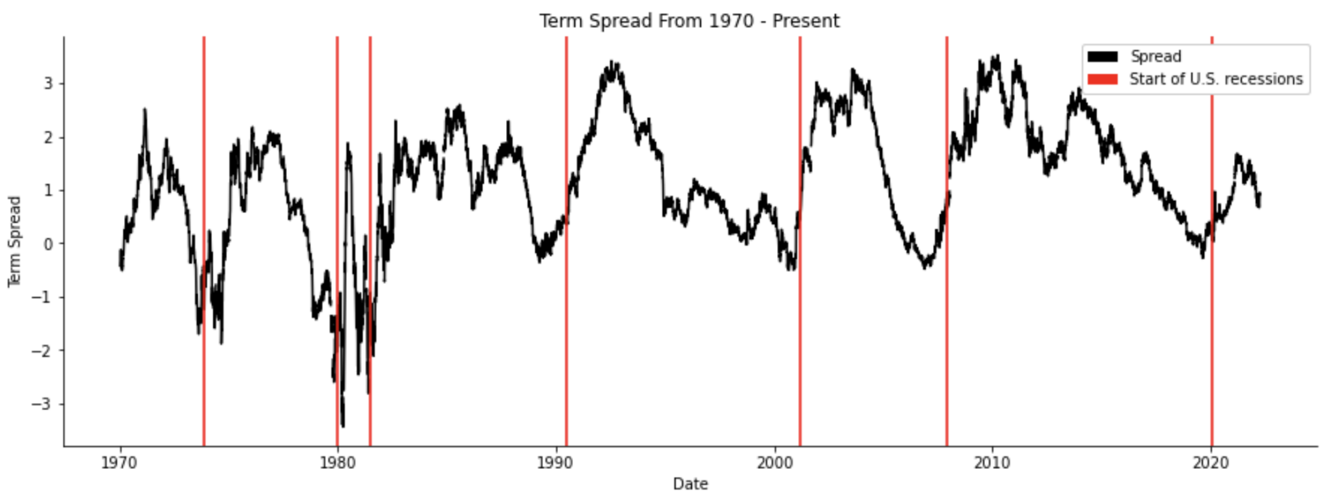
How the Term Spread Relates to Economic Recessions
Spring 2022, Due April 15, midnight

Note: I worked in google docs, which does not support SVG files.

Execuitive Summary: The term spread can predict recessions because the beginning of each recession happens with the term spread sloping downward, and then coming back up right at the start of the recession. However, this is an indicator, not something that proves a recession is coming. Currently, the spread is trending downward, which means a recession could be approaching, but is not guaranteed.

1970 - Present Term Spread

There seems to be a very obvious correlation between the term spread and economic recessions. Based on this graph, the term spread will dive down right before a recession begins and then start moving upward as the recession begins. However, when the term spread takes a dive, this does not mean a recession is bound to happen. The graph shows a dive around the year 2012 that is comparable to the dip before the 1990 recession. However, the 2012 dip did not lead to a recession until COVID-19 hit the United States. Even then, the recession only lasted for two months, which tells me that the 2012 dip is completely unrelated to the 2020 recession.



Another very interesting aspect to this graph that I found is that the term spread was decreasing prior to covid starting in December of 2019. Meaning, that if COVID-19 did not exist, would there have been a recession anyways? Was the economy not doing well before COVID-19 already? This makes me question how strongly correlated the term spread is to economic recessions.

The Term Spread's Trajectory and Economic Prediction

The term spread appears to be trending downward at this time, which based on history, would indicate another recession. However, like I stated earlier, I think that this not as strongly correlated as some may believe. The term spread could be another of example of the classic phrase, “correlation does not mean causation” because there has been plenty of dips in the term spread without economic recessions.

What Drives the Evolution of the Term Spread

The term spread is calculated as the difference between a long-term interest rate and a short term interest rate. In the graph below, the long term interest rate is in blue, while the short term interest rate is in grey, with the red line indicating the start of U.S. recessions. It appears as though the short term interest rate moves up the long term interest rate whenever the term spread dips down, causing the term spread to get closer to zero. This is also the case recently, where we can see both the long and short term interest rates increasing, but the short term is increasing at a faster rate, making the term spread smaller at this current moment in time.