

INVESTMENT NOTE: JULY 2023

Yield Curve Inversion + Yields + Price = Opportunity in Leveraged Debt Markets



Summary

- A yield curve inversion is often considered predictive of a recession, but it has been inverted for a long time and ... no recession.
- The U.S. Treasury yield curve has been inverted since July 2022, with the spread at about -99bps between the yield on the 2 and 10 year Treasury bonds. This inversion is one of the longest and more extreme cases in history (**Exhibit 1**).
- We offer some reasons why we believe this inversion may be less economically predictive than in the past: Fed transparency, extreme FOMC actions, and anchoring bias. If this inversion is less predictive, perhaps the probability of a recession should be much lower, which could lead to tighter spreads in credit and continued healthy levels of capital markets new issue activity.
- Much of this new issuance is being used for refinancing. In these credit markets, debt retirements typically occur before maturity. If one used a high yield index's characteristics and combined an early retirement, with the recent deep average price discount and the shortest average maturity in history, it would theoretically lead to returns that would be above the stated yield-to-maturity, assuming no defaults, of course.
- Even though the U.S. Treasury curve is inverted, "credit risk premia" should still increase over time as predictability/certainty of credit quality decreases.
- This inverted yield curve also impacts how fixed income investments trade and can distort relative value between different dated instruments, different coupon structures, and yields and spreads, making credit and scenario analysis potentially more valuable under the current market conditions.

Mark R. Shenkman

Founder & President

Justin W. Slatky

Chief Investment Officer

Bob Kricheff

Global Strategist and Head of Multi-Asset Credit

For more information, please contact:

Richard A. Keri, CPA

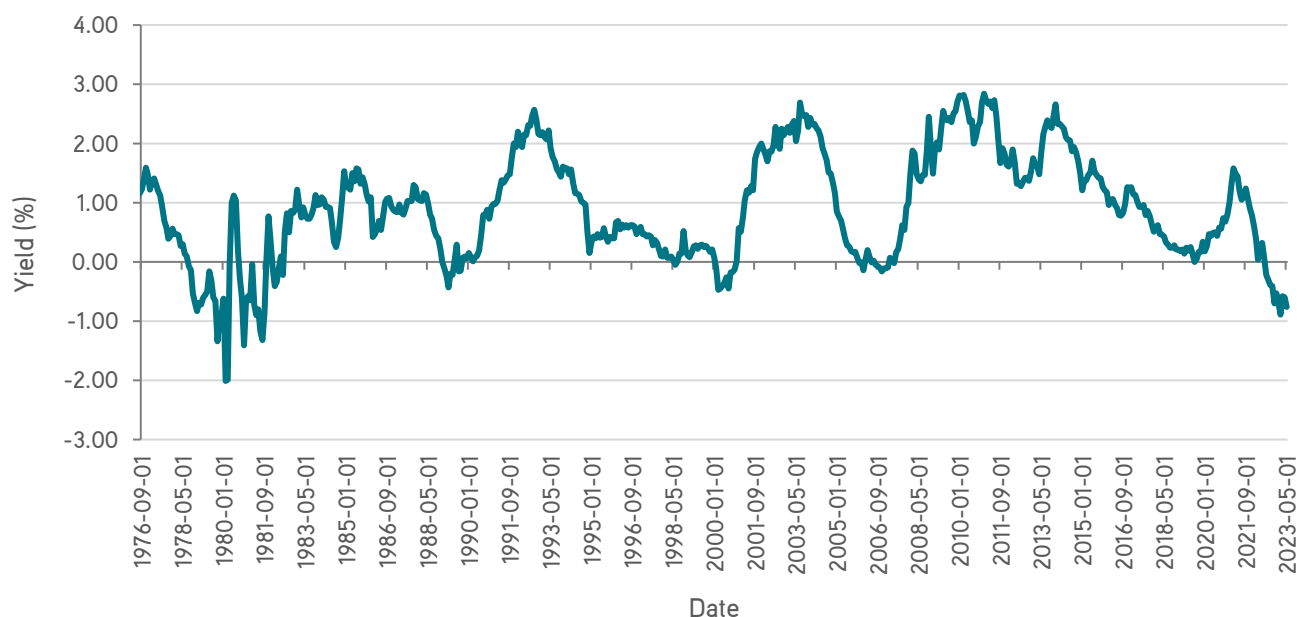
SVP, Global Head of Business Development & Investor Relations
(212) 867 - 9090

