



Portfolio Perspectives

Adding to the Benefits of Diversification

By **Mason Wev, CFA[®], CMT**, *Portfolio Manager*


Diversification is said to be one of the only free benefits that you can get while investing. It costs nothing, except the time to plan and the wherewithal to stick with your plan. In this article, we will discuss diversification, touching on some less reviewed aspects of it, and then examine how we look to achieve it in our Alternative Opportunity portfolio. Let's begin by reviewing Morningstar's recently introduced concept of an alternatives style box, which was introduced to provide a snapshot of a fund's diversification potential. The analysis looks at a fund's three-year correlation to global equities on one axis and its volatility relative to global equities on the other axis. Thus, a fund can be called high correlation and low volatility (perhaps a long-short equity fund) or low correlation and high volatility (perhaps a managed futures fund).

Return Gaps – Moving Beyond Correlation

We know that in modern portfolio theory an efficient portfolio is constructed using covariances of the holdings, but for our purposes here we will use correlations, which share a common and easily understandable scale between -1 and 1. While it is true that in assembling a portfolio we look for assets with lower correlations to improve the risk-return profile, there is more to the story. For a given pair of assets with a higher correlation, their diversification benefits can be notably improved if their returns substantially deviate. For example, the Russell 2000 Value and Russell 2000 Growth have a five-year correlation through September 30, 2017 of 0.91, and one would think they are not good diversifiers. But the deviation, or return gap, between their returns is substantial. Over the five-year period ending September 30, 2017, we looked at the one-year rolling returns for the Russell 2000 Value and 2000 Growth. At one point, Value outperformed Growth by 21.0% over a one-year period, while on the other hand, at one point, Growth outpaced Value by a maximum of 16.5%. This variation is driven by the two indexes' different sensitivities to factors like interest rates, commodity prices, and earnings growth rates. Thus, these two highly correlated indexes are better diversifiers than they would seem to be at first glance — it pays to diversify among factor exposures and not just raw correlation.

Return Gaps in Fixed Income

The same concept of a return gap can be applied to fixed income segments. Let's look at how three different segments, high yield munis, high yield corporate bonds, and Treasury Inflation Protected Securities (TIPS), compare to the Bloomberg Barclays Aggregate Bond Index and to each other. TIPS, using the iShares TIPS ETF (TIP) as a proxy, have a 0.85% five-year correlation to the Aggregate Index, and its one-year returns deviate from the Aggregate Index by a minimum of -7.5% and a maximum of 3.94%. Given that TIPS have considerable interest rate risk and as government bonds have little credit risk, their effectiveness as a diversifier are modest. High yield muni bonds, using Nuveen S&P High



Yield Municipal Bond ETF (HYMB) as a proxy, have a fairly high 0.7 correlation to the Aggregate Index, but HYMB's one-year returns deviate more substantially from the Aggregate Index by a minimum of -3.4% and a maximum of 13.0%. High yield corporate bonds, using Bloomberg Barclays High Yield Bond ETF (JNK) as a proxy, have a lower 0.37 correlation to the Aggregate Index, and its one-year return deviations are substantial, with a minimum of -14.2% and maximum of 28.2% over the last five years. What might be most surprising is that two "junk" credit quality fixed income segments, high yield muni and high yield corporate, have only a 0.26 correlation to each other, and their one-year return deviations are substantial, with a minimum of -16.2% and a maximum of 22.2%. What's more, high yield corporate bonds have a 0.61 correlation to the S&P 500, while high yield munis' correlation is 0.01.

Diversification in Liquid Alternatives

When investing in liquid alternatives, as our Alternative Opportunity portfolio does, the stated objective of the portfolio is first and foremost to provide a less correlated series of returns compared to stocks and bonds. Within our portfolio, we look for assets that are not only less correlated to stocks and bonds but are less correlated to each other. On the chart on the next page, you will see a correlation matrix for the past five years for many holdings in our Alternative portfolio, along with the S&P 500 ETF (SPY, #18) and Core U.S. Aggregate Bonds (AGG, #7). In looking at correlations to bonds, only Nuveen High Yield Municipal Bond Fund (NHMRX, #13) has a correlation of over 0.7 to AGG. We have included high yield bonds prominently in the portfolio because they are less correlated to the broad Bloomberg Barclays Aggregate Bond Index and also have deviating returns, but at the same time, high yield munis achieve this without correlating to the broad equity markets.

