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Are you making the most of your winning streaks?

Why clients discount winning streaks and what you can do about it

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Winning streaks are impressive. But are they reliable indicators of skill or just lucky accidents? And, perhaps more important, can they offer insight into a manager's performance prospects?

In this paper, we turn our attention to Joe DiMaggio, Steven Jay Gould and others to learn what, if anything, investment performance winning streaks can tell us about the future.

A most extraordinary thing

Between May 15th and July 16, 1941, New York Yankee outfielder Joltin' Joe DiMaggio put up at least one hit in each of 56 consecutive games in what would become the longest streak in major league baseball history. It was a feat so statistically improbable that paleontologist Stephen Jay Gould called it "the most extraordinary thing that ever happened in American sports."[1]

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There have been some pretty extraordinary winning streaks in big league investment management history, too. Bill Miller is sort of the DiMaggio of the mutual fund industry. His Legg Mason Value Trust beat the S&P 500 on a total-return basis for 15 consecutive years — that's years, not quarters — between 1991 and 2005. And like Joe's record, it exists on an Olympian level that we mortals can barely imagine. As of 2011, Morningstar was reporting that only eight funds had beaten the S & P 500 for more than 10 consecutive years, and just 22 had reached the five-year mark.[2]

Hot hands and a toss of the coin

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Why? According to researchers Mauboussin and Arbesman,[3] there are a couple of reasons:

- **The hot hand fallacy**
  Basketball fans and poker players know about this one: It's the tendency for people to believe that a player on a winning streak is in some sort of mystical zone that will continue to ensure future success, when, in reality, they are subject to the same laws of probability as everyone else. Belief in the "hot hand" causes people to make assumptions that are statistically inaccurate.

  Asset owners know this and, as a result, many dismiss the predictive power of winning streaks.

- **The coin-toss model**
  A standard in probability theory, this is the model that asserts there is a 50–50 chance of a coin turning up heads or tails on any given toss. It is widely applied to the investment management world — the idea being that, with each investment decision, a manager has a 50–50 chance of beating the market or not.

  Relying on this belief, asset owners often reject the notion that a winning streak represents anything other than a lucky — and statistically improbable — run.

Skill and luck

As it turns out, neither hot hands nor coin tosses are valid reasons to think winning streaks in investment management are the result of luck alone.

Using Joe DiMaggio as a basis for their study on long streaks, researchers Arbesman and Strogatz found that "Joltin' Joe's record, while certainly incredible, is in fact not that unlikely within the long history of baseball."[4]

Their work suggests that, hot hands notwithstanding, skilled players are more likely to produce long winning streaks than unskilled players. But there's still some luck involved. DiMaggio, although in the top 2% of all-time hitters, barely made their model's list of the 50 players most likely to hold the record. In other words, there have been better hitters than Joe—fully capable of putting together a 56-game hitting streak—but he was skillful and lucky.

These conclusions are supported by Xu and Harvey,[5] who found that winners were more likely to win and losers more likely to lose. This was because winners tended to follow risky bets with safer bets, while losers tended to follow losing bets with more risky bets.

With respect to the coin toss model, Mauboussin and Argesman (2011) assert that it just doesn't reflect the realities of the investment record, saying the model is "ill-suited to explain actual investment outcomes. The main reason is that beating the market is nowhere near a 50-50 proposition. The actual data show that only about 38% of funds beat the market, on average, in a particular year." They conclude that "our analysis shows that there are substantially more long streaks in the empirical [investment] data than randomness would indicate."

So it seems that long winning streaks do indicate some skill on the part of the investment manager. But can those streaks provide insight into whether the manager is likely to generate excess returns in the future?

Consistency matters

Prior to 1998, most investment performance rankings relied solely on historical performance. But research by Scott Stewart and others now shows that "ranking managers on consistency of outperformance over time is an effective method for identifying strong future performance. ... Ranking solely by cumulative returns does not appear to offer predictability of future performance."[6]

While one winning streak might net a manager some nice publicity, it's the ability to string together a series of winning streaks over long time periods that separates the truly skillful from the rest of the pack.

In Stewart's study, he highlights 4 areas investment managers should evaluate—and communicate to clients—when discussing their own consistency:

1. The size of the bets taken
2. The alpha generated by those bets
3. The number of bets over time
4. The return correlation between bets

(Where bets=active weight vs. benchmark)

Diversifying bets are especially important because they increase the consistency of active returns. Increasing the number of bets, as long as they are diversifying, also improves consistency. And increasing the level of returns generated from active bets leads to increased excess performance — as long as it doesn't add too much volatility. That's not to say that taking frequent bets is the only way to boost consistency of returns — fewer bets can be OK, as long as they add more value.

