CIBC PRIVATE WEALTH
WOOD GUNDY

THE STAN CLARK FINANCIAL TEAM'S

PERSPECTIVES

An Excerpt from Volume 17 | Issue 4 **June 2026**

INVESTING

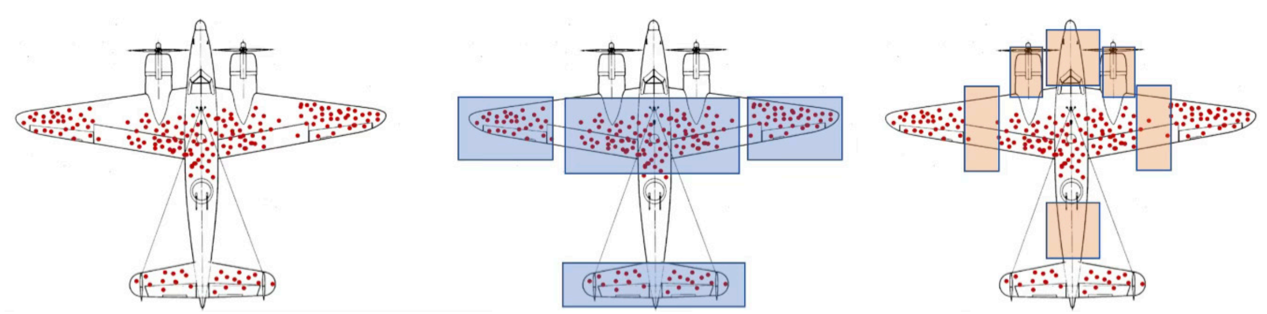
SURVIVORSHIP BIAS: THEY DON'T MAKE 'EM LIKE THEY USED TO

By Michael Chu, Senior Wealth Advisor

During World War II, statisticians were tasked with figuring out where to add armor to planes to minimize losses. In response, they studied the bullet holes on planes that had returned from dangerous missions.

At first the statisticians wanted to reinforce the most damaged areas (blue shade). This seemed to make sense – but, they soon realized, was a mistake. The returning planes could survive hits in those areas.

The planes that were hit in the most critical areas were the ones that did not return. So, instead, the statisticians decided to reinforce the areas with the least damage on the returning planes, where a hit would likely be fatal (orange shade).



It is tempting, as the statisticians initially did, to go with a compelling first impression. In another example of one, many highly successful entrepreneurs like Bill Gates and Mark Zuckerberg dropped out of college. Maybe college isn't that important, after all? But accepting this first impression ignores the vast number of people who dropped out and failed. We rarely hear stories about the failures.

"They don't make 'em like they used to!" We often hear this about older appliances, cars or clothing. But we're only seeing the high-quality older ones that have lasted – have survived –through the years. Masses of lower-quality items from that era have long since broken down and been forgotten. Nobody remembers, say, that creaky sofa from 10 years ago.

Meet survivorship bias

In a previous article, "Benchmarks: When average is much above average," we discussed investors who achieve returns equal to market-index returns. This achievement, we noted, actually puts these investors well above the average investor. That's because most investors' performance falls well short of the market – and not by trivial amounts, either.

For stock indexes, the average shortfall is likely in the range of 2-3% per year. This is for a variety of reasons, such as market timing and behavioral biases. But another reason is that many investors use mutual funds, and the majority of mutual funds underperform their benchmarks.

As discussed in the previous article, this is based on the S&P Indices Versus Active (SPIVA)[1] study of actively managed funds that attempt to beat the market, but mostly end up failing in Canada, the U.S. and internationally.

One key element of the SPIVA study is that it adjusts for *survivorship bias*. This bias is extremely important to consider when evaluating the historical returns of a manager's funds. About 40% of mutual funds that existed 10 years ago have either been shut down or merged with other funds. Usually it is the poorly performing funds that have been closed. The performance numbers shown by fund managers therefore only show the performance of the surviving funds, which creates a biased representation of actual past performance.

Let's say that, at the beginning of the year, there are three funds: A, B and C. After a year, fund A underperformed. Fund B did average. Fund C outperformed. Because of its underperformance, fund A was shut down at the end of the year. Now, a year later, if we are analyzing funds, only fund B and C exist. Mutual fund investing looks like a good idea because the performance has been at least average or better. The reason: poorly performing fund A has "disappeared" from the record books.

A good study will adjust for survivorship bias by looking at what funds existed at the beginning of the period. In the above case, this would involve all three funds. Only looking at the two good funds that survived to the end of the year would create a significantly unfair bias in the study.

SPIVA makes an adjustment to remove this bias in three ways. First, it includes all funds that existed the beginning of the study period. Second, it shows the survivorship rate for each fund category. And third, SPIVA calculates peer-average returns for each category. The first adjustment, that of including all funds, is the most important. The other adjustments give us more information when making investment decisions.

Let's look at some numbers from the SPIVA study about survivorship bias. At the beginning of the study, there were 701 equity mutual funds. Only 83% survived to the end of the period five years later. That means 119 funds were closed down – likely due to poor performance. After all, who would shut down a well-performing fund?

If the study didn't include those 119 funds, the overall performance of mutual funds for the last five years would be overstated. It's even worse over the last 10 years, as only 61% of funds survived. A decade ago, 741 funds existed, but only 452 would show if you did a basic search today. The other 289 funds have, you guessed it, "disappeared."

So, whether its classic cars, college dropouts or mutual funds, don't just go with your first impression. Remember to think about survivorship bias, as it can have a big impact on your conclusions. We can do this by looking at failures as well as successes – and by making sure we have all the data.

[1]SPIVA Canada and SPIVA US

Michael Chu is a Portfolio Manager and Senior Wealth Advisor for The Stan Clark Financial Team at CIBC Wood Gundy. Michael is a specialist in investment research and information technology.

CIBC PRIVATE WEALTH
WOOD GUNDY

The Stan Clark Financial Team
Where planning, investing and behavioral finance meet

Phone: 604 641-4361 | Toll-free: 1 800 661-9442 | Fax: 604 608-5211 | Email: stanclarkfinancialteam@cibc.ca | www.stanclark.ca