Investing Lessons from Golf and Blackjack Players

By Robert Huebscher
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The Lehman bankruptcy, which occurred a year ago today, was the nadir of a financial crisis brought on by excessive risk-taking throughout the investment industry. Naturally, reigning in risky behavior has been in vogue since, and regulators are hard at work trying to do just that wherever possible. Sometimes, however, the problem is not too much risk, but too little. Indeed, research confirms that individuals are hard-wired to avoid certain risks at crucial times—even when, in so doing, they impose costly economic penalties on themselves.

In other words, at key moments people refuse to take chances that will make them money. Behavioral finance has a term for this – risk intolerance.

And, believe it or not, some of what we know about risk intolerance comes from research into two unlikely topics: the games of blackjack and golf.

One putt too late

The golfing research comes from Devin Pope and Maurice Schweitzer, professors at the University of Pennsylvania, who published a paper earlier this year, Is Tiger Woods Loss Averse? Persistent Bias in the Face of Experience, Competition, and High Stakes. They showed that golfers make par putts more frequently than they do birdie putts, and that this proclivity costs a top-20 golfer approximately $1.2 million in prize money per year.

(In golf, each hole has a par score – the number of strokes expected to complete the hole. Finishing the hole in one less than par is a birdie and one more than par is a bogey.)

The professors studied putts attempted by 200 golfers between 2004 and 2008 – 1.6 million putts in all. Using laser technology, they measured the length of each putt and showed that birdie putts were made 3% less frequently than par putts from an equivalent distance.

Of course, the value of a stroke is the same regardless of whether a putt is for birdie or for par.

They ruled out alternative explanations for the effect, such as whether golfers could "learn" from observing putts taken by other golfers before theirs, whether the difference could be explained by player ability, or whether it was due to the ball's position on the green or the player's standing in the tournament. After adjusting for those possibilities and others, golfers exhibit a measurable and costly bias known as loss aversion.

Golfers' fear of making a bogey, the research suggests, carries more weight than the potential benefit of making a birdie. As the *New York Times* noted when it reported the results of the study, that bias affects how professional golfers play, and many of them acknowledge it.

"When putting for birdie, you realize that, most of the time, it's acceptable to make par," Justin Leonard, one such professional golfer, told the *Times*. "When you're putting for par, there's probably a greater sense of urgency, so therefore you're willing to be more aggressive in order not to drop a shot. It makes sense."

Even Tiger Woods, perhaps the greatest golfer and arguably most accurate putter of all time, was just as guilty of loss aversion as his competition.

Holding back in blackjack

Gamblers in high-stakes blackjack games exhibit a similar behavior. Bruce Carlin, a professor at UCLA, and David Robinson, a professor at Duke University, published a study this summer, Fear and loathing in Las Vegas: Evidence from blackjack tables, and showed that blackjack players suffer from passive mistakes – failures to act when they should.

The professors studied the results of 4,300 hands played during 1,300 rounds of blackjack at a Las Vegas casino. Tiny RFID chips were implanted into the cards and the betting chips in order to monitor and record play covertly and non-obtrusively. This technology, incidentally, now allows casinos to spot card counters with relative ease.

In blackjack, the players compete against the dealer to get to a combined card count of 21 without going over. Players must decide, for example, whether to be dealt another card or whether to hold. A well-known strategy (the "basic strategy") dictates the optimal choices in all situations (card counting aside).

Players make two kinds of mistakes when deviating from the basic strategy – those of inaction and those of an unnecessary (suboptimal) action. The professors found that errors of inaction occurred four times more often than errors of incorrect action, resulting in the phenomenon of omission bias. Most people persist in being too conservative, failing to take a card, for example, when it is optimal to do so.

The economic cost of this bias was significant – for example, on winning hands players following the basic strategy won approximately 20 times more than those who deviated from the strategy.

As in the golfing study, the professors ruled out alternative explanations. Card counting was not responsible, nor could the effect explained by the skills of individual players or by other alternative theories.

“This profound omission bias occurs in spite of the fact that real economic agents are making real decisions with their own money, reaping the rewards of skill and good luck, suffering the costs of bad luck and mistakes,” the authors concluded.

“The primary reason for this bias rests on the observation that people experience more regret from actions they have taken than from inaction,” Carlin said.

Blackjack players are not a random sample of the population, and instead consist of individuals who are natural risk-takers. The authors note that this self-selection amplifies the omission bias – even those willing to take risks err far more often by failing to act.

Implications for advisors

These studies confirm some of the basic precepts of behavioral finance laid out by Daniel Kahneman and Amos Tversky in the early 1980s, work that won them the 2002 Nobel Prize in Economics. Fear of loss outweighs perceived gains. Professional golfers don’t putt as accurately when going for a birdie (which they perceive as a gain) as they do when trying to avoid a bogey (which they perceive as a loss).

Investors face many situations involving the possibility of losses and gains, and the fear of loss may lead to conservative asset allocations and investment vehicle selections, or to simply saving too much money. Advisors can use this golfing study – which will resonate well with many high-net worth clients – to counteract the tendency to act too conservatively out of fear.

The blackjack study shows that when we make mistakes, those mistakes are much more likely to be a failure to act than a decision to act that proves incorrect. Individuals may delay retirement planning or may put off rebalancing their asset allocations when such action is called for, as other academic studies have shown.

If those mistakes are prevalent among professional gamblers, who make their living taking risks, we can expect that they are even more pervasive among the general population. Advisors can use the blackjack study to exhort clients to act when decisive action is warranted.

"Many circumstances require action, and fear of regret may be responsible for both inaction and underperformance," Carlin said, summarizing the implications of his research. "Recognizing cases in which you might fall into this trap is the key to capturing all of the fruits of one's labor."