

Pitfalls to Avoid

Warren Buffett says that smarts and talent are like a motor's horsepower, but that the motor's *output* depends on rationality. "A lot of people start out with 400-horsepower motors but only get a hundred horsepower of output," he said. "It's way better to have a 200-horsepower motor and get it all into output."¹ Even bright investors with an intelligent stock-picking approach don't reach their potential if they fail to make disciplined decisions. By exposing the major pitfalls to avoid, this chapter will help you make your output rise toward your horsepower.

Classical economic theory assumes that all people have the same preferences, perfect knowledge of all alternatives, and understand the consequences of their decisions. In short, people behave rationally. No one really believes that this idyllic state exists. In fact, ample empirical research and anecdotal evidence show that people aren't perfectly rational. This gap between theory and practice has spawned a new field called behavioral finance.² Researchers in this field seek to bridge the gap between classical economics and psychology to explain how and why people, and markets, behave.

Behavioral finance raises a couple of key issues for investors. The first is whether or not it is possible to exploit irrational behavior when it occurs. If we know when people are acting irrationally, can we take advantage of the resulting value-to-price gaps? The second is how to avoid making bad decisions as an investor. The goal is to close the gap between how we *actually* make decisions and how we *should* make decisions. Minimizing mistakes helps us achieve superior returns. Behavioral finance's fundamental lessons are a valuable complement to the expectations investing process.

We can analyze investor behavior either at a **collective** or an **individual** level. Collective behavior deals with the potentially irrational actions of groups, and is typically associated with "excessive" market swings.³ Evidence includes investor herding and price bubbles. Herding is when a large group of investors make the same choice based on the observations of others, independent of their own knowledge.⁴ This massive social imitation can occasionally lead to inefficiencies—i.e., discernable gaps between value and price. A price bubble, often the result of herding, is the part of an asset price movement that can't be explained by fundamentals.⁵

These collective behavior phenomena are interesting to the extent that they create profitable expectations opportunities for individual stocks. But taking advantage of collective irrationality, either for a specific stock or for the market as a whole, is difficult. Since most humans have a strong urge to be part of the crowd, acting independently is a tough assignment. Furthermore, the crowd is often right. So being a contrarian for its own sake is an unlikely path to investment success.

Analysis of individual behavior focuses on the fact that investors consistently fall into "psychological traps." There are two main sources for these traps. The first is behavior that does not conform to sound economic theory. This source is formally

articulated in **prospect theory**, developed by Daniel Kahneman and Amos Tversky, which identifies economic behaviors that are inconsistent with rational decision-making.⁶

For example, people act in a risk-averse way when making choices between risky outcomes, conflicting with the “rational” behavior predicted by expected utility theory. Suppose you had a choice between (1) accepting a sure loss of \$750 or (2) taking a chance where there is a 75% chance of losing \$1,000 and a 25% chance of losing nothing. Both choices have an expected loss of \$750, but most people pick the latter because the uncertain choice holds out the hope that they won’t have to lose. As we will see, this risk aversion can influence investor buy and sell decisions.

Heuristic biases are a second cause of psychological traps. Investors use rules-of-thumb, or heuristics, to help simplify their lives. Heuristics are useful because they reduce the information demands of decision-making. However, they also lead to biases that can undermine the quality of our decisions. Many of these biases exist because of how humans are hardwired to think.

The best way to avoid these psychological traps is to become familiar with them and the forms they take. While this creates a high degree of self-awareness, good decision-making is still not easy. Often our intuition suggests a course of action that proves to be suboptimal under more deliberate analysis. We now highlight five common pitfalls along with suggestions on how to avoid them.

