

What does economy's crystal ball tell us?

The yield curve is a graph of the interest rates for loans of various lengths. Consider people intent on borrowing money for ten years. If these people were certain that every one-month loan

Joe McGarrity

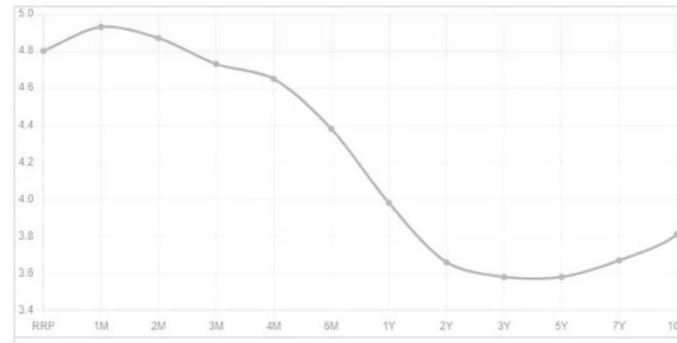


for the next ten years would always have an annualized interest rate of 4 percent, then people would be indifferent between taking out a series of one-month loans for ten years; taking out ten one-year loans; taking out

two five-year loans; or taking out one ten-year loan. This information can be used to draw a yield curve. To draw any yield curve, one would construct a graph with loans of varying lengths listed on the x-axis and with the interest rates measured on the y-axis. In the case described above, the yield curve would be flat – every loan, regardless of length, would pay a 4 percent interest.

The yield curve will slope upwards if people expect the one-month interest rate to increase in the future. For instance, if the current one-month interest rate is 4 percent and people expect the interest rate to steadily rise over the next ten years, lenders will insist on charging more than a 4 percent interest rate on a three-year loan since if they did not, they would be better off waiting for the interest rate to increase. These lenders would insist on charging an even higher interest rate on a six-year loan and a still higher interest rate on a ten-year loan.

The yield curve will slope downward if people expect the one-month interest rate to decrease in the future. For example, if the one-month interest rate is 4 percent today and people expect it to go steadily downward, borrowers won't agree to pay 4 percent for loans that extend three, five or ten years. These people will believe that they can borrow money at lower rates in the future, so they will agree to pay less than 4 percent for longer term loans. Indeed, when they expect the interest rate on one-month loans to steadily decrease, borrowers will agree to pay lower



The accompanying graph shows the yield curve, as I saw it early this week. It charts the interest rates paid by the U.S. Treasury for bonds of different maturities (graph from USTreasuryyieldcurve.com).

interest rates as the term of the loan gets longer.

The accompanying graph shows the yield curve, as I saw it early this week. It charts the interest rates paid by the U.S. Treasury for bonds of different maturities (graph from USTreasuryyieldcurve.com). You will notice that it slopes downward – a telltale sign that people expect the interest rate to drop in the future. But why do they think the interest rate will drop? There are two plausible stories. One is good news, and the other is bad news.

The good news story is that people might think the inflation rate will continue to decrease. Generally, the interest rate we pay is what economists call the nominal rate of interest. The nominal interest rate is the sum of the real interest rate and the expected inflation rate. The real interest rate is the interest rate borrowers insist on receiving when they expect the inflation rate to be zero. However, people usually expect the inflation rate to be positive. When the inflation rate is positive, lenders get paid back with dollars that are worth less than the dollars they lent out. Inflation is, after all, the erosion of the purchasing power of money. To make up for this loss in purchasing power, lenders charge an interest rate equal to the real interest rate and the expected inflation rate. This gives them a return equal to the real interest rate after they have been compensated for the damage done by inflation.

Inflation reduces the value of wealth, so those of us with wealth (which is many of us) benefit when the inflation rate decreases. Therefore if the inflation rate does

actually decrease in the future, it will be good news for those with wealth.

The bad news story is that the downward-sloping yield curve may be caused by fears of an upcoming recession. During a recession, people buy fewer goods and services. In response, firms cut back on their production. As a result, firms will no longer need to borrow money to expand their production capacities. With fewer firms competing to borrow money, those that lend money will not be able to charge high interest rates. Borrowers just won't be willing to pay those high rates because other lenders, eager to lend out their money, will offer the borrowers lower interest rates. This scenario is bad news since during a recession, people earn less money and more people than normal are unemployed. We are all rooting against this scenario.

The yield curve gives us insight into what the players in financial markets believe will happen to interest rates going forward. However, on its own, the current downward sloping yield curve might be predicting lower interest rates for reasons that will make many of us happy or for reasons that may make many of us sad. Whether the yield curve's prediction about future interest rates turns out to be true will be something worth watching. If the prediction is true, it will be interesting to see what actually materializes – a lower inflation rate or a recessionary economy. Only time will tell.

Joe McGarrity is a Professor of Economics at UCA and can be reached at joem@uca.edu.