Understanding T. Rowe Price's Strategic Investing Approach

Discipline creates a strong investment process for our clients.

KEY INSIGHTS

- Fundamental analysis, backed by our global research platform, is the core of our investment approach and provides a strong foundation for stock selection.
- To uncover opportunities for our clients, we constantly analyze markets and the companies within them. We talk to the key players to seek the answers we need.
- Our investment professionals investigate how the companies we're investing in are performing today to assess how we think they'll perform in the future.
- We seek to go beyond the numbers and get ahead of change, which we believe leads to better decisions and prudent risk management.

(Fig. 1) **Manager Results Can Be Volatile Over the Short Run**

Percentage of managers in eVestment Alliance database exceeding their category and style benchmarks (net of fees)[1]

Rolling one-year periods ended December 31, 2021

eVestment Manager Categories

U.S. Large Growth
255 Managers

U.S. Large Value
320 Managers

U.S. Small Growth
167 Managers

U.S. Small Value
216 Managers

Relative manager results can vary widely over short-term periods due to market trends or other factors. The result is a high degree of volatility or statistical "noise."

Sources: Zephyr StyleADVISOR and eVestment Alliance LLC. Data analysis by T. Rowe Price. Created with Zephyr StyleADVISOR.

Past performance is not a reliable indicator of future performance.

[1] Size and style categorization is by eVestment Alliance.

Not all strategies/structures presented herein are available in all jurisdictions from T. Rowe Price. The information is provided for illustrative, informational purposes only.

> Evaluating managers based on quarterly or even annual results can be difficult and potentially misleading. Successful strategies often take time to bear fruit....

Most sophisticated investors are aware of the pitfalls of overreacting to short-term market trends—a habit that can lead to disappointing long-term returns. Capital markets are volatile, and investors who rush to sell or buy assets based solely on their recent performance may find they've taken on more risk than they expected.

The same principle applies to actively managed investments—those that seek to add value for clients through security selection, sector rotation, factor weighting, or other techniques. Like the markets themselves, relative performance tends to be volatile. Evaluating managers based on quarterly or even annual results can be difficult and potentially misleading. Successful strategies often take time to bear fruit, and contrarian bets are rarely rewarded immediately. Attractive growth opportunities may be prospective, not immediate, and undervalued companies may remain undervalued for months or years.

The academic literature is clear about the obvious problem that the "average" active manager faces in seeking to generate excess returns, especially net of fees and other costs. Over time, the positive and negative excess returns of active managers as a group have tended to balance out, leaving fees and other costs as a net drag on relative performance.

However, while we recognize the virtues of passive index strategies—and employ indexed components in some of our asset allocation strategies—we do believe strongly that a skilled strategic investing approach has the potential to add value for clients over longer-term time horizons.

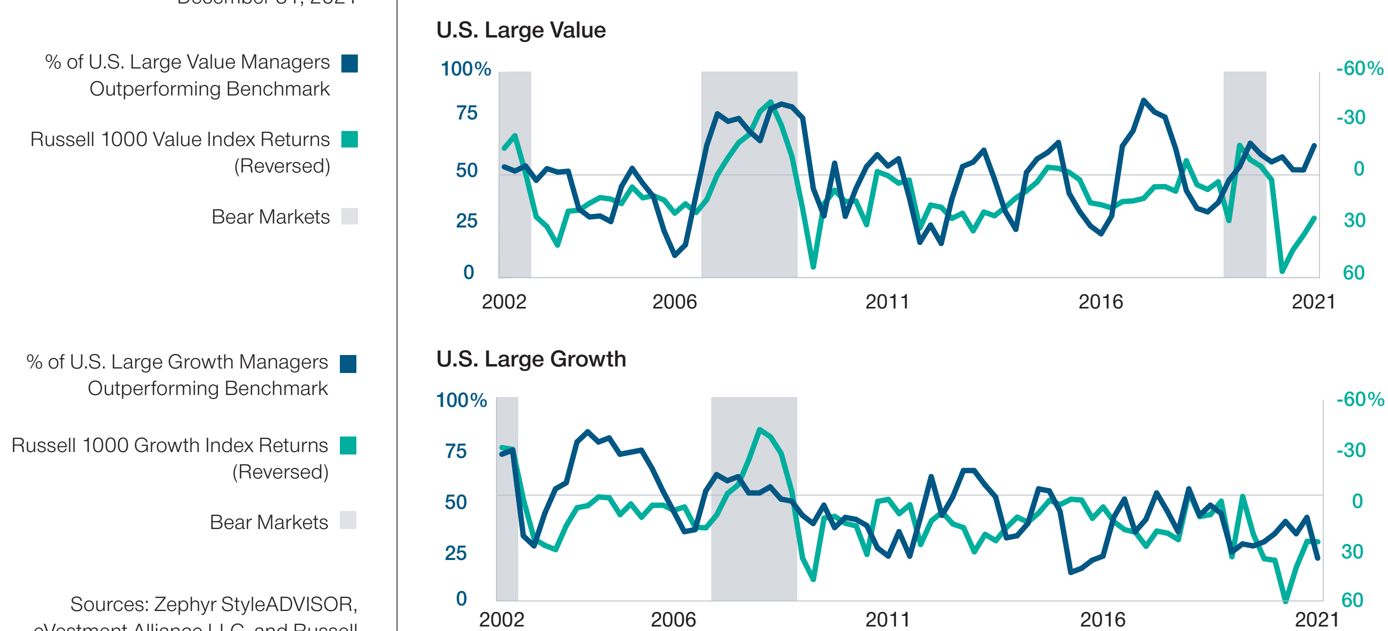
Evaluating manager performance requires investors and/or their financial advisors to distinguish between the signal and the noise—that is, to see past the many factors that may generate volatility in relative returns and paint a distorted short-term picture (either positive or negative) of manager skill.

(Fig. 2)

Active Managers May Lead in Bear Markets, Lag in Bull Markets

Manager performance vs. benchmark performance (net of fees)

Rolling one-year periods ended December 31, 2021



Active managers, as a group, have tended to outperform in bear markets by limiting downside volatility. Market performance has been inverted in the above charts to make that point clearer.

Sources: Zephyr StyleADVISOR, eVestment Alliance LLC, and Russell (see Additional Disclosures). Data analysis by T. Rowe Price. Created with Zephyr StyleADVISOR.

Past performance is not a reliable indicator of future performance.

Active U.S. equity managers as a group have been somewhat more likely to outperform in periods when market returns have been more variable.

Relative Performance Is Noisy in the Short Term

The first point to recognize is that relative performance—equity performance, in particular—can be extremely volatile over the short run, as seen by the trends in manager rankings in four key size/style categories in the eVestment Alliance database over the past two decades (Figure 1).[2]

While aggregate relative outperformance will tend to equal aggregate underperformance over time, that may mean a relatively small number of managers outperforming a benchmark by wide margins while a large majority of managers slightly underperform—or vice versa. This balance can reverse very quickly. When return dispersion is low, manager and benchmark performance may differ by only a handful of basis points, further magnifying the volatility of relative performance rankings when return differentials widen again.

