



Informed Investor Series Low Correlation – A Defense Against the Bear White Paper

The Informed Investor Series explores how better understanding markets may help you to make the most informed investment decisions possible.

The Low Correlation – A Defense Against the Bear white paper explores how understanding correlation could be helpful when managing the risk in your portfolio.

Low Correlation- A Defense Against the Bear

Ideally, you would love to find a “perfect” defense for an investment portfolio. However, an investment that always beats inflation and does not lose money simply does not exist. In addition, as we have seen in other papers we have published, trying to time the market is, at best, a problematic and elusive strategy to achieve.

Despite the absence of a perfect solution, in our opinion, there could be what we consider to be a possible defense through the use of a series of low correlated asset classes. It could be a way of controlling some of the risks in your portfolio.

For some investors, correlation may seem a complex and abstract term. However, it could be the basis of sound portfolio construction and, in our view, it is the foundation of a more modern approach to asset allocation. While adding low correlated assets to your portfolio is not a guarantee against losses, gaining an understanding of correlation could be helpful in understanding how to budget risk in your portfolio.

What is Correlation?

Correlation is a statistical measure that shows the degree to which any two things move together and their dependency on each other. Correlation is expressed as a number between +1 and -1.

What Does a Correlation of +1 Mean?

If you were looking at two investments and they had a correlation of +1, that would indicate a high degree of correlation. A +1 means that they will always move together in the same direction at the same time. Having two asset classes with a correlation of +1 will do little to reduce the volatility (risk) in an investment portfolio.

Think of it as having the proverbial eggs in the same basket. When that basket falls, since both eggs are in the same basket and headed in the same direction simultaneously, the likelihood is that both eggs will break.

What Does a Correlation of -1 Mean?

The opposite of a correlation of +1 is a correlation of -1. A correlation of -1 indicates a negative correlation, meaning that they always move in opposite directions of each other. With a negative correlation, the eggs are now in different baskets, and each basket is attached to a pulley. When one basket drops down, the other automatically moves up, meaning that now the baskets and the eggs will always move in opposite directions.

What does a Correlation of Zero Mean?

A zero correlation would indicate no relationship between the two asset classes, and their price will move independently of each other. The eggs are in different baskets, but now there is no relationship if one were to fall. Their ability to fall or stay firmly in hand is independent of each other.

Practically speaking, very few asset classes have a perfect positive correlation (+1), a zero correlation (0), or a perfect negative correlation (-1). Typically, the majority of investments will have some correlation between +1 and -1. The goal is to build a portfolio with assets having a low correlation.

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Correlation Table

Correlation Range	Diversification Level in a Portfolio
Negative	Maximum
0.0 - 0.5	Excellent
0.5 - 0.6	Very Good
0.6 - 0.7	Good
0.7 - 0.8	OK to Poor
0.8 - 0.9	Poor to Low
0.9 - 1.0	Least

Source: Dunham & Associates Investment Counsel, Inc., 2022

Putting the Concept of Correlation into Practice.

To further expand on the concept of correlation, let's look at building a hypothetical investment portfolio.

Let's assume you were investing a \$1 million portfolio. Would you place all of the assets in one investment or diversify them among various asset classes? Typically, conventional wisdom would dictate that you spread the investment

across different asset classes for long-term investing.

Generally, this is done to lower portfolio risk while attempting to optimize portfolio returns. Typically, this diversification works best if you combine asset categories in the portfolio with a low correlation. By putting low correlated investments in a portfolio, the overall volatility may be lowered. Historically, the absolute risk in your portfolio has been firmly determined by the correlations between the portfolio components.

To illustrate the point, the chart below demonstrates the correlation between stocks and low correlated investments like bonds, real estate, long/short credit, global macro investments, and merger arbitrage. We are not suggesting any of these investments but simply using them to represent the types of diverse low correlation assets available. Your financial advisor can help you select these or other low correlated investments based on your particular situation.

Index	Bear Market Correction
S&P 500 Index	1.00
Bloomberg U.S. Aggregate Bond Index	0.171
Wilshire Focused Liquid Alt Index	0.738
Credit Suisse Liquid Alt Beta Index	0.695

Source: Dunham & Associates Investment Counsel, Inc., 2022

The correlation numbers include the last three bear markets. Those occurred, March 2000 - October 2002, October 2007 - March 2009, and February 2020 - March 2020.

Historically, the numbers in the table suggest that by adding a diversified set of low correlated assets to your portfolio, you might reduce your losses in a bear market. It is essential to keep in mind that all markets are different and past performance does not

guarantee the future success of any one investment or investment strategy.

It is crucial to understand that diversification is not precisely the same as building low correlated assets in your portfolio. A portfolio diversified in large-cap and small-cap value stocks and growth stocks may have a high correlation and also be highly correlated in a bear market.

An experienced Financial Advisor may help manage your risk by building an investment portfolio tailored to your tolerance for risk through the use of low correlated assets.

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And while there is no perfect defense for your portfolio, perhaps you and your financial advisor can find the portfolio that suits you and your individual situation.

Sources:

(1) Dunham & Associates Investment Counsel, Inc.

Disclosures:

This document is provided for informational purposes only by Dunham & Associates Investment Counsel, Inc. ("Dunham") and should not be construed as individual investment advice.

Investments are subject to risks, including possible loss of principal. Investors should consider the investment objectives, risk factors, and expenses of any investment carefully before investing. Diversification does not guarantee profit or ensure against loss.

No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

Asset allocation, which is driven by complex mathematical models, should not be confused with the much simpler concept of diversification. Asset allocation cannot eliminate the risk of fluctuating prices and uncertain returns. Rebalancing may be a taxable event. Before taking any specific action, be sure to consult with your tax professional.

All examples are hypothetical and are for illustrative purposes only. We encourage you to seek personalized advice from qualified professionals regarding all personal finance issues. The solution for an investor depends on their and their family's unique circumstances and objectives. No two markets are the same and past performance is not an indication of future results.

A bull market is defined as a market that is up 20 percent or more. A bear market is defined as a market that is down 20 percent or more.

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The S&P 500, or the Standard & Poor's 500, is a stock market index based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The S&P 500 Index components and their weightings are determined by S&P Dow Jones Indices. It differs from other U.S. stock market indices, such as the Dow Jones Industrial Average or the Nasdaq Composite index, because of its diverse constituency and weighting methodology. It is one of the most commonly followed equity indices, and many consider it

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one of the best representations of the U.S. stock market, and a bellwether for the U.S. economy.

Bloomberg U.S. Aggregated Bond Index - The Bloomberg U.S. Aggregate Bond Index is an unmanaged index which represents the U.S. investment-grade fixed-rate bond market (including government and corporate securities, mortgage pass-through securities and asset-backed securities).

Wilshire Focused Liquid Alternative Index - The Wilshire Focused Liquid Alternative IndexSM measures the performance of a focused basket of mutual funds that provides risk adjusted exposure to equity hedge, global macro, relative value, and event driven alternative investment strategies.

The Credit Suisse Liquid Alternative Beta Index tracks the performance of the hedge fund industry, and is comprised by the aggregate performance of its three individually investible liquid alternative beta strategy indices – Long/Short Equity, Event Driven, and Global Strategies – weighted to mirror the asset composition of the Credit Suisse Hedge Fund Index.

You cannot invest directly in an index.

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