

Behavioral Matters

Insights from the application of Behavioral Finance | Issue 14

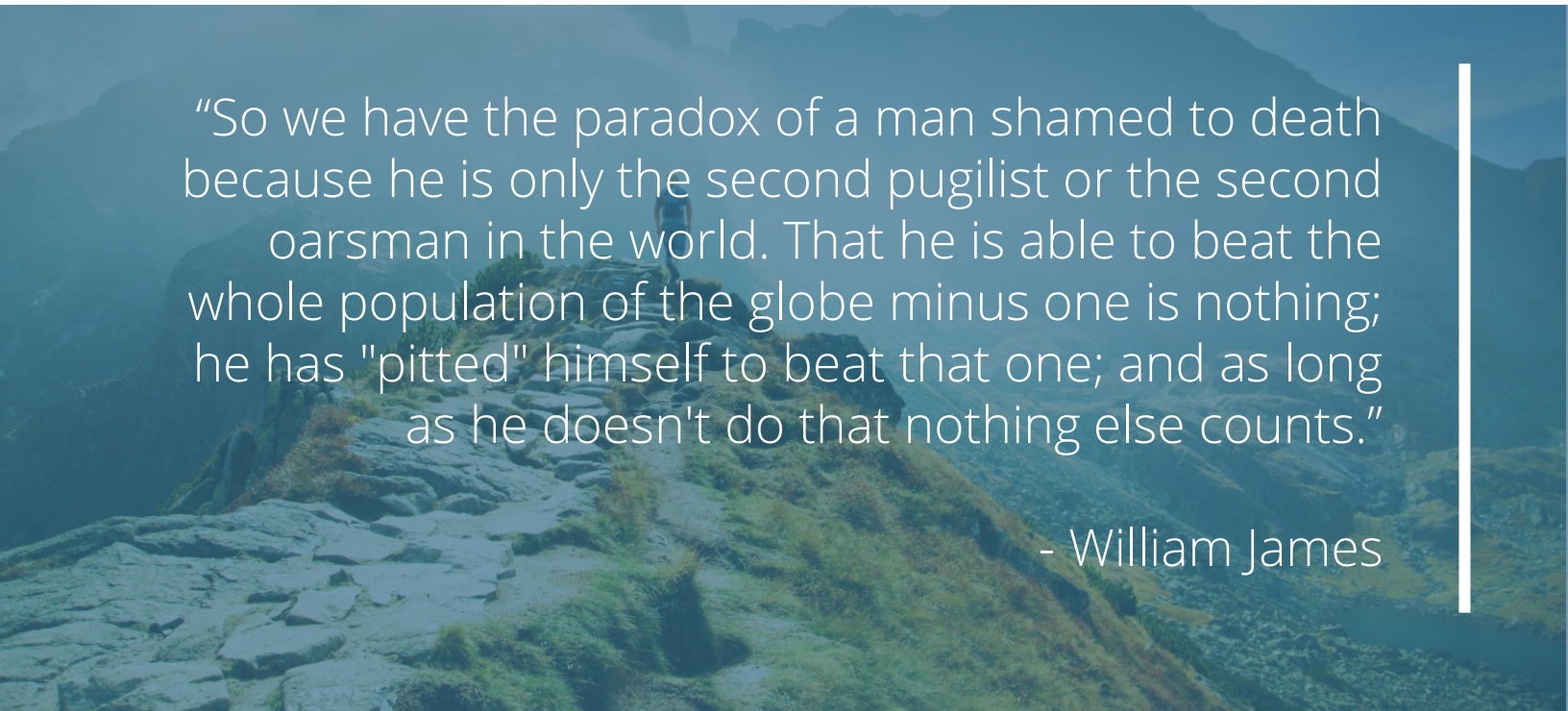
Counterfactual Investing

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SKILL VERSUS LUCK

INTRODUCTION

Behavioral Matters is a series of essays on the application of Behavioral Finance written specifically for professional investors and portfolio managers.

A person is standing on a rocky mountain peak, looking out over a vast valley. The scene is captured in a blue-tinted, slightly hazy style, suggesting a high-altitude or early morning setting. The person is small in the frame, emphasizing the scale of the landscape.

“So we have the paradox of a man shamed to death because he is only the second pugilist or the second oarsman in the world. That he is able to beat the whole population of the globe minus one is nothing; he has "pitted" himself to beat that one; and as long as he doesn't do that nothing else counts.”

