

Book Review: *Your Money and Your Brain*

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How the New Science of Neuroeconomics Can Help Make You Rich

Jason Zweig (Simon & Schuster, 2007)

Does managing your money sometimes make your head hurt? We're beginning to learn the reasons why.

In 2002, Princeton Professor Daniel Kahneman won the Nobel Prize in Economics for observing and categorizing the variety of emotional and cognitive mistakes we tend toward in our financial decision making...like following the herd into buying high and selling low. The Nobel was a highlight in the field that has come to be known as behavioral finance.

According to Kahneman, investing is not just about making money, it triggers deep emotional cravings, such as achieving pride and avoiding regret. Gains and losses provide cocaine like highs and depression-like lows. But Kahneman and other psychologists, while able to discern and describe our frequent errors, have not really been able to explain *why* we make them.

In his new book, *Your Money and You Brain*, *Money Magazine's* Jason Zweig explores how the new science of neuroeconomics contributes to this field and "can help make you rich"—or maybe just achieve Zweig's objective of knowing ourselves well enough to make far fewer of these mistakes.

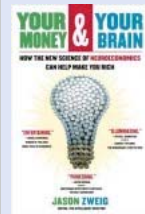
Neuroeconomics, a hybrid of neuroscience, economics, and psychology, takes the behavioral finance analysis a step deeper—all the way into the nooks and crannies of our brains. Both rational thought and our emotions are centered in that three pound organ. But the emotional circuitry—think "fight or flight"—which has been developing for millions of years, tends to overwhelm the rational/logical skills necessary to survive and thrive as an investor.

Dissecting Your Brain

The brain is divided roughly into two parts—the prefrontal cortex (the reflective or thinking part) and the basal ganglia/limbic system (the intuitive and emotional part.) This distinction is important in understanding a number of the mistakes, including what's called the "framing" bias. Improper framing causes us to focus either on the wrong or partial data, such as focusing on a mutual fund's past performance (a poor predictor of future returns) rather than expenses (a good predictor).

The book is chocked full of examples and exercises that you can do. And, there are descriptions of research experiments—conducted with sensors measuring the subjects' brain functions—documenting the various phenomena.

Your Money and Your Brain



Are your choices of investments driven by stock tips? Psychology? How about neurochemistry? Author Jason Zweig walks us through the new science of neuroeconomics, which can inform our understanding of our investment decision making.

Zweig has organized the book into chapters generally paralleling behavioral science categories, including a few deadly sins: Greed, Prediction, Confidence, Risk, Fear, Surprise, Regret and Happiness.

Fear and Risk, Prediction and Confidence

A good place to start is Fear—first cousin to Risk. What are we most afraid of? What are the consequences and the likelihood that it will happen? Our emotions frequently trick us into miscalculating this equation. A classic example is the fear of flying while feeling safe driving—which is statistically much riskier than flying. When we are behind the wheel, we have an illusion of control. Investors, in general, significantly overestimate the odds of a stock market crash, the actual likelihood of which is about 2%, and entirely overlook the effects of inflation on our purchasing power. In the short run, stock market volatility resembles the Hobbesian state of nature. The amygdala—your brain’s alarm system—would have us run from the dragon when the market falls by 10% in a couple of days. The reflective part of your brain hopefully knows better.

Two other related phenomena are Prediction and Confidence. We are actually addicted to prediction. Just the experience of trying to predict what the markets will do shoots dopamine into the brain. Being right causes an overdose. Amazingly, recency bias, which causes us to give inordinately greater weight to recent events over remote ones, occurs *biologically* due to of the surge of dopamine those recent events produce. This bias resulted in investors losing trillions of dollars in the aggregate by selling in 2002—at the bottom of the technology bubble—in advance of what has been a five-year bull market. The best way to immunize yourself is to stop relying on prediction: yours or anyone else’s.

One of the most difficult things for investors to do is admit to themselves that neither they nor their money managers are above average. The chapter on Confidence—actually overconfidence—is replete with examples of surveys in which over 80% of the respondents believe they are exceptional. Even in the face of contrary evidence, people exaggerate their returns. And, investors frequently mistake luck for skill in what is essentially a game of random numbers...in the short run.

Because they think they know more, employees overwhelmingly invest too much of their 401(k) money in company stock. Peter Lynch’s advice to “buy what you know” is the worst investment advice known, because none of us knows more than the collective knowledge of everybody else (i.e. the market). Zweig commends you to liberate yourself by saying three simple words—“I don’t know”—and buy a diversified portfolio of index funds.

Rules, Policies, and Procedures

At the end of each chapter, Zweig provides sage and practical advice on how to overcome our genetic predisposition to subvert our finances. The antidote, the author makes clear, is to put procedures and rules in place, in advance, to guide your investment decision making. There is an Appendix containing a simple template for an Investment Policy Statement, investing’s Holy Grail—if you have the discipline to stick to it. These tools can help you get started on winning the battle with your amygdala, which may very well be worth the price of the book.