CornerCap
Institutional

Improving Portfolios with Small-Cap Value

Key Insights

- Investors' experience of the past ten years—when large stocks beat small and large-cap growth has dominated—runs counter to historical lessons.
- Small-cap stocks have historically provided the best return profile in public markets.
- Style matters. While value and growth can play complementary roles in a balanced portfolio, the highest returns have typically come from value over broad economic environments.
- Research suggests that small-cap value navigates most macroeconomic regimes better than the growth style, except for periods resembling low economic growth, low interest rates, and low inflation. An economic environment that is now in the rear-view mirror.

If a coin-flip ends in heads ten times in a row, what would you predict the probability of the next flip's results to be heads? If it isn't 50%, you have allowed recency bias to creep into your decision making. Recency bias can be hard to avoid in the investing world. This can lead to poor decision-making if investors are not considering all available information.

Looking at the past decade, it would be easy to assume that small-cap stocks and value strategies are perennial laggards in investment performance, and that may go on for another decade. But history shows this view as a major mistake! Based on CornerCap's investment experience of over 30 years of varied market environments and an in-depth analysis of long-term, Fama / French data, we believe US small-cap value equity offers some of the best risk-adjusted returns.

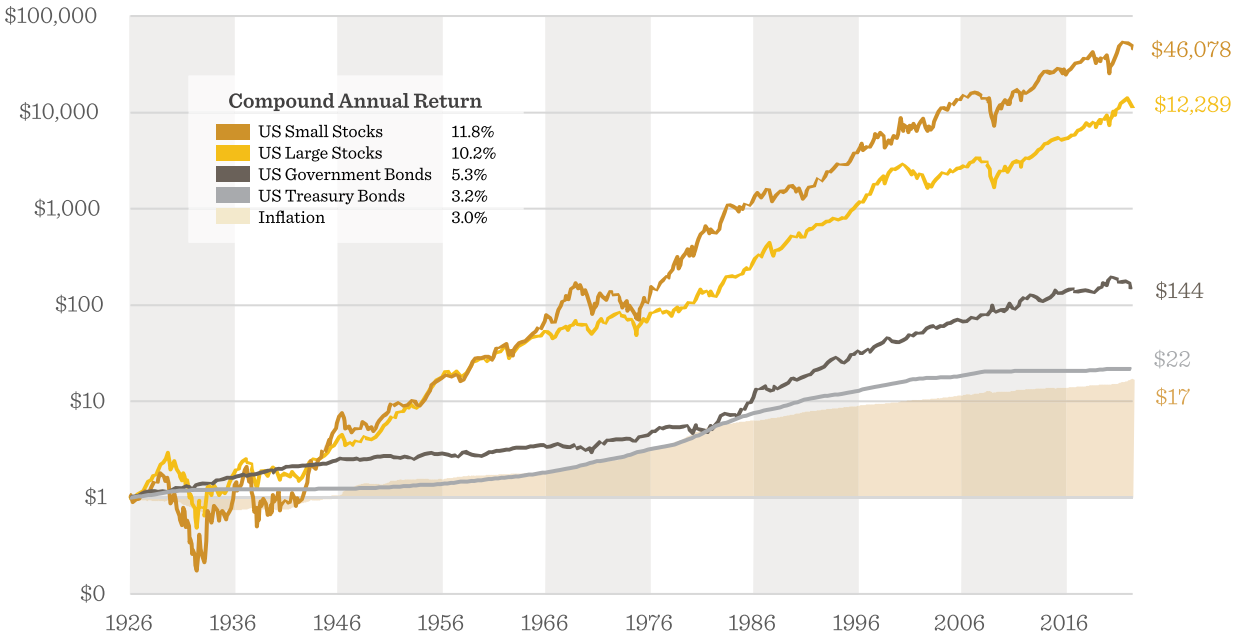
For the remainder of the paper, we review returns of different asset classes, including a focused comparison of US equity markets classified by size and style. Then we explore those returns in different macroeconomic regimes to determine if there are advantages to certain assets within different market environments. By the end, we hope our historical analyses helps to reduce recency bias in support of US small-cap value, leading investors to overweight, or at the very least, include the strategy in balanced portfolios with long-term investment horizons.