- William James

Imagination and creativity help turn good ideas into winning strategies and great picks if they are calibrated to ensure favorable results. Imagination also can push investors toward unproductive decisions — ones that feel right while lowering performance. Known as Counterfactual Thinking, this type of deliberation can affect your interpretation of results and can shape the buys and sells you make.

DARN, I JUST MISSED IT



“Counterfactual Thinking does more than color how we feel about past events; it can also trigger surprising actions.”

Emotional responses to outcomes often are influenced by what might have been. Counterfactual Thinking, as such thoughts are known, often ends in regret. The emotional response to an event depends on how easily one can conjure up alternate outcomes that are either better or worse. An often cited example regards missing a flight by five minutes or 45 minutes. People that just miss their flight tend to kick themselves more than those who missed their plane by a mile. The closer you were to making the flight, the easier it is to construct an alternative outcome or counterfactual that triggers regret.

WHEN WORSE IS BETTER

Who should be happier, the person that wins the silver medal or the bronze? The silver medal winner is objectively better off — he or she is closer to gold than the bronze medal winner. Yet, that is precisely why a silver medalist enjoys second place far less than the bronze medalist enjoys coming in third.

In analyzing medal winners from both the Olympics and the Empire State Games, researchers Thomas Gilovich, Victoria Husted Medvec and Scott Madey found that silver medalists were less happy with their accomplishment than bronze winners. The silver medalists created a counterfactual based on not having won gold, focusing upward and ruminating about how close they came to first place. This thinking induced feelings of regret and frustration... the, if-only-I-hads. The bronze medalist, in contrast, focused downwards and formulated a more positive counterfactual. Rather than being among the others hitting the showers, they were at least up on the awards pedestal and very happy to be there. Counterfactual Thinking does more than color how we feel about past events; it can also trigger surprising actions.

PHANTOM GAINS & LOSSES

Investors sometimes generate counterfactuals when they consider repurchasing previously owned stocks. In their paper "Once Burned, Twice Shy" Terrance Odean, Michal Strahilevitz and Brad Barber observed that investors are more likely to repurchase a stock when its current price is below that at which it was sold, and less likely to repurchase it when the current price is higher. The counterfactuals motivating these choices are explained as: "Investors who buy a stock at a lower price than they previously sold it experience the pleasure of knowing they are better off than if they had never sold that stock. Investors who buy a stock at a higher price than they previously sold it are painfully aware that they are worse off than if they had simply never sold that stock." The terms "knowing" and "being aware" express the feelings investors have about these purchases based on their if-only-I-hads.

The more relevant question for these investors is whether any stock they previously owned is likely to outperform alternate stocks going forward. For example, repurchasing a stock at a price higher than at what it was sold might be a good investment decision — even though it might feel bad. The counterfactuals make the investor feel a loss or gain based on price movement when the stock wasn't even owned. This distracts from focusing on today's thesis and how the stock will perform going forward. The result can be murky judgment — where emotions emanating from if-only's override objective analysis.



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CAN'T WIN FOR LOSING

Counterfactuals also shape the choices made when adding to current positions, according to Odean et al. Investors tend to add less frequently to holdings whose price has gone up, since being purchased ("winners") and add more frequently to those whose price has dropped ("losers"). The counterfactual created for winners is, "I should have purchased more when it was cheap." Investors prefer to avoid feeling the regret that this counterfactual brings, so they tend to avoid these buys. The counterfactual for buying losers seems to be associated with avoiding the pain of losing, as in, "If I buy more now and the price moves up, I can regain my current losses." This counterfactual is consistent with Prospect Theory and resetting one's reference point. The team's research demonstrates, however, that the investors were no better off preferentially adding to losers over winners. Feeding their counterfactuals did not enhance their returns.



CONCLUSION



Counterfactual Thinking can hurt performance. It has the power to make silver medalist feel worse than those taking bronze. It can drive investors to make decisions based on if-only's rather than facts. Counterfactuals can cause you to consider repurchasing stocks based more on price movement since being last sold than on current thesis. They can also cause you to refrain from adding to current portfolio winners... perhaps missing a huge run-up in the bargain. Selfawareness counters such ineffective thinking — keeping decisions factual.

ENDNOTES

1. "When Less Is More: Counterfactual Thinking and Satisfaction Among Olympic Medalist", Thomas Gilovich, Victoria Husted Medvec and Scott F. Madey, *Journal of Personal and Social Psychology*, Volume 69, 1995.
2. "Once Burned, Twice Shy: How Naïve Learning and Counterfactuals Affect the Repurchase of Stocks Previously Sold", Terrance Odean, Michal Strahilevitz and Brad M. Barber, *Working Paper*, September 2004.