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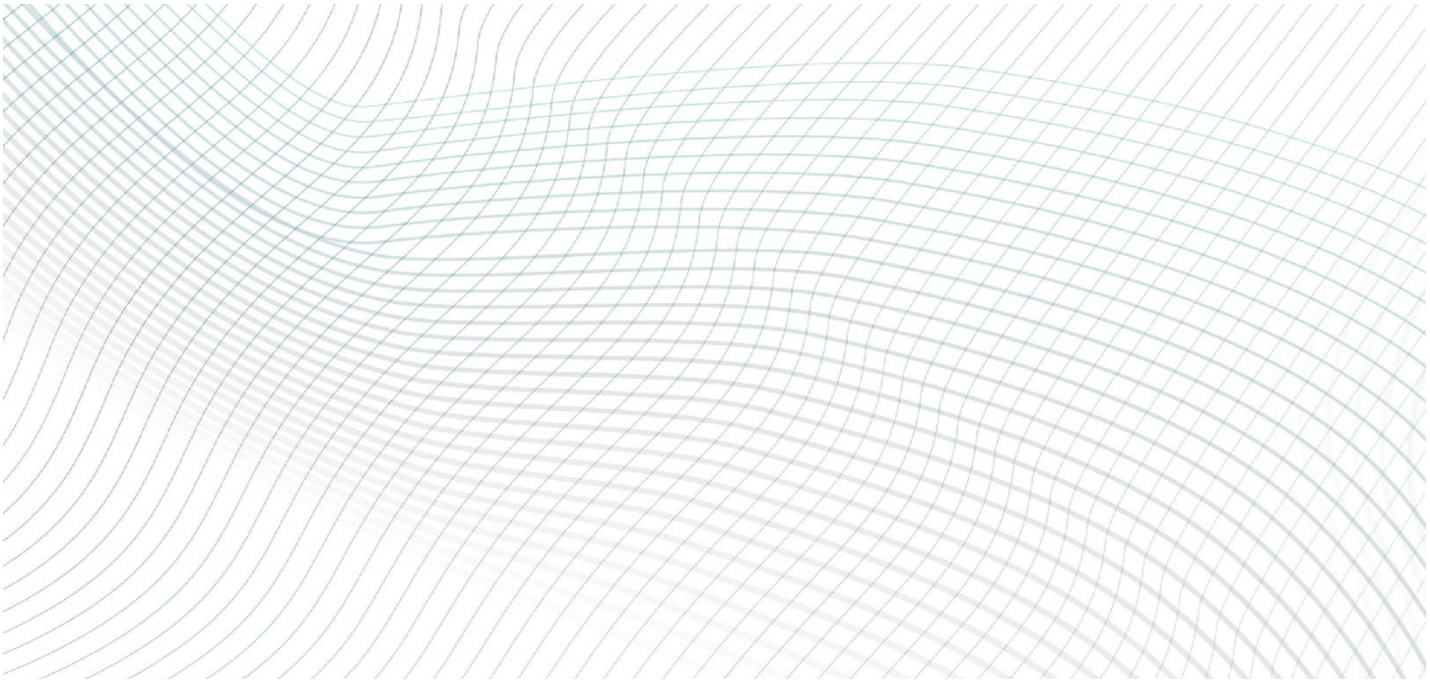


The Pareto Strategy

Nick Lumpp

Abstract

Every advisor has their own models, strategies and preferred approaches to building a portfolio they feel is best for their clients. In this paper, I'll show how the Pareto Strategy will enhance portfolio performance and risk dynamics of standard portfolio models, like the common 60/40 allocation, when added as a tactical position in place of stocks, bonds or both proportionately (depending on your objective). It was built from the ground up, fixing some of the flaws embedded in standard allocation models, to achieve the desired results. In order to enhance the risk-adjusted returns when added to a standard allocation model, a strategy needs to either generate better returns with a similar risk profile or reduce the overall risk metrics of the portfolio without sacrificing returns. Fortunately, the Pareto Strategy has accomplished both, historically, and breaks the notion that if you want higher returns, you have to take more risk.

When added into standard allocation models, the Pareto Strategy has been shown to increase the expected performance "up a level" without increasing the risk dynamics of the overall portfolio (i.e. you can generate returns like a 60/40 allocation while utilizing a 40/60 allocation model or returns like an 80/20 while using a 60/40). Improving risk-adjusted performance is how advisors can improve the client experience and consistently outperform their portfolio benchmarks.

The strategy is a compilation of individual, systematic allocation strategies that were built over time to meet the needs of actual clients. It is purely systematic and tactical in nature, meaning it is rules-based and designed to adapt to a changing world and the potential risks that may arise, as compared to traditional portfolio models which are static allocation models that hold through downturns (with the occasional rebalancing). The Pareto Strategy is designed with a core focus on managing downside risk - the utmost priority for many investors as they retire. An advisor can adjust the size of the allocation to the strategy to meet an investor's specific withdrawal, tax, and investment needs.

In short, the Pareto Strategy is a valuable tool for advisors and investors seeking a long-term portfolio solution designed to continually compound savings in a risk-controlled manner.

Introduction

The Pareto Strategy was named after the Pareto Principle, or more commonly: the 80/20 rule. It's a process to focus on what is most essential and to weed out trivial things that don't add value. This is the process which I followed in constructing what I detail in this paper, which is why I refer to it as the Pareto Strategy. I identified the necessary pieces that matter and cut out the rest.

"Everything should be made as simple as possible, but not simpler."

