

# Musing About a Future Recession

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## Introduction

The U.S. economic expansion is another year older, having commenced in June 2009. The longest expansion was 10 years and coincided with the technology boom of the 1990s. The current expansion has eclipsed the Kennedy tax-cut boosted expansion of the 1960s. If the longest expansion was 10 years, and the current one is nine years, then it is worth musing about the prospect for a U.S. economic downturn. The National Association of Business Economists' (NABE) June forecast survey pointed to more concern about the downside economic risk to the U.S. expansion. Two-thirds of those surveyed were looking for a year-end 2020 recession event, while 18% forecast an end of 2019 event. Either way, the current expansion looks set to become the longest in U.S. history. Let's take a look at some indicators.

## More Art Less Science

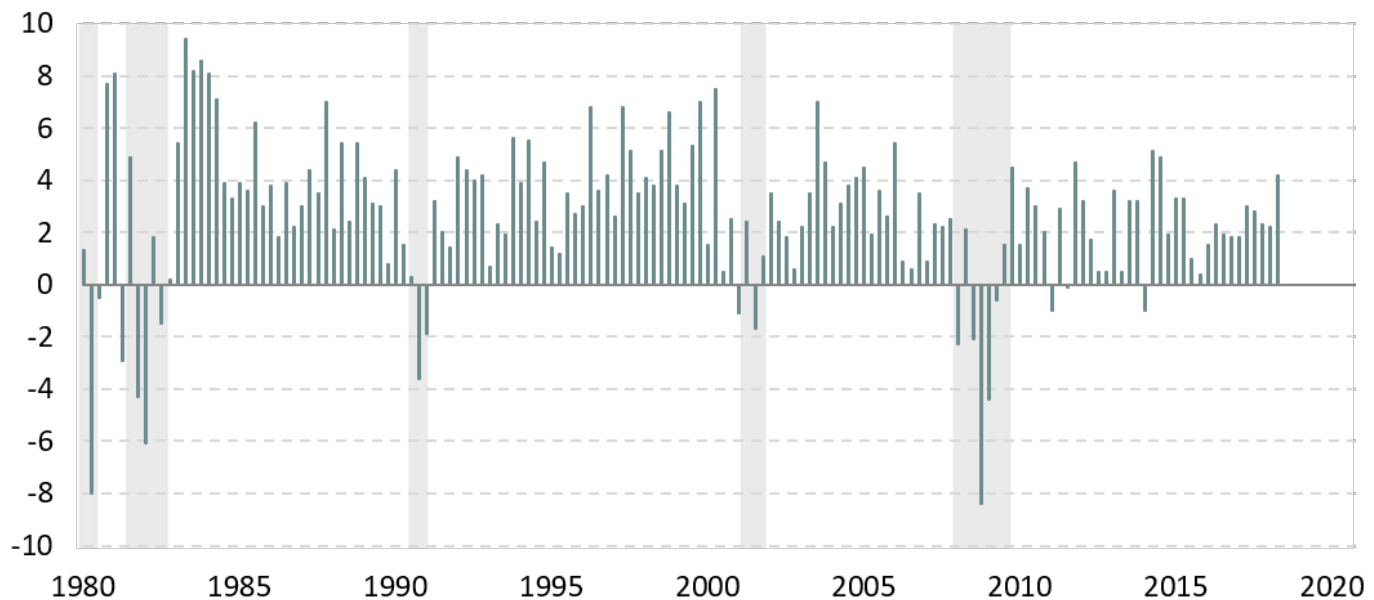
### Still Solid Economic Growth

The NABE panel of forecasters are not nearly as optimistic as the Trump Administration, which has steadfastly believed its tax reform legislation, a more hospitable regulatory environment, and an aggressive trade policy would produce 3% real growth—and maybe stronger—even as the U.S. output gap has turned positive. Business economists are instead forecasting sub-3% growth this year and next, waning tax reform stimulus, and tariffs and trade rhetoric raising a red flag for growth. [Chart 1](#) shows the year-over-year (YoY) growth in real growth domestic product (GDP) on an annualized percent change basis. This chart indicates the president just may be the better prognosticator. For example, the Federal Reserve Bank of Atlanta's GDP Nowcast is currently pointing to an annualized growth rate of 4.4% for the third quarter. The economy, gauged by GDP, looks fine.

