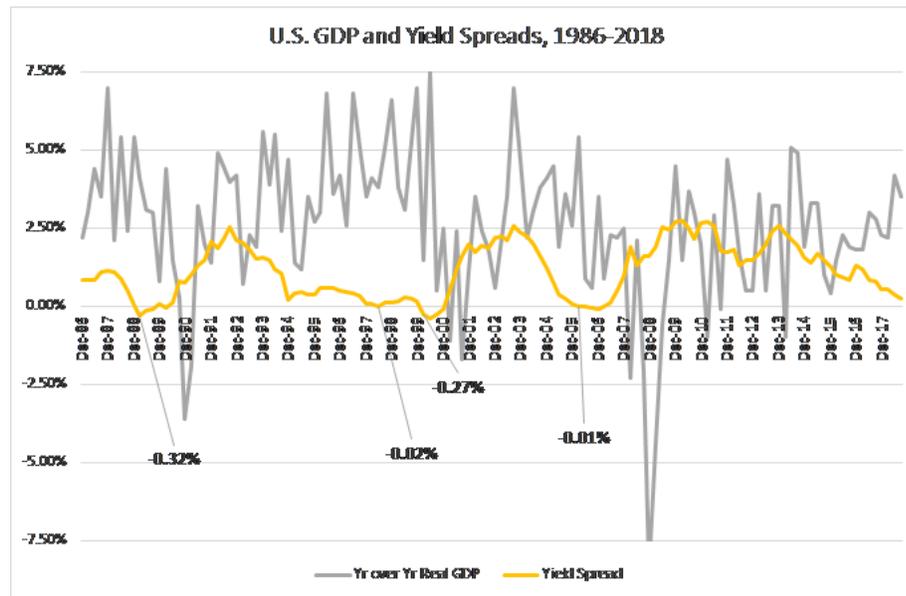


## Does a Yield Curve Inversion Foretell Recessions?

Investors are always looking for early signals that provide reliable guidance as to when adverse events foretell an economic recession and act accordingly by avoiding large market price corrections. Of course, that leads us to the recent observation that market pundits cite as a flattening-then-inverting of the Treasury yield curve as predictive of a near-term economic recession. However, we are not altogether convinced that the very limited set of relevant historical data fully supports this hypothesis. There have been just five cases of inverted yield curves since 1980, and going back further in time may not be as relevant given broad structural changes in the U.S. economy across the last four decades. Even the oldest of these periods (i.e., the inverted yield curve of September 1980) occurred inside a materially different economic environment: inflation had risen over 12%, the Fed Funds rate was increased from 10% to 18% in a very short time period (six months), and 10-year bonds yielded close to 12%.

We looked at the remaining four periods of "inverted yield curves": December 1988, June 1998, March 2000, and March 2006. The exhibit below shows the speed with which the U.S. economy experienced recessions following the inversion (spread between the 2-year and 10-year yields), demonstrating little correlation.

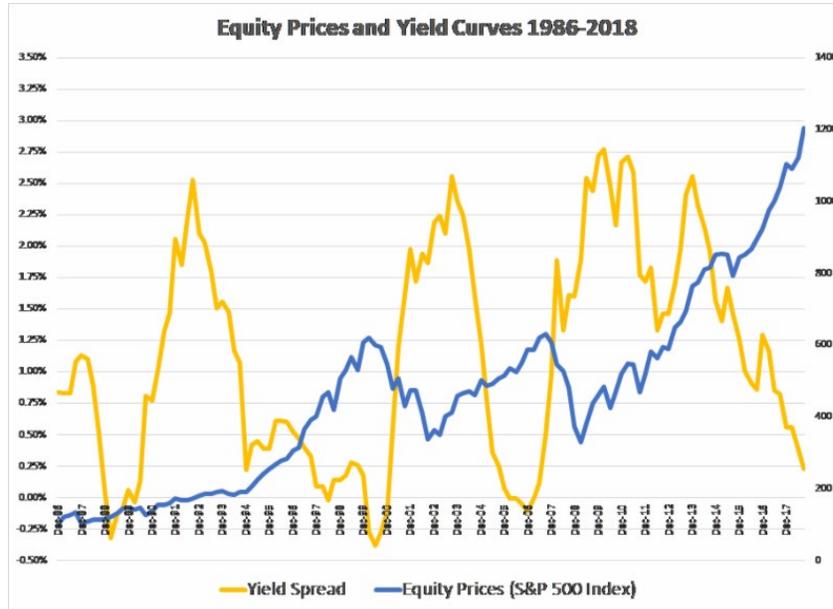
- According to the National Bureau of Economic Research (the official arbiter of U.S. economic cycles) a recession began in July 1990, roughly 18 months after the yield curve initially inverted.
- Another recession began in March 2001 (32 months after curve first inverted, 12 months after it re-inverted), and the Great Recession began in December 2007 (18 months later).



Source: Bloomberg, Capital Economics, Morgan Stanley

Statistically, this limited data suggests at best a low-level of consistency between negative yield spreads and the imminent onset of U.S. recessions. Perhaps equally relevant, especially given the equity market's downturn in the face of a flat-to-inverting yield curve, the longer-term data similarly shows that equity market trends and the shape of the yield curve are not generally highly correlated:

- 12-months after a yield curve inversion equity prices were higher in 3 of 4 post-1980 cases; prices were also higher 18 months later in 3 of these 4 cases.
- In all but the March 2000 instance, stock market valuations were flat to somewhat higher 12 months later.



Source: Bloomberg, Capital Economics, Morgan Stanley

**We are not suggesting that investors ignore the yield curve and changing interest rates altogether.** A flat yield curve is the combined product of two forces at work in capital markets: Fed monetary policy, which most directly impacts yields on securities with 3-year and shorter maturities; and long-term inflation expectations, which most directly influence yields on longer maturities. Higher interest rates produce rising “financing costs” across government, corporate, and individual borrowers. Worries about borrowers’ creditworthiness combined with tighter spreads between bank lending and deposit rates can reduce banks’ willingness to lend. Accordingly, rising interest rates do put the economy at a somewhat greater risk of a slowdown or a recession.

**We believe that the slow speed with which rates have been increased (i.e., by year-end the Fed Funds rate will have risen only +200 basis points in two years) could dampen their near-term economic impact.** Absent extreme systemic risks such as: very high inflation, extremely over-valued stock markets, highly leveraged consumers that tipped the economy into a recession within 12-18 months of other recent inverted yield curves, the recent inversion in 2-year yields may well be giving a false signal of near-term trends. Accordingly, we see no immediate evidence that the recent drop in equity markets is reflective of an emerging economic trend that quickly takes U.S. stocks into “bear market” (-20%) territory.

**In summary, we see some headwinds for 2019, even as we expect markets to rally into the end of 2018.** The case for a yearend rally has faded recently, but the factors include: strong seasonality, oversold conditions, risk-off investor positioning and improving trade tensions. The selloff in recent days could also suggest that the markets are painfully shifting leadership away from Growth stocks towards Value stocks.

The opinions expressed in this commentary are those of Altman Investment Management, LLC as of the date appearing on this material only and are subject to change. The material is based upon information we consider reliable but we do not represent that it is accurate or complete and should be relied upon as such. This material does not take into account the particular investment objectives, financial situation or needs of the individual client and should not be viewed as an endorsement of any particular investment. Certain investments give rise to substantial risk and are not suitable for all investors.