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Thoughtful Investing.

WHITE PAPER

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Active Alpha

The latest academic research suggests that there are certain common characteristics of active equity managers who deliver persistent outperformance.

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EXECUTIVE SUMMARY

One of the major trends in equity investing over the past several decades has been a shift by both individual and institutional investors toward passive, or indexed, investments. This trend has been encouraged by two assertions that until recently were widely accepted in academic circles, namely: 1) that active equity managers as a group are unable to consistently outperform market indices after their expenses and fees are deducted; and 2) that an equity manager's outperformance during a particular period is simply a matter of good fortune. However, a growing body of academic studies conducted over the past several years calls these assertions into question and allows investors to view certain active managers in a new light.

At Brown Advisory, we believe that our approach as active equity managers has the potential to add value for our clients, and this new body of research confirms many aspects of our approach. According to some of these studies, manager outperformance is not a random event. Instead, active equity managers with certain traits are more likely to outperform than others, and these traits generally can be identified ahead of time. Many of these characteristics, such as a high level of divergence from a strategy's benchmark, are core components of our investment philosophy.

In this paper, we synthesize some of the recent academic literature studying the subject of active equity manager performance and examine how our firm's approach might be evaluated in light of that research.

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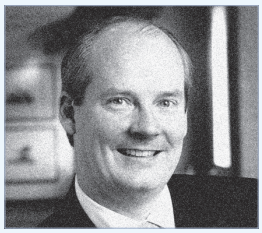
ABOUT BROWN ADVISORY

Brown Advisory is an independent investment firm committed to delivering to clients a combination of first-class performance, strategic advice and the highest level of client service. The firm offers a full range of equity, fixed income and alternative strategies to a diverse client base of endowments, foundations, public pension funds, subadvisory clients and other institutions. Brown Advisory was founded in 1993 as an affiliate of Alex. Brown & Sons, a leading investment bank focused on growth companies, and underwent a management-led buyout in 1998.

ABOUT THE AUTHORS



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Introduction

One of the major trends in equity investing over the past several decades has been a shift by both individual and institutional investors toward passive, or indexed, strategies. The shift toward index strategies over the past generation is well documented, and more recently the advent of "smart beta" index strategies has added a new dimension to the active vs. passive debate.

Historically, academic research has supported the market's move toward index investing. Generally, the academic arguments supporting passive equity investing can be boiled down to two simple statements:

1. *The aggregated performance of all equity investment managers will, by definition, roughly equal market returns. Therefore, the average manager should underperform the market by approximately the amount of management fees and expenses charged.*
2. *Some equity managers will outperform the market over varying periods of time, but it is impossible to predict which ones will do so in any given year.*

Statement 1 is a simple mathematical truth, so it is not surprising that most academics have confirmed through research that the average manager underperforms after fees. Michael Jensen studied this concept in his notable 1968 paper, in which he popularized the concept of investment "alpha"—a measure that indicates how an investment performs after accounting for risk—and showed that the typical equity manager's alpha was negative.[1]

The underperformance of the average manager has been reconfirmed in numerous studies over the years; recent papers include studies by Barras, Scaillet and Wermers (2010), which demonstrated an aggregate negative alpha generated by active mutual fund managers,[2] and by Busse, Goyal and Wahal (2010), which showed that active equity institutional managers as a group did not generate statistically significant alpha.[3]

Statement 2 above implies that when active equity managers outperform, it is essentially due to random chance. This second statement is much more open to debate than the first in the view of the academic research community. There are now many academic studies that refute this assumption and find that there is, in fact, a group of active equity managers who have generated "persistent" outperformance over time. ("Persistent" outperformance is a commonly used phrase in the academic literature; if managers outperform during an initially studied period and are found to outperform in a subsequent period, their performance is said to "persist.")

Further, research indicates that it is *not* impossible to predict which managers are more or less likely to outperform. According to several studies, investors can greatly improve their chances of identifying good managers by screening for a variety of characteristics related to performance, portfolio make-up and other variables.

Brown Advisory is committed to the idea that actively managed equity portfolios are an attractive method of pursuing outperformance over time, so the academic research focused on that idea is of great interest to us and to our clients. The purpose of this paper is to look at the findings of some of the recent studies addressing active equity management and examine Brown Advisory's approach as it relates to each study. None of the studies reviewed should be seen as definitive on its own. Each suggests one specific factor that to some extent influences the probability of good relative returns. It goes without saying that this is an area of rich and often contradictory academic inquiry; there are plenty of studies to support a variety of hypotheses. Taken together, however, these studies provide a useful checklist for evaluating managers for their likelihood of outperforming in the future—and the discussion should provide some insight into how we think about investing.

