the EDUCATED INVESTOR
Buckingham Asset Management
FEATURE ARTICLE
July 2009

The Factor of Chance

Overview: Many people make the mistake of interpreting luck as skill. In some cases, such a mistake simply makes for interesting debates. Other times, it can be costly.

One of the most storied records in all of sports is baseball great Joe DiMaggio's streak of 56 consecutive games with a base hit. It is often cited as one of the most unbreakable records in all of sports. When discussions of great baseball players come up, this streak is frequently cited as a reason for including DiMaggio in the discussion as evidence of his skill.

DiMaggio was certainly a great baseball player. After all, he made the baseball hall of fame. It is worth noting that, since DiMaggio accomplished this feat in 1941, no one has come close to duplicating this streak despite all the great hitters that have come and gone.

Certainly some luck was involved with compiling a streak like this, even if not readily acknowledged. In this case, few people would suffer significant harm by believing that this streak is purely the product of DiMaggio's skill.

Unfortunately, many people make the same mistake in a host of other areas, including investing. That is when the potential dangers show up. As Leonard Mlodinow wrote in *The Wall Street Journal* (*WSJ*), "People are remembered — and often rewarded — not for their usual level of talent or hard work, but for their singular achievements, the ones that stand out in memory. It does no harm to view those achievements as heroic. But it does harm us to make investments or other decisions on a basis of misunderstanding."[1]

Evidence of Luck

First, let's look at DiMaggio's streak a little closer as an example of being attributed to skill instead of luck. Several studies have been devoted to this type of analysis. One example comes from two researchers from Cornell University who used computer generation to simulate each year of baseball from 1871 to 2005, then repeated the process 10,000 times.

They found that 42 percent of these simulated histories produced a hitter with a streak equal to or longer than DiMaggio's. The longest streak reached an astounding 109 games. And it was not just DiMaggio holding the streak each time. For example, baseball great Ty Cobb held the record in nearly 300 of these simulations.[2]

Skill or Luck in Investing?
Now let's say that people viewed DiMaggio's hit streak as proof he could do it again. Would anything point to him not being able to pull it off for a second time?

Despite his hitting prowess, DiMaggio did not come close to duplicating such a feat. He never had another hitting streak even reach 30 games.

In the investing world, many people view streaks and patterns in the wrong light. This causes them to make investing mistakes such as chasing a hot fund, sector or fund manager. It also causes investors to attribute skill for results when luck may have been more appropriate.

The classic example is Bill Miller, manager of the Legg Mason Value Trust Fund. Miller's fund beat the returns of the S&P 500 Index for 15 years through 2005. In the aforementioned *WSJ* article, Mlodinow wrote that, "It was a feat compared regularly to DiMaggio's, but if all the comparable fund managers over the past 40 years had been doing nothing but flipping coins, the chances are 75 percent that one of them would have matched or exceeded Mr. Miller's streak."[3]

Pretend for a minute that Miller truly was that skillful. How do investors explain his fund's performance during the past three calendar years? In 2006, 2007 and 2008, the Legg Mason Value Trust underperformed the S&P 500 by 10 percent, 12 percent and 18 percent, respectively.

Then, Miller's fund suddenly reversed fortune again in 2009. Through the first half of the year, the fund was up 15 percent, compared with a 3 percent gain for the S&P 500.

What does this mean? Did Miller take a three-year hiatus, and then decide 2009 was a good time to return? Doesn't it seem more plausible that luck played a significant part in Miller's streak?

This is not to say Miller isn't a smart fund manager. It simply means that investing due to his track record (or streak) is akin to gambling.

Taking the Opposite Approach
The opposite effect can also happen. People avoid making some decisions (or worse, make the opposite decision) because they read too far into streaks that are no more than chance.

In 1913, a remarkable event occurred at a casino in Monte Carlo. The roulette wheel came up red 26 straight times. Theoretically, if gamblers had put down 20 francs on red at the beginning of the streak and taken their money at the end of it, they would have walked away with 1.35 billion francs.

The fact the streak occurred may not be the most astonishing fact about that night. In the middle of the streak, gamblers started laying down heavy bets, as would be expected, but they bet heavily on black, thinking "Surely it was due." The casino had a very profitable night.[4]

Such an occurrence happens in investing as well. Consider the growth stocks versus value stocks debate. From 2000–2006, value stocks outperformed growth stocks each year. That didn't stop many market "experts" from releasing articles each year saying, "Value stocks have had their turn. Now, it's time for growth stocks."

The logic was the same each time. Surely, value stocks cannot continue their run. And eventually, they would be right, just like the gamblers who continuously bet on black. They would just lose substantially more in the process.

Summary
Streaks and patterns might as well be put in the same category with noise: They are simply distractions when it comes to investing. Investors would be better served by tuning out this noise and remembering that patterns are more likely to cause confusion and tempt them to stray from well-developed investment plans.

Mlodinow concluded that, "Looking for order in patterns has allowed us to understand the patterns of the universe, and hence to create modern physics and technology; but it also sometimes compels us to submit bids on eBay because we see the face of Jesus in a slice of toast."[5]

[1] Leonard Mlodinow, **The Triumph of the Random.** *The Wall Street Journal*, July 3–5, 2009.
[2] Ibid.
[3] Ibid.
[4] Byron Roth and John Mullen, *Decision Making*, (Rowman & Littlefield Publishers, 1990).
[5] Mlodinow.

This material is derived from sources believed to be reliable, but its accuracy and the opinions based thereon are not guaranteed. The articles and opinions in this publication are for general information only and are not intended to serve as specific financial, accounting or tax advice. Copyright © 2009 Buckingham Family of Financial Services. All rights reserved. This material may not be copied or distributed (electronically or otherwise) without the written consent of Buckingham Asset Management. The products or services described herein are available to US citizens and residents only and the information contained is intended for such persons only. No information contained herein is an offer to sell. Investors should read the prospectus of a security prior to making any investments. Please contact us if you have any questions at 314.725.0455.