Five Pitfalls to Avoid

1. Overconfidence—acting as if you are smarter than you are. Researchers have found that people consistently overrate their abilities, knowledge, and skill. This is especially true in areas outside of their expertise. For example, professional securities analysts and money managers were presented with ten requests for information that they were unlikely to know (e.g., total area of Lake Michigan in square miles). They were asked to respond to each question with both an answer and a “confidence range”—high and low boundaries within which they were 90% certain that the true number resides. On average, the analysts choose ranges wide enough to accommodate the correct answer only 64% of the time. Money managers were even less successful at 50%.⁷

Edward Russo and Paul Schoemaker, in their book “Managing Overconfidence,” argue that this confidence quiz measures how well we recognize the gap between what we think we know and what we do know. They point out that good decision-making means knowing the limits of your knowledge. Warren Buffett echoes the point with his circle of competence concept. He argues that investors should define their circle of competence, or area of expertise, and stay within it. Overconfidence in our expertise can lead to poor decisions. In the words of Will Rogers, “It’s not what we don’t know that gets us into trouble, it’s what we know that ain’t so.”

The overconfidence trap has at least two direct implications for those applying the expectations investing approach. The first comes into play when investors estimate high and low growth rates for the sales trigger, the initial step in the three-step search for expectations opportunities. Overconfidence in setting the range can lead to

misidentification of the turbo catalyst. An unrealistically broad estimate range overestimates the stock price impact of the sales trigger. Sales would then be incorrectly identified as the turbo trigger. If the estimated range is too narrow, the reverse is true—you may choose one of the other two triggers (operating costs and investments) as the turbo trigger when, in fact, it should be sales growth. Inappropriate ranges induced by overconfidence also lead to incorrect high and low shareholder values, which bias the expected value analysis and therefore generate misleading buy and sell signals.

Second, overconfidence can lead to excessive stock trading and high transaction costs. Brad Barber and Terrance Odean studied account data for over 60,000 households from a large discount brokerage firm, and found that the 20 percent of investors who traded most actively earned an average net annual return 5.5 percent lower than that of the least active traders.⁸ Overconfident investors make more mistakes because they trade more often, and rack up unnecessary transaction costs to boot. Expectations investing, by contrast, is a long-term investment approach that incorporates tax and trading cost considerations and thereby limits trading activity.

How do you avoid overconfidence?

- Try not to overestimate your abilities. Know thyself.
- Allow for a “margin of safety.”
- Actively challenge your extreme (high and low) figures.
- Seek feedback from others.

2. Anchoring and adjustment—being affected by what data are presented.

In considering a decision, we often give disproportionate weight to the first information we receive. As a result, initial impressions, ideas, estimates, or data anchor our subsequent thoughts.

Hersh Shefrin cites the example of the expectations revisions of securities analysts following corporate earnings announcements. He suggests that analysts do not revise their earnings estimates enough to reflect the new information because they are anchored on past views. So positive earnings surprises tend to be followed by more positive surprises, and negative surprises by more negative surprises.⁹

One of the most common anchors is a past event or trend. In considering high and low ranges for sales growth, avoid giving too much weight to historical results at the expense of more salient factors. This is especially important when a company is undergoing rapid change. Another major anchor for investors is stock price. Investors often consider a stock cheap if it is at a low point in its trading range and expensive if it is at the high end. So even if the current fundamental prospects of a company justify a change in value, it is often difficult to erase historical prices from memory.

How do you avoid anchoring and adjustment?

- Realize that past events or prices are signposts, not answers.
- View the decision from various perspectives.
- Seek information from a variety of sources.

- Consider the problem on your own terms to avoid being swayed by (anchored by) the opinion of others.

3. Improper framing—being affected by how data are presented. People’s decisions are affected by how a problem, or set of circumstances, is presented. Even the same problem framed in different—and objectively equal—ways can cause people to make different choices. One example is what Richard Thaler calls “mental accounting.”¹⁰ Say an investor buys a stock at \$50 per share that surges to \$100. Many investors divide the value of the stock into two distinct parts—the initial investment and the quick profit. And each is treated differently—the original investment with caution and the profit portion with considerably less discipline. Thaler and Eric Johnson call this “the house money effect.”

