It Works Until it Doesn't

HOW MANY INVESTORS AND INSTITUTIONS STILL ENGAGE IN FLAWED THINKING – AND HOW THE DISCERNING CAN AVOID THE SAME TRAP

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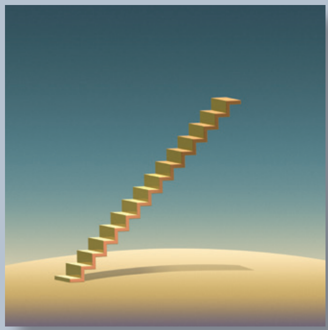

The following paper outlines my study of the root causation of portfolio underperformance and the delusions associated with how too many investors, the world's largest institutions included, have been guided down a path destined for disappointment.

I encourage you to see (perhaps in yourself) how the "business as usual" approaches to money management and research have in many ways been misguided. The crux of this has been the proverbial "Pie Chart" – the asset allocation methodology that is generally based off a process called Modern Portfolio Theory. As you will read, it can be grossly ineffectual. Fortunately, there is an alternative.

This will provide insight on:

- **Why I believe the typical allocation pie chart may not minimize risk – but often minimizes returns.**
- **Why I believe there is often little to no value in Wall Street research and its shortcomings.**

And most importantly:

- **A high-minded approach to have an investment portfolio that only owns "what's working now" without any bias or opinions.**

It is my hope that this information and insight seeks to empower you to make the changes, if needed, to invest your assets with confidence and the knowledge to move forward.

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Copernicus was imprisoned by the Catholic Church when he refused to denounce his findings that the sun was at the center of our solar system and not the earth. It takes great strength to change "old" belief systems. Just imagine hearing the conversations for the first time that someone was going around attempting to convince anyone who would listen that the earth was actually round? As a kid, I remember my dad showing me an old magazine ad with a doctor holding a pack of L&M cigarettes with the byline reading "Doctor recommended to sooth your throat". What seemed acceptable and sensible at one point, with time, hindsight and further knowledge, are now just amusing anecdotes. **It works until it doesn't.**

The preservation of the status quo or the self-delusion of possession of wisdom is remarkable, until I'm reminded of the psychology of change, that all "new" thinking always get pushback. However, ultimately truths become undeniable and the masses slowly play catch-up not wanting to be left behind. (What grandmother doesn't own a smartphone?)

The following is a compilation of some relatively new research. I say relatively because some of it began in the early 90's. Much of this insight has been building for a while and the need has increased with the abject failings of the standard asset allocation models and risk/ reward models during the Global Financial Crisis which began in 2007. Many discerning and knowledgeable financial advisors and their like-minded clients are now at a seminal turning point with how institutions, foundations, pension funds, governments, and individuals have been re-assessing the way in which they construct their portfolios and manage their wealth.

My journey was one of intrinsically knowing that what we've been led to believe about the basic tenants of investing wasn't working, or at least not working **well enough.**

My journey was one of intrinsically knowing that what we've been led to believe about the basic tenants of investing wasn't working, or at least not working well enough. I too relied upon Modern Portfolio Theory and other subjective methodologies. I lived it, and I as well saw too few optimal results. I knew that there had to be a better way to manage my own and my clients' wealth. Fortunately, for some of us at least, investment management methodology can be a continually evolving landscape.

Take a moment to evaluate the following for yourself and see whether or not your investment portfolio is in alignment with some of the best thinking and methods available.

The Power of Momentum Investing – and Other Great Truths

As many have painfully learned, sophisticated asset allocation strategies did not always deliver the diversification and returns that were expected.

As I have observed during almost 35 years of watching Financial Advisors, their clients, the chasm between market returns and client returns, and the means by which all are managed – I see an unnecessary disconnect. I will replace some ambiguity with clarity as I touch briefly on four points related to one area of our industry's greatest shortcoming: the general underperformance of portfolio returns and more importantly, the potential solutions. I will tie this thinking together for a concept that investors may well want to consider. Keep in mind that this is just a primer, with the intent to show you a more pragmatic approach that will warrant further consideration and discussion.