1355 Peachtree Street, Suite 1700 | Atlanta, GA 30309
404 455 5117 | cornercapinstitutional.com

Historical Returns

Stocks, in general, have provided the best historical returns, outpacing government securities and inflation, and small-cap stocks have outperformed large stocks by 1.6% per annum (Exhibit 1). This is a healthy margin when considering the effects of compounding returns.

Exhibit 1: Ibbotson® SBBI®
Stocks, Bonds, Bills, and Inflation 1926 – June 2022



Source: Morningstar and Precision Information, dba Financial Fitness Group 2022. Past performance is no guarantee of future results. Hypothetical value of $1 invested at the beginning of 1926. Assumes reinvestment of income and no transaction costs or taxes. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index.

Given today's inflationary environment, stocks are the only group that have historically provided relief from the erosion of inflation. After inflation, small-cap stocks' annual real return is 8.6%[1] while US Treasury Bills returned 0.3%--meaning an investor would have barely gained on his or her investment since 1926.

Exhibit 2: Ibbotson® SBBI®
Real Returns (Returns after Inflation) 1926 – June 2022

Asset Class	Compound Annual Return	Real Returns
US Small Stocks	11.8%	8.6%
US Large Stocks	10.2%	7.0%
US Government Bonds	5.3%	2.2%
US Treasury Bills	3.2%	0.3%

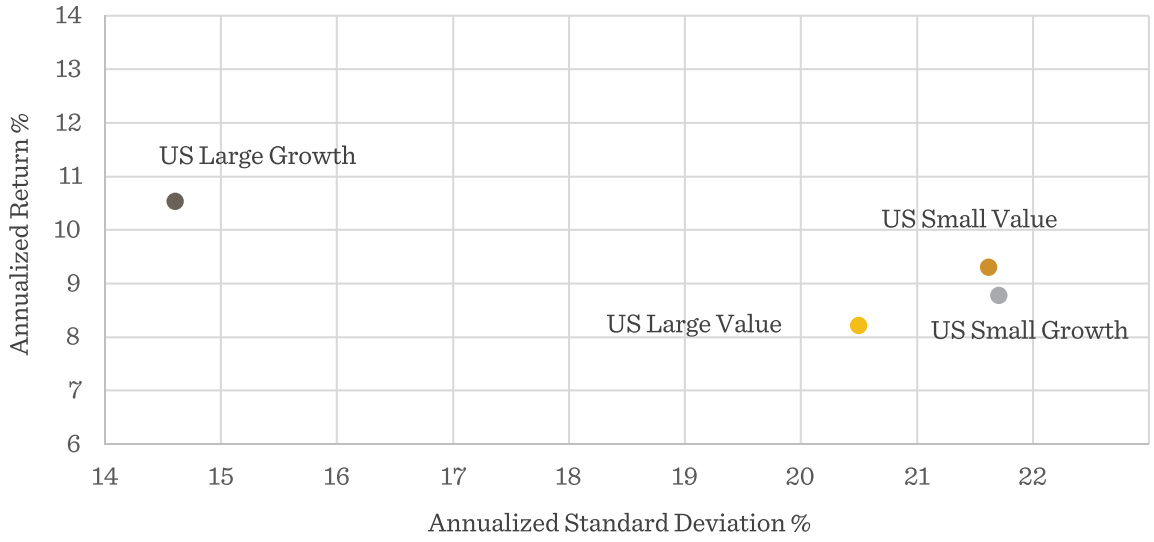
[1]*Real return = (1 + nominal rate of return) / (1 + inflation) – 1*

Returns and Risk by Size and Style

A simple investment principle is the risk-return tradeoff; meaning the higher the risk of an investment, the higher the potential (or expected) return. Risk is typically defined by standard deviation, which measures the dispersion of returns around the average return for a given time.

Over the past 20 years, large-cap growth has dominated the other asset classes (Exhibit 3), driven mostly from results of the last decade. Large-cap value has struggled compared to large growth with both lower returns and higher risk. Small-cap value has had similar risk to its growth counterparts with higher returns to both small-cap growth and large-cap value.

