Would You Fire God?

"Being patient as an investor, is much, much harder than it sounds." - Barry Ritholtz

From Bespoke on May 4th:

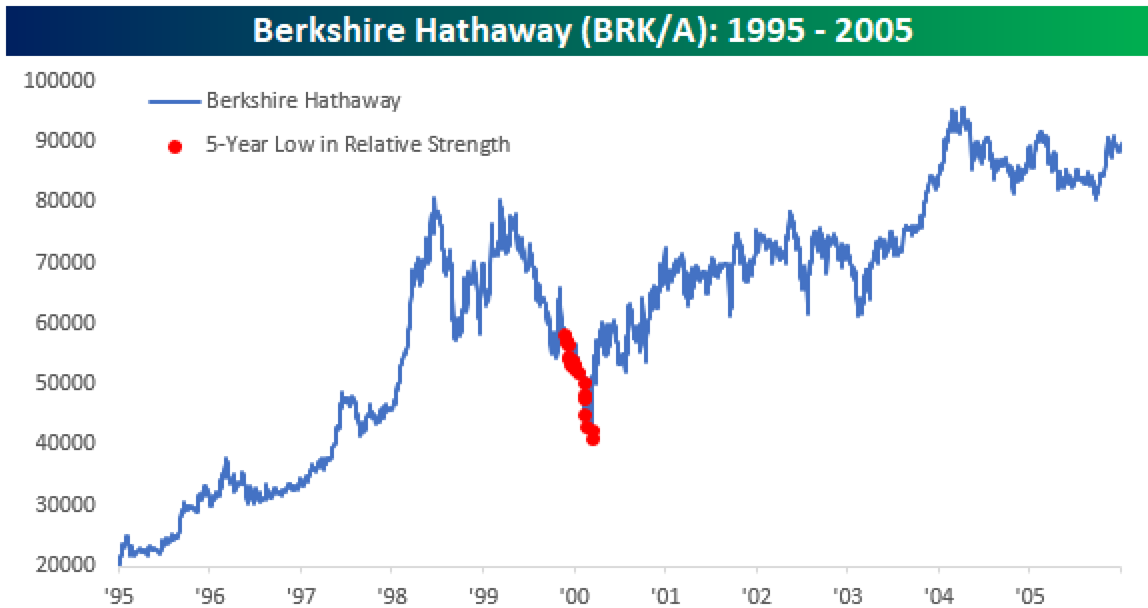
"What's Wrong, Warren?"

That seems to be a question a lot of people are asking lately. Warren Buffett surprised a lot of investors this past weekend by disclosing that he was a net seller of equities in April after liquidating all of Berkshire Hathaway's (BRK/a) stakes in the major airlines. Declines like the one we saw in February and March have typically been used by Buffett as an opportunity to add to Berkshire's equity exposure, and over the last couple of weeks, everyone has been wondering what positions Buffett may have added to or even initiated during the sell-off. Therefore, the news that Buffett actually added cash to his $100 billion war chest was surprising. The fact that Buffett became even more conservative after Berkshire reported a quarterly loss of nearly $50 billion has the stock underperforming with a decline of over 3% today.

