# Power Your Portfolio With Value 

By Paul Merriman

## Article Highlights

- Value stocks have produced higher long-term returns than the S\&P 500 over many periods, albeit with the risk of periodic underperformance.
- A diversified value-tilted portfolio would have beaten the S\&P 500 by two percentage points annually.
- When held over 15- or 40-year periods, an all-value portfolio would have realized returns even higher than the value-tilted portfolio.

For almost a quarter century, I've been advocating massive worldwide equity diversification in a portfolio that's weighted toward value stocks and small-cap stocks.

I call it the Ultimate Equity Portfolio, as it's simply the best that I know for most investors.

This year, as I looked more closely at data going back to 1928 , I've concluded that long-term equity investors are likely to do even better if they invest more heavily in value. Although I'm not abandoning my previous recommendations, I believe an all-value equity portfolio is a compelling alternative for long-term investors who understand value investing.

In this article, I first outline briefly the Ultimate Equity Portfolio. I make the case for the outsized role value stocks play in it, then I make the case for why some investors may want to consider going one step further with an all-value approach. Finally, I show how to put this to work.

Most of this discussion is about equity investing. That's where your portfolio gets its growth engine for achieving long-term returns.

I'm keenly aware that most investors need at least some fixed-income funds to moderate their risk. Later in the article, I show you how to evaluate the amount of fixed income that should be in your portfolio, depending on your circumstances and your risk tolerance.


## My Investing Philosophy

Before we dig in, you should know my underlying investment beliefs and philosophy.

I believe that individual investors will get the best returns by taking three basic steps:

- Identify and invest in a combination of the most productive equity asset classes that have long histories of providing the greatest unit of return per unit of risk.
- Determine how much fixed income your portfolio should contain to mitigate the risk of owning equities while you seek the growth to meet your needs. This is sometimes a tricky balancing act.
- Find a trustworthy source for information, insights and recommendations.
I don't believe in active management or owning individual stocks. I don't believe in trying to beat the market. There's plenty of evidence that, in the long run, any investor who can reliably get the returns of the market will outperform the majority of other investors.

As such, I believe in using low-cost index funds and exchange-traded funds (ETFs) in order to keep expenses, fees and portfolio turnover low. Additionally, instead of trusting Wall Street for insights, I look to academic researchers who, without any ulterior motive or conflict of interest, have devoted their professional lives to discovering what actually
works in producing superior long-term investment returns.

Everything I'm about to tell you stems from that trust.

## The Ultimate Equity Portfolio

Since the 1990s, I have described and prescribed (and followed with much of my own investments) an equity portfolio that's sliced and diced roughly as follows: Half is in U.S. funds, and half is in international. Half is in blend funds (growth stocks and value stocks), half in value funds. Half is in large-cap stocks, half is in small-cap stocks. (On the U.S. side, I suggest including REITs [real estate investment trusts]. On the international side, I suggest including a slice of emerging markets.)

In list form, the portfolio is allocated evenly among:

- U.S. large-cap blend,
- U.S. large-cap value,
- U.S. small-cap blend,
- U.S. small-cap value,
- U.S. REITs,
- International large-cap blend,
- International large-cap value,
- International small-cap blend,
- International small-cap value, and
- Emerging markets value.

This allocation gives the portfolio a decided tilt toward value, as value stocks appear in both value funds and, to a significant extent, in blend funds.

Over the long haul, from 1970 through 2016, the returns from constructing a portfolio with such exposure would have been impressive. The portfolio's returns would have compounded at $11.3 \%$ annually, compared with $9.3 \%$ for the S\&P 500 index. Was the portfolio riskier? Yes, but not as much as you might think. (Both of these numbers, as well as the returns shown in Tables 1, 2 and 3 , reflect an assumed $1 \%$ annual charge for professional management.)