This effect is not limited to individuals. Hersh Shefrin documents how the committee in charge of Santa Clara University’s endowment portfolio succumbed to this effect. Because of strong market performance, the endowment crossed a preordained absolute level (the frame) ahead of the time line set by the university president. The result? The university took some of the “house money” and added riskier investment classes to its portfolio, including venture capital, hedge funds, and private placements.¹¹ Classic economic theory assumes frame independence: all money is treated the same. But empirical evidence shows that the frame indeed shapes decisions.

One of the most significant insights from prospect theory is that people exhibit significant aversion to losses when making choices between risky outcomes, no matter how small the stakes. In fact, Kahneman and Tversky find that a loss has about *two and a half times* the impact of the gain the same size. In other words, people feel a lot worse about losses of given size than they feel good about a gain of similar magnitude. This leads to loss aversion.

To describe this loss aversion, Shefrin and Meir Statman coined the term “disposition effect,”¹² which they amusingly suggest is shorthand for “predisposition toward get-evenitis.” Since it is difficult for investors to make peace with their losses, they tend to sell their winners too soon and hold on to their losers too long. This is because they don’t want to take a loss on a stock. They want to at least get even despite the fact that the original rationale for purchasing the stock no longer appears valid. This is an important insight for all investors, including those that adopt the expectations investing approach.

Odean confirms the disposition effect in a study of 10,000 accounts at a large discount brokerage firm.¹³ He finds that investors indeed realize their gains more readily than their losses. And the winning investments investors chose to sell continue to outperform the losers they hold on to in subsequent months. The moral is that we are at risk of making poor decisions when we rely on purchase price as the frame of reference.

How do you avoid improper framing?

- Remind yourself of your long-term, fundamental objectives.
- Try to reframe the issue in different ways.
- Welcome diverse opinions.

- Think about how you framed the issue throughout the decision process.

4. Irrational escalation of a commitment—compounding past errors.

Investors tend to make choices that justify past decisions, even when the past decisions no longer appear valid. Past decisions create what economists call “sunk costs.” A sunk cost is past investment of money or time that cannot be recovered. Even though investors know that sunk costs are irrelevant to current decisions, it is often hard to divorce the two.

An example of this pitfall that befalls investors is doubling down—buying more of a stock once it has declined. This idea is related to the disposition effect. Not only are investors slow to take losses, they often buy *more* of a stock just because they bought it in the past. Of course, prior investment decisions are history, and decisions today need to be based on current facts. As Warren Buffett says, “The most important thing to do when you find yourself in a hole is to stop digging.”

Investors who stick to the expectations process for buying and selling stocks will avoid the escalation trap. The expectations investing approach recommends buying stocks only when they trade at a sufficient discount to their expected value. And it suggests selling stocks that have reached their expected value, when more attractive stocks are available, or when expectations for a current holding have changed for the worse. Past decisions should dictate neither buying nor selling; you should base your decisions on *today’s* expectations opportunities.

How do you avoid irrational escalation of a commitment?

- Consider only future costs and benefits.
- Consider the perspectives of those not involved with the initial decision—they tend to be dispassionate.
- Examine why admitting error distresses you. Deal with self-esteem head-on.
- Think about how you would explain your choice as if it were new.

5. Confirmation trap—justifying a point of view. Investors tend to seek out information that supports their existing point of view while avoiding information that contradicts their opinion. This trap not only affects where investors go for information but also how they interpret the information they receive—too much weight is given to confirming evidence and not enough to disconfirming evidence.

Investors often fall into the confirmation trap after making an investment decision. For example, once investors purchase a stock, they seek evidence that confirms their thesis and dismiss or discount information that disconfirms it. This leads to a loss of objectivity.

We have found one technique particularly useful for managing the confirmation trap in the expectations investing process. Ask questions and conduct analysis that challenges your most cherished and firmly held beliefs about the company and industry. Posing disconfirming questions opens your mind to alternatives you haven’t fully considered, improving your decision-making and, ultimately, your investment track record.

How do you avoid the confirmation trap?

- Play devil's advocate at all times.
- Be honest and objective.
- Expose yourself to disconfirming evidence and examine it with appropriate rigor and analysis.
- Ask disconfirming questions.

