Predictions of a U.S. Recession Are in Vogue, But the Data is Mixed

Our Reading Tilts against a Nearer-Term Recession Scenario

Economies have periods of expansion and contraction which together make up the business cycle. The U.S. economy is now in its longest expansion ever – 120 months. Since about 2011, market observers have been predicting a recession would begin within the next 12-24 months. Given the strong correlation between recessions and bear markets, investor focus on recession forecasting is unsurprising. So far, predictions for the end of this expansion have not proved out. But with the U.S. and global economies now slowing, trade war actions increasing, and interest rates and other economic indicators signaling rising risks, the growing crop of recession predictions warrant our careful review.

What is a Recession and What Causes Them?

Recessions have commonly been defined as two consecutive quarters of a decline in real (net of inflation) GDP. However, many sources (e.g., the National Bureau of Economic Research), use a broader approach to defining significant turning points in the economy, taking into account the depth as well as the duration of a decline, and changes in income as well as GDP.

Common to all recessions is a significant drop in aggregate demand that almost always occurs first and foremost among businesses, with consumer demand falling subsequently. Businesses make decisions about whether to invest in capital equipment, workforce, and inventory based on their expectations about future demand for their products and services. Anything that changes business confidence about future demand can quickly change these investment decisions.

Common causes of recessions can be grouped as follows.

- Inflationary overheating leading to monetary policy tightening. When growth is strong, businesses tend to over-invest and consumers increase their spending. Most recessions occur when the Federal Reserve perceives the economy to be growing at an unsustainable rate creating inflationary pressures, and raises interest rates in response.
- Asset bubbles and financial crises. When the stock market or housing values crash, the impact ripples through the economy via tightened financial conditions and a negative wealth effect. This scenario has led to some of the more severe recessions, including the last two. During the current expansion, asset prices have grown much faster than the economy, and stock prices have grown faster than corporate earnings. In their effort to stop the previous asset price collapse, the Federal Reserve may have enabled another asset price bubble, and growing concern that asset price cycles may now drive the economy, not the other way around.
- Geopolitical events, e.g., trade wars, oil embargos, etc. Instead of the traditional late-cycle concerns about economic overheating, the greatest perceived risk to the current global expansion is escalating trade tensions and their impact on global supply chains. The trade disputes with China and Europe could escalate further. Economic indicators can measure the trade war's impact after the fact, but they are of little use in predicting the determinative political events.

Recession Indicators and What They Are Showing Now

Recessions can be hard to identify even after they have begun. By the time a downturn is apparent in data like payrolls or GDP, a contraction may have already begun. The National Bureau of Economic Research's Business Cycle Dating Committee generally waits a year to make a recession call. In the span of just six months, the Federal Reserve's assessment of the U.S. economy has gone from a rate hike in December to their recent signaling of a likely near-term rate cut.

From an investment standpoint, being able to predict a recession in advance is the holy grail. Every recession has a small number of pundits who call the downturn in advance, but predicting recessions consistently and without too many "false positives" is another matter. Furthermore, recessions related to geopolitical events (e.g., trade wars) and financial crises present special challenges. Nevertheless, there are a number of indicators of which have been shown to have significant signal value in predicting an approaching recession. These indicators - and what they are showing now - are reviewed below.