InvestorRelations@shenkmancapital.com

Inversion and Why it May Mean Less

Research has shown that, in many cases, an inverted yield curve is a precursor to a recession.¹ This current inversion is a reason often cited in predictions of an impending recession. However, it is worth noting that the number of recessions and inversions is a fairly small sample size, and there have been periods where, in our opinion, it has not always been a great guide for investors looking to maximize returns.

Exhibit 1: 2-10 Year Yield Curve



10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity, Percent, Monthly, Not Seasonally Adjusted. Source: Federal Reserve Economic Data. Past performance is not a guarantee of future results. For illustrative purposes only. Any trends depicted or described above may not continue.

While this inversion is the longest since the early 1980s, and fairly extreme, we have not seen a study that implies a longer or more extreme inversion increases the likelihood of recession (not saying it doesn't exist, we just haven't found one).

However, perhaps this inversion is not driven by the expectation of a recession, but rather the situation is being driven by a "crowded trade" that is assuming rates decline but not necessarily due to a recession. If one believes this theory, this inversion does not have as much predictive power as in the past.

Below are three reasons that we believe may be causing this inversion:

1. The Fed is more transparent than in the past. The "dot plot" (FOMC members anonymous outlook for rates) was not introduced until 2012. This is the first extended yield curve inversion since the dot plot has existed.² While the dot plot can change, and is not always a correct picture of the future, it

¹ <https://www.chicagofed.org/publications/chicago-fed-letter/2018/404> ; https://www.newyorkfed.org/research/capital_markets/ycfaq/

² The yield curve inverted very briefly in 2019, not sure if this caused the COVID related 2020 recession, and for three days in April 2022.

is a "roadmap" on rates supplied by the Fed that shows expected rate cuts in 2024 or 2025. Therefore, this could be less of a prediction of a recession by rate traders and just a very large trade that is just following information supplied by the FOMC not available during most other inversions.

2. In 2022, the Fed undertook the most extreme tightening in such a short period since about 1980 (rise/run). Investors may simply not believe it is sustainable because it was so extreme. Some investors may view this Fed move as more of an orchestrated shock to the system than a long-term policy and therefore assume rates will come down with or without a recession.
3. Anchoring bias is potentially also driving this inversion. From about 2009-2021, the U.S. went through an incredible period of low inflation and very low rates. With such an extended period of low inflation and interest rates, we believe some people could view that period as the norm and anything else as an aberration.

The Yield Curve and Recession

A simplified explanation for why the yield curve predicts a recession is that higher, short-dated interest rates lead to a recession, which in turn force the Fed to lower rates. This can be driven by policy decision and/or extreme economic factors. Said a couple of different ways:

- Investors favor near-term investments versus longer term.
- Investors are favoring preservation of capital.

However, perhaps the yield curve is inverted because the Fed is showing investors their expectations so clearly to lower rates.