We have discussed psychological traps for investors in general and the expectations investing approach in particular. But these traps are also very useful for evaluating management actions. Subpar management decision-making in areas like mergers and acquisitions, capital spending, and employee relations can lead to material expectations shifts. You should assess management quality in part based on their ability to avoid these costly pitfalls.

Consider the ill-fated acquisition of Snapple by Quaker Oats in 1994. Quaker's management team fell into multiple psychological traps. First, they anchored on the historical growth rates for the alternative beverage industry, without giving full consideration to competitive dynamics. Second, they exhibited overconfidence in their ability to integrate the Snapple complex distribution system with their own Gatorade network. Finally, they irrationally escalated their commitment by allocating an additional \$20 million to Snapple marketing in July 1996—well beyond the typical beverage marketing season. The business never responded. In 1997, Quaker sold Snapple for \$300 million—a fraction of the initial \$1.7 billion purchase price—and took a \$1.4-billion asset write-off.

The Postdecision Audit

The traps reviewed in this chapter are key reasons that investors don't achieve the investment performance they hope for. You can minimize your errors by maintaining a high degree of awareness of your decision-making process. Here are some tips:¹⁴

- Don't claim credit for successes that have occurred by chance. When you succeed, honestly consider which of your actions contributed to your success and which did not.
- Avoid rationalization when you fail. Don't exaggerate the role of bad luck in your failures. Learn from the experience. Review the complete expectations investing process and objectively assess your actions.
- Minimize hindsight bias, an after-the-fact belief that you would have known an outcome of an event ahead of time. (Colloquially known as Monday morning quarterbacking.) You can do this by keeping notes of what you expect at the time that you make your decisions.

Expectations investing is an intelligent approach to stock picking. It is market based and economically solid. Yet even the best investment approach is undermined by common decision-making errors. Accordingly, the ability to identify and manage cognitive pitfalls is essential in the search for superior returns.

-
- ¹ Brent Schlender, "The Bill & Warren Show," *Fortune* (20 July 1998).
- ² It is generally agreed that the starting point for the field was in 1985 with the landmark paper: Werner De Bondt and Richard Thaler, "Does the Stock Market Overreact?," *Journal of Finance* 40, (1985) 793-805.
- ³ Robert J. Shiller, "Do Stock Prices Move Too Much to Be Justified by Subsequent Changes in Dividends?" *American Economic Review* 71, 1981.
- ⁴ Sushil Bikhchandani, David Hirshleifer, and Ivo Welch, "Informational Cascades and Rational Herding: An Annotated Bibliography," Working Paper: UCLA/Anderson and Michigan/GSB (June 1996).
- ⁵ Peter M. Garber, *Famous First Bubbles: The Fundamentals of Early Manias* (Cambridge: MIT Press, 2000), pp. 4.
- ⁶ Daniel Kahneman and Amos Tversky, "Prospect Theory: An Analysis of Decision Under Risk" *Econometrica*, 47: 263-291 (1979).
- ⁷ J. Edward Russo and Paul J. H. Schoemaker, "Managing Overconfidence," *Sloan Management Review* (Winter 1992).
- ⁸ Brad Barber and Terrance Odean, "Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors," *Journal of Finance*, Vol. LV, No. 2, (April 2000), 773-806.
- ⁹ Hersh Shefrin, *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing* (Boston: Harvard Business School Press, 2000), pp. 20.
- ¹⁰ Richard H. Thaler "Saving, Fungibility, and Mental Accounts," *Journal of Economic Perspectives*, 4:1 (Winter 1990), 193-205.
- ¹¹ Shefrin, pp. 214-18.
- ¹² Hersh Shefrin and Meir Statman, "The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence," *Journal of Finance* 40, (1985) 777-90.
- ¹³ Terrance Odean, "Are Investors Reluctant to Realize Their Losses?" *Journal of Finance* 53 (October 1998), 1775-1798.
- ¹⁴ Russo and Schoemaker, pp. 187-88.