Times When Active Outperforms

Within that short-term noise, more predictable—or at least more cyclical—patterns also may be found. Research has identified several broad market environments in which active equity managers, in general, may be more likely to outperform. These include:

- **Bear markets:** Research suggests that active U.S. equity managers have had a relatively higher chance of outperforming when market performance is poor (Figure 2). One study has argued that this effect persisted even after differences in exposure to market risk (i.e., beta) were taken into account, suggesting that active managers have provided a certain amount of relative performance improvement in more volatile markets.[3]
- **High return dispersion:** Historically, when the correlation of returns within a benchmark was low, active managers as a whole may have had more opportunities to add value through security selection or sector rotation (Figure 3). However, this trend did not hold amid the market disruptions associated with the pandemic and the subsequent market recovery. It remains to be seen whether the historical pattern will reassert itself if dispersion remains elevated going forward.
- **Volatile markets:** Active U.S. equity managers as a group have been somewhat more likely to outperform in periods when market returns have been more variable.

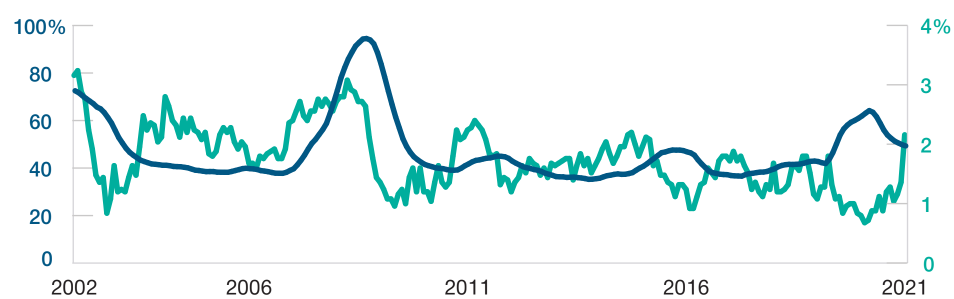
(Fig. 3) High Return Dispersion Historically Created Opportunities for Active Managers to Add Value

Active manager performance vs. return dispersion (net of fees)

Rolling one-year periods ended December 31, 2021

% of U.S. Large Core Managers Outperforming the Russell 1000 Index

Average Dispersion of Trailing 90-Day Returns in the Russell 1000 Index



Sources: Zephyr StyleADVISOR, eVestment Alliance LLC, and Russell (see Additional Disclosures). Data analysis by T. Rowe Price. Created with Zephyr StyleADVISOR.

Past performance is not a reliable indicator of future performance.

[2] Based on relative performance of the managers in their respective categories in the eVestment Alliance database, net of fees, as of December 31, 2021. The performance of large growth managers was measured against the Russell 1000 Growth Index, large value managers against the Russell 1000 Value Index, small growth managers against the Russell 2000 Growth Index, and small value managers against the Russell 2000 Value Index.

[3] Kosowski, "Do Mutual Funds Perform When It Matters Most? U.S. Mutual Fund Performance and Risk in Recessions and Expansions," *Quarterly Journal of Finance*, Vol. 1, No. 3, 2011.

Over longer time horizons, periods of extreme relative underperformance or outperformance have tended to revert toward the mean, smoothing out some of the noise that dominates quarterly and annual results. This tendency is highlighted in Figure 4, which shows relative manager performance in the same four eVestment Alliance categories as in Figure 1 but across progressively longer rolling time periods.[4] The influence of longer-term cyclical factors is now more visible.

Study of T. Rowe Price Diversified U.S. Equity Strategies

Looking at broad historical trends can be enlightening when it comes to evaluating the performance of active managers as a group. But it doesn't tell us much about the question investors are probably most interested in: Can my manager generate positive excess returns after management fees and other costs?

For investors with longer time horizons—such as pension plan sponsors—we believe this question is best answered across multiyear periods (or even multiple market cycles) to filter out the short-term relative volatility described above. However, the standard 1-, 3-, 5-, and 10-year return histories typically shown to clients and prospective investors—and used in many industry performance studies—provide

(Fig. 4)

Rolling periods ended December 31, 2021

Relative Performance Has Been More Stable Over Longer Time Horizons

Percentage of managers in the eVestment Alliance database outperforming their benchmarks (net of fees)

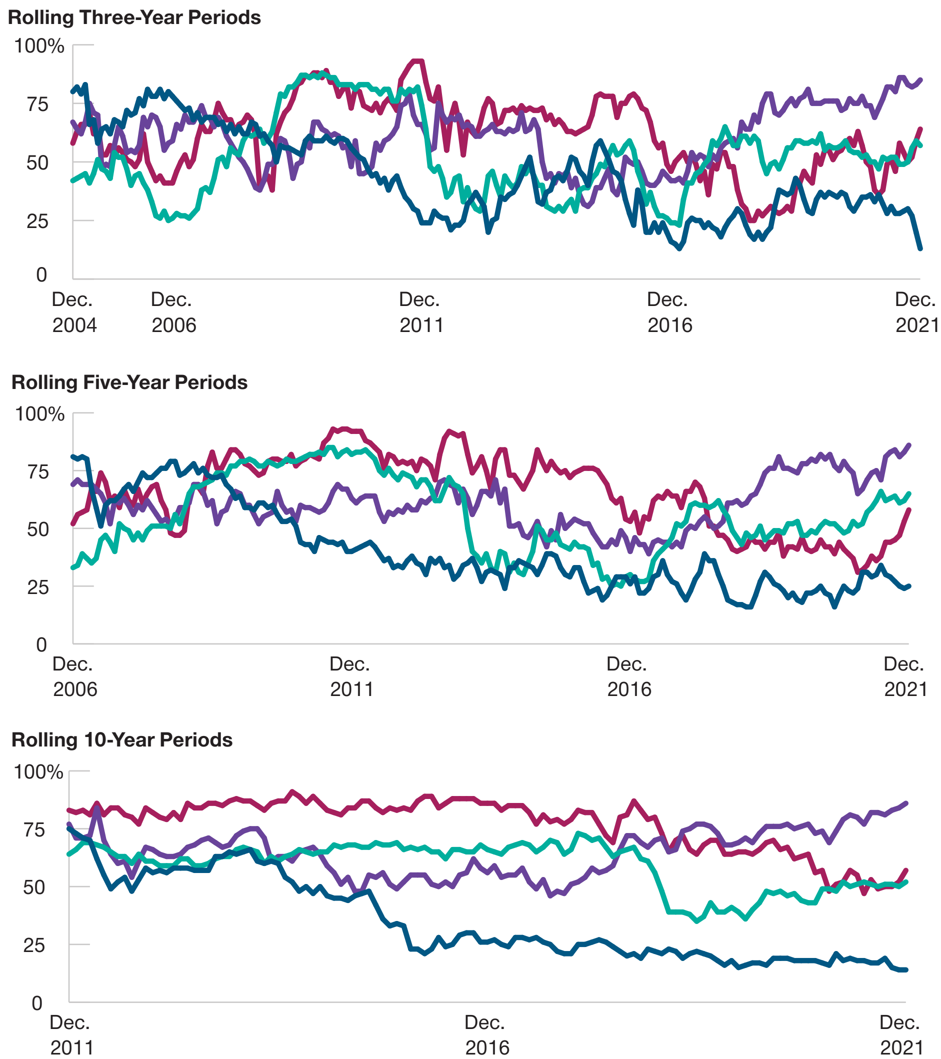
eVestment Manager Categories

U.S. Large Growth 255 Managers

U.S. Large Value 320 Managers

U.S. Small Growth 167 Managers

U.S. Small Value 216 Managers



These charts show how relative performance has tended to offer a more consistent picture as time periods extend, smoothing out some of the noise that dominates one-year periods.