-Albert Einstein

My goal from the outset was to make a portfolio model as simple as possible, yet extremely robust and flexible. It's simple in terms of the minimal number of asset classes included and in terms of the implementation via low-cost ETF's. It's extremely robust because it is designed in a manner to handle all potential economic outcomes. And it's highly flexible because you can adjust the allocation within a portfolio to meet an investor's specific withdrawal, tax and investment needs. The result is a portfolio that is extremely resilient by being able to adapt to all environments.

The investment markets have evolved greatly over the decades and investors today have access to more options than ever before. This includes things like better data, more investment options (there are ETF's for just about everything) and super low trading costs. There are countless ways to invest your money these days, but I do believe that most are sub-optimal and a bit outdated.

Additionally, as many Baby Boomers are retiring, they are hitting the most crucial point where risk management within a portfolio becomes the utmost priority. The Pareto Strategy was created out of necessity to meet the actual needs of my clients. It's a compilation of strategies constructed over many years that can work well for anyone, but especially so for retirees or investors that are withdrawing from their portfolios each year.

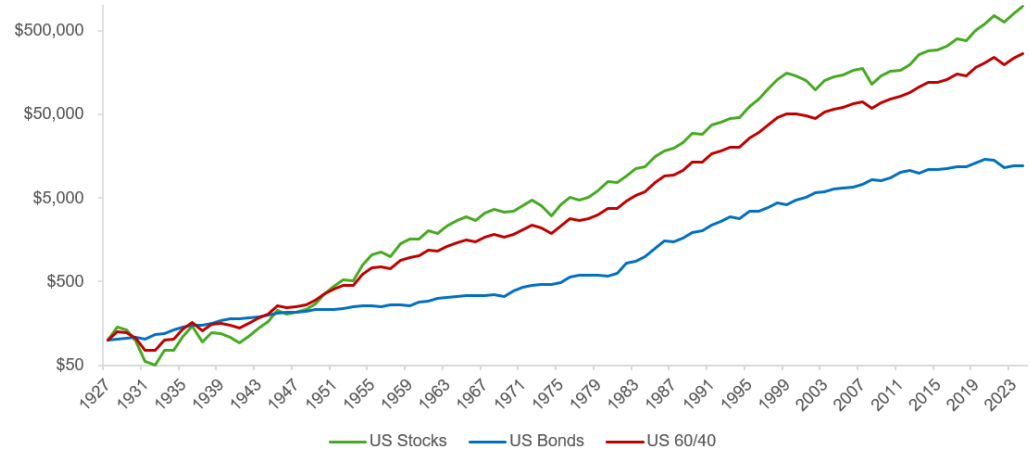
Lastly, it's important to note that this paper highlights the gross, backtested returns of the strategy compared to other asset classes and portfolio models. They are not actual results of real money. The point of this white paper is to provide an overview of the thinking behind the approach and construction of the strategy for conceptual purposes and to illustrate its value when combined with standard portfolio allocation models.

Standard Portfolio Models

Let's start with our baseline: Since 1928, US Stocks have returned 9.80% per year and US Bonds have returned 5.13% per year. So, if stocks have historically performed much better than bonds, then why would anyone ever own bonds? Why wouldn't you just invest 100% of your portfolio in stocks to earn better returns over time?

The answer of course is because stocks are riskier than bonds – both in terms of higher risk of permanent loss in the event of bankruptcy as well as higher volatility and greater downside risk for a portfolio, which is problematic for clients that are taking withdrawals. The very common 60/40 portfolio generally hits the sweet-spot of maximizing returns per unit of volatility (i.e. the Sharpe Ratio).

Figure 2 – US Stocks, US Bonds & US 60/40 Portfolio, Growth of $100 1928-2024



Source: Nick Lumpp, NYU Stern data

Figure 3 – US Stocks, US Bonds & US 60/40 data, 1928-2024

	US Stocks	US Bonds	60% US Stocks 40% US Bonds
Return	9.94%	5.07%	8.47%
Volatility	19.39%	7.32%	12.34%
Sharpe (3.5%)	0.33	0.21	0.40
$100 Invested Becomes	$982,842	$12,111	$265,751
# Negative Years	26	19	21
# Positive Years	71	77	76
Worse Negative Year	-43.84%	-17.16%	-28.64%
Best Positive Year	52.56%	31.87%	33.14%

Source: Nick Lumpp, NYU Stern data

However, I think standard portfolio models make 3 big mistakes:

1. **They don't manage downside risk.** In fact, they don't do anything to manage downside risk since they always hold a static allocation to each asset class through bear markets. The solution is to invest with a more conservative allocation by putting less in stocks and more in bonds, like a sliding scale. Can you tolerate 100% in stocks? Too aggressive, how about 80% stocks/20% bonds? Too aggressive, how about 60/40 or 40/60?
2. **They allocate too much to bonds.** Again, the allocation to bonds is the solution to reducing the downside risk presented by stocks. The problem with this, however, is that the more you invest in bonds, the lower your expected returns will be.
3. **They don't have enough gold.** Maybe it's for ideological reasons, or because gold will perform poorly for long periods, or maybe it's because the research underpinning the construction of standard portfolio models was done before gold freely floated (the US dollar peg to gold didn't end until 1971). Regardless, most models have no exposure to gold while others will have a small allocation.

Let's rethink portfolio construction to see if we can improve on standard allocation models.

Rethinking Portfolio Construction

Our overarching goal is to maximize our returns over time while minimizing our downside risk. Notice I didn't say minimize volatility. In my opinion, volatility is a terrible metric for risk, yet it's fundamental to the construction of standard portfolio allocation models! Who doesn't like upside volatility (i.e. big up years)? It's only downside volatility that people hate to experience, so that's where we should focus our optimization efforts.

