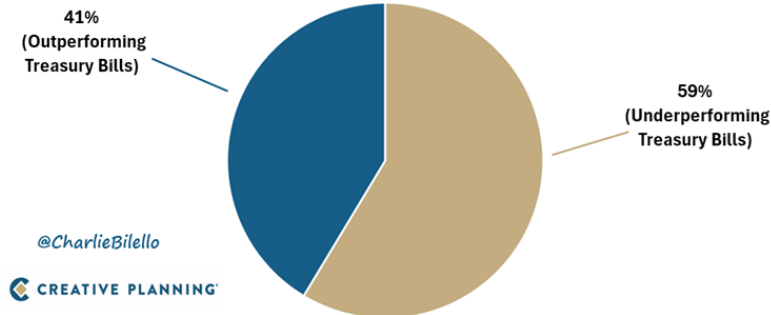


Bessembinder 2026

Do Stocks Outperform Treasury Bills?

(Bessembinder Study: 1926 - 2025)



Dr. Hendrik Bessembinder is a professor of finance at Arizona State University. He recently published a report that analyzed the long-term returns of all 29,754 publicly traded domestic stocks from 1926 through 2025. The average lifespan of a publicly traded stock was just under 12 years, while the median lifespan (half had more, half had less) was just under 7 years. Stocks disappeared due to involuntary delisting or outcomes such as mergers and acquisitions. The average annualized return of the stock market since 1926 has been 10.1%. By comparison, the risk-free 30-day U.S. Treasury bill netted a 3.3% annualized return. Thus, the “equity risk premium” - the extra return stock investors earned over risk free US Treasury bills - was 6.8% per

year. Most stocks (52%) had negative returns over their lifetime. Only 41% outperformed risk-free Treasury bills.

The long-term returns of domestic stocks are “positively skewed.” This means that although the annualized return for most stocks during their lifetime has been modest or poor, a few exceptional performers (called outliers) have pulled the annualized average return of the stock market upward. Bessembinder noted that although the average annualized return for all stocks since 1926 has been 10.1%, the median annualized return (half had more and half had less) was a 6.9% loss. Positive skewness is the result of the fact that there is no ceiling on the magnitude of a gain, while the maximum loss is limited to 100%. A list of the 30 best performing stocks over the past century is headed by Altria Group (formerly known as Phillip Morris) with an annualized average return of 16.5%. The annualized return of these top performers, all well-known companies, averaged less than one might expect - 13.0%. Perhaps the most surprising member of this select group, residing in 24th place and bringing endless joy to dentists, is Tootsie Roll Industries, Inc. Go figure.

Bessembinder noted several takeaways from his study -

- Publicly traded U.S. stocks were, despite their ongoing volatility, a tremendous source of wealth enhancement - creating \$91 trillion of wealth over the past 100 years.
- Long-term stock market performance has been attributable to relatively few firms. Over half of all individual stocks delivered negative returns over their lifetime. Most failed to outperform low-risk investments such as Treasury bills. The stock market’s overall success is not due to average performance across all stocks, but rather the exceptional success of a limited few.
- The impossibility of identifying the outliers in advance makes diversification essential. Owning a broadly diversified portfolio of stock index funds ensures ownership of future outliers.
- The best performing stocks tended to grow steadily over the decades. Long-term compounding—not short-term spikes—is the primary driver of wealth creation. Stay Invested for the long-term and be a disciplined rebalancer. Market timing or frequent trading increases the risk of missing key growth periods. Time in the market is the critical factor in achieving success.

These results explain why most active funds, which typically have concentrated, non-diversified portfolios, so often underperform index funds. Lacking divine insight, most fund managers have been unable to identify the best performing stocks before the fact. Successful stock picking doesn’t just require research and hard work. It requires an almost prophetic ability to identify those few stocks that will become outliers. But since the odds are so steep against success, the better strategy is to stick with the simpler and less risky alternative of index funds. Fortunately for investors today, there is no easier or less expensive way to own tomorrow’s great performers than to own a total stock market index fund. No guessing or divine inspiration required. If they can avoid large losses, most people will do quite well with the stock market’s average annualized gains over a long-time horizon. Engaging in stock picking or market timing in a quest to gain market beating returns is unnecessary.

It's Not Fair

As I have explained to my granddaughters many times, usually following the complaint, “Papa that’s not fair”, “Life’s not fair, get used to it.” Most adults know that life is unfair. But most do not realize that just like life, arithmetic is unfair. Here is a three-question quiz. You need to get all three correct to pass and I am not grading on a curve -

- 1) A \$1,000 investment gains 10% in the first year and goes down 10% in the second. After two years the value is -
 - A. \$1,000
 - B. More than \$1,000
 - C. Less than \$1,000
- 2) Conversely, if the investment loses 10% in the first year and then gains 10% in the second year, will the ending value be A, B, or C?

Unfortunately, the answer to both questions is C. In the first case, the investment grows to \$1,100 in the first year and declines to \$990 in the second year. In the second case, it initially declines to \$900 in the first year and rebounds to only \$990 in the second year. The sequence of returns does not change the ending value. It’s not fair, but after a portfolio decline, the percentage gain required to recover is disproportionately larger. For example, a 20% decline requires a 25% gain to break even, and a 50% decline requires a 100% gain. This is because the recovery percentage return occurs on a smaller principal amount.

- 3) Which of the following investments would you prefer to own for the next 10 years given the following annual returns?

