Forecasting the Next Recession
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Guggenheim’s Model Points to Recession in Late 2019 or 2020

Report Highlights

- It is critical for investors to have a well-informed view on the timing of the business cycle because of its importance as a driver of investment performance.

- Our Recession Dashboard includes six leading indicators that exhibit consistent cyclical behavior ahead of a recession—and can be tracked in real time.

- Based on the dashboard and our proprietary Recession Probability Model, which shows 24-, 12-, and six-month ahead recession probabilities, we believe the next recession will begin in late 2019 to mid-2020.

- Risk assets tend to perform well two years out from a recession, but investors should become increasingly defensive in the final year of an expansion.

Introduction

The business cycle is one of the most important drivers of investment performance. As the nearby chart shows, recessions lead to outsized moves across asset markets. It is therefore critical for investors to have a well-informed view on the business cycle so portfolio allocations can be adjusted accordingly. At this stage, with the current U.S. expansion showing signs of aging, our focus is on projecting the timing of the next downturn.

Predicting recessions well in advance is notoriously difficult. Using history as a guide, however, we find that it may be possible to get an early read on when the next recession will begin by analyzing the late-cycle behavior of several key economic and market indicators. Together, they would have provided advance warnings of a downturn. Our analysis of these metrics suggests that the current expansion will end as soon as late 2019.
Identifying Common Late-Cycle Symptoms

The last several expansions have shown similar patterns leading up to a recession. The charts on the following pages help to tell this story by identifying six indicators that would have exhibited consistent cyclical behavior, and that can be tracked relatively well in real time. We compare these indicators during the last five cycles that are similar in length to the current one, overlaying the current cycle. Taken together, they suggest that the expansion still has room to run for approximately 24 months. At the end of this paper, we assemble the six indicators into our single-page Recession Dashboard, which we will update regularly going forward.

1. Labor Market Becomes Unsustainably Tight
The first indicator is the unemployment gap, which is the difference between the unemployment rate and the natural rate of unemployment (formerly called NAIRU, for the non-accelerating inflation rate of unemployment). A strong labor market prompts the Fed to tighten because an unemployment rate well below the natural rate is unsustainable by definition, and can lead to a spike in wage and price inflation. Looking at the current cycle, the labor market is in the early stages of overheating. We see unemployment heading to 3.5 percent, which would be consistent with the pre-recession behavior of the unemployment gap in past cycles.

2. Fed Raises Rates into Restrictive Territory
The second chart shows the reaction function of the Fed. Subtracting the natural rate of interest—which is the neutral fed funds rate, neither contractionary nor stimulative for the economy—from the real fed funds rate gives us a gauge of how loose or tight Fed policy is. Leading up to past recessions, the Fed has usually hiked rates beyond the natural rate to cool the labor market and get ahead of inflation, only to inadvertently push the economy into recession. Looking at the current cycle, we expect quarterly rate hikes to resume in December. This will put Fed policy well into restrictive territory next year, barring a sharper increase in the natural rate than we expect.

3. Treasury Yield Curve Flattens
One of the most reliable and consistent predictors of recession has been the Treasury yield curve. Recessions are always preceded by a flat or inverted yield curve, usually occurring about 12 months before the downturn begins. This occurs with T-bill yields rising as Fed policy becomes restrictive while 10-year yields rise at a slower pace. Looking at the current cycle, we expect that steady increases in the fed funds rate will continue to flatten the yield curve over the next 12–18 months.

4. Leading Indicators Decline
The Conference Board Leading Economic Index (LEI), which measures 10 key variables, is itself a recession predictor, albeit a fallible one. It has been irreverently said that the LEI predicted 15 out of the last eight recessions. Nevertheless, growth in the LEI always slows on a year-over-year basis heading into a recession, and turns negative about seven months out, on average. Looking at the current cycle, LEI growth of 4 percent over the past year has been on par with past cycles two years before a recession, and we will be watching for a deceleration over the course of the coming year.

