



Counter Cyclical Stocks: An Alternative to "Alternative Investments"

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Introduction

In an era of high equity valuations, elevated inflation, and growing economic uncertainty, investors are understandably drawn to search for Alternative Investments to protect their portfolios from these risks. Wall Street is more than happy to oblige by providing a myriad of sophisticated-sounding, opaque, complex products promising to diversify your portfolio and help you sleep at night. At Sankala Group we are certainly fans of diversification and strong risk management, but we are leery of the opacity, derivatives, and performance based incentive fees generally associated with Alternative Investments.

It is too easy to stand on the outside and throw stones – instead, we want to deeply understand the value of Alternative Investments and then work to develop an understandable, straightforward alternative that provides the same diversification benefits with higher returns and lower cost. Since articulating our Counter Cyclical Business thesis in our <u>Q4 2019 letter</u>, we have carried out additional research which supports our finding that Counter Cyclical stocks are a superior alternative to standard Alternative Investments.

Alternative Investments

The normal 60/40 portfolio (60% stocks / 40% bonds) has exposure to only two asset classes, so its performance outcomes are completely driven by the risk, reward, and correlation of those two assets. Alternative Investments aim to deliver very low correlation to generic stocks and bonds, thus providing significant diversification benefits to the normal 60/40 portfolio. There are three primary types of Alternative Investments which have publicly available track records longer than 15 years: Merger Arbitrage, Systematic Trend (Managed Futures), and Equity Market Neutral.

Merger Arbitrage – This strategy looks to take a long position in a stock that is being acquired and a short position in the acquiring stock. The price of the company being acquired usually trades below the stated acquisition price because the deal might fall apart, but on average the deal closes and the pair trade collects the return of the converging prices.

Systematic Trend (Managed Futures) – This strategy takes long and short positions in futures contracts across stocks, bonds, currencies, and commodities. The trades are based on trend-following signals that aim to go long in rising markets and short in falling markets.

Equity Market Neutral – This strategy aims to have zero net exposure to the stock market by taking offsetting long and short positions. It seeks to generate returns by going long stocks that are expected to perform well and by selling short stocks that are expected to go down.

Central Limit Theorem

Each asset class and each Alternative Investment strategy has a non-normal, left-skewed distribution of returns. Thus, for any individual asset or strategy, this means that the probability of experiencing a large (2+ standard deviation) negative return is much higher than if the distribution of returns were normal (a bell curve shaped). The Central Limit Theorem predicts that if you randomly sample a large number of observations from a non-

normal distribution, compute the average of those observations, and then repeat the process many times, the probability distribution of these averages will produce a normal distribution. We can apply this theory to portfolio design by including multiple non-correlated asset classes and Alternative Investments. As time passes, we are effectively taking many random samples from many separate non-normal return distributions and averaging them across the whole portfolio. These time slices of averaged returns produce a normal distribution of portfolio return outcomes over time.

In the 16.5 year period from March 2007 through September 2023, the S&P 500 had an average annual return of 10.42% and an annual standard deviation of 15.87%. If its returns were normally distributed, a negative 3 standard deviation return should occur once every 741 years. In reality, the S&P experienced a negative 3.39 standard deviation return (-53.7%) once during the last 16.5 years, and a separate even larger drawdown in the previous 78 years - clearly the returns of the S&P are negatively skewed, much to the detriment of risk averse investors. Even the 'safe' total bond market index is much more risky than its low standard deviation would suggest. During the last 16.5 years, it has had an average annual return of 2.83% and an annual standard deviation of 4.13%, but it experienced a negative 4.53 standard deviation return (-18.72%). A negative 4 standard deviation event should only occur once every 31,574 years! Combining these non-normal asset classes into a 60/40 portfolio produces an average annual return of 7.28% and an annual standard deviation (-34.95%) was still a 3.41 standard deviation event.

If, instead, we construct a portfolio composed of 3 non-correlated asset classes (S&P 500, long term Treasury bonds, and gold) plus 3 non-correlated Alternative Investments (Merger Arbitrage, Systematic Trend, and Equity Market Neutral) weighted equally by their risk contribution to the portfolio¹, we can produce a much more normal distribution of return outcomes. In Table 1 we can see that each of the 6 holdings are non-correlated with the other holdings in the portfolio; in fact, the average correlation across all of the holdings is - 0.085, which is extremely close to zero.