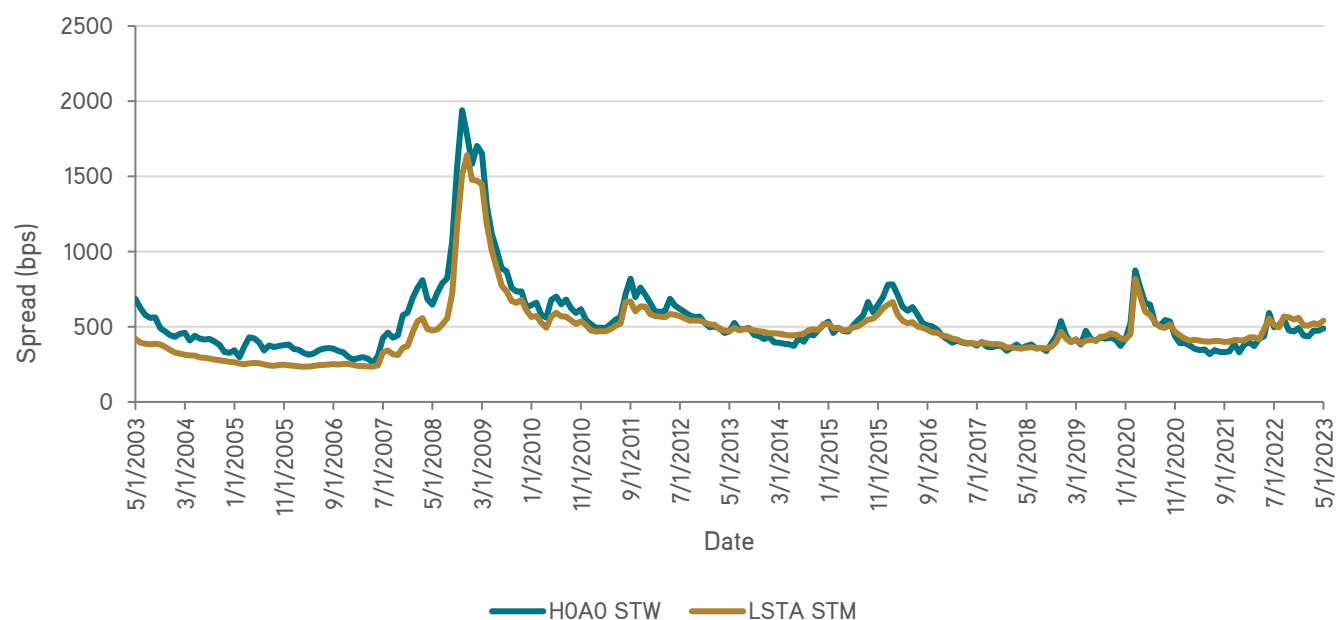
The U.S. GDP has been growing over the last few quarters, employment measures have remained very healthy, and capital markets have been active in supplying corporations liquidity. Therefore, with all of these relatively healthy signals in place, we believe there are a few main items that people are pointing to as likely recession signals. These include high inflation, last year's exceptional rate hike cycle, and the inverted yield curve. If the yield curve is less predictive in this cycle, then perhaps the probability of a recession should be lower. This could help rationalize why spreads are not at the levels seen during other periods of extensive market stress. However, there are other reasons that may help rationalize why spreads are not comparable to a recessionary period, such as the higher than average portion of higher rated bonds, and the high level of recent average yields and low level of prices in the market place.

Spreads Now and Then

Over the last 20 years, during times of extreme financial stress, such as recessions or the COVID shutdown, spreads have been wider than the current period in the leveraged debt markets. These periods include the Great Financial Crisis, the Euro crisis in 2011, the Commodity sell off of 2015 (primarily impacting high yield bonds) and the COVID crisis. **Exhibit 2** uses spreads on the high yield bond market as a proxy for leveraged finance market spreads. We do not see the current period exhibiting the same

extreme stress as in these other periods, and particularly in the high yield bond market, find very different characteristics than in these other cycles (e.g. higher percentage of BBs, less commodity exposure).

Exhibit 2: High Yield and Leveraged Loan Spreads



Source: ICE Data Indices (ICE BofA U.S. High Yield Index), Morningstar LSTA (Morningstar® LSTA US Leveraged Loan Index). Spreads are versus equivalently dated treasuries. Past performance is not a guarantee of future results. For illustrative purposes only. Any trends depicted or described above may not continue.

As pointed out above, we believe many of the economic conditions are currently fairly sound. Maturity walls, which can often cause financial stress, are fairly low this year. Thus far, in 2023, new issuance has been increasing, with a majority of these proceeds going to refinancings/maturity extensions.

The default rate for high yield bonds, while off historical lows in 2022, remains well below 10 and 21 year historical averages.

Yields are well above historical averages, and prices are below historical averages in the high yield bond and the loan markets. We believe the combination of all these factors is creating a potential opportunity in these markets.

