

Hey, why is it hard for mutual fund managers to beat the market? I mean, how hard can it be to figure out which companies are good and which are lousy? Let's try to get some intuition into this problem from a sports analogy.

All right, a couple of years ago, the Indianapolis Colts were 0-13. And the Baltimore Ravens were 10-3. The Ravens were favored to win by 17 points. Now, suppose you were betting on the game. If you bet on the Ravens, that meant that the Ravens had to be the Colts by 17 points for the bet to pay off. If you bet on the Colts, then either the Colts had to win, or the Ravens had to win by less than 17 points for a bet on the Colts to pay off. Which team would you have picked to win the game? Which team would you have picked to beat the spread? In that game, the Ravens scored 24. The Colts scored 10. So the Ravens won, but not by enough to beat the spread.

All right, another game a couple years ago, Green Bay Packers were 13-0 and the Oakland Raiders, my home team, were 7-6. Not surprisingly, Green Bay was favored to win. And the spread was 11 and 1/2 points. That meant Green Bay had to beat the Oakland Raiders by 11 and 1/2 points to beat the spread. Well, they did. The Packers scored 46. The Raiders, 16. You know, the favorites do usually win. But they beat the spread only about half the time.

In the last 46 Super Bowls, the favorites have won about 69% of the games, but only beaten the spread 52% of the time. In one study of 5,000 NFL games, the favorites beat the spread only 48% of the time. And in a study of 8,000 NBA games, they beat the spread 49% of the time. So what does this have to do with money managers? Well you know, money managers don't simply have to pick profitable companies. They have to beat the spread. That is, they have to find under priced companies. So what if there were two companies, company A and company Z. The profits of both companies have, let's say, average economic risk, that is that both companies tend to earn stronger profits when the economy does well. And their profits vary with the economy by an average amount.

Now, both companies are trading at \$100 a share. However, company A is a stronger company. And it's expected to earn \$8.00 a share in profits for the next several years. Company Z is expected to earn \$4.00 a share. Which company would you buy? Which company would everybody buy? And what would happen to the price? Let's say that the price of company A goes up to \$140 a share and the price of Z falls to \$70 a share. Now two shares of Z cost \$140 and are expected to earn \$8 of profits, the same cost and the same profits as one share of company A. Company A is still a better company, but not a better bet. Like spreads in sports betting, prices in the market adjust to make it very hard for investors to find bargains. Sure, investors can identify good and bad companies. But sometimes good companies are overpriced. Sometimes bad companies are under priced. And quite often, both companies are priced about right.

As I'll discuss in another video, individual investors actually do worse than chance when picking stocks, even before costs. So on average, institutional investors must do better before costs. But there are a lot of institutional investors spending a lot of money trying to beat the market. And as a group, the small edge they have isn't enough to cover these costs. My teacher and mentor Danny Kahneman wrote in this book, "When faced with a difficult question, we often answer an easier one instead, usually without noticing the substitution." In sports betting, the hard question is which team's going to beat the spread? A much easier question is which team's going to win the game? In stock picking, the hard question is which company's stock is going to do better? A much easier question is which is the better company? Fortunately, you don't have to answer any of these questions. You can simply buy and hold an index fund.