# Avantis Investors By American Century Investments

## Investment Errors Are Costly

Choosing fish as your main course when a waiter hovers over you and your fellow diners are impatient is a reasonable shortcut even if it turns out to be an error. Chicken might have been a better choice, but the cost of this error is small. The fish tastes pretty good.

But choosing a set of mutual funds for your retirement savings account without extensive examination is an unreasonable shortcut, likely to turn out to be a costly error.

Financial advisers who possess financial-facts and human-behavior knowledge can educate their clients and guide them to good choices when clients' erroneous choices threaten to inflict disastrous costs.

### SHORTCUTS AND ERRORS

Which contractor shall we choose to remodel our kitchen? We care about a range of benefits and costs when choosing a contractor, including price, quality, reliability, and distance. Typical homeowners find ranking all contractors by the full set of benefits and costs too complicated. Instead, we might begin with a cognitive shortcut that simplifies the problem by excluding contractors from outside our city, limiting the number of contractors we interview to three, and setting a maximum price we are willing to pay. We might add an emotional shortcut, accounting for our feelings of ease in interactions with the contractor.

Good cognitive and emotional shortcuts enable us, typical homeowners and investors, to get close to the best choices. Shortcuts turn into errors when they take us far from our best choices. Cognitive shortcuts that simplify choices turn into cognitive errors when they cause us to save time and effort by failing to visit houses remodeled by the contractor. And cognitive shortcuts that simplify choices turn into cognitive errors when they induce us to save time failing to examine whether a fund's good recent performance indicates anything more than good luck.

Emotional shortcuts stirred by feelings of affinity turn into emotional errors when they induce us to hire a contractor who is an expert at affinity fraud. And emotional shortcuts stirred by feelings of affinity turn into emotional errors when they induce us to choose a poorly managed fund whose manager graduated from the same school.

#### **ACADEMIC PERSPECTIVE**



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### SYSTEM 1 AND SYSTEM 2

Cognitive and emotional shortcuts are part of the intuitive "blink" System 1 in our minds, whereas System 2 is the reflective "think" system. Psychologists Keith Stanovich, Richard West, and Nobel-prize winning psychologist Daniel Kahneman described these two systems.¹ System 1 is automatic, fast, and effortless, whereas System 2 is controlled, slow, and effortful.

The intuition of System 1 and its cognitive and emotional shortcuts take us to good choices in most of life. But the reflection of System 2 takes us to better choices when the intuition of System 1 misleads us into cognitive and emotional errors. People with knowledge of human behavior and financial facts employ cognitive and emotional shortcuts correctly, whereas people lacking such knowledge commit cognitive and emotional errors as they employ them incorrectly.

System 2 is most beneficial when the consequences of poor choices by System 1 are costly, such as the consequences of poor investment choices.

We might begin with a System 1 intuitive claim or hypothesis, such as the claim that mutual funds rated 5 stars are best for our retirement savings plan. But we should subject that claim to the reflective System 2, examining the claim by the tools of science—logic and empirical evidence—in a controlled, slow, and effortful process.

We are fortunate to have brains that use System 1 shortcuts and jump to conclusions. Indeed, jumping to the right conclusions constitutes much of what we call intelligence. This is what we do when we swerve our cars quickly to avoid a sofa that just fell off the truck in front of us. A lightning-quick combination of cognition and emotions prompts a System 1 slam on the brakes when the cars ahead of us stop suddenly, but we are unable to coordinate our cognition, emotions, and foot movements fast enough to pump the brakes, as the older among us remember from driving school. Computers are better at the braking task. The anti-lock braking systems onboard today's cars function as a System 2, letting us jump to our System 1 conclusions, slamming the brakes, while they pump the brakes fast enough to avoid a crash.

### FROM IGNORANT TO KNOWLEDGEABLE

Ignorant people lack financial-facts knowledge, humanbehavior knowledge, or both. They have not learned to proceed from the intuitive System 1 to the reflective System 2 even when errors induced by System 1 impose substantial costs. For example, people lacking financialfacts knowledge fail to understand differences between types of mortgages and thus cannot identify the ones that are best for them. Their portfolios might include a small number of stocks, because they believe portfolios composed of a few stocks of companies they know are less volatile, or more likely to rise in value, than portfolios of mutual funds that hold thousands of stocks of companies they do not know.2 And they fail to understand they should assess their investment success by the difference between their returns and market returns, rather than by their returns alone.

People lacking human-behavior knowledge are unaware of their susceptibility to cognitive errors and are easily

misled into funds advertised as 5-star funds. They are not on guard against representativeness cognitive errors that mislead them into forecasting either continuations or reversals of recent stock market trends. And they are blind to emotional errors such as unwarranted pride or unjustified regret.

Financial advisers perform System 2 functions in controlled, slow, and effortful processes as they probe, challenge, and offer their clients better choices than those derived by their clients' System 1.

Financial advisers who possess financial-facts and human-behavior knowledge can educate their clients. Education is hard, especially when financial-facts and human-behavior knowledge conflict with System 1 intuition. But education is possible and its benefits are great.

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#### **INVESTMENT ERRORS ARE COSTLY**

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Meir Statman is the Glenn Klimek Professor of Finance at Santa Clara University and a consultant to Avantis Investors. His research focuses on behavioral finance. He attempts to understand how investors and managers make financial decisions and how these decisions are reflected in financial markets. His most recent book is *Finance for Normal People: How Investors and Markets Behave*, published by Oxford University Press.

### **Endnotes**

- Stanovich, Keith E., and Richard F. West. "Individual Differences in Reasoning: Implications for the Rationality Debate?" *Behavioral and Brain Sciences* 23, No. 5 (2000): 645-665. Kahneman, Daniel. Thinking, Fast and Slow. New York: Farrar, Straus and Giroux, 2011.
- <sup>2</sup> Reinholz, Nicholas, Philip M. Fernbach, Bart De Langhe. 2016. "Do People Understand the Benefit of Diversification?" in NA *Advances in Consumer Research Volume 44*, edited by Page Moreau and Stefano Puntoni: Association for Consumer Research: 190-194.

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