# The long and winding road to recession

## US Special

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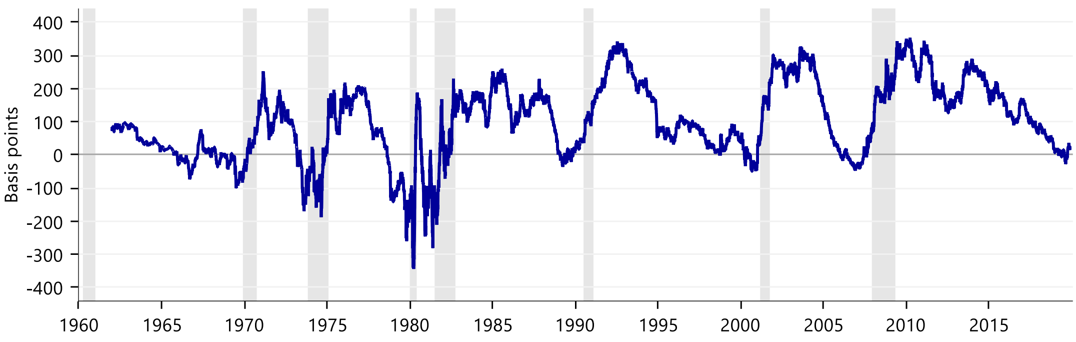
## Summary

- Our forecasting framework continues to point to a US recession next year. While the coincident and lagging indicators show that the economy is still going strong, the leading indicators suggest that the future looks less bright.
- The inversions of the yield curve earlier this year are early warning signals of a recession next year.
- We have shown that the 'this time is different' argument used by the Fed to dismiss the signals given by the yield curve is flawed.
- The recent un-inversion of the yield curve does not mean that the danger of a recession has faded. In fact, this also happened prior to the last three recessions.
- The first cracks in the economy are already visible, widening and could ultimately lead to a recession.
- The remaining slack in the economy also suggests that the economy is in the late phase of the cycle.
- We expect the US economy to be in a recession in the second half of 2020.

# Forecasting the future or the present?

The yield curve is upward sloping again, employment growth is strong, the unemployment rate is low, consumer spending remains solid, and a US-China trade deal seems within reach. So why worry about a recession? The first step in forecasting is to distinguish between leading, coincident and lagging indicators. The fact that employment growth is strong today does not tell us very much about GDP growth next year. Still we see coincident and lagging indicators used over and over again in statements by reporters and economists about the future state of the economy. In contrast, we focus on leading indicators to forecast the economy.

**Figure 1: Early warning signals from the yield curve**




Source: Macrobond

# Yield curve as early warning signal

Large macroeconometric models are not good at spotting turning points in the economy. In fact, typically exogenous shocks are absorbed by adjustments in interest rates and exchange rates and a new equilibrium is reached without the economy ever falling into recession. What's more, government institutions and banks are usually hesitant to predict a recession. They prefer to wait until it is obvious to everyone that a recession has been reached before 'decisively' downgrading their forecasts.

However, there is strong empirical evidence that an inversion of the US treasury yield curve is a reliable predictor of US recessions. Therefore, we use yield curve inversion as an early warning signal in our US forecasting framework. In fact, last summer we were alarmed when it was clear that the FOMC would not hesitate hiking the yield curve into inversion. We warned against this monetary policy mistake that could lead to a recession. Ironically, the Fed's bias that 'this time is different' made it possible for us to extend the usual forecasting lag between inversion and recession by several months based on this anticipated inversion. Consequently, we were able to give a warning in 2018 about a possible recession in 2020.

While we have to wait until next year to find out whether our recession forecast is right, the Fed has already made a U-turn in recent months. Last fall we concluded that the Fed was on a road to inversion and the Fed would end its hiking cycle after March 2019. As we are approaching the end of the year, the Fed has already made three insurance cuts this year. So from a perspective of forecasting the turning point in Fed policy, the yield curve has already proven to be a valuable forecasting tool.

While the Fed decided to be patient and keep the policy rates unchanged early this year, it was too late to stop the yield curve from inverting. If we take the 12m-10y spread as the key measure, the yield curve briefly inverted in March and May of this year, followed by a more sustained inversion from August through early October. Based on past lags between inversion and recession, this points to a recession starting in 2020.

