

---

# Using Behavioral Finance to Improve the Adviser–Client Relationship

Bryan Olson, CFA

Mark W. Riepe, CFA

Those persons who accept a fee for making investment recommendations to individuals are generally thought of as acting in a fiduciary capacity. One obligation of a fiduciary is to act solely in the best interests of the client. This obligation often applies whether or not the adviser has discretion over the assets of the client. Operating in such a world is challenging for the investment adviser, whose well-meaning recommendations can sometimes be at odds with what clients (mistakenly) believe to be in their best interests.

For the adviser in a fiduciary but *nondiscretionary* relationship, the challenge increases. The advice must still be in the best interests of the client, but the client is the final decision maker. Every recommendation must pass through the client's thicket of emotions and the well-intentioned decision-making shortcuts (heuristics) clients may use to cope with the mass of information with which they are flooded each day. In effect, the difficulty of giving good advice doubles for the fiduciary in a nondiscretionary relationship. The adviser must create a recommendation that is in the best interests of the client and then convince the client that accepting and sticking with the recommendation is, in fact, in the client's best interest.

More and more advisers will face this challenge because the amount of assets in nondiscretionary advisory relationships is expected to increase dramatically. Cerulli Associates (2007) estimates that assets in nondiscretionary advisory accounts will grow from \$321 billion in 2007 to \$577 billion by 2011.

Behavioral finance has furthered our understanding of the ways in which individuals are prone to make mistakes when making decisions. With this knowledge, an adviser can gain a more accurate picture of

the cognitive and emotional weaknesses of investors that relate to making investment decisions: their occasionally faulty assessment of their own interests and true wishes, the relevant facts that they tend to ignore, and the limits of their ability to accept advice and to live with the decisions they make. (Kahneman and Riepe 1998, p. 52)

We believe advisers who study behavioral finance and incorporate its insights into their practices will improve the outcomes for their clients by making prudent recommendations in a way that increases the odds that the clients will act upon them.

We address the topic in the following four sections:

- *Establishing the relationship.* This process begins with the first encounter of the adviser and the client in the postsales environment; that is, the “prospect” has become a “client.” A relationship has been established in a legal sense, but in reality, the client and the adviser are getting to know each other.
- *Profiling the client.* After the establishment of the relationship comes the process of obtaining a detailed understanding of the client—wants, needs, fears, history, and present circumstances.
- *Making recommendations.* With an understanding of the client in hand, the adviser prepares recommendations for the client. If the relationship is nondiscretionary, the adviser must also determine a strategy for presenting the recommendations to obtain the client’s assent before implementation of the strategy.
- *Evaluating performance and renewing the relationship.* This stage encompasses a review, evaluation, and quality assessment of the recommendations that were made earlier in the relationship. It is a time to check in and ensure that expectations are still aligned with strategy, make adjustments if necessary, and deepen the relationship on the basis of increased knowledge (e.g., how the client has reacted to certain situations). After this stage, the cycle ends and begins again.

Within each section, we describe key findings from behavioral finance and make recommendations for how advisers can incorporate these findings into their practice. We do not cover every behavioral finding that has a bearing on the adviser–client relationship. We focus on (1) findings that our experience suggests most frequently impede an effective client–adviser relationship and (2) findings that suggest practical recommendations we can make for advisers to use.

## **Establishing the Relationship**

We believe the adviser–client relationship works best for everyone when the ground rules are established at the beginning. When establishing these sensible rules, the adviser will benefit from understanding four tendencies exhibited by most people—tendencies that can potentially influence all interactions between adviser and client. These tendencies are betrayal aversion, overconfidence, the illusion of control, and optimism.

**Betrayal Aversion.** Individuals who hire an adviser to manage or consult on the management of their financial affairs are not buying a device or a commodity. They are hiring a person to perform an ongoing service in an area of life that most people find deeply personal and that some people even find scary and/or overwhelming. Individuals entering into such a relationship subject themselves not only to the inherent risk of the financial markets but also to social risk.

Bohnet, Greig, Herrmann, and Zeckhauser (2008) identified social risk as arising in situations in which decisions by other human beings are the primary source of uncertainty. They found that individuals are less willing to take on risk when the source of the risk is driven by the actions of another person as opposed to the source of risk being pure chance. The authors call the tendency to make a special effort to avoid social risk “betrayal aversion.”

In an advisory context, this finding means that individuals may be overly cautious in their willingness to accept and endorse investment recommendations made by advisers. Understanding this tendency and addressing it when first establishing the relationship can help clients overcome the aversion.

Recommendation 1: Establish and communicate an understandable corporate investment philosophy and a disciplined process.

When presenting recommendations to institutional investors, advisers must include in the presentation an extensive discussion of their firm’s philosophy and process. Advisers presenting recommendations to individuals too often take the approach of “Trust me; I’m an intelligent, experienced professional.” This approach, which emphasizes the adviser as a person, can trigger betrayal aversion.

To mitigate betrayal aversion on the part of the client, we suggest that firms document their investment philosophy and process. The documentation should be in the form of a compelling yet concise description that can be used by all members of the firm who interact with clients and that can be easily understood by unsophisticated clients.

Advisers may be concerned that this approach diminishes them to some extent in the eyes of the client. In fact, we believe it enhances their stature. Individual investors are drawn to organizations that combine commitment to a philosophy with the expertise of professionals who apply that philosophy to the specific circumstances of clients. This combination should be communicated when evaluating an investor’s unique needs and circumstances and emphasized as a driving force in the selection of recommendations.

The creation, documentation, and adherence to a philosophy and process also help alleviate concerns clients may have about employee turnover. Discussion of the firm’s philosophical grounding can help clients understand that they

are dealing with a firm that is more than a collection of individuals. Furthermore, the creation, documentation, and adherence to a philosophy and process can be used to increase employee morale and engagement by providing a common purpose to rally around.

**Overconfidence.** Confucius is said to have defined knowledge as knowing what we do not know. Unfortunately, most people are not aware of what they do not know and tend to be overconfident when making decisions involving uncertain outcomes.

One reason individuals tend to be overconfident is that they have an inflated sense of their skill when it comes to forecasting. For example, consider this exercise proposed in a Kahneman and Riepe (1998) study: The task was to forecast a price range within which Google’s end-of-quarter stock price would fall 98 percent of the time. To establish the range, the forecasters in the study picked a price they were 99 percent confident would be higher than the actual price and a price they were 99 percent confident would be lower than the actual price. The two prices established a 98 percent confidence interval. They repeated this exercise once per quarter and counted the extent to which the actual Google price finished within the range. For a forecaster who was “well calibrated,” the actual price would fall within the range about 98 percent of the time; about 1 percent of the time, the actual price would be above the range, and about 1 percent of the time, the actual price would be below the range. Kahneman and Riepe concluded,

Few people are well-calibrated. A vast amount of research documents a highly systematic bias in subjective confidence intervals; there are far too many surprises, indicating that the intervals were set too tightly. A typical outcome in many studies is a surprise rate of 15–20%, where accurate calibration would yield 2%. Overconfidence has been confirmed even when it is in the best interest of the research subjects to be well-calibrated. (p. 54)

Two types of clients who seek to use the services of an adviser may well be subject to overconfidence: those who believe they could manage their investments but are too busy and those who have total faith that the adviser will succeed.

- *I could do it, but I do not have the time.* Such clients believe they are perfectly capable of managing their own investments. For example, Moore, Kurtzberg, Fox, and Bazerman (1999) conducted what we believe is a realistic trading simulation with MBA candidates at Northwestern University. Nearly two-thirds of the students overestimated their actual past performance, despite being given regular updates as to how they were doing relative to the market.