Managed Futures, Non-Correlating Equity, and Gold

When considering correlations, we believe managed futures is one of the better diversifiers, and for this reason, we allocate to two funds, Altegris Futures Evolution Fund (EVOIX, #1), and LoCorr Long/Short Commodities Strategy Fund (LCSIX, #11). Note that the Long/Short Commodities Fund has negative correlation to both equity and credit risk. While this is ideal from a diversification perspective, the fund has gone down while stocks and credit have risen in recent years (and there is no guarantee that this will reverse in an equity decline). Some equity holdings, such as FlexShares Morningstar Global Upstream Natural Resources Index Fund (GUNR), All Country Asia ex Japan ETF (AAXJ), and MSCI Frontier 100 ETF (FM), are in the portfolio due to their technical strength, but just as importantly due to their lower correlations to the S&P 500, which are 0.57, 0.21, and 0.23, respectively. We also note that Gold Shares Trust (GLD, #17) is an excellent diversifier and a solid long-term holding in any alternatives bucket in our opinion. While our view on gold is currently bullish, we would have no hesitation shorting gold when our indicators point that way.

When Diversification Loses Its Power: Correlations Rise During Major Declines

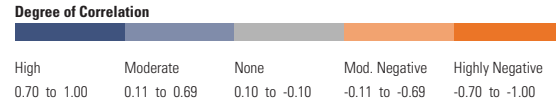
In alternatives investing there is a second, unstated but strongly held client expectation for liquid alternatives to have less correlated returns especially during times of market stress. The portfolio is expected to possibly go up, or at least go down much less than equities,

Correlation Matrix 09-30-2012 to 09-30-2017

Correlation Matrix 5 Year																		
1																		
1		2																
2	0.14		3															
3	-0.04	0.31		4														
4	0.13	0.31	0.42		5													
5	-0.10	0.29	0.59	0.60		6												
6	-0.06	0.35	0.15	0.09	0.17		7											
7	0.64	-0.09	0.09	0.32	0.05	-0.10		8										
8	0.07	0.38	0.70	0.71	0.70	0.20	0.37		9									
9	0.10	0.30	0.51	0.41	0.66	0.19	0.29	0.59		10								
10	-0.26	0.39	0.43	0.30	0.60	0.17	-0.06	0.41	0.54		11							
11	0.29	-0.15	-0.40	-0.29	-0.34	-0.08	0.17	-0.37	-0.28	-0.18		12						
12	-0.02	0.64	0.62	0.56	0.60	0.37	0.03	0.67	0.68	0.54	-0.34		13					
13	0.42	0.02	0.19	0.19	0.06	-0.07	0.74	0.26	0.27	0.13	0.16	0.08		14				
14	0.37	-0.28	0.08	0.22	0.06	-0.16	0.59	0.23	0.16	-0.05	0.12	-0.05	0.59		15			
15	0.13	0.34	0.64	0.65	0.65	0.24	0.34	0.76	0.70	0.43	-0.20	0.76	0.37	0.40		16		
16	-0.64	0.29	0.10	-0.19	0.18	0.19	-0.91	-0.14	-0.08	0.21	-0.28	0.20	-0.65	-0.65	-0.13		17	
17	0.18	-0.13	0.07	0.28	0.38	0.01	0.49	0.31	0.15	0.11	0.06	-0.04	0.30	0.24	0.17	-0.44		18
18	0.12	0.71	0.54	0.53	0.57	0.29	-0.03	0.63	0.60	0.45	-0.25	0.89	0.04	-0.06	0.73	0.23	-0.11	
19	0.08	-0.14	0.12	0.32	0.57	0.09	0.35	0.32	0.21	0.23	-0.04	0.01	0.19	0.19	0.21	-0.29	0.85	-0.04