Exhibit 3: Returns and Risk by Size and Style – Last 20 years



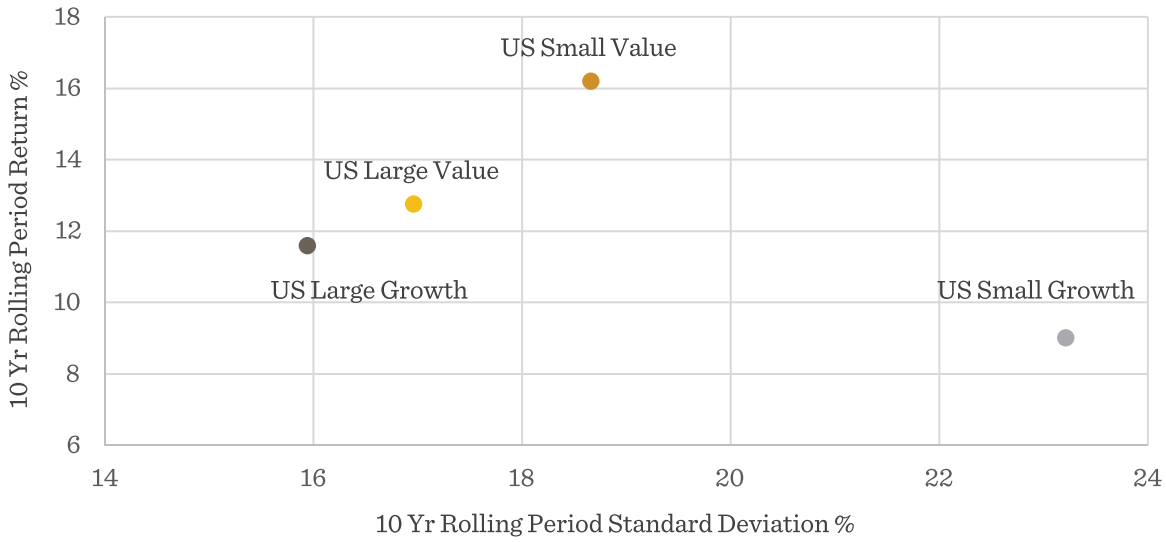
Source: Kenneth R. French Data Library[2], CornerCap Analysis. Chart data from June 2002 – June 2022. Annualized returns and standard deviation calculations based on monthly periods. Past Performance is no guarantee of future results.

However, studying a longer-term history paints a different picture where small-cap value has dramatically outperformed (Exhibit 4). Over the past 50 years, large-cap value stocks have slightly beaten large-cap growth on a risk-adjusted basis. Small-cap stocks remained riskier than large caps, but the incremental risk has historically rewarded small cap value.

Annualized returns may not reflect individual investors' experiences since they can be significantly influenced by start and end dates so presented below are the average 10-year rolling period returns and standard deviations for each asset class.

[2] https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html. *Fama/French Research Portfolios are value-weighted and constructed at the intersection of 2 portfolios formed on size (market equity) and 3 portfolios formed on the ratio of book equity to market equity.*

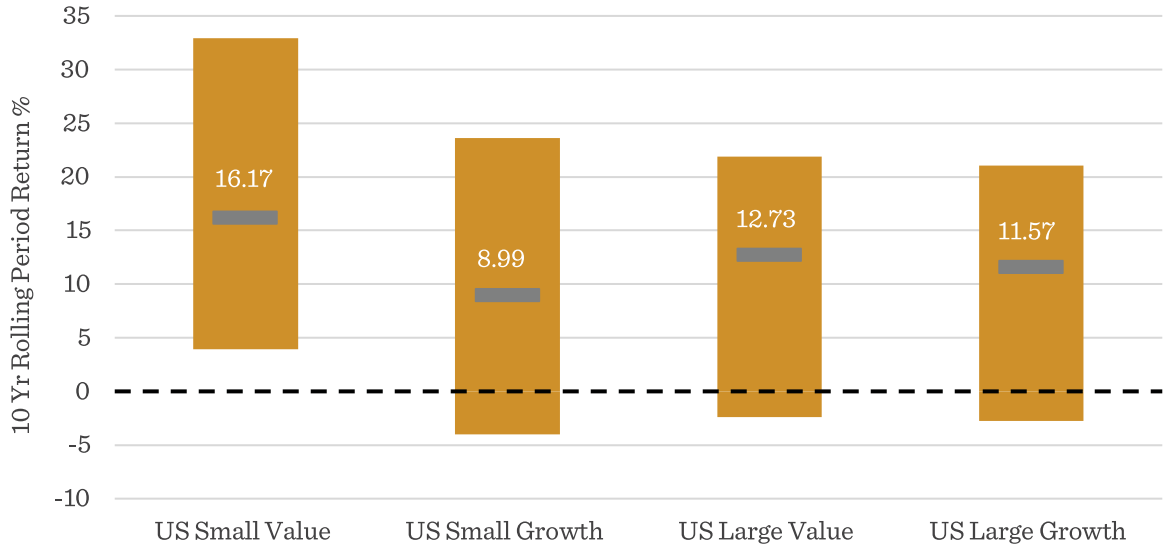
Exhibit 4: Returns and Risk by Size and Style – Last 50 years