One additional note: While some of the academic research in this space analyzes institutional managers, the majority looks at mutual fund data due to the quantity and quality of data available from public mutual fund filings. In our view, the findings of these studies are useful for potential investors in actively managed equity strategies, regardless of the specific vehicle being considered.

"Many studies show that the average equity manager tends to underperform the index, but new research indicates that a minority subset of active equity managers have demonstrated persistent outperformance."

Active Share

FINDING

"Active share" measures the degree to which the holdings in a portfolio differ from those of its benchmark. The greater the difference, the higher the portfolio's active share. For actively managed funds, active share generally ranges from 60% at the low end to close to 100% at the high end. Recent research indicates that strategies with high active share are more likely to outperform their benchmarks and peers.

One of the most intriguing studies in recent years was that of Cremers and Petajisto (2009), which defined the concept of "active share" as the extent to which managers differ from their underlying benchmark, either by owning securities not included in the benchmark or by weighting differently those securities that are held in common. This measure has grown in popularity as a tool for comparing investment managers, based on the idea that the potential for a manager to outperform increases in proportion to how much that manager diverges from the benchmark.

Note that we do not hold out active share as a panacea, but we believe that it can be useful when measured alongside other manager characteristics. Cremers and Petajisto, for example, evaluated managers using two factors: active share (which measures the variance of a portfolio's *holdings* from its benchmark) and tracking error (which measures the variance of a portfolio's *returns* from its benchmark over time). Their initial research was recently updated in a study by Petajisto (2013), which looked at a universe of 1,124 actively managed funds over the period between 1990 and 2009. The study divided the universe of active equity funds into quintiles (i.e., the top 20%, the next 20%, etc.) by their active share percentage and then further sorted each of these groups into quintiles by tracking error. It found that only a small group of managers generated excess annualized returns over the duration of the study, characterized by, on average, high active share of 97% and moderate tracking error of 8.5%—a group that the study termed "stock pickers" (see Figure 1).[4,5] In other words, the only funds that generated positive excess return over time were those whose portfolios differed significantly from their respective benchmarks, but whose performance did not diverge wildly from their benchmarks.

The simple notion that active share might correlate with performance created a stir in the academic community, since predicting active manager performance has been so elusive while the concept of active share is so easy to understand. Most prior studies simply considered an absolute choice between active and passive management, but with active share, Cremers and Petajisto provided a relative scale to measure just how active a manager is. With active share, one can quickly see the wide gap that separates a "benchmark-hugging" strategy and a truly active manager.

An interesting sidenote of this study was its finding that the percentage of funds that practiced closet indexing tended to rise

The Value of Nonconformity

Petajisto (2013) updated the original Cremers and Petajisto 2009 study and evaluated a universe of actively managed, U.S. all-equity mutual funds for the period 1990-2009. Figure 1 illustrates different types of active managers as defined by active share and tracking error. "Stock pickers," for example, exhibit high active share with low-to-moderate tracking error. Figure 2 shows that only managers in the "stock picker" group generated positive average annual net returns in excess of their benchmarks over the life of the study.

FIGURE 1: Active managers fall into different categories according to their active share and tracking error.

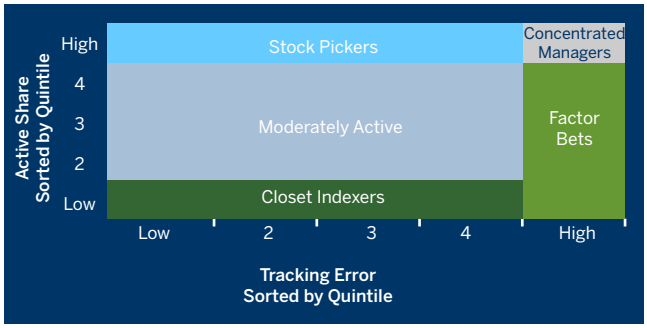
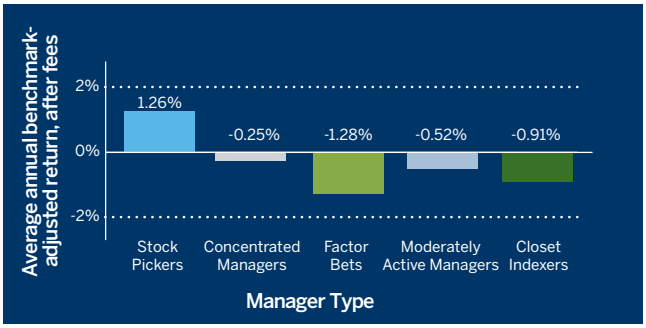


FIGURE 2: Only "stock-picker" funds generated excess annualized returns (1990-2009).



