# The recession of 2020

## US Special

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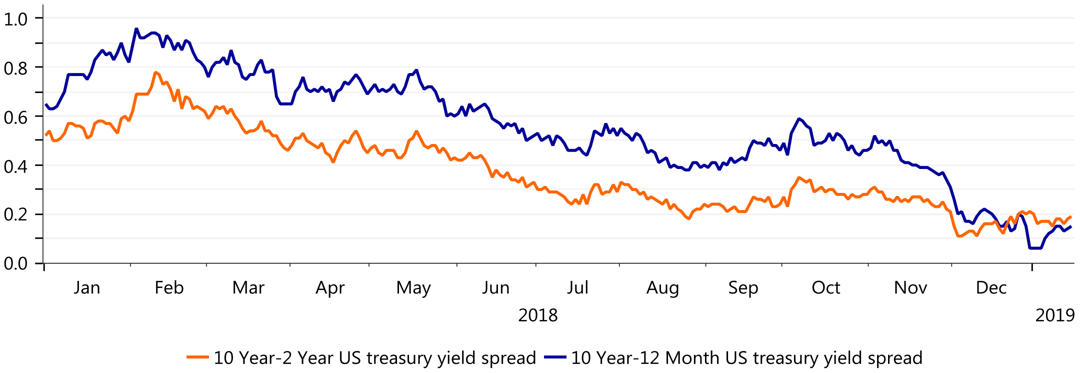
## Summary

- While the 2-10 year US treasury yield spread has moved sideways in recent weeks, the recent plunge in the 12m-10y spread has activated our early warning system and now gives a 69% chance of a recession by May 2020. So the US treasury yield curve is increasingly pointing at 2020 as the year of the next recession.
- The first cracks in the housing market confirm our suspicion that monetary policy error is the cause of the next recession as the higher level of interest rates has started to slow down aggregate demand. In fact, it seems that this sequence of events leading to a recession has started before a full inversion of the US treasury yield curve. Even if the Fed were to abandon its hiking cycle immediately, the damage may already have been done.


# Introduction

Last month we sent out our special report The next US recession as the US treasury yield curve was flattening and some parts of the curve had already inverted. Our recession model based on an adjusted 12m-10y spread indicated a 47% probability of a recession at the 17 month horizon. We also identified monetary policy error as the prime suspect. In Visualizing a recession we described what the next US recession might look like. In this special report, we give an update of our recession forecasting model. But we also take a closer look at the real economy to see if we can find the first signs of a sequence of events that could lead to a recession. In particular, the housing market has started to show signs that usually precede recessions, confirming our view that the Fed's hiking path has been too aggressive and may cause a recession.

**Figure 1: 12m-10y spread takes a plunge**

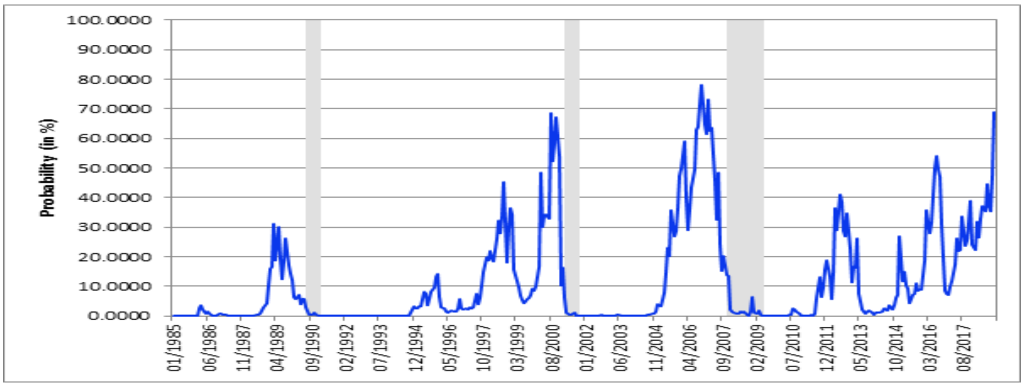



Source: Macrobond

# An early warning signal from the yield curve

While the 2-10 year spread has moved sideways in recent weeks, the 12m-10y spread took a plunge at the turn of the year. Consequently, our recession forecasting model[1] – which is based on an adjusted 12m-10y spread – has jumped to a 69% probability of a US recession by May 2020. Our early warning system exceeds the 50% probability before a full inversion of the 12m-10y spread takes place. This is because we have built in a correction for the low levels of policy rates, which make an inversion more difficult than before. After all, at present the fed funds rate is still lower than were it ended after the Fed stopped cutting in previous episodes of monetary easing. The exception is of course the last episode, the response to the Great Recession, but now that we appear close to the end of the hiking cycle, we are still about halfway where we were in the previous hiking cycle.