That two-percentage-point difference in compound return is huge. In the S\&P 500 , an initial $\$ 100,000$ would have grown to $\$ 6,502,245$; the same investment in the Ultimate Equity Portfolio would have grown to $\$ 14,324,293$.

The standard deviation (the typical

Table 1. Portfolio Performance Based on Annual Returns
A comparison of the performance of the two portfolios and the S\&P 500 on a compounded basis using annual return data. The four U.S. asset class portfolio is allocated to large-cap blend (large-cap growth and value), large-cap value, small-cap blend (small-cap growth and value) and small-cap value. The large and small value only portfolio is allocated to domestic large-cap value and small-cap value stocks. The standard deviation is a measure of price volatility; large numbers imply greater year-by-year variance returns.

|  | Four U.S. <br> Asset Class | Large and Small <br> Value Only | S\&P 500 |
| :--- | ---: | ---: | ---: |
| Held 1928 through 2016 | $\$ 2.2$ million | $\$ 3.7$ million | $\$ 393,039$ |
| Growth of $\$ 100$ | $11.9 \%$ | $12.5 \%$ | $9.7 \%$ |
| Compound rate of return | $96.2 \%$ | $110.6 \%$ | $54.0 \%$ |
| Best one-year return | $(51.8 \%)$ | $(58.2 \%)$ | $(43.3 \%)$ |
| Worst one-year return | $25.0 \%$ | $27.0 \%$ | $19.9 \%$ |

Source: Calculated using data from Dimensional Fund Advisors.
range in which each year's returns fluctuated) of this Ultimate Equity Portfolio was $17.8 \%$, versus $17.1 \%$ for the S\&P 500. In light of the big performance difference, I think that this additional risk is not significant.

Lots of factors contributed to the success of this worldwide combination. It gave investors the benefits of largecap stocks and small-cap stocks, growth stocks and value stocks, U.S. stocks and international stocks. But perhaps the most powerful contributing factor was the emphasis on value stocks.

In the discussion that follows, I advocate for a variation that goes considerably further toward taking advantage of value investing.

## The Case for Value Stocks

Some of the world's most famous investors have focused on value stocks.

- Warren Buffett and his mentor Benjamin Graham found their success in the bargain bins of value, as did Peter Lynch of Fidelity Magellan fame.
- John Templeton took a similar approach by loading up on Japanese companies early, while they were still making relatively inferior products. He also showed his value orientation when, during the depression of the 1930s, he bought 100 shares
of each NYSE-listed company that was selling for less than $\$ 1$ a share. In the United States, value stocks have been tracked as a distinct asset class for nearly 90 years. Compared with the S\&P 500, value stocks have produced higher long-term returns in many periods, although they have produced significantly greater losses in other periods.

The underlying assumption of value investing is that some stocks are out of favor (and selling at bargain prices), but will later regain the favor of investors and command higher prices.

Buying value stocks one at a time is very risky. Buying them as an asset class, preferably through an ETF or an index fund, has proven to be profitable in almost all long-term periods, however.

We have reliable data going back to 1928 on the four basic U.S. asset classes: large-cap blend (essentially what we know as the S\&P 500), large-cap value, small-cap blend and small-cap value. The data shown in Tables 1, 2 and 3 supports the case for value investing. (I don't necessarily suggest simply buying four or two funds to match the asset combinations shown in the tables, but the data is useful for comparison because it goes so far back.)

Table 1 shows the long-term performance using annual return data. Obviously, an 89 -year investment horizon

## Table 2. Portfolio Performance Based on Rolling 15-Year Periods


#### Abstract

A comparison of the performance of the two portfolios and the S\&P 500 based on rolling 15 -year periods. The four U.S. asset class portfolio is allocated to large-cap blend (large-cap growth and value), large-cap value, small-cap blend (small-cap growth and value) and small-cap value. The large and small value only portfolio is allocated to domestic large-cap value and small-cap value stocks. The standard deviation is a measure of price volatility; large numbers imply greater year-by-year variance returns.