SOURCE: "Active Share and Mutual Fund Performance," Antti Petajisto, Financial Analysts Journal, vol. 69, no. 4, 2013.

and fall along with market volatility. In particular, closet indexing rose in 2007 when market volatility spiked due to substantial economic uncertainty. As of the end of 2009 (the end of the period covered in Petajisto's 2013 paper), closet indexers represented nearly one-third of all mutual fund assets, suggesting that more managers are "hiding" within their benchmark and avoiding any decisions that might draw unwanted attention from anxious investors.

OUR PHILOSOPHY

"To be great, you have to be different."

Brown Advisory's equity strategies generally fall squarely within the "stock picker" group described by Cremers and Petajisto. Our portfolios typically hold a concentrated group of companies that are diversified across sectors and industries. In academic terms, our strategies exhibit high active share along with relatively low tracking error (see Figure 4); we often refer to this approach as being "benchmark aware, but not benchmark driven."

Interestingly, the recent trend toward so-called smart-beta strategies can be viewed through the lens of active share. By definition, these strategies seek outperformance vs. standard cap-weighted benchmarks by differing from those benchmarks in some manner. Smart-beta strategies offer an interesting way for investors to place style bets while still capturing the various benefits of index investing, but they should not be viewed as a truly "active" alternative to passive indexes. The active share of a typical smart-beta offering is still quite low when compared to actively managed funds; for example, as of June 30, 2014, the popular Guggenheim S&P 500 Equal Weight ETF had a 44% active share.

Our equity managers generally hold anywhere from 30 to 80 positions in their portfolios, depending on the asset class; in comparison, strategies offered by other firms typically hold up to several hundred positions. We are aware of our benchmarks in terms of sector allocation, but we generally do not constrain portfolios with sector-allocation limits, which gives us greater freedom to pursue particularly promising opportunities. We believe that this approach best captures the value of our in-house research team's efforts.

At the risk of stating the obvious, simply buying a portfolio that looks different than one's benchmark is not a viable investment strategy. Equity managers who exhibit high active share should be doubly focused on adhering to a highly disciplined and consistent investment process. All of our portfolio decisions start with internally generated fundamental research and end with a financial model that quantifies our view of a stock's upside potential and downside risk. We generally do not deviate from this approach, and we ensure that our investment team has the resources it needs to implement this process consistently.

Standing Out

Brown Advisory's core equity strategies address different segments of the market, but they are all guided by the common belief that a concentrated portfolio of carefully selected stocks, diversified across sectors to avoid significant tracking error, can deliver above-average results over time.

FIGURE 3: Distribution of mutual funds across active share and tracking error ranges, 2009.

ACTIVE SHARE (%)	
80-100	44% of funds
60-80	34% of funds
40-60	13% of funds
20-40	3% of funds
0-20	6% of funds

TRACKING ERROR (%)	
>14	12% of funds
10-14	18% of funds
6-10	37% of funds
4-6	19% of funds
<4	13% of funds

SOURCE: "Active Share and Mutual Fund Performance," Antti Petajisto, Financial Analysts Journal, vol. 69, no. 4, 2013.

FIGURE 4: Active share and tracking error of Brown Advisory equity strategies as of 06/30/2014.

	ACTIVE SHARE (%)	TRACKING ERROR (%)
Large-Cap Growth	83.4	5.5
Large-Cap Value	90.8	4.5
Large-Cap Sustainable Growth	87.0	3.4
Flexible Equity	78.2	2.8
Equity Income	83.2	5.5
Small-Cap Growth	94.4	4.3
Small-Cap Fundamental Value	97.4	4.8

SOURCE: FactSet. Data as of 06/30/2014.
NOTES: Active share is calculated by comparing a representative account for each strategy to its respective benchmark. Tracking error is based on monthly returns over the three-year trailing period ended 06/30/2014 and is calculated using composite performance data for each strategy. The presentations for each of these composites are available upon request and provide more information about the composites. Please see the notes at the end of the presentation for peer group and benchmark definitions.