If we can fix mistake #1, then we will automatically fix mistake #2 because we will no longer have the large downside risk potential to reduce, thus not needing to hold as much in bonds and therefore improving expected returns. Mistake #3 is easy to fix with a simple understanding, at a foundational level, of the dynamics that drive asset class performance in various economic environments.

The first step in this exercise is to isolate how we will generate growth.

Let's start with US stocks. Below is a table with the average return for US Large Cap and US Small Cap stocks during all years of positive performance (up years) and the average return during all years of negative performance (down years.)

Figure 4 – Average performance during all up years and down years, S&P 500 and Russell 2000

	US Large Caps (S&P 500 TR)	US Small Caps (Russell 2000 TR)
Average Return During All Negative Years	-13.5%	-11.0%
Average Return During All Positive Years	21.1%	20.9%
% Negative Years	26.8%	31.6%

Source: Nick Lumpp, NYU Stern data; S&P 500: 1928-2024, Russell 2000: 1987-2024

As you can see, the up years tend to be really good, on average, and provide plenty of growth potential. But the down years, on average, tend to be in the double-digits and occur roughly one out of every three or four years. The thing about stock market returns though is that the distribution does not follow a normal distribution curve. Most years are positive, but the total distribution is skewed by a handful of really big down years (e.g. 2008, etc.). This is referred to as *left-tail risk*.

Now, obviously, there is no way to know ahead of time whether a year will be an up year or down year for stocks so what we'll need to do is find a way to cut out the big down years (the left-tail risk) in order to reduce the average loss during any down years as much as possible. An investor can recover from a single digit down year relatively quickly; it's the years where returns of stocks are worse than -20% that become problematic and can take years to recover.

As it turns out, if we want strong growth potential, US stocks provide all the opportunity we need without the added currency risk, concerns about rule of law or asset seizures, or any other risks that come with International and Emerging Market stocks. So, this will be our starting point for developing a systematic trend following strategy (tactically allocating based on trend) to determine when to be in US stocks, in hopes of capturing as much of the upside potential as possible, and when to be out, in hopes of eliminating the big down years as much as possible.

Figure 5 below details the performance and risk statistics for our systematic trend following strategies developed for exposure to both US Large Cap stocks and US Small Cap stocks, compared to the S&P 500 Total Return Index and the Russell 2000 Total Return Index. To highlight the improvement in downside risk management, please draw your attention to the bottom three rows. By reducing the number of down years as well as the worst calendar year return, we're able to lower the average return during all down years by a large margin. Fewer down years and smaller losses on average, without giving up return potential equals "mission accomplished."

Figure 5– Historical Return & Risk Metrics of Combined Systematic Trend Following vs Benchmarks

	S&P 500 TR	Russell 2000 TR	Combined Tactical Growth
Return	10.9%	9.2%	12.1%
Volatility	17.0%	18.3%	12.5%
Sharpe	0.38	0.34	0.73
Worst Year	-36.6%	-33.8%	-10.1%
% Down Years	17%	32%	20%
Average Return During Down Years	-13.5%	-11%	-4.7%

Source: Nick Lumpp, S&P 500 TR: 1972-2024; Russell 2000 TR: 1987-2024

What we've accomplished by managing the downside risk usually presented by holding a static allocation to stocks is eliminating the need for a large allocation to bonds because there is no longer a large downside risk potential to hopefully diversify away! And again, it turns out that the risk-adjusted performance metrics of our US stock systematic trend following strategies is so good on its own historically, that adding in other asset classes, like international stocks or real estate, provides **no additional value**. Historically, it has increased the downside risk and volatility because these assets are highly correlated to US stocks and often drop *more* than US stocks during bear markets. So, what we need for true diversification purposes is to find asset classes that are *inversely correlated* to US stocks to provide that "flight to safety" effect during times of crisis (i.e. something that goes up when US stocks go down).

Diversification During Times of Crises

When I ask people what the "flight to safety" asset class used to diversify a portfolio is, meaning what tends to go up when stocks go down, the most common answer is bonds. And specifically, it's US Treasury bonds that often provide the best hedge. However, this is only true about half the time, historically speaking, as the correlation between stocks and bonds continually alternates between positive and negative. The issue that most investors face is that the correlation has been negative for most of their investment experience as we lived through a period of disinflation and falling interest rates for roughly 40 years from 1981-2021, so it's almost engrained in their mind as if that's how things should always work. One needs to zoom out and look back over a longer period to see the historical oscillations. Additionally, gold has also acted as a "flight to safety" asset that benefits during times of turmoil so why do standard portfolio models incorporate little to no gold?

Below are the historical correlations between gold, treasury bonds and US stocks since gold began freely floating.