Individuals of this type choose to retain the services of an investment adviser because they (1) realize they do not have the time to devote to the task of managing their investments and/or (2) do not enjoy the task enough to justify allocating their own time to it. In either case, because they are overconfident in their own abilities, they will use that inflated sense of their own skill as the standard against which to measure the performance of the adviser.

Recommendation 2: Avoid making overconfident statements to clients.

- *I cannot do it, but you can.* These clients recognize that they lack the requisite skill and/or knowledge to manage money effectively. They have unrealistic expectations about what results are possible in the financial markets, however, and project onto the adviser the mantle of super adviser.

Recommendation 3: Communicate realistic odds of success.

A key to success in the advisory business is setting realistic expectations and living up to those expectations in clients' eyes. Advisers who project competence through bold pronouncements about what they can accomplish may improve their initial attractiveness to potential clients, but failure to live up to those bold pronouncements will come back to haunt these advisers.

Defining success and setting realistic expectations around achieving that success need to happen in the early stages of the adviser–client relationship. The definition and expectation setting should be comprehensive and cover the investment plan, portfolio, and relationship.

- *Investment plan.* Success of the plan should be defined as progress toward or achievement of a future goal. The goal should be presented in both dollar terms and more personal terms (e.g., what those dollars will help fund). We find that describing how endowments, foundations, or pension plans approach investment strategy with a plan to fund *future liabilities* resonates with clients. The plan should incorporate current asset levels, savings rates, return projections, sustainable withdrawal rates over a given period, and any residual amount the client wants for heirs or gifting.
- *Portfolio.* Success of the portfolio should be discussed in terms of return relative to risk. Many clients view success solely in terms of the rate of return on their money. We have observed that communicating risk control as a measure of success, however, is an effective tactic.

Framing the conversation by comparing the client's portfolio with a benchmark composed of the same asset classes used in the client's portfolio can often be useful. It helps clients conceptualize that the overall success (i.e., return on a diversified portfolio) is linked to the performance of the underlying asset classes. Then, a discussion or graphic showing the vagaries of asset class performance from year to year can prevent the mistaken belief that anyone can successfully predict the best-performing sector of the market in which to invest.

At a more detailed level, describing the number of stocks or funds from a given category that outperformed the benchmark in a given year is often enlightening for individuals. For example, showing funds from a particular category over a 10-year period that were able to be in the top quartile for 1, 2, 3, 4, and so on of those years can illustrate the difficulty of picking the right funds all the time. For U.S. domestic equity mutual funds with a complete 10-year record, 90 percent had at least 1 year with top-quartile performance in the past 10 years. When the hurdle rate is raised to producing top-quartile returns in 6 out of 10 years, however, the percentage of funds drops to 3 percent.<sup>1</sup>

- *Relationship.* Defining a successful relationship that encompasses more than returns can be helpful. A firm usually provides account services, planning functions, and client education as part of a relationship. These benefits lead to overall success and satisfaction but do not show up in short-term returns. Successfully setting and meeting realistic expectations for the relationship over time may go beyond simple satisfaction to become client loyalty. True client loyalty can lead to referrals from and evangelizing by existing clients about what the firm is capable of beyond performance.

**Illusion of Control.** A golfer stands over a 30-foot putt on a severely undulating green and strikes the ball, and a few seconds later, it eases over the lip of the cup and falls to the bottom. Is the golfer lucky, is the golfer skillful, or is the pleasant result a combination of both? More importantly for purposes of this discussion, is the golfer able to distinguish between luck and skill?

Illusion of control refers to the tendency of individuals to think they have more influence over events than they actually do. One manifestation of this illusion is that people tend to mischaracterize future events as being determined by one's skill rather than chance.

---

<sup>1</sup>The source of this information is a 2008 report from the Schwab Center for Financial Research with data provided by Morningstar. The universe in this study included 1,167 U.S. domestic equity funds with a complete 10-year history from 1998 through 2007.

When thought about in this way, the link between illusion of control and overconfidence is apparent. As noted, overconfidence can be caused by a miscalibration on the part of the individual about the true odds of success. What might cause that miscalibration? One cause is individuals' having an unrealistic perception of the control they exert over the events that affect them.

An example of this trait was uncovered by Strickland, Lewicki, and Katz (1966), who found that study participants were willing to bet more on the outcome of a dice roll before the roll than after the roll but before the outcome of the roll was revealed. This behavior reveals their perception that they could influence the outcome of the dice's roll.

In a comprehensive treatment of the topic, Langer (1975) identified many factors associated with an increase in the illusion of control even when the situation's outcome is driven purely by chance. One hypothesis of Langer's study was that individuals will perceive that they have more control over a situation when they have a choice over some aspect of the situation. In a test of the hypothesis, a group of workers agreed to participate in a lottery at their office. Half of the participants were sold a lottery ticket for \$1. The other half were also sold a lottery ticket for \$1 but were allowed to pick which ticket they wanted. A week later, on the day of the drawing, each participant was asked the price for which he or she would be willing to sell his or her ticket. The average selling price for those who were randomly assigned a ticket was \$1.96. The average selling price for those who picked their ticket was \$8.67.

Other factors also were associated with an inappropriately heightened level of perceived control in this study. Subjects believed they had more control even though the results were random when the subjects

- were familiar with a task,
- had spent a great deal of time involved with the task, and
- had a sense of superiority to others engaged in the same task.

Think about the world of investing from the standpoint of a client who is hiring an adviser. The adviser is obviously familiar with investments, spends all day, every day doing it, and makes representations that he is a top-notch professional (superior not only to an amateur but also to many of the other professionals who ply the same trade and compete for the same clients). Given these facts, it is no wonder that clients sometimes gain a perception that advisers have a level of control over outcomes in investing that is unrealistic.

Recommendation 4: Be clear about what you, as the adviser, do and do not control.
---

Much of the necessary clarity about what the adviser controls can be accomplished by properly setting expectations, describing the firm’s philosophy and process, and using an investment policy statement (see Recommendation 11). Even so, however, clients may need reminding that an adviser has limited control over the outcomes of her recommendations. The market performs in a mostly random pattern, and so will individual portfolios. Disappointments can be avoided by being explicit from the beginning about where the adviser does add value and why delivering that value is within her control. We recommend that the adviser focus on communicating and highlighting the following:

- the benefits of risk control that come from using the firm’s philosophy and disciplined process;
- the time, tools, and resources allocated for periodic portfolio reviews to monitor the quality of securities;
- ongoing adjustments to the investment plan and portfolio when they are necessary to reflect changes in the client’s personal situation;
- account servicing;
- client education; and
- progress toward a goal.

**Optimism.** Individuals tend to be optimists. The optimist has at least three qualities that are relevant to the adviser–client relationship. Optimists tend to (1) overestimate their skills, (2) suffer from illusion of control, and (3) underestimate the odds that a bad event will affect them. Optimism interacts with overconfidence and illusion of control to make a bad situation worse as each of the three reinforces the other.

Recommendation 5: Make clients aware of what can go wrong with the recommendations.
---

To combat overoptimism, the client should be made aware of the downside of the adviser’s recommendations. Every recommendation contains a degree of uncertainty. The recommendation may turn out well or poorly as a result of whether various assumptions that underlie it do or do not pan out and whether unanticipated events that occur work in favor of or against the recommendation.

If in laying out the recommendation, the adviser also lays out the basis on which that recommendation is made and the countervailing forces that may work against it, the client probably will not only be more appreciative of the work involved in preparing the recommendations but will also develop a realistic idea about how capital markets work.



