

# Embrace Pareto's Principle

By Michael Melissinos



info@melissinotrading.com

www.melissinotrading.com

(732) 688-2683

September 2024

---

## Introduction

Contrary to what many of us want to believe, long-term investing success rests on a foundation of capturing a **very few but very large winners**, not an abundance of small ones. The world is not evenly distributed. Storms don't roll through with a symmetrical cadence, but come in bunches. Even Berkshire Hathaway has made most of its money on only a [handful of investments](#).

The best opportunities don't come around very often, so we cannot afford to miss them when they do. Similarly in baseball, you don't get many fat pitches so when you do you better capitalize.

Most investors prefer stability and consistency. Making a profit on a high percentage of trades feels good and satisfies the craving of wanting to be right and feel smart. This, however, lures us into making very poor investing decisions. One being: booking profits before the trend turns. The fancy term for this is [Disposition Effect](#).

I'm sure by now everyone has seen the clip of Roger Federer's [speech at Dartmouth](#) where he spoke of his career statistics — winning 80% of his matches, but only 54% of the points. Shocking and counterintuitive, but this is how it works. This is Pareto's Principle at work.

Thinking the only way to succeed is by capitalizing on the majority of your chances is incorrect. Embracing Pareto's Principle, better known as the 80-20 Rule, not only in investing but across all areas of life, would improve our returns and lives in general.

Sports, as well as many other areas of life, supports the notion of succeeding with a low win-percentage as well. The best hitters only have a .300 average. The best football teams only score on a small fraction of their drives. The best hockey players carry a ~12% shooting percentage. The best three-point shooters make only 40% of their attempts.

The best teams do not have a full roster of superstars, but only a couple. The best investors don't have a portfolio stocked full of winners, but only a few — big ones that is. They understand the Principle. They use it to their advantage by staying in the game both financially and mentally and acting when opportunity knocks.

## Taking Pareto to the Extreme

To show you just how embracing Pareto's Principle can help you in the markets, I ran an experiment. I simulated the results of a simple trend-following trading system, similar to Melissinos Trading's [Eupatrid Global Trends](#) program, from 1980 to today. It generated ~8,600 trades.

A few questions to start off:

1. **What percentage of the trades were profitable?**
2. Organize all of the trades in order of PnL (high to low). Sum up the PnL all of the losing trades then sum up the winners. **What percentage of the trades do you need to count to recoup the losses?**
3. **What percentage of the trades account for 80% of the system's total profit in dollars?**

Back when I was conceiving of [Melissinos Trading](#), I conducted thousands of simulations on trends-based trading systems. Over time, I noticed that profitable systems had a lot of things in common with a winning baseball team. Low win-rates, pitching, defense and the big hit to name a few. Before finance, I came from the baseball world so this discovery was intriguing yet comforting.

The answers to the three questions above were shocking then and they're shocking now. The answers: (1) 42.6%, (2) 99% and (3) 0.34% (30 out of 8,600). Only 42.6% of the trades were profitable. 99% of the trades netted to no gain at all. And only 0.34% of them accounted for 80% of the total gain. Absolutely nuts.

Surely these are not the stats of a strong and consistently performing strategy, right? Knowing these answers, and maybe appreciating Pareto a bit more, **what percentage of the 535 months produced a positive return?** Answer: 62%. And **what percentage of the 44 years produced a positive return?** Answer: 80%.

The CAGR of this system is 15% with an annualized volatility of 14.5% and a maximum peek-to-trough drawdown of -24.2%. *[Past performance is not necessarily indicative of future results]*

The beauty of Pareto's Principle, and maybe why it works in the markets, is that it's counterintuitive and doesn't feel particularly good. Who wants to make a living on the back of a low win-rate and infrequent large winners? Not many as it turns out.