Sources: Zephyr StyleADVISOR and eVestment Alliance LLC. Data analysis by T. Rowe Price. Created with Zephyr StyleADVISOR.

Past performance is not a reliable indicator of future performance.

[4] Based on the same eVestment Alliance manager categories and benchmark comparisons used in Figure 1.

only snapshots of past performance as of a current date. To gain a clearer picture of manager skill, we believe more intense investigation is required.

As equity managers, we are primarily interested in whether our own investment process—which emphasizes bottom-up fundamental analysis, in-depth research coverage, and collaboration across size and style categories—has created long-term value for our clients. For a better understanding of this issue, we conducted a rigorous study of the performance of T. Rowe Price's institutional diversified U.S. equity composites over the 20 years ended December 31, 2021.

Our study included 18 of the 24 composites within the institutional diversified U.S. equity strategies currently advised by T. Rowe Price. In instances where a portfolio manager managed multiple strategies in the same sub-asset class and/or style (e.g., U.S. small-cap growth), we used only the composite with the highest assets under management to avoid double counting.[5] The composites included in our study represented approximately 80% of total U.S. equity

(Fig. 5)

The Performance Study Universe

T. Rowe Price composites, benchmarks, and inclusion dates

Composite	Designated Benchmark	Inclusion Date
U.S. Capital Appreciation Composite	S&P 500 Index	12/31/2001
U.S. Dividend Growth Equity Composite	S&P 500 Index	12/31/2001
U.S. Growth Stock Composite	Russell 1000 Growth Index	12/31/2001
U.S. Large-Cap Core Growth Equity Composite	Russell 1000 Growth Index	12/31/2001
U.S. Large-Cap Equity Income Composite	Russell 1000 Value Index	12/31/2001
U.S. Large-Cap Growth Equity Composite	Russell 1000 Growth Index	12/31/2001
U.S. Large-Cap Value Equity Composite	Russell 1000 Value Index	12/31/2001
U.S. Mid-Cap Growth Equity Composite	Russell Midcap Growth Index	12/31/2001
U.S. Mid-Cap Value Equity Composite	Russell Midcap Value Index	12/31/2001
U.S. All-Cap Opportunities Equity Composite†	Russell 1000 Growth Index ††	12/31/2001
U.S. Small-Cap Core Equity Composite	Russell 2000 Index	12/31/2001
U.S. Small-Cap Growth II Equity Composite	Russell 2000 Growth Index	12/31/2001
U.S. Diversified Small-Cap Value Equity Composite*	Russell 2000 Value Index	12/31/2001
U.S. Smaller Companies Equity Composite	Russell 2500 Index	12/31/2001
U.S. Structured Active Mid-Cap Growth Equity Composite	Russell Midcap Growth Index	12/31/2001
QM U.S. Small-Cap Growth Equity Composite**	Russell 2000 Growth Index	12/31/2001
U.S. Structured Research Equity Composite	S&P 500 Index	12/31/2001
U.S. Value Equity Composite	Russell 1000 Value Index	12/31/2001

*Formerly the U.S. Small-Cap Value IV Equity Composite.

**Formerly the U.S. Structured Active Small-Cap Growth Equity Composite.

†Prior to March 1, 2021, the name of the U.S. All-Cap Opportunities Equity Composite was the U.S. Multi-Cap Growth Equity Composite.

††The formal benchmark for the U.S. All-Cap Opportunities Equity Composite was changed to the Russell 3000 Index on March 1, 2021. However, the active performance results cited in this study were based on the Russell 1000 Growth Index.

Sources: T. Rowe Price, Russell, and Standard & Poor's (see Additional Disclosures).

For illustrative, informational purposes only. Not all strategies/structures shown are available in all jurisdictions from T. Rowe Price.

[5] Our performance study covered composites within 18 institutional diversified U.S. equity strategies that had accounts and were actively being offered by T. Rowe Price as of December 31, 2021. It excluded any dormant or previously terminated composites. Two composites, U.S. Small-Cap Value Equity and U.S. Small-Cap Growth I Equity, were excluded from the study to avoid double counting. Four composites were excluded due to their limited performance track records, which made a long-term analysis unreliable. An additional composite, QM U.S. Equity Lower Volatility, was excluded both because of its extremely short track record and because its investment objective is fundamentally different from the other composites in the study. We believe inclusion of these 5 composites would have been inappropriate. In addition, 4 socially responsible composites, 2 sustainable composites, and 2 constrained composites also were excluded, as was 1 composite focused on environmental, social, and corporate governance (ESG) issues. These composites consist of portfolios for clients who mandate specific stock restrictions. The portfolio manager, in turn, alters the base strategy, often substituting a different holding for a restricted security. Given that the restrictions are client-dictated and can affect relative performance, we felt it was appropriate to exclude these composites. More detailed information on the study methodology, including the excluded composites, can be found in the appendix.

assets in the domestic and global equity composites advised by the firm as of December 31, 2021. The designated benchmarks for each composite, as well as the dates of their inclusion in the study, are shown in Figure 5.

For each composite included in the study, we examined performance over rolling 1-, 3-, 5-, and 10-year periods (rolled monthly) from December 31, 2001, through December 31, 2021. We then calculated excess returns (positive or negative) for each composite for each time period relative to the appropriate benchmark—the designated style benchmark used in T. Rowe Price performance reports and disclosures. Composite returns were calculated net of fees, based on the highest breakpoint fee for T. Rowe Price institutional U.S. equity clients.

For each composite, we calculated active success rates (the percentage of periods in which the composite outperformed its benchmark) and average returns relative to that benchmark for each time frame (i.e., over all rolling 1-, 3-, 5-, and 10-year periods).[6] The results are displayed in Figures 6 and 7.

Positive Results for Most T. Rowe Price Diversified U.S. Equity Composites Over Longer Time Horizons

Rolling periods December 31, 2001, through December 31, 2021

(Fig. 6)

Active success rates: percentage of rolling periods with returns higher than benchmark (net of fees)

(Fig. 7)

Average annualized excess returns over benchmark (net of fees)

