Much Portfolio Advice is Whackadoodle

By Alan Snyder

Our headline is deliberately inflammatory, meant to get your attention and protect your portfolio. The relentless search for the highest returns (that are often levered to the moon) may be a fool's errand. "I kept wondering why the baseball was getting bigger and bigger… then it hit me." Ergodicity and ergodic scenarios spotlight many of the flaws in traditional portfolio advice.

Those two ten-dollar words, from recent statistical advances hitting the mainstream, elucidate. The probabilities of success from a collection of people do not readily apply to one person, i.e., ensemble probability across time versus the individual's trajectory may not be the same. A simple illustration brings this tricky concept to life.

Imagine a game of Russian roulette with a revolver holding one bullet in a six-chamber gun. Each surviving player earns one million dollars. Should you play the game? The average gain is $833,333 (the five million dollar prize pool – one million for each empty chamber – divided by the maximum number of players – six. Or, from the individual's point of view, your one million dollar potential prize multiplied by your chance of hitting an empty chamber – five out of six at game's start). However, the average outcome for the group is not the same as that for the individual who runs the risk of dying - "total ruin" in investment terms.

Other examples abound, like flipping a coin to earn a dollar if guessing correctly or lose 50 cents if wrong. On average, a group playing this game wins whereas the individual may not. Life insurers are predicated on group experience but any insured individual cannot experience the result of the group. The risk of dying for the individual is binary.

Equity returns over the long term are attractive, yet any individual has his or her own discrete return pattern, witnessed clearly in retirement income streams. Think of fixed withdrawals in a down market and running out of money before dying versus the lucky individual starting out in a bull market with early gains. The sequence of returns is critical. That old bromide about long-term results says it all: in the long term we all die. At an individual level, time horizon, possible unforeseen cash need, etc., have a real-life impact, but not for the ensemble averages. Lastly, and of current import, is the development of a COVID-19 vaccine. Group-average results may be compelling, yet for an individual not so nifty if he falls in the half of one percent who could die from a potential adverse effect.

These examples display the counterintuitive results of non-ergodic scenarios. Return sequence, lack of limitless funds to capture the average results and risk of portfolio ruin come to the fore.

What to do? The expression 'as cool as the other side of the pillow' points the way:

1. Better upside than downside in any investment
2. Diversification
3. Investment "bet" size (Kelly Criterion)

Distilling those three-way points to portfolio action is doable. Consider the efficacy of a 60% equity and 40% debt portfolio written about previously (Between the Devil and the Deep Blue Sea). The 60% piece is designed to capture greater upside with the 40% allocation as protection against undue volatility and capital to stay in the game (lowering risk of ruin) during troughs from the 60% higher octane allocation.

Risk of ruin is mitigated by our pillow points. A 60/40 portfolio works. However, selecting what investments to put in the 60% or 40% pieces is not a walk in the park. In our next missive, we will dig down into the "alt" alternative possibilities which offer interesting and, we believe, compelling choices.

Please share your reactions, insights and criticism of the above. N.B. Ergodic scenarios rule, too. Stay safe, wear a mask, be careful.