## A Minority of Months Account for Most of the Profit

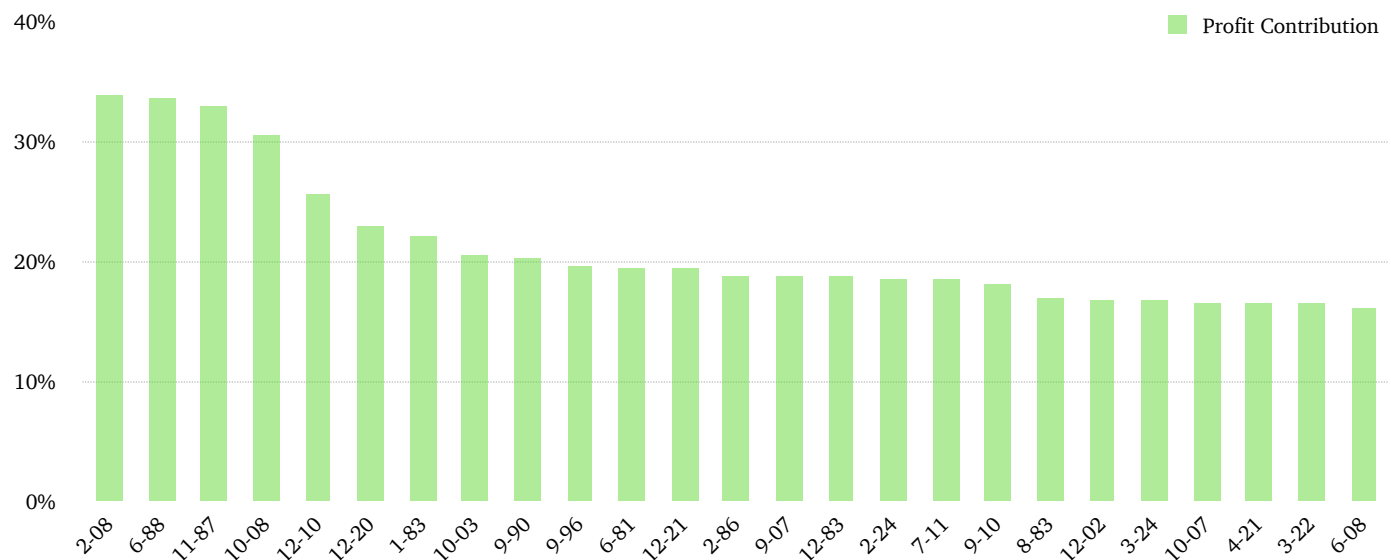
Similar to a small percentage of the trades accounting for most of the system's profit, a small percentage of the months account for a majority of the profit. This again speaks to the behavior of the markets, and life in general. Missing that one opportunity can be the difference between winning and losing.

Below, the chart shows the top performing months that, when summed up, account for 80% of the system's overall profit (25 total). You might notice that the best performance can sometimes occur during times when there's tremendous volatility in the markets. For example, there are three months from 2008 in this list.

What can make the Pareto Principle, and trend-following for that matter, psychologically difficult to accept. Often times, you must sit through long periods without profits and continuously cutting losses. This can weigh on our psyche and make it difficult to stick with over long periods of time. Often times, many people quit out of desire for stability and consistency.

### 5% of the Months Account for 80% of the Total Profit

Sample Trend-Following System [1980 — 2024]



*Past Performance is Not Necessarily Indicative of Future Results  
This illustration is for informational purposes only. It is not a recommendation to buy, sell or stay out of these asset-classes.*

## Most of the Time it's Quiet...then Boom

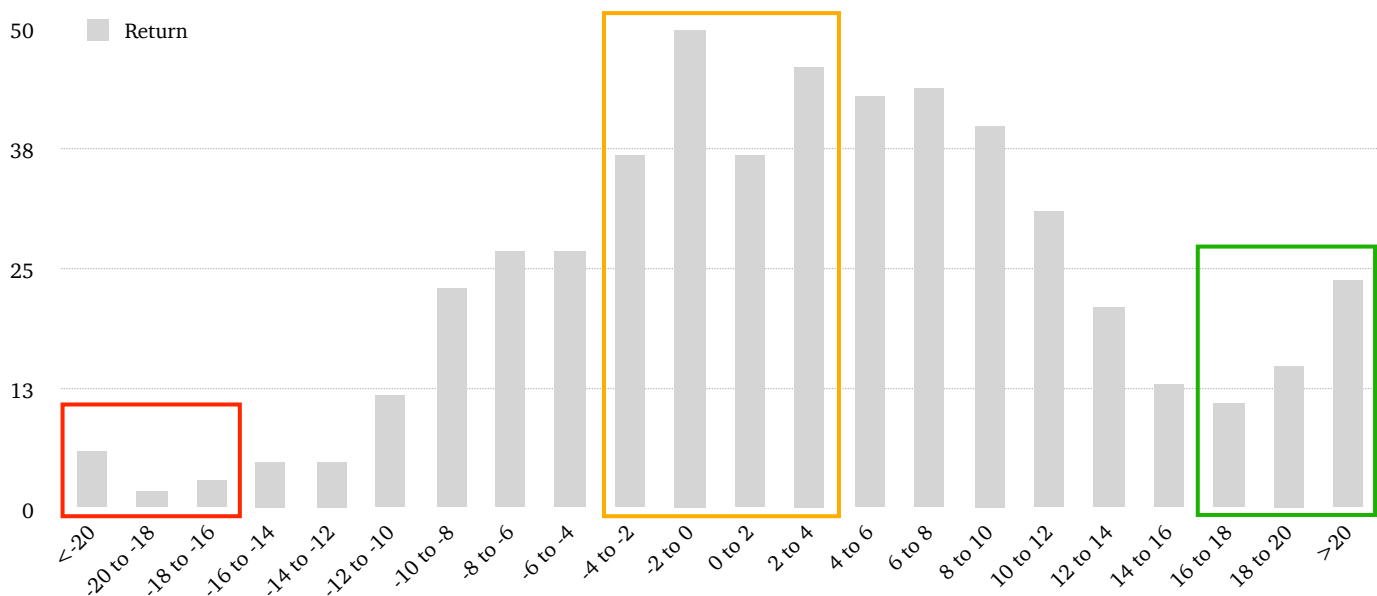
Trend-Following cuts losses and lets winners run. This, when executed with consistent discipline, typically produces a uneven distribution of returns as we see below.