**Figure 2: Probability of recession at 17 month horizon (based on adjusted 12m-10y spread)**




Source: Rabobank

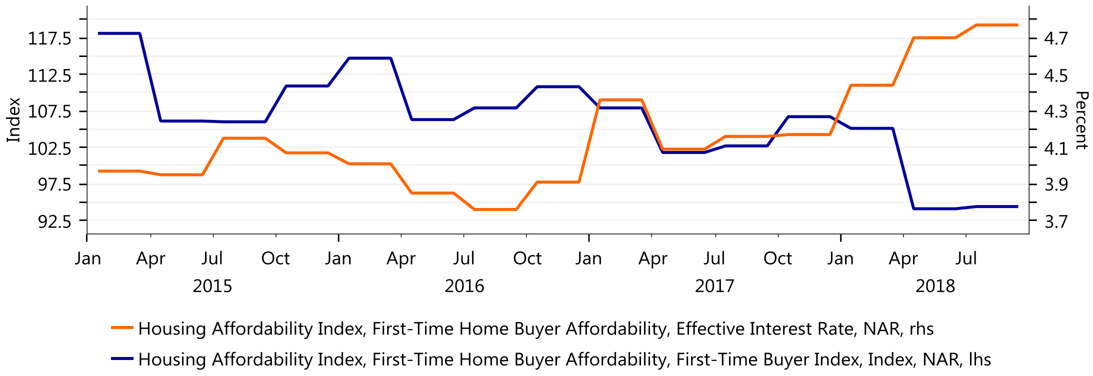
However, our early warning system has not been tested in real-time before. Therefore, we have linked our timing of the next recession to a time-tested signal, a full inversion of the 2-10 spread. But that appears to be approaching fast as well. Since the FOMC thinks that inverting the yield curve does not cause a recession because 'this time is different', we expect the 2-10 segment of the yield curve to invert in 2019Q2 (after a final hike in March), which would signal a recession in 2020Q4-2021Q1. However, our early warning system based on an adjusted 12m-10y spread suggests that recession risks are increasingly located in 2020. In fact, if we run the model *without* adjustment, it already generates a 44% probability of a recession in May 2020.

# First cracks in the housing market

At the moment, we assume that the US will be hit by a run-of-the-mill recession, caused by a monetary policy error. Not only is the yield curve giving warning signals, the housing market is already being affected by the rise in mortgage rates caused by the Fed's hikes. In combination with rising house prices, this has undermined housing affordability, slowing down demand for homes. The slowdown in demand for homes also reduce the incentives for homebuilding activity. What's more, higher interest rates also make it more costly for home builders to finance their activities. In addition, real estate has become less attractive to investors because yields on bonds have risen. Through these channels, monetary policy tightening is slowing down residential investment. Finally, shortages of labor and land are also hampering building activity.

[1] Our model was estimated at a monthly frequency and is updated at the end of the month. For more details, we refer to Is the next US recession visible in the yield curve?

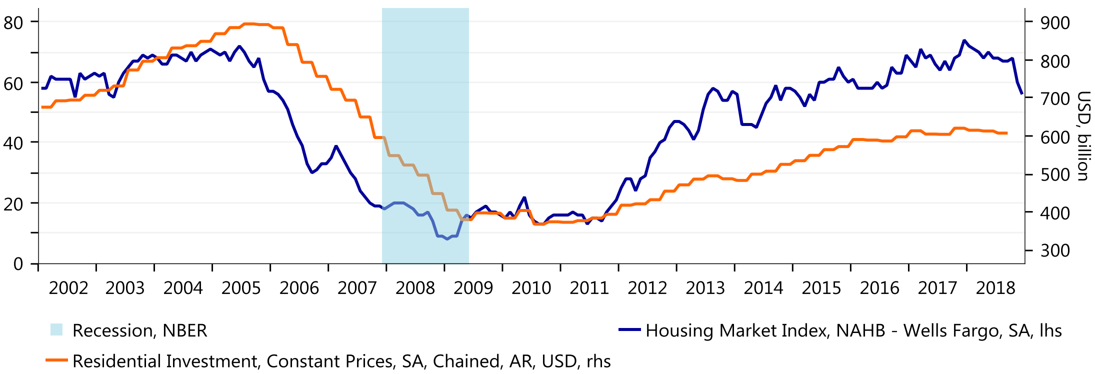
**Figure 3: Rising interest rates are reducing housing affordability**




Source: Macrobond

No wonder that home builder confidence has plunged and residential investment has started to fall. Note that residential investment growth was negative in each of the first three quarters of 2018 (Q4 to be released on January 30) and reduced GDP growth by about 0.1 ppt in each quarter. While these overall effects are still small, US recessions have often been preceded by declines in residential investment. It does show that the Fed's tightening of monetary policy has started to affect aggregate demand. Our expectation is that the higher level of interest rates will also start to slow down business investment and personal consumption expenditure during the course of 2019 and 2020. The combined effects may be enough to push the economy into a recession before the end of 2020. In fact, it seems that this sequence of events leading to a recession has started before a full inversion of the US treasury yield curve. Even if the Fed were to abandon its hiking cycle immediately, the damage may already have been done.

**Figure 4: First cracks in the housing market**




Source: Macrobond

# Conclusion

The US treasury yield curve is increasingly emitting warning signals of a recession. In particular, the recent plunge in the 12m-10y spread has activated our early warning system and now gives a 69% chance of a recession by May 2020. While our model has not been tested before in real-time - because policy rates were never this low toward the end of a hiking cycle -, we are rapidly approaching the critical levels for time-tested recession signals, in particular full inversions of the 12m-10y spread and the 2y-10y spread. More importantly, developments in the housing market have started to follow patterns that preceded US recessions before and are consistent with our suspicion that monetary policy is the prime suspect as the cause of the next recession. In fact, the sequence leading to recession may already have been set in motion, before a full inversion of the yield curve, and even if the Fed were to terminate its hiking cycle immediately. In terms of timing, due to the pace of spread tightening the US treasury yield curve is increasingly pointing at 2020 as the year of the next recession.

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