Why the Current Combination of Price and Yield is Attractive Regardless of Spread

The average price in the high yield bond market is 87.52 and on the loan market is 92.89, with yields-to-maturity of approximately 8.9% and 10.8%.³ Below, we use the high yield bond market average statistics to show how the yield changes if a bond is retired one year before maturity at par, given this discounted price (Exhibit 3).

³ Using the ICE US High Yield Bond Index (H0A0) & Morningstar LSTA Leveraged Loan Index.

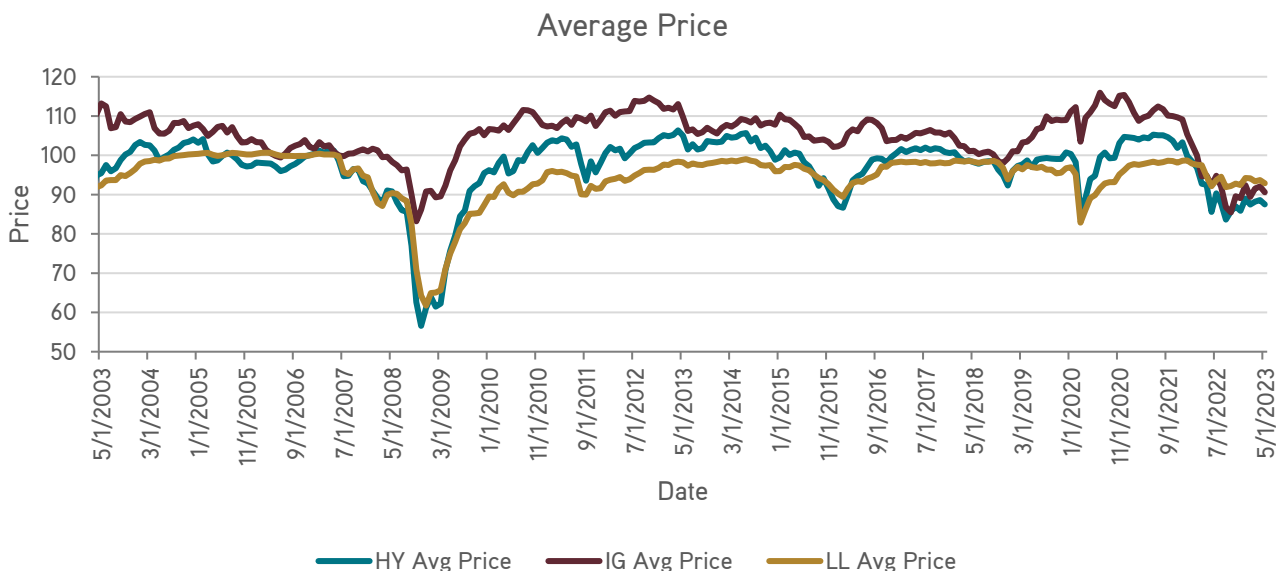
Most high yield bonds (and loans) do not mature; we estimate about 90% of them get taken out at least one year early, enabling the monetization of discount to occur early.⁴ This is primarily due to prudent balance sheet management in which companies do not want their debt to become "current debt" on their balance sheet, which could taint investors' view of the survivability of the company. Moreover, management often wants flexibility and do not want to be beholden to the capital markets at the last minute.

If an investment is trading at such a steep discount, and the bond comes out one year early, using the average statistics of the index, it would result in a return above the stated yield-to-worst. This yield, of course, doesn't factor in defaults.