For clients who have a long investment horizon, common practice is to show them a graph or table that illustrates how various asset classes have performed over long periods of history. Such graphs and tables serve a useful purpose, but focusing on long-term average returns masks the short-term volatility that investors usually experience to achieve high rates of return. Therefore, we suggest that when an adviser is presenting summarized historical data, he take the time to walk the client through the year-by-year results. The adviser should highlight periods of poor performance and explicitly ask clients how they would feel during the worst years and whether they would be willing to act on the rebalancing recommendations the adviser would suggest at such times. If the adviser has a sense of the client's total portfolio size, the adviser can convert the yearly results to dollars. (We find that clients connect better emotionally with dollars than with percentages.)

Recommendation 6: Make clients aware of the time frame over which success of a recommendation should be measured.

As part of this education process, the adviser should attach a time frame within which each recommendation is to achieve results. Many advisers who work with individuals suggest investment strategies that are expected to pay off successfully over a few *years* and find they must explain after a few *weeks* why the results are not as expected. We think this misunderstanding often stems from the adviser's failure to communicate in the beginning that the road between recommendation and ultimate results is not linear.

Recommendation 7: Take special care with clients who are prone to optimism and betrayal aversion.

An adviser with a client who is overly optimistic and who then feels betrayed when her lofty expectations are not met is in a high-risk situation. Such a dangerous combination is one reason we include a section on understanding the client. This often-overlooked step is incredibly valuable to the success of the long-term relationship. We find that overly optimistic clients are often those who want to act the fastest without coming to a common understanding. Slowing them down enough to provide the education and context necessary for them to set realistic expectations can be a challenge. Such clients usually have soured advisory relationships and/or bad investing experiences in their pasts, however, which an adviser can use to gain understanding of the client. For example, advisers can ask the clients what they liked and disliked about past advisory relationships to uncover areas in which concerns need to be addressed and areas in which optimism may need to be reined in and proper expectations set. Asking clients about bad investing experiences will reveal areas in which a little education on the capital markets may cure overly optimistic views.

## Profiling the Client

When establishing a relationship, the adviser seeks to demonstrate trustworthiness and expertise and to provide education about the firm’s investment philosophy and process. This dialogue introduces the client and adviser to each other and promotes an understanding of the way in which they wish to interact.

In the profiling stage, the adviser seeks to develop a deeper and more personal understanding of the client. What are the client’s investing preferences? What past experiences might influence the client’s behavior? How does the client make decisions? What influences that decision-making process? What are the nuances among the client’s needs that provide the color, flavor, and texture of that particular client’s universal investment needs, such as investing savings for retirement?

To gain an accurate and deep understanding of the client during the profiling stage, the adviser will benefit from understanding how behavioral tendencies may influence this step. We suggest keeping projection bias, the availability heuristic, and different performance expectations in mind and using our recommendations to counteract them.

**Projection Bias.** Projection bias refers to the tendency of individuals to understand qualitatively the directions in which their tastes will change, but systematically underestimate the magnitudes of these changes. Hence, they tend to exaggerate the degree to which their future tastes will resemble their current tastes. (Loewenstein, O’Donoghue, and Rabin 2003, p. 1210)

When advising individuals, advisers commonly assess the client’s willingness and capacity to bear risk. This task is difficult for many reasons. One reason is that an individual’s willingness to take on risk is influenced by recent market performance. Grable, Lytton, O’Neill, Joo, and Klock (2006) placed a financial risk–tolerance survey online and asked respondents to take it while answering a set of control questions that might reasonably be expected to influence risk taking (e.g., age, income, education). When analyzing what variables influenced risk tolerance, they found that price activity in the stock market over the previous week had a positive correlation with the risk assessment score.

Yao, Hanna, and Lindamood (2004) used data from the Federal Reserve Board’s Survey of Consumer Finances to perform a similar study. Respondents were asked about their willingness to take on investment risk and were asked a large number of other questions about their financial affairs. Their self-reported willingness to take on risk was correlated with market movements in the years preceding the survey even after the authors controlled for a set of relevant variables.

Recommendation 8: Be cautious about risk–tolerance assessments performed during or near periods of extreme market movements.
--

Ideally, an assessment of a client's willingness to bear investment risk will be undertaken several times throughout a client–adviser relationship, with assessments taking place during periods when the market is exhibiting different levels of volatility. If multiple assessments are not practical, we suggest scheduling the single assessment when the market is behaving in a neutral fashion.

Even finding a time of market neutrality in which to assess the client, however, is frequently impractical. So, if the initial assessment takes place during or near a period of extreme market performance (whether the volatility is on the upside or the downside), the adviser should encourage the client to think about periods of time in the past when market performance was different or times in the future when it will be different from recent experience. This process of encouragement could include reviewing portfolios with low levels of risk following large upswings in the market and, conversely, considering portfolios with high levels of risk following severe downturns.

We have no illusions about the ease of this task. Its inherent difficulty leads to our recommendation of interpreting the assessment results with caution. If the adviser maintains frequent dialogues on the subject of risk, then over time, both adviser and client will develop a clear sense of the client's true level of risk tolerance.

**Availability Heuristic.** Our discussion of projection bias in the context of risk assessment focuses on one aspect of risk (the client's willingness to endure the volatility that comes with stock market exposure). The availability heuristic is the tendency of individuals to base decisions on the evidence and considerations that are most easily accessible. On the one hand, if individuals are subject to the availability heuristic, they are willing to take on more market risk if gains from recent market activity are fresh in their minds. On the other hand, the availability heuristic suggests that individuals who still carry emotional scars from seeing their parents' retirement nest eggs wiped out in the technology wreck of 2000–2002 or from their own losses during the Great Recession of 2007–2009 will ascribe greater weight to capital preservation than growth through risk taking.

Advisers need to be concerned with more than short-term volatility when performing a risk assessment at the beginning of a client relationship. Clients who are saving for retirement will need to consider a broad set of risks—purchasing power risk, longevity risk, timing risk, consumption risk, and health risk:

- *Purchasing power risk.* The risk that inflation will eat away at the purchasing power of the client's portfolio.
- *Longevity risk.* The risk that the client will outlive his portfolio.

- *Timing risk.* The risk that the client will leave the workforce and begin drawing down the portfolio just as the market begins to perform extremely poorly or that the client will enter into an annuity arrangement when interest rates are extremely low.
- *Consumption risk.* The risk that the client will experience unavoidable expenses in retirement that were not anticipated when the client’s retirement plan was being assembled.
- *Health risk.* The risk that the client will experience an adverse health event that will accelerate her separation from the workforce or prevent her from returning to the workforce should a return to work be necessary to support her desired standard of living.

These risks are real, and similar lists could be created for clients in any stage of life. Which risks most concern a particular client? In general, because of the availability heuristic, risks that are more important to clients will be those with which they are most familiar and those that are most salient or vivid. Factors that drive familiarity, salience, and vividness include how frequently the experience has occurred in the client’s life, how recently it occurred, and whether it was personally experienced (or experienced by a close friend or relative).

Recommendation 9: Probe the client about risks that the client may not have experienced but should consider.

An important task for the adviser is to have a discussion with the client about each risk and assess the applicability of each risk to the client. Furthermore, the adviser needs to evaluate whether the client’s expressed level of concern about each risk is driven by the “availability” of that risk. We think particular attention should be paid to those risks that the adviser, in his professional judgment, believes to be relevant but to which the client gives short shrift because of the availability heuristic; that is, neither the client nor her friends or family members have experienced it. In this way, the adviser must be more than simply a survey taker.

A technique for making legitimate risks more “available” to clients is to archive stories of real clients or acquaintances that have experienced each risk. Preferably, this collection of stories will reflect a wide variety of client types so the adviser can use the type that most closely resembles the client currently being advised. Such stories about “people like me” may shift the real risk from a merely theoretical idea to a real possibility that requires steps to prevent it from happening.