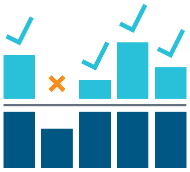
	Rolling Periods				Rolling Periods			
Composites	**1-Year**	**3-Year**	**5-Year**	**10-Year**	**1-Year**	**3-Year**	**5-Year**	**10-Year**
U.S. Capital Appreciation	49%	46%	49%	64%	0.40%	0.83%	0.76%	0.69%
U.S. Dividend Growth Equity	47	49	57	64	-0.23	0.22	0.27	0.24
U.S. Growth Stock	61	60	66	82	0.69	0.57	0.56	0.51
U.S. Large-Cap Core Growth Equity	58	72	82	99	0.68	0.83	0.89	0.91
U.S. Large-Cap Equity Income	39	39	43	44	-0.30	-0.40	-0.22	-0.24
U.S. Large-Cap Growth Equity	60	73	96	100	1.81	1.43	1.39	1.31
U.S. Large-Cap Value Equity	56	64	78	88	0.55	0.38	0.54	0.52
U.S. Mid-Cap Growth Equity	61	77	88	93	0.62	1.15	1.46	1.50
U.S. Mid-Cap Value Equity	47	45	56	64	-0.11	-0.04	0.30	0.16
U.S. All-Cap Opportunities Equity	69	77	83	100	1.77	1.35	1.28	1.08
U.S. Small-Cap Core Equity	65	78	87	100	1.19	2.48	2.35	2.58
U.S. Small-Cap Growth II Equity	76	93	100	100	4.54	5.21	4.60	4.62
U.S. Diversified Small-Cap Value Equity	62	84	92	100	1.15	1.76	1.70	1.64
U.S. Smaller Companies Equity	65	77	87	100	1.43	1.86	1.67	1.90
U.S. Structured Active Mid-Cap Growth Equity	51	63	77	79	-0.13	0.12	0.29	0.30
QM U.S. Small-Cap Growth Equity	64	78	85	100	0.30	1.54	1.72	2.06
U.S. Structured Research Equity	77	84	91	100	0.70	0.61	0.59	0.50
U.S. Value Equity	66	75	92	100	1.66	1.26	1.33	1.43
Averages All Composites	**59.6**	**68.6**	**78.3**	**87.6**	**0.93**	**1.17**	**1.19**	**1.21**
Percent of Composites With Positive Active Success Rates	**77.8**	**77.8**	**88.9**	**94.4**				

Periods with positive active success rates or positive average excess returns.

Sources: T. Rowe Price, Russell, and Standard & Poor's (see Additional Disclosures). Data analysis by T. Rowe Price.
For illustrative, informational purposes only. Not all strategies/structures shown are available in all jurisdictions from T. Rowe Price.

Past performance is not a reliable indicator of future performance.

[6] Excess returns for the 3-, 5-, and 10-year rolling periods were annualized.



Active Success Rates

The active success rate records the percentage of times that a composite beat its designated benchmark, net of fees and trading costs, over a specified time period (e.g., 10 years). Think of this as a measure of how often a client might review his or her regular performance reports and find that a composite has outperformed for that time period.

We've defined a positive active success rate as a composite beating the performance of its designated benchmark in more than half of the periods measured.

See Figure 6 for details on the specific active success rates for each composite over 1-, 3-, 5-, and 10-year rolling time periods.

"One of the more consistent findings in the study was that the likelihood of outperformance tended to improve over longer time horizons.

Results of T. Rowe Price Performance Study

We found that for most T. Rowe Price institutional diversified U.S. equity composites, shorter-term active success rates (over rolling one-year periods, in this case) were higher than the 50% mark one would normally expect for the average active manager over an extended time frame—like the 20 years covered by our study. Fourteen of the 18 composites outperformed in more than half of all one-year rolling periods, while only four composites underperformed half the time or more.

Short-term excess returns, net of fees, also tended to be significantly more positive than for the average active manager. Fourteen of the 18 composites showed positive excess returns, on average, across the one-year rolling periods covered by the study (Figure 7). Active success rates and excess return results may differ depending on a particular composite's overall performance pattern—a composite that outperformed its index by a large margin in a relatively small number of periods, for example, might show positive excess returns but a negative (i.e., below 50%) active success rate.

One of the more consistent findings in the study was that the likelihood of outperformance tended to improve over longer time horizons.

- While 14 of the 18 composites had positive active success rates (i.e., higher than 50%) over rolling three-year periods, all but two had positive active success rates over rolling five-year periods, and 17 out of 18 had positive active success rates over 10-year rolling periods.
- Nine of the 18 composites outperformed their benchmarks over every rolling 10-year period covered by our study. Four more composites outperformed in at least 82% of all rolling 10-year periods.
- Fourteen of the 18 composites had positive excess returns, on average, over every time horizon studied (one, three, five, and 10 years).

Our study indicates that a majority of T. Rowe Price's institutional diversified U.S. equity composites generated positive relative performance, net of fees and trading costs, over the past 20 years. However, there were some potential biases inherent in the study that we needed to address.

While we have provided broad-based averages, the diverse range of investment objectives represented in the study provided an opportunity for us to dig deeper than just calculating simple performance averages across all 18 composites. The universe of smaller stocks is typically less deeply researched than the large-cap market, potentially making it easier for small-cap managers to generate excess returns by exploiting informational inefficiencies. Thus, the excess returns for the small-cap managers in the study could have biased a simple average higher, concealing relatively weak results for large-cap managers.

To correct for these potential biases, we divided the 18 composites in the study into three capitalization categories—large-, mid-, and small-cap—based on the designated benchmarks for the composites. We then calculated average active success rates and average excess returns for each category. The results of our category analysis are shown in Figure 8 (average active success rates) and Figure 9 (excess returns).[7]

- As one might reasonably expect, excess returns for T. Rowe Price's small-cap managers were, on average, stronger than for large-cap managers.
- Average active success rates for seven of the 10 T. Rowe Price large-cap managers were positive (above 50%) over all time horizons. Average excess returns also were positive over all time horizons for eight of the 10 large-cap managers.

[7] The capitalization categories for each composite are shown in the appendix (Figure A2).

94%

of diversified U.S. equity composites had positive active success rates over rolling 10-year periods.

17 of 18

diversified U.S. equity composites had positive average excess returns over rolling 10-year periods.

14 of 18

diversified U.S. equity composites had positive average excess returns over every time horizon examined.

- Average active success rates for all three manager categories consistently increased as time horizons were extended.

Disciplined Investing for the Long Run

Although the study appears to confirm that T. Rowe Price U.S. equity managers, on average, have been able to add value, net of fees and trading costs, especially over longer time horizons, the same is clearly not true for all our strategies across all time periods. Like other investment managers, we have encountered prolonged market environments that were unfriendly either to our overall philosophy or to specific size and style disciplines. A number of composites within T. Rowe Price growth strategies, for example, underperformed in the 1990s after their managers, concerned about lofty valuations, declined to match the soaring weights for technology stocks in capitalization-weighted growth indexes.

However, underperformance turned into relative outperformance for composites within some strategies when markets normalized and cap-weighted benchmarks were dragged lower by their heavy exposure to deflating technology stocks. That episode suggests that a disciplined investment approach can pay off over the long run. Still, the fact that cyclical market factors can have such persistent effects suggests that the performance of composites within individual strategies also should be interpreted with caution—especially for those with track records that do not span the full 20 years covered by our study.

A Focus on Long-Term Value Creation

If, as our study suggests, it is possible for active U.S. equity managers to add value over longer time horizons, what factors might influence their degree of success? Academic research indicates there are some common characteristics associated with relative outperformance.[8]

One of the most important factors, obviously, is cost. While studies have suggested that some active managers do exhibit skill in outperforming the market before costs, that performance edge typically disappears, on average, after trading expenses and fees are subtracted.[9] Accordingly, active managers that can hold costs down would appear to have an advantage over their peers. But more substantive, investment-related factors also have been linked to strong relative performance.

These include:

- **Stock selection skill:** Some researchers have concluded that active equity managers as a group have the ability to select stocks that outperform the broad market on a before-cost basis.[10]
- **Manager tenure:** Active managers with stable, experienced management teams that have been in place for some time appear to be more likely to outperform.[11]
- **Management structures:** Teams that feature clear lines of authority appear to outperform those with less well-defined organizational roles.[12]

To the extent that composites within T. Rowe Price's institutional diversified U.S. equity strategies were able to deliver strong long-term relative

[8] Mutual fund net asset value data are the most commonly used by researchers examining active manager performance. Accordingly, many of the studies cited here refer to mutual fund vehicles. However, we believe the research and its conclusions are also applicable to the institutional separate account managers represented by the performance composites used in our study.

