



# Is There Going to Be a Eurozone Recession in 2020?

The traditional leading indicators are saying different things.

February 2020

## KEY INSIGHTS

- Two leading eurozone recession indicators—the German bund yield curve and M1 money growth—are currently giving very different signals.
- Our analysis suggests that neither may be particularly reliable this time because central bank quantitative easing (QE) has weakened the predictive power of both.
- Consumer and business surveys continue to be reliable predictors of recession in the age of QE—and these suggest the risk of a recession in 2020 is low.



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The inversion of the German bund yield curve in the third quarter of last year raised concerns that the eurozone may be heading for a recession (like a U.S. Treasury yield curve inversion, an inverted bund yield curve is regarded as a harbinger of recession). However, eurozone M1 (currency supply in circulation) growth, which is also seen as a reliable indicator of recession, is currently signaling a return to expansion. Which of these two measures should we trust?

German bund yield curve inversions have preceded recessions in Europe since before the euro was formally adopted in 1999 (see Figure 1). There are three probable reasons for this: First, past recessions in Germany have tended to spill over into other economies in mainland Europe; second, German yield curve inversions have reflected macroeconomic shocks in common with all large economies in Europe; and third, prior to the euro, the German

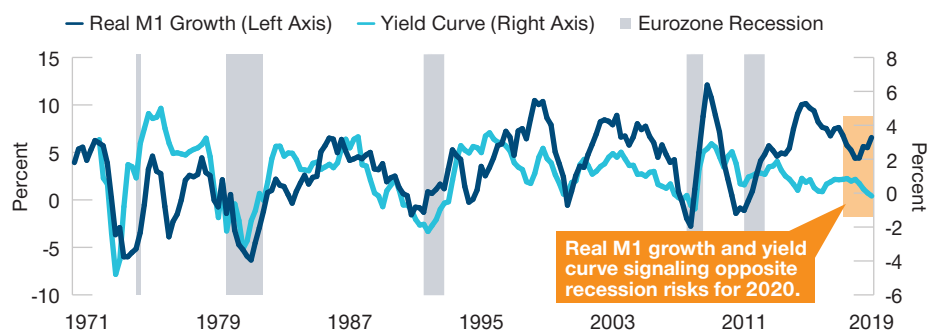
deutsche mark was the anchor currency of the European Monetary System of exchange rates, which meant that German yield curve inversions following monetary tightening always likely led to a slowdown/recession in other countries as well.

Following the adoption of the euro in 1999, inversion in the bund market continued to be a reliable predictor of recessions in the eurozone. This is likely because Germany has one of the highest degrees of financial development in the eurozone and its lack of sovereign risk—unlike, say, Spain and Italy—means that bund yields are more reflective of European Central Bank (ECB) policy rate expectations than term premia. However, during this period, the yield curve inversion also appears to have once sent a false signal: In the first quarter of 2001, the yield curve inverted but no eurozone-wide recession followed. There was a recession in Germany and then France, but Italy,

## (Fig. 1) Divergent Signals for Eurozone Recession

The yield curve and M1 growth suggest different outcomes.

As of December 31, 2019



Sources: Centre for Economic Policy Research and ECB Statistical Data Warehouse.

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Spain, and other European countries remained recession-free as they were experiencing very rapid credit growth as a direct result of the creation of the euro. It is, however, unlikely that these mitigating conditions will be repeated, and inversions in the German yield curve have once again reliably indicated future eurozone recessions.

Real M1 growth has also been a very reliable predictor of eurozone recessions. A large fall in real M1 growth has preceded every eurozone recession, while rebounds typically hail a recovery. As with the inverted yield curve, there is no consensus among economists about the precise mechanism underlying the predictive power of real M1 growth. However, it is broadly accepted that large swings in real narrow money (M1) aggregates affect asset prices, leading to large wealth effects, which, in turn, influence aggregate demand and help to predict turning points in the cycle.

Until recently, real M1 growth and the bund yield curve typically provided the same signal ahead of a recession. However, the most recent real M1 growth rates have been strong by historical standards. This means that, for the first time, the yield curve has inverted (signaling eurozone recession) at the same time that M1 money supply has continued to grow robustly

(signaling a return to expansion). Determining which of these signals is correct is a key question for eurozone bond investors in 2020.