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## Chart 1: U.S. Real GDP

% Change QoQ and Annualized, As of 6/30/2018



Shaded gray areas indicate U.S. recession. Source: Haver Analytics

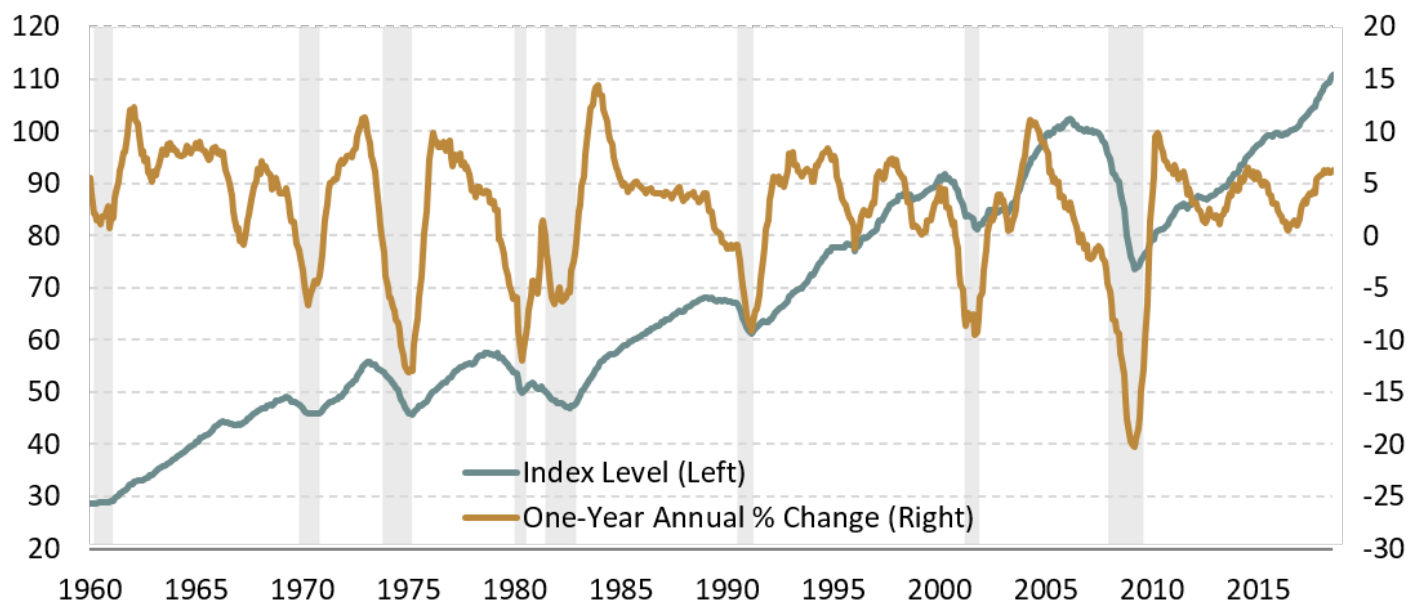
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## Leading Indicators and the Monetary Environment

The near-term outlook for the economy is on solid footing. Consumer confidence remains strong and small business optimism just hit an all-time high. But, are there any gathering forces that could be pulling the economy toward a recession? [Chart 2](#) shows the Conference Board's **Index of Leading Indicators**, an index of 10 components that includes such leading indicators as the ISM New Order Index, building permits, stock prices, and the Treasury yield curve. This index forecasts continued economic expansion as this series marches higher. The index would need to roll over and decline over several months in order to set off alarm bells.