The Yield Curve

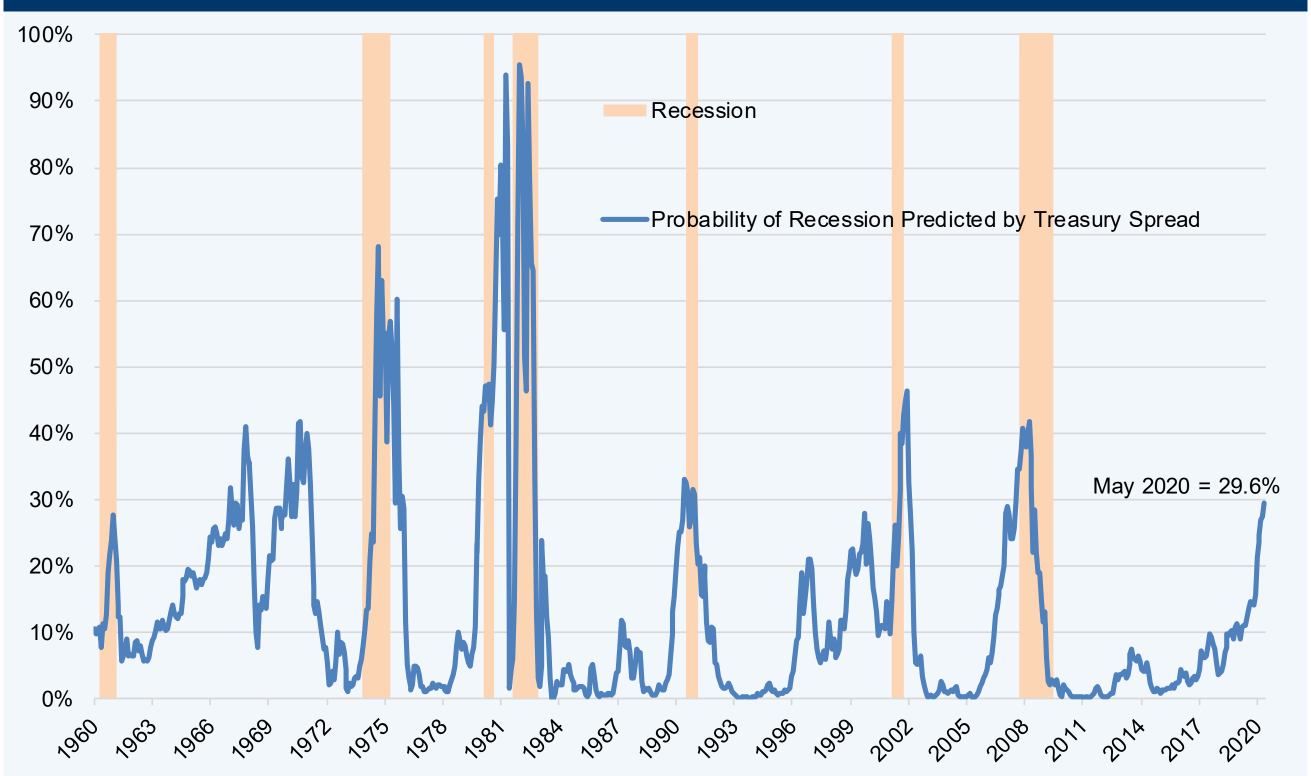
The yield curve refers to the difference in rates between treasuries with short-term and long-term maturities. Usually, long-term yields are higher because investors demand higher returns for locking up their money for a longer period. But when short-term rates are higher – an "inverted" curve – it indicates that economic growth is expected to decline and that shorter rates will be lowered in response to the slowdown.

The spread between three-month and 10-year securities has inverted before every recession since 1945, with an average of 10 months between inversion and the expansion's peak month. This record has made an inverted yield curve a widely watched signal of a coming economic downturn.

The New York Fed publishes a model for the probability of a recession occurring in the 12 months ahead that is based largely on the spread between 10-year and three-month treasury rates. As shown in the chart below, the recession probability remained very low throughout this expansion until the past two years during which it has risen to about 30%. While the probability reading has been above 30% in the past without a recession occurring, the readings at the beginning of past recessions have often been at levels below 30%.

It is notable that the curve inverted many times in the 80s, 90s and in 2005-2006 without a subsequent recession. Some argue that central bank policies that depress longer rates (viz., quantitative easing) have made curve inversion less predictive of a downturn. Evidence for this would be the 10-year's exceptionally low term premium. Importantly, 30-yr rates have not followed the drop in the 10-year, belying the 10-year rate's message about economic weakness ahead.

Probability of U.S. Recession Within the Next 12 Months Predicted by Treasury Spreads