5. Growth in Hours Worked Slows

6. Consumer Spending Declines
Real retail sales growth weakens significantly before a recession begins, with the inflection point typically occurring about 12 months before the start of the recession. Consumers cut back on spending as they start to feel the impact of slowing real income growth. This shows up most noticeably in retail sales, which are made up of a higher share of discretionary purchases than other measures of consumption. Looking at the current cycle, real retail sales growth has been steady at around 2 percent. This is weaker than the historical average, but is consistent with slower-trend gross domestic product (GDP) growth in this cycle.

**Model-Based Recession Probability**

In addition to creating our dashboard of recession indicators, we have also developed an integrated model that is designed to predict the probability of a recession over six-, 12-, and 24-month horizons. The model uses the unemployment gap, the stance of monetary policy, the yield curve, and the LEI, as well as the share of cyclical sectors of the economy (durable goods consumption, housing, and business investment in equipment and intellectual property) as a percent of GDP. Applying our model using historical data shows that it would have successfully signaled each recession in advance going back to 1960.

As the chart below illustrates, we believe the current likelihood of a recession in the next six or 12...
months is low, at 4 percent and 9 percent, respectively, as of the third quarter of 2017. Within a two-year window, recession risk appears more meaningful at 22 percent. We also show projections for the model, which is based on a continuation of current trends for each of the indicators, and assumes the Fed resumes quarterly rate hikes starting in December. If these trends play out, the model indicates a high probability of a recession starting in late 2019–mid 2020.

Hypothetical illustration based on a back-test. Hypothetical, back-tested model results have inherent limitations, such as: the model is designed with the benefit of hindsight, based on historical data, and does not reflect the impact that certain economic and market factors might have had on the rule-making process. Please see “Important Notices and Disclosures” for more information on the limitations of back-tested model results. Source: Haver Analytics, Bloomberg, Guggenheim Investments. Data as of 9.30.2017. Shaded areas represent periods of recession.

Additionally, our recession date coincides with a period where the balance sheets of the world’s major central banks will likely be shrinking in aggregate for the first time since the financial crisis, removing that form of global monetary stimulus just as U.S. fundamentals are weakening.

As we noted earlier, predicting downturns is a notoriously difficult endeavor, but the fact that a variety of approaches all point to the same timeframe for a recession gives us confidence in our view. Naturally, there are substantial risks that our recession date could be too early or too late. The expansion could last longer than we think for a number of reasons, including the possibility that there is more labor market slack than there currently appears, or that productivity growth could accelerate considerably. On the flipside, a recession could occur sooner than we anticipate due to a sudden spike in inflation, more hawkish Fed policy, or a geopolitical shock, such as a military conflict with North Korea or a trade dispute with China. And there are always the unknown unknowns.

Nevertheless, we believe that successful investing requires a roadmap, as with any other endeavor. Our investment team uses this roadmap to help guide our portfolio management decisions, in order to
seek superior risk-adjusted performance over time and across cycles.

**Investment Implications**

When faced with a recession looming on the horizon, investors first must recognize that preparing too early can be as harmful as reacting too late. Indeed, the best gains in stocks often occur in the latter stages of an expansion, when economic growth is accelerating, monetary policy is not overly restrictive, and optimism is high—as is currently the case. As the graph below demonstrates, in the last five comparable cycles the S&P 500 has rallied an average of 16.2 percent in the penultimate year of the expansion, before falling 3.8 percent in the final 12 months.

![Graph showing stocks rally two years out from recession before declining in final year.](image)


In credit markets, high-yield spreads tend to stay flattish in the penultimate year of the expansion before widening in the final year, on average. Rising defaults and increasing credit and liquidity risk premiums drive a sharp pullback in the performance in high-yield bonds before and during recessions.
If history is a guide, then by the final year of the expansion (2019), investors should turn defensive, positioning for widening credit spreads and falling equity valuations. Treasury yields are likely to decline once the Fed stops hiking. As we noted in Stocks for the Long Run? Not Now, elevated stock valuations portend meager returns over the next decade, and one key reason is that a bear market is likely a couple of years away. Maintaining some dry powder in the final year of the expansion will allow equity and credit investors to take advantage of more attractive valuations, as some of the best investment opportunities present themselves during recessions.

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