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Coin Flips, Business Thinking and Losing the Game

Imagine it is possible to possess a coin that, when flipped, comes up heads 55 percent of the time. If you believe you own one, you would be unwise to bet much on the next flip. Despite possessing a real advantage, there is a 45 percent chance of tails. Given the potential for such special coins, people likely will believe that there is skill involved; that better, smarter, more diligent people are more likely to get heads on the next flip.

What happens when you flip four tails in a row? With a 55-percent-heads coin, this wil happen more than four percent of the time. While four tails may cause you to question whether your coin really is one of the special ones, observers will conclude that you are bad at coin flipping, or that you are not conscientious, bright or dynamic enough to make heads appear. Four consecutive tails do not "just happen." Something more *must* be going on.

People who believe this commit what social scientists refer to as the fundamental attribution error – personalizing things that should not be personalized. This error is rampant in business reporting. In the news, corporations with good earnings are led by geniuses, while corporations with bad earnings have only mediocre management. Presidents of companies in the notoriously low-margin airline industry are idlers; presidents of companies in the highmargin pharmaceutical industry are dynamos. Sports reporters also seem prone to overexplaining things. In reality, losers do not necessarily have bad coaches or less-skilled, lessmotivated players. Sometimes the ball goes in the hoop and sometimes it does not, and it may have nothing to do with character. The conventions of sports commentary, though, lead us to laud winners and criticize losers.

Those committing the fundamental attribution error focus on outcomes rather than process. Business managers obsess about the bottom line, and results are all that matter. If you lose, you are a loser, no excuses. In investing, this type of thinking explains why money flows to whatever asset currently enjoys the best recent results. Winners must be better, smarter or harder-working. Like the business manager, you have the evidence of recent performance.

Broadly speaking, there are three categories of investors. First are those business thinkers who follow data rather than mere theory. If a coin comes up heads once or twice, they will bet on heads; if tails comes up once or twice, they will bet on tails. This category believes in a Newtonian clockwork universe, with every action having a specific cause. If interest rates fall, financial stocks will rise, without question. In this world, smart, hardworking people discern cause and effect. There is no game because there is absolute certainty. Outcomes are everything; knowledge can be perfect so process is unimportant. These are the talking heads, brokerage house strategists, and their followers.

The second category, pure index investors, cannot accept our initial premise. All coins are 50-50, always. There is no game because there is total uncertainty. Unlike the belief in perfect knowledge of the first category, the second category believes there is no individual knowledge worth having.

The third category believes in neither perfect certainty nor absolute uncertainty, neither faultless knowledge nor inevitable ignorance. These are the only investors who believe there is a game (as in game theory, not Parcheesi). Rather than chasing outcomes, they follow a process to find the investment equivalent of one of those special coins. Some may follow a simple course, e.g. believing that value stocks or smal company stocks tend to perform better than standard indexes over time, while others are more active. The two determining characteristics of this third category are: (1) belief in the possibility of opportunity; and (2) recognition of the probabilistic nature of trying to capitalize on the opportunity.

The problem with the first category of investors is that they seem unaware they are not buying and selling reality (corporate balance sheets and income statements) but only a derivative, how that reality is priced in the financial markets. Reality changes slowly, but manic-depressive emotions and psychology vacillate rapidly. Investors can vastly overvalue reality and shortly thereafter dramatically undervalue the same reality. The "data" these business thinkers rely upon is a chimera—the reflected, flawed flow of human behavior. The second category, put simply, has a closed mind. The market does tend to be efficient at incorporating available information into asset prices, but just because something may seem unlikely does not make it impossible. The second group gives short shrift to human behavior, assuming that index investors will experience the global financial crisis or technology bubble, shrug their shoulders and be impervious to emotion or psychology. The errors revealed by flows into and out of mutual funds, including index funds, demonstrate otherwise.

The third group is pragmatic, believing there are actions worth taking, but realizing outcomes are always a matter of probability rather than predictability. Ultimately, behavior and process are keys. Even a 55-percent-heads coin will do you no good if you are prone to give up after four flips of tails. Success results from having a valid method of discerning the investment equivalent of those special coins and having the patience and fortitude to capture the perceived advantage. Sigma is in the third category of investors. **A core belief of ours is that successful investing is a matter of probability, process *and* behavior.** This leads to the unpleasant conclusion that sometimes things really do "just happen." If you do not realize investing is a probabilistic game, though, you likely will fail. You may not want to play the game but, like it or not, the game will play you.