IMPLICATIONS OF AN INVERTED YIELD CURVE

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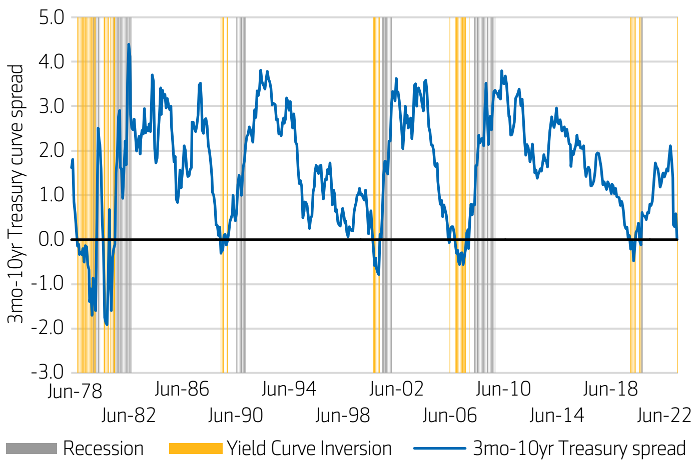
With the Federal Reserve (Fed) continuing to hike interest rates, the probability of a sustained inversion in the yield curve is on the rise. Historically, an inverted yield curve, a common phenomenon late in an expansionary cycle, has been one of the leading indicators of a looming recession. An inverted curve can have negative implications for the economy, specifically tightening lending conditions; however, the implications for risk assets are not always clear. Given the Fed's aggressive pace of hikes and current market dynamics, we believe investors should consider the implications of an inverted yield curve. In this article, we will look at the economic rationale behind an inverted yield curve as well as what it historically has meant for the macro environment and certain asset classes.

Economic consequences of an inverted curve

An inverted yield curve, specifically when the spread between the 3-month and 10-year US Treasury yields turns negative, has occurred several times in the past four decades. As outlined in Exhibit 1, the last six recessions since the late 1970s were preceded by an inverted curve. With the spread between the 3-month and 10-year US Treasury rates narrowing and inverting recently, the recessionary warning flags have been raised once again.

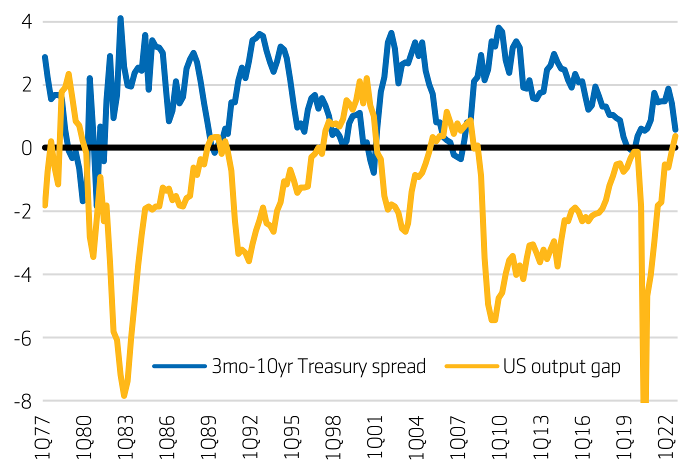
Exhibit 1: Inverted yield curves tend to foreshadow recessions
June 1978 to October 2022



Source: Bloomberg and Haver Analytics.

Inverted yield curves typically occur at the end of an expansionary cycle as monetary authorities seek to prevent the economy from overheating. Exhibit 2 uses the output gap to illustrate the balancing act between monetary policy and economic growth. The output gap measures the difference between actual and potential GDP and shows how efficiently an economy is utilizing its resources. When a large negative output gap exists, slack can be absorbed before overheating occurs. Naturally, a maturing cycle causes slack to diminish, and monetary authorities typically act to remove policy accommodations to keep inflation in check—exactly where we are today.

Exhibit 2: As the output gap closes, the yield curve tends to flatten or invert
Q1 1977 – Q3 2022



Source: Haver Analytics.