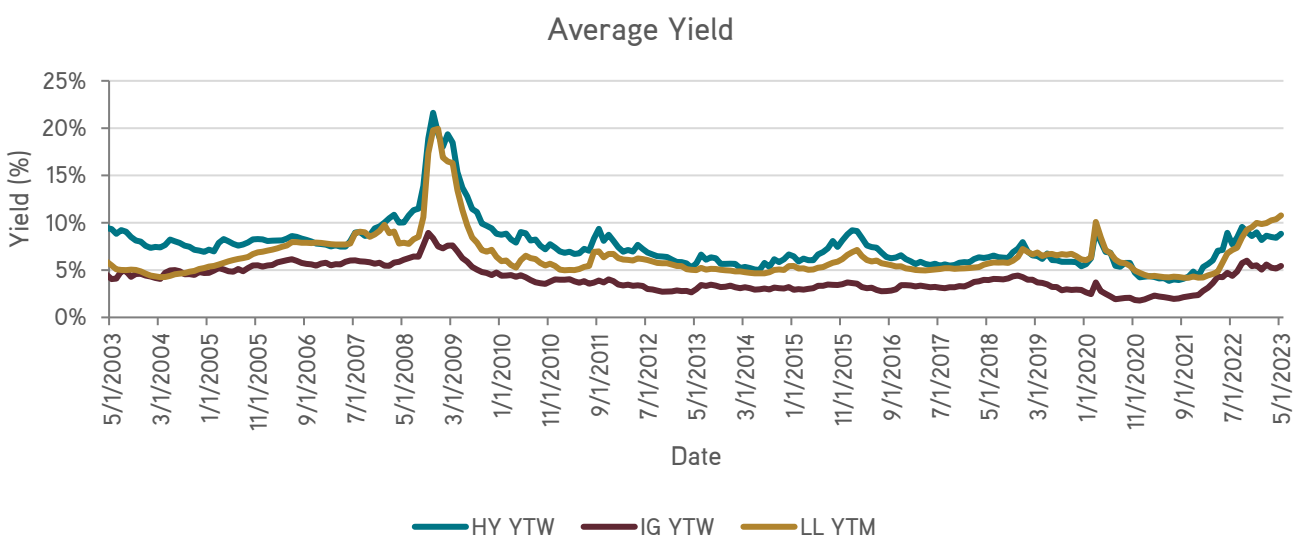
This is particularly pronounced right now because the high yield market has close to the shortest average maturity in its history. Thus, using the "one-year before maturity" scenario, this very steep discount in price versus historical averages would get accreted over a much shorter time period than in the past.

Credit analysis and understanding of corporate management styles can also give investors a stronger sense of the likelihood of an early refinancing.

Exhibit 3: Average Price and Average Yield History



⁴ As of 1/31/2022. Source: SCM, ICE BofA Index (H0A0), Bloomberg. Statement derived from weighted index data on a rolling 12-month period starting 8/31/2011 through 1/31/2022.



Source: ICE Data Indices (Using the ICE BofA U.S. High Yield Index (HOAO) and ICE BofA U.S. Corporate Index (COAO)), Morningstar LSTA (Using the Morningstar® LSTA US Leveraged Loan Index). YTW = Yield to Worst, YTM = Yield to Maturity. Past performance is not a guarantee of future results. For illustrative purposes only. Any trends depicted or described above may not continue.

One could run a similar analysis on the investment grade market⁵, however, it is worth noting that this market tends to have more "bullet" maturities than the callable structures in the leveraged debt markets, which we believe makes a bond less likely to come out early. However, in IG, the impact on the return of a bond (with the average statistics of the common IG Index) coming out one year before maturity would not be as great as in high yield. This is because, using the average statistics for the broadly followed IG Index, the market has a much longer average maturity at about 10 years. The yield differential between IG and high yield debt is more than 300 bps in these examples.