- **The Limits of Modern Portfolio Theory Methodology**
- **The Flaws with Fundamental Analysis**
- **Asset Class Rotation**
- **Momentum Investing**

Losing an illusion makes you wiser than finding a truth — Ludwig Borne

The Limits of Modern Portfolio Theory Methodology

Well, let's tackle the elephant in the room, the demise of modern portfolio theory as I have come to see it. I believe the shortcomings are profound and yet, this king of investment philosophy is still fiercely defended. But we now know it has its limitations and that market events do not fit neatly into little models. As many have painfully learned, sophisticated asset allocation strategies did not always deliver the diversification and returns that were expected. As a result, investors are cognizant today that there are many different kinds of risks and interdependencies embedded in most investment portfolios, and that the base-case assumptions about the risk/return relationships and asset class pair correlations can fall short of expectations, particularly in times of crisis.

What is Modern Portfolio Theory?

The basic construct of modern portfolio theory is risk adjusted asset allocation. This typically shows itself in the form of "pie charts" so often provided with the encouragement that one is receiving a "diversified" and "risk-adjusted" portfolio as it is spread out over many different types of investments. Sounds good, but this is based on *historical* data for return and risk. Quite often you are asked to simply answer 8-12 questions about your risk profile and investment time frame and voila!, you now have your ideal allocation. In my opinion, this approach is sadly insufficient, and it provides a false sense that one is doing the right thing. I call this "set and forget".

A recent report[*1] points out that 93% of modern portfolio theory allocations are based solely on returns. *Past returns from the last 50 years*. This means that only 7% is based on an attempt to reduce risk. Think about it, you own a portfolio with 5-10 different asset classes, and you own them no matter how well or poorly they are performing – all of this performance sacrifice is for a small amount of risk reduction. And here's the rub, the next 50 years will be different than the last and correlations (relationships between asset classes) constantly change.

*1 Andreas Steiner, *Principal Component Analysis of Time Variations in the Mean-Variance Efficient Frontier*

What grand purpose is achieved by owning underperforming assets?

The standard asset allocation and diversification model did not work in the mid 90's when the S&P 500 on its own far outperformed many of the other common asset classes that are typically found in a diversified portfolio. Again it failed in 2000-2003, and 2007-2008. It is well known that when markets collapse, correlations converge and diversification falls short of expectations. But yet we are told to hold a variety of asset classes even though they may be performing poorly, just in case of a negative market event with the belief that some assets will be spared, but in that market event EVERYTHING moves down together (more or less). Too much of the time, all we have accomplished by owning a basket of "diversified" assets is lower returns. If I was selling real estate and told you that you should buy some apartment buildings in Detroit to balance the risk you have with your Beverly Hills holdings, you would fire me.

I appreciate diversified, but let's just say that we have 20% each in five different asset classes. One does great, one does okay, two do average and one does poorly. Once again we are told to keep them for sake of diversification. What grand purpose is achieved by owning underperforming assets? Why do I need to own 20% of something that clearly isn't working just to own it? Because in two years it might? Fine, if it begins to perform well in two years, I'll buy it then, and only then. How often do you find yourself justifying why you own asset classes that have been out of favor for some time, and not owning more of what's working? And, there is substantial new evidence that financial markets in many cases do not reward investors who take high risks counter to the long held CAPM (capital asset pricing model)[*2] – which is also a big component of how modern portfolio theory allocates assets.

The real tragedy is this, any 10 year period with modern portfolio theory can act and look NOTHING like the risk/reward that was signed on for. Take a look at the 10-year period from 2000-2009, it looks just the *opposite* of how one would expect. *Bonds outperformed stocks* with 75% less risk. *Higher risk, less returns,* that is not what modern portfolio theory was intended to produce, but it was the outcome.