There are real economic consequences of an inverted curve. It removes a key incentive for lending to longer-term projects which are likely to boost growth prospects. It also tends to encourage the allocation of capital to cash or cash-like asset classes as yields become relatively attractive in conjunction with potentially lower volatility. Unless an investor needs duration, why would someone take long-term risk when they can get the same or higher yield, and, more importantly, better risk-adjusted returns, in cash and cash-like assets? It is worth noting a yield curve inversion does not typically lead to a recession overnight. Given how many economic actors are involved, a recession has historically occurred within approximately 24 months.

Potential implications for risk assets

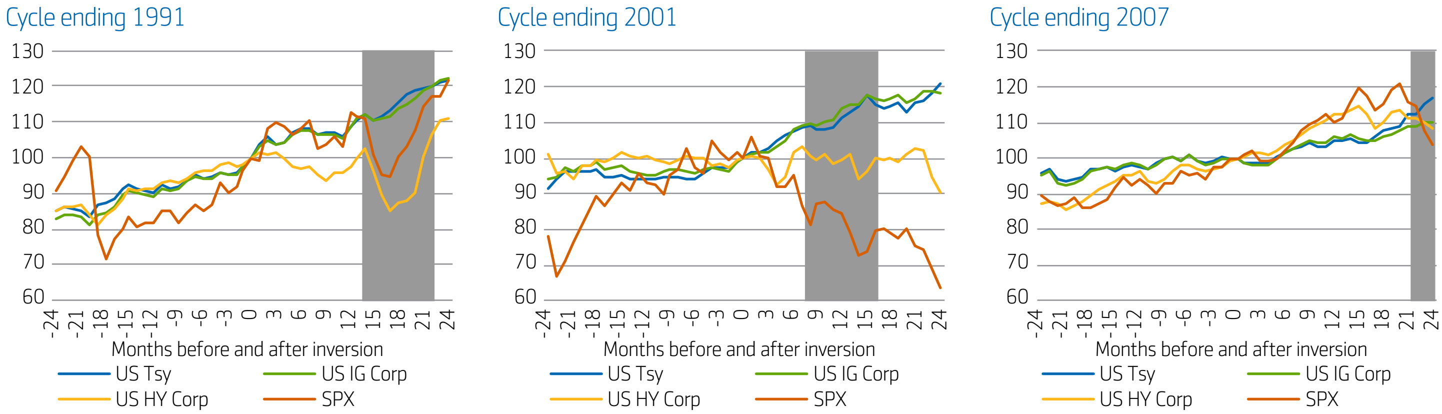
So when the yield curve inverts, what are the implications for risk assets?

To assess performance following yield curve inversions, we compiled risk and return data for US Treasurys, US investment grade corporates, US high yield corporates and US equities, in the time periods leading up to and following the last three yield curve inversions that preceded recessions in 1991, 2001 and 2007. While the limited sample size—to account for the Fed as a factor—is not conducive to substantive conclusions, the exercise nonetheless produces interesting results hinting at what may transpire as inversion continues amid Fed tightening.

Exhibit 2 shows that late-cycle yield curve flattening tends to coincide with periods of robust economic growth. These periods tend to be broadly positive for asset classes across the risk spectrum, using respective indices as proxies (Exhibit 3). Proxies are indexed to the month prior to the yield curve inversion in order to capture pre- and post-inversion performance.

As observed in Exhibit 3, duration assets such as US Treasurys and investment grade corporates have historically rallied post-inversion; conversely, for assets on the lower end of the risk spectrum such as high yield corporates and equities post-inversion performance has been, at best, mixed.

Exhibit 3: Historical performance of various asset classes during recent yield curve inversions
Monthly returns of US Treasury, US investment grade and high yield corporate as well as US equity indices indexed to the month prior to the yield curve inversion



Source: Bloomberg. US Treasury represents the (Bloomberg Barclays US Treasury TR index). US IG Corp reflects the (Bloomberg Barclays US Corporate TR index). US HY Corp is the (Bloomberg Barclays US Corporate High Yield TR index). SPX is the S&P 500 equity index. The gray bars indicate a recession.