¹ Equally weighting assets by their risk contribution to the portfolio is called Risk Parity weighting. In this methodology, an asset is weighted inversely proportional to its volatility. This approach gives lower weight to riskier (high volatility) assets and higher weight to less risky (low volatility) assets. This ensures that the risk contribution of each asset is the same.

Asset Class, Alternative Investment	Ticker	SPY	WHOSX	IAU	MERFX	RYMFX	VMNFX	Avergage	
S&P 500	SPY	1.000	-0.190	0.097	0.495	-0.167	-0.013	0.045	
Long Term Treasury Bonds	WHOSX	-0.190	1.000	0.277	-0.277	0.009	-0.301	-0.096	
Gold	IAU	0.097	0.277	1,000	0.379	-0.190	-0.633	-0.014	
Merger Arbitrage	MERFX	0.495	-0.277	0.379	1.000	-0.353	-0.487	-0.049	
Systematic Trend	RYMFX	-0.167	0.009	-0.190	-0.353	1.000	0.081	-0.124	
Equity Market Neutral	VMNFX	-0.013	-0.301	-0.633	-0.487	0.081	1.000	-0.271	
Portfolio Average				-				-0.085	

Table 1. Asset Correlations with Alternative Investment Strategies

In the 16.5 year period from March 2007 through September 2023, this portfolio had an average annual return of 3.32% and an annual standard deviation of 3.26%; its largest negative deviation (-7.03%) was only a 2.15 standard deviation event and its largest positive deviation (6.17%) was a more symmetrical 1.89 standard deviation event. A negative 2 standard deviation event should occur once every 44 years, and considering that the time period studied included both the Financial Crisis and the Pandemic, the fact that the portfolio only experienced a negative 2.15 standard deviation event is quite impressive. While this portfolio does a great job of controlling risk and delivering a more normal distribution of returns, its total return of only 3.32% is unacceptably low. In *Figure 1* we can see that the Three Asset Classes plus Three Alternative Investments Portfolio is superior to the Total Bond Market Index, but its bond-like returns are not high enough to compound wealth at a level desired by most investors.

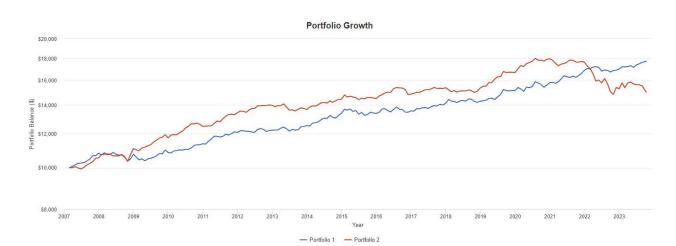


Figure 1. Three Asset Classes + Three Alternative Investments Portfolio (Portfolio 1, blue line) compared to Total Bond Market Index (Portfolio 2, red line)

The primary reason the return is so low is that the average annual return of the 3 Alternative Investments was only 2.05%. This leads to the most important question: Can we find non-correlated investments that have a higher rate of return?

Counter Cyclical Stocks

Looking across the major asset classes of cash, bonds, real estate, commodities, and stocks, the one with the highest long-term return is stocks. This makes intuitive sense because stocks pass what Hal likes to call the "Coffee Test": Do a group of people wake up every morning, drink coffee, and think about how to make more money for the business? No other asset class passes this growth test. With this in mind, it would be ideal if we could invest in a basket of non-correlated stocks which would provide a more normal distribution of returns and the higher rate of return expected of stocks. Importantly, it is not enough to just have a basket of stocks that are non-correlated with each other – they also have to be non-correlated with the larger macroeconomic forces of the economy which can temporarily drive regular stocks to have a correlation close to 1 during a recession.

Counter Cyclical stocks are a small subset of stocks which make more money during a recession than they do during an economic expansion. Even though their revenue generation is anti-correlated with the economy, their price action is non-correlated with the economy. This can be explained by standard behavioral economics: during good economic times, humans are less fearful, so they are willing to pay a higher price per how much a company earns, but during bad economic times, humans are more fearful, so they demand a lower price per how much a company earns. This economically correlated behavioral bias is approximately equal in magnitude and opposite in direction of the anti-correlated revenue growth of Counter Cyclicals. The net result is that Counter Cyclical stock returns are approximately non-correlated with the economy.