Figure 6– Correlations between Gold, Treasury Bonds and US Stocks

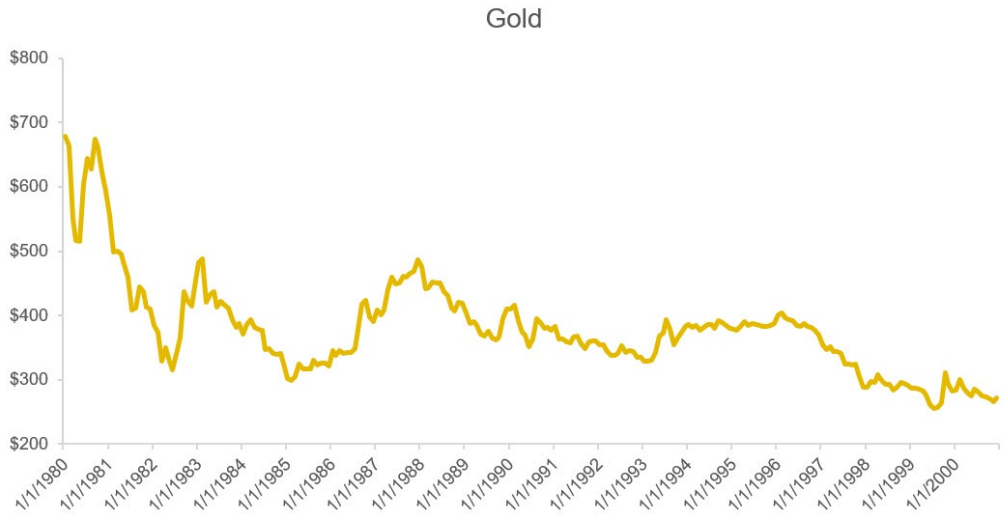
	Gold	Long-Term Treasuries
S&P 500	-0.19	0.06
Russell 2000	-0.06	0.01

Source: Nick Lumpp, Correlations with S&P 500: 1972-2024, Russell 2000: 1987-2024

While both gold and treasury bonds have exhibited low correlations with US stocks, gold is the asset that has maintained a negative correlation to both Large Caps and Small Caps, whereas treasuries have held a very low correlation as they oscillate between periods of positive and negative correlation.

Perhaps the exclusion of gold is because of ideological reasons with industry leaders like Warren Buffett and Jack Bogle proclaiming it an unproductive "pet rock." I think the answer most likely lies in one of two areas. First, the research that underpins Modern Portfolio Theory and the Efficient Frontier, the foundation of standard portfolio models, was conducted during the 1950's and '60's – a period before gold freely floated as the US dollar was still pegged to gold then. Other than a couple of devaluations of the dollar against gold in prior decades, they largely had no data or reason to include gold in a portfolio as it was simply an equivalent of cash that paid no interest. Second, since gold began trading freely in 1971, it tends to move in long, multi-decade trends including a period of over 20 years where it did nothing but fall in value! I think people became fed up with it and decided it just wasn't worth holding in a portfolio.

Figure 7–Gold Price 1980-2001



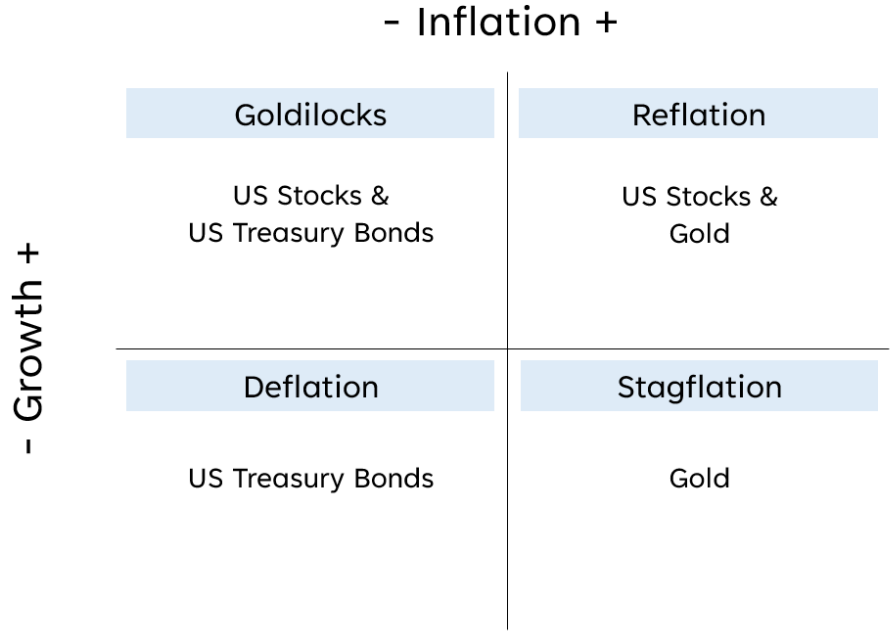
Source: Nick Lumpp, data from MacroTrends

However, again I think people are incorrectly viewing an asset and the best way to approach it within a portfolio. Most asset classes are viewed in terms of maintaining a *static* allocation

when a portfolio model is backtested. But this is a fundamental misunderstanding, at a foundational level, of the economic variables that drive asset class performance. No asset class works well in every environment. For example, there are times when stocks perform well (i.e. during economic expansion) and times when they don't (i.e. economic contraction). This is true for every asset class, including bonds and gold. So, our goal in constructing a truly diversified portfolio should be to make sure we're covering all potential outcomes and remaining flexible enough to adapt as conditions change in order to consistently maintain an inverse correlation to stocks.

From an economic perspective, the two main drivers of asset class performance are the rate of change in economic growth and the rate of change in inflation. For math geeks, I'm referring to the second derivative. Specifically, what we want to know is whether the rate of change in each is accelerating or decelerating. We can take these potential outcomes and make a simple four quadrant grid to illustrate the type of macroeconomic environment we're in (Figure 8, below). For example, the top left quadrant is the environment of growth accelerating ("+") while inflation is decelerating ("-"). We would call this a "goldilocks" economic environment of strong growth with falling rates of inflation. In this scenario, both stocks and bonds tend to perform well. This is the standard 60/40 portfolio sweet spot. The reverse of this is the bottom right quadrant where inflation is accelerating but growth is decelerating. This is known as a period of "stagflation" and typically gold is the best performing asset as both stocks and bonds tend to perform poorly (e.g. the 1970's).

