Don't Sweat the Inverted Yield Curve: No One Really Knows What It Means

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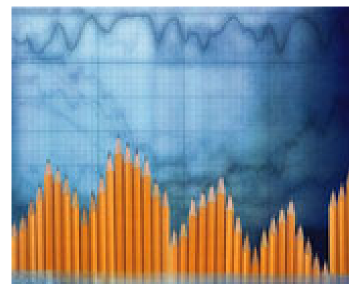

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Consider the inverted yield curve as the equivalent of an economic bogeyman. It's when the natural order up-ends and short-term interest rates are higher than long-term ones.

The Treasury bond yield curve inverted December 27 for the first time in five years. That gave shudders to those who see the phenomenon as a harbinger of recession. And yet, the U.S. economy is strong, and surveys show most forecasters think it will stay that way. So what does the inverted yield curve really mean?

"I think it sometimes portends a recession, sometimes not," says Marshall E. Blume, finance and management professor at Wharton. This time, it probably does not, he adds. "All the forecasts are quite favorable. There aren't any real excesses in the economy at the current time, and you usually think of recession as a tonic to the economy, to undo excess."

Business inventories are not excessively high, Blume notes. Recent government data has shown inflation picking up, which can lead to recession. But most of that is due to the oil-price jump last year, and oil has leveled off and doesn't appear likely to rise further. Also, the economy is less dependent on oil than it was during the recession-bound '70s, so oil-price increases are less likely to infect the broader economy, Blume says.

In fact, it's a bit of a stretch to describe today's yield curve as inverted, suggests Wharton finance professor Robert F. Stambaugh. "I certainly wouldn't describe it as a *sharply* inverted yield curve. It's 'flatish' and downward-sloping in some segments."

The yield curve is a graph with a line tracing short-term yields on the left and longer term yields as it moves to the right. Typically, rates for one- and three-month Treasury bills on the left are several percentage points lower than those of 10-, 20- and 30-year Treasury bonds on the right, as investors demand higher yields for tying their money up longer. A year ago, the three-month yield was just over 2% and the 30-year just under 5%.

The curve is inverted when short-term yields are higher than long-term ones. At this time last year, the two-year Treasury yielded just over 3% and the 10-year about 4.3%. By late December, the two-year had moved up to 4.347%, just edging out the 10-year at 4.343%.

Not only was this inversion very slight, it was confined to just part of the curve, Stambaugh says. Three-month yields continued to be lower than 10, 20 and 30-year yields, though the difference was far less pronounced than a year earlier. "People were comparing the two-year to the 10-year, but that's sort of the worst case."

The curve has flattened -- and inverted in this segment -- because short-term yields have risen significantly while long-term ones have stayed about the same.

At the short end, the cause is clear: The Federal Reserve has raised short-term rates 13 times since June 2004, lifting the Fed Funds rate from 1% to 4.25%. By raising rates, the Fed hopes to make it more expensive for individuals and companies to borrow money, causing a slow-down in spending. That translates into a decline in demand that should discourage prices from rising, averting inflation.

Typically, a rise in short-term yields is followed by a less pronounced rise in long-term yields. But the Fed has no direct control over long-term yields, which are governed by supply and demand as bonds are traded in the secondary market.

Greenspan's "Conundrum"

The key question today: Why have long-term rates so stubbornly stayed low despite the Fed action? Even Fed chairman Alan Greenspan, often seen as the guru of interest rates, has described this as a "conundrum."

While various factors affect long-term rates, economists generally see them as an average of current short-term rates and the short-term rates traders expect in the future, says Nicholas S. Souleles, finance professor at Wharton. Current yields are known, but long-term yields can only be guessed at. They largely depend on what the Fed will do with short-term rates in the future, and that is governed not just by evolving Fed philosophy but by the unpredictable factors it will evaluate years down the road.

Simple arithmetic says that if the Fed lifts short-term yields, long-term ones will follow -- but not by as much, since current short-term yields are only part of what governs long-term yields, Souleles says. "We always see this: When the Fed raises short-term rates, long-term rates don't go up as much." Typically, long-term rates rise about two-fifths as much as short-term rates do.

But today, "long-term rates have not gone up as much as they would typically," he says, adding that economists have focused on three general reasons for this. First, bond traders may be anticipating low inflation in the future, which would allow the Fed to keep interest rates low, or to make them even lower. Some economists and traders believe that globalization will rein inflation in, as more products and services are produced by low-cost economies.

Also, he adds, the bond market may be anticipating an economic slowdown or recession as well as a Fed rate cut to make more money available to stimulate the economy.

Second, long-term rates may be staying low because high demand for Treasuries and other U.S. debt securities keeps bond prices high, which keeps yields low. Bonds represent loans from bond buyers to bond issuers. When demand is high, issuers like the government can attract lots of buyers despite offering low yields.

Various factors affect demand for Treasuries, including their perfect safety record. But demand has been increasing, Souleles says, because China, Japan and some other countries are selling more products to the U.S. than they are buying, leaving them with a cash surplus they are stashing in safe Treasuries. "The Chinese have more income than they are spending. They are saving those funds and some of the saving is going abroad."

The third reason for low long-term yields involves traders' demand for a "risk premium," according to Souleles. Typically, they demand higher yields to offset risks related to tying money up in long-term bonds. For example, if interest rates rise in the future, bonds issued at that time will be more generous than ones issued today, so there will be less demand for the older bonds and their prices will fall. Similarly, higher inflation in the future could chew away a good part of a bond's interest earnings.

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These risks are not as pronounced for short-term bonds, since they will soon automatically convert to cash that can be reinvested in whatever way seems most suitable for the changing conditions. So there is little risk premium on short-term bonds.

When long-term rates are virtually the same as short-term ones, it could mean that traders don't believe it likely that interest rates and inflation will move higher, Souleles says. Hence, they do not demand as high a risk premium as they did in the past.

Early in January, the Fed released minutes of its December meeting, indicating that its rate-raising cycle may soon come to an end. If short-term rates will not be rising in the future, that would help keep long-term rates low.

Though most economists agree about the three groups of factors that influence long-term rates, it is virtually impossible to determine how much influence each has at any one time, notes Souleles. The world's bond markets are too big and far-flung, and different traders weigh the key factors differently.

Upward Pressure on Energy Prices

Given all the factors that can be affecting today's yield curve, a looming recession can hardly be considered a certainty. But that cannot be entirely ruled out, either, notes Francis X. Diebold, professor of economics, finance and statistics at Wharton.

In fact, most recessions have been preceded by inverted yield curves, as traders anticipate a Fed rate reduction to stimulate the economy, he points out. "I'm not going around saying there's a recession coming." But he notes that the future is not necessarily rosy, either. "The bond market doesn't seem to be as worried about inflation as I am," he adds, arguing that growing demand for oil by China, India and other countries will continue to put upward pressure on energy prices, contributing to broader inflation.

Interest rates are also likely to rise as the U.S. deals with the huge federal budget deficit, according to Diebold. There are only three ways to address that problem -- raising taxes, borrowing or printing money. The Bush administration has ruled out higher taxes, and the other two remedies both tend to drive interest rates up.

Hence, he predicts inflation will run 3.5 to 4% over the next decade, a half to 1 percentage point above the long-term average. Investors in 10-year Treasuries will demand a real return of about 1.5 points above inflation, and they will want a 1-point risk premium. That would take the 10-year Treasury to 6 or 6.5%, well above today's 4.3%.

And that would be the end of today's partially inverted yield curve. "Markets are fickle," Diebold says. "So I can't say this with any certainty, but I wouldn't be surprised to see the yield curve steepening, with the long bond going up."

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