

Yield Curve Inversion and Recession Prediction

Key Takeaways

- Yield-curve inversion can be a potent tool for predicting recessions, boasting a remarkable historical track record.
- While the current economic landscape is complex, we maintain that monitoring the yield-curve inversion remains crucial.
- In addition to tracking the yield-curve inversion, it is prudent to diligently observe other significant economic indicators for a comprehensive assessment of the economy.

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Introduction

The yield curve—the graph plotting interest rates against time to maturity—holds a mysterious power in the world of finance and economics. It serves as a crystal ball, offering glimpses into the future of our economy. This article explores the intriguing relationship between yield-curve inversion and recession prediction, examining how an inverted yield curve can foretell impending economic downturns.

Yield-Curve Inversion as a Leading Indicator of Economic Recession

The yield curve represents the interest rates on Treasury debt for a range of maturities, typically spanning from short-term to long-term. In its normal state, the curve tends to slope upward, reflecting the fact that long-term investments typically command higher returns, which is known as the term premium. However, when short-term rates exceed long-term rates, the curve inverts, presenting a scenario where patience is no longer rewarded. Investors and economists typically study the difference between yields on the 2-year and 10-year Treasury bonds, often referred to as the “2–10 spread,” as well as the yield difference between the 10-year Treasury bonds and 3-month Treasury bills.

The potency of yield-curve inversion as an economic prediction tool is evident in its remarkable historical track record. Throughout history, it has consistently served as an early warning sign of impending economic recessions. Notably, all six recessions that have impacted the U.S. economy since 1977 were preceded by such yield-curve inversions, and there have been no instances of false alarms (Chart 1).

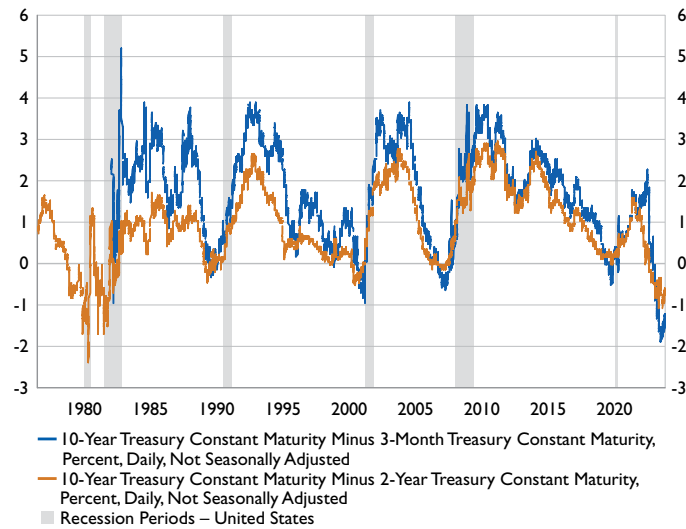
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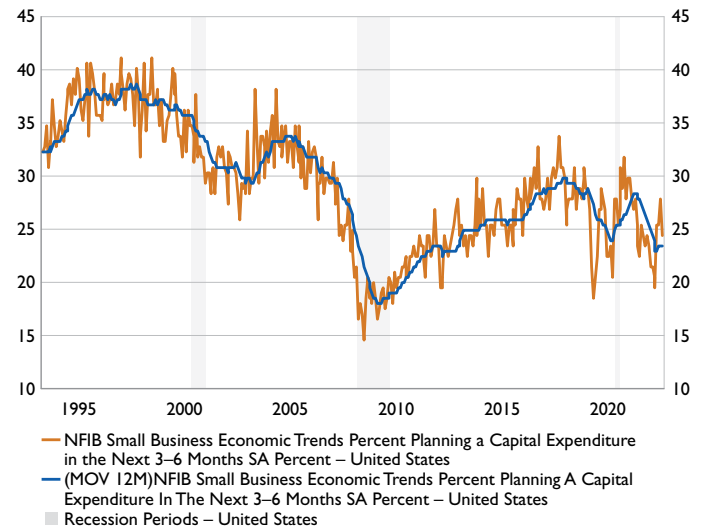
When the yield-curve inverts, historical data reveals that a recession typically follows within a year or two, with an average lead time of approximately 15 months. This predictive power extends beyond the United States and is evident in other countries as well. In an article titled [“Do Yield Curve Inversions Predict Recessions in Other Countries?”](#) by Federal Reserve economist Sungki Hong, the U.S. and five additional developed countries were examined. It was found that in all these countries, except Italy, recessions were consistently preceded by a yield curve inversion. In the United Kingdom and Canada, there were a few instances of false alarms. However, in Germany and France, false alarms were almost nonexistent, further highlighting the reliability of this indicator.

Chart 1



The predictive power of the yield-curve inversion can be explained in several ways. First, when investors demand higher returns for locking up their funds in the short term rather than the long term, it signals a lack of confidence in the near future. This lack of confidence can be a precursor to economic difficulties and recessions. Second, when short-term interest rates surpass long-term rates, it negatively impacts the profitability of banks that borrow in the short term and lend in the long term. This can lead to a reduction in lending activities, affecting economic growth. Third, an inverted yield curve also reflects reduced demand from companies for financing, which indicates a lack of confidence in future business prospects. This reduced demand can set off a negative feedback loop as companies cut back on capital expenditures, further contributing to the onset of a recession (Chart 2).