Figure 8– Four Macroeconomic Outcomes



Source: Nick Lumpp

As has played out historically, stocks tend to exhibit their worst performance during times when economic growth is decelerating or outright declining. It's during these periods when

a "risk off" diversifier like treasury bonds or gold is crucial to offset potential drops in the stock allocation of one's portfolio. As can be seen in the four quadrant grid above, Treasury bonds and gold tend to alternate as the flight-to-safety asset depending on inflation at that time. Historically, inflation of 4% annually, as measured by the Consumer Price Index (CPI), has acted as a line in the sand where the correlation between stocks and bonds flips. We generally see a negative correlation during periods of low inflation (below 4%) and a positive correlation when inflation is above 4%. **This means that bonds don't always work as the sole portfolio diversifier against drops in stocks!** Case in point was 2022, where the economy was experiencing high inflation and both stocks and bonds dropped in the same year. It also means that gold doesn't always work, as is highlighted in Figure 7 above where interest rates were taken to the high teens in the early 1980's in an attempt to break the inflation of the 1970's, leading to a 20+ year period of decelerating rates of inflation. In short, a static allocation to either is probably not the best approach.

With knowing that the flight to safety portfolio diversifier has flipped back and forth between treasury bonds and gold historically, our goal should be to come up with a systematic way to determine which asset a portfolio should be holding for times of economic turmoil - and that is what we did. Figure 9 below details the historical performance and risk statistics of our systematic timing strategy between treasury bonds and gold.

Figure 9– "Flight to Safety" Asset Performance and Risk Statistics, 1972-2024

	Gold	Long-Term Treasuries	Gold/Treasuries Systematic Timing
Return	7.9%	5.9%	12.0%
Volatility	26.3%	11.6%	23.5%
Sharpe (4.5%)	0.13	0.11	0.31
R^2 with S&P 500	-0.19	0.06	-0.11

Source: Nick Lumpp, NYU Stern data; S&P 500: 1928-2024, Russell 2000: 1987-2024

There are a few points to highlight. First, since gold is a pretty volatile asset by itself, the volatility of the systematic timing strategy was still relatively high. However, a lot of gold's volatility comes from big up years. The negative correlation with stocks was maintained, which is great to see. And lastly, by adapting our portfolio as the inflationary environment changes, we would have been able to increase returns quite a bit over statically holding gold and treasuries through long bear markets in each, resulting in a significant increase in the overall Sharpe Ratio.

Most people think diversification means holding a lot of different assets or simply having exposure to everything. In portfolio terms, true diversification means holding assets that hold no correlation, or ideally, are inversely correlated. The final step is to add additional

True Diversification is Inverse Correlation

exposure to the one asset class that isn't positively correlated to US Stocks: Managed Futures.

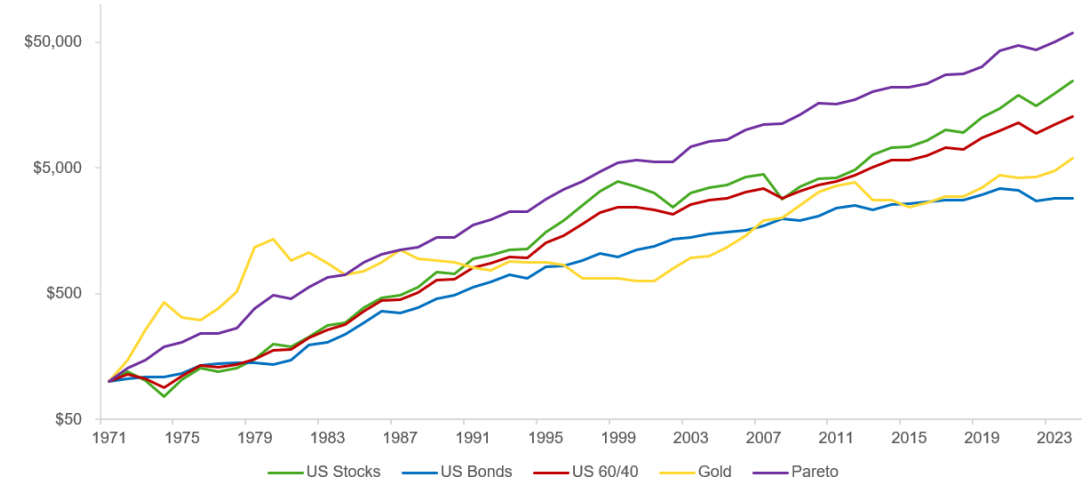
I've found that many advisors don't fully appreciate or understand the point of including an allocation to a managed futures strategy within a portfolio allocation. These strategies are systematic, absolute return focused strategies that generally trade in commodities, interest rates and FX. They're generally correlated to volatility so they can often have a long string of low annual returns when markets are calm. However, this also means they tend to experience their best years of performance when markets get crazy and volatility spikes, thus creating an inverse correlation to stocks when it matters most: during the down years. This is how these funds can add a lot of value to a traditional stock & bond oriented portfolio.

We don't have as much historical data on strategies like this as we do for asset classes like stocks and bonds. However, they've been around long enough (the Eurekahedge CTA/Managed Futures Index has data since 2000) to show their merit through various market environments and bear markets and adding a small allocation has proven to reduce the volatility and downside risk of the Pareto strategy, historically.

