

Betting on Your Future, or Extrapolating an Illusion?

We take for granted the fundamentals of probability – the daily sports page lists betting lines for games, the weather reporter tells us the percentage chance of rain, and anything unlikely to happen is compared to a coincidence of cold events in the underworld. Our awareness of probability, however, is relatively recent. People gambled for millennia before anyone developed a formal theory about the chances of various outcomes.

Blaise Pascal, a 17th century mathematician and theologian, was one of the first to develop a theory. He created the earliest form of roulette out of intellectual curiosity about probability. Illustrating why there are few rich mathematicians or theologians, two French brothers made a bundle modifying Pascal's game by adding a zero to the wheel to give the "house" a 2.7 percent advantage. One of the brothers founded the first casino in Monte Carlo but was dogged by rumors that he had sold his soul to the devil to understand the secrets of roulette – after all, the sum of the numbers on the wheel total 666, the number of the beast in Revelation. Illustrating the ingenuity that explains why this is the greatest country in the world, Americans further modified the game by adding the double zero to increase the house odds to 5.26 percent, unencumbered by unfortunate Faustian rumors and with no drop off in willing players.

Can investors learn anything from how casinos, one of the most profitable businesses in the world, approach games of chance? Most investors fail because they extrapolate the recent past. Our brains are hard-wired to seek out patterns and to assume the patterns will continue. While this is an excellent rule in many areas of our lives, it is a hindrance when there are no patterns, or at least no patterns that we can easily discern. Our tendency to extrapolate everything is so

pronounced, and our fear of randomness is so great, that we tend to see patterns and order where none exists.

Consider the modern application of Pascal's invention. What happens when a player wins at roulette? Does the casino extrapolate, decide that recent trends are unfavorable and close down the roulette games? No – they do precisely the opposite, because they know each spin is independent of all other spins. They set off sirens and flashing lights and announce the big win over the public address system to attract more roulette players. The casino managers know that the more times the wheel spins, the more likely they are to capture that 5.26 percent advantage (in a U.S. casino), and the more money they will make. Why do players stream to the roulette tables after the big payout? Because they mistakenly believe, consciously or otherwise, that there is now a trend that will make them money. Gambling lingo is full of talk of hot and cold streaks, at best exhibiting faulty knowledge of probability and at worst descending into mere superstition.

“Imagination is the dominant faculty in man, master of error and falsehood, all the more deceptive for not being invariably so.”
~ Blaise Pascal

Casinos detach us from rationality. Someone who in their normal life would argue for an hour over a 50 cent overcharge on a dinner tab will tip a maitre d' \$100 to get a better seat at a Vegas floor show. Casinos portray their games of chance as glamorous and exciting, appealing to our imagination. Casinos generate emotion in patrons; while emotion may

add to excitement, it typically is unprofitable. Nothing is less emotional than collecting 5.26 percent on thousands upon thousands of spins of a roulette wheel, but it is very profitable. Wall Street acts in a very similar manner – has anyone ever tried to get you to buy a stock or invest in an industry that has gone down? Marketers of investment products know it is easy to sell us something that has already gone up substantially – it is in the news, it is exciting, it is the equivalent of the sirens and lights going off over the roulette tables after a big win. It appeals to our natural sense of extrapolation. It is alluring to our imagination. It is also unprofitable for us, but quite profitable for the unemotional sellers.

Has the media ever described somebody with tremendous portfolio profits as being lucky? No – the investment winner is always a genius, a guru you can emulate to make money. The unstated corollary is that people without tremendous profits are not just unlucky, they are unintelligent and incompetent. This ignores the reality that even the best investment managers have bad years as well as good years despite having a relatively constant level of brainpower and skill.

Nature wired our brains to expect order, not chaos or randomness – we want there to be a pattern, a reason, a cause for everything. The nightly business report invariably explains that the stock market moved up or down “because...,” no matter how remote the supposed cause may be to what actually happened. We are more comfortable with a reason, no matter how ludicrous. This is why it took so long for us to discover the notion of probability in the first place.

The cure is to have a more detached view of market reality. Recognizing the potential destructive power of “normal” psychology is the first step to investment success. We can help. Call us at 503-419-3938 or check us on the web at www.sigmainvestment.com.