“Action bias” harmful to soccer goalkeepers and investors

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Every four years, the World Cup captivates soccer fans around the globe. The 2018 FIFA World Cup Russia concluded on July 15, with France defeating Croatia, 4-2 in The Final.

Thirty-two teams qualified to compete in the World Cup (the U.S. did not) and were assigned to eight “Groups” of four teams. Each team played a round-robin schedule against the other three teams in its Group. During this stage, the winning team earned three points and both teams earned a point if the score was tied at the end of regulation.

The top two teams in each Group advanced to the “knockout” round, where there are no ties and it’s win or go home. If a game is tied at the end of regulation and remains tied after “extra time,” the game is decided by a shootout. The teams alternate five penalty kicks each and the team scoring the most goals wins.

A penalty kick involves a stationary ball placed 12 short yards from the goal line, the kicker and the goalkeeper. Kicks can approach 100 MPH, so with the ball so close, the goalkeeper has virtually no time to react and has to guess whether to dive right or left to make the save.

Four games in this year’s World Cup were decided by shootout. The stakes are obviously sky high in a shootout, so teams want to do everything possible to maximize their chances of success. Why so many don’t is an interesting example of “decision under uncertainty” that also offers insights into behavioral economics important to even us non-soccer fans.

In research headed by Michael Bari-Eli at the Ben Gurion University of the Negev, Israel, “Action Bias Among Elite Soccer Goalkeepers: The Case of Penalty Kicks,” 286 penalty kicks were analyzed by kick direction (Left/Center/Right) and the goalkeeper’s jump direction. More than 85% of the kicks ended up in the net, so the deck is stacked against the goalkeeper.

Goalkeepers jumped to the left or right 94% of the time, but even when they guessed the kick direction correctly (40% of the time), they only stopped 25-30% of the shots. However, when the goalkeeper did nothing (i.e. stayed in the Center—the remaining 6% of the time), they stopped 60% of the kicks to the center (29% of kicks).

Goalkeepers staying in the Center stopped 33% of all kicks, while those who jumped left or right stopped only half as many. If the odds say doing nothing is far superior to jumping left or right, why do goalkeepers jump almost every time?

The problem is humans have an “action bias,” which means when times are tough, we would rather be seen “doing something” than doing nothing, even when we know doing nothing is the better option. Further, when “action” is the norm (see goalkeepers diving and investors panicking during a stock market downdraft), a negative outcome is amplified following inaction.

I’ve written of the work of behavioral economics pioneer and Nobel-prize winning Richard Thaler of the University of Chicago’s Booth School of Business. In classical economics, individuals are highly intelligent, perfectly rational and capable of unemotionally analyzing all relevant data. They possess tremendous self-control, enabling them to make optimal decisions, unburdened by biases or other “supposedly irrelevant factors,” or SIFs. Picture Mr. Spock in “Star Trek.”

In reality, these “Econs” are mythical characters existing only in theory. Not only are humans highly emotional and lacking in self-control, they are influenced by all sorts of biases and SIFs. They act on biases in irrational and predictable ways, often leading to poor decisions. In fact, we’re more like Homer Simpson.

If Spock and Simpson face-off as goalkeepers in a shootout, be sure Simpson will dive wildly for one of the corners of the goal while Spock knows remaining coolly planted is the truly heroic move.

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