- Investment Key**
- 1 Altegris Futures Evolution Strategy I (USD, EVOIX)
 - 2 BlackRock Event Driven Equity Instl (USD, BILPX)
 - 3 BlackRock Global Long/Short Credit Instl (USD, BGCIX)
 - 4 First Trust North Amer Engy InfracETF (USD, EMLP)
 - 5 FlexShares Mstar Gbl Upstrm Nat Res ETF (USD, GUNR)
 - 6 IQ Merger Arbitrage ETF (USD, MNA)
 - 7 iShares Core US Aggregate Bond ETF (USD, AGG)
 - 8 iShares iBoxx \$ High Yield Corp Bd ETF (USD, HYG)
 - 9 iShares MSCI All Country Asia ex Jpn ETF (USD, AAXJ)
 - 10 iShares MSCI Frontier 100 ETF (USD, FM)
 - 11 LoCorr Long/Short Commodity Strats I (USD, LCSIX)
 - 12 Neuberger Berman Long Short Instl (USD, NLSIX)
 - 13 Nuveen High Yield Municipal Bond I (USD, NHMRX)
 - 14 Nuveen Muni High Inc Opp (USD, NMZ)
 - 15 PowerShares CEF Income Composite ETF (USD, PCEF)
 - 16 ProShares UltraShort 20+ Year Treasury (USD, TBT)
 - 17 SPDR® Gold Shares (USD, GLD)
 - 18 SPDR® S&P 500 ETF (USD, SPY)
 - 19 VanEck Vectors Gold Miners ETF (USD, GDXX)

The Correlation Matrix demonstrates the relationship of return patterns among investments. It is based upon the correlation coefficient, a number between -1.0 and 1.0. A perfect negative linear relationship between two investments has a correlation of -1.0, whereas a perfect positive linear relationship exists with a correlation of 1.0. A correlation coefficient of 0.0 indicates no linear relationship between the investments. Correlation information can be valuable in assessing the diversification effect of combining an investment with other investing options.



Source: Morningstar

during times of market strain. Given that, we would like to circle back to Morningstar's alternatives style boxes. These style boxes are calculated over a three-year time frame, and the problem with that is that the last three years have been times of generally calm markets. When a major equity decline does develop, correlations should rise, as they have during most bear markets in the past. Thus, relying on a three-year correlation will not provide an accurate picture of correlations during the times that you most need diversification. In constructing our portfolios, we are mindful that effective diversification means constantly dedicating a large portion of a liquid alternative portfolio to lower correlations to stocks and bonds, as well as lower correlations among the holdings themselves. One cannot predict when or what will cause the next major decline, but we believe maintaining constant diversification, particularly in the alternatives portion of a portfolio, should be a primary and constant focus.



Author: Mason Wev, CFA®, CMT, Portfolio Manager

Mason Wev joined Clark Capital Management Group, Inc. in 2005 as a Portfolio Manager. He is a member of the Clark Capital Investment Committee, contributing to asset allocation policy and security selection. Mason has more than a decade of experience in the investment industry. He is responsible for quantitative investment analysis, security selection, and communicating the firm's investment policy to wealth advisors and consultants. He participates in the research and product development efforts of the Portfolio Team. A graduate of Dickinson College, Mason earned an M.B.A. in International Management from the Garvin School of Management at Thunderbird (the American Graduate School of International Management). He is a CFA® charter holder and a Chartered Market Technician. CFA® and Chartered Financial Analyst® are registered trademarks owned by CFA Institute.

This information should not be considered to be an recommendation to buy or sell a security or to adopt a particular investment strategy.

Clark Capital Management Group, Inc. is an investment adviser registered with the U.S. Securities and Exchange Commission. Registration does not imply a certain level of skill or training. More information about Clark Capital's advisory services can be found in its Form ADV, which is available upon request.

Past performance is not indicative of future results. The opinions expressed are those of the Clark Capital Management Investment Team and are subject to change without notice. The opinions referenced are as of the date of publication and may not necessarily come to pass. This material is not financial advice or an offer to buy or sell any product. Clark Capital reserves the right to modify its current investment strategies based on changing market dynamics or client needs. The material in this report has been derived from sources considered to be reliable, but Clark Capital cannot guarantee its completeness or accuracy.

CCM-910