Putting it all Together

When we put it all together, the result is a simple portfolio composed of a few systematic strategies combined in a manner that drastically reduces the downside risk of investing as compared to standard portfolio allocation models and the usual buy-and-hold approach to investing. We have our trend following strategies on US stocks to provide our growth (a 70% allocation) coupled with a small allocation to managed futures and our systematic strategy to flip between treasury bonds and gold as our "risk off" diversifier to buoy the portfolio during times of crises (a 30% allocation). Everything else isn't needed, allowing us to create this portfolio strategy with a handful of low-cost ETF's for the ultimate simplicity.

Figure 10 – US Stocks, US Bonds, US 60/40, Gold & Pareto Portfolio, Growth of $100: 1972-2024



Source: Nick Lumpp, NYU Stern data

Figure 11 – Risk & Return Metrics: 1972-2024

	US Stocks	US Bonds	60% US Stocks 40% US Bonds	Gold	Pareto
Return	10.94%	6.53%	9.58%	8.03%	12.79%
Volatility	17.03%	8.90%	11.43%	26.25%	10.75%
Sharpe (4.5%)	0.38	0.23	0.44	0.13	0.77
$100 Invested Becomes	$24,516	$2,852	$12,737	$5,985	$58,991
# Negative Years	11	10	9	19	7
# Positive Years	42	43	44	34	46
Worst Negative Year	-36.55%	-17.16%	-17.69%	-32.60%	-7.01%
Best Positive Year	37.20%	31.87%	31.49%	126.55%	43.32%

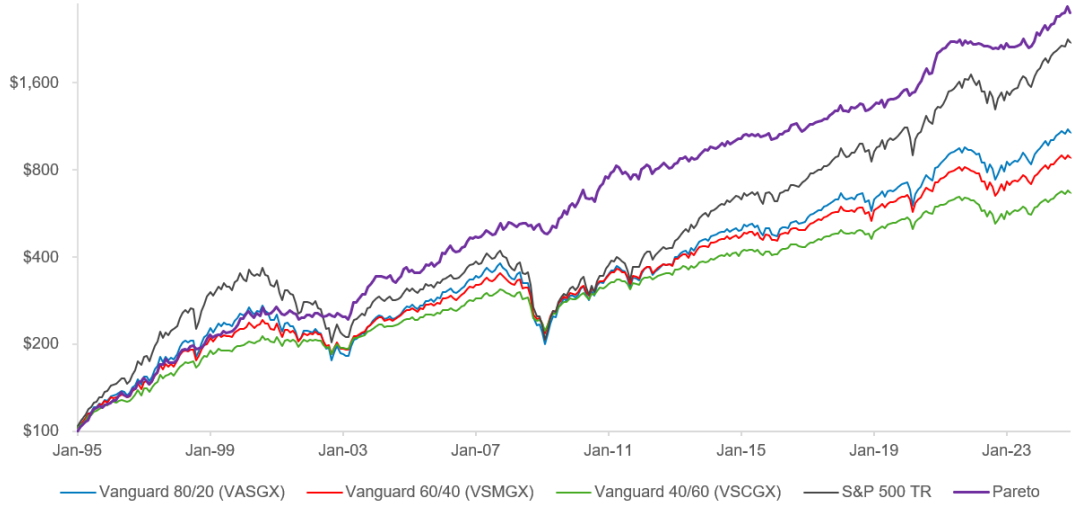
Source: Nick Lumpp, NYU Stern data

As you can see in the table above, the Pareto Strategy has been able to achieve stock-like returns with less volatility than a 60/40 portfolio, and most importantly, better downside risk management than all other assets in the table, historically, including bonds by themselves. The path of returns is also much smoother with the Pareto Strategy never experiencing a long period of below average returns or significant drawdowns – something very important as someone retires and begins withdrawing from their portfolio. All of this is accomplished by cutting out the left-tail risk presented by asset classes, thus improving the compounding of returns over time.

You may be thinking to yourself that your preferred portfolio model is not just US Stocks and US Bonds. Maybe it's global in nature and includes other asset classes like International Stocks, International Bonds and Real Estate. How does the Pareto Strategy stack up against a globally diversified standard portfolio model and how can it be used to enhance your overall portfolio model?

The current makeup of most of the portfolio models used today cannot be backtested to 1972 since many asset classes and benchmark indices weren't created until the 1970's and 1980's. However, some of the longest running global (standard) portfolio models are the Vanguard LifeStrategy Funds which became available in 1994. The Vanguard LifeStrategy funds are extremely popular and common in many retirement plans, totaling assets in the tens of billions of dollars, so these are a great proxy to use for the past 3 decades. Figures 12 & 13 below compare the return and risk data on Vanguard's global 80/20 fund (VASGX), 60/40 fund (VSMGX) and 40/60 fund (VSCGX) compared to the Pareto Portfolio Strategy and S&P 500 TR Index from 1995-2024.