FINDING

Top-decile or bottom-decile past performance may serve as a useful tool for selecting managers more likely to achieve persistent results.

Several recent studies suggest that past performance, when filtered with appropriate statistical techniques, can help improve one's probability of selecting managers who will outperform in the future. Figure 5 shows the results of a study by Kosowski, Timmermann, Wermers and White (2006), which found that top-decile performers over a three-year period generated positive alpha of +0.96% on average in the following year.[6] Similarly, a study by Harlow and Brown (2006) sorted mutual funds by decile and found that top-decile performers over a three-year period generated average annual alphas of +1.58% the following year, while the figure for funds in the bottom decile was -2.18%.[7]

This finding is not, as it might seem at first glance, contradictory with the standard warning about selecting investments based on past investment returns. In fact, if you simply look at raw performance numbers, you will not find a broad correlation between past and future returns. However, the studies above *did* find a correlation by measuring performance using a modified form of investment alpha that adjusts for "style bias." A fund's style bias may impact performance by increasing exposure to particular market segments such as smaller capitalization stocks, value or growth stocks, or "momentum" stocks. For example, in the case of small-cap bias, a manager's results in a particular period may be simply due to owning a lot of small companies relative to the benchmark during a period when small companies outperformed. Eliminating the influence of these sources of "noise" from a study is the way to isolate and identify managers whose performance is likely to persist.[8]

OUR PHILOSOPHY

"Stick to your areas of excellence; partner with others who excel at the rest."

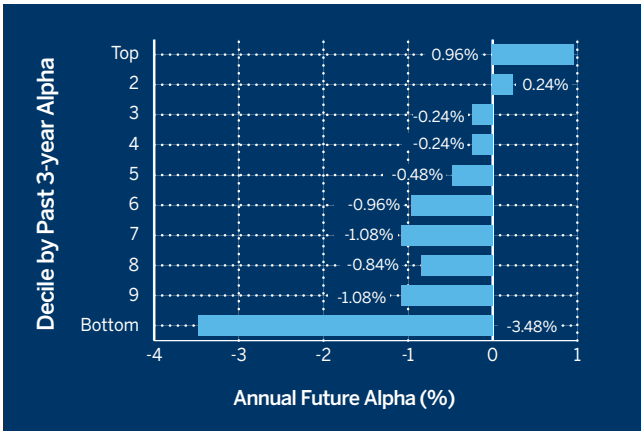
Brown Advisory manages proprietary equity strategies in a variety of styles, and we have also built an open-architecture platform for our clients that encompasses a select group of carefully researched third-party managers. Both of these efforts seek to generate consistent results over time, so we focus on eliminating substantial sources of style bias from our internally run strategies and look for external managers that do the same. The research on performance persistence offers some support for Brown Advisory's approach to portfolio management by showing that a top-down style bias is not a reliable way for a manager to generate consistent results.

In some cases, our internally managed strategies deliberately eliminate such biases from their investment process. For example, our large-cap growth strategy specifically screens out momentum stocks and cyclically sensitive stocks in an effort

The Existence of Persistence

Kosowski, Timmermann, Wermers and White (2006) sought to determine if manager alpha during rolling three-year periods from 1975 to 2002 had any correlation with those same managers' results in the subsequent year. Managers with top-decile alpha during those three-year periods generated positive average annual alphas of +0.96% in the following year, while bottom-decile managers generated negative average annual alphas of -3.48% in the following year.

FIGURE 5: The study of the relationship between past and future alpha (1975-2002, three-year rolling periods).



SOURCES: "Can Mutual Fund 'Stars' Really Pick Stocks? New Evidence from a Bootstrap Analysis," Kosowski, Timmermann, Wermers and White, Journal of Finance, vol. 56, no. 6, 2006; "Active Management in Mostly Efficient Markets," Jones and Wermers, Financial Analysts Journal, vol. 67, no. 6, 2011.
NOTES: Results based on a sample of 2,118 U.S. equity funds listed during the period covered in the Center for Research in Security Prices (CRSP) mutual fund database.

to keep the portfolio focused on companies that, in our team's estimation, can reliably grow earnings at 14% or more per year in a variety of economic scenarios. We do have strategies labeled as "growth" and "value," but as mentioned previously, we do not constrain ourselves with benchmark-related or other externally developed definitions. Instead, we maintain a standalone investment thesis for each of our equity strategies, using criteria to evaluate growth or value that we have independently developed based on years of experience. We believe that this approach offers the advantage of uncovering growth or value opportunities in places that may be less obvious to conventional growth or value investors.