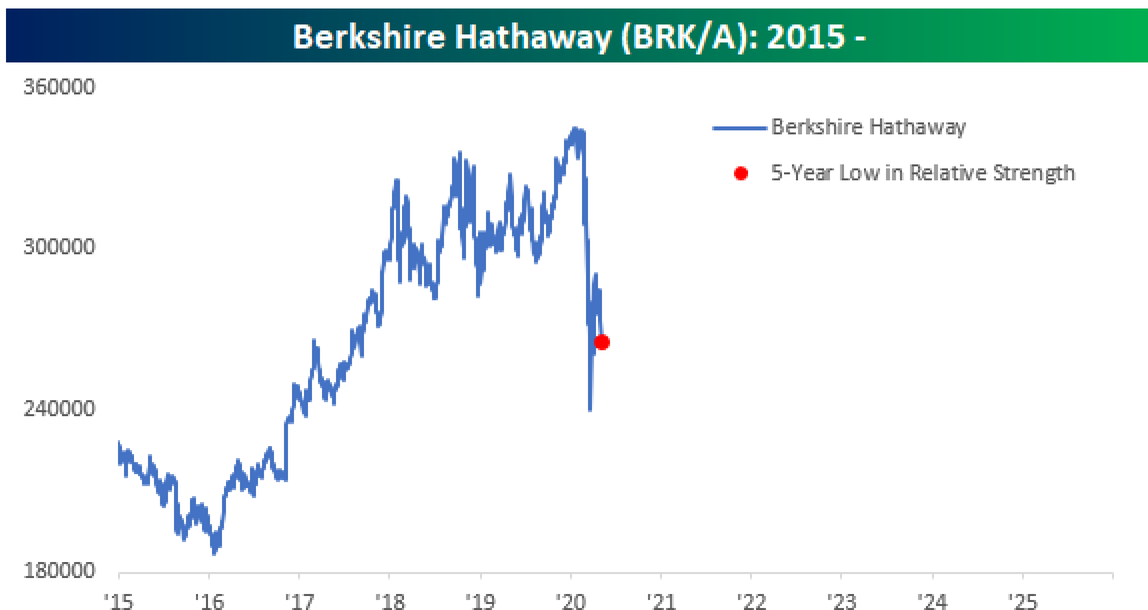
Even before the weekend's events, shares of BRK/a have been underperforming the S&P 500 by a wide margin, and while it's not particularly uncommon for BRK/a to underperform when the equity market is doing well, investors will usually tolerate that underperformance knowing that the stock will outperform in a bear market. The only problem this time around is that even with the S&P 500 moving into (and out of) bear market territory in the last several weeks, the stock is still lagging the broader market in a big way.

Berkshire has been doing so bad lately that after today's weakness, the stock's relative strength versus the S&P 500 is at a five-year low. Going all the way back to 1980, there has only been one other period where the Oracle of Omaha's stock has seen its relative strength versus the S&P 500 drop to a five year low, and that was in late 1999/early 2000. In fact, the title of this post has nothing to do with the present period as it's actually a headline from an article in the Wall Street Journal from 12/27/1999.

As shown in the above chart, the one and only other time that Berkshire's relative strength hit a five-year low, it didn't stay low for long. Below, instead of showing the relative strength, we show Berkshire's price in the five years before and after that period. From 1995 right up until early 1998, Berkshire's stock did very well, but as the tech bubble began to inflate, the stock ran out of steam. While Berkshire made a run at new highs in early 1999, it couldn't quite get there, and from there the stock was nearly cut in half in the span of a year. From there, though, Berkshire rebounded quickly even as the rest of the market started to fall apart and shareholders who held on made out well.



Fast-forwarding twenty years to today, the pattern for Berkshire has some similarities to the period leading up to 2000. Like the late 1990s, Berkshire was essentially range-bound in the last couple of years leading up to the recent decline, but unlike 1999 when the stock failed to make a higher high, Berkshire hit a new high right along with the S&P 500 earlier this year. Now that the stock has fallen and underperformed so sharply, questions surrounding Buffett and whether he has lost his touch are making the rounds.



History has shown that it has never been profitable to bet against Warren Buffett in the past, so that would make now look like an opportune time to be in the stock. The only caveat here is time. The last time people were questioning whether Berkshire was worth holding for the long-term, Buffett was just 69 years old. This time around he's less than four months away from his 90th birthday. Definitely a young 90, but 90 nonetheless.

Our thoughts

As we note on our website, "while under Warren Buffet's control Berkshire Hathaway has seen its stock price halved on four separate occasions."

Fidelity conducted a study on the performance of its flagship Magellan fund during the tenure of its famous manager Peter Lynch, who ran the fund from 1977-1990, delivering an astonishing 29% average annual return. Despite this remarkable performance they discovered that the average investor actually lost money during his 13 year tenure.

I wrote a review of Quantitative Momentum (see Worth Sharing on our website) in which the authors cite the following case: "Ken Heebner's $3.7 billion CGM Focus Fund, rose more than 18% annually and outpaced its closest rival by more than three percentage points. ... Too bad investors weren't around to enjoy much of those gains. The typical CGM Focus shareholder lost 11% annually in the 10 years ...." This is "a reflection of the typical investor's inability to time effectively in and out of Ken's fund. When Ken's fund was underperforming (and the opportunity was high), they pulled capital; when his fund was outperforming (and opportunity was low), they invested more capital. On net, Ken looks like a genius, but few investors actually benefited from Ken's ability -- a lose-lose proposition."

From AdvicePeriod: "Most investors are their own worst enemies. Multiple studies illustrate that over time the average investor significantly under-performs the markets due to behavioral tendencies that all humans are susceptible to. Many individuals buy high and sell low as the emotions of greed and fear win over discipline and long-term planning."