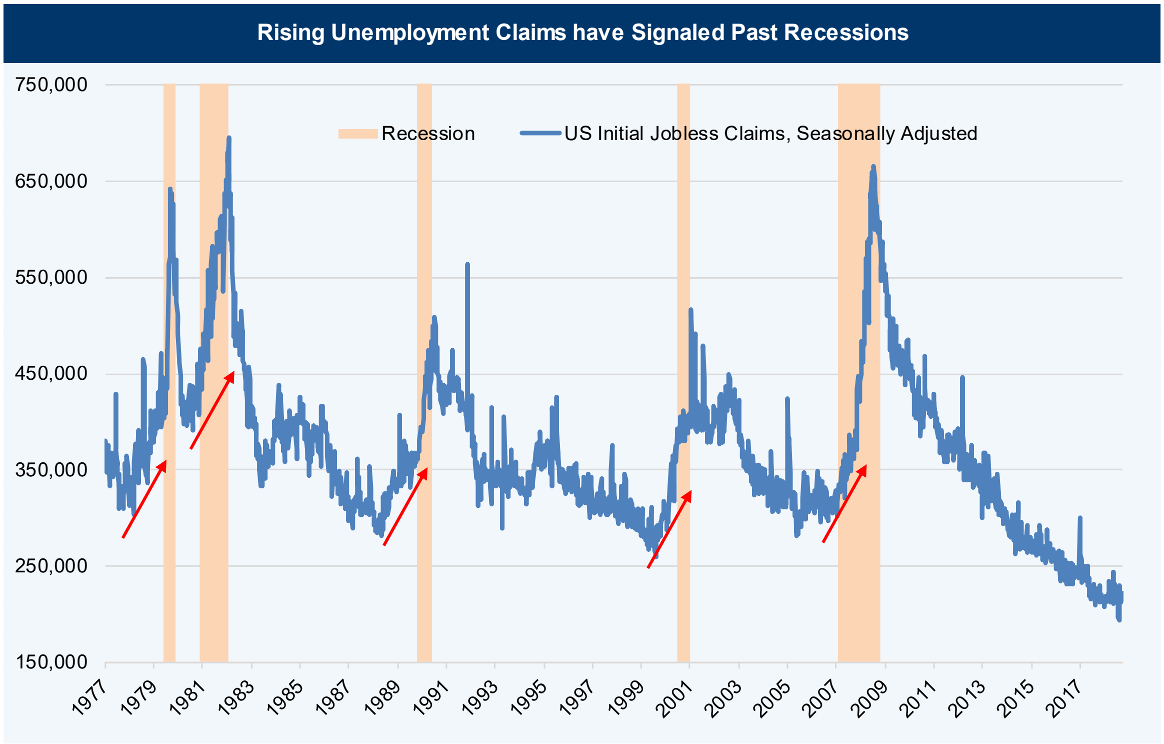


Labor Market Signals

With the consumer comprising two-thirds of the economy, the health of the labor market and that of the economy are closely linked. However, monthly payroll data are "coincident" indicators meaning that they measure labor market conditions at the time the data are collected. Because there is a lag between when economic weakness begins and when companies stop adding workers or begin lay-offs, payroll data are somewhat limited in their forward predictive power.

A better labor market leading indicator is initial jobless claims (the number of new applications for unemployment benefits). A significant and sustained pick-up in jobless claims indicates that companies are increasing layoffs and that economic weakness is approaching. The good news is that initial jobless claims remain very low (see chart below). While the pace of hiring has tailed off in recent months. With unemployment at 3.6% and jobless claims near all-time lows, the labor market is still the strongest in decades.

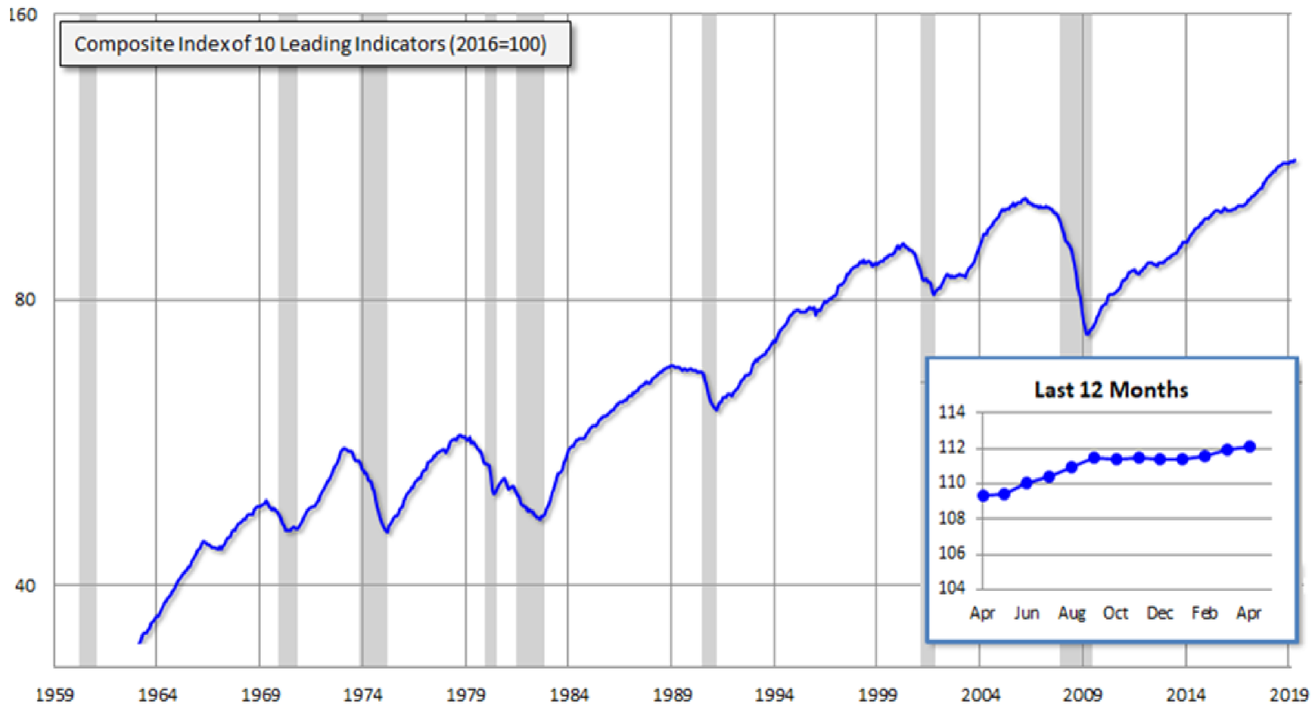
Claudia Sahm of the Federal Reserve has described a recession indicator which looks for a 0.5% rise in the 3-month average unemployment rate above the unemployment rate's low for the past 12 months. This indicator has signaled each of the seven recessions since 1970 within 4-5 months of the recession's start and <u>without a single false signal.</u> That's a better track record than the inverted yield curve, although the signal comes later in the recession. With unemployment essentially at its past year low, the "Sahm Recession Indicator" suggests that recession probability within the next year is unlikely (about 10%).