Counter Cyclical stocks are generally strong and stable businesses which come from very different industries. Some of the most common Counter Cyclical businesses are discount retailers, packaged food manufacturers, auto part retailers, confectionary food manufacturers, health insurance providers, and medical manufacturers that make heart/stress related devices. While they all share the common characteristic of making more money during a recession, beyond that, they are non-correlated because they are not systemically linked and are thus more apt to be affected by independent, company-specific events.

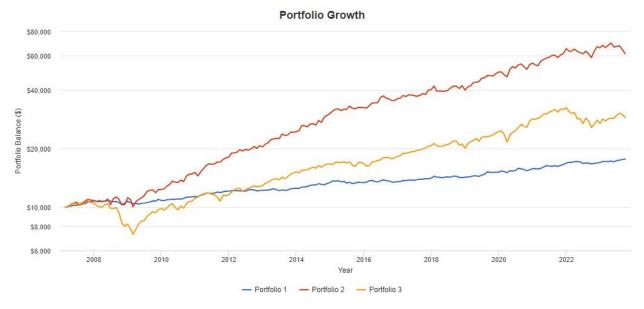
We conducted a massive screen that identified 14 Counter Cyclical stocks which grew their revenue more in the year of an S&P 500 revenue recession than in the year before the recession in at least 3 of the last 4 revenue recessions. As can be seen in Table 2, these stocks have an extremely low average correlation of only 0.098.

Asset Class, Counter Cyclical Stock	Ticker	SPY	WHOSX	IAU	ORLY	SJM	AZO	DORM	STRA	CVS	UNH	GILD	HSY	DLTR	MMSI	BSX	VGR	CAG	Average
S&P 500	SPY	1.000	-0.190	0.097	0.291	0.400	0.258	0.270	-0.264	0.657	0.737	0.194	0.533	-0.073	-0.158	0.440	0.584	0.530	0.269
Long Term Treasury Bonds	WHOSX	-0.190	1.000	0.277	-0.148	-0.392	-0.052	-0.151	0.156	-0.112	-0.149	-0.169	-0.063	0.447	0.051	-0.580	-0.013	-0.162	-0.078
Gold	IAU	0.097	0.277	1.000	-0.271	0.067	-0.076	0.127	-0.031	-0.389	-0.137	-0.664	0.061	0.152	0.012	-0.700	-0.017	0.212	-0.080
O'Reilly Automotive, Inc.	ORLY	0.291	-0.148	-0.271	1.000	0.113	0.812	0.356	-0.035	0.677	0.399	0.153	0.377	0.110	-0.577	0.322	0.450	0.013	0.190
J.M. Smucker Company	SJM	0.400	-0.392	0.067	0.113	1.000	0.130	-0.057	-0.421	0.388	0.227	0.163	0.282	0.045	-0.286	0.110	0.480	0.721	0.123
AutoZone, Inc.	AZO	0.258	-0.052	-0.076	0.812	0.130	1.000	0.360	-0.150	0.590	0.172	0.115	0.517	0.375	-0.635	0.102	0.580	0.028	0.195
Dorman Products, Inc.	DORM	0.270	-0.151	0.127	0.356	-0.057	0.360	1.000	-0.481	0.175	0.101	0.153	0.295	0.151	-0.168	0.104	-0.104	-0.162	0.061
Strategic Education	STRA	-0.264	0.156	-0.031	-0.035	-0.421	-0.150	-0.481	1.000	-0.216	-0.134	-0.265	-0.231	-0.236	-0.077	-0.040	0.097	0.010	-0.145
CVS Health Corporation	CVS	0.657	-0.112	-0.389	0.677	0.388	0.590	0.175	-0.216	1.000	0.580	0.615	0.550	0.121	-0.417	0.450	0.630	0.280	0.286
UnitedHealth Group Incorporated	UNH	0.737	-0.149	-0.137	0.399	0.227	0.172	0.101	-0.134	0.580	1.000	0.089	0.511	-0.111	0.020	0.380	0.506	0.318	0.220
Gilead Sciences, Inc.	GILD	0.194	-0.169	-0.664	0.153	0.163	0.115	0.153	-0.265	0.615	0.089	1.000	0.319	0.024	-0.188	0.511	0.139	0.056	0.078
Hershey Company	HSY	0.533	-0.063	0.061	0.377	0.282	0.517	0.295	-0.231	0.550	0.511	0.319	1.000	0.233	-0.485	0.156	0.583	0.466	0.257
Dollar Tree, Inc.	DLTR	-0.073	0.447	0.152	0.110	0.045	0.375	0.151	-0.236	0.121	-0.111	0.024	0.233	1.000	-0.073	-0.327	0.237	-0.192	0.055
Merit Medical Systems, Inc.	MMSI	-0.158	0.051	0.012	-0.577	-0.286	-0.635	-0.168	-0.077	-0.417	0.020	-0.188	-0.485	-0.073	1.000	-0.141	-0.545	-0.479	-0.259
Boston Scientific Corporation	BSX	0.440	-0.580	-0.700	0.322	0.110	0.102	0.104	-0.040	0.450	0.380	0.511	0.156	-0.327	-0.141	1.000	0.182	0.145	0.070
Vector Group Ltd.	VGR	0.584	-0.013	-0.017	0.450	0.480	0.580	-0.104	0.097	0.630	0.506	0.139	0.583	0.237	-0.545	0.182	1.000	0.649	0.277
ConAgra Brands, Inc.	CAG	0.530	-0.162	0.212	0.013	0.721	0.028	-0.162	0.010	0.280	0.318	0.056	0.466	-0.192	-0.479	0.145	0.649	1.000	0.152
Portfolio Average																			0.098