A majority of the months produce little to no profit or loss (orange), a small amount of large losing months (red) and a fat right positively skewed fat right tail of highly profitable months (green).

This kind of distribution exemplifies life, in general. Most of the time there's little to no opportunity to act on, so we must wait patiently through the mundanity of it all. Storms will unexpectedly roll through, so we have to do our best to minimize the damage. All the while keeping our spirits up and having the courage to act when opportunity presents itself.

### Monthly Returns Histogram

Sample Trend-Following System [1980 — 2024]



*Past Performance is Not Necessarily Indicative of Future Results  
This illustration is for informational purposes only. It is not a recommendation to buy, sell or stay out any of these asset-classes.*

## The Best Trades Tend to Start When Your Guard is Down

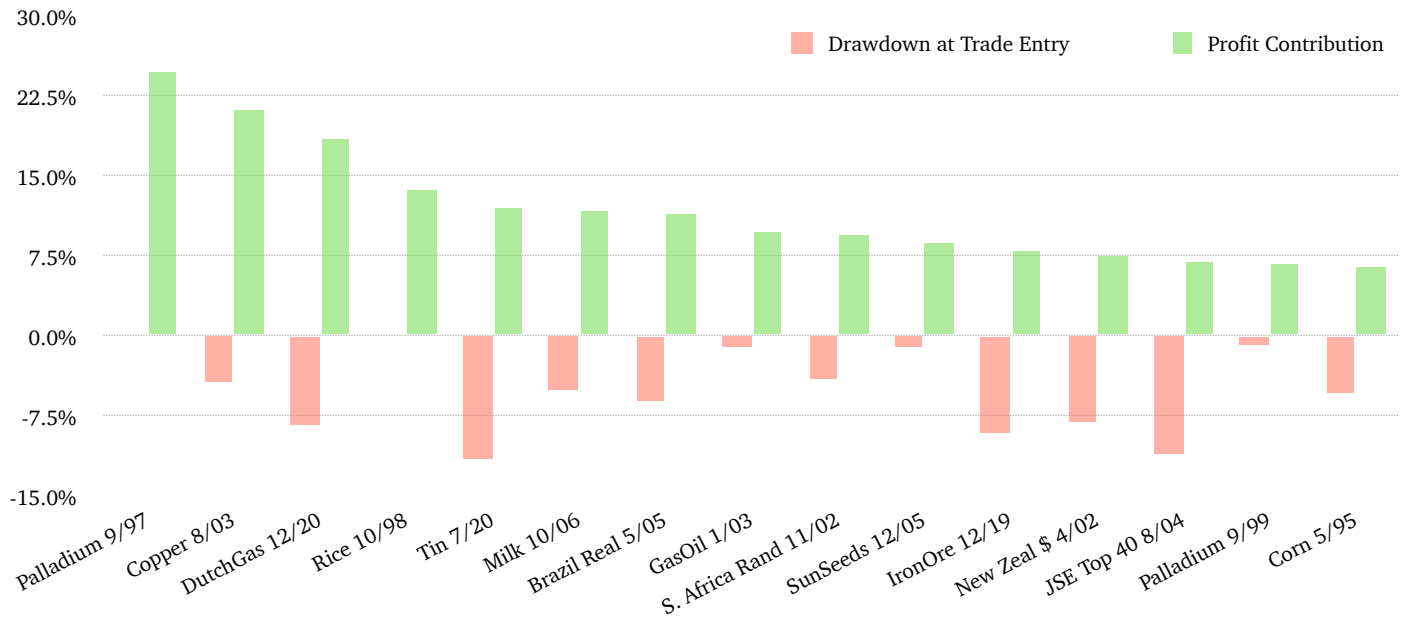
One good winner pays for lots of losers. A simple concept we can all grasp, but it's not logic that gets us in trouble but our unwillingness to execute when we don't feel like it. And when don't we feel like it? When we've been losing money recently.