Moreover, individuals can be subject to the availability heuristic with respect to past relationship experiences. In the arena of investment management, this bias can strain the client–adviser relationship and hamper the success of the adviser.

Recommendation 10: Understand the client’s past experiences working with advisers.

Past experiences, good and bad, may influence the client’s perception of an adviser’s intention or actions. Prospective clients often seek out a new adviser because of a poor relationship with a past adviser. Understanding what worked—and more importantly, what did not—in that relationship will help the adviser set expectations, communicate the asset management process the adviser will follow, and reduce the odds of disappointment down the road.

The adviser should engage in questioning and dialogue that uncover the specifics of client likes and dislikes in adviser behavior and services. We have found that many adviser–client relationships soured because of communication approaches and service expectations, so we recommend expanding the conversation beyond investment approach.

**Differing Performance Expectations.** At some point in the relationship, the client will ask, “How well am I doing?” The performance discussion is a hornet’s nest that reveals a number of biases when broken open. For that reason, the last step in profiling is for the client and adviser to agree on performance expectations and the process for measuring progress.

Advisers tend to think of performance in terms of such gauges as return relative to a benchmark, risk-adjusted return, and absolute return. These measures can be thought of as objective measures of performance. Meeting performance objectives is not easy, but at least the adviser knows the benchmark, can track progress against it, and can declare victory or defeat after some set period of time.

A different perspective on the performance question is found in the literature of psychologists. They suggest that “a person’s objective achievements often matter less than how those accomplishments are subjectively construed” (Medvec, Madey, and Gilovich 1995, p. 603). We find that at least three subjective performance benchmarks are relevant to the adviser–client performance discussion. They are as follows:

1. *Performance compared with that experienced by others.* Individuals sometimes talk about the performance of their investments with friends and family. We would not be surprised if the better the performance, the more they talk. If clients hear these conversations, they will naturally wonder how they are doing in comparison and allow the performance stories they hear to guide their expectations of their own investments.

Another source of comparisons is the popular financial press’s frequent lionization of successful investors. This acclaim often takes the form of articles entitled something like “Secrets of the Five Best Mutual Fund Managers Alive Today.” For at least some individuals, these five managers will be perceived to be a fair standard against which their advisers should be measured; thus, the performance of the five constitutes an expectation of performance.

Why do individuals latch on to the performance of others as a benchmark? One explanation is that this kind of comparison is an example of the availability heuristic at work.

2. *Performance compared with the client’s original expectations.* Many financial media outlets periodically survey individuals about, for example, their long-term rate of return forecasts for the U.S. stock market. Our sense is that these forecasts tend to be much higher than appropriate. This result is consistent with the tendency toward optimism discussed earlier.
3. *Performance compared with what might have been.* Imagine an adviser has a young client who inherits a substantial number of shares in the company his father worked for his entire career. The father never sold the shares because of his emotional commitment to the company, and that emotional attachment was passed on to the adviser’s client. With the step-up in cost basis upon the father’s death, the client has no reason—beyond his emotional attachment—to hold on to the shares, so the adviser recommends a sale of the shares and the reallocation of the proceeds into a more diversified portfolio. In the two years that follow, the shares of the father’s stock triple in value while the diversified portfolio beats the S&P 500 Index on an after-fee basis by 200 bps. Is the client content because his adviser has beaten the market, or does he spend his days imagining what he could have done with all his gains had he not diversified?

Wondering about what might have been is an example of “counterfactual thinking,” and it can be destructive because it causes clients not to focus on their objective states and whether they are better off now than they were previously but, instead, to compare their current states with a different (nonrealized) state that would have been achieved by following the path not taken. A vivid example of counterfactual thinking is provided by Medvec et al. (1995) in a study of the behavior of Olympic medalists. An analysis of the athletes’ behavior on the medal stand indicates that silver medalists appeared to be less happy than bronze medalists. Objectively, silver medalists were better off than the bronze medalists (and nonmedalists), but they appeared to be less satisfied—presumably because they were thinking of the gold medal that got away. The bronze medalists appeared to be happy that at least they had received something for their years of toil.

Recommendation 11: Prepare an investment policy statement.

The importance of agreeing on and documenting the goal of the client–adviser relationship, the expectations of reaching the goal, and the measures by which progress will be measured cannot be overstated. A great tool for documenting this agreement is the investment policy statement (IPS). Creating and getting the client to agree to an IPS at the beginning of the relationship helps avoid surprises later on (see Recommendation 4).

The IPS allows the adviser to clearly lay out what services the firm provides, what the firm does and does not control, and where the adviser’s time, expertise, and resources will thus be spent. Ideally, this information should establish the value and benefits a client gains from the relationship. In addition, the adviser and client can clearly establish in the IPS, before the emotions of the market or stories from others cloud comparisons, the performance expectations, benchmarks, measurement frequency, and gauges of success.

Discussions about the IPS are also an ideal time to highlight the unique needs of the client and how these needs may make the client different from others whom she may be tempted to use as a comparison. For example, an endowment may have an indefinite time horizon that allows it to invest in illiquid investments, but individuals who need money for retirement, college, or an emergency do not have the same flexibility. The adviser can point out the client’s specific time horizon, tax situation, liquidity needs, legal or structural issues, and unique preferences.

The IPS should be revisited from time to time, especially if client expectations need to be reset because of market gyrations or changes in client circumstances. The IPS also serves as a place for documentation of and agreement on the rationale for proposed changes to the plan; this process will help avoid comparisons with what might have been. Too often, people view the IPS as only a legalistic document when, in fact, it also helps to address a client’s emotional needs.

## Making Recommendations

The adviser–client life cycle begins with the establishment of the relationship and then proceeds with an in-depth profile of the client by the adviser. At the conclusion of the profiling process, the adviser and client formulate an IPS. Then, it is time for the adviser to combine his professional expertise in the technical aspects of portfolio management with the knowledge of the client’s situation and the IPS and to prepare specific recommendations for the client to act upon.

We think many advisers make a mistake at this phase of the relationship because they approach it as purely a technical problem to be solved. The technical problem is to “make the best recommendations possible.” Are the best recommendations those that are technically proficient and demonstrate expertise but go unimplemented because they are not accepted by the client? We believe the goal of the adviser–client relationship is to improve the outcome for the client. Achieving that goal requires that the recommendations be expert but also take into account the likelihood of being enacted.

Ideally, no compromise would need to be made between expert advice and recommendations that can be implemented, but if forced to choose, we would prefer good advice that clients implement over great advice that gathers dust on a shelf. The ideal of not needing to compromise requires that the adviser, when preparing recommendations, be ever mindful of behavioral biases when presenting recommendations to the client. Particular biases to be wary of are regret avoidance, the endowment effect, the focus on unusual events, narrow framing, and mental accounting.

**Regret Avoidance.** “Eliminate emotion” is a standard prescription in innumerable how-to guides that purport to provide a path to better investing. We agree with those sentiments and have expressed them many times ourselves. We make the unremarkable observation, however, that nothing in our experience suggests that emotion is going away anytime soon. Emotion can, at best, be reduced. Even so-called quants, who delegate their trading decisions to machine-driven algorithms, are buffeted by emotional turmoil when their models do not work and they are asked (or ask themselves) whether they still have “faith” in their models.

