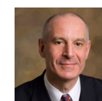
Recession Risk Muted Despite Curve Flattening

Key signals indicate aging expansion rather than imminent downturn.

June 2019



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KEY INSIGHTS

- The risk of a recession in the near term has not increased markedly despite the flattening of the U.S. Treasury yield curve.
- While in the past a rise in the short rate typically caused the flattening of the curve, on this occasion, policy has not been tightened to the same degree. Second, cyclical indicators do not point toward the buildup of economic vulnerabilities.
- Finally, the very low term premia currently in evidence mean that yield curve flattening or inversion was more likely to occur recently than at any other point in U.S. history.

The risk of a recession in the near term has not increased markedly despite the flattening of the U.S. Treasury yield curve. Although Treasury curve flattening is widely seen as a harbinger of recession, having preceded each of the past seven downturns, we do not believe that the current curve flattening is a compelling indication of short-term recession risk.

We base this view on our belief that the economic implications of curve flattening depend upon on the factors *behind* the change in curve shape and the extent to which any emerging cyclical imbalances make the economy vulnerable to shocks. On both counts, we find a relatively muted 12-month recession signal in the current yield curve flattening.

A Less Restrictive Curve Flattening

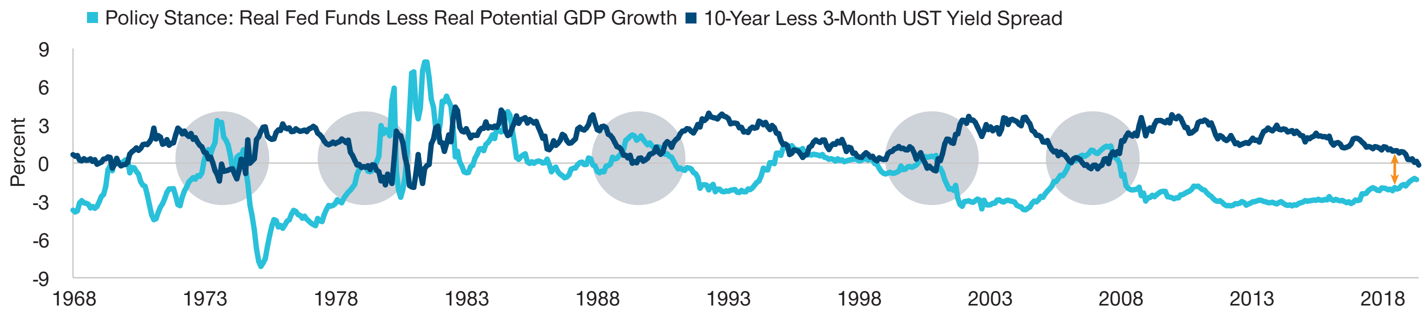
Historic curve flattening episodes have typically involved interest rates rising across the curve (see Figure 1), with short-term rates—more closely tied to Fed policy changes—rising more than long-term rates. This has provided two channels for economic restraint: First, higher borrowing rates have reduced the demand for credit, and second, the flatter yield spread had squeezed the profitability of borrow-short, lend-long credit intermediation, reducing the supply of credit.

Underpinning the rise at the short end of the yield curve, the Fed has, in the past, tightened policy to such an extent that the inflation-adjusted federal funds rate has exceeded the potential real gross domestic product (GDP) growth rate, signifying a restrictive policy stance. However, the real federal funds rate remained 130 basis points below the economy's growth potential as of April this year. While there may be legitimate uncertainty over the current level of the "neutral" policy rate—that which is consistent with sustaining full

(Fig. 1) Curve Flattening Is Usually Restrictive

Short-term rates usually rise more than long-term rates before an inversion.

As of May 1, 2019



Sources: Bureau of Economic Analysis, Congressional Budget Office, Federal Reserve, Haver Analytics, and T. Rowe Price.

> …the impact of Fed balance sheet adjustments appears to be small overall…

employment and 2% inflation—it seems unlikely that the underlying policy stance is restrictive. It is certainly substantially below that which has preceded past recessions.