We also apply this concept as we select outside managers. We generally seek out managers who share a philosophy similar to our own; among a variety of other factors, we look for managers who generate results from bottom-up research and strong individual security selection, while avoiding managers whose results are primarily driven by a systematic bias that may move in and out of favor over time.

Somerset Capital Management, a firm we selected to manage part of our emerging-market equity allocation in 2012, is a good example of the kind of disciplined, independent-minded manager that we favor. Based on demographic and economic developments around the world, we decided to invest a portion of client portfolios to benefit from the secular rise of the middle class in emerging markets. However, we felt uncomfortable with many managers who—consistent with popular benchmarks—invested heavily in the global energy, financial and materials companies that tend to dominate emerging-market benchmarks, as opposed to companies that more directly cater to the rising affluence of the populations of developing nations. After an extensive due-diligence process, we were attracted to Somerset's strategy, which exhibited a number of the desirable characteristics outlined so far in this paper. First, its focus on the emerging-markets middle class theme was one example of a general philosophical willingness to intelligently diverge from its benchmark. The active share of its emerging-market strategy relative to the MSCI Emerging Markets Index was 88.3% as of June 30, 2014—relatively high compared to other managers we considered. Additionally, Somerset takes care to protect itself from any style bias, focusing on bottom-up, fundamental factors as its primary basis for decision making.

"We select outside managers who share a philosophy similar to our own—based on bottom-up research, strong security selection and avoidance of systematic biases."

Collaboration

FINDING

Performance is not solely the product of "star managers"; instead, it is a joint product of managers and their firms, and in the majority of cases, the firm is more responsible for performance than the manager.

A 2003 study by Baks sought to build a model that measured the relative performance contribution of a fund's portfolio manager vs. the overall firm which sponsored that fund. Baks built a database that tracked over 2,000 fund managers and their responsibilities for different funds during their careers from 1992 to 1999; he subsequently built a regression framework to learn about the contributions of managers and fund organizations by studying results when managers change funds or manage multiple funds simultaneously. While the results of the study were not entirely conclusive, they did generally point to the importance of the fund organization in driving fund returns. Baks found that managers were typically responsible for no more than 50% of performance results and at times as little as 10%.[9] His results are somewhat surprising, given the attention paid to "star managers" in the financial press, and his study emphasizes the value of identifying strategies that are backed by strong research teams rather than just a well-regarded manager.

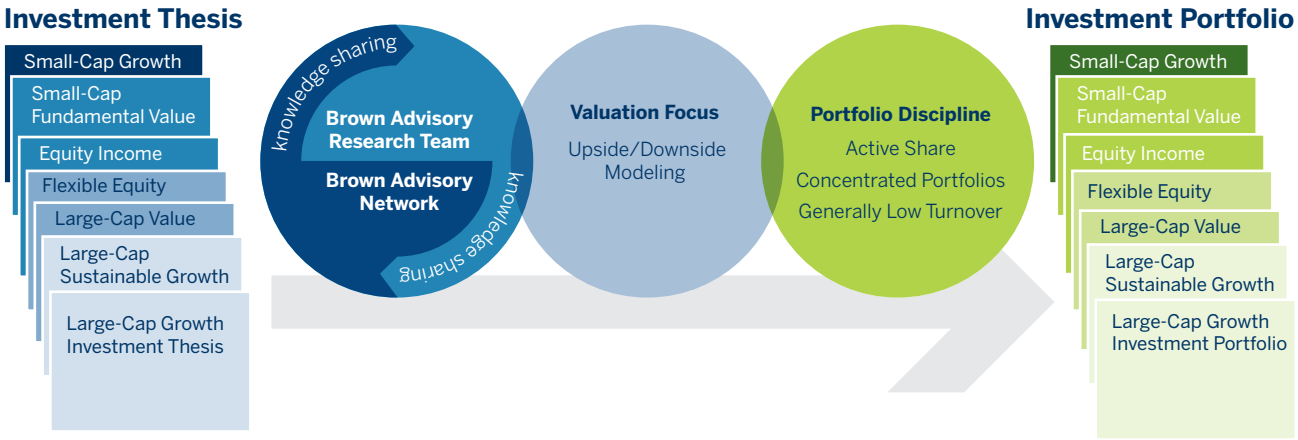
OUR PHILOSOPHY

"Make excellence a collaborative process."