Well, to your dismay, the best trades for our sample trend-following system tend to get their start when recent performance has been poor.

Pareto's Principle transcends trade and monthly-related statistics. It's relevant to our effort as well. A majority of the time, we're willing to do the work. It's the few instances when we don't feel like it that burns us. Following a mistake, many people try to make up for it but opportunity is gone so they often compound the error with additional losses.

## You Must Pull the Trigger During Drawdowns

Sample Trend-Following System [1980 — 2024]



Past Performance is Not Necessarily Indicative of Future Results  
 This illustration is for informational purposes only. It is not a recommendation to buy, sell or stay out any of these asset-classes.

## The Principle Applies to Index Investing Too

For buy-and-hold investors, arrogance/greed during bull markets tends to turn into fear/despair during bear markets. Even die-hard buy-and-holders tend to abandon the approach when losses pile up. There's nothing quite as effective as short-term losses to get people to lose faith.

If you're going to buy-and-hold any asset-class, you must know that losses are part of the deal. Also, that bailing out during losing streaks can inflict irreparable harm on your performance (as we've seen on previous pages). One or two mistakes can make all the difference.

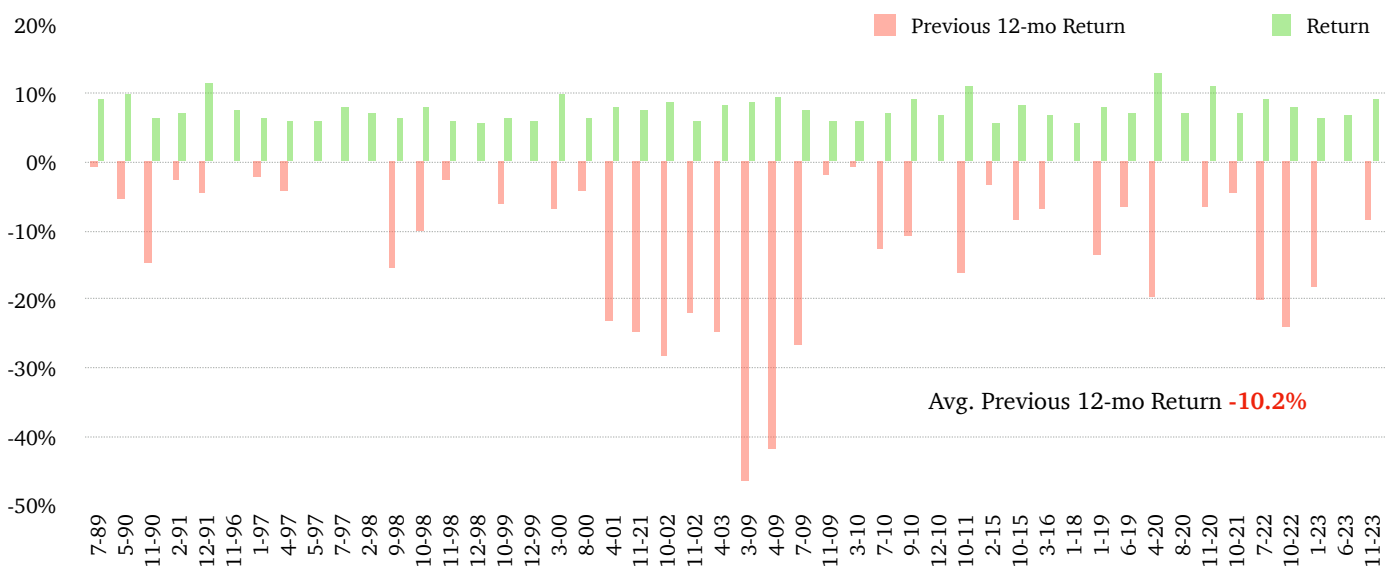
**Remember back in 2008-09?** How many of you sold at least some of your equity funds during that time? When did you get back in? DID you get back in? And if you did, how did you buy enough to make the win meaningful?

Most people didn't get back in for years despite many equity indices making new highs in mid-late 2009. This is likely because the feelings stemming from the Financial Crisis were still fresh and many extrapolated recent returns lower. As a result, many investors missed a ton of upside.