[9] Fama, French, "Luck versus Skill in the Cross-Section of Mutual Fund Returns," *Journal of Finance*, Vol. 65, No. 5, October 2010; Dellva, Olson, "The Relationship Between Mutual Fund Fees and Expenses and Their Effects on Performance," *The Financial Review*, Vol. 33, No. 1, February 1998; and Kacperczyk, Sialm, Zheng, "Unobserved Actions of Mutual Funds," *The Review of Financial Studies*, Vol. 21, No. 6, November 2008.

[10] Grinblatt, Titman, "The Persistence of Mutual Fund Performance," *Journal of Finance*, Vol. 47, No. 5, December 1992; Culbertson, Nitzsche, O'Sullivan, "Mutual Fund Performance: Skill or Luck?" *Journal of Empirical Finance*, Vol. 15, No. 4, September 2008; Baker, Litov, Wachter, Wurgler, "Can Mutual Fund Managers Pick Stocks? Evidence From Their Trades Prior to Earnings Announcements," *Journal of Financial and Quantitative Analysis*, Vol. 45, No. 5, October 2010.

[11] Golec, "The Effects of Mutual Fund Manager Characteristics on Their Portfolio Performance, Risk and Fees," *Financial Services Review*, Vol. 5, No. 2, 1996.

[12] Luo, Qiao, "On the Team Approach to Mutual Fund Management: Observability, Incentives, and Performance," paper presented at the European Financial Management Association 2014 Annual Meeting, January 12, 2014.

performance, net of fees, over the past two decades, we believe it reflects the strengths of our investment process in these key areas.

Fundamental analysis, backed by a well-resourced global research platform, is the core of our approach, providing a strong foundation for bottom-up stock picking. We go out into the field to get the answers we need. That means that prior to the pandemic, over 530 of our investment professionals saw firsthand how the companies we invested in were performing, in order to make skilled judgments about how they thought they'd perform in the future.[13] We seek to uncover more opportunities for our clients and are constantly on the lookout, analyzing the markets and the companies within them. By speaking with executives and employees, our professionals can ask the right questions to get a deeper understanding of where a company stands and where it could go in the future. During the pandemic, these research activities are being conducted virtually.

Experience has been a critical component of our success as well. Our skilled portfolio managers have deep experience—an average of 22 years in the industry and 16 years with T. Rowe Price.[14] Significantly, many of our analysts go on to become portfolio managers, which we believe creates a strong foundation on behalf of our clients.

We also don't wait for change; we seek to get ahead of change for our clients. We know when to move with the crowd and when to move against it. Our people have the conviction to think independently but act collaboratively. This means we're able to respond quickly to take advantage of short-term market fluctuations, or we can also choose to hold tight.

Positive Long-Term Average Active Success Rates and Excess Returns Within U.S. Equity Composite Categories

(Fig. 8)

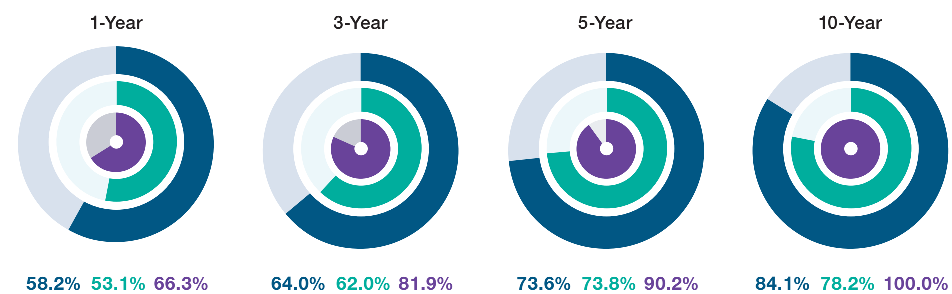
Rolling periods December 31, 2001, through December 31, 2021

U.S. Large-Cap Average (10 composites)

U.S. Mid-Cap Average (3 composites)

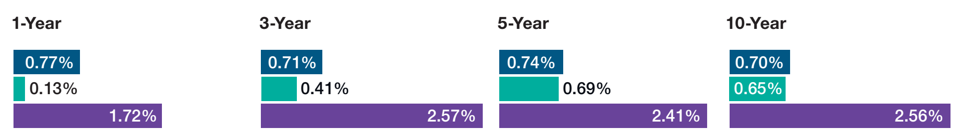
U.S. Small-Cap Average (5 composites)

Average active success rates



(Fig. 9)

Average annualized excess returns (net of fees)



Sources: T. Rowe Price, Russell, and Standard & Poor's (see Additional Disclosures). Data analysis by T. Rowe Price.

Past performance is not a reliable indicator of future performance.

[13] T. Rowe Price professional staff as of December 31, 2021. Includes 137 portfolio managers, 24 associate portfolio managers, 204 investment analysts, 71 associate analysts, 8 multi-asset specialists, 29 specialty analysts, 4 economists, 34 traders, and 22 senior managers.

[14] As of December 31, 2021.

(Fig. 10)

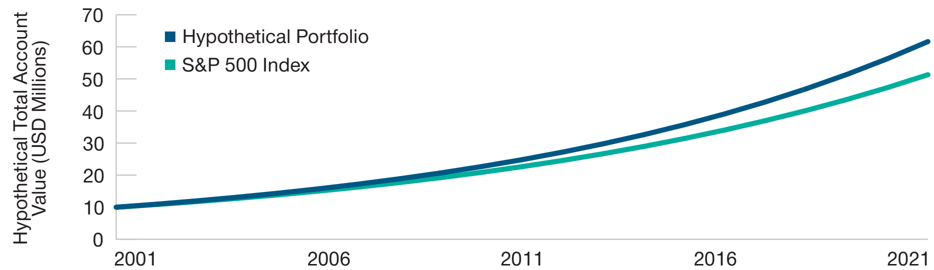
December 31, 2001, through December 31, 2021

Hypothetical Portfolio (9.52%: S&P 500 Index + one percentage point)

S&P 500 Index (8.52%)

Sources: T. Rowe Price and Standard & Poor's (see Additional Disclosures). Data analysis by T. Rowe Price.

Hypothetical Results of a USD 10M Investment vs. the S&P 500 Index + One Percentage Point Over 20 Years



The results shown above are hypothetical, do not reflect actual investment results, and are not a reliable indicator of future performance. Hypothetical results were developed with the benefit of hindsight and have inherent limitations. The results shown are based on index returns and are not indicative of any T. Rowe Price investment. Results do not reflect any fees or expenses. If fees had been included, results would have been lower. Figures are shown for illustrative purposes only and are not intended to provide any assurance or promise of actual returns and outcomes.

Chart shows growth of USD 10 million invested in a hypothetical portfolio tracking the historical annualized average return on the S&P 500 Index and a hypothetical portfolio tracking the historical annualized average return on the S&P 500 Index plus 1 percentage point from December 31, 2001, through December 31, 2021.

Figures include changes in principal value with dividends reinvested.

By remaining focused on the underlying factors that support strong relative performance, T. Rowe Price will continue to seek long-term value creation for our U.S. equity clients.