## Chart 2: U.S. Conference Board Leading Economic Indicators

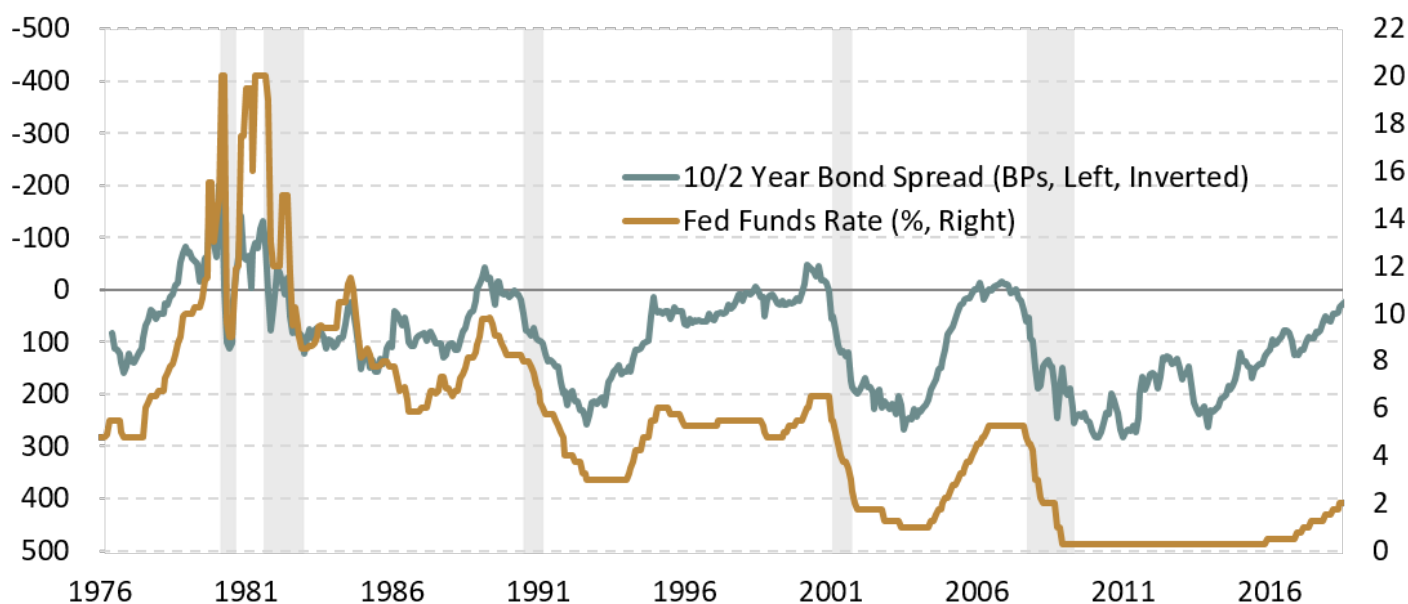
As of 7/31/2018



One source of concern is the monetary environment. For our purposes, the monetary backdrop includes the yield curve, rising interest rates, the shrinking Federal Reserve (Fed) balance sheet, stock prices, and financial stress. The first three are the more worrisome forces, while rising U.S. stock prices point to an economy that seems to be full steam ahead. Financial stress is not evident either. Let's look at each in turn.

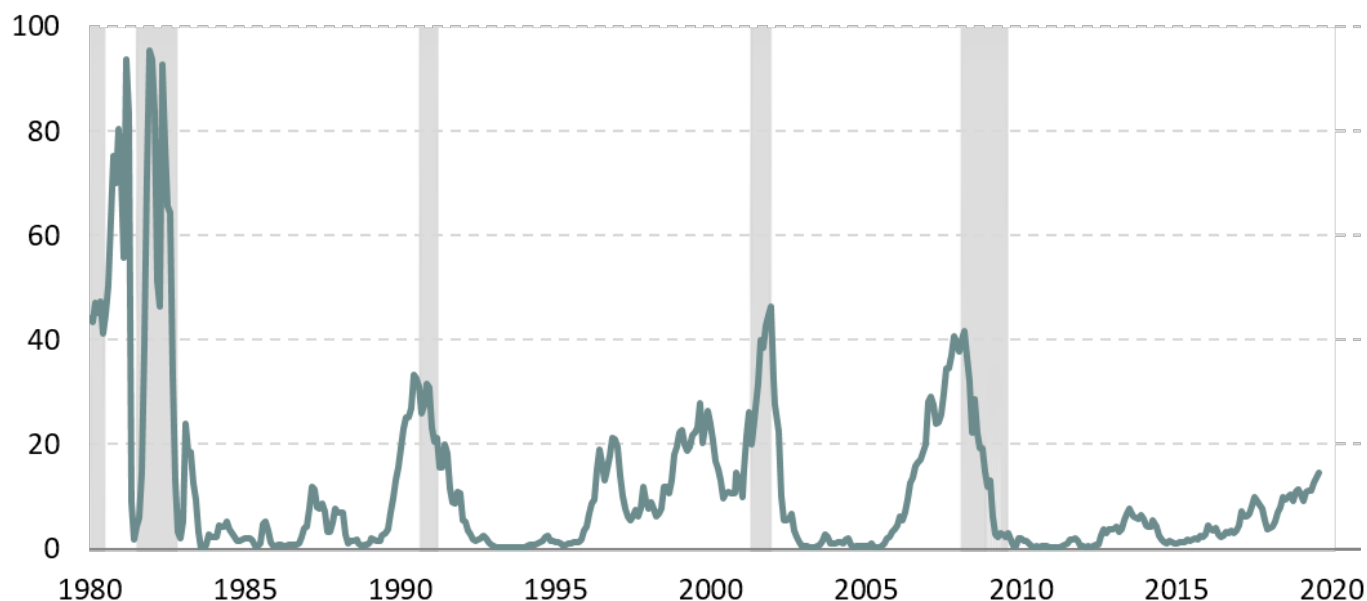
## Chart 3: U.S. 10/2 Bond Spread & Fed Funds Rate