Based upon its survey results, the research firm *Risk 3.0* says many wealth management firms are in a "state of denial" unwilling to adapt to major shifts in the global and domestic financial markets. Instead, they're determined to stick to their existing risk management formula when advising clients on how to invest. Mean variance optimization (modern portfolio theory) is outdated thinking as it relies on historical inputs (returns, correlations and variances) of different asset classes to generate an allocation.

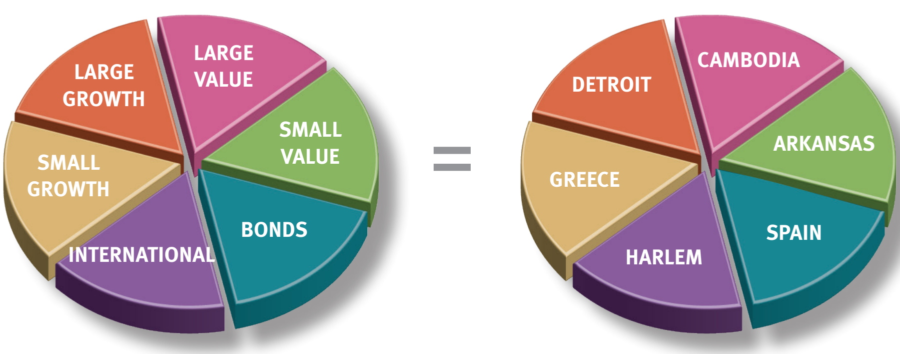
*2 August 2013, Robeco's Introduction to Factor Investing 1996, James O'Shaughnessy, What Works On Wall Street

It's time to re-think your approach to portfolio allocation. There is much more available than a colorful pie chart and a failed process.

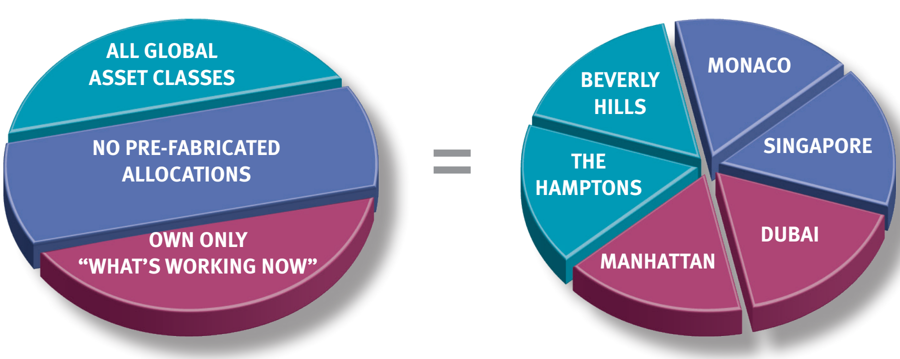
Andre Ang of Columbia Business School wrote an important paper*3. In it he discusses the relationship between risk and reward, the cornerstone of modern portfolio theory. Mr. Ang *objectively* tested this method against a wide variety of other diversification methods.
Ang's finding was that "Modern portfolio theory performs horribly. The strategy is trounced by all other strategies".

Yet this is the basis for a great deal of yesterdays and todays asset allocations and their performance results on our hard earned wealth. It's time to re-think your approach to portfolio allocation and construction. There is much more available to investors than a colorful pie chart and an often times ineffectual process.
It works until it doesn't.

Be about the data, not the narrative



versus



Investors who feel uncomfortable about the underperformance resulting from a persistence to diversify toward out-of-favor asset classes, should not be concerned about their risk to equities (stocks) so much as their investment process.

Owning low performing asset classes with the simple rationale of being conservative and diversified subjects the investor to the possibility of being wrong for a very long period of time. **Move your money into alignment with its ultimate purpose.**

The biggest determinate of your returns is what assets you own and when. You can't get rid of risks – you can only change them. Act in such a way as to help minimize your failure rate.

