Does Anything Affect TIPS Breakevens?

Many trading rooms around the world operate on a form of "publish or perish" at the end of the day. You have seen it; regardless of what happened that day, there is always someone who has an explanation of why it happened. Most of the time, more than most of us care to admit, events actually are random, relationships rise and fall in their relative importance to one another and, in the most startling form of alternative reality, really powerful moves often materialize out of seeming nothingness and defy explanation until days, weeks or even months later. How many times have you observed a market rising on bearish news or falling on bullish news and saying to yourself that defines what a bull or a bear market, respectively, is?

A Macro Concept

Let's take expected inflation as measured by the ten-year Treasury Inflation-Protected Securities (TIPS) breakeven rate; this is the spread between conventional and inflation-protected Treasury bonds. We have seen in the past how this spread is distorted by all manner of factors, including the flight-to-quality during market crashes (see "TIPS, Treasuries and Insurance," May 2008) and the risk to accrued principal in short-dated TIPS when negative changes in the Consumer Price index loom (see "Trading Inflation Impossible In A Deflationary World," August 2009). Still, like the gambler who sits down at a crooked poker table because it is the only game in town, TIPS remain the best measure of expected inflation by default, no pun intended.

When the time comes to explain the day's doings, a discourse on stochastic measures of inflation, implied crash insurance premia, embedded options on negative CPI readings, the presence of a few large orders from TIPS-linked mutual funds and the like will prove unacceptable if offered a second time to the same inquirer; these minds really do not want to know. You need a simple answer, such as gasoline prices. It is a crying shame such a simple answer has worked correctly only once, during the financial crisis of 2008, since TIPS were introduced in January 1997.

Please notice how we used gasoline and not crude oil; consumers do not buy crude oil unless they have a backyard refinery, but it takes no particular skill set to buy gasoline. It, and not crude oil, is in the CPI. The r^2 , or percentage of variance explained, in the TIPS breakeven after their May 2004 peak by gasoline is 0.075; this leaves 92.5 percent of the variance unexplained. Moreover, after the financial crisis ended in early 2009, TIPS breakevens rose further and faster than gasoline prices did; one thus should be willing to argue the absurdity higher TIPS breakevens lead to higher gasoline prices. Right. Those who seek to explain TIPS breakevens with gasoline prices are missing some of the finer things in life, such as a grip on reality.



TIPS' Breakeven Rose Faster Than Gasoline Prices After Crisis' Low

Well, what about gold, that allegedly eternal measure of constant value? No; here, too, gold has done an outstanding job of ignoring TIPS breakevens and vice-versa. The two dominant features of the TIPS chart after 1998 have been the huge drop and rebound associated with the 2008 financial crisis and its constancy otherwise. The dominant feature of the gold chart after 2001 has been an accelerating bull market. Those who seek to explain gold lagged two months and TIPS breakevens in terms of each other explain 15.40 percent of the variance. Nice work.



Financial Variables

If inflation is always and everywhere a monetary phenomenon (see "Inflation's Macro Myths" and "Financial Markets and Inflation," April & May 2010, respectively) we should be able to see inflation expectations in various market spreads and yield curve shapes.

Two variables found by the author to show promise through 2005 have been the forward rate ratio (FRR) of the LIBOR yield curve between three and six months and the ten-year swap spread. The FRR_{3,6} is the rate at which we can lock in borrowing in the LIBOR market for three months starting three months from now, divided by the sixmonth rate itself; the more this FRR_{3,6} exceeds 1.00, the steeper the money market yield curve is and, presumably, the looser the monetary policies are. As the Federal Reserve has adopted a policy to create higher inflationary expectations via money-printing, a strategy that would baffle a modern Rip van Winkle who fell asleep in 1980, they clearly believe in this mechanism.



TIPS' Breakeven Reconnecting To LIBOR Curve

Interestingly, the spread fell apart as an indicator in 2006-2008, only to reassert itself during the 2008 crisis through early 2010. The latter linkage may simply be spurious correlation; the rebound in TIPS breakevens was driven by the same manic monetary policies as steepened the FRR_{3,6}. However, over the entire period, the r^2 is near zero; the FRR_{3,6} alone is an insufficient explanatory variable.

Finally, let's take a look at the ten-year swap spread. This is the amount a borrower who is paying a floating-rate, such as LIBOR, is willing to pay to fix the loan payment. Declining swap spreads signal a greater willingness by floating-rate borrowers to remain in that position, which is equivalent to saying they do not fear rising rates sufficiently to lock in a fixed-rate of payment now.

As the ten-year swap rate itself is the present value of the LIBOR curve, the very mechanics of the calculation drive swap rates lower when the yield curve is steeper. No yield curve on record was steeper than that following the 2008 financial crisis and the Federal Reserve's campaigns of quantitative easing, and this served to drive swap rates down vis-à-vis Treasury rates to the extend the spread actually turned negative by the end of March 2010.



Over time, swap spreads have led the TIPS breakeven rate of inflation by 12 months; this is a tribute to the ability of an ever-steeper yield curve to raise inflationary expectations. Rising swap spreads, such as those seen during the late 1990s technology bubble and again during the 2005-2007 bull market, normally coincide with more restrictive monetary policies and lead to lower TIPS breakevens. The aggressively defiant Bernanke Federal Reserve of 2009-2010 is the first in history to maintain near-zero interest rates during an inflating asset bubble; this is almost certain to raise future realized inflation.

There we have it: The "soundbite" answers of gold prices or gasoline prices are almost completely worthless. A yield curve indicator such as the FRR_{3,6} is worthwhile on occasion but is woefully incomplete. A more complete answer, such as swap spreads, has more merit, but is difficult to explain to those outside of the business. All of this combines to tell us the answer to the question, "Does Anything Affect TIPS breakevens?" will be outside of common knowledge for a very long time to come. As politicians and unscrupulous purveyors of financial information both prey upon public misunderstandings, this creates a dangerous mix for whenever the inevitable upsurge in inflation will occur. Finally, Ben Bernanke's assertion he is "100 percent confident" in the Federal Reserve's ability to end this inevitable inflation given the difficulties in modeling historic inflation expectations should be given all of the credence it deserves, which is none at all.