Source: Kenneth R. French Data Library, CornerCap Analysis. Chart Data from June 1972 – June 2022. Average annualized 10-year returns and standard deviations based on rolling monthly periods. Past Performance is no guarantee of future results.

Another interesting point from the previous analysis comes from comparing the range of 10-year rolling monthly returns among equity asset classes. Since 1972, small-cap value has had a much higher maximum return than others and is the only one where the minimum 10-year return is above zero (Exhibit 5). Investing in stocks is inherently risky where the loss of capital happens often, but to not log a negative 10-year return makes for a compelling asset to hold in a portfolio.

Exhibit 5: Range of Returns



Source: Kenneth R. French Data Library, CornerCap Analysis. June 1972 – June 2022. Average annualized 10-year returns and standard deviations based on rolling monthly periods. Past Performance is no guarantee of future results.

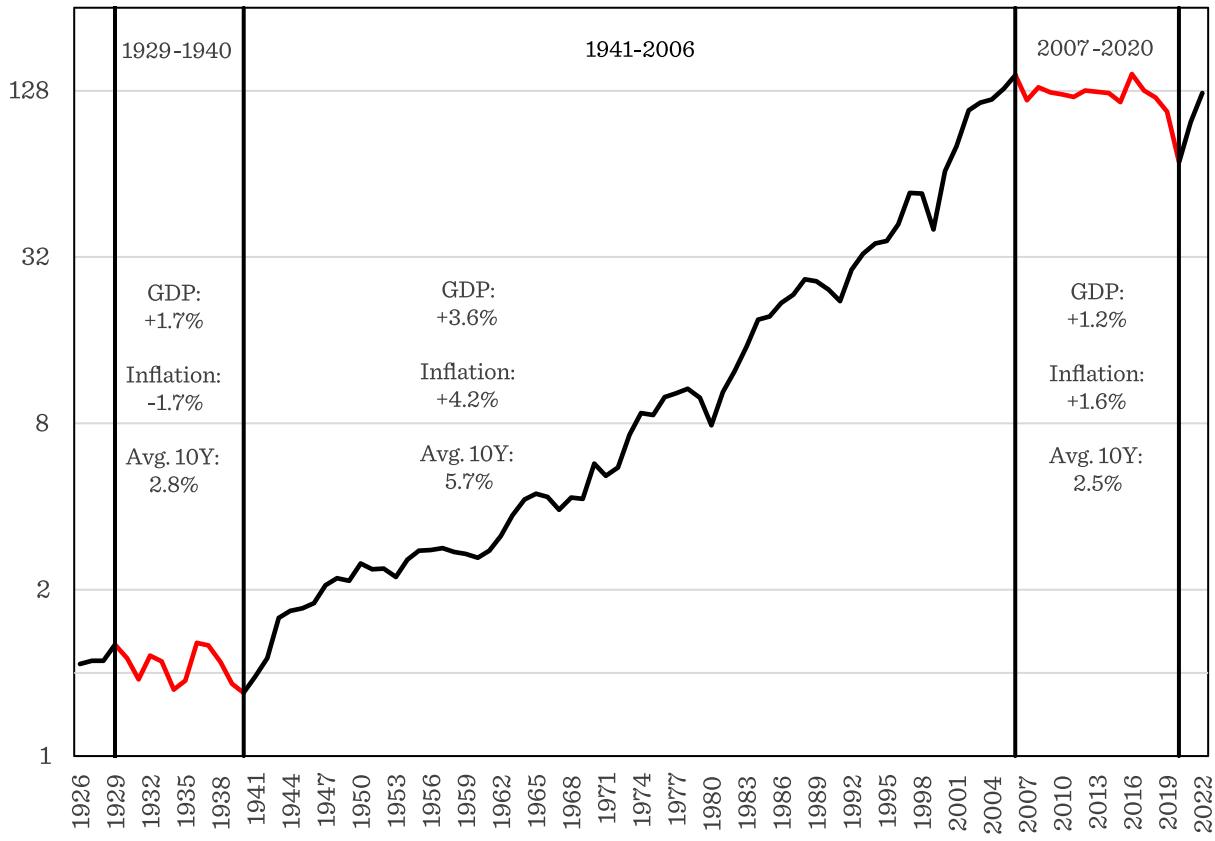
Returns in Different Macroeconomic Environments