*3 August 10, 2012, Columbia Business School Research Paper No. 12/49

"There are two kinds of forecasters: those who don't know, and those who don't know they don't know." — John Galbraith

The Flaws with Fundamental Analysis

Or "predicting the future with unknown information" as I like to think of it. Fundamental Analysis is a method for evaluating a security (stock) that measures its intrinsic value by examining related economic, financial and other qualitative and quantitative factors. It studies everything believed to affect the security's value including macroeconomic factors and earnings. This type of analysis has often had its shortcomings, because you need to know that any assumptions reasonable or not, have no bearing on the outcome. I believe that it is imperative that you don't get influenced by what you *think* might happen. In the October 11, 1993, issue of *Forbes Magazine*, David Dreman recounts a study that used a sample of 67,375 analysts' quarterly estimates for the New York and American Stock Exchange listed companies between 1973 and 1990. *It found that analysts' average forecast error was 40 percent and that estimates were misleading.*

Philip Tetlock, a psychologist at the University of California, Berkley did a study based on the opinions of some 284 highly knowledgeable professionals in their fields within the political and economic genres.[*4] He queried analysts, journalists, economists and foreign policy elites on their predicted outcomes of such things as market bubbles, apartheids, and major elections. In sum, he aggregated more than 82,000 opinions from the people best positioned to give accurate forecasts. However, a wealth of experience and more than 270 post-graduate degrees in their respective fields of study was not enough to produce even a narrow majority of accurate predictions. Perhaps Mr. Tetlock's observations about these results are just as insightful as the results themselves.

"The main reason for the inaccuracy has to do with overconfidence. Because the experts were convinced that they were right, they tended to ignore all the evidence suggesting they were wrong. This is known as confirmation bias, and it leads people to hold all sorts of erroneous opinions. Famous experts were especially prone to overconfidence, which is why they tended to do the worst. Unfortunately, we are blind to this blind spot: Most of the experts in the study claimed that they were dispassionately analyzing the evidence. In reality, they were indulging in selective ignorance, as they explained away dissonant facts and contradictory data. The end result is that the pundits became 'prisoners of their preconceptions.' And their preconceptions were mostly worthless."

*4 2005, Expert Political Judgment: How Good Is It? How Can We Know?

Larry Swedroe, financial author, and former senior vice president and treasurer at Citicorp, reviewed the leading research on forecasting accuracy from 1970-1995[*5]. He concluded that:

- **Economists cannot predict the turning points in the economy. He found that of the 48 predictions made by economists, 46 missed the turning points.**
- **Economists' forecasting skill is about as good as guessing. Even the economists who directly or indirectly run the economy (such as the Council of Economic Advisors and the Congressional Budget Office) had forecasting records that were *worse* than pure chance.**
- **There are no economic forecasters who consistently lead the pack in forecasting accuracy.**
- **There are no economic ideologies that produce superior forecasts.**
- **Increased sophistication provides no improvement in forecasting accuracy.**
- **Consensus forecasts don't improve accuracy.**
- **Forecasts may be affected by psychological bias. Some economists are perpetually optimistic and others perpetually pessimistic.**

I don't believe that this should be the foundation any highly discerning investor should rely upon to optimize the probability of positive results.

It doesn't matter whether an expert is predicting a Greek default, a bear market, or a rally in commodities – they really have no idea.

The markets don't care what you think.
Markets have no respect for any person, ideology, tradition or past realities. If you take away anything from this writing, take away that. In other words, pay no attention to the wizard hiding behind the curtain. It doesn't matter whether an expert is predicting a Greek default, a bear market, or a rally in commodities – they really have no idea. About the best you can do is determine what the market is actually doing right now. What is – is. *This is the foundation of momentum investing which I will elaborate on later.* Everything else is merely conjecture mixed with wishful thinking and human ego.

As you can now see clearly, historically, if we used modern portfolio theory as an overlay for allocation – "the pie" - and then filled in the asset classes – "pieces of the pie" - with managers or funds engaging in fundamental analysis– it's not a stretch to see how we came to that underperformance chasm. ***It works until it doesn't, and it doesn't anymore.*** So, what's the alternative? How about a tactical asset allocation for one? Rather than rely on an approach to asset allocation that makes assumptions about how the future *should* look, why not embrace a tactical approach to asset allocation that is designed to adapt to the current realities as they are?