Leading Economic Index

The Leading Economic Index (LEI) published monthly by The Conference Board is a composite of 10 components covering production, employment, consumption, and financial conditions whose changes tend to precede changes in the overall economy. The Index has tended to decline for several months prior to the start of U.S. recessions. As of the April data released in May (see chart below), a decline had not yet occurred.

Conference Board Leading Economic Index with Recessions Highlighted



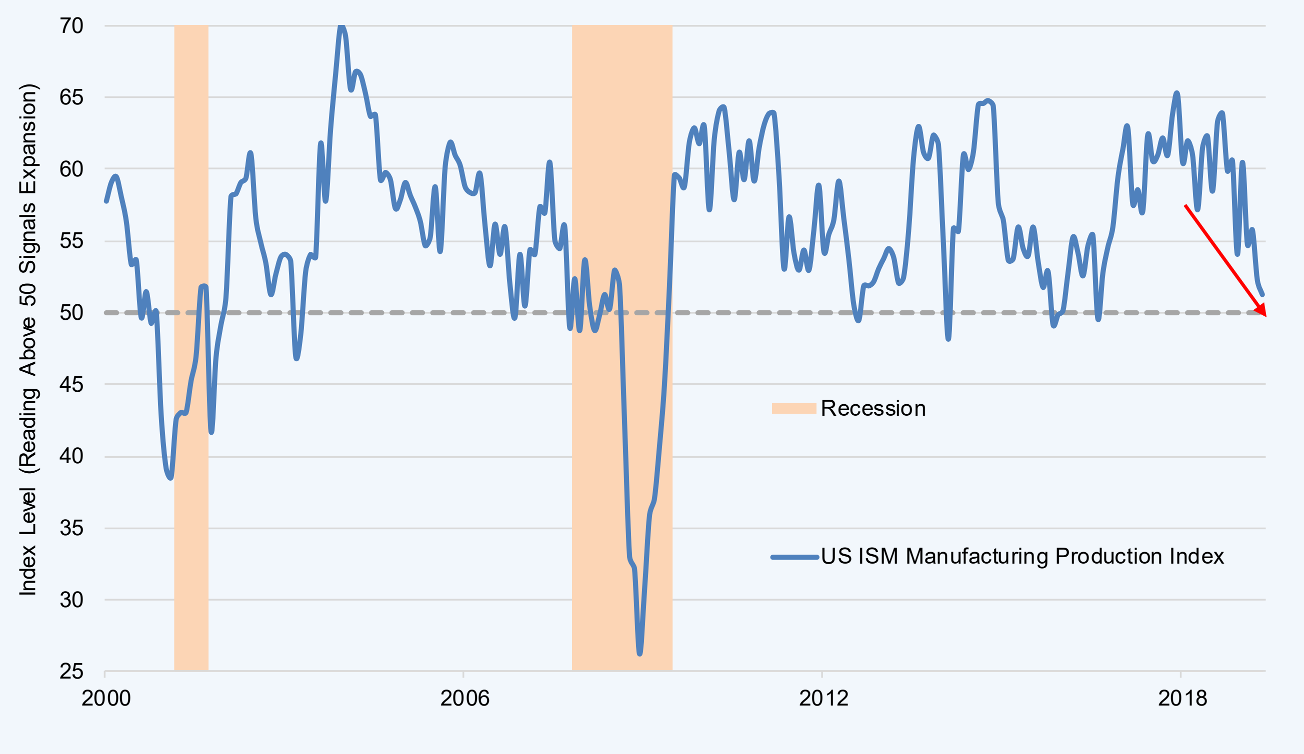
Business Confidence Measures

There are various survey-based measures of business confidence, the most prominent of which is the Institute of Supply Management (ISM) Purchasing Managers Index (PMI). This report is compiled monthly from surveys of purchasing and supply executives in over 400 companies. Index components include new orders, production, inventories, employment, and prices. Scores reflect the percentage of responses indicating a change in a positive direction vs. those indicating a negative change. There are separate indices for manufacturing firms and for non-manufacturing (services) firms. A score over 50 indicates expansion for the sector, and below 50 indicates contraction.

In May, ISM's manufacturing PMI continued its downward trend since late 2018, falling to its lowest level since before Trump's election in 2016. However, at 52.1, the reading still indicated expansion. Manufacturing contracted in 2015 and early 2016 without pushing the economy into a recession.

On the positive side of the ledger, the May Non-Manufacturing (services) PMI came in at a surprisingly strong 56.9, 1.4% better than the April reading.

ISM Manufacturing Gauge stilll shows growth, but it is at its lowest level since 2016

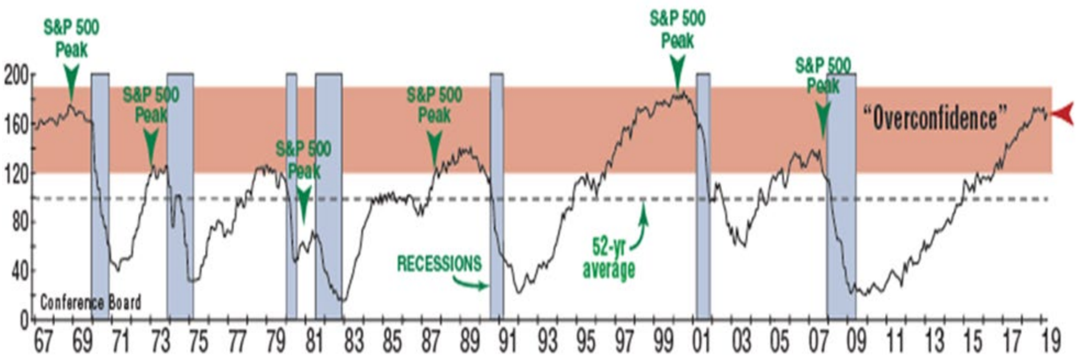


Consumer Confidence Measures

In economies weighted towards consumer spending, high consumer confidence is generally a positive factor. However, confidence that is low and rising tends to be more predictive of a strong growth outlook than when confidence is high and starting to fade (see chart below). In fact, stock markets tend to peak when confidence is highest. Falling consumer confidence from a high level is often a warning sign for a near-term recession.