Chart 2



While the yield-curve inversion has a commendable track record in predicting recessions, it is not immune to criticism. Some contend that, in an era marked by unconventional monetary policies, the yield curve may have lost some of its reliability compared to the past. Moreover, skeptics highlight that there have been instances of false alarms associated with yield-curve inversions, even if they did not occur in the U.S. As previously mentioned, false alarms have been observed in the United Kingdom and Canada, raising questions about the indicator’s infallibility. Furthermore, an argument can be made that an inverted yield curve reflects investor expectations of high short-term inflation but a belief that inflation will be controlled in the long run.

Extended Periods of an Inverted Curve without Recession

One of the perplexing questions that has arisen recently is, “Why has the yield curve stayed inverted for such an extended period without an accompanying recession?” The spread between the yields on 2-year and 10-year Treasury notes and bonds has been inverted since July 6, 2022, which is about 14 months ago. Many investors have lost patience waiting and started to ask: Is this time different? Are the factors contributing to the yield-curve inversion and the absence of an immediate recession indicative of a new economic paradigm?

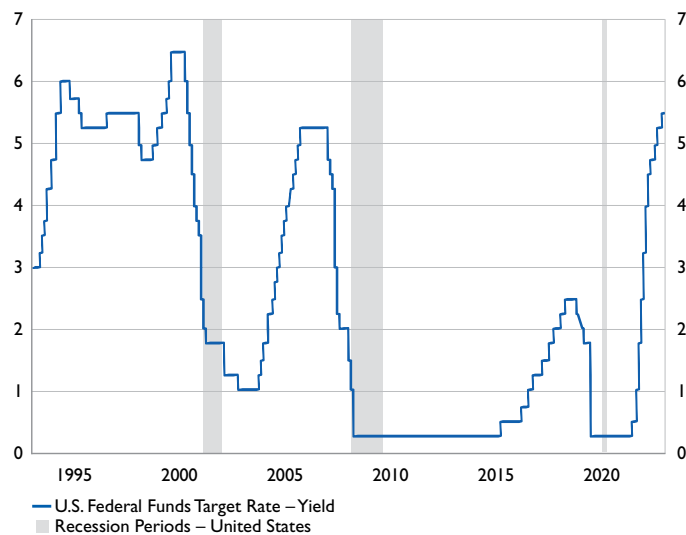
We think the prolonged inversion of the yield curve can be attributed to a couple of factors. First is the influence of central banks. In response to the 2008 financial crisis and, more recently, the coronavirus pandemic, central

banks have deployed unconventional monetary policies, including large-scale asset purchases (also known as quantitative easing) and near-zero interest rates. These policies have artificially suppressed long-term interest rates, contributing to the yield-curve inversion. Second, changes in the global economic environment also have played a role. The interconnectedness of global financial markets and the search for yield by investors across the world have led to increased demand for long-term bonds, pushing their prices higher and yields lower.

While we believe these factors have contributed to the prolonged inversion of the yield curve, we still advocate for caution span. First, the 14-month length does not seem unusual, considering that the average span between inversions and the onset of recessions since 1977 was 15 months, with the longest span being 24 months during the 2008 financial crisis. The difference this time might lie in the extended duration for which forecasters have been predicting the recession. Some argue that, if a recession were to begin, it would be the most prolonged and widely forecasted recession in recent history. After all, the consensus on an impending recession was reached many months ago, and its delay has naturally led people to question the accuracy of these predictions.

Second, we found that U.S. recessions have historically happened after the inverted yield curve starts to steepen—as the Federal Reserve began its rate-cuts cycle. Notably, of the six recessions we have examined since 1977, the most recent four sparked after the 2–10 yield spread turned positive (Chart 3).

Chart 3



In addition, though some strategists are abandoning their recession predictions, the Bloomberg consensus forecast still shows a 60% probability of a recession in the next 12 months. The [New York Fed](#) has been using the yield curve to predict the likelihood of a recession, and its current data also indicates a significant risk of a recession within the next 12 months (Chart 4).

Chart 4



Since July 2023, the yield curve has started to show signs of steepening, which should alert investors to remain watchful. In the event of a sudden shock to the current fragile economic environment, there is a risk that the economy could slip into a recession within the next 12 months. We consider this scenario to be the most probable. However, a more optimistic scenario cannot be dismissed entirely. The Fed may have learned from past mistakes of over-tightening and could halt rate hikes soon, possibly starting a series of rate cuts in 2024. In such a scenario, it is possible to avoid a recession.

As history has demonstrated, the yield curve serves as a valuable tool for investors. However, it is prudent for investors to also track other indicators diligently to comprehensively assess the state of the economy. For instance, in his article, [“Recession Signals: The Yield Curve vs. Unemployment Rate Troughs,”](#) Federal Reserve economist Kevin Kliesen compared yield-curve inversion to the unemployment rate trough and found that a trough in the unemployment rate also tends to be a reliable predictor of a recession. Additionally, studies have indicated that unemployment claims, retail sales, wage growth, commodities prices, ISM new orders, profit margins, credit spreads, etc., also can serve as robust predictors of a recession. It is imperative to monitor a range of key indicators to effectively inform investment decisions.

Conclusion

Yield-curve inversion stands out as a powerful predictor of economic recessions due to its remarkable historical track record. It serves as a crucial tool, providing valuable insights into the future that can significantly influence our investment decisions. However, it is prudent to track other key economic indicators to develop a comprehensive evaluation of the economic landscape. Relying solely on

one indicator, no matter how potent, is not advisable. The PLFA team remains committed to diligently monitoring the yield-curve inversion and various other vital economic indicators on behalf of our clients. Our investment decisions are made with careful consideration with a holistic perspective.

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