# This time is different

However, the more sophisticated arguments against our recession forecast come from the 'this time is different' crowd. They recognize the yield curve as a relevant leading indicator, but each has his or her pet theory why this indicator does not work this time. Take former Fed Chairman Bernanke, who claimed in 2006 that 'this time is different' because the global savings glut had flattened the US treasury yield curve. Two years later the Great Recession started. Since last year, the most persistent 'this time is different' argument has been based on the Fed's asset purchases flattening the yield curve. This sounds familiar. What's more, earlier this year we showed the flaws in this argument. Most notably, it mixes up level and slope effects of asset purchases, and it ignores the dynamic nature of bonds. For a full explanation, we refer to Yield curve inversion: This time is not different.

# Yield curve un-inversion

After a sustained inversion starting in August this year, in the second week of October the yield curve un-inverted (i.e. became largely upward-sloping again). Unfortunately, that does not mean that the danger of a recession has faded. In fact, as we explained in Uninverted yield curve: Quiet before the storm, inverted yield curves are *early* warning signals that turned off again before the start of the last three recessions. In fact, partly it is the logical consequence of rate cuts by the Fed in response to increasing downside risks to the economy. It does not mean that the recession has been averted. So an uninverted yield curve is no cause for celebration, instead it is the quiet before the storm.

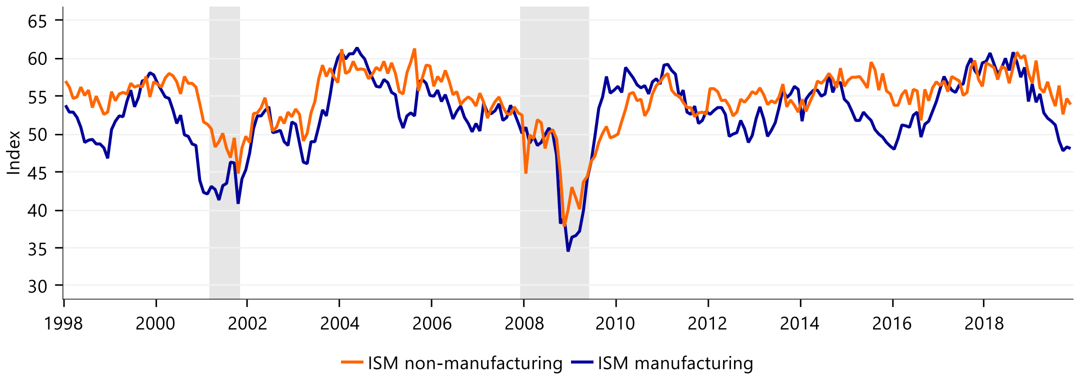
# Cracks in the economy

What's more, we use the yield curve as an *early* warning signal. In fact, no other economic indicator or macroeconometric model has such a strong forecasting record at horizons of longer than a year. However, once the early warning signal was given, we looked at the various segments of the economy to see if we could find the first cracks in the economy that could widen and ultimately lead to a recession.

In fact, the first crack had already been visible since early 2018. The Fed's more aggressive hiking path in 2017-2018 had caused its first casualty in the housing market, which is of course the most-interest rate sensitive sector. Residential investment fell in each quarter in 2018 and 2019H1. If the other components of GDP, such as consumption and business investment, had not been strong enough to offset the decline in residential investment, the US would already have fallen into recession last year.

The second crack opened in Q2 of 2019. Business investment started to decline as well. The slowdown in global growth and the uncertainty caused by trade policies were dragging down the US business sector. This also contributed to the Fed's change of mind from being 'patient' (before expecting to hike further) to opening the door to insurance cuts. Going forward, a 'phase one' US-China trade deal will not remove the fundamental uncertainty that business are facing with the two superpowers on a collision course. According to the ISM survey, the US manufacturing sector started to contract in August. Of course, it is often argued that the importance of manufacturing to the overall economy has diminished. Most jobs are in the services sector, so - the argument goes - we should not be worried about a manufacturing contraction anymore. Unfortunately, manufacturing is usually where the recession starts before it spreads to the wider economy. In fact, the PMIs clearly show that the services sector is already being dragged down by the manufacturing sector. This confirms our suspicion that forces leading to a recession have already been set in motion. Once the services sector slowdown forces firms in that sector to freeze or even slash personnel, a slowdown in employment growth will undermine the main pillar of US GDP, personal consumer spending. Once this happens, the recession has arrived.