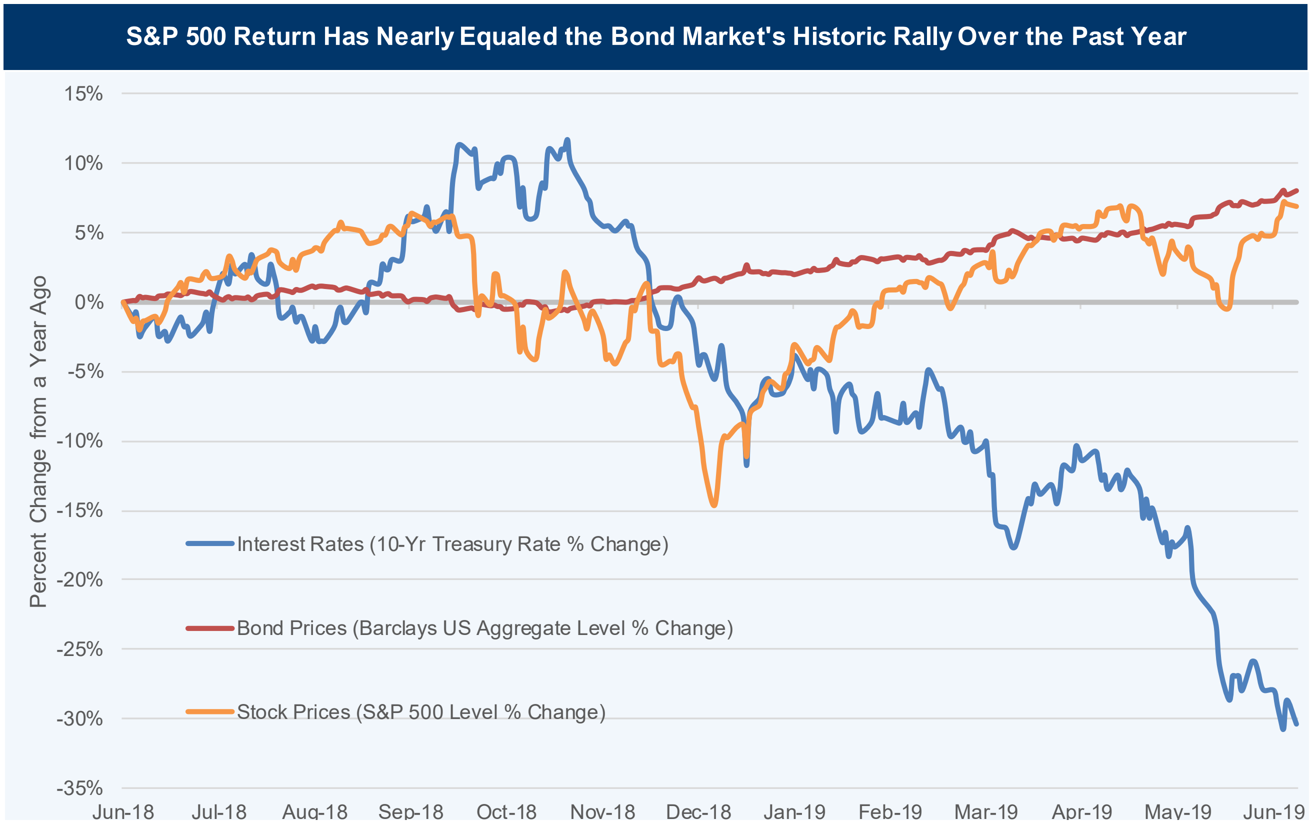
The Conference Board Consumer Confidence Index rose in both April and May, pushing it back near its all-time highs reached last fall. A persistent fall in consumer confidence from this level would be concerning.

Consumer Confidence: "Present Situation"



Stock and Bond Markets

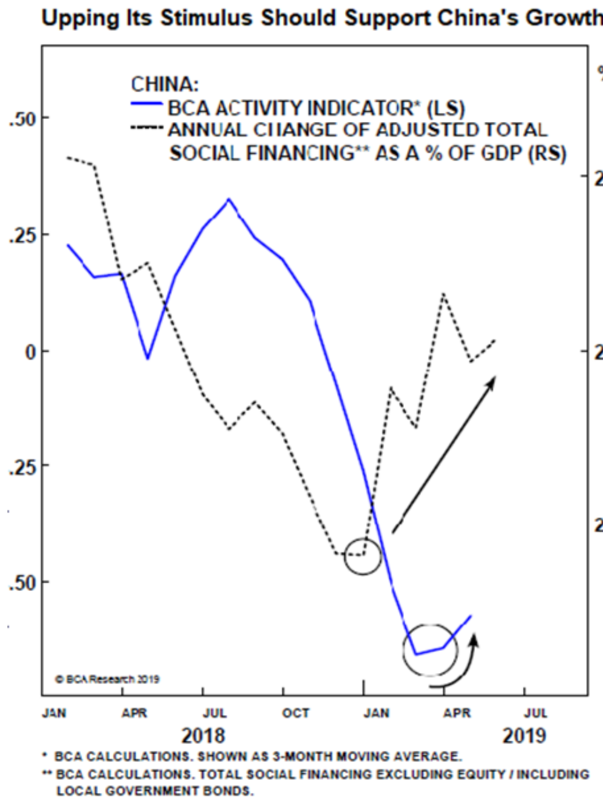
Historically, the stock market has not been a very good predictor of economic downturns, with the bond market earning more credibility in this regard. This year we have seen plunging interest rates (blue line in chart below) and rising bond prices (red line) which has usually been a strong indicator of economic weakness ahead. When bond markets are rising, it is unusual to see strong equity markets at the same time. Over the last year, the 10-year treasury yield has fallen 30%, leading to the strong rally in bond prices. However, the S&P 500 return (orange line) is within 2% of the bond market return, leading many to ask "who is right about the economy – the stock market or the bond market?"