The recent cycle of policy rate increases was accompanied by a reduction in the Federal Reserve's balance sheet, which must be taken into account when assessing the cumulative reduction in policy accommodation. However, the impact of Fed balance sheet adjustments appears to be small overall—Fed researchers estimated in 2015 that the cumulative impact of the central bank balance sheet stimulus programs on the 10-year term premium was around -110 basis points.[1] (Treasury yields can decompose into a "risk-free" rate, capturing market expectations of the future path of short-term Treasury rates, and a Treasury term premium, the compensation that investors require for bearing the risk that short-term rates do not evolve as they expected.[2])

A proportional impact on the USD 572 billion portfolio runoff since September 2017 would result in a 15-basis-point positive impact on the 10-year term premium,[3] perhaps consistent with an additional 0.25% rate hike. If this rough approximation is correct, it would imply a balance sheet-adjusted policy stance close to the center of Federal Open Market Committee participants' estimates of neutral (though still not a restrictive one).

At the long end of the yield curve, the current cycle has departed from historical norms in that the 10-year Treasury yield has fallen outright since the Fed began raising rates, with the term premium declining by more than the risk-neutral yield has risen (see Figure 2). This has likely been caused by stable-to-lower inflation expectations, less divergence of opinion on the long-term inflation outlook, and quantitative easing in the eurozone and Japan.

Indeed, this decline in perceived long-term interest rate risk has inverted the term premium portion of the Treasury yield curve—an anomaly over

[1] Stanley Fischer, "Conducting Monetary Policy with a Large Balance Sheet," Board of Governors of the Federal Reserve System, February 27, 2015. Those programs included roughly USD 1.925 trillion net purchases of government-sponsored enterprise debt and mortgage-backed securities, USD 1.69 trillion net purchases of U.S. Treasury (UST) securities, and a Maturity Extension Program that effectively added USD 537 billion of 10-year equivalents to the Fed's UST portfolio.

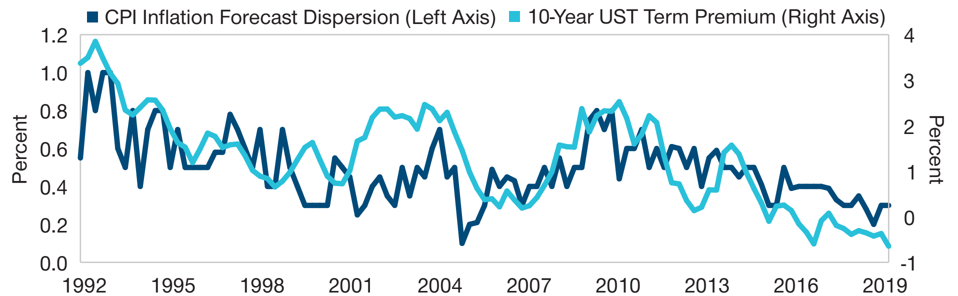
[2] Tobias Adrian, Richard Crump, Benjamin Mills, and Emanuel Moench, "Pricing the Term Structure with Linear Regressions," Staff Reports, Federal Reserve Bank of New York, April 2013, and "Treasury Term Premia," Liberty Street Economics, Federal Reserve Bank of New York, May 12, 2014.

[3] If anything, this overstates the impact. Fed research found that the earliest rounds of quantitative easing had the greatest impact on the term premium. The earliest stages of balance sheet normalization may have relatively little impact, because the Fed's portfolio is still large and the stock of reserve deposits still ample.

(Fig. 2) Less Inflation Uncertainty Means Lower Rate Risk

The 10-year Treasury yield has fallen since the Fed began raising rates.

As of December 31, 2018



Sources: Federal Reserve Bank of Philadelphia, Federal Reserve Bank of New York, and Haver Analytics.

> Currently, wage and price inflation are well below rates requiring a late-cycle Fed tightening response.

the past seven recessions, stretching back 52 years. Equally anomalous is the persistence of a positive risk-neutral rate spread: The expected path of future interest rates is not as bullish as the overall yield curve slope might suggest, and this component of the yield curve may have to invert in order to strengthen the recession signal (see Figure 3).

