



## Investing – The loser’s game

By CIO Mikkel Petersen, AI Alpha Lab ApS

Most real-world problems humans’ face can be separated into two groups or “games”. In his 1975 paper “The Loser’s game”, Charles D. Ellis explores the profound difference between these two kinds of “games” and makes the conceptual distinction through the game of tennis.

Ellis refers to the scientist Simon Ramo, who identified the crucial difference between a Winner's Game and a Loser's Game in his excellent book on playing strategy, *Extraordinary Tennis for the Ordinary Tennis Player*. Over a period of many years, Ramo observed that tennis was not *one* game but *two*. One game of tennis is played by a few gifted professionals; the other is played by amateurs and even most professional players (although at a different level than amateurs!)

Although players in both games use the same equipment, dress, rules and scoring, and conform to the same etiquette and customs, the basic natures of their two games are almost entirely different. Professionals exploit the marginal opportunity set within the game or in plain English, professionals *win* points, while amateurs *lose* points.

Professional tennis players stroke the ball with strong, well-aimed shots, through long and often exciting rallies, until one player is able to drive the ball just beyond the reach of his opponent. Errors are seldom made by these splendid players. Expert tennis is what Ramo called a Winner's Game because the ultimate outcome is determined by the actions of the *winner*. Victory is due to *winning more points than the opponent wins* – not simply getting a higher score than the opponent, but getting that higher score by *winning* points.

Amateur tennis, Ramo found, is almost entirely different. Brilliant shots, long and exciting rallies and seemingly miraculous recoveries are few and far between. On the other hand, the ball is fairly often hit into the net or out of bounds, and double faults at service are not uncommon. The amateur duffer seldom *beats* his opponent, but he beats himself all the time. The victor in this game of tennis gets a higher score than the opponent, but he gets that higher score *because his opponent is losing even more points*.

As a scientist and statistician, Dr. Ramo gathered data to test his hypothesis. Ramo counted points *won* versus points *lost*. And here is what he found. In expert tennis, about 80 percent of the points are won; in amateur tennis, about 80 percent of the points are lost. In other words, professional tennis is a Winner's Game – the final outcome is determined by the activities of the winner – and amateur tennis is a Loser's Game – the final outcome is determined by the activities of the *loser*. The two games are, in their fundamental characteristic, not at all the same. They are opposites.

From this discovery of the two kinds of tennis, Dr. Ramo builds a complete strategy by which ordinary tennis players can win games, sets and matches again and again by following the simple stratagem of losing less and letting the opponent defeat himself. Dr. Ramo explains that if you choose to win at tennis – as opposed to having a good time – the strategy for winning is to avoid mistakes. The way to avoid mistakes is to be conservative and keep the ball in play, letting the other fellow have plenty of room in which to blunder his way to defeat, because he, being an amateur, will play a losing game and not know it.

He will make errors. He will make too many errors. Once in a while he may hit a serve you cannot possibly handle, but much more frequently he will double fault.

Occasionally, he may volley the ball past you at the net, but more often they will sail far out of bounds. He will slam balls into the net from the front court and from the back court. He will try to beat you by winning, but he is not good enough to overcome the many inherent adversities of the game itself. The situation does not allow him to win with an activist strategy and he will instead lose. His efforts to win more points will, unfortunately for him, only increase his error rate. As Ramo instructs us in his book, the strategy for winning in a loser's game is to lose less. Avoid trying too hard. By keeping the ball in play, give the opponent as many opportunities as possible to

make mistakes and blunder his way to defeat. In brief, by losing less become the victor.

All professional athletes will recognize this description of winner's and loser's games (and yes, I myself is a former professional athlete!). By playing by the rules of the game, even mediocre skilled players can climb to the top. However, the egocentric sacrifice associated with this, is simply too hard for most people. Acknowledging the limits of one's skills is not a natural human trait and therefore often results in more satisfaction in playing the game as a winner and lose, than playing as a loser and win.

What can investors infer from being part of a loser's game?

Remove focus from being better than everyone else at the most difficult task in investing, forecasting returns, and instead focus on the few fundamental truths in finance that most people don't spend a lot of time on. Let performance be the result of the losing trades not the winners!

Chances are that any single investor is not among the blessed 95<sup>th</sup> percentile of skilled humans with extraordinary investment capabilities, but playing the investment game the right way means that any investor can be among the 95<sup>th</sup> percentile of investment performers.

At AI Alpha Lab we play by one primary rule: We know that we don't know!

We do estimate and forecast returns on financial assets, but we also estimate the uncertainty associated with the estimates in order to scale our reliance on any single estimate. Furthermore, we ensemble everything we do in order to be as little exposed to our own ignorance as possible. Diversification across assets, processes and implementation is what makes our investment solutions robust across time.

Specification risk and implementation risk (read our white papers about these risks on our webpage) are large uncompensated exposures that most managers ignore or don't understand. These exposures require exceptional skills in order to generate long term performance and the underlying premise of these are, that the manager is playing a winner's game.

As investors the best we can hope for is to add together small significant edges (in statistics referred to as adding weak predictive models), exploit the correlation

structure between these and end up with an investment process that provides robust future return expectations.

We at AI Alpha Lab play the investing game as a loser's game and we believe that this approach is one of our greatest advantages.

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**AI $\alpha$  Lab**

AI Alpha Lab ApS

Univate

Njalsgade 76

DK-2300 Copenhagen

Denmark

VAT 40 41 55 99

**AI $\alpha$  Lab**