Over the years, Brown Advisory has deliberately built a disciplined equity investment process, intended to serve as a "performance engine" that powers our proprietary equity strategies, as illustrated in Figure 6. The first component of this engine is a strong and interdependent team, now comprising more than 30 seasoned portfolio managers and research analysts. Importantly, all full-time members of the team are equity owners of Brown Advisory, a factor that keeps turnover to a minimum and aligns their long-term interests with those of our clients. In

Many Strategies, One Common Engine

FIGURE 6: The performance engine that drives an investment thesis into an investment portfolio.



addition, and in contrast to many investment firms, we don't view portfolio managers as necessarily senior to research analysts. Instead, these roles are viewed as equally valuable, collaborative functions; analysts need not "jump the fence" to become portfolio managers in order to increase their compensation or standing within the firm. The level playing field among investment professionals promotes the frank discussion of issues and keeps the Brown Advisory team stable and focused. While our research analysts generate most of the ideas for our portfolios, our due-diligence process on those companies is typically a collaboration between portfolio managers and research analysts, each lending relevant skills and experience to the task.

Another critical component of this engine is our disciplined process for modeling upside potential versus downside risk (see Figure 7). Our analysts and portfolio managers calculate the potential upside to an investment if things go well and a downside worst-case price. This tool is a cornerstone of our process and used in several important ways. Most obviously, it is useful for individual security evaluation at the time of purchase, but it is also helpful in ongoing portfolio-management decisions, in which existing holdings and new ideas are constantly competing for one of the limited spots in our portfolios based primarily on each stock's "upside/downside" (our shorthand term for our team's estimate of the ratio of the stock's upside potential versus its downside risk). Upside/downside is also a key factor driving our sell discipline and our decisions regarding position size within the portfolio. When we increase or trim exposure to a stock (or sell it outright), our decisions may be influenced by fundamental changes to a company's business, valuation considerations or competing ideas we find more attractive. All of those factors, however, are boiled down to their respective impacts on our upside/downside model and whether the stock's price is still attractive in light of the model.

In short, we believe that our equity strategies are driven by a comprehensive system, not just by individual managers.

Darwinian Capitalism in Action

Brown Advisory's equity analysts model the upside potential and downside risk for each stock they follow. By comparing the two, our portfolio managers get a sense of the relative attractiveness of potential stock holdings. This methodology is also valuable when applied to our concentrated portfolios. New ideas and current holdings compete for scarce places in our portfolios in a kind of "Darwinian capitalism," all based on upside/downside.

FIGURE 7: Example of hypothetical upside/downside calculations.

	ANALYST PROJECTIONS				
	UPSIDE FROM CURRENT PRICE	DOWNSIDE FROM CURRENT PRICE	"UPSIDE/ DOWNSIDE RATIO"	CURRENT PORTFOLIO WEIGHTING	SUGGESTED ACTION
Stock A	40%	17%	2.35	3.00%	Increase
Stock B	27%	18%	1.50	2.50%	Hold
Stock C	35%	24%	1.45	1.75%	Hold
Stock D	25%	23%	1.08	2.50%	Trim
Stock E	14%	25%	0.56	1.50%	Sell

SOURCE: Brown Advisory

Consistency and Discipline

FINDING

Funds that display a consistent level of risk generally outperform funds whose risk levels vary over time.

Huang, Sialm and Zhang (2010) studied what they called mutual fund "risk shifting," motivated by the relatively high level of activity they observed in a significant percentage of mutual funds that seemed to ratchet risk up or down from year to year.[10] The study looked at the impact of risk shifting on performance during the period between 1980 and 2009; the authors believed that risk shifting is most often driven by motivations apart from shareholders' interests, such as when underperforming managers "juice" performance at the end of a reporting period by taking on added risk, or when managers lock in gains for purposes of protecting their compensation.[10] By looking at a risk-shifting measure (RS)—which they defined as the difference between past realized volatility of a fund versus the volatility of its current holdings—they found that 20% of mutual funds each year shifted their annual volatility levels by more than 6 percentage points, indicating that these funds were fundamentally changing their risk stance and therefore their investment strategy. Moreover, they found that funds in the highest RS decile generated negative annualized alpha of -3.5% during the period covered by the study.