Broader Cyclical Context

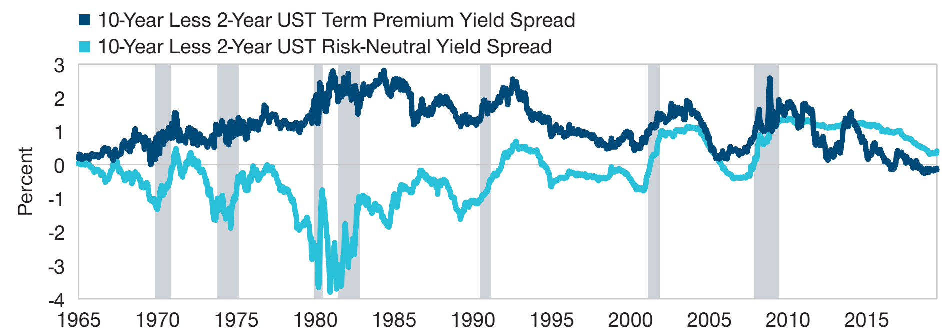
To the extent that it reflects the removal of monetary policy accommodation, the flat yield curve is an indication of the 10-year economic expansion's substantive, but not chronological, age. As such, it could soon receive confirmation from the step-down in employment growth that began in February if the latter trend is extended much longer.

This would not necessarily be an unwelcome development: If the economy is to achieve a "soft landing" at full employment and sustain growth in line with its long-term potential, employment growth will have to slow to a pace consistent with the growth of the working-age population. Such a "unicorn" outcome has never previously occurred because imbalances have always tended to accumulate, making expansions vulnerable to retrenchment— for example, wage-price spirals through the 1980s and debt-fueled asset bubbles and investment booms in the 1990s and 2000s.

(Fig. 3) A Positive Risk-Neutral Rate Persists

The expected path of future interest rates is not as bullish as the overall yield curve may suggest.

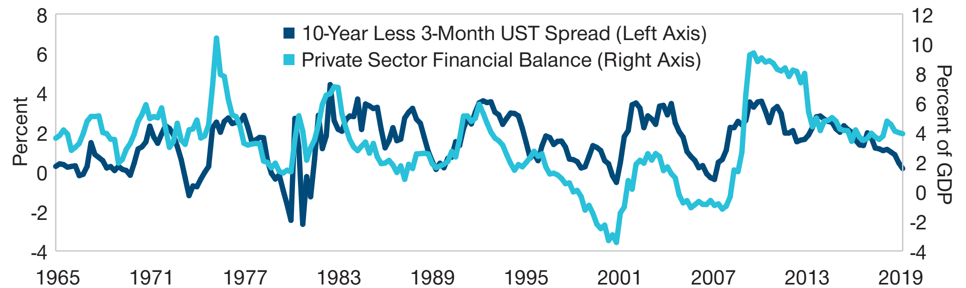
As of June 14, 2019



Sources: Federal Reserve Bank of New York and Haver Analytics.

(Fig. 4) The Savings Buffer

Healthy private sector balance sheets belie yield curve's late cycle signal.
As of December 31, 2018



Sources: Bureau of Economic Analysis, Federal Reserve Board, and Haver Analytics.

Currently, wage and price inflation are well below rates requiring a late-cycle Fed tightening response. Indeed, even as the labor market overshoots full employment, the Fed is considering ways to boost expected and actual inflation. Expansion-ending real and financials sector imbalances also seem manageable: Corporate profit margins are high, though no longer expanding; household and business debt service burdens are low; and private sector financial balances are healthy. This persistent excess of saving over investment provides a buffer against adverse conditions and contrasts with the historical tendency for it to decline—presenting a mounting cyclical vulnerability—as the yield curve flattens.

Overall, there are a number of reasons to suggest that the recent yield curve flattening is less likely to signal recession than previously. While in the past a rise in the short rate was typically behind the flattening of the curve, on this occasion, policy has not been tightened to the same degree. Cyclical indicators do not point toward the buildup of economic vulnerabilities, either. Finally, current very low term premia, which are due at least in part to stable inflation expectations and euro area and Japanese quantitative easing, have meant that yield curve flattening was more likely to occur recently than at any other point in U.S. postwar history. Given all of this, we believe that the current yield curve flattening/inversion is a less reliable signal of imminent recession than it has been in the past.

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