

MONTHLY COMMENTARY | OCTOBER 2022

"I've missed more than 9,000 shots in my career. I've lost almost 300 games. Twenty-six times I've been trusted to take the game-winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed."

- Michael Jordan

We all tend toward innumeracy generally, and we're especially bad at probability.

If a weather forecaster says that there is an 80 percent chance of rain today and it remains sunny, instead of waiting to see if it rains 80 out of 100 times when his or her forecast called for an 80 percent chance of rain (or even eight in ten), we race to conclude — perhaps based upon that single instance — that the forecaster isn't any good.

To do math, neither maturity nor knowledge of human nature and experience are required. All that is needed is the ability to perceive patterns, logical rules, and linkages. But because of the enormity of random variables involved in real life, patterns, logical rules, and linkages alone do not solve many actual puzzles. Correlation does not imply causation. Information may be cheap, but meaning is expensive and elusive. Insight is priceless.

If one reads an investment disclosure – yes, that would be the small print at the page bottom – odds are the information will incorporate some quantitative description pertaining to "risk". That measure will ascribe its meaning to one of the buzzwords (Sharpe ratio, R-squared, standard deviation, correlation, etc.) derived from the bell curve, that symmetrical graph representing probability distribution.

Such measures of future uncertainty satisfy our human's ingrained desire to "simplify" by squeezing into one single number matters that are too rich to be described by it. In addition, they cater to psychological biases and our tendency to understate uncertainty in order to provide an illusion of understanding the world.

Daniel Kahneman offers an interesting explanation for why it is so difficult for people generally to compute and deal with probabilities. He said, "to compute probabilities you need to keep several possibilities in your mind at once. It's difficult for most people. Typically, we have a single story with a theme. People have a sense of propensity, that the

system is more likely to do one thing than the other, but it's quite different from the probabilities where you have to think of two possibilities and weigh their relative chances of happening."

Accordingly, when assessing the effectiveness of a given financial, economic or social strategy, the observation window needs to be large enough to include substantial deviations. Therefore, one must base strategies on a long-time frame but, in some situations, you will never see all the components. And so, to extrapolate the Russia/Ukraine crisis, or rising interest rates, or geopolitical interference into predictions of long-term market or business/economic weakness are, at best, fraught with probability bias. Or described another way, Mandelbrot and Taleb would refer to this as "wild randomness."

Weight, height, and calorie consumption are "Gaussian" - they can be described by normal distribution. Market returns, distribution of incomes, casualties in terrorist attacks or wars – these are all man-made variables of wild uncertainty. The normal bell curve has thin tails, where large events can be considered but are far too rare to be consequential. Wild randomness describes distributions that have fat tails – a higher probability of extreme values that can have a dramatic impact on the outcome.

Which is why we at Laurus do not try to fathom unpredictable macro factors such as consumer or political actions, long-term inflation, or the reaction of business growth to inflation, or the reaction of markets to the reaction of business growth to inflation. There are too many variables to solve these equations.

Successful long-term investing is ultimately the outcome of very specific selections, and this is where we will continue to devote our efforts. Laurus's investment process is entirely geared to identifying those unique business models that separate the top achievers from the rest of the pack. While market and exogenous valuation influences will guarantee that performance will fluctuate in the short term, experience has shown that, while our formula may not work during particular months or even quarters, it does tend to work over several years. Great businesses, like great athletes, will always triumph.