ESTIMATES OF THE BEHAVIOR GAP

The behavior gap measures the loss that the average investor incurs as a result of emotional responses to market conditions. Several academics have studied and estimate the gap to be between 1.17% and 4.30% per annum.

As we state on our website, "Part of our job at HCM is to make sure the above doesn’t happen to you."

From an October 26, 2016 post by Meb Faber:

Pros often scoff at the inability of individual investors to stay the course with underperforming assets or strategies, but really the pros are just as bad as retail. Look at this recent survey from the FT and State Street.

The title for this post comes from the following Alpha Architects' White Paper that has been edited and previously shared with clients:

Even God Would Get Fired as an Active Investor

February 2, 2016 Wesley R. Gray, Ph.D.

Empirical asset pricing research can sometimes get monotonous because you end up circling back relentlessly to the same conclusions: value works, momentum works, and yet, markets are remarkably efficient. But, *sometimes,* research uncovers absolutely stunning and counter-intuitive results–and this is where things get truly exciting. The study below is what we consider “exciting” research because the results are so profound (at least to us).

Our bottom line result is that perfect foresight has great returns, but gut-wrenching drawdowns. In other words, an active manager who was clairvoyant, and knew ahead of time exactly which stocks were going to be long-term winners and long-term losers, would likely get fired many times over if they were managing other people’s money.

Question: if God is omnipotent, could he create a hedge fund that was so good that he could never get fired? No. It turns out even God would most likely get fired as an active investor.

Strategy Background

We compute the 5-year “look ahead” return for all common stocks for the 500 largest NYSE/NASDAQ/AMEX firms. For simplicity, we eliminate any firms that do not have returns for a full 60 months. We look at gross returns and all returns are total returns including dividends. Next we create decile portfolios based on the forward five-year compound annual growth rate (CAGR).

We rebalance the portfolio on July 1st every fifth year. The first portfolio formation is July 1, 1926 and is held until June 30, 1931. The second portfolio is formed on July 1, 1931 and held until June 30, 1936. This pattern repeats

every fifth year. To be clear, we know with 100% certainty the performance of the top 500 stocks over the next 5 years.

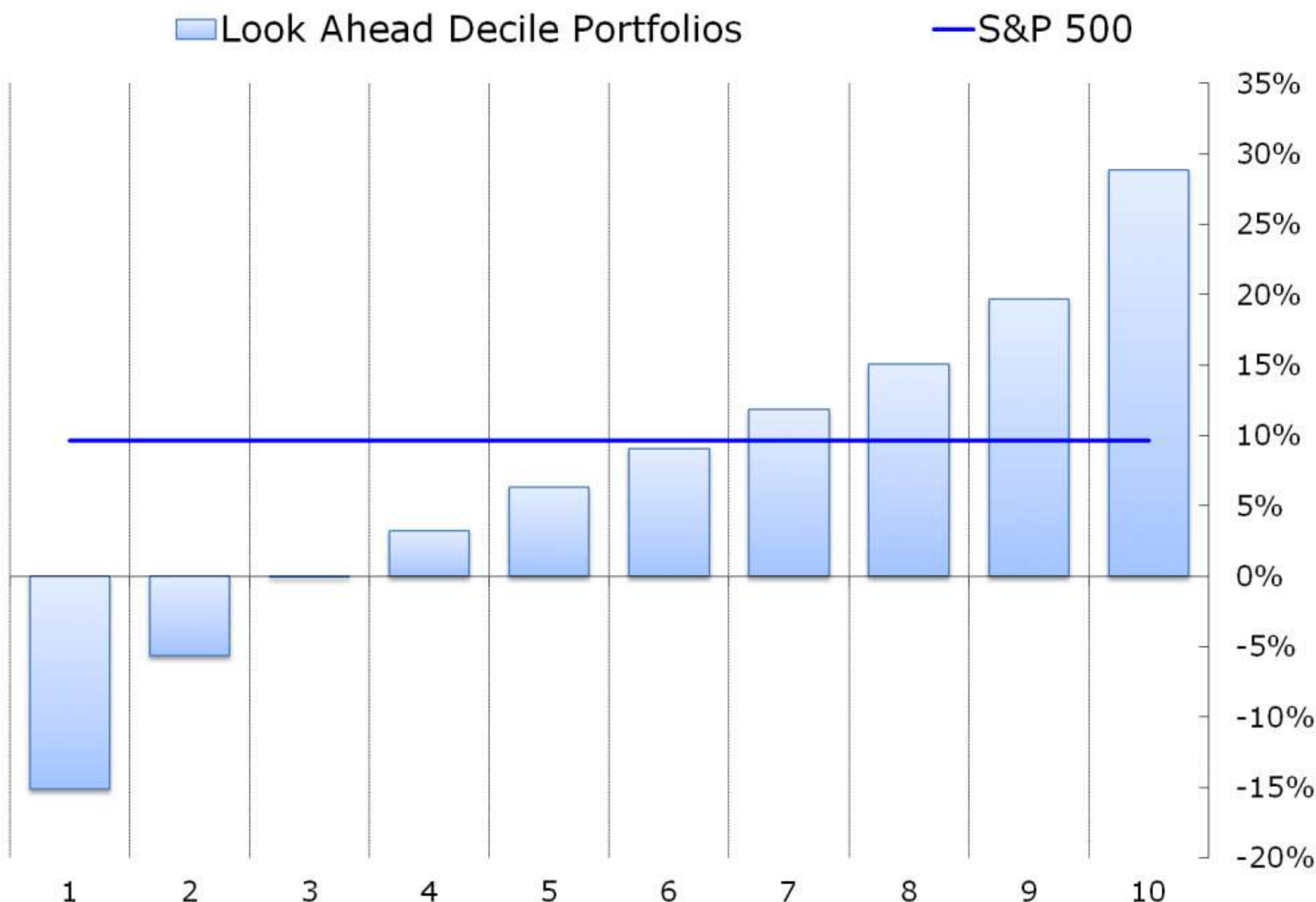
We are explicitly engaging in look-ahead bias.

