20% allocation to low-correlating alternatives (as measured by the Morningstar Systematic Trend Category, which has a correlation of -0.03 to the S&P 500). The figures are for the period from May 1, 2007 (the inception of the Morningstar Systematic Trend Category) to the end of 2021.

Low-correlating strategies seek to create a smoother ride and a more consistent outcome for investors.

	Return	Standard Deviation	Sharpe Ratio	Max Drawdown	Worst Month	Worst Quarter
High-Correlating Alts - 60/20/20	7.94%	10.9	0.69	-38.6%	-13.0%	-15.8%
Low-Correlating Alts - 60/20/20	7.61%	**9.4**	**0.75**	**-31.0%**	**-8.2%**	**-11.4%**
S&P 500 Index	10.54%	15.5	0.68	-51.0%	-16.8%	-21.9%

The portfolio with high-correlating alternatives did perform slightly better – 33 basis points annualized over 15 years. However, given the long bull market before and after the initial onslaught of the COVID-19 pandemic, that performance isn't surprising. But the low-correlating portfolio performed better on every other risk metric, dampening volatility and drawdown for the investor. Those metrics matter a great deal to an investor's experience. Less volatility and lower drawdowns may prevent irrational decision making, such as abandoning an asset class at the bottom of a pullback and missing its rebound.

Source: Morningstar, LoCorr Funds Research. Table data is since common inception, 5/1/2007-12/31/2021. [3]Morningstar Alternatives sub category top flows in 2021. **Past performance does not guarantee future results.**

For those seeking diversification, correlation should be central to the decision process.

When investors or advisors look at alternative investment strategies, correlation is not always the first thing they evaluate. But for those seeking diversification, we believe it should be central to the decision process. These guidelines can help when allocating to alternatives:

- **Understand correlations among your core holdings.** Correlations range on a scale from 1 (perfectly correlated) to -1 (inversely correlated). For advisors whose primary objective is diversification, an optimal correlation might range between -0.5 to 0.5. Anything below -0.5 has high inverse correlation. And given the general, but not constant, upward trajectory of equities, a strategy or basket of alternatives with inverse correlation to stocks may be a semi-constant drag on performance. On the other hand, for diversification purposes, anything above 0.5 could move too closely in tandem with equity markets. The objective of diversification is to find strategies that move independently of equities, but not inversely.

- **Look far back.** When assessing strategies for diversification purposes, look at correlation over the lifetime of the strategy, and look specifically at its correlation during periods when stocks were down.

- **Be clear on why you own a particular strategy.** If you are seeking diversification within alternatives, it's not enough for every strategy to have a low correlation to stocks. What is their correlation to each other? And what is the value each new strategy brings to the portfolio? For example, one strategy might provide inflation protection and real return, another market neutrality, while another strategy may provide equity risk diversification. There is no single, 'silver bullet' strategy that meets all portfolio diversification needs. Instead, different strategies can be combined in the same "sleeve" or "bucket" to potentially provide better diversification from stocks and bonds and address different market risks.

- **Analyze other metrics beyond correlation.** Sharpe ratio shows return per unit of risk and is a good gauge of how the strategy achieved its performance. Ideally, the addition of low-correlating strategies may bring the Sharpe ratio of the aggregate portfolio higher. Meanwhile, maximum drawdown can show when the strategy suffered, and by how much. One can also see whether those drawdowns are happening at times different from equity market downturns.

By making correlation an important aspect of evaluating alternative strategies, advisors can construct an allocation to a sleeve within the portfolio that is truly diversified from stocks and bonds. As asset flows last year indicate, it's a nuance that some investors may be missing.

To learn more about how LoCorr can help you reach your investment goals, contact us at **888-628-2887** or visit us at **www.LoCorrFunds.com**.

DO'S and DON'TS for Adding Low-Correlating Strategies

- **Understand correlations** among your core holdings
- Be clear on **why you own** it and the outcome you're trying to achieve
- **Allocate enough** to make a difference. It's unlikely marginal tweaks would have a substantial impact
- Allocate to a **sleeve of multiple strategies** to address different market concerns
- Know your **alternatives managers**

- Lose sight of **risk management**
- Try to **time market** cycles
- Sell low-correlating strategies when the stock market is outperforming
- Go exclusively for the **lowest cost provider**
- Invest based solely on a **back-tested track record**

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[1]Correlation measures the relationship in price movements between stocks and a fund or asset class. A measure of 1.0 represents perfect correlation – meaning the fund or asset class moves in tandem with stocks. A measure of -1.0 means it moves inversely to stocks. [2]Source Morningstar, LoCorr Funds Research

