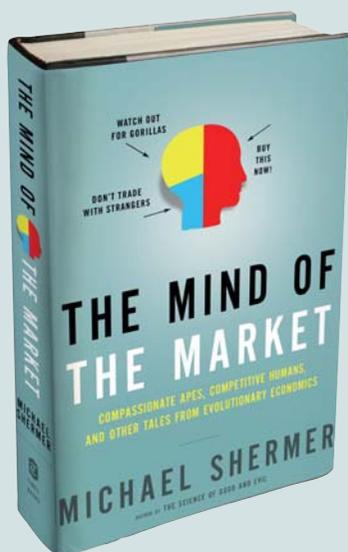


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MICHAEL SHERMER is the author of ten books and a columnist for *Scientific American*. He holds a master’s degree in experimental psychology and a doctoral degree in the history of science and is an adjunct professor of economics at Claremont Graduate University. As the publisher of *Skeptic* magazine and the founder of the international Skeptics Society, he is singularly dedicated to expanding scientific literacy. Throughout the years, he has launched business start-ups, invested in the stock market, and bought brand-name goods—often exhibiting his evolutionary share of irrationality.



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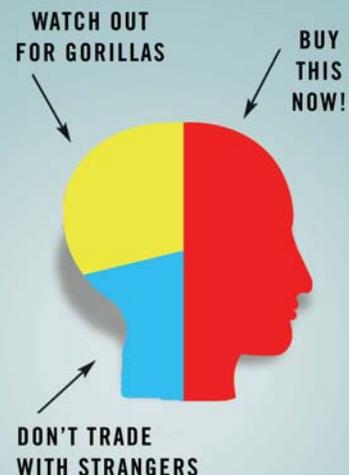
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**WHEN IT COMES TO MONEY,
EVERYONE BEHAVES IRRATIONALLY**

THE MIND OF THE MARKET

**COMPASSIONATE APES, COMPETITIVE HUMANS,
AND OTHER TALES FROM EVOLUTIONARY ECONOMICS**

BY MICHAEL SHERMER

Why do we hold on to stocks long after it becomes clear that we should sell them? Why do we pay more for shirts with popular brand names, even when the labels are visible only inside our collars. Why do we become indignant as soon as we learn that other people are getting paid more for the same work, though we were perfectly satisfied before. Why? Because evolution wired us that way.

The Mind of the Market uncovers the hidden psychology and biology that shapes the way we think about money, explaining hot fields such as:

- neuroeconomics, in which fMRI scans analyze brains while people are making decisions, uncovering their biochemical, emotional roots
- behavioral economics, in which mathematically identical money choices are posed to real people to figure out why we strongly prefer having fewer options and avoiding losses
- evolutionary economics, in which scientists observe how other primates act in situations eerily similar to the office and the marketplace

THE MIND OF THE MARKET

NEVER CHEAT A MONKEY

In the ultimatum game, you are given \$100 to split between yourself and a partner. Whatever division you propose—if your partner accepts it—you are both richer. How much should you offer? Why not a \$90-\$10 split? If your partner is a self-interested money-maximizer, she isn't going to turn down a free ten bucks, right? But proposals that deviate beyond a \$70-\$30 split are usually rejected. They aren't considered fair.

“I'll scratch your back if you'll scratch mine” only works if I know you will respond with something approaching parity. **This sense of fairness is hardwired into primate brains.** In studies with capuchin monkeys in which two monkeys work together on a task and only one is rewarded, if the rewarded monkey does not share, the partner will refuse to help in the future. And when both monkeys are rewarded but one receives a sugar-packed grape and the other receives a less exciting slice of cucumber, the monkey who receives the cucumber becomes noticeably outraged, even throwing the cucumber at researchers in disgust.

DOUBLE YOUR MONEY

Gamblers are highly sensitive to losses, but not in the way you might think: They tend to follow losing hands with bigger bets and turn conservative after a win by placing smaller bets. Experiments in behavioral economics demonstrate that most of us tend to be cautious when granted the chance to lock in a sure gain. **We don't want to lose what we already have.**

We are so loss averse that most people will reject the prospect of a 50-50 probability of gaining or losing money unless the amount to be gained is double the amount to be lost. Thanks to the wonders of fMRI technology, we now know that as the gain-to-loss ratio rises, activity increases in the dopamine-sensitive areas of the brain (dopamine normally rewards decisions that are good for the organism, such as making food, family, and friends). Differences in loss aversion between individuals can be predicted by how much a person's dopamine receptors were turned on by gains versus turned off by losses. Risk takers owe their boldness to basic neurochemistry.

“REAL” TRADE

Imagine that you have pre-purchased a \$100 ticket for an event you have been eagerly anticipating, but when you arrive you discover that you have lost the ticket. Would you plunk down another hundred bucks? In experiments, 54 percent of people say they would not. But now imagine that instead you arrive at the venue intending to purchase your ticket at the gate. As you pull out your cash, you discover that you have lost one of the two \$100 bills you had folded into your wallet. Would you still purchase the ticket? When asked, 88 percent of people said they would.

Rationally, there is no difference between a \$100 ticket and a \$100 bill. In economic jargon they are fungible—pieces of paper of equal value used as a medium of exchange. Emotionally, though, there is a difference. People sort their money into categories in what behavioral economists call “mental accounting.” A ticket is a commodity, a product, a thing—like a stone tool or a trading shell—while money is symbolic and representational. **Our brains evolved to handle tools and shells, not currency.**

THE PRICE OF HAPPINESS

Would you rather earn \$50,000 a year while other people make \$25,000 or earn \$100,000 a year while other people get \$250,000? Stunningly, studies show that most people select the first option, even when they are told that the prices of goods and services would be the same, so they would only be able to afford half the lifestyle. As H. L. Mencken quipped, “A wealthy man is one who earns \$100 a year more than his wife's sister's husband.”

Why would someone choose half the money? While our genes account for roughly half of our predisposition to be happy or unhappy, much of the rest comes down to how we view ourselves in the pecking order. **We want what other people have—our happiness depends on it.** In our hunter-gatherer past, there was so little wealth to accumulate that love, hard work on behalf of one's family and community, and socializing with fellow group members as friends and peers were the primary roads to happiness. When we fall to the bottom of our tribal order, our happiness plummets, even if our tribe is Fortune 500 CEOs.