Below, the graph shows the top performing months for the S&P 500 Index. Once again, we see that the best months tend to come when recent performance is negative.

### The Best Months Occur During Drawdowns

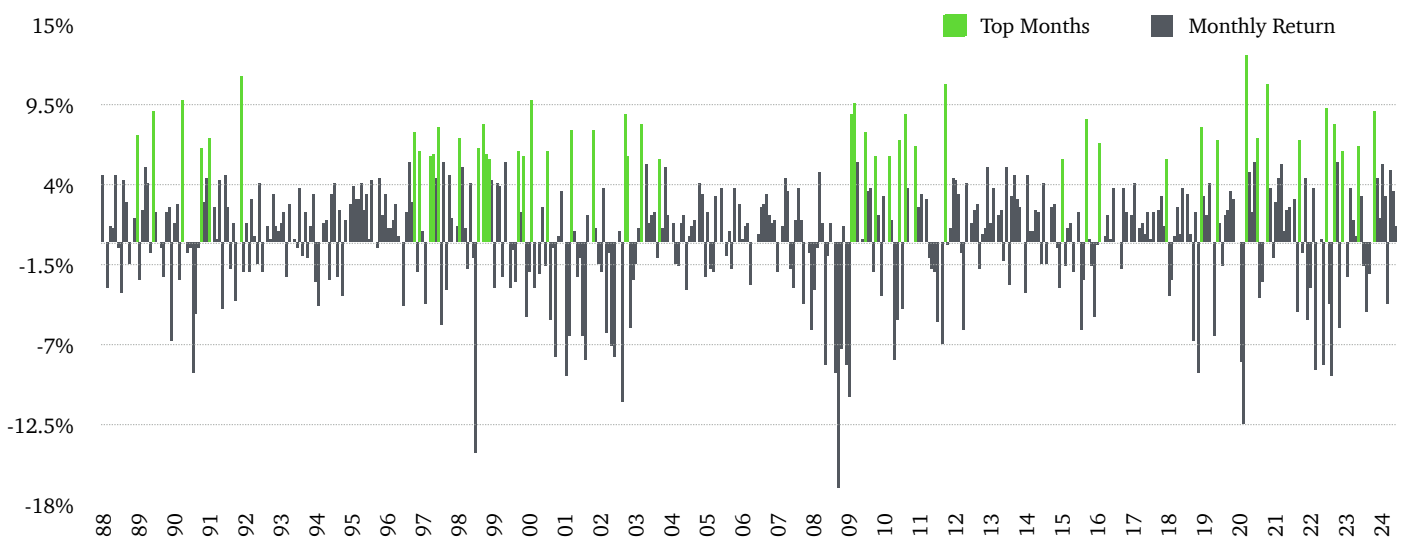
S&P 500 TR Index [1988 — 2024]



And to further solidify the point in visual form, below shows the monthly returns for the S&P 500 TR Index for the past 35+ years. The top months, from the previous page, are colored green and are unpredictably random. One common trait they have is that they occur during drawdowns, often when index investors are at high risk of jumping ship.

### 11% of the Months Account for 80% of the Gain

S&P 500 TR Index [1988 — 2024]



Past Performance is Not Necessarily Indicative of Future Results

### Learn to Love the Pareto Principle

We can win over the long run with lots of small losses and a few large winners. To pull this off, however, we need to embrace cutting losses (admitting defeat so we can stay in the game) and letting winners run (resisting the urge to take profits).

Playing the anti-Pareto way is to favor our ego over the evidence of natural world and successful sports teams, companies and investment firms.

## Disclosures

### **FUTURES TRADING INVOLVES A SUBSTANTIAL RISK OF LOSS PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS**

Charts, when present, are meant to show examples of trends. Inclusion of a chart as a trend example does not imply any kind of recommendation to buy, sell, hold or stay out. The information set forth herein is for informational purposes only and does not constitute financial, investment, tax or legal advice. Please see the appropriate professional advisor for advice specific to your situation. There is no guarantee that a particular investment strategy will be successful. Opinions expressed herein are subject to change at any time. Past performance does not guarantee future results. All investments are subject to risks, including the risk of loss of principal.

Certain information contained herein has been obtained from third party sources and such information has not been independently verified by Melissinos Trading. No representation, warranty, or undertaking, expressed or implied, is given to the accuracy or completeness of such information by Melissinos Trading or any other person. While such sources are believed to be reliable, Melissinos Trading does not assume any responsibility for the accuracy or completeness of such information. Melissinos Trading does not undertake any obligation to update the information contained herein as of any future date.



info@melissinotrading.com  
www.melissinotrading.com  
(732) 688-2683