Do stocks outperform Treasury bills?

Research by Hendrik Bessembinder, finance professor and Francis J. and Mary B. Labriola Endowed Chair in Competitive Business, evaluated lifetime returns to every U.S. common stock traded on the New York and American stock exchanges and the Nasdaq since 1926.

What compelled him to do this?

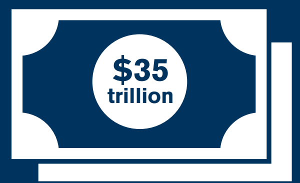
Bessembinder got into the stocks-versus-Treasury-bills question accidentally. He was looking at data on continuously compounded returns for stocks, and noticed that the average was negative, meaning a lot of stocks were losing money. He didn't understand how that could be, given the fact that the overall stock market does make money in the long run, and he wanted to know why.

His investigation ended up documenting the importance of the statistical concept "skewness" for stock market investing. In particular, he found that returns from long-term stock investing are positively skewed, meaning that very large returns to a few stocks pull up the average, while most stocks post modest or negative returns. Because of skewness, he found that:

58% **of stocks failed to beat Treasury bill returns over their lives.**

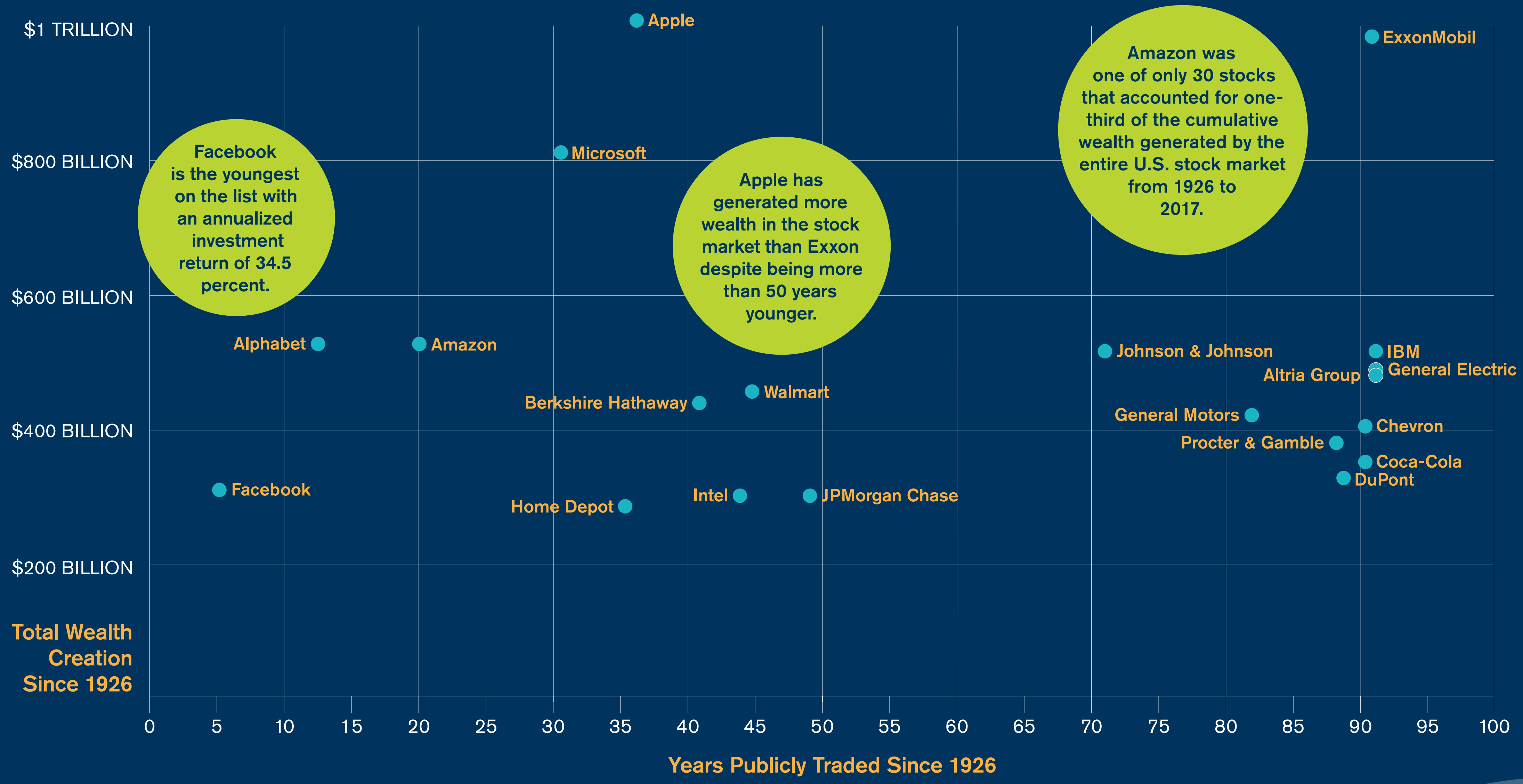
38% **of stocks beat Treasury bill returns by just moderate amounts.**

Just over 4% **of stocks are responsible for boosting the market's overall returns higher than those on Treasury bills.**



Bessembinder found that all of the $35 trillion in wealth that stocks created over and above Treasury bills returns between 1926 and 2016 could be attributed to just 1,092 companies, or 4.3 percent of the nearly 26,000 stocks that have been traded in the markets. More than half of the $35 trillion came from just 90 companies, or less than one-third of 1 percent.

Top 20 Wealth Creators
from 1926 to 2017



"The results help to explain why active strategies, which tend to be poorly diversified, most often underperform." — *Bessembinder*

To realize outsize gains, however, investors would have to have been lucky or savvy enough to pick those and other winners out of the nearly 26,000 stocks, buy them when they first went public, and hold the stocks for the long run.

He found that the largest returns come from very few stocks overall — just 86 stocks have accounted for $16 trillion in wealth creation, half of the stock market total, over the past 90 years. All of the wealth creation can be attributed to the 1,092 top-performing stocks, while the remaining 96 percent of stocks collectively matched one-month Treasury bills.

Get the spreadsheet containing lifetime stock market wealth creation data for each U.S. common stock since 1926, as well as the SAS computer program that generates the data:

wpcarey.asu.edu/86stocks

The bottom line

For most individual investors

The results reinforce the desirability of having a well-diversified portfolio, which increases the chances that some of your stocks will become big performers, and of the buy-and-hold strategy.

For risk-taking investors

The odds are that picking just a few stocks will lead to underperformance. But, if you are lucky or sufficiently skilled, a handful of picks can have the potential for very big payoffs.

For fund managers

Active managers need to be able to make the case to investors that they have a reasonable chance of picking big winners in advance. Passive managers now have more ammunition to show investors that diverse investments held for the long run will most reliably create wealth.

For managers of publicly traded companies

The median length of time a stock appears in the CRSP database is 7.5 years, so take that as a reminder of how dynamic the U.S economy has become.