S&P 500 Index is a capitalization weighted unmanaged benchmark index that includes the stocks of 500 large capitalization companies in major industries. This total return index includes net dividends and is calculated by adding an indexed dividend return to the index price change for a given period. US Fund Options Trading Category The options-based category was split into two new categories: Derivative income (in the nontraditional equity U.S. category group) and options-trading (staying in the alternative U.S. category group). Strategies that largely rely on options contracts to generate incremental income on top of traditional equity market return drivers are classified in the new derivative-income category, which is included in the nontraditional equity U.S. category group, while less market-sensitive, relative-value-oriented strategies are classified as options-trading, an alternative category. Morningstar Systematic Trend Category is an average monthly return of all funds in the Morningstar Systematic Trend Category. These funds typically take long and short positions in futures options, swaps, and foreign exchange contracts, both listed and over-the-counter, based on market trends or momentum. A majority of these funds follow trend-following, price-momentum strategies. Standard Deviation - The statistical measurement of dispersion about an average, which depicts how widely a portfolio's returns varied over a certain period of time. When a portfolio has a high standard deviation, the predicted range of performance is wide, implying greater volatility. Sharpe Ratio - measures the amount by which a set of values differs from the arithmetical mean, equal to the square root of the mean of the differences' squares. Drawdown refers to how much an investment or trading account is down from the peak before it recovers back to the peak. Drawdowns are typically quoted as a percentage, but dollar terms may also be used if applicable for a specific trader. Drawdowns are a measure of downside volatility. Basis Points (bps) - A unit that is equal to 1/100th of 1%, and is used to denote the change in a financial instrument. The basis point is commonly used for calculating changes in interest rates, equity indexes and the yield of a fixed-income security.

Past Performance does not guarantee future results. Index performance is not indicative of fund performance. For current standardized fund performance, please call 1.855.LCFunds or visit www.LoCorrFunds.com. The performance of various indices is shown for comparison purposes only. The performance of those indices was obtained from published sources believed to be reliable, but which are not warranted as to accuracy or completeness. Unless noted otherwise, index returns do not reflect fees or transaction costs and reflect reinvestment of net dividends. One cannot invest directly in an index.

The Fund's investment objectives, risks, charges, and expenses must be considered carefully before investing. The prospectus contains this and other important information about the investment company, and it may be obtained by calling 1.855.LCFUNDS, or visiting www.LoCorrFunds.com. Read it carefully before investing.

Mutual fund investing involves risk. Principal loss is possible. The Funds are non-diversified, meaning it may concentrate its assets in fewer individual holdings than a diversified fund. Therefore, the Funds are more exposed to individual stock volatility than a diversified fund. The Funds invest in foreign investments and foreign currencies which involve greater volatility and political, economic and currency risks and differences in accounting methods. These risks are greater for emerging markets. The Funds may make short sales of securities, which involves the risk that losses may exceed the original amount invested. Investing in commodities may subject the Funds to greater risks and volatility as commodity prices may be influenced by a variety of factors including unfavorable weather, environmental factors, and changes in government regulations. Investing in derivative securities derive their performance from the performance of an underlying asset, index, interest rate or currency exchange rate. Derivatives can be volatile and involve various types and degrees of risks, and, depending upon the characteristics of a particular derivative, suddenly can become illiquid. Derivative contracts ordinarily have leverage inherent in their terms which can magnify the Fund's potential for gains or losses through increased long and short position exposure. The Fund may access derivatives via a swap agreement. A risk of a swap agreement is the risk that the counterparty to the agreement will default on its obligation to pay the Fund. Investments in debt securities typically decrease in value when interest rates rise. This risk is usually greater for longer-term debt securities. Investments in Asset Backed, Mortgage Backed, and Collateralized Mortgage-Backed Securities include additional risks that investors should be aware of such as credit risk, prepayment risk, possible illiquidity and default, as well as increased susceptibility to adverse economic developments. The LoCorr Dynamic Equity Fund may invest in small- and medium-capitalization companies which involve additional risks such as limited liquidity and greater volatility. The Fund may also invest in lower-rated and non-rated securities which present a greater risk of loss to principal and interest than higher-rated securities. ETF investments are subject to investment advisory and other expenses, which will be indirectly paid by the Fund. As a result, the cost of investing in the Fund will be higher than the cost of investing directly in ETFs and may be higher than other mutual funds that invest directly in stocks and bonds. ETFs are subject to specific risks, depending on the nature of the ETF. The Spectrum Income Fund's portfolio will be significantly impacted by the performance of the real estate market generally, and the Fund may be exposed to greater risk and experience higher volatility than would a more economically diversified portfolio. Property values may fall due to increasing vacancies or declining rents resulting from economic, legal, cultural, or technological developments. Investments in Limited Partnerships (including master limited partnerships) involve risks different from those of investing in common stock including risks related to limited control and limited rights to vote on matters affecting the Limited Partnership, risks related to potential conflicts of interest between the Limited Partnership and the Limited Partnership's general partner, cash flow risks, dilution risks and risks related to the general partner's limited call right. Underlying Funds are subject to management and other expenses, which will be indirectly paid by the Fund.

 LC 3951 (2/22)