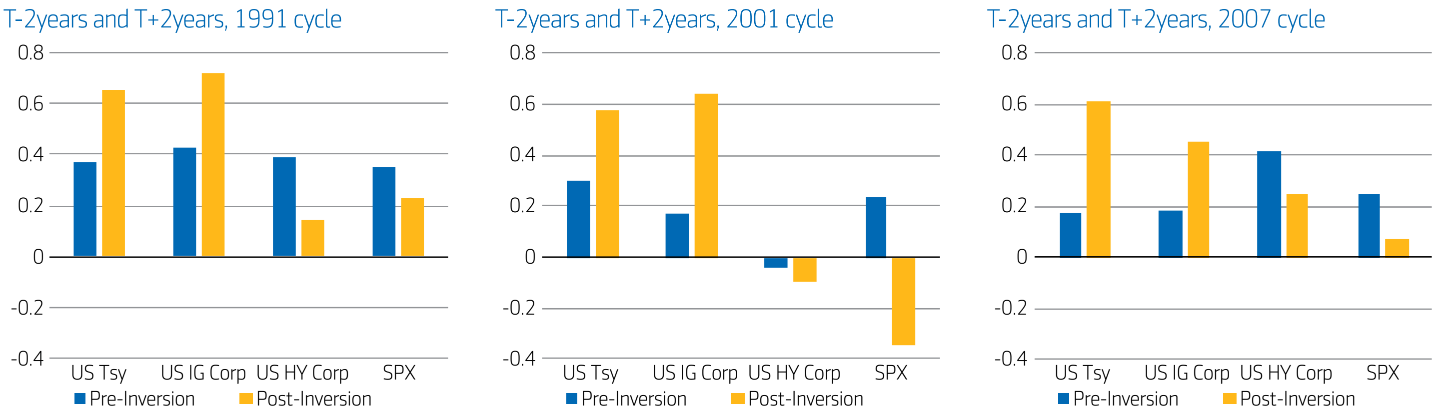
Two observations seem particularly relevant to current market trepidation over negative term spread.

First, inversions need not mean a bloodbath for riskier assets such as high yield and equities. High yield corporate bonds, for instance, typically have not suffered catastrophic losses post-inversion and before recessions. High yield bonds performed relatively well after the last inversion, while equities continued to advance for at least 12 months in two of our three observations before ultimately succumbing to a recession. These results suggest additional factors beyond a mere inversion affect risk assets. For instance, led by the tech sector, price-to-earnings multiples were materially higher as the curve inverted in 2000, the only such episode that was followed by an equity bear market. While it is difficult to draw meaningful inferences from a limited sample size, these results suggest valuations heading into an inversion may be an important factor in determining subsequent asset class performance.

Second, higher-quality assets such as US Treasurys and US investment grade corporate bonds tend to have better risk-adjusted returns post-inversion than they do pre-inversion. Exhibit 4 depicts the average 2-year returns pre- and post-inversion divided by the standard deviation of returns, or volatility, over the respective time frame. The charts demonstrate that higher-quality assets outperformed riskier assets in risk-adjusted terms including for the cycle ending in 2007, for which the two-year window notably excludes the bulk of the recession and the meltdown in high yield and equities. This is to be expected given the increased volatility profile of riskier assets late in the cycle, a topic we explored in the risk-adjusted equity valuations and the macro environment paper.

Exhibit 4: Historical return-to-risk ratio of various asset classes during recent yield curve inversions

Return-to-risk ratio of US Treasury, US investment grade and high yield corporate as well as US equity indices for the two years pre- and post-inversion.



Source: Bloomberg. US Treasury represents the (Bloomberg Barclays US Treasury TR index). US IG Corp reflects the (Bloomberg Barclays US Corporate TR index). US HY Corp is the (Bloomberg Barclays US Corporate High Yield TR index). SPX is the S&P 500 equity index. SPX return-to-risk excludes the October 1987 outlier.

Summary

While an inverted yield curve typically signals the later stages of an economic cycle and is not ideal for the productive flow of investment capital and continued above-trend growth, it does not necessarily imply serious trouble for financial markets, at least within the context of continued economic growth. However, it is important to note that riskier assets such as high yield bonds and equities tend to generate lower risk-adjusted returns than investment grade credit or government bonds following a curve inversion. Using a disciplined investment process emphasizing fundamentals, valuation, sentiment and technicals, can help investors navigate various yield curve environments and strike a balance between de-risking and generating competitive risk-adjusted returns over the long term.

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