As of 9/17/2018



#### Chart 4: Recession Probability based on Treasury Spread

%, 12 Months Ahead, As of 8/31/2018



Shaded gray areas indicate U.S. recession. Source: Federal Reserve Bank of New York / Haver Analytics

Chart 3 shows the **yield curve**, measured as by the difference between the 10- and 2-year Treasury notes, and the federal funds rate, which is controlled by the Fed. The flattening of the yield curve is taking place as the fed funds rate rises due to the Fed's move toward normalization. The yield on the 2-year Treasury note reflects that normalization in monetary policy. Assuming the Fed hikes rates two more times this year, then the yield curve seems likely to invert by the end of 2018. That inversion would get the market's attention, as the yield curve has a solid track record in predicting a recession in the U.S. That's obvious in the [Chart 3](#) above. [Chart 4](#) indicates the recession probability based on the yield curve—the likelihood is increasing but remains low. Based on this history, though, a probability of greater than 20% should begin to cause some investor angst.

Additionally, the Fed is reducing its balance sheet following the years of quantitative easing, as [Chart 5](#) below shows. This is another source of monetary tightening as **balance sheet** reduction lowers excess reserves in the banking system, negatively affecting the banking system's ability to extend credit. The liquidity fuel for the economy is dropping. Keep in mind, tighter monetary policy also reduces the supply of dollars, which consequently tightens global monetary conditions.