Returns are analyzed from 1/1/1927 to 12/31/2009. Portfolios are value-weighted returns for month *t* are weighted using the market capitalization at the end of month *t-1*. All returns are gross of transaction costs, taxes, and fees.

Decile Portfolios

We first look at the decile portfolios rebalanced every 5 years. These portfolios highlight what perfect foresight can achieve. The Decile 10 portfolios represent value-weighted portfolios sorted on future top 5-year performers and the Decile 1 represent value-weighted portfolios sorted on future bottom 5-year performers. The compound annual growth rates for the 10 decile look-ahead portfolios are mapped above.

As expected, a portfolio formed on the names that have the best 5 -year performance, have the best 5-year performance. Duh. But the details are interesting…



Summary Statistics

Here we investigate some statistics and charts on the performance of the 5-year look ahead portfolio.

First, the raw summary statistics (labeling Decile 10 above as High MOM VW):

Summary Statistics*	5 year High MOM VW	SP500
CAGR	28.89%	9.63%
Standard Deviation	21.81%	19.40%
Downside Deviation (MAR=5%)	15.52%	14.44%
Sharpe Ratio	1.12	0.39
Sortino Ratio (MAR=5%)	1.48	0.42
Worst Drawdown	-75.96%	-84.59%
Worst Month Return	-32.69%	-28.73%
Best Month Return	44.20%	41.65%
Profitable Months	69.18%	61.45%

The 29% CAGR is obviously awesome for the look-ahead portfolio. Expected.

But how about the drawdown associated with a perfect foresight portfolio? Can't be that bad if you know the future, right?

Wrong! The worst drawdown for the look-ahead portfolio is devastating: **-76%**! (Aug 1929 to May 1932). But the pain doesn't end there…as shown in the above table of the top 10 drawdowns:

Clearly, even a "perfect" long portfolio can cause a long-only investor pain.

Rank	Date Start	Date End	5 year High MOM VW	SP500
1	8/30/1929	5/31/1932	-75.96%	-84.59%
2	3/31/1937	3/31/1938	-44.04%	-51.11%
3	5/31/2008	2/28/2009	-42.18%	-45.72%
4	3/31/2000	3/31/2001	-34.03%	-21.48%
5	10/31/1973	9/30/1974	-30.74%	-38.91%
6	8/31/1987	11/30/1987	-27.94%	-29.58%
7	3/31/1962	6/30/1962	-23.35%	-20.64%
8	11/30/1980	9/30/1981	-22.89%	-13.69%
9	4/30/1940	5/31/1940	-19.16%	-23.13%
10	5/31/1946	10/31/1946	-19.09%	-21.97%

How About We Create the Ultimate Hedge Fund?