The excess returns shown in Figure 9 may seem rather modest relative to the absolute returns that investors typically have been able to achieve in the U.S. equity markets over longer periods. However, even a small improvement in annualized returns can make a significant difference in ending portfolio value over longer time horizons.

Take, for example, a hypothetical equity portfolio that appreciated at a rate equal to the 8.52% annualized total return on the S&P 500 Index over the 20-year period covered by our study. A portfolio that achieved a 100-basis-point improvement in annualized return over those same 20 years, after all fees and costs, could have increased its ending value by more than 20% (Figure 10).

(Fig. 11)

2017 through 2021
Net of Fees

Calendar Year Returns for T. Rowe Price Composites

	2017	2018	2019	2020	2021
U.S. Large-Cap					
U.S. Capital Appreciation Composite	15.59%	0.78%	24.84%	18.30%	18.72%
U.S. Dividend Growth Equity Composite	19.50	-0.94	31.17	14.08	26.19
U.S. Growth Stock Composite	33.85	-0.94	31.12	37.01	19.09
U.S. Large-Cap Core Growth Equity Composite	36.68	2.22	30.19	34.87	17.83
U.S. Large-Cap Equity Income Composite	16.44	-9.20	26.76	1.45	25.84
U.S. Large-Cap Growth Equity Composite	37.84	4.37	28.68	39.57	21.63
U.S. Large-Cap Value Equity Composite	16.85	-9.20	26.68	2.92	26.06
U.S. All-Cap Opportunities Equity Composite	34.84	1.51	35.31	45.01	21.04
U.S. Structured Research Equity Composite	23.99	-4.25	32.73	20.30	28.12
U.S. Value Equity Composite	19.28	-9.18	26.57	10.77	30.17
U.S. Mid-Cap					
U.S. Structured Active Mid-Cap Growth Equity Composite	24.99	-2.96	37.82	31.98	13.98
U.S. Mid-Cap Growth Equity Composite	25.19	-1.96	32.02	24.23	15.01
U.S. Mid-Cap Value Equity Composite	11.84	-10.47	19.81	10.05	24.66
U.S. Small-Cap					
U.S. Small-Cap Core Equity Composite	15.39	-3.14	33.84	24.99	16.73
U.S. Small-Cap Growth II Equity Composite	31.50	4.00	37.75	57.73	9.55
U.S. Diversified Small-Cap Value Equity	13.40	-11.52	25.92	12.45	25.30
U.S. Smaller Companies Equity Composite	18.13	-4.36	36.83	29.85	16.07
QM U.S. Small-Cap Growth Equity	22.47	-6.67	33.01	24.11	11.57

Past performance is not a reliable indicator of future performance.
Net of fees performance reflects the deduction of the highest applicable management fee that would be charged based on the fee schedule appropriate to you for this mandate, without the benefit of breakpoints.

Source: T. Rowe Price.

Appendix: Study Methodology

We examined the performance of 18 composites within T. Rowe Price's current lineup of institutional diversified active U.S. equity strategies over a 20-year period beginning December 31, 2001, and ending December 31, 2021. The 18 institutional composites included in the study were those that had accounts and were actively being offered by T. Rowe Price as of December 31, 2021. The study excluded any dormant or previously terminated composites. Diversified strategies were defined as those that had the ability to invest across one or more U.S. equity categories, such as large-cap growth and large-cap value; mid-cap growth and mid-cap value; small-cap growth and small-cap value; or the core large-, mid-, and small-cap universes. One of the 18 strategies, U.S. Capital Appreciation, also has the ability to invest in fixed income assets but is primarily an equity portfolio and is benchmarked to the S&P 500 Index.

Our study was limited to diversified U.S. equity strategies primarily for two reasons:

- Many of T. Rowe Price's international and global equity strategies have significantly more limited performance records than our U.S. diversified equity portfolios. Combining them in the U.S. diversified equity study could have significantly skewed average performance comparisons over shorter and longer rolling time periods and between the early and later years of the study.
- U.S. equity markets are widely regarded as the world's most efficient, transparent, and intensively researched, making them particularly formidable tests of active management skill.

More specialized sector portfolios—such as T. Rowe Price's Health Sciences and Communications & Technology strategies—were excluded from the study because the narrow, sector-specific performance benchmarks used by these strategies made direct comparisons with diversified strategies inappropriate, in our view. It is our belief that including these strategies would not have had a materially negative effect on the study's conclusions, as composites within most T. Rowe Price sector strategies show positive excess returns against their specialized benchmarks that, in many cases, are larger than for the firm's diversified U.S. equity strategies.

Three specialized composites that seek to target after-tax returns (U.S. Tax-Efficient Large-Cap Growth Equity, U.S. Tax-Efficient Large-Cap Value Equity, and U.S. Tax-Efficient Smaller Company Growth Equity) also were excluded from the study. The composites' objective of seeking to maximize after-tax portfolio growth results in an active management process that is fundamentally different from composites focused on before-tax performance and makes comparisons of active success rates and average excess returns relative to taxable benchmarks inappropriate, in our view.

Composites for four of T. Rowe Price's active diversified U.S. equity strategies were excluded from the study due to their comparatively limited longer-term performance track records. U.S. Large-Cap Core Equity began operations in June 2009, making a 10-year performance analysis unreliable. QM U.S. Small & Mid-Cap Core Equity and QM U.S. Value Equity both incepted at the end of February 2016, and thus, had only 34 completed three-year performance periods, 10 five-year performance periods, and no 10-year performance periods within the time frames covered by the study. QM U.S. Large-Cap Growth Equity incepted at the end of December 2017 and, thus, had only 13 three-year performance periods. We believe inclusion of these four composites would have been inappropriate.

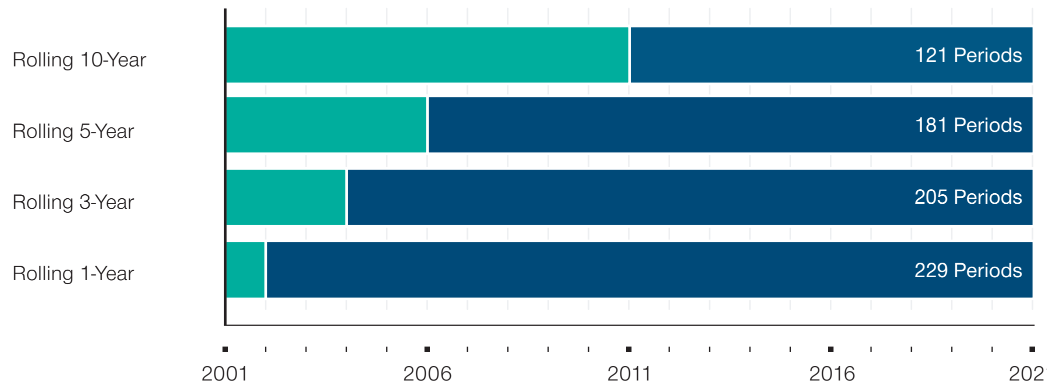
An additional composite (QM U.S. Equity Lower Volatility) also was excluded from the study, both because of its relatively short performance history and because the investment strategy for the composite seeks to limit return volatility, an investment objective that is fundamentally different from the composites included in the study.