*5 Money Watch ,October 4, 2011, The Accuracy of Experts Forecasts

We've seen why the "business as usual" approach has often failed investors, let me now share how the next generation of investors are overcoming this.

Let's Move Forward

After almost a decade of study on this topic I find the following to be some forward thinking wealth management methodologies that have been underutilized and misunderstood by professionals and clients alike. You *can* engage differently, begin to move your money into alignment with market realities and your personal mission in life, career and legacy. But you won't get there by clinging to antiquated methods and those who support a defected status quo. I challenge you to re-think your approach. *Investors' don't live on risk adjusted returns. They live on consistent performance in the real world.*

Asset Class Rotation

Momentum Portfolio Management

I employ the above two approaches together as a Portfolio Manager to ***construct*** *and* ***manage*** portfolios. I invest in such a way that strategically allocates towards the most attractive segments of the market, and invest intelligently in the areas that have shown to have the highest potential current benefits. Let me further explain.
The purpose of an asset class rotation portfolio is to identify major themes in the market, have exposure to those strongest themes and avoid the weakest ones. It is this dispersion of returns that creates the opportunity for a relative strength evaluation process to identify worthwhile trends to follow, as well as those critical to avoid.

As the design of my portfolio is to identify major themes that are most likely to outperform the baseline index (say the S&P 500), I believe I have found the most adaptive tool to achieve this goal is the use of the relative strength methodology. Relative strength is longer term in nature, yet responsive enough to the changing trends in the markets to cause rotation in the portfolio. The screening process of relative strength compares themes to one another and seeks to achieve the largest magnitude of movement to the upside while managing downside risk by moving away from sectors (or markets) with the least relative strength. The systematic and rules based approach also allows me to eliminate the human (fundamental analysis) or "emotional" trades. When there are wider differences between the best and worst performing areas of the markets the model is designed to capture that potential. During periods when market leadership is changing or performance choppy, the model will tend to underperform. However, the robust nature of relative strength analysis and the disciplined application of its guidance have proven to add material value over time.

Invest in such a way that strategically allocates towards the most attractive segments of the market.

> *"The case for the tactical use of sectors not only makes intuitive sense, it is supported by the data."*
>
> — September 2012 *Journal of the Indexes*

This is my delineation as a Portfolio Manager. A process by which the top performing assets from a macro world view are chosen based on a non-judgmental, non-emotional, non-ego criterion. This is achieved through a technical screening process (relative strength) that allows the cream to rise to the top as I discussed earlier. *Own only what is currently working the best.* Ask yourself this; could it be that the performance of a portfolio has little to do with diversification and more to do with asset selection?

Simply stated, an investor owns "what's working now" – no "losing" Detroit real estate to counter-balance the "winning" Beverly Hills real estate. No prefabricated allocations. No emotional or ego attachment to any ideology, location, industry or politically correct asset class.

May I suggest that you just "rent" these winning investment themes until they no longer work as opposed to owning them in perpetuity past their productiveness. **It work's until it doesn't.**

Asset Class Rotation

Numerous academic studies have shown that successful asset class rotation is one of the most important factors for portfolio success. The difference in returns among sectors (Healthcare, Utilities, Technology etcetera) remains far greater than among the broad style indexes (Growth and Value), supporting the notion of tactical sector allocation. Between the years 1994-2012, the average annual difference between the best performing sector and the worst performing sector in the U.S. was 53.09% (making the case to own only the top performing sectors). And the difference between the commonly used value and growth? Just 8.5%. Invest internationally? Between 1996-2011 the average annual difference between best and worst countries was 139.5% (again, just own the top performing countries and don't let performance be dragged down by the bottom tier – many portfolio managers feel the need to own the majority of the countries believing that there is a diversification benefit – owning poor performing assets provides no benefit).
From 1994-2008, the correlation (how closely or not two assets react to each other) of Value and Growth to the S&P 500 is .95 and .96 respectively – *almost identical. Yet, even today, this continues to be how a lot of advisors and investors manage diversification and risk.*