In the analysis above we highlight that the perfect long portfolio still can create massive pain. But perhaps we can create the ultimate hedge fund portfolio: 1) long the names we know will perform the best over the next 5 years and 2) short the portfolio of names that we know will perform the worst over the next 5 years. Surely, this would be a god-like hedge fund?

The long/short portfolio is constructed as follows:

- Fully funded long book and a short book that earns the risk-free rate on short proceeds.
- The long/short weights are rebalanced monthly.

The following portfolios are examined:

- **5 Year High MOM VW L/S** = Long 5-Year winners; short 5-year losers
- **SP500** = S&P 500 Total Return

Summary Statistics

Here are the high-level stats:

Summary Statistics*	5 year High MOM VW_L/S	SP500
CAGR	39.74%	9.63%
Standard Deviation	24.11%	19.40%
Downside Deviation (MAR=5%)	25.82%	14.44%
Sharpe Ratio	1.39	0.39
Sortino Ratio (MAR=5%)	1.24	0.42
Worst Drawdown	-69.80%	-84.59%
Worst Month Return	-54.84%	-28.73%
Best Month Return	23.87%	41.65%
Profitable Months	77.81%	61.45%

Yowza! Clearly, the ultimate hedge fund does amazingly well — 39% CAGRs would have you owning the world's stock market in short order. Obviously, this sort of return is not possible over a long period — even if someone had perfect "Biff-like" foresight.

Yet check out the worst drawdown on the PERFECT hedge fund — 70%+. Incredible. And it gets better…

Here are the top 10 drawdowns for the ultimate hedge fund and the associated returns on the stock market:

Rank	Date Start	Date End	5 year High MOM VW_L/S	SP500
1	6/30/1932	6/30/1933	-69.80%	168.60%
2	2/28/2009	9/30/2009	-54.59%	45.01%
3	9/30/2002	1/31/2004	-49.36%	42.33%
4	6/29/1935	2/29/1936	-43.59%	46.96%
5	12/31/1974	2/29/1976	-38.07%	52.51%
6	12/31/1933	2/28/1934	-37.08%	7.79%
7	12/31/1930	2/28/1931	-36.01%	17.73%
8	12/31/1990	3/31/1991	-28.56%	14.71%
9	6/30/1939	9/30/1939	-28.20%	22.56%
10	3/31/2000	2/28/2001	-25.49%	-16.16%

Let those numbers soak in a bit.

What the chart highlights is that even GOD HIMSELF would get fired multiple times over. The performance on the perfect hedge fund would get crushed many times over by the passive index.

These results highlight the fickle nature of assessing relative performance over short horizons. We've shown this quantitatively, but Ben Carlson talks about the challenge of short horizon thinking here, and Meb Faber recently highlighted that investors are terrible at timing active investments.

Takeaways:

1. Keynes was right: Markets can remain irrational longer than you can remain solvent
2. Active investors MUST have a long-horizon…and few investors actually have horizon.

Good luck out there…

From Justin Sibears' February 8, 2016 "God, Buffett, and the Three Oenophiles":

Recently AQR's Cliff Asness had this to say regarding Warren Buffett and his phenomenal success:

"I used to think being great at investing long-term was about genius. Genius is still good, but more and more I think it's about doing something reasonable, that makes sense, and then sticking to it with incredible fortitude through tough times.

Of course [AQR] found [Warren Buffett] was fantastic – but not quite as fantastic. His track record was phenomenal…but human phenomenal.

What was beyond human was him sticking with it for 35 years and rarely, if ever, really retreating from it.

That was a nice little lesson that you have to be good, even very good, but sticking with it and not getting distracted is much more the job."

Going one-step further, we think that it is important to remember that investing is a team sport. Yes, a manager needs to have the conviction to stick with his approach. However, it is equally important that the client has the discipline to stick with the manager.

I think the Buffett example is particularly interesting since he may be one of the closest examples we have to an omnipotent stock picker.

The Oracle of Omaha

Unsurprisingly, Buffett's raw performance statistics are phenomenal. Berkshire Hathaway trounces the Vanguard S&P 500 Index Fund.

Buffett Summary Statistics (1980 to 2016)

	Berkshire Hathaway (ticker: BRK-A)	Vanguard S&P 500 Index Fund (ticker: VFINX)
CAGR	20.3%	10.4%
Standard Deviation	22.8%	15.6%
Downside Deviation	20.2%	17.6%
Sharpe Ratio	0.65	0.31
Sortino Ratio (MAR=5%)	0.76	0.30
Worst Drawdown	44.5%	51.0%
Ulcer Index	12.1	14.1
Worst Month Return	-21.2%	-21.7%
Best Month Return	30.0%	13.3%
% Profitable Months	61.4%	63.5%

Source: Yahoo! Finance, Newfound Research. Past performance is not a guarantee of future results.