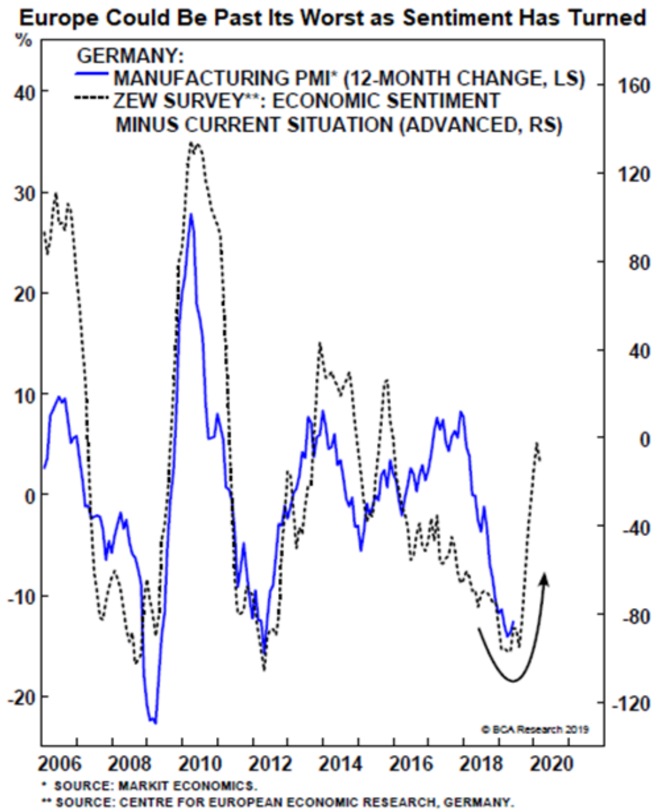


Global Growth:

With exports accounting for only about 12% of U.S. GDP, the U.S. economy is less dependent on the rest of the world than are most other countries. Nevertheless, with about 45% of S&P 500 revenues coming from abroad, the U.S. is not an island. The best leading indicator for growth in China, the world's second largest economy, is "total social financing," a broad measure of credit and liquidity in China's economy. Social financing accelerated in 2018-Q4, and is continuing to expand (see left chart below). This stimulus has already been reflected in upward ticks in measures for China's economy and should continue to support growth despite the trade war's impact.

Global Growth Indicators





European forward-looking measures are not as favorable as those for China. PMI numbers for Europe's major economies are near 48, just into the contraction zone. However, there has been a sharp rise in the ZEW Indicator for Germany, a leading indicator based on business sentiment in Europe's largest economy. The chart at right above shows the strong correlation between the ZEW results and Germany's manufacturing PMI.

Summarizing Our Recession Indicators' Current Readings

The U.S. economy is an extraordinary complex, adaptive system with millions of participants making independent decisions. Market pundits commonly present strong views with high confidence, but the truth is that predictions about the economy should be only be offered with humility given the degree of difficulty. In that vein, we summarize our review of the forward-looking indicators of a coming recession in the context of current monetary and fiscal policy as follows:

1. Data supportive of a "coming recession" scenario:

- The sharp decline in U.S. manufacturing PMI data (although it still remains in the expansion zone)
- An inverted yield curve – albeit one whose recession-predicting power may be less than in the past
- Bond market strength
- The trade wars

2. Data supportive of a slowdown in the rate of expansion but without a nearer-term recession:

- Strongly accommodative monetary policy in the U.S., China, and Europe
- Significant U.S. fiscal stimulus in place through 2020
- No rise in U.S. unemployment claims (yet)
- Non-confirmation by the “Sahm Recession Indicator”
- No decline in the U.S. Leading Economic Index (LEI)
- Stock market strength

3. Data sending mixed signals:

- Very strong U.S. consumer confidence measures
- Favorable leading indicators in China and Europe amidst contractionary current conditions

Although the U.S. economy is slowing, the foregoing key indicators present a conflicting message as to whether we will see a recession within the next year or so. Our reading is that they tilt against a nearer-term recession. Given this picture, it is no surprise that the Federal Reserve did not cut rates at its June meeting, deferring this decision until further data is available. The mixed picture also makes it likely that the current trade war – whose duration or path we make no pretense of being able to assess – may be determinative of the timing of the next U.S. recession.