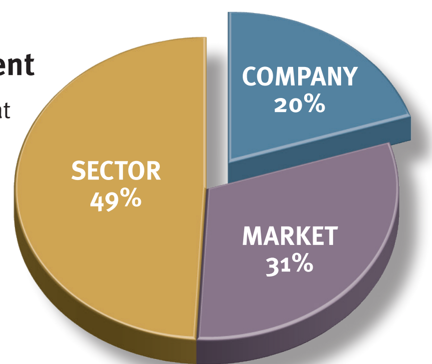
A well-constructed and managed Asset Class Rotation portfolio may offer investors more precision to express macro views versus viewing the markets by just the usual broad asset classes of growth and value, large companies and small companies. The shortcomings of just using style investing and the similarity in how they react in time of crisis are causing discerning investors to look elsewhere.

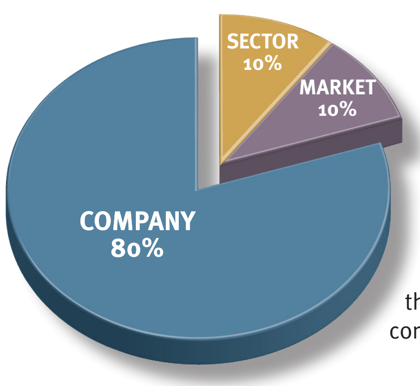
May I suggest that you give more credence to the factors that affect returns the greatest when constructing your portfolio? In the main, many advisors and investors construct portfolios with the belief that they are minimizing risk – *but I submit to you that too often they are really only minimizing return*. Let's reframe our thinking to fit the realities of the market as it exists and shifts. Standard deviation (the standard used for market risk) is really investor emotions. *Risk*, as I see it, is the chance of underperformance. If sectors (or asset classes) are the most important driver of return, how does one manage exposure to these?

By using momentum.

Causes of Price Movement

This University of Chicago study suggests that **sector and market control about 80% of the price action of average stock.**





Typical Resource Allocation

Yet, the average investor spends the vast majority of resources analyzing company risk (ie, fundamentals).

Source: *The Latent Statistical Structure of Securities Price Changes* Benjamin F. King

The success of investing in specific sectors is not a new one. In the 1950's and early 1960's it was the emerging electronic industry, in the late 1960's and early 1970's it was the big conglomerates (a.k.a. the Nifty Fifty), in the mid 1970's it was energy and materials, in the 1980's and early 1990's financials and healthcare ruled the day and in the late 1990's it was dominated by the technology and telecom sectors.

"Momentum outperforms all other investment styles and has the shortest periods of under-performance"*

Momentum Investing

Momentum can be used to find the strongest trends in a market or to identify the strongest asset classes in a given universe. It is a disciplined systematic investing style that applies across all asset classes. It is trend following using technical analysis (no emotion or fundamentals) - the main driver focusing on the "price" of a security, because price (what someone is willing to pay) is the ultimate determinate of supply and demand in the marketplace. When you cut through all the red tape on Wall Street, *what most reliably, consistently and predictably moves equity prices is supply and demand.*

"As a stand-alone investment strategy, momentum delivers positive abnormal returns (alpha) above the markets returns, producing even better abnormal performance than either size or value styles." – Moskowitz 2010

In the early 1900's Charles Dow began to see the connection between supply and demand and stock price, and began to chart it. This was the raw beginning of the momentum strategies that have been used by market technicians for many years.

In the 1950's George Chestnut was publishing market letters with industry groups based on relative strength and in the 1960's Robert Levy published a book[*6] devoted to using momentum. Academics began to heavily research the topic of momentum in the early 1990's and although it has morphed tremendously – *momentum is simply about supply and demand, that which controls the price of everything*. More buyers than sellers = stock price moves up. More sellers than buyers = stock price moves down. All traders on all exchanges price stocks, commodities, and currency solely based on supply and demand. No emotion and no ideology. The screening process of momentum allows supply and demand, as reflected in market pricing, to make the pragmatic decision about what is valuable or not at any given time – not someone's opinion.