Year	Investment A	Investment B
1	20%	3%
2	-10%	3%
3	20%	3%
4	-10%	3%
5	20%	3%
6	-10%	3%
7	30%	3%
8	-30%	3%
9	20%	3%
10	-10%	3%

Investment A will have spectacular returns in five of the ten years. Losses in four of five down years will be only half of the prior year’s gain. No year will have a loss greater than the prior year’s gain. The average annual return of Investment A is 4.0%. Intuitively, it would seem that Investment A would be a better choice than Investment B. But we have to distinguish between average annual return and average annualized return. The average annual return (arithmetic mean) is the sum of Investment A’s annual returns divided by 10 = 4%. But investors need to know the average annualized return (geometric mean), which is the compounded ten-year growth rate of Investment A. The average annual and average annualized returns will be the same only if there is no variation in annual returns, such as in Investment B. It may be hard to believe, but the average annualized return of Investment A is only 2.2% vs. Investment B’s 3%. A \$10,000 investment in each would grow to \$12,380 in Investment A and \$13,439 in Investment B. Therefore, a higher annualized return, and a greater ending value with no volatility makes B the better investment.

This example shows the key role loss avoidance plays in long-term wealth accumulation. The time that it takes to recover from losses is more than just a function of market returns. The relentless laws of arithmetic are also at work, increasing the time necessary to recover. What this means in practice is that risk management—diversification, appropriate asset allocation, and disciplined rebalancing—is not just about reducing volatility. It’s about protecting your portfolio’s ability to compound over time.

“Experts” have told us that if we want higher returns, we must take more risk. Although taking more risk might provide the opportunity for higher returns, there is no guarantee of receiving them. Taking more risk is inevitably accompanied by more volatility with more frequent, and potentially larger declines. And the evidence suggests that investors do not manage volatility very well. The more widely a fund’s returns swing compared with similar funds, the more likely it is that shareholders will trade inopportunistically, buying high and selling low. In a recent study, Morningstar noted that when

comparing funds within an asset class, riskier funds did not make enough to compensate for their higher volatility; they were more likely to underperform, usually cost more and they were less likely to survive than less risky funds.

Most investors are more comfortable with investments that have less fluctuation in value. Slow and steady just might be the best way to win the accumulation race. As the example of Investment B shows, a lower risk, boring investment strategy may produce higher returns over time than a more volatile investment, with fewer sleepless nights.

Northwestern Mutual Life Insurance Company has, for the last 18 years, conducted a study that *“Explores US adults’ attitudes and behaviors towards money, financial decision making, and the broader issues impacting people’s long term financial security.”* Among the 2026 survey’s findings -

- About 39% of those surveyed said they are investing, or considering investing, in high-risk assets such as cryptocurrencies, options, prediction markets, sports betting (betting = investing?) or meme stocks.
- Among the investors drawn to speculative assets, 73% said they are doing so because they feel financially behind and believe those investments will help them reach their goals faster than traditional approaches. These people have no concept of how the unfair arithmetic of investing will work against them in the years ahead.
- Roughly 80% of Gen Z investors (below age 30), who are considering speculative assets say they are motivated by the feeling that they need to accelerate their wealth building efforts.

When people feel deprived or resentful, or who are led to believe they are at a relative disadvantage they become more prone to gamble. I doubt that most of these Gen Z young people came to these conclusions on their own. They’ve been misled by social media influencers, YouTube videos, friends who don’t know anything and online grifters. When they hear stories (true or not) about people who have made quick riches, they are tempted to try it themselves. They have never been told that the most important wealth building asset they have is time. They do not need to take unnecessary risks in investments that they do not understand, and which are likely to enhance the wealth of hucksters who sell fictional promises and profit from the financial naivety of their victims.

If you are giving advice to a Gen Z investor, tell them about my friends, Stan and Ollie, 21-year-old twin brothers just beginning their professional careers.

Stan is the prudent brother. He knows that time is his most important financial asset. He starts contributing \$5,000 each year to a Roth IRA. After ten years, his contributions totaled \$50,000. Ollie is a perennial procrastinator and saves nothing during the first decade of his working years. Ollie then has a Prodigal Son moment. He realizes that he has been wasting time and squandering money long enough. So, he decides to begin annual \$5,000 contributions to a Roth IRA.

After making contributions for ten years, Stan finds that the expenses of home ownership and raising a family leave him with no money to invest. So, from this point until retirement, he makes no further IRA contributions.

Let us assume that both accounts yield a 7% annualized rate of return and that Stan and Ollie work for 45 years. At retirement, which brother will have the larger IRA?

Stan’s contributions totaled \$50,000, and when he ceased contributing to his Roth IRA it was worth \$69,082. Ollie’s Roth contributions amounted to \$175,000. Upon retirement, Stan’s Roth will have grown to \$737,000 while Ollie’s will be worth \$691,000. Intuitively, it seems that this cannot be true.

With a 7% rate of return, an account doubles in about ten years. When Stan stopped his contributions, enough years remained for his account to double three times. By the time Ollie has made \$50,000 in contributions, he is 25 years from retirement, and his IRA has time to double only twice. This is a simple example of how compound growth rewards early contributions more than later ones. When growing rich slowly, it is the last doubling that puts you over the top.

To take full advantage of the benefits of compound growth, Gen Z investors should own a number of broadly diversified, low cost, tax efficient index funds. By doing so they will maximize their net-invested dollars and the long-term growth of their portfolio. Albert Einstein, no slouch when it comes to number crunching, is reported to have said that the most powerful force in the universe is compound interest. And perhaps growing rich slowly is the most unappreciated benefit of patient, disciplined, long-term investing.

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