> ... ranking managers on consistency of outperformance over time is an effective method for identifying strong future performance.

He concludes that "consistency, especially if measured over five-year periods, appears to be a successful tool for selecting managers who will offer superior performance in the future" and offers a clear call to action to asset owners:

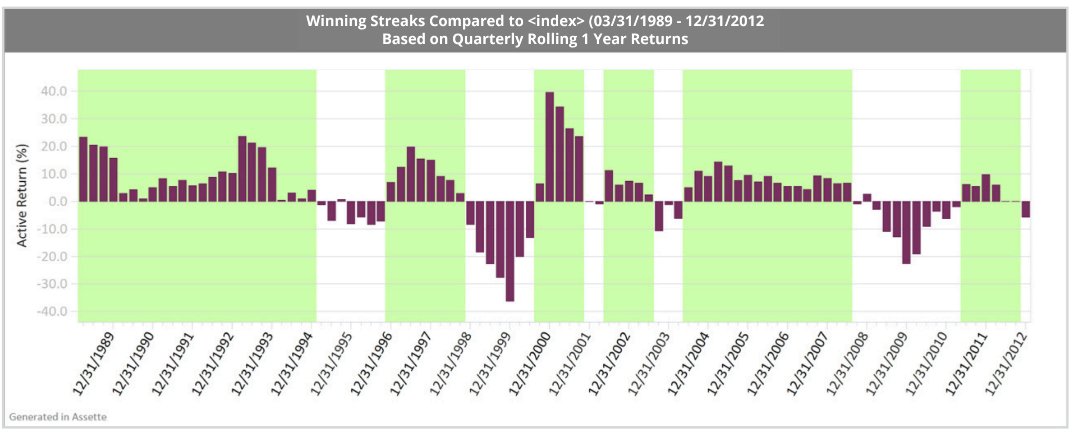
> Investors should look beyond cumulative excess returns during manager searches, and focus their efforts on evaluating a manager's ability to generate high frequencies of excess returns.

In other words, make sure your clients pay attention to those winning streaks.

Give your clients a complete scorecard

Be sure your clients have all the information they need to assess your ability to sustain and replicate winning streaks—preferably in a regular report that highlights the duration of your portfolio's winning streaks over the long term.

Here's an example of a simple winning streak chart:



This chart illustrates a manager's history of quarterly rolling 1-year active returns vs. their benchmark from 1989 to 2012. Periods of 4 or more continuous quarters of positive active returns vs. the benchmark are defined as "winning streaks" and are highlighted in green. In the example above, the manager has had sustained periods of both winning—and losing—streaks. But they win more often than they lose, and their winning streaks are admirably persistent. Over their 25 years of history, this manager has legitimate reason to claim that their ability to generate active returns isn't just a function of luck. It's a matter of skill.

Showing your clients the frequency, duration and magnitude of your performance winning streaks will go a long way toward giving them the quantitative information they need to understand that your investment returns—much like The Yankee Clipper's 56-game hitting streak—are due to active skill, persistent implementation and maybe, just maybe, a little bit of luck, too.

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[1] Stephen J. Gould. "The Streak of Streaks." New York Review of Books. 18 Aug 1988. NYREV, Inc.

[2] Chuck Jaffee. "Only 8 funds have beaten the S&P 500 for 10 years." The Tell: The market news and analysis blog. 17 Nov 2011. Market Watch: The Wall Street Journal.

[3] Andrew Mauboussin and Samuel Arbesman. "Differentiating Skill and Luck in Financial Markets with Streaks." 3 Feb 2011. Available at SSRN: http://ssrn.com/abstract=1664031 or http://dx.doi.org/10.2139/ssrn.1664031

[4] Samuel Arbesman and Steven H. Strogatz. "A Monte Carlo Approach to Joe DiMaggio and Streaks in Baseball." 2008.

[5] J. Xu and N. Harvey. "Carry on winning: The gamblers' fallacy creates hot hand effects in online gambling." Cognition. 131.2:173-80. 2014.

[6] Scott Stewart. "Is consistency of performance a good measure of manager skill?" The Journal of Portfolio Management. 24.3:22-32. Spring 1998.