Four socially responsible composites within strategies (U.S. Large-Cap Growth Socially Responsible Equity, U.S. Large-Cap Value Socially Responsible Equity, U.S. Large-Cap Core Growth Socially Responsible Equity, and U.S. Dividend Growth Socially Responsible Equity), two sustainable composites within strategies (U.S. Large-Cap Growth Sustainable Equity and U.S. Large-Cap Value Sustainable Equity), and one composite focused on ESG issues (U.S. ESG Equity) also were excluded from the study, as were two constrained composites within strategies (U.S. Large-Cap Core Growth Constrained Equity and U.S.

(Fig. A1)

First Period in Each Series

Rolling Time Periods in Performance Study



Source: T. Rowe Price.

Value Constrained Equity). These composites consist of portfolios for clients that mandate specific stock restrictions. The portfolio manager, in turn, alters the base strategy, often by reducing the number of holdings in the portfolio or substituting a different holding for a restricted security. Given that these restrictions are client-dictated, we felt it was appropriate to exclude these composites.

In cases where one portfolio manager managed multiple strategies in the same sub-asset class and/or style (e.g., U.S. small-cap growth), only the largest composite as measured by assets under management was included in the study to avoid double counting.

Composites were included in the study universe as of December 31, 2001. Composite and benchmark return data were taken from T. Rowe Price's internal performance database, which is used by T. Rowe Price to calculate returns for its quarterly, semiannual, and annual client reports; for marketing materials; and for regulatory disclosures. Benchmark returns in the T. Rowe Price database are collected from the index providers—in this case, the Standard & Poor's Corporation and Russell Investments. All study results were based on total returns, including dividends reinvested. Performance was calculated net of fees, based on the highest breakpoint fee for T. Rowe Price institutional U.S. equity clients.

For each composite in the study, T. Rowe Price analysts calculated 1-, 3-, 5-, and 10-year rolling returns, rolled monthly. Returns for the 3-, 5-, and 10-year rolling periods were annualized. To ensure these periods all covered the equivalent two-decade slice of U.S. equity market history, each rolling series began on December 31, 2001, and ended on December 31, 2021. This produced:

- 229 rolling one-year periods,
- 205 rolling three-year periods,
- 181 rolling five-year periods, and
- 121 rolling 10-year periods.

For each rolling period, the returns for each composite's current size and/or style benchmark were subtracted from the composite return, producing an excess return. The percentage of rolling periods in each time series in which excess returns were positive was then calculated, producing an active success rate for each composite across each time horizon. Excess returns were averaged across every rolling period in each time frame for each composite to arrive at the results shown in Figure 7.

Firmwide performance averages were calculated overall, as well as for three capitalization categories in the study universe: U.S. large-cap strategies, U.S. mid-cap strategies, and U.S. small-cap strategies. Managers were placed in these categories based on their designated benchmarks:

- Composites benchmarked to the S&P 500 Index, the Russell 1000 Value Index, or the Russell 1000 Growth Index were included in the U.S. large-cap category.
- Composites benchmarked to the Russell Midcap Growth Index or the Russell Midcap Value Index were included in the U.S. mid-cap category.

- Composites benchmarked to the Russell 2000 Index, the Russell 2500 Index, the Russell 2000 Growth Index, or the Russell 2000 Value Index were included in the U.S. small-cap category.

Due to the relatively small sample sizes in each capitalization category (10 U.S. large-cap composites, three U.S. mid-cap composites, and five U.S. small-cap composites), the results of this analysis are of limited statistical significance and should be regarded as indicative only.

Additional View: Performance in Up and Down Markets

One additional view that we incorporated into our analysis was to separate the data points analyzed into periods in which each composite's designated benchmark was up and periods in which the designated benchmark was down. Using those separate data sets and the exact process employed in the broader study, we were able to get a sense of how our strategic investing approach has fared in up and down markets. The exhibit below provides a high-level view of the active success rate and additional return after fees at an aggregate level for the standard rolling 1-, 3-, 5-, and 10-year rolling windows used throughout the analysis when a composite's benchmark was up and when it was down.

(Fig. A2)

Rolling periods
December 31, 2001, through
December 31, 2021

T. Rowe Price Diversified U.S. Equity Composites vs. Designated Benchmarks

Performance averages for all composites in study in up and down market periods[15]

	Up Markets				Down Markets			
	Rolling 1-Year	Rolling 3-Year	Rolling 5-Year	Rolling 10-Year	Rolling 1-Year	Rolling 3-Year	Rolling 5-Year	Rolling 10-Year
Average Active Success Rates	56%	66%	77%	88%	78%	85%	95%	N/A
Average Annualized Net-of-Fees Excess Returns (Percentage Points)	0.54%	0.96%	1.13%	1.19%	2.93%	2.29%	1.67%	N/A
Period Count (Across All Composites)	3,346	3,158	2,976	2,178	776	532	282	0

Sources: T. Rowe Price, Russell, and Standard & Poor's (see Additional Disclosures). Data analysis by T. Rowe Price.
Past performance is not a reliable indicator of future performance. See Important Information for standardized performance.

[15] In this analysis, up markets were defined as rolling 1-, 3-, 5-, or 10-year periods in which the return for the composite's benchmark was greater than or equal to zero, and down markets were defined as rolling periods in which the benchmark return was negative.

Important Information

Standardized Performance

Annualized total returns for periods ended March 31, 2022

As of 3/31/22 Figures shown in U.S. dollars	Annualized Total Returns 1 Year	3 Years	5 Years	10 Years	Inception Date
US Capital Appreciation Composite (Gross)	**11.25%**	**15.57%**	**14.05%**	**13.20%**	**12/31/1995**
US Capital Appreciation Composite (Net)	10.70	15.00	13.48	12.65	
S&P 500 Index	15.65	18.92	15.99	14.64	
US Dividend Growth Equity Composite (Gross)	**14.94**	**17.29**	**15.73**	**14.66**	**12/31/1995**
US Dividend Growth Equity Composite (Net)	14.37	16.71	15.16	14.09	
NASDAQ US Broad Dividend Achievers Index	14.00	14.48	12.98	12.26	
S&P 500 Index	15.65	18.92	15.99	14.64	
US Growth Stock Composite (Gross)	**0.13**	**16.92**	**17.43**	**15.88**	**12/31/1995**
US Growth Stock Composite (Net)	-0.37	16.34	16.85	15.31	
Russell 1000 Growth Index	14.98	23.60	20.88	17.04	
S&P 500 Index	15.65	18.92	15.99	14.64	
US Large-Cap Core Growth Equity Composite (Gross)	**3.44**	**16.61**	**18.68**	**16.63**	**12/31/1995**
US Large-Cap Core Growth Equity Composite (Net)	2.93	16.03	18.10	16.06	
Russell 1000 Growth Index	14.98	23.60	20.88	17.04	
S&P 500 Index	15.65	18.92	15.99	14.64	
Lipper Large-Cap Growth Funds Index[16]	6.85	20.00	19.03	15.26	
US Large-Cap Equity Income Composite (Gross)	**14.43**	**14.91**	**11.72**	**11.77**	**12/31/1989**
US Large-Cap Equity Income Composite (Net)	13.90	14.37	11.19	11.24	
Custom Benchmark—100% S&P 500 to 100% RS1000V on 3/1/2018	11.67	13.02	11.88	12.59	
Russell 1000 Value Index	11.67	13.02	10.29	11.70	
US Large-Cap Growth Equity Composite (Gross)	**3.66**	**19.09**	**20.52**	**17.63**	**11/30/2001**
US Large-Cap Growth Equity Composite (Net)	3.15	18.50	19.93	17.05	
Russell 1000 Growth Index	14.98	23.60	20.88	17.04	
US Large-Cap Value Equity Composite (Gross)	**13.05**	**14.69**	**11.54**	**12.90**	**3/31/1990**
US Large-Cap Value Equity Composite (Net)	12.52	14.15	11.01	12.37	
Russell 1000 Value Index	11.67	13.02	10.29	11.70	
S&P 500 Index	15.65	18.92	15.99	14.64	
US Mid-Cap Growth Equity Composite (Gross)	**-0.22**	**13.59**	**14.38**	**14.57**	**12/31/1995**
US Mid-Cap Growth Equity Composite (Net)	-0.82	12.92	13.70	13.89	
Custom Benchmark—Linked for U.S. Midcap Growth Strategy	-0.89	14.81	15.10	13.62	
Russell Midcap Growth Index	-0.89	14.81	15.10	13.52	

Source: T. Rowe Price.