### Are Macrofinancial Indicators Reliable in the Age of QE?

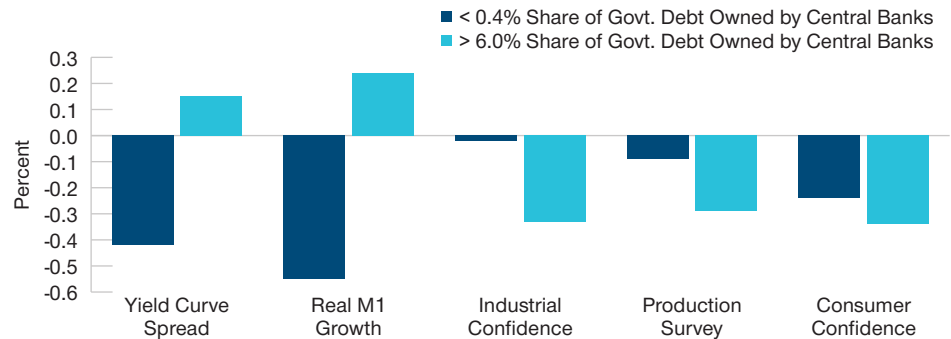
In truth, however, it is possible that neither the yield curve nor M1 growth are particularly reliable indicators of the likelihood of a recession on this occasion because central bank QE has weakened the predictive power of both. The yield curve consists of a term premium and an interest rate expectation component. When bond markets are convinced that a period of long monetary easing lies ahead, the interest rate expectation component will push the long-term rate below the short-term rate, leading to a yield curve inversion ahead of recession. However, by purchasing government debt, central banks have relied on compressing the spread between the long-term and short-term government bond yields. This explicit intervention in the bond market means that it probably takes less negative news to invert the curve than in the past, limiting the efficacy of a yield curve inversion as a predictor of recession.

Similarly, a large component of M1 is the central bank's balance sheet. Any large central bank balance sheet expansion, whether due to QE or long-term

## (Fig. 2) Central Bank Debt Ownership Distorts Data

Yield curve and M1 growth signals are scrambled.

Analysis as of December 31, 2019



Shows correlation of indicators with recessions two quarters later using data for G7 economies from 1986–2011.

Sources: ECRI, OECD Main Economic Indicators. Data analysis by T. Rowe Price.

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refinancing operation, can, therefore, distort the recession signal sent by M1, especially if it is spread over many months as in the case of the ECB’s QE.

Our internal research backs up these concerns. We collected data on the share of government debt on central bank balance sheets for the G7 economies from 1986–2011, then analyzed the strengths of the poly-serial correlation between these indicators and recessions two quarters ahead. The results from this exercise, illustrated in Figure 2, show that the yield curve spread and real M1 growth predict recession well when the share of government debt on the central

bank balance sheet is less than 0.4% (they are negatively correlated, so a positive yield curve spread or strong real M1 growth implies a low recession risk). However, if the share of government debt on central bank balance sheets is greater than 6%, then these variables have the wrong sign (positive correlation)—and have therefore lost their predictive power.

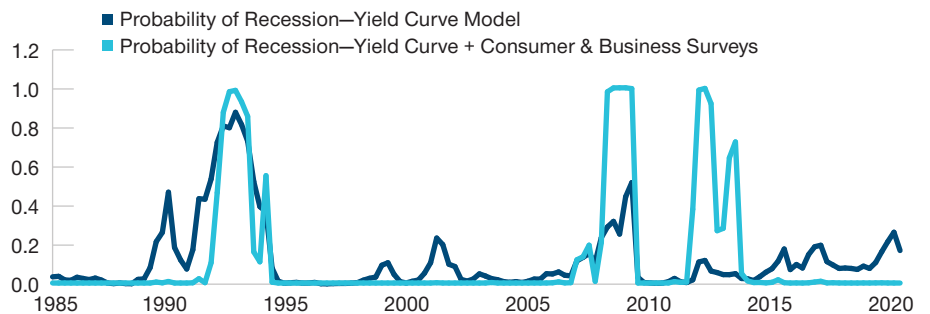
### Which Variables Remain Reliable Indicators of Recession?

If yield curve inversion and real M1 growth are less reliable indicators of a recession in the age of QE, what other signals can investors turn to?

## (Fig. 3) Surveys Provide Fuller Picture

Our model predicts a very low chance of recession.

As of December 31, 2019



Actual outcomes may vary significantly.

Sources: CEPR, OECD Main Economic Indicators. Data analysis by T. Rowe Price.

“...consumer confidence and business surveys continue to be correlated with recession risks even when the central bank owns more than 6% of government debt.

Our analysis suggests that consumer confidence and business surveys continue to be correlated with recession risks even when the central bank owns more than 6% of government debt. We include these variables into a standard predictive model of recession based on the bund yield curve (see Figure 3). These additional variables clearly improve the predictive power of the model for past recessions, raising the probability of recessions before they actually occur and lowering false signals. For 2020, this model indicates that the probability of recession is just

above zero—much lower than the 27% implied by the yield curve model alone.

Among the surveys, the most reliable statistical predictor of recession two quarters ahead is consumer confidence. While the age of QE persists, investors may find it useful to consider consumer confidence surveys in addition to the bund yield curve and real M1 growth when assessing eurozone recession risks. At present, consumer confidence surveys are predicting there will not be a eurozone recession this year.

#### **WHAT WE'RE WATCHING NEXT**

To assess recession risks in times of QE, we are now watching both business and consumer surveys. While business surveys such as PMIs have only begun to improve, consumer confidence surveys remain at strong levels. We will continue watching these surveys to assess imminent recession risks.

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