Among the emotions that arise in the context of advising individuals on investing, *regret* is a particularly interesting one because of several characteristics:

- *Pervasive.* We would not be surprised if every investor had felt regret’s sting—perhaps when she failed to carry out a buy trade and then watched the security’s price soar. Even those who pride themselves on their cold-blooded objectivity and discipline have probably remarked at least once, in the face of poor performance, “If only I had \_\_\_\_.”
- *Influential in decision making.* If regret were merely a pervasive emotion that individuals tended to deal with effectively, then it would not interest us for purposes of this article. Larrick and Boles (1995) found, however, that when individuals expect to receive feedback on a forgone alternative, they alter their behavior so as to avoid the feedback. In other words, the possibility of being faced with evidence that they would have been better off going down a different path is so painful that individuals take action to block the receipt of the feedback.



- *Frequently misleading.* In some realms of human activity, regret is a good thing. When we look back on decisions we have made, the pain of regret can encourage us to learn from the past and make better decisions in the future. The power of regret as a learning tool works well in a highly predictable world, but it does not work well in a world where randomness rules. Statman (2002) opined that “regret often teaches us the wrong lesson in the stock market, where randomness and luck rule” (p. 8).
- *Painful.* Regret hurts, so individuals who feel regret may naturally try to make it go away by blaming someone else. In the context of the adviser–client relationship, the client may blame the adviser.

The world of investment advice is fruitful ground for generating regret. First of all, investing provides many opportunities for regret. Perfectly reasonable and well-intentioned recommendations go wrong all the time, and each mistake creates regret. Second, clear alternatives exist for each decision. The opportunity for feedback is present in probably all investing decisions. A plausible alternative for each decision is simply not to do it. Thus, each decision evaluated solely on the basis of the rate of return it generated can be compared with a reference point of 0 percent. Or if the investor is choosing between investing in Security A and in Security B, then the security not chosen provides a clear benchmark for comparing results. Finally, in the world of investing, measurement is easy. For regret to influence decision making, the outcome of the decision has to be known; feedback of some form as to the outcome of the decision has to be possible. When it comes to investing, data on the success of alternatives are often easily available to the client.

Recommendation 12: Make sure the client “buys into” each recommendation.

Recommendation 12 seems ridiculously obvious. After all, in a nondiscretionary relationship, as a matter of law, the adviser is not the decision maker. The client agreement or buy-in that we recommend, however, is something deeper and more meaningful than the type of consent that is usually obtained. We suggest creating a sense of joint ownership by bringing the client close to the decision-making process. Giving clients choices on various product types that may achieve the same goal enables them to make more decisions, which promotes an increased level of client acceptance of recommendations.

We have also found that clients can be resistant in areas with which they have little familiarity. Increasing clients’ awareness of the investments being recommended through education can thus help client buy-in, although this approach may take several meetings and explanations.

After expending the energy to present and explain recommendations to a client, an adviser may feel his job is done, but seeking out client objections or questions and addressing them can solidify client buy-in. Therefore, advisers should always take time to check with clients.

We advise against ever talking a client into a recommendation with which the client is not comfortable. It is always better to wait and seek opportunities for more education and dialogue rather than to proceed and risk client regret.

Recommendation 13: The adviser's recommendations should take into account the client's past investment experiences.

We recommended earlier that investment advisers take an investment history of their clients, just as physicians take a medical history of their patients. In profiling, the motivation for this history is typically to gauge the client's level of sophistication and risk tolerance. An additional reason for collecting this history, however—a reason we think is underappreciated—is that the past history of the client will influence how current recommendations are viewed. Gilovich (1981) explains this process:

We do not view each new decision or dilemma as entirely novel. Rather, we often liken new dilemmas to past events or decisions from which useful information, strategies, and courses of action can be gleaned. That is, we form associations between existing circumstances and past situations and are influenced by what we consider to be the implications of those past events. . . . This process can greatly benefit effective decision making, because it brings additional information to bear on the decision analysis and thus fills in some of the uncertainty surrounding the decision. However, this process is also fraught with potential costs, since the associations between existing circumstances and past events can sometimes be inappropriate and misleading. (p. 797)

Advisers who want to recommend an investment that is similar to something that was disastrous for the client in the past will have a tough task. But the effect of past experience can also work in favor of the adviser; one approach to creating client buy-in to a recommendation is to review the client's history and couch the recommendation in terms of a successful past investment.

**The Endowment Effect.** The theory of the endowment effect (proposed by Thaler 1980) posits that simply owning an item causes individuals to value that item more than similar items they do not own. Kahneman, Knetsch, and Thaler (1990) conducted a classic experiment showing this effect. Some individuals in a group were given a mug, and others were not. Those with the mugs were asked how much they were willing to sell the mugs for, and those without the mugs were asked how much they were willing to pay for a mug. In two separate experiments conducted, the median prices for the sellers were \$7.12 and \$7.00 whereas the median prices for the buyers were \$3.12 and \$3.50.

This effect is important for advisers to understand because often clients arrive with already existing portfolios—in many cases, portfolios that the client was responsible for creating. The adviser may have difficulty convincing clients to part with these holdings because of the endowment effect.

Recommendation 14: Understand the ownership history of the client's existing investments.

The adviser needs to understand the ownership history of any existing components of the client's portfolio. One particular facet to focus on is the length of time a security in the portfolio has been owned. In experiments using trivial items such as key chains and mugs, Strahilevitz and Loewenstein (1998) found that length of ownership is positively correlated with the price at which subjects are willing to sell an item. Anecdotal evidence suggests the same applies to investors: The longer a security is held, the more emotionally attached the investor becomes and the less willing the investor is to part with it, irrespective of the investment merits for doing so.

Understanding the ownership history of a portfolio can help advisers plan the delivery of their recommendations. For example, an adviser should be prepared to spend substantial time explaining the rationale for and obtaining client buy-in for a recommended sale of long-held positions. The adviser may want to prepare several approaches for this discussion in case the client has difficulty overcoming the endowment effect. In this area, we find that sharing stories of other clients who have successfully reduced risk, constructed improved portfolios, or had better outcomes by changing their portfolios may help clients visualize a different path and overcome the endowment effect.

One of the large risks related to the endowment effect that we see facing clients is their tendency to have excessively large portions of their portfolios invested in a single stock or industry. This concentration exists not only for wealthy clients (e.g., former company executives) but also for clients with smaller portfolios. For example, the largest asset in 401(k) plans continues to be company stock, despite the well-publicized losses employees experienced at companies such as Enron Corporation, WorldCom, Bear Stearns, and Lehman Brothers.

Recommendation 15: Trim concentrated positions over time.

If a client holds a large position in a single stock, a recommendation to immediately sell all the shares will often be unsuccessful. The endowment effect can be particularly strong in these situations because the concentration is often a result of past periods of strong stock performance. We recommend breaking the sell decision down into increments for two reasons.

First, this approach will reduce regret. Unloading an entire position at once carries the risk of major regret if the stock performs strongly subsequent to the sale. Unloading through several smaller decisions helps lessen the chance of regret.

Second, spreading the sale out over time lessens the emotional pain of taxes. The prospect of giving up some of the gain by paying taxes can amplify the endowment effect. Smaller sales over time can lessen the tax burden at any given point, and pushing portions of the tax liability into future years can ease the emotional pain of selling.

In addition, we suggest that advisers continue to point out the risks of a concentrated position to dilute the value associated with it. In many cases, the adviser can find examples of similar companies to illustrate this—companies that seemed safe at one time but for some reason (e.g., fraud, mismanagement, technical obsolescence, product replacement) proved very risky.

If we assume that no complicated tax issues exist, is this gradualist approach to reducing concentrated positions at odds with good advice? Stated more harshly, does pandering to the emotional whims of the client compromise the professional standards to which the adviser is held?