Figure 12 – Vanguard LifeStrategy Funds, S&P 500 and Pareto Portfolio, Growth of $100: 1995-2024



Source: Nick Lumpp, data from NYU Stern and Yahoo!Finance

Figure 13 – Risk & Return Metrics: 1995-2024

	Vanguard 80/20 (VASGX)	Vanguard 60/40 (VSMGX)	Vanguard 40/60 (VSCGX)	S&P 500 TR	Pareto
Return	8.29%	7.61%	6.62%	10.82%	11.50%
Volatility	14.94%	11.93%	9.23%	18.16%	10.15%
Sharpe (2.1%)	0.42	0.46	0.49	0.48	0.93
$100 Invested Becomes	$1,092	$902	$685	$2,180	$2,619
# Negative Years	8	7	6	6	5
# Positive Years	22	23	24	24	25
Worst Negative Year	-34.39%	-26.5%	-19.52%	-36.55%	-7.01%
Best Positive Year	29.24%	27.94%	24.35%	37.20%	33.83%

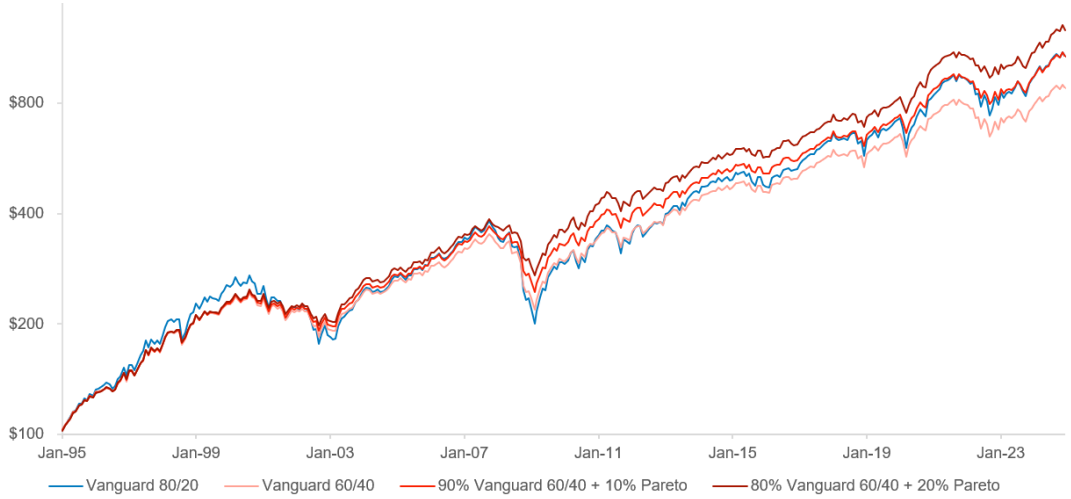
Source: Nick Lumpp, data from Yahoo!Finance & PortfolioVisualizer.com

We can see again how the Pareto Strategy exhibits stock-like returns with significantly less risk. The volatility of the strategy is like a conservative allocation model but by successfully reducing the downside risk through systematic trend following, we no longer need a large allocation to bonds and thus don't experience the large reduction in expected returns, resulting in a substantially higher Sharpe Ratio. Not to mention never experiencing a double-digit down year, historically.

Given its superior return and risk characteristics, adding the Pareto Strategy to a standard portfolio model provides a significant enhancement to portfolio statistics. A 60/40 portfolio with a 10% allocation to Pareto (taken proportionately from stocks and bonds) can perform closer to an 80/20 allocation over time but with less volatility and downside risk than a 60/40 allocation on its own. A 20% allocation, historically, created better performance than an 80/20 portfolio with no increase in risk statistics. Notice that the outperformance occurs

during the bear markets in stocks – the name of the game, when it comes to compounding of returns, is managing downside risk.

Figure 14 – Vanguard 80/20, Vanguard 60/40 + Pareto, Growth of $100: 1995-2024



Source: Nick Lumpp, data from Yahoo!Finance

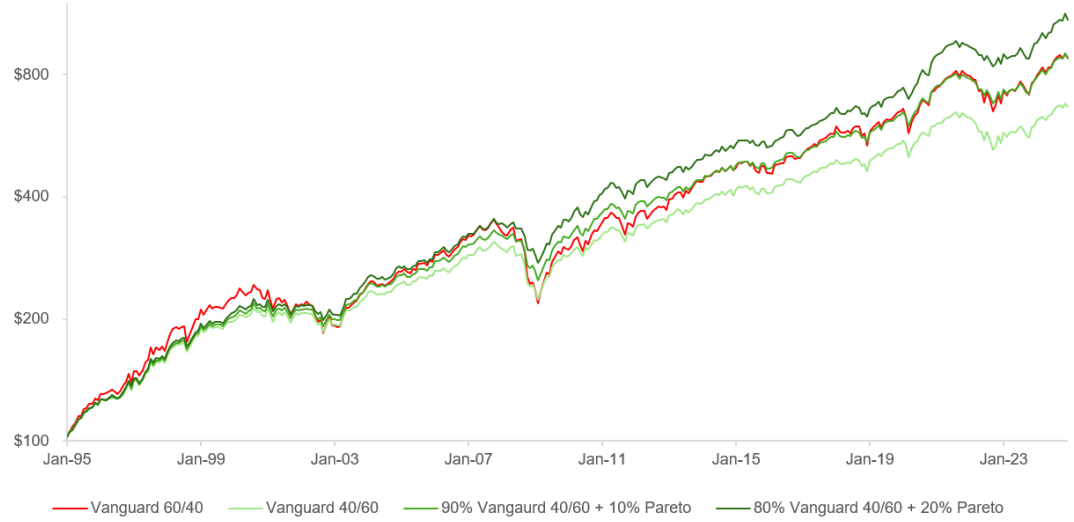
Figure 15 – Risk & Return Metrics: 1995-2024