## Chart 5: Fed Balance Sheets Assets

Billions of U.S. Dollars, As of 9/17/2018

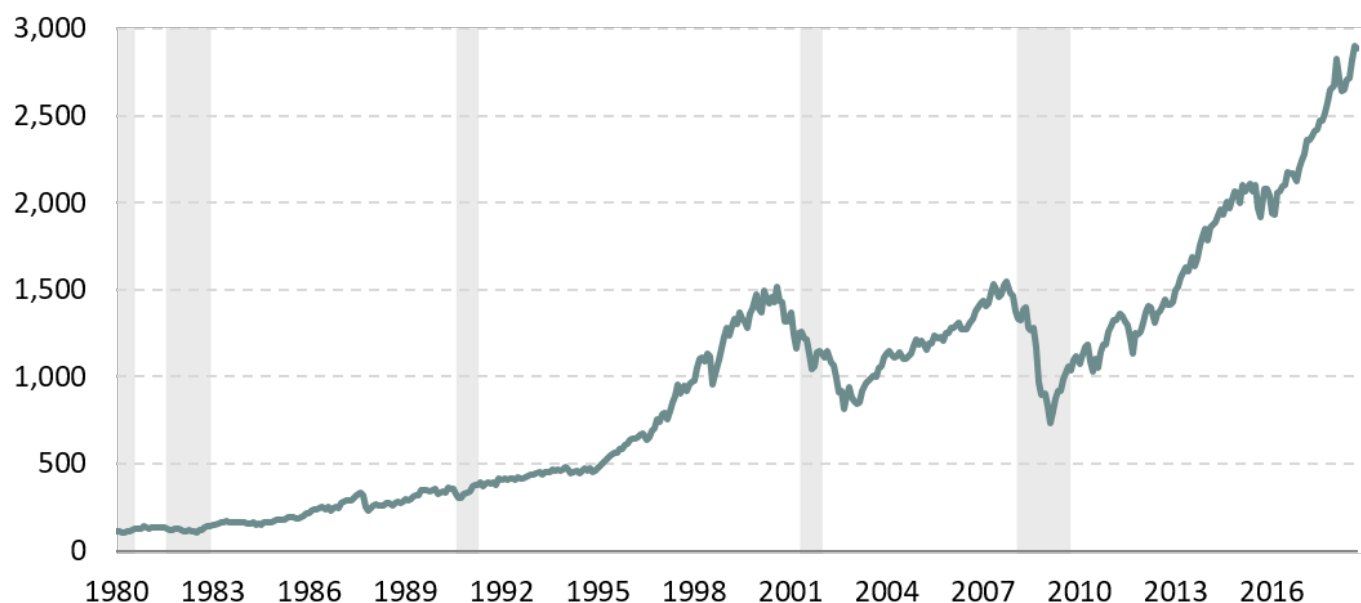


Source: Macrobond

Another factor worth looking at is **stock prices**, using the S&P 500 stock index as a proxy. The stock market can offer insight into the future course of the economy— notwithstanding Nobel prize-winning economist Paul Samuelson's quip about the stock market having forecast nine of the last five recessions. [Chart 6](#) shows stock pricing rising during an economic expansion. Those stock prices also tend to peak prior to an economic downturn and that represents a potential inflation signal. Stock prices show no signs of peaking. Profits rise and investors are willing to pay more for corporate earnings. Yet, stocks are becoming more expensive as Shiller's Cyclically Adjusted S&P Price Earnings ratio (CAPE) suggests in [Chart 7](#). At some point investors become less willing to pay a higher price for those earnings. Yet, just because stocks are expensive isn't prima facie evidence of an impending decline, nor the sounding of a recession bell. Despite the level of stock prices and CAPE multiples, equities can still go higher. If past is prologue then the economy will continue to expand, based on the direction of stock prices.

## Chart 6: U.S. Stock Price Index: S&P 500 Composite

Index, As of 9/17/2018



Shaded gray areas indicate U.S. recession. Source: Macrobond

## Chart 7: U.S.: Shiller Cyclically Adjusted S&P Price to Earnings

Ratio, As of 9/17/2018



Shaded gray areas indicate U.S. recession. Source: Macrobond

Finally, can we find any evidence that the financial system in the U.S. is becoming increasingly stressed? Increasing **financial stress** would spill over into the real economy. The Kansas City Fed has created an index of financial stress that includes 11 financial variables that are calculated monthly. **Chart 8** shows the financial stress index since 1990. The onset of financial stress can be signaled by a rising, positive value in the index,

according to the bank. Building financial stress can be seen during the technology bubble in early 2000 and is most obvious during the Great Financial Crisis (GFC), both periods of deteriorating financial conditions and recessions. Now the stress index is negative and moving lower:

### Chart 8: U.S.: Kansas City Financial Stress Index

As of 8/31/2018



Shaded gray areas indicate U.S. recession. Source: Bloomberg (© 2018, Bloomberg Finance LP)

## Conclusions

What does a review of some well-known recession indicators tell us about the current—and future—state of the U.S. expansion? The information provided by the indicators is mixed, but favors the continuation of the current expansion. The leading indicators are telling us the economy should continue to expand well into next year—at least. Stock prices are weaving the same tale. And the Kansas City Fed's financial stress index says there isn't any right now. In light of these factors, this current expansion seems likely to become the longest expansion in U.S. history. As noted, corporate profitability remains solid and the unemployment rate and rising wages should support further gains in consumer spending. Rising federal government spending adds another source of positive thrust for the economy. Strong domestic demand will likely expand the trade deficit as import demand grows.

However, the most worrisome of the indicators is the flattening of the yield curve, as the fed funds rate is pushed higher. What investors should be doing is taking note of the yield curve's forecasting prowess and watch for changes in the direction of the other indicators, especially if the leading indicators roll over, stock prices fall, and financial stress starts to build. Other catalysts could be a Fed policy mistake or the continued escalation of the U.S.-China trade tensions that potentially exerts a larger, negative impact on the U.S. economy.

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