



## Beating the Market Is Simple But Not Easy

An interesting paradox exists in investing: the capitalization-weighted stock market is among the worst ways to construct a portfolio, yet most investors and investment managers can't beat it.

It is simple to beat the market (even simulated monkeys can do it) but it is not easy. Understanding the tension between the flawed nature of the stock market's construction and why it is so hard to beat is a crucial mental model for all investors to understand.

### Why the Market Portfolio Is Flawed

The stock market is "capitalization-weighted." Bigger, more valuable companies have more of an effect on how the market performs than smaller, less valuable companies. So when you invest in a S&P 500 index fund, you are investing in the 500 stocks in that index in proportion to each company's relative value. For example, the top five companies in the S&P 500 (Apple, Microsoft, Amazon, Facebook, and Google) currently compose 22% of the overall index. The bottom five stocks make up a mere 0.04% of the index. So, an S&P 500 index fund gives you an outsized dose of the biggest companies in the index.

The cap-weighted structure has been at a recent advantage because the top-weighted stocks such as Apple and Amazon have been powerful performers for years. But this hasn't always been the case. Over more extended periods, the weighting of the market to larger and more expensive stocks has led to underperformance relative to other methods of weighting stocks.

The reason for this is straightforward. As Jacques Lussier explains in *Successful Investing is a Process*, with a cap-weighted index, "relatively overvalued stocks will be overweighted, and relatively undervalued stocks will be underweighted, whether or not we know which stocks are relatively undervalued, overvalued or fairly priced." Thus, over time the cap-weighted market gives sub-par returns.

A study by the Cass Business School in London illustrates the point. The researchers examined various ways to weight the top 1,000 stocks in the U.S. stock market for the period 1969 — 2011. Over this 42-year period the authors found that portfolios with alternative weightings such as dividends paid, cash flow, book value, and sales handily beat the capitalization-weighted market portfolio. The research also found that portfolios weighted randomly (so-called "monkey portfolios") also outperformed the market.

Numerous other studies have reached the same conclusion. One of the most interesting studies on this topic found that not only do smart beta portfolios (which are weighting schemes not linked to share price) beat the

market over long periods, but that portfolios weighted inversely to smart beta factors also outperform!

The conclusion we can draw from these studies is that the cap-weighted market portfolio is flawed. A broadly diversified portfolio weighted using almost any set of rules other than capitalization should outperform the market over time with a high degree of certainty.

## But Most Investors and Investment Managers Underperform the Market

Notwithstanding the inherent flaws of the cap-weighted market portfolio, most investors and investment managers fail to beat it. [Research from Dalbar Associates](#) found that over the 20 years ending December 31, 2019, the average equity fund investor underperformed the market by nearly 2% annually (which is nearly 30% cumulatively).

Most professional investment managers don't fare any better. [According to S&P](#), over the 10 years ending December 31, 2019, 89% of domestic equity funds and 65% of institutional separate accounts underperformed their benchmarks, net-of-fees. Likewise, a [report](#) by the consultancy firm Hewitt EnnisKnupp, which is in the business of finding and recommending investment managers, found that less than 2% of managers generate out-performance beyond their fees while 16% provided performance equal to their fees.

## If the Market Is Flawed, Why Is Beating It So Hard?

Beating the flawed market is so hard because it requires a long-term perspective and disciplined behavior. Case in point is the study by Cass Business School which revealed numerous multi-year periods during the 42 years studied where all of the monkey portfolios and all the factor-weighted portfolios underperformed the market, even though every one of these strategies significantly outperformed the market over the long term.

What is true of simulated monkeys and factor-weighted portfolios is also true of active managers. [A study by Vanguard](#) found that 18% of active mutual fund managers beat their benchmarks over a 15-year period. Of these outperforming managers, 97% of them experienced at least five years of underperformance, more than 60% experienced seven or more years of under-performance, and two-thirds of these star managers underperformed for three or more consecutive years.

## The Big Takeaway for Investors

Long periods of underperformance by outperforming strategies and investment managers is what leads to most investors underperforming. It's extremely hard to stick with an investment strategy or manager through years of underperformance.

The problem is compounded by the fact that investment managers often can't afford to stick with their outperforming strategies when they are out of favor. If a manager's performance falls too far behind their benchmark (which is cap-weighted) many of their investors will leave, and they might go out of business.

We saw an example of this a few years ago with an investment manager our firm used. It was a small-cap growth manager focused on buying growth companies at a reasonable price (GARP). The manager had performed well compared to the small-cap growth index for years, but then experienced substantial

underperformance as returns in small-cap growth were driven by tech and biotech companies without positive earnings. As a GARP manager, they didn't own these high-flying stocks. After a few years of underperformance, clients began pulling money from the manager and then a mutual fund company to which the manager sub-advised fired them as well. In about a year, the manager dropped from over \$3 billion under management to less than \$1 billion. The firm went out of business even though its long-term strategy was sound and would likely have delivered strong performance again in the future.

## What Should an Investor Do?

Knowing that the market is flawed but hard to beat is a vital mental model in our tool chest. As an investor, you should ask yourself if you can withstand experiencing lower returns than the market for long periods. Most cannot and should buy index funds so that impatience doesn't lead to them underperforming the market along with the vast majority of others. Additionally, cap-weighted index funds are extremely tax efficient which is another reason that they may be appropriate for investors.

Investors who have the discipline to stick with a strategy that may look horrible for years should consider investing in a fund that is weighted based on factors other than market capitalization. Examples of non-capitalization factors include equal-weighted, dividend-weighted, quality-weighted, profitability-weighted, book value-weighted, and momentum strategies. There is a good chance these funds will outperform over the long-term, but it will probably be a wild ride as compared to the market and thus may be hard to stick with.

Investing with active managers who follow a proven strategy and have stock-picking skills is right for some investors. While these managers are hard to identify, many investors successfully use active managers within a portfolio. This requires conviction, discipline, and an appropriate time horizon. Similar to factor-weighted portfolios, investors need the patience to withstand years of underperformance for even the best active managers.

A successful strategy many of our clients follow is a combination: core holdings of index funds complimented by active managers or factor-weighted portfolios. This sort of hybrid approach with index funds providing market returns and the other investments providing potential outperformance can be easier to stick with from a behavioral perspective than just utilizing one type of investment.

What's most important is to have a strategy and stick to it. Practicing discipline and having patience is one of the most important aspects of successful investing.



### John Jennings

*President and Chief Strategist of ArchBridge Family Office*

*ArchBridge Family Office is an independent, multi-family office and trust company that advises 65 clients on more than \$13 billion of*

investment assets and more than \$15 billion of total wealth. Founded in 2002, ArchBridge Family Office provides holistic, high-touch client service including customized, independent investment management and a full range of family office and fiduciary services. The firm serves a limited number of clients with substantial wealth in order to maintain very low client-to-employee ratios. Visit [archbridge.com](https://www.archbridge.com) to explore how the firm manages complexity with unmatched expertise and a Family, Forward focus.