Table 2. Asset Correlations with Counter Cyclical Stocks

While the average correlation was not quite as low as was seen in the Three Asset Classes plus Three Alternative Investments Portfolio above, the fact that there are more holdings from which to randomly sample returns, causes this portfolio to have an even more normal distribution of returns. In the 16.5 year time period from March 2007 through September 2023 a portfolio constructed with the 3 non-correlated asset classes (S&P 500, long term Treasury bonds, and gold) plus the 14 Counter Cyclical stocks all equally weighted by their risk contribution to the portfolio, we find an average annual return of 12.67% and an annual standard deviation of 9.92%; impressively, the largest negative deviation (-19.00%) was only a 1.92 standard deviation event and the largest positive deviation (+18.23%) was a nearly symmetric 1.84 standard deviation event (see *Figure 2*).

Figure 2. Three Asset Classes + Counter Cyclical Stock Portfolio (Portfolio 2, red line) Three Asset Classes + Alternative Investments (Portfolio 1, blue line) 60/40 Portfolio Benchmark (Portfolio 3, yellow line)



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An average annual return of 12.67% plus strong risk management due to an assembly of non-correlated investments is a favorable combination that is significantly superior to a similarly risk-managed portfolio employing Alternative Investments. Of note, the historical return of 12.67% is higher than we would expect going forward; in fact, we would be pleased to have a normal stock market return of 8 to 10%.

Can these results be achieved without using Counter Cyclical stocks? No, not completely, but yes, partially. The closest substitute for Counter Cyclical stocks are Non-Cyclical stocks, such as those held by the Consumer Staples Select Sector SPDR fund (XLP). While XLP is generally non-cyclical, most of its holdings actually make slightly less money during a recession, so their correlations rise when the economy falters. If we replace the 14 Counter Cyclical stocks with XLP, the performance characteristics of the portfolio decline: the average annual return falls to 8.90% and the standard deviation rises to 9.97; importantly, the largest negative deviation (-23.78%) rises to a 2.39 standard deviation event indicating a less normal return distribution (See *Figure 3*).

Figure 3. Three Asset Classes + Counter Cyclical Stock Portfolio



(Portfolio 1, blue line) compared to Three Asset Classes + Consumer Staples (Portfolio 2, red line)

Conclusion

The addition of non-correlated assets to a standard 60/40 portfolio decreases risk and increases predictability by creating a more normal distribution of return outcomes. On Wall Street, these beneficial results are usually achieved through the use of Alternative Investments, but we find that these high cost, low return options are sub-optimal. Instead, our research demonstrates that a portfolio of stringently selected Counter Cyclical stocks provides similar risk reduction benefits with lower costs and higher returns.

For the benefit of our clients, Sankala Group is excited to continue to refine this research and improve portfolio outcomes with this promising alternative to Alternative Investments.

Best,

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