OUR PHILOSOPHY

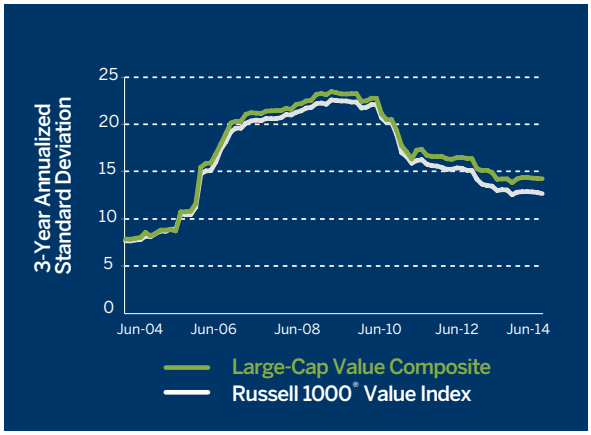
"Long-term investors needn't worry about quarter's end."

We are firm believers in a consistent approach to portfolio risk. Because our portfolios are built based on the intrinsic value of individual companies, we seek to avoid changing our risk stance in response to short-term performance events or market reactions (Figure 8). Additionally, we are long-term, low-turnover investors (Figure 9); since we intend to hold positions for longer periods of time, we choose our entry and exit points based on carefully constructed models. The notion of trading for the sake of improving the portfolio cosmetically is simply not a consideration.

Steady As She Goes

While our equity managers actively respond to risks and opportunities that are presented by changing company fundamentals, their intent is to generally maintain a consistent risk stance over time. The chart below demonstrates an example of this consistency by showing how steadily the volatility of our Large-Cap Value strategy has tracked with the volatility of its benchmark over the past 10 years.

FIGURE 8: Trailing three-year annualized standard deviation of the Large-Cap Value strategy as of 06/30/2014.



SOURCE: FactSet. Data as of 06/30/2014.
NOTES: Performance volatility information, as measured by 3-year annualized standard deviation, is represented by the Brown Advisory Large-Cap Value Composite (net of fees) and is compared to the Russell 1000® Value Index calculated monthly. The presentation for this composite is available upon request and provides more information about the composite. Please see the notes at the end of the presentation for index definitions.

Holding On

One of the tenets of our firm's equity investment philosophy is to only buy companies that we believe have the potential to be long-term portfolio holdings. While changing circumstances over time may change our outlook for an individual security, our approach generally results in portfolio turnover that is equal to or below our various peer groups.

FIGURE 9: Portfolio turnover comparisons of Brown Advisory equity strategies vs. institutional peers as of 06/30/2014.

	STRATEGY	PEER GROUP
Large-Cap Growth	22%	71%
Large-Cap Value	35%	68%
Large-Cap Sustainable Growth	31%	71%
Flexible Equity	20%	71%
Equity Income	24%	83%
Small-Cap Growth	27%	75%
Small-Cap Fundamental Value	32%	67%

SOURCE: Morningstar Direct.
NOTES: Portfolio turnover figures are calculated using a representative account for each strategy for the 12-month period ended 06/30/2014 compared to its respective Morningstar institutional fund peer universe, which excludes index funds. Please see the notes at the end of the presentation for peer group definitions.

ACTIVE EQUITY MANAGER PERFORMANCE THROUGHOUT THE ECONOMIC CYCLE

The academic research summarized so far suggests that there is a set of tools that may be useful in identifying managers with a higher likelihood of persistent outperformance. Taking these ideas one step further, other studies suggest that there are particular environments in which active managers as a group tend to deliver better performance.

Unfortunately, there is no definitive data on this topic covering the current market cycle; the most recent study by Kosowski (2011) covers the period between 1962 and 2005. That study suggests that active managers add the most value in difficult markets (see Figure 10); as a broad group, active managers generated positive alpha during periods of economic recession during the period studied. The author was careful to control for recession-related effects within the study, such as the higher propensity of funds to carry cash to meet fund redemptions and the possibility of survivorship bias as a result of weaker funds exiting the sample via fund liquidations or mergers. During the period of the study, actively managed equity funds as a group generated average annual alpha of more than 4% a year during recessions, while generating negative average annual alpha of -1% during expansion periods. Similar results were shown by funds across the range of fund styles studied.[11]

These striking results are backed up by other studies, such as that of Moskowitz (2000),[12] and Avramov and Wermers (2006).[13] All of these studies strongly support the idea that active equity managers add the most value in difficult markets,[8] when the market isn't a one-way street upward, when careful selection is essential to identifying firms that can thrive in challenging conditions, and when a watchful eye can minimize exposure to particularly risky investments.

Performance When It Counts

Actively managed equity funds generated considerable value during recessionary periods in the last half of the 20th century.