Relative Value and The Yield Curve

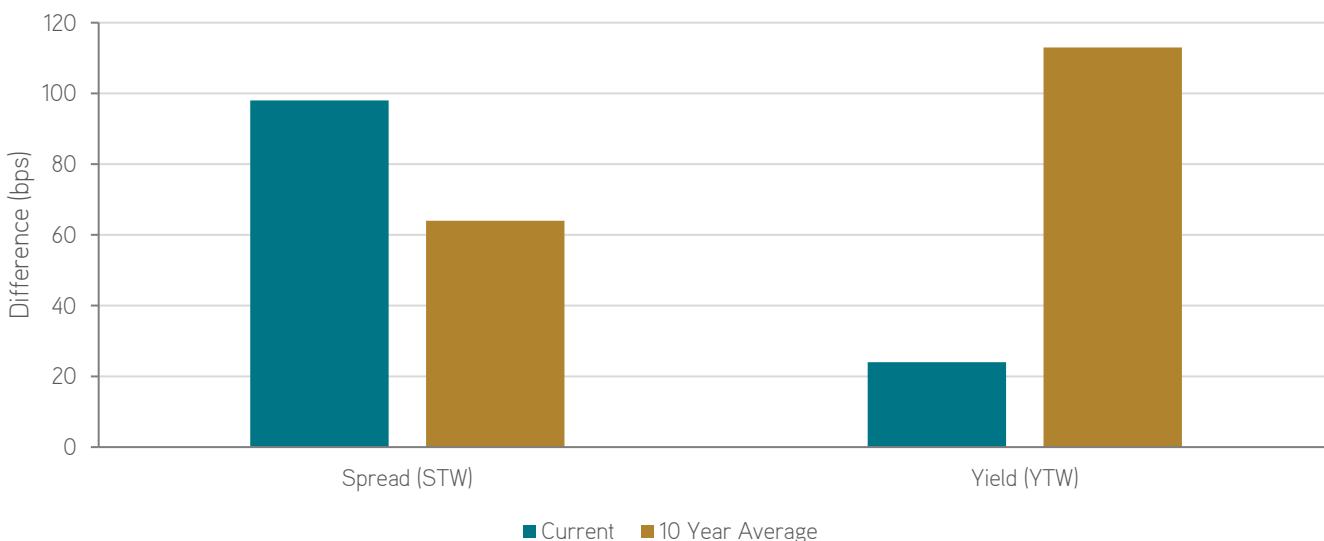
The inverted yield curve is creating other relative value anomalies that can potentially enhance the benefits of credit selection and of scenario analysis, especially if an investor can be flexible across security types.

The U.S. Treasury yield curve is theoretically risk-free. Credit yield curves are not risk free. As one looks at longer term maturities in credit, the risk (and reward) should be higher, regardless of rate policy.

An inverted yield curve can distort relationships between yields and spreads because the yield on the Treasury curve is so steep at the short-end. Theoretically, credit risk and volatility are lower for shorter dated issues. The relationship between a broad based high yield bond index and a short duration index now versus historical average is shown in **Exhibit 4**. It shows that there is much less of a differential in yield to move to short duration currently versus historical averages. By this methodology, short duration looks relatively attractive on a historical basis, but the opposite is true by spread, where short duration looks somewhat rich.

⁵ Using the ICE BofA Corporate Bond Index (COAO) as a proxy

Exhibit 4: BB-B High Yield (H0A4) vs BB-B Short Duration (H42C): Yield and Spread Differences



As of 5/31/2023. Source: ICE Data Indices. STW = Spread to Worst, YTW = Yield to Worst. Past performance is not a guarantee of future results. For illustrative purposes only. Any trends depicted or described above may not continue.

A strongly inverted yield curve alters the relationships between fixed and floating rate instruments, as floating rate debt uses the short-end of the curve as its base-rate. This is one of the reasons that the average coupon on the leveraged loan market rose above that on the bond market for the first time in history in late 2022.⁶

Yields on floating rate debt are often run using the forward curve on short rates. If the yield curve is distorted by a crowded trade, these "quoted" yields can be over-or-under stated relative to what the eventual IRR on the investment. Therefore this analysis needs to be factored into relative value.

Conclusion

The inverted yield curve may not be as predictive of a recession as in the past. This could imply the probability of a recession is lower. We believe this potentially lowered probability of a recession is one of several reasons that make the current market conditions relatively more attractive in the leveraged debt markets.

If the probability of a recession becomes lower, it is likely that new issuance will continue to occur at a healthy pace. An active new issue market will lead to more refinancings, year to date through May about 65% of new issuance has been used for refinancing.⁸ With the market on average trading at a discount assuming there is not a default, an early refinancing could create a return above the stated yield, as the accretion of the discount occurs faster. With credit research and scenario analysis, returns in selected parts of the market could exceed the stated yield-to-worst, which may not be reflected in market spreads.

⁶ JP Morgan.

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