**Figure 2: Weakness is spreading to the services sector**

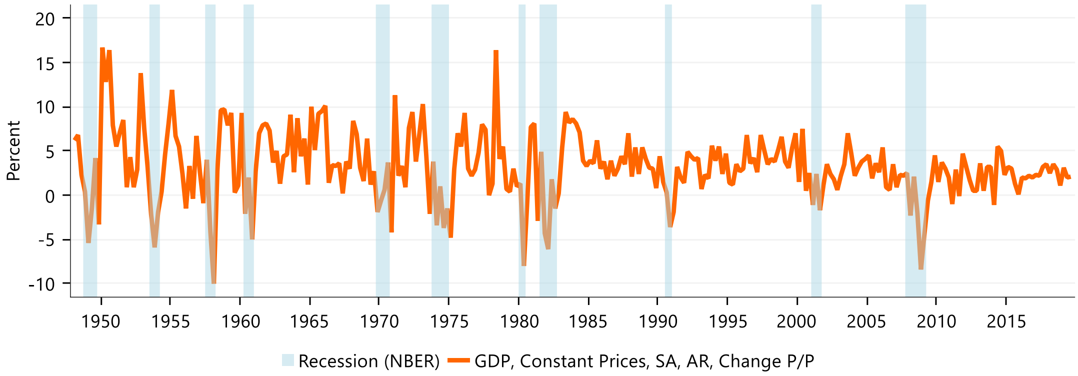



Source: Macrobond

# Late cycle

Besides cracks opening and widening, there is also evidence that we are late in the cycle anyway. So even without cracks, the end of the current expansion is in sight. First of all, note that we are now – as of July 2019 – in the longest economic expansion on record (figure 3). Of course, in itself this does not prove that a recession is near. Recessions don't die of old age. In fact, the Fed has repeatedly said that the three insurance cuts made this year are *mid-cycle* adjustments to monetary policy. If we take this literally, this means that we may be looking ahead for 10 more years of economic expansion.

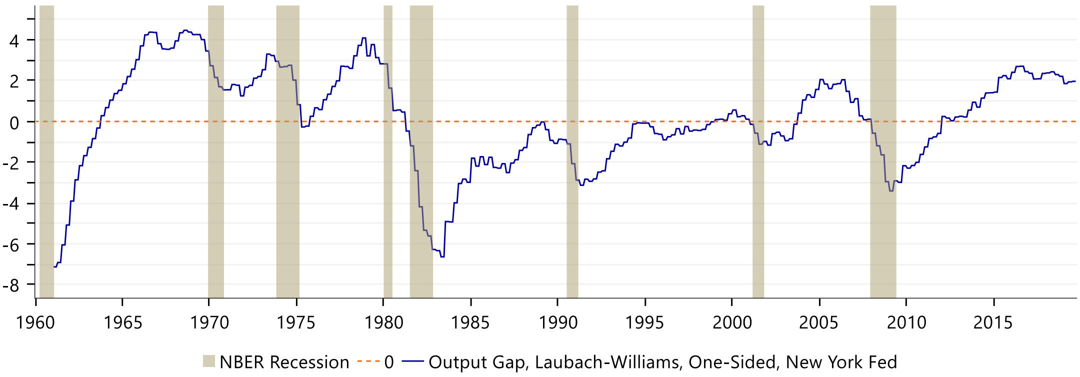
**Figure 3: The longest expansion on record**




Source: Macrobond

However, various labor market indicators suggest that the slack in the economy has fallen to very low levels. In fact, a more general measure of slack in the economy, the output gap, confirms that we are late in the cycle. This is confirmed by various estimates of the output gap, but also by anecdotal evidence that skilled labor is getting more scarce and the quality of the long-term unemployed returning to the labor market is declining. In the housing market, even land to build on is becoming scarce. Note that historically, the output gap tends to peak before the next recession (figure 4).

**Figure 4: Output gap has peaked**




Source: Macrobond

Note that by looking at the remaining amount of slack in the economy, we came to the same conclusion as by looking at the yield curve or the cracks in the economy. Therefore, we may conclude that there is broad evidence that a recession is likely. Of course, economics is not an exact science, so there is always the probability that our recession forecast is wrong. However, our forecast is based on empirical evidence, not on unproven theories, institutional inhibitions, herd behavior or lack of courage.

# Conclusion

The un-inversion of the yield curve, strong employment growth, solid growth in consumer spending, the low unemployment rate and a possible US-China trade deal do not change our forecast that the US economy is heading for a recession next year. The arguments put forward to dispel our forecast of a recession reveal the absence of a coherent forecasting framework. The first step in forecasting is to distinguish between leading, coincident and lagging indicators. While the coincident and lagging indicators show that the economy is still going strong, the leading indicators suggest that the future looks less bright. Our forecasting framework points to a recession in the second half of 2020. This will also force the Fed to slash rates back to zero before the end of 2020. More on that in our next US special.

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