Our answer is no. One interpretation of the adviser’s job is to maximize long-term wealth subject to considerations of risk. Another interpretation is to maximize *utility*. This latter and more expansive view of the adviser’s role requires recognition that

the long term is not where life is lived. Utility cannot be divorced from emotion, and emotions are triggered by changes. A theory of choice that completely ignores feelings such as the pain of losses and the regret of mistakes is not only descriptively unrealistic, it also leads to prescriptions that do not maximize the utility of outcomes as they are actually experienced. . . . (Kahneman 2003, p. 1457)

**Focus on Unusual Events.** Advisers want an accurate history of a current portfolio. Typically, however, individuals tend to display a bias toward recalling those events that were the most unusual. Morewedge, Gilbert, and Wilson (2005) asked subway passengers to recall a past occasion when they missed a train and what resulted and also to predict their reaction if they miss a train in the future. Those who chose to recall a single occasion recalled the worst one and predicted their experience would be equally bad if they missed a train in the future.

Recommendation 16: Do not assume the client’s version of the portfolio’s history is accurate.
---

Advisers should always seek to uncover and verify the history that a client remembers. The adviser can probe into the rationale for purchases/sales and specifics on the time period of purchases/sales. Clients may not recall all the facts or time lines, but this questioning can help the adviser develop the proper pattern of facts and clarify the client's recollection. We have seen, for example, a client perceiving a past real estate investment as having worked out well. After further exploration, however, the client recalled that he had overlooked the maintenance and interest costs. When these facts were pointed out, the client's perception changed.

This bias can be a particular problem in situations in which an adviser wishes to recommend an instrument that is perceived by the client to be unusual or exotic and then the investment does not work out over time. It will stick out in the client's mind for a long time and potentially color future interactions between the client and adviser. An adviser might ask the client if a recommendation is similar to some investment strategy the client followed in the past. The client may have a vivid memory of a past experience that could taint her perception—for better or worse—of the current recommendation. To reinforce the benefits of the current recommendation, the adviser should remind the client of the broad context in which past recommendations were made. This approach can improve the client's memory, increase the accuracy of the client's version of history, and shift the focus from an isolated recollection.

**Narrow Framing.** Tversky and Kahneman (1981) introduced the concept of “framing”—that is, the idea that the context in which a decision is made influences the choice of the decision maker. Kahneman and Lovallo (1993) later introduced the concept of narrow framing, in which an individual faced with a decision evaluates that decision in isolation from other decisions. An example of a narrow frame is the investor who evaluates each trading decision in isolation, without considering the rest of the portfolio. In a broad frame, the investor not only evaluates a trade on its own merits but also takes into account the trade's effect on the rest of the portfolio.

Clients who adopt narrow frames create problems for investment advisers (as well as for themselves if they choose to be self-directed and make their own decisions). The reason is that most advisers prefer to manage at the portfolio level (i.e., they want to be evaluated on how the portfolio as a whole performs in comparison with a relevant benchmark). The client who adopts a narrow frame will tend to evaluate each trade individually and is likely to be unimpressed by the adviser who recommends trades that are primarily motivated by a desire to maintain or enhance diversification in the overall portfolio.

There are competing, but not mutually exclusive, explanations for why individuals exhibit narrow frames. Two that are relevant for our topic are regret avoidance and intuitive decision making.

- *Regret avoidance.* Barberis, Huang, and Thaler (2006) suggested that when the tendency toward regret is high, it can lead to narrow framing. Consider the investor who frets over the performance of each and every security in a portfolio. This individual will naturally be unable, or at least find it difficult, to take a portfolio view.
- *Intuitive decision making.* Kahneman (2003) suggested that narrow framing can arise when individuals make intuitive, spontaneous decisions. The spontaneous decision is influenced by evidence and reasoning processes that are quickly made available to the individual. We believe that the intuition of most people is to look at an investment decision in isolation and to consider its effect on the broader portfolio only after thoughtful deliberation.

Recommendation 17: Bundle recommendations.

Narrow frames are the enemy of diversification. Bundling recommendations combats narrow frames and benefits the client in two ways.

First, bundling recommendations creates an educational opportunity. Explaining to the client how a set of recommendations works as a unified set is easier when the recommendations are bundled together. Bundling also helps show the client the complexity of the portfolio-building task (see Recommendation 21).

Second, bundling recommendations combats another common bias—the disposition effect. Shefrin and Statman (1985) first documented the reluctance of individual investors to sell securities if the investors would have to recognize a loss on them (thanks to individuals’ aversion to losses) and investors’ willingness to sell securities that have increased in value. They termed this tendency the “disposition effect.” Kumar and Lim (2008), using actual investor data, found that those who grouped trades together were less prone to the disposition effect and built more diversified portfolios.

**Mental Accounting.** Thaler (1999) defined mental accounting as a “set of cognitive operations used by individuals and households to organize, evaluate, and keep track of financial activities.” Mental accounting is relevant in the context of investment management because money is not fungible across accounts. For example, if an individual unexpectedly finds \$20 on the sidewalk, he may well be more likely to spend that \$20 on a self-indulgent, impetuous expenditure than if the \$20 came out of his next paycheck. The

sidewalk money can be thought of as being in the “windfall” account, which is governed by different rules from those governing the “serious” account represented by the paycheck.

Recommendation 18: Segregate “emotional” investments from the rest of the portfolio.

Emotional investments are those to which the client has a strong emotional attachment that biases the client’s objectivity. These attachments can develop for many reasons, including inheritance, impact that a company’s products have had on the client (e.g., a medical device or treatment that helped a family member), or social welfare. For investments to which the client has an emotional attachment, any discussion of the *merits* of the investment can strain the relationship. Therefore, as long as the amount in the investment is a relatively small percentage of the portfolio and does not put the portfolio at risk, segregating this investment into its own account can often be fruitful. This approach allows the adviser to focus on adding value to areas of the portfolio in which it will be welcomed. The initial segregation should not be used, therefore, as a reason to avoid revisiting the situation and continuing attempts to educate the client.

## Evaluating Performance and Renewing the Relationship

Good performance cures a remarkable variety of ills, so if performance were always stellar, many of the emotional pitfalls discussed in the previous sections would not be a cause of concern for the competent adviser. Of course, performance is not always stellar. In fact, periods of poor performance are inevitable. For example, one study of equity mutual funds found that 99 percent of the top-quartile funds for the entire 1998–2007 period had at least one year in which the fund finished in the bottom half of its peer group and 95 percent had at least two years of such performance. In fact, 83 percent had at least one year in which the fund finished in the *bottom quartile*.<sup>2</sup>

The point in the relationship when the client and adviser are evaluating performance and renewing the relationship is a natural time to review some of the assumptions and expectations that were set at the beginning of the relationship. The adviser has learned about the client’s background and preferences, and the client has experienced the adviser’s process and communication style, as well as seen more of the market’s performance. In addition, the client’s life situation and circumstances may have changed. This is an appropriate time to

<sup>2</sup>Schwab Center for Financial Research.

see if expectations are being met, to reset them if necessary, and to conduct further client profiling, albeit not as extensive as the initial profiling. Continued profiling will help uncover any new information that can be used to deepen the relationship. Clients may fall prey to behavioral traps as time passes even if signs of the biases were not present at the beginning of the relationship. For this reason, the adviser should always be looking for signs of the behavior we have mentioned. Recommendations initially suggested may need to be revisited, or new suggestions may need to be made. In addition to the biases already described, a time of review may reveal hindsight bias, outcome bias, and myopic loss aversion.

**Hindsight Bias.** Advisers have a difficult job because their performance is judged after the fact and *ex post* evaluations are often clouded by hindsight bias—that is, the tendency for people with knowledge of what happened to have an inappropriately strong belief that they would have predicted that outcome. Hindsight bias can be thought of as an offshoot of the availability heuristic. As the client reviews what has happened since the relationship began, “events that actually occurred are easier to imagine than counterfactual events that did not” (Camerer and Loewenstein 2004, p. 10). That is, clients may think the outcome that occurred was the only possible outcome and should have been foreseen by the adviser.