FIGURE 10: Average annual four-factor alpha for equity funds, 1962-2005.

	RECESSION PERIODS	EXPANSION PERIODS	FULL SAMPLE
All Growth Funds	3.87%	-1.27%	-0.37%
Aggressive Growth Funds	0.82%	-1.63%	-0.98%
Growth Funds	3.21%	-1.22%	-0.41%
Growth & Income Funds	3.27%	-1.21%	-0.40%
Balanced & Income Funds	5.48%	-1.69%	-0.71%
ALL EQUITY FUNDS	4.08%	-1.33%	-0.43%

SOURCE: "Do Mutual Funds Perform When It Matters Most? U.S. Mutual Fund Performance and Risk in Recessions and Expansions," Kosowski, Quarterly Journal of Finance, vol. 1, no. 3, 2011.
NOTES: Recession and expansion periods defined by the National Bureau of Economic Research. Results based on all U.S. equity funds listed during the period covered in the Center for Research in Security Prices (CRSP) survivor-bias free mutual fund files. Fund categories were constructed by the authors based on each fund's reported investment objectives.

Conclusion

The academic literature on the topic of active versus passive management is hardly conclusive. Rigorous research makes persuasive cases on both sides of this question, and we expect a healthy back and forth debate to continue in academic circles well into the future. However, there is a strong body of work that suggests that some top-quality active equity managers can in fact outperform the market consistently, and that those who do often share certain attributes, philosophies and processes. Not surprisingly, the attributes for success suggested by this body of research are quite similar to those sought by the institutional investment community: track record, proven consistency, strong managers supported by strong research teams, and a process that focuses on well-supported and consistently smart divergence from the benchmark.

Over time, Brown Advisory has sharpened its investment philosophy, and we are encouraged that the firm's approach seems to be validated by academic research. Ultimately, however, we judge the success of our philosophy by the results that we generate for our clients; the academic confirmation covered herein only strengthens our commitment to a process that we follow on behalf of our clients every day.

Peer Group Definitions: Portfolio information throughout this paper is taken from representative accounts within Brown Advisory's equity strategies. Representative accounts are compared to the following peer groups, with data provided by Morningstar, Inc.: Brown Advisory Large-Cap Growth strategy is compared to a peer group of 262 institutional funds within the Morningstar Large Growth category; Brown Advisory Large-Cap Value strategy is compared to a peer group of 268 institutional funds within the Morningstar Large Blend category; Brown Advisory Small-Cap Growth strategy is compared to a peer group of 141 institutional funds within the Morningstar Small Growth category; Brown Advisory Small-Cap Fundamental Value strategy is compared to a peer group of 145 institutional funds within the Morningstar Small Blend category; Brown Advisory Flexible Equity strategy is compared to a peer group of 262 institutional funds within the Morningstar Large Growth category; Brown Advisory Equity Income strategy is compared to a peer group comprised of a subset of 51 institutional funds within the Morningstar Large Blend category, which have a primary prospectus objective of "Growth & Income." All peer groups exclude index funds within their respective categories. Morningstar data contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information.

Benchmark Definitions: The Brown Advisory Institutional Large-Cap Growth and Large-Cap Sustainable Growth strategies are benchmarked to the Russell 1000® Growth Index, which measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000® companies with higher price-to-book ratios and higher forecasted growth values. The Brown Advisory Large-Cap Value strategy is benchmarked to the Russell 1000® Value Index, which measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000® companies with lower price-to-book ratios and lower expected growth values. The Brown Advisory Small-Cap Growth strategy is benchmarked to the Russell 2000® Growth Index, which measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000® Index companies with higher price-to-book ratios and higher forecasted growth values. The Brown Advisory Small-Cap Fundamental Value strategy is benchmarked to the Russell 2000® Value Index, which measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000® Index companies with lower price-to-book ratios and lower forecasted growth values. The Brown Advisory Flexible Equity and Equity Income strategies are benchmarked to the S&P 500 Index, an unmanaged index, that consists of 500 stocks chosen for market size, liquidity and industry group representation. It is a market-value weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value. The MSCI Emerging Markets Index is a free-float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 23 emerging market country indexes: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. **The Russell 1000® Index, Russell 1000® Growth Index, Russell 1000® Value Index, Russell 2000® Index, Russell 2000® Growth Index and Russell 2000® Value Index are trademarks / service marks of the Frank Russell Company. Russell® is a trademark of the Frank Russell company. One cannot invest directly in an index.**

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