Extending the study beyond 50 years, allows us to compare returns in different macroeconomic regimes to determine if there were periods when one style had an advantage over the other. Our approach was to study the *level* in economic variables (e.g., inflation between 3-4%), as well as the *trend* (e.g., rising inflation).

Does the Macro Environment *Level* Matter?

To begin, we studied the levels of the economic variables for any indication of the type of environments when small-cap value may underperform or when other asset classes may be advantageous. Our research suggests that the level of GDP growth, inflation, and long-term interest rates has been impactful on value vs. growth returns (Exhibit 6). It is logical that growth stocks would outperform when growth in the economy is scarce. Growth stocks are a longer-duration asset than value stocks because a higher proportion of their cash flows are expected in the future. And an environment of low long-term bond yields impacts the discount rate that investors use to value the cash flows, which has a more favorable impact on growth valuations.

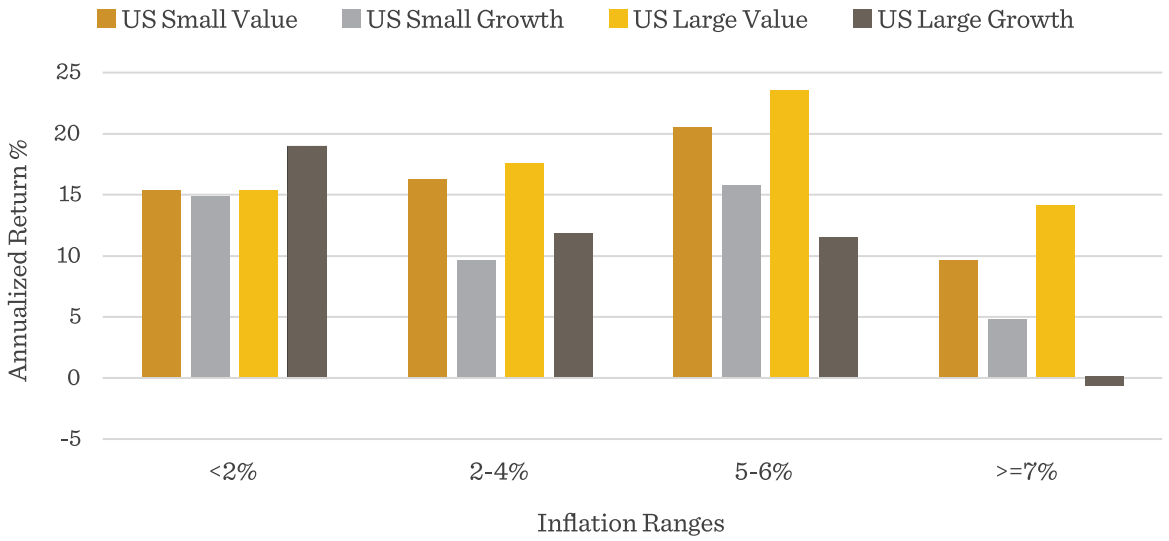
Exhibit 6: Small-cap Value/Small-cap Growth Relative Index (Annual, Log Scale)



Source: Kenneth R. French Data Library, Bureau of Economic Analysis (BEA), Federal Reserve Bank of St. Louis, US Treasury, US Bureau of Labor Statistics, CornerCap Analysis. July 1926 – June 2022. Relative Index calculated as small-cap value return / small-cap growth return. Other metrics calculated as average of the annual periods within the time set. Past Performance is no guarantee of future results.