Because of this selective interpretation of history, Kahneman and Riepe (1998) concluded,

Events that the best-informed experts did not anticipate often appear almost inevitable after they occur. Financial punditry provides an unending source of examples. Within an hour of the market closing every day, experts can be heard on the radio explaining with high confidence why the market acted as it did. A listener could well draw the incorrect inference that the behavior of the market was so reasonable that it could have been predicted earlier in the day. (p. 55)

Worse for the adviser is the fact that, as shown by experiments by Fischhoff (1975), those influenced by hindsight bias are not even aware it is happening.

Hawkins and Hastie (1990) suggested that hindsight bias is particularly likely in at least two situations that are present in financial advice:

1. *The event has a well-defined alternative outcome.* Whether a client evaluates the adviser against a benchmark, against peers, or on the basis of absolute returns, *ex post* performance is clear cut.



2. *The outcome has emotional or moral significance.* Anyone who has ever worked with an individual investor will attest to the emotion that is often present when making financial decisions and discussing subsequent outcomes.

Recommendation 19: Convey the complexity of the task.

The market and economic dynamics, together with the multitude of product choices available, create a complex environment with many decision points for an adviser. Popular media and the wide availability of market information have led many investors to minimize the complexity of the investment task. The adviser can convey the complexity of the task by creating an understanding of the current situation and the broad array of alternative choices before making final recommendations to the client. The adviser can illustrate for the client the steps in the analysis used to arrive at the recommendations. The firm philosophy and process (see Recommendation 1) can and should be revisited at this point.

**Outcome Bias.** A relative of hindsight bias is outcome bias—inappropriately taking the known outcomes of a decision into account when evaluating the quality of the decision. Baron and Hershey (1988) tested for the existence of outcome bias in the realm of laypeople evaluating medical decisions made by doctors. In their experiment, the authors provided subjects with a description of several situations faced by a doctor treating a patient. Each situation was described in two ways. In the first way, the situation was described from the standpoint of what the doctor knew (i.e., the facts and circumstances of the case, the treatment options), the decision made by the doctor, and the fact that the outcome was successful. The second method of description was identical to the first description except that the outcome was described as being a failure. The task assigned to the subjects was to rate the quality of the decision.

In 44 percent of the situations rated by subjects, the “success” version was rated as having been a high-quality decision compared with such a rating in only 9 percent in the “failure” situations. In 46 percent of the situations rated, the subjects saw no difference in decision quality between the “success” and “failure” versions.

What is particularly interesting in this study is that when subjects were asked whether they should have taken into account the outcome when evaluating the decision quality, 88 percent said they should not; yet, an analysis of the subjects showed that 75 percent did take the outcome into account.

Recommendation 20: Continually reinforce investment philosophy and process.

As clients experience a variety of outcomes in various periods, they may start to second-guess the adviser or lose confidence in the adviser's recommendations. To help counteract this outcome bias, reinforcement of the firm's investment philosophy and process should continue throughout the relationship. The adviser should emphasize the logic of the philosophy and process and how they were developed. The adviser should communicate that the investment approach is designed to work most of the time, shifting the odds in favor of the client over the long term, but that the approach cannot be expected to work in all environments (refer to Recommendation 3).

**Myopic Loss Aversion.** Loss aversion, first documented by Kahneman and Tversky (1979), is the tendency of individuals to allocate more weight to losses than to gains of an equal magnitude (e.g., losing \$100 hurts more than the pleasure of gaining \$100 is enjoyed). Various studies have estimated that for most people, the pain from a loss of X dollar amount is twice as strong the pleasure of a gain of the same dollar amount (see also Tversky and Kahneman 1992; Kahneman et al. 1990).

Benartzi and Thaler (1995) pioneered the study of *myopic* loss aversion, which is loss aversion combined with a tendency to evaluate results over short time periods. Clients with myopic loss aversion create problems for advisers who recommend a strategic asset allocation tilted toward equities. These clients will tend to evaluate the performance of their equity exposures over inappropriately short periods of time and to prefer more and more conservative investments, which may be inconsistent with what an objective analysis suggests they need.

Thaler, Tversky, Kahneman, and Schwartz (1997) conducted an experiment designed to test these tendencies. Subjects were told they were portfolio managers whose task was to allocate dollars between Fund A and Fund B. Subjects were not told that the return and risk characteristics of Fund A were modeled after the historical performance of five-year bonds and that Fund B was given the characteristics of a capitalization-weighted stock index. Each subject was to invest for 200 periods.

Three groups of subjects were created. In Group 1, each subject made an allocation decision between Funds A and B for each of the 200 periods. In Group 2, the subjects were allowed to make an allocation decision once every 8 periods (i.e., they were told that when they made an allocation decision, they would have to stick with it for 8 periods). In Group 3, subjects had to stick with their allocations for 40 periods.

After each decision, the subjects received feedback on how their portfolios were performing. After all 200 periods had passed, subjects in all three groups were asked to make an allocation decision between Funds A and B that would last for the next 400 periods.

Group 1 subjects (who received the most feedback) allocated roughly twice as much to Fund A, which was modeled after the performance of bonds, compared with subjects in Groups 2 and 3. Group 1 thus exhibited myopic loss aversion. Moreover, analysis revealed that the subjects in Group 1 were not aware of the myopic loss aversion. This finding is consistent with the results of many studies on other types of biases: Individuals committing the error are often unaware that they are doing so.

What is particularly intriguing about myopic loss aversion is that it appears to be hardwired into the human brain. Shiv, Loewenstein, Bechara, Damasio, and Damasio (2005) conducted an experiment similar in spirit to that of Thaler et al. (1997). The innovation of Shiv et al. was to compare the results of 19 individuals who had normal brains with a group of 15 individuals who each had “chronic and stable focal lesions in specific components of a neural circuitry that has been shown to be critical for the processing of emotions” (p. 436).

The experiment consisted of 20 rounds. In each round, the individual faced a decision to invest or to not invest. The optimal strategy was to invest each time.

The brain-damaged individuals invested about 84 percent of the rounds, and this percentage was stable from Round 1 through Round 20. The normal patients invested only about 58 percent of the time overall, and their decision making got steadily more conservative over time.

Recommendation 21: Adopt broad frames when discussing performance.

Clients with myopic loss aversion and a narrow frame will tend to evaluate performance one security at a time and view performance as simply price sold minus price paid. The adviser can broaden the frame by getting the client to think about performance in more comprehensive ways. For example, for the taxable investor, taking into account after-tax returns is a good idea. Considering taxes justifies the sensible practice of selling some securities at a loss to offset realized gains.

Broadening the frame by including risk and/or risk-adjusted return can also be effective. This approach has the benefit of keeping clients focused on risk, which an adviser has greater ability to influence than return.

Another way to broaden the frame is to define performance not simply as percentage gains and losses but also as growth in dollars toward a goal or an increase in wealth.

Reducing myopic loss aversion while broadening the frame of reference in performance review can also be accomplished by lengthening the evaluation period. This can be done in client reporting or in discussions with clients. Continually reinforcing the need to avoid noise in the marketplace over the short term and refocusing the client on longer, more meaningful periods are part of reducing myopic loss aversion.

Finally, we are often surprised by the number of clients who are not aware of compounding effects or total return. In these cases, some baseline explanations may help, especially for clients who are overly focused on price moves or yield.