Yet, for an investor to fully capitalize on Buffett's genius, she would have needed the wherewithal to stay invested through grueling periods of absolute and relative underperformance.

Buffett's Large Drawdowns (1980 to 2016)

Rank	Date of Top	Date of Bottom	BRK-A	VFINX	BRK-A Out / Underperformance
1	Dec. 2007	Feb. 2009	-44.5%	-48.5%	+4.0%
2	Jun. 1998	Feb. 2000	-43.8%	23.3%	-67.1%
3	Dec. 1989	Sep. 1990	-32.3%	-11.2%	-21.1%
4	Sep. 1987	Nov. 1987	-31.3%	-28.1%	-3.2%
5	Nov. 1981	Jul. 1982	-17.4%	-15.2%	-2.2%
6	Mar. 1986	Sep. 1986	-15.9%	-1.8%	-14.1%
7	Nov. 1985	Jan. 1986	-14.1%	-1.8%	-12.3%
8	Feb. 1996	May 1996	-14.1%	5.1%	-19.1%
9	Dec. 2014	Jan. 2016	-14.0%	-3.8%	-10.2%
10	Feb. 2004	Sep. 2005	-13.2%	10.2%	-23.4%

Source: Yahoo! Finance, Newfound Research. Past performance is not a guarantee of future results.

"Has the world's most famous investor lost his Midas touch?"

Imagine time traveling back to February 2000. Berkshire Hathaway has just lost nearly 44% of its value over the preceding 20 months. A low-cost index fund trounced the Oracle of Omaha by 67%.

Berkshire's lone acquisition in 1999 was Jordan Furniture. Not exactly sexy in the midst of the dotcom boom.

A Motley Fool article from 2000 cited this critical email from a Berkshire Hathaway investor (emphasis is ours):

"We are holders of Berkshire Hathaway – quite a bit of it in fact, as my wife works at Gen Re. How do you explain Buffett's oft-repeated contention that he does not understand technology stocks and therefore does not own them? What is difficult to understand about technology, especially a stock like Microsoft, where Buffett and Gates are known to be good friends? If anything, Buffett should have bought Microsoft, since it is a 'toll-collector' like many of his other companies. Moreover, how can he ignore technology stocks given their growing role in the economy? ***I think Buffett is becoming a bit of a relic by refusing to take time to learn about technology stocks****."*

Buffett was even critical of himself in his 1999 letter to shareholders. He wrote:

"We had the worst absolute performance of my tenure and, compared to the S&P, the worst relative performance as well. Relative results are what concern us: Over time, bad relative numbers will produce unsatisfactory results.

Even Inspector Clouseau could find last year's guilty party: your Chairman. My performance reminds me of a quarterback whose report card showed four Fs and a D but who nonetheless had an understanding coach. "Son," he drawled, "I think you're spending too much time on that one subject."

My "one subject" is capital allocation, and my grade for 1999 most assuredly is a D."

Nevertheless, Buffett was steadfast in sticking to his process. Later in the same letter, he wrote:

"Our lack of tech insights, we should add, does not distress us. After all, there are a great many business areas in which Charlie and I have no special capital-allocation expertise. For instance, we bring nothing to the table when it comes to evaluating patents, manufacturing processes or geological processes. So we simply don't get into judgments in those fields.

If we have a strength, it is recognizing when we are operating well within our circle of competence and when we are approaching the perimeter. Predicting the long-term economics of companies that operate in fast-changing industries is simply far beyond our perimeter. If others claim predictive skill in those industries -- and seem to have their claims validated by the behavior of the stock market -- we neither envy nor emulate them. Instead, we just stick with what we understand. If we stray, we will have done so inadvertently, not because we got restless and substituted hope for rationality. Fortunately, it's almost certain there will be opportunities from time to time for Berkshire to do well within the circle we've staked out."

Would you have had the discipline to stick with Warren? It certainly would have required guts, the ability to ignore short-term performance, and the foresight to recognize a manager dedicated to a sound, thoughtful investment process. If so, you would have been handsomely rewarded. Berkshire more than quadrupled in value from February 2000 to January 2016. The Vanguard index fund didn't even double.