Inflation is at the forefront of investors' minds, so we studied different levels of inflation and how it impacted style and size stock performance. We found that small-cap value has been competitive in all ranges of inflation, but the key takeaway is the *inverse* relationship between inflation and growth (Exhibit 7), i.e., growth has underperformed in higher inflationary environments. This is consistent with what we saw over the full history in Exhibit 6.

Exhibit 7: Annualized Monthly Returns by Inflation Ranges – Last 50 Years



Source: Kenneth R. French Data Library, US Bureau of Labor Statistics – Consumer Price Inflation (CPI), CornerCap Analysis. June 1972 – June 2022. Annualized returns based on average one-month returns. Past Performance is no guarantee of future results.

What About the Trend of Economic Activity?

To measure and determine if the characteristics of the market trend matter, we studied monthly, rolling one-year small-cap value (SV) returns compared to small-cap growth (SG) returns in periods when the US Consumer Price Index (CPI) or 10-year US Treasury yields were rising or falling. Rising or falling regime periods were determined by comparing the current month's value to the same month in the previous year[3]. We have provided the results for the full history since 1926 (Exhibit 8).

The historical study shows that the trend in economic data has not necessarily been a good indicator for value vs. growth performance, as small value's performance has been favorable relative to small growth in all trending environments, outperforming between 5-6% annually in all regimes. The consistency of outperformance (measured by batting average or percentage of times SV beat SG) is also of importance, but specifically that the batting average for SV beating SG is better in rising CPI and Treasury yield regimes.

We also analyzed data during recessionary periods. Small value has had the return advantage regardless of whether the economy was in a recession, but the batting average for SV was much stronger in periods when the economy was not in a recession.

[3]*E.g., Inflation regime = CPI June 2022 / CPI June 2021 – 1. If positive, rising inflation.*

Exhibit 8: Market Trend Environments

Since July 1926	Regime	Periods SV Beat SG	Batting Average	SV Return	SG Return	Average Spread
CPI	Rising	389/571	68%	18.6%	13.3%	5.3%
	Falling	333/569	59%	19.7%	13.6%	6.0%
10yr US Treasury	Rising	403/575	70%	20.6%	13.7%	6.1%
	Falling	319/565	56%	17.7%	13.2%	5.8%
Recession	True	114/217	53%	-8.6%	-14.5%	5.9%
	False	609/934	65%	25.4%	19.7%	5.7%

Source: Kenneth R. French Data Library, National Bureau of Economic Research (NBER), Federal Reserve Bank of St. Louis, US Bureau of Labor Statistics, CornerCap Analysis. July 1926 – June 2022. Based on one-year period returns. Past Performance is no guarantee of future results.

Conclusion

The evidence supports our belief that small-cap value offers many benefits to an investor's portfolio. Contrary to history, the past ten years has been a period when large stocks beat small and large-cap growth reigned superior, bringing investors to wonder if this is the new normal. We believe that it has been a matter of the economic regime—low growth, low interest rates, and low inflation—that is now fading away into an environment that has been favorable for small-cap value.

About CornerCap and our methodology: *Developing and implementing systematic investment models is at the heart of what we do at CornerCap. As a data-driven firm, we are methodical and deliberate in how we employ the quantitative research that prioritizes the stocks invested in client portfolios. We spend most of our research time studying and testing objective characteristics—or factors—that drive investment returns. These factors are tested individually and collectively to become the inputs into our models, so we can be confident in its outcome. Just as important is identifying and avoiding factors that do not hold up to the statistical analysis over periods spanning multiple economic regimes. It is our belief that rigorously testing a wide variety of investment theses can provide insights, help avoid human biases, and improve the probability of success.*