Implications for Portfolio Positioning

Because most past bear markets have occurred in association with a recession, correctly identifying a coming recession can be hugely beneficial in terms of wealth-preservation. But as noted above, forecasting recessions is also hugely difficult, and over-reacting to “false positive” recession forecasts (e.g., every recession call in the last 10 years) can be wealth destroying, especially if serially repeated.

When recessions occur, market responses follow a pattern. Equities move lower, with higher beta stocks leading the way. As corporations’ need for credit dries up and the risk of default increases, companies with high leverage, near-term funding needs, or uncertain cash flows underperform their better-capitalized peers. Fixed income investors shift to higher quality, exiting high yield and other less liquid bonds. Treasury yields remain low, although the yield curve flattening that preceded the recession eventually steepens after the Federal Reserve has lowered short rates.

In contrast with recessions, economic slowdowns in the midst of expansions show more varied market patterns. Recession fears can trigger sharp equity market sell-offs (e.g., 2011, 2016, 2018). However, once the market judges a slowdown to be just that and not a recession, equity markets typically advance as confidence improves and expected earnings are capitalized at higher multiples. In the current expansion, weakening economic data has often triggered accommodative monetary policy responses with the Fed’s actions since last December only the most recent example.

With the current mixed signals for the U.S. economy and markets near all-time highs, we believe that remaining cautious on higher volatility areas of both the equity and fixed income sectors of the market is prudent. We are pleased with the market returns we have been able to achieve this year, and will keep preservation of those returns front and center in our minds during the year’s remainder.

We have adjusted portfolios this year in accordance with our reading of the market and business cycles. Actions taken have included dialing down risk via asset allocations, raising cash levels somewhat above our historical norms, and adjustments in portfolio holdings, with the specific moves dependent on client and portfolio objectives. If trade wars and weakening in key economic data continue, we expect to have the ability to take advantage of buying opportunities that may be presented.

Should you have any questions about how the above relates to your personal investment portfolio or financial plan, please reach out to your advisory team to review your specific situation. Communication with your investment advisor to ensure that your portfolio is well-structured to fit your objectives is always important, but especially so in periods of higher than average uncertainty as we see now.

Figure 1: Probability of U.S. Recession Within the Next 12 Months Predicted by Treasury Spreads. Graph shows the probability of recession in the next twelve months predicted by the spread of the 10-Yr U.S. Treasury bond yield and the 3-Mo U.S. Treasury bill yield. Parameters estimated using data from January 1959 to December 2009, recession probabilities predicted using data through May 2019. Recessions highlighted in orange. Source – New York Federal Reserve.

Figure 2: Rising Unemployment Claims Have Signaled Past Recessions. Graph shows the number of US initial jobless claims, seasonally adjusted from January 1977 to May 2019. Recessions highlighted in orange. Source – U.S. Department of Labor.

Figure 3: Conference Board Leading Economic Index with Recessions Highlighted. Graph shows the Conference Board Leading Economic Index from 1963 to 2019, with monthly data over the last twelve months highlighted. Recessions highlighted in grey. Source – The Conference Board.

Figure 4: ISM Manufacturing Gauge still shows growth, but it is at its lowest level since 2016. Graph shows the ISM Manufacturing PMI Index from January 2000 to May 2019. Recessions highlighted in orange. Source – Institute for Supply Management.

Figure 5: Consumer Confidence: "Present Situation". Graph shows the Conference Board Consumer Confidence level from 1966 to 2019. Area highlighted in orange represents consumer "overconfidence". Recession highlighted in blue. Source – Conference Board.

Figure 6: S&P 500 Return Has Nearly Equaled the Bond Market's Historic Rally Over the Past Year. Graph shows the return of interest rates (represented by 10-Yr Treasury Yield), bonds (represented by the Barclays US Aggregate Index), and stocks (represented by the S&P 500 Index) over the past trailing year. As of June 25, 2019. Source – yhcarts.com.

Figure 7: Global Growth Indicators. Graph on the left shows BCA Activity Indicator in Chine (blue line) as well as the Annual Change of Adjusted Social Financing (black dotted line). Source – BCA Research. Graph on the right shows Germany Manufacturing PMI (blue line) and the Economic Sentiment minus Current Situation line (black line). Source – BCA Research.