|  | Four U.S. <br> Asset Class | Large and Small <br> Value Only | S\&P 500 |
| :--- | :---: | :---: | ---: |
| 15-year periods, $1928-2016$ | $\$ 676$ | $\$ 782$ | $\$ 465$ |
| On average, $\$ 100$ grows to | $13.6 \%$ | $14.7 \%$ | $10.8 \%$ |
| Average compound return | $22.1 \%$ | $24.2 \%$ | $18.9 \%$ |
| Best 15-year return | $0.6 \%$ | $(0.9 \%)$ | $0.6 \%$ |
| Worst 15-year return | $22.4 \%$ | $24.0 \%$ | $18.2 \%$ |

Source: Calculated using data from Dimensional Fund Advisors.

## Table 3. Portfolio Performance Based on Rolling 40-Year Periods

A comparison of the performance of the two portfolios based on rolling 40year periods. The four U.S. asset class portfolio is allocated to large-cap blend (large-cap growth and value), large-cap value, small-cap blend (small-cap growth and value) and small-cap value. The large and small value only portfolio is allocated to domestic large-cap value and small-cap value stocks. The standard deviation is a measure of price volatility; large numbers imply greater year-by-year variance returns.

|  | Four U.S. <br> Asset Class | Large and Small <br> Value Only | S\&P 500 |
| :--- | :---: | ---: | ---: |
| 40-year periods, 1928-2016 | $\$ 17,396$ | $\$ 26,564$ | $\$ 6,314$ |
| On average, \$100 grows to | $13.8 \%$ | $15.0 \%$ | $10.9 \%$ |
| Average 40-year compound return | $15.9 \%$ | $17.2 \%$ | $12.5 \%$ |
| Best 40-year return | $10.8 \%$ | $10.7 \%$ | $8.9 \%$ |
| Worst 40-year return | $21.9 \%$ | $23.3 \%$ | $17.8 \%$ |

Source: Calculated using data from Dimensional Fund Advisors.
is unreasonable for most people. Plus, looking at performance one year at a time is far too brief and choppy for someone seeking to take advantage of long-term returns.

Table 2 shows how the portfolios would have performed based on rolling 15 -year periods from 1928 through 2016. There were 75 such periods.

Table 3 is similar to Table 2, but uses rolling 40 -year periods. Forty years is a reasonable time horizon for many investors, even those who have recently retired. There were 50 such periods.

Whether you choose 15 years or 40
years for your measurement, these tables show a consistent pattern: Holding a portfolio allocated to four U.S. asset classes outperformed the S\&P 500, and the all-value combination outperformed the four-way combination. After 40 years, there's an enormous difference between having $\$ 6,314$ (from the S\&P 500), having $\$ 17,396$ (from four asset classes) and having $\$ 26,564$.

The data also shows that, as you would expect, returns from longer time frames are less variable than those from shorter periods. The differences in risk between the portfolios are much less
dramatic (and frankly I think very few investors pay much attention to standard deviations).

The calculations are derived from the database of Dimensional Fund Advisors, which calculates indexes and runs a series of asset-class funds. The returns are before any fund expenses or advisory fees.

Value's advantage isn't limited to the United States. International value funds have shown an advantage over international blend funds.

We have reliable data for international value-centric asset classes going back to 1970 , giving us 47 calendar years of data through 2016. Unless otherwise noted, that's the data I have used for the remainder of this discussion.

## The Ultimate Value Portfolio

For the Ultimate Value Portfolio, I suggest five asset classes:

- U.S. large-cap value,
- U.S. small-cap value,
- International large-cap value,
- International small-cap value, and
- Emerging markets value.

Various mutual funds and ETFs provide exposure to these asset classes. As a general rule, seek low-cost, passive approaches. (My personal suggestions for specific funds and ETFs are listed at www.paulmerriman.com; click on "Recommendations" and then on "Best-in-Class Recommended Portfolios." No registration is required.)