"Momentum may be the single most powerful and adaptive tool available to the typical investment advisor to help manage client accounts." – Michael Moody, CMT

* Source: David Blitz, "Strategic Allocations to Premiums in the Equity Market", *Journal of Index Investing*, 2012. Tacita Capital, based on Morningstar Data.

*6 May 20, 2013, Value and Momentum Everywhere

Momentum Outperforms The S&P 500 by 39%

The Performance of Momentum, Value, Growth and the S&P 500 since the 1930s

Summary of Index Performance by Decade	1930s	1940s	1950s	1960s	1970s	1980s	1990s	2000s	1930-2014
Momentum	**2.3%**	**12.9%**	**23.3%**	**14.1%**	**10.3%**	**18.6%**	**23.1%**	**0.6%**	**13.1%**
Value	-5.8%	17.2%	22.3%	10.7%	12.3%	20.4%	14.3%	4.0%	11.6%
Growth	1.6%	7.4%	17.5%	8.0%	3.4%	15.8%	20.0%	-1.3%	8.9%
S&P 500	-0.5%	9.0%	19.3%	7.8%	5.9%	17.6%	18.2%	-0.9%	9.4%

Momentum (AKA relative strength) stocks have been proven to outperform growth, value, and S&P 500 strategies over time.
Ken French Data Library; Ken French, definition of momentum

Again, the markets don't care what you or I think. Momentum deals with what is, reasons don't matter. The process of momentum investing lets the winners continue to outperform and limits the loss on what's failed to work as underperforming assets are sold quite quickly due to the screening process which culls out weakness (on a relative basis). Many investors do just the opposite, sell winners and hold on to the losers with the belief that they've ultimately made the right decision. This process has no ego or belief system, what is – is.

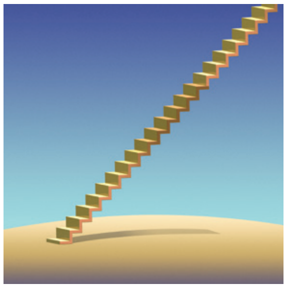
Morningstar does a pretty deep dive into momentum in their article *Does Momentum Investing Work?*[*7] "While practitioners have been exploiting this relationship for decades, the idea has gained broad acceptance in the academic community only within the past 20 years. Momentum runs counter to the predictions of modern portfolio theory, but the evidence is too overwhelming to ignore."

And a recent report[*8] went back to 1927 (the entire CRSP database) stating that *momentum outperformed the S&P 500 in EVERY 10-year rolling period.*

AQR Capital Management wrote[*9] "Virtually all investors can expect higher risk adjusted returns by adding momentum to their portfolios. Growth investors will see that momentum delivers much better performance. Momentum is for most investors the 'undiscovered style,' a valuable tool in building diversified portfolios with above average returns."

If the above has you re-thinking your approach to portfolio management, please feel free to reach out to me for a full and complete explanation of how this just might be one of the solutions you somehow knew was out there.

And remember, **it works until it doesn't.**



*7 April 10, 2013, Does Momentum Investing Work? *8 Ken French Data Library
*9 Summer 2009, The Case for Momentum Investing

About The Author

Gregg Haglund has been a Financial Advisor since 1991 and a Portfolio Manager since 1996. Gregg provides fiduciary quality investment advice and his portfolio management skills to other financial advisors for use with their clients, as well as personally for a select group of his own clients. He is a student of the markets and from time to time authors timely industry related articles when warranted. Gregg finds that being a Fiduciary Standards of Care Portfolio Manager in addition to a Financial Advisor allows for greater transparency with his clients as the management of their assets is not "delegated" to third parties or products elsewhere. This empowers Gregg with a greater depth of knowledge of his clients' assets and the ability to provide timely insight on alignment with the realities of the markets.

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