Economists and Weathermen

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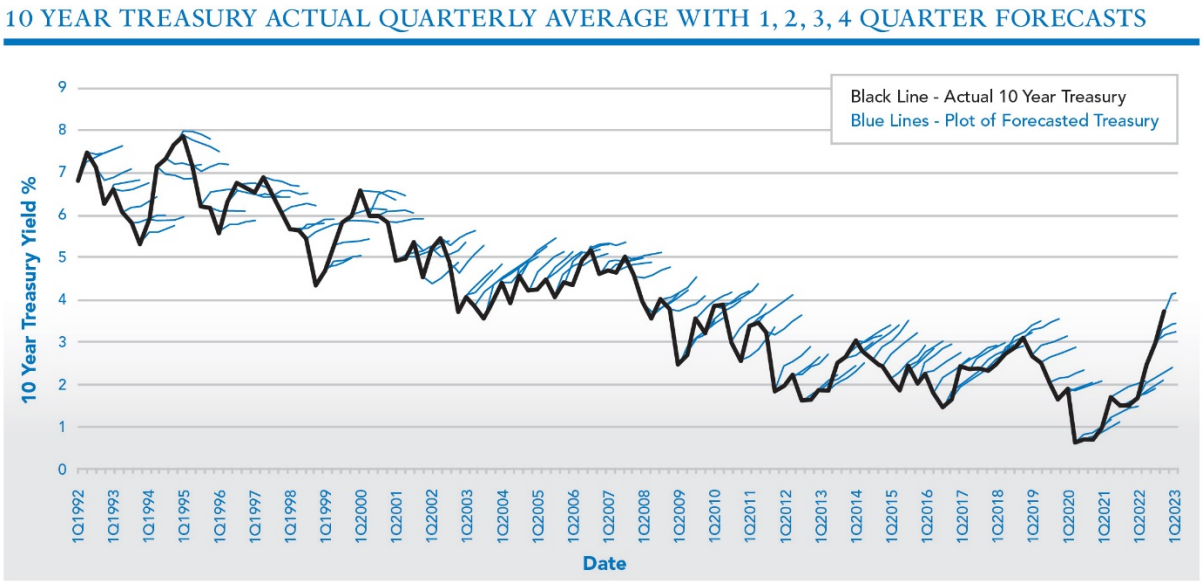
The old joke about economists being created to make weathermen look good has been around for as long as finance and meteorology. To be fair both are very tough professions, trying to predict with a high degree of certainty a force that changes rapidly and affects the lives of many. In an attempt to accomplish that feat, both professions have poured the most significant advancements of theory, science, and technology into their practice, trying as they might to keep the next market correction / rebound or natural weather disaster / beautiful sunny day from being a surprise. As we know all too well, this unfortunately doesn't always work out, and we are sometimes left on the wrong side of the trade or soaking wet on the golf course.

One of the more common predictions fixed income investors look for is that of the direction of the 10 Year Treasury, a fundamental driver of the performance of both stocks and bonds. Every Fed meeting, Fed chair testimony, and resulting move to the yield curve are analyzed, opined on, extrapolated, and the conclusion is made that we can infer the direction of the 10 year. But what is the success rate of these projections? The Philadelphia Fed has been collecting the consensus economist estimates for projected rates for the last 30+ years, which allows us to look back and see their accuracy.

Graph 1[1]



In Graph 1, we are given predictions for 1, 2, 3, and 4 quarters out for what the average 10 Year Treasury will yield, as well as the actual 10 Year Treasury Yield[2]. As you can see, rarely do the projections match up with actual rate a year later. Not only does the end number not match up, but economists often miss the direction of the rate move in the 10 Year Treasury too. Chart 1 below highlights economists' success rates of predicting the direction of rates again over the next 4 quarters.

[1] Source: Philadelphia Fed Survey of Professional Forecasters

[2] Source: U.S. Department of the Treasury. Yield shown is the 10 Year Treasury Yield recorded as of the first day of each calendar quarter

We can see that during periods where the vast majority of economists are predicting rates to rise that the prediction is accurate less than 50% of the time.

Chart 1[3]

	Rise	Fall	Rise	Rise	Fall	Fall
	Prediction	*Prediction*	*Prediction Correct*	*Prediction Incorrect*	*Prediction Correct*	*Prediction Incorrect*
1 Quarter Out	77%	23%	56%	44%	75%	25%
2 Quarters Out	87%	13%	48%	52%	56%	44%
3 Quarters Out	90%	10%	42%	58%	62%	38%
4 Quarters Out	90%	10%	46%	54%	83%	17%
Total	**86%**	**14%**	**48%**	**52%**	**70%**	**30%**

What about during times of significant volatility? Do economists' projections for rates become more accurate? Over the period for which we have this data, the 10 Year Treasury Yield has declined, and the further it declines, as shown in Chart 2, the higher percentage of estimates are for an increase in yield. During the COVID lockdown (measured from 1st quarter 2020 through 2nd quarter 2021), 83% of estimates were for an increase, and the yield declined by 19 basis points. During the Great Bond Massacre in the 90s (measured from 1st quarter 1994 to 2nd quarter 1995), only 38% of predictions were for an increase, and the yield increased by 122 basis points. It looks strikingly like the economists are projecting yields to return to some sort of "average" yield, but that this "average" keeps changing as rates continue to go lower. The aggregate of estimates missed the yield by around 0.33% (regardless of the miss direction).

Chart 2[4]

	Start Value	***End Value***	***Avg. Miss*** *(absolute)*	***% Over***
COVID	1.88%	1.69%	0.37	83%
GFC	4.65%	3.89%	0.34	67%
Fed Hiking	4.38%	4.68%	0.21	71%
9/11	4.55%	3.56%	0.45	66%
Tech Bubble	4.69%	5.20%	0.38	48%
GBM	5.92%	7.14%	0.50	38%

What does this mean for investing in bonds? It means that even an aggregate of professional economists have historically been unable to not only accurately predict where the average of the 10 Year Treasury will be, but they often miss the direction in which it will move.

[3] Prediction Source: Philadelphia Fed Survey of Professional Forecasters. 10 Year US Treasury Yield Source: U.S. Department of the Treasury. The 10 Year US Treasury yields defined as yield as of the first day of each calendar quarter.

[4] Crisis windows start and end dates are as follows:

- COVID: Market Correction surrounding COVID 19 lockdown beginning in Q1 2020 and ending with the last US lockdown in the state of California in June of 2021 : 1Q20 – 2Q21
- GFC: Global Financial Crisis - 2Q07 – 2Q10
- Fed Hiking: 17 consecutive Fed Rate hikes starting in 2004 - 1Q04 – 1Q07
- 9/11: The market correction post 9/11/2001 terrorist attacks- 4Q01 – 3Q03
- Tech Bubble: The correction post Tech Bubble is defined as the period of 1/99 through 6/02 -1Q99 – 2Q02
- GBM: The Great Bond Massacre is generally defined as 1/94 through 9/95- 1Q94 – 2Q95

As Yogi Berra said, “Predictions are hard, especially about the future,” and the data suggests that this is accurate. Fixed income investors should be cautious about trying to predict the direction of the 10 Year Treasury or repositioning their portfolio based on consensus estimates of that direction. Much like we keep an umbrella in the golf bag or bring a sweatshirt to a beach day, investors may seek to employ a fixed income strategy that is not designed to be predictive of 10 Year Treasury yield movements.