This portfolio retains the benefits of having small-cap stocks and international stocks. By eliminating blend funds (both large and small, U.S. and international), this all-value combination gets rid of most of the growth stocks.

As it turns out, from 1970 through 2016, the Ultimate Value Portfolio would have achieved better returns with only slightly higher risks than the Ultimate Equity Portfolio outlined earlier. The data is shown in Table 4.

## What Makes a Stock a "Value Stock?"

There are many reasons you could

## Table 4. The Ultimate Equity Portfolio Versus the Ultimate Value Portfolio

A comparison of the two portfolios and the S\&P 500. Compounded returns are annualized. The standard deviation is a measure of price volatility; large numbers imply greater year-by-year variance returns.

|  | Ultimate <br> Equity | Ultimate <br> Value | S\&P 500 |
| :--- | ---: | ---: | ---: |
| 1970-2016 | $11.4 \%$ | $12.1 \%$ | $10.3 \%$ |
| Compound return | $14.7 \%$ | $15.1 \%$ | $15.2 \%$ |
| Standard deviation | 14.7 | $(53.3 \%)$ |  |

Source: Calculated using data from Dimensional Fund Advisors.

## What's Not to Like About Value Stocks?

Individually, value stocks are very risky. After all, in every case there's a reason why institutional investors are wary.

Value stocks can lose more money than the S\&P 500. The worst drawdown of the S\&P 500 from 1970 through 2016 was $50.1 \%$; the Ulti-
decide that a company's stock is (or should be) out of favor. Maybe you don't like the product or the company culture or the politics of the CEO. Maybe the competition is doing a better job. For those and other subjective reasons, thousands of investors may be willing to pay less for some companies.

You can't create an index of value companies that way, however. Fortunately, quantitative measures are easy to find. The most common indicators are the price-to-book-value $(\mathrm{P} / \mathrm{B})$ ratio and the price-earnings $(\mathrm{P} / \mathrm{E})$ ratio.

When hundreds of stocks are lumped together by those measures, higher returns typically come from companies with stocks that are more deeply discounted.

The numbers needed to evaluate individual companies (and for that matter the portfolios of mutual funds and ETFs) are readily available from various financial websites.

## What's to Like About Value Stocks?

Individually, value stocks may be the ugly ducklings of the stock market. Collectively, they provide extra returns with the potential to change lives.

Value stocks also tend to hold up better in bear markets:

- In the bear market of 1973 and 1974, the S\&P 500 lost $37.3 \%$; the Ultimate Value Portfolio also declined, but only by $14.5 \%$.
- In 2000 through 2002, while the S\&P 500 lost $37.6 \%$, the Ultimate Value Portfolio lost only $6.9 \%$.
mate Value Portfolio's biggest drawdown was a loss of $60.1 \%$. Value's underperformance can also last a long time. At the end of 1998, U.S. value stocks had trailed U.S. growth stocks for the previous one-, three-, five-, 10-, 15- and 20-year periods.

That long underperformance made it very easy for many value investors to get discouraged. It prompted lots of experts to proclaim that value investing no longer worked.

## Turbocharging Any Portfolio With Value

Despite this very impressive evidence of the value of value, I'm guessing that relatively few investors will be comfortable going "all-in" by adopting an all-value portfolio.

However, any portfolio that includes equities can potentially get a long-term boost from value investing. Here are a few ways to do that.

- If you are invested in a target date fund, consider having $10 \%$ to $40 \%$ of your portfolio in value funds while keeping the rest in the target date fund. You'll retain the conservative glide path of the target date fund, but the boost of value could double the amount of money you have available when you retire.
- If you're a young investor with a long time horizon, consider having as much as $75 \%$ of your equities invested in all-value. This could more than double what you have
at retirement.
- Even if you're retired, consider allvalue for a slice of your portfolio in order to potentially provide more money for your estate and perhaps increase the amount you can safely withdraw.