## **Conclusion**

The business of advising individuals on their investments is ultimately about improving outcomes for clients. One aspect of “outcome” is risk-adjusted return for the client over the long term. Therefore, of course, an adviser naturally needs expertise in the technical aspects of how to increase the odds of achieving risk-adjusted returns over the long term. The outcome will not be realized, however, unless the advice is acted upon and the client sticks with the advice over time. Advisers who use the findings of behavioral finance to develop a better understanding of the lens through which their efforts are viewed by clients stand a better chance of their clients understanding their strategy and approach, agreeing to implement that approach in a timely manner, and sticking with that approach during the inevitable periods of poor performance.

---

*Bryan Olson, CFA, is senior vice president at Charles Schwab & Co., Boston.*

*Mark W. Riepe, CFA, is senior vice president at the Schwab Center for Financial Research, Charles Schwab & Co., and president of Charles Schwab Investment Advisory, San Francisco.*

---

## **REFERENCES**

- Barberis, Nicholas, Ming Huang, and Richard H. Thaler. 2006. “Individual Preferences, Monetary Gambles, and Stock Market Participation: A Case for Narrow Framing.” *American Economic Review*, vol. 96, no. 4 (September):1069–1090.
- Baron, Jonathan, and John C. Hershey. 1988. “Outcome Bias in Decision Evaluation.” *Journal of Personality and Social Psychology*, vol. 54, no. 4 (April):569–579.
- Benartzi, Shlomo, and Richard Thaler. 1995. “Myopic Loss Aversion and the Equity Premium Puzzle.” *Quarterly Journal of Economics*, vol. 110, no. 1 (February):73–92.
- Bohnet, Iris, Fiona Greig, Benedikt Herrmann, and Richard Zeckhauser. 2008. “Betrayal Aversion: Evidence from Brazil, China, Oman, Switzerland, Turkey, and the United States.” *American Economic Review*, vol. 98, no. 1 (March):294–310.
- Camerer, Colin F., and George Loewenstein. 2004. “Behavioral Economics: Past, Present, Future.” In *Advances in Behavioral Economics*. Edited by Colin F. Camerer, George Loewenstein, and Matthew Rabin. Princeton, NJ: Princeton University Press.

- Cerulli Associates. 2007. *Cerulli Quantitative Update: Managed Accounts 2007*. Boston: Cerulli Associates.
- Fischhoff, Baruch. 1975. "Hindsight (Not Equal to) Foresight: The Effect of Outcome Knowledge on Judgment under Uncertainty." *Journal of Experimental Psychology: Human Perception and Performance*, vol. 1, no. 3 (August):288–299.
- Gilovich, Thomas. 1981. "Seeing the Past in the Present: The Effect of Associations to Familiar Events on Judgments and Decisions." *Journal of Personality and Social Psychology*, vol. 40:797–808.
- Grable, John, Ruth H. Lytton, Barbara O'Neill, So-Hyun Joo, and Derek Klock. 2006. "Risk Tolerance, Projection Bias, Vividness, and Equity Prices." *Journal of Investing*, vol. 15, no. 2 (Summer):68–74.
- Hawkins, Scott A., and Reid Hastie. 1990. "Hindsight: Biased Judgments of Past Events after the Outcomes Are Known." *Psychological Bulletin*, vol. 107, no. 3 (May):311–327.
- Kahneman, Daniel. 2003. "Maps of Bounded Rationality: Psychology for Behavioral Economics." *American Economic Review*, vol. 93, no. 5 (December):1449–1475.
- Kahneman, Daniel, and Daniel Lovallo. 1993. "Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking." *Management Science*, vol. 39, no. 1 (January):17–31.
- Kahneman, Daniel, and Mark W. Riepe. 1998. "Aspects of Investor Psychology." *Journal of Portfolio Management*, vol. 24, no. 4 (Summer):52–65.
- Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decisions under Risk." *Econometrica*, vol. 47, no. 2 (March):263–291.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. 1990. "Experimental Tests of the Endowment Effect and the Coase Theorem." *Journal of Political Economy*, vol. 98, no. 6 (December):1325–1348.
- Kumar, Alok, and Sonya Seongyeon Lim. 2008. "How Do Decision Frames Influence the Stock Investment Choices of Individual Investors?" *Management Science*, vol. 54, no. 6 (June):1052–1064.
- Langer, Ellen J. 1975. "The Illusion of Control." *Journal of Personality and Social Psychology*, vol. 32, no. 2 (August):311–328.
- Larrick, Richard P., and Terry L. Boles. 1995. "Avoiding Regret in Decisions with Feedback: A Negotiation Example." *Organizational Behavior and Human Decision Processes*, vol. 63, no. 1 (July):87–97.
- Loewenstein, George, Ted O'Donoghue, and Matthew Rabin. 2003. "Projection Bias in Predicting Future Utility." *Quarterly Journal of Economics*, vol. 118, no. 4 (November):1209–1248.
- Medvec, Victoria Husted, Scott F. Madey, and Thomas Gilovich. 1995. "When Less Is More: Counterfactual Thinking and Satisfaction among Olympic Medalists." *Journal of Personality and Social Psychology*, vol. 69, no. 4 (October):603–610.
- Moore, Don A., Terri R. Kurtzberg, Craig R. Fox, and Max H. Bazerman. 1999. "Positive Illusions and Forecasting Errors in Mutual Fund Investment Decisions." *Organizational Behavior and Human Decision Processes*, vol. 79, no. 2 (August):95–114.

- Morewedge, Carrie K., Daniel T. Gilbert, and Timothy D. Wilson. 2005. "The Least Likely of Times: How Remembering the Past Biases Forecasts of the Future." *Psychological Science*, vol. 16, no. 8 (August):626–630.
- Shefrin, Hersh M., and Meir Statman. 1985. "The Disposition to Sell Winners Too Early and Ride Losers Too Long." *Journal of Finance*, vol. 40, no. 3 (July):777–790.
- Shiv, Baba, George Loewenstein, Antoine Bechara, Hanna Damasio, and Antonio R. Damasio. 2005. "Investment Behavior and the Negative Side of Emotion." *Psychological Science*, vol. 16, no. 6 (June):435–439.
- Statman, Meir. 2002. "Financial Physicians." In *Investment Counseling for Private Clients IV*. Charlottesville, VA: Association for Investment Management and Research.
- Strahilevitz, Michal A., and George Loewenstein. 1998. "The Effect of Ownership History on the Valuation of Objects." *Journal of Consumer Research*, vol. 25, no. 3 (December):276–289.
- Strickland, Lloyd H., Roy J. Lewicki, and Arnold M. Katz. 1966. "Temporal Orientation and Perceived Control as Determinants of Risk-Taking." *Journal of Experimental Social Psychology*, vol. 2, no. 2 (April):143–151.
- Thaler, Richard H. 1980. "Toward a Positive Theory of Consumer Choice." *Journal of Economic Behavior & Organization*, vol. 1, no. 1:39–60.
- . 1999. "Mental Accounting Matters." *Journal of Behavioral Decision Making*, vol. 12, no. 3 (September):183–206.
- Thaler, Richard, Amos Tversky, Daniel Kahneman, and Alan Schwartz. 1997. "The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test." *Quarterly Journal of Economics*, vol. 112, no. 2 (May):647–661.
- Tversky, Amos, and Daniel Kahneman. 1981. "The Framing of Decisions and the Psychology of Choice." *Science*, vol. 211, no. 4481 (January):453–458.
- . 1992. "Advances in Prospect Theory: Cumulative Representation of Uncertainty." *Journal of Risk and Uncertainty*, vol. 5, no. 4 (October):297–323.
- Yao, Rui, Sherman D. Hanna, and Suzanne Lindamood. 2004. "Changes in Financial Risk Tolerance, 1983–2001." *Financial Services Review*, vol. 13, no. 4 (Winter):249–266.