	Vanguard 80/20 (VASGX)	Vanguard 60/40 (VSMGX)	90% Vanguard 60/40 + 10% Pareto	80% Vanguard 60/40 + 20% Pareto
Return	8.29%	7.61%	8.23%	8.82%
Volatility	14.94%	11.93%	11.16%	10.74%
Sharpe (2.1%)	0.42	0.46	0.55	0.63
$100 Invested Becomes	$1,092	$902	$1,071	$1,263
# Negative Years	8	7	8	7
# Positive Years	22	23	22	23
Worst Negative Year	-34.39%	-26.5%	-22.47%	-18.69%
Best Positive Year	29.24%	27.94%	25.85%	25.70%

Source: Nick Lumpp, data from Yahoo!Finance & PortfolioVisualizer.com

Similarly, a 10% allocation combined with a 40/60 portfolio would have created similar performance as a 60/40 portfolio. And a 20% allocation created better performance outright and significantly better risk-adjusted performance (figures 16 & 17 below). This is how you can add significant value to your client's portfolios and outperform benchmarks without taking added risk and being exposed to even larger drawdowns.

Figure 16 – Vanguard 60/40, Vanguard 40/60 + Pareto, Growth of $100: 1995-2024



Source: Nick Lumpp, data from Yahoo!Finance

Figure 17 – Risk & Return Metrics: 1995-2024

	Vanguard 60/40 (VSMGX)	Vanguard 40/60 (VSCGX)	90% Vanguard 40/60 + 10% Pareto	80% Vanguard 40/60 + 20% Pareto
Return	7.61%	6.62%	7.51%	8.29%
Volatility	11.93%	9.23%	8.71%	8.69%
Sharpe (2.1%)	0.46	0.49	0.62	0.71
$100 Invested Becomes	$902	$685	$878	$1,091
# Negative Years	7	6	4	5
# Positive Years	23	24	26	25
Worst Negative Year	-26.5%	-19.52%	-16.08%	-13.05%
Best Positive Year	27.94%	24.35%	22.81%	23.00%

Source: Nick Lumpp, data from Yahoo!Finance & PortfolioVisualizer.com

Blackrock's allocation models are also very common with advisors. If these are your preference, figure 18 below details the numbers for the Blackrock Global Allocation fund (MALOX), their global 60/40 fund, as a proxy for their models by itself as well as with a 10% and 20% allocation to Pareto since 1990.

Figure 18 – Blackrock 60/40 + Pareto, Risk & Return Metrics: 1990-2024

	Blackrock 60/40 (MALOX)	90% Blackrock 60/40 + 10% Pareto	80% Blackrock 60/40 + 20% Pareto	Pareto
Return	8.18%	8.69%	9.13%	11.41%
Volatility	12.07%	11.55%	11.13%	9.90%
Sharpe (3%)	0.43	0.49	0.55	0.85
$100 Invested Becomes	$1,565	$1,847	$2,129	$4,386
# Negative Years	7	7	8	6
# Positive Years	28	28	27	29
Worst Negative Year	-20.90%	-18.35%	-15.86%	-7.01%
Best Positive Year	34.51%	34.22%	33.94%	33.83%

Source: Nick Lumpp, data from Yahoo!Finance

Summary & Implementation

Systematic trend-following strategies like the Pareto Strategy have proven to provide substantial value to portfolios by significantly reducing the downside risk exposure. Advisors can also be very flexible with how they implement it into their client's portfolios. You can supplement it with other assets in a portfolio to either enhance returns or reduce the expected volatility of an overall portfolio model, helping to beat benchmarks and create a smoother path of compounding your client's wealth. This creates a less stressful journey and happier clients overall. Here are the primary ways I implement the strategy for my clients:

1. You can simply use it as a tactical holding and pull proportionately from stocks and bonds as a means of enhancing the overall risk and return dynamics of a portfolio model to help outperform your benchmark allocation.
2. Given the strong historical returns (i.e. stock-like returns), it can be utilized as a risk-managed growth position to replace equity exposure for clients wanting a more conservative tilt in their portfolio (understanding that it should trail the stock market during bull markets but should outperform during bear markets). This can be extremely helpful and important for retirees or clients taking withdrawals to reduce the "performance drag" created from withdrawals during down years.
3. Conversely, for clients that are more growth oriented, it can be used to replace bonds as a way of enhancing total expected returns without increasing overall expected risk.
4. Lastly, it can be utilized to target a specific level of volatility and expected downside risk without giving up as much return potential as you would by shifting more toward bonds.

Exhibit A: Historical Returns by Year

Figure 19 – Pareto Strategy Backtest Annual Returns: 1972-2024

	Return		Return		Return
1972	27.20%	1990	-0.32%	2008	1.67%
1973	16.15%	1991	25.23%	2009	17.78%
1974	27.29%	1992	10.97%	2010	23.10%
1975	9.63%	1993	15.64%	2011	-1.41%
1976	16.97%	1994	0.69%	2012	9.48%
1977	0.29%	1995	25.55%	2013	15.39%
1978	9.78%	1996	18.91%	2014	9.25%
1979	43.32%	1997	16.46%	2015	-1.01%
1980	28.16%	1998	19.88%	2016	7.86%
1981	-6.42%	1999	16.56%	2017	16.18%
1982	23.66%	2000	5.63%	2018	1.43%
1983	18.68%	2001	-3.35%	2019	15.05%
1984	5.84%	2002	-0.97%	2020	33.83%
1985	25.35%	2003	31.88%	2021	9.62%
1986	15.51%	2004	11.09%	2022	-7.01%
1987	7.94%	2005	3.53%	2023	15.01%
1988	5.55%	2006	19.19%	2024	18.04%
1989	19.39%	2007	9.71%		

Source: Nick Lumpp