Past performance is not a reliable indicator of future performance.
Gross performance returns are presented before management and all other fees, where applicable, but after trading expenses. Net-of-fees performance reflects the deduction of the highest applicable management fee that would be charged based on the fee schedule contained within this material, without the benefit of breakpoints. Gross and net performance returns reflect the reinvestment of dividends and are net of all non-reclaimable withholding taxes on dividends, interest income, and capital gains.

For any equity benchmarks shown, returns are shown with gross dividends reinvested, unless otherwise noted.

For illustrative, informational purposes only. Not all strategies/structures shown are available in all jurisdictions from T. Rowe Price.

As of 3/31/22 Figures shown in U.S. dollars	Annualized Total Returns				Inception Date
	1 Year	3 Years	5 Years	10 Years	
US Mid-Cap Value Equity Composite (Gross)	**14.69%**	**16.46%**	**11.44%**	**13.22%**	**7/31/1996**
US Mid-Cap Value Equity Composite (Net)	14.01	15.77	10.78	12.55	
Russell Midcap Value Index	11.45	13.69	9.99	12.01	
US All-Cap Opportunities Equity Composite (Gross)[17]	**9.86**	**25.11**	**22.88**	**18.52**	**12/31/1995**
US All-Cap Opportunities Equity Composite (Net)	9.26	24.43	22.22	17.88	
Custom Benchmark—100% RS1000GR to RS3000 on 3/1/21[18]	11.92	23.24	20.67	16.94	
Russell 3000 Index	11.92	18.24	15.40	14.28	
US Small-Cap Core Equity Composite (Gross)	**-3.74**	**14.65**	**14.19**	**13.99**	**12/31/1995**
US Small-Cap Core Equity Composite (Net)	-4.46	13.80	13.34	13.15	
Russell 2000 Index	-5.79	11.74	9.74	11.04	
US Small-Cap Growth II Equity Composite (Gross)	**-9.04**	**17.65**	**19.92**	**17.61**	**12/31/1995**
US Small-Cap Growth II Equity Composite (Net)	-9.73	16.78	19.03	16.75	
Russell 2000 Growth Index	-14.33	9.88	10.33	11.21	
US Diversified Small-Cap Value Equity Composite (Gross)	**4.17**	**14.29**	**11.10**	**11.98**	**12/31/1995**
US Diversified Small-Cap Value Equity Composite (Net)	3.39	13.44	10.28	11.15	
Russell 2000 Value Index	3.32	12.73	8.57	10.54	
US Smaller Companies Equity Composite (Gross)	**0.46**	**17.83**	**16.26**	**15.56**	**7/31/2001**
US Smaller Companies Equity Composite (Net)	-0.29	16.96	15.40	14.71	
Russell 2500 Index	0.34	13.79	11.57	12.09	
Russell 2500 Net 30% Index	0.00	13.33	11.11	11.61	
US Structured Active Mid-Cap Growth Equity Composite (Gross)	**0.53**	**15.66**	**16.09**	**14.62**	**12/31/1992**
US Structured Active Mid-Cap Growth Equity Composite (Net)	-0.07	14.98	15.41	13.94	
Russell Midcap Growth Index	-0.89	14.81	15.10	13.52	
QM US Small-Cap Growth Equity Composite (Gross)	**-4.84**	**12.18**	**12.38**	**13.41**	**4/30/1997**
QM US Small-Cap Growth Equity Composite (Net)	-5.37	11.56	11.76	12.79	
Custom Benchmark—100% RS2000GR to 100% MUSCG on 10/1/2006	-7.44	14.65	13.26	12.91	
US Structured Research Equity Composite (Gross)	**16.05**	**19.78**	**17.10**	**15.39**	**5/31/1999**
US Structured Research Equity Composite (Net)	15.69	19.41	16.74	15.03	
S&P 500 Index	15.65	18.92	15.99	14.64	
US Value Equity Composite (Gross)	**13.45**	**16.96**	**13.39**	**13.97**	**12/31/1995**
US Value Equity Composite (Net)	12.92	16.41	12.86	13.43	
Custom Benchmark—100% S&P 500 to 100% RS1000V on 3/1/2018	11.67	13.02	11.88	12.59	
Russell 1000 Value Index	11.67	13.02	10.29	11.70	

Source: T. Rowe Price.

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Gross performance returns are presented before management and all other fees, where applicable, but after trading expenses. Net-of-fees performance reflects the deduction of the highest applicable management fee that would be charged based on the fee schedule contained within this material, without the benefit of breakpoints. Gross and net performance returns reflect the reinvestment of dividends and are net of all non-reclaimable withholding taxes on dividends, interest income, and capital gains.

For any equity benchmarks shown, returns are shown with gross dividends reinvested, unless otherwise noted.

For illustrative, informational purposes only. Not all strategies/structures shown are available in all jurisdictions from T. Rowe Price.

[17] Prior to March 1, 2021, the name of the U.S. All-Cap Opportunities Equity Composite was the U.S. Multi-Cap Growth Equity Composite.
[18] Effective March 1, 2021, the benchmark for the U.S. All-Cap Opportunities Equity Composite changed to the Russell 3000 Index. Prior to this change, the benchmark was the Russell 1000 Growth Index. Historical benchmark representations have not been restated. The active performance results cited in this study were based on the Russell 1000 Growth Index.

General Equity Risks

Capital risk—the value of your investment will vary and is not guaranteed. It will be affected by changes in the exchange rate between the base currency of the portfolio and the currency in which you subscribed, if different.

ESG and Sustainability risk—may result in a material negative impact on the value of an investment and performance of the portfolio.

Equity risk—in general, equities involve higher risks than bonds or money market instruments.

Geographic concentration risk—to the extent that a portfolio invests a large portion of its assets in a particular geographic area, its performance will be more strongly affected by events within that area.

Hedging risk—a portfolio's attempts to reduce or eliminate certain risks through hedging may not work as intended.

Investment portfolio risk—investing in portfolios involves certain risks an investor would not face if investing in markets directly.

Management risk—the investment manager or its designees may at times find their obligations to a portfolio to be in conflict with their obligations to other investment portfolios they manage (although in such cases, all portfolios will be dealt with equitably).

Operational risk—operational failures could lead to disruptions of portfolio operations or financial losses.

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ID0005028 (04/2022)
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