## Should You Have an All-Equity Portfolio of Any Kind?

As I mentioned earlier, most investors should at least seriously consider owning fixed-income funds to mitigate the very real risks of equity ownership. The topic is too big to adequately cover here, but I can make a few general statements and then introduce you to a couple of tables that will help you evaluate your own situation.

Here's the key question you have to answer: How much fixed income should you have? This question is tricky. While fixed income makes for a more stable portfolio over time, it is likely to reduce the growth that most investors need to keep up with (and ideally to stay ahead of) inflation.

If you must have a quick-and-dirty answer, consider this: Unless you are quite young (say in your 20s or 30 s), very wealthy, or very nervous, you won't go too far wrong having $40 \%$ to $60 \%$ of your portfolio in fixed income and the rest in equities.

Many endowments and insurance companies usually keep $35 \%$ to $40 \%$ of their portfolios in fixed income.

To get a more detailed answer, you may want to explore the two tables that accompany the online version of this article, "Fine Tuning Table: Ultimate Equity Portfolio" and "Fine Tuning Table: Ultimate Value Portfolio." Each table shows year-by-year returns from 1970 through 2016 for 12 combinations of assets, from $100 \%$ bonds to $100 \%$ stocks, plus the S\&P 500. At the bottom of each column you'll find a set of statistics for that particular asset combination over this 47 -year period. As you would expect, as the percentage of equity increased (and bonds decreased), returns rose and so did risks, as measured by standard deviation and worst-period
performance.
You can use these tables as a sort of thought experiment by running your finger down a column looking for losing years (or series of losing years) that you think you would find too distressing to stick with a particular allocation. Another way to use the numbers is to search at the bottom part of the tables for the compound return you would need, and then see if you could tolerate the risks involved.

The next 47 years won't be the same as those shown here, of course. But I'm confident that the overall relationships between return and risks will not change much.

As you compare the two tables, you'll see that the compound returns of the Ultimate Value Portfolio are higher than those of the Ultimate Equity Portfolio. This leads me to a final point: In the long run, the expected returns of the Ultimate Value Portfolio are high
enough that many investors may be able to meet their needs while keeping more of their portfolio in fixed-income funds.

It might be just the ticket in a household where one person is a bit of a worrywart: A little more fixed income will help mitigate risk, while an allocation to the all-value equity portfolio is likely to enhance long-term returns.

Sounds like a potential win-win to me!

Richard Bucke contributed to this article.

Paul Merriman is president of The Merriman Financial Education Foundation and author of "Financial Fitness Forever: 5 Steps to More Money, Less Risk and More Peace of Mind" (McGraw-Hill, 2011). Find out more about Merriman at www.aaii.com/ authors/paul-merriman.
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and behavior and that drive the formation of our personalities as investors. Our view of ourselves in the world is profoundly impacted by early life experiences, and messages we get from others about money, wealth and risk-taking. As adults, our life experiences manifest themselves in the type of investor personality we take on: Fixer, Survivor or Protector. Each personality type has unique emotional characteristics that
drive investment behaviors, and each personality type morphs emotionally as market conditions shift from low to high stakes.

By understanding ourselves as emotional beings, we can bring greater self-awareness to the investing process and to the behaviors that impel us both in low-stakes and high-stakes situations. By becoming self-aware investors, we can recognize and manage our emotional
triggers and make better, more realitybased decisions about investing. In so doing, we can avoid excessively emotional responses to the marketplace that undermine otherwise well-constructed wealth management plans and consistent achievement of our financial goals. $\boldsymbol{\wedge}$

The opinions in this article and in the book, "Working With the Emotional Investor," belong solely to Cbris White and do not express the opinions of Hemenvay Trust Company.

Chris White is a senior investment counselor at Hemenway Trust Company, LLC. He is author with Richard Koonce of the book "Working With the Emotional Investor" (Praeger, 2016). Find out more about White at www.aaii.com/authors/chris-white.

