



# Longbow Asset Management Company

## Quarterly Investment Note February 10, 2005

Behavioral finance is an emerging field of study quickly moving from financial theory's backcountry to its frontier. It uses psychology to explain investor behavior that cannot be explained with traditional financial and economic theory.

Traditional financial and economic theory, which were largely forged in the ivory towers of academia at such places as *The University of Chicago*, *New York University*, and *MIT* subtly rest on the sensible assumption that investors make purely rational decisions. A rational decision, as defined by an economist, is one that maximizes an investor's utility function.

This simply means that when presented with a choice an investor will always choose the course of action that will gain the most for expending the least. Thus, it is a decision supported by logic and reason and is therefore deemed 'rational' by economists. With this assumption made, economists were then free to develop mathematical models that now provide investors with the necessary tools to price assets, optimize portfolios, and quantify and manage risk – all valuable contributions and significant achievements.

But was their underlying assumption correct? Do investors actually make purely analytical decisions utterly devoid of emotion? Studies analyzing historical trades generated by both retail investors as well as professional traders reveal that, in fact, they do not.

On the other hand, does this mean the pendulum swings completely the other way and the opposite is then true? Do investors make wild, unpredictable, or unexplainable decisions? No, this is not the case either. Behavioral finance, by utilizing the insights of psychology, provides the explanation.

Psychologists, upon hearing economists' definition of 'rational,' would not be fully satisfied. They would be quick to cite the work of *Sigmund Freud* who insisted that rational as well as irrational behaviors are the result of reason. That is, there is a method to the patient's madness.

Behavioral finance arrives at the same conclusion. Investors often make sub-optimal decisions *but they have great reasons for making these poor decisions*. And these reasons are not random or unpredictable, but manifestations of the investor's embedded psychological biases.

Below are three well-documented<sup>1</sup> psychological biases known to affect investors' judgment:

### **Psychological Bias 1: Disposition Effect** – *Selling Winners Early and Holding Losers Too Long*

People naturally seek pride and avoid regret. Selling an investment for a gain confirms that the investor's original decision was correct and yields pride. By contrast, selling an investment at a loss painfully admits that they made a mistake and produces regret. Not surprisingly, investors eagerly sell winners and reluctantly sell losers.

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<sup>1</sup> The examples used were adapted from the books *The Psychology of Investing (2002)* by John R. Nofsinger and *Irrational Exuberance (2000)* by Robert J. Shiller.

**Psychological Bias 2: House Money Effect** – *Profits Increase the Appetite for Risk Taking*

After earning a profit, people are willing to take more risk. This is described as the ‘house money effect’ by gamblers because of the known tendency to play more carelessly with winnings than their original money. Similarly, investors may invest their profits into riskier securities.

**Psychological Bias 3: Magical Thinking** – *The Illusion of Control*

Magical thinking describes the tendency for people to erroneously believe that their involvement or actions will positively affect the outcome of an event for their benefit even when the event’s outcome is known to be purely random.

Research has shown that when asked to sell their lottery ticket people demand a price that is on average four times greater if they personally chose the numbers themselves than if they possess a ticket to which the numbers were randomly assigned. Clearly, each ticket’s odds of winning are equal. But the lottery player perceives their selections somehow increased the odds in their favor. Similarly, investors may incorrectly feel that by personally selecting an investment it has an improved chance for success.

**Conclusion: “Know Thyself”** – *Greek Maxim*

Behavioral finance offers investors this advice: “know thyself.” By exposing an investor’s ingrained flaws it affords them the opportunity to reduce their destructive impact. And far from contradicting or undermining traditional financial and economic theory, behavioral finance confirms their worth<sup>2</sup>. Rational decision making maximizes wealth, but it may not be our natural instinct.

Longbow Asset Management Company faithfully accepts behavioral finance’s counsel<sup>3</sup>. Our hope is to create client wealth, not destroy it. To that end, we employ a computer driven optimization model to construct mean-variance efficient equity portfolios for our clients. This mathematical model maximizes an investor’s return for a given level of risk and, thus, qualifies as a rational decision making tool.

However, as behavioral finance warns, we must still guard against the harmful effects of our innate psychological biases – no one is immune. Fortunately, these biases lead to predictable and therefore avoidable mistakes. Wise investors must be self aware and understand that human judgment can be both an asset as well as a potential liability.

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Each of our firm’s clients is unique and each has different investment goals. We work efficiently and in a disciplined manner to design investment solutions to meet our clients’ needs. We invite you to call our office at (918) 295-9929 or send an e-mail message to [jakedollarhide@lbamc.com](mailto:jakedollarhide@lbamc.com) if you have any questions or need assistance anytime. We are always available to help and we appreciate your trust and confidence.

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<sup>2</sup> In addition to the three aforementioned psychological biases uncovered by behavioral finance, there are many others that are well documented and widely shared by investors all over the world, including price anchoring, overconfidence, overreaction, and mental accounting.

<sup>3</sup> As our Website states: “The advantage of using a computer model is that it limits emotions from overly influencing the investment decision making process. Using the “gut model” can lead to irrational decisions and give poor results. Having a model in place creates a systematic, definable, and transparent process.” But ultimately humans make the final decisions.