

What Affects TIPS?

Man does not live by bread alone, which considering what the price of wheat has been doing (cash spring wheat at Duluth is up 236% from a year ago) is no doubt a good thing. And given the propensity of government statisticians to exclude food and energy prices from various inflation measures, I guess we all can ignore higher grocery bills in the months to come.

Russian civilians trapped in Leningrad during the horrific World War II siege resorted to making ersatz bread from materials such as sawdust. I look forward to *The Core Inflation Cookbook*, by Ben Bernanke as told to Rachel Ray.

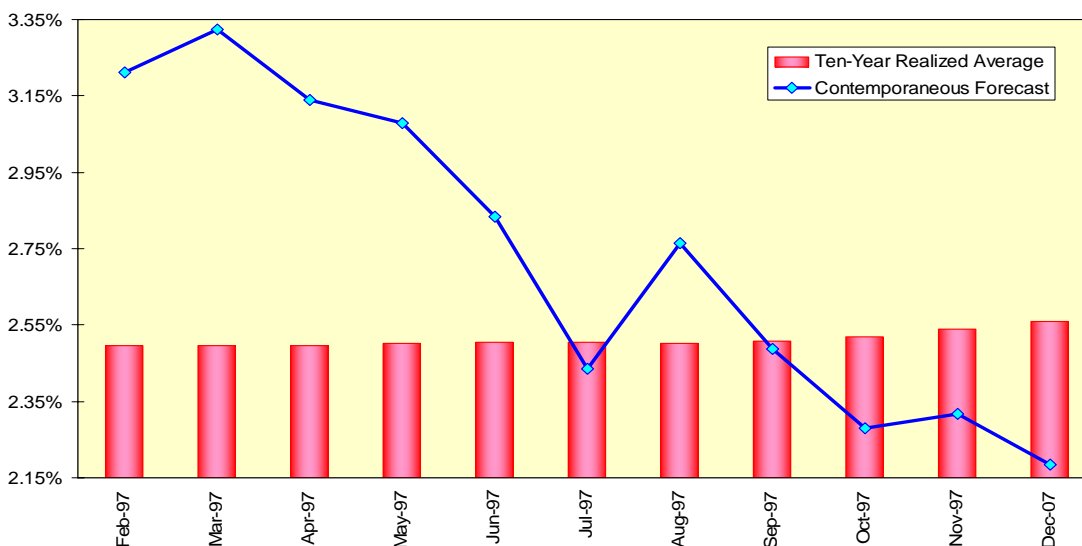
Treasury Inflation-Protected Securities (TIPS) are based not on any bogus core inflation measures, but rather on the All-Urban Consumer Price Index, not seasonally adjusted (CPI-U). Both food and energy are included, as are difficult-to-understand measures such as owners' equivalent rent and hedonically adjusted prices for various consumer goods.

TIPS' Forecasting Record

As I discussed in [September 2007](#), TIPS are anything but a pure measure of inflation expectations. The yields on conventional Treasury notes have been forced unnaturally low by the flight-to-quality trade. Even so, the ten-year breakeven rate of inflation of 2.32% seems both wildly and disconnected from reality.

Even though the role of markets is to measure, not to forecast, we should go back and check how well TIPS' contemporaneous forecasts matched up to the realized rate of inflation ten years later. As TIPS began trading at the end of January 1997 and we have CPI-U data through December 2007, we have eleven months of comparison for TIPS' forecasting ability.

Assessing The TIPS Market's Forecasting Ability



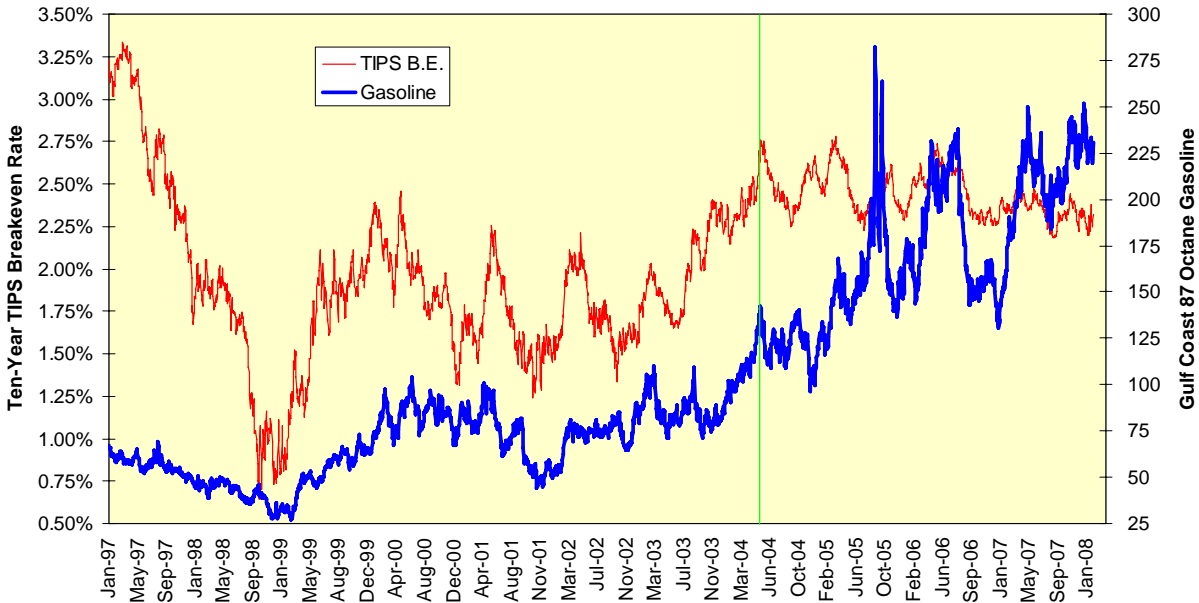
A casual glance at the chart above might indicate TIPS were well off the market. This does not stand up to analysis, however. The average root mean squared error of their forecast was 39 basis points. Contrast this to the semi-annual *Wall Street Journal* survey of economists for a six month-ahead period; this root mean squared error is 70 basis points. To emphasize, TIPS' forecast error for ten years is 56% of the economists' forecast error for six months.

Forecast Basis

Given all of the distortions involved in the TIPS market and the impossible task of forecasting almost anything ten years in advance, we have to ask what TIPS traders might be looking at. Here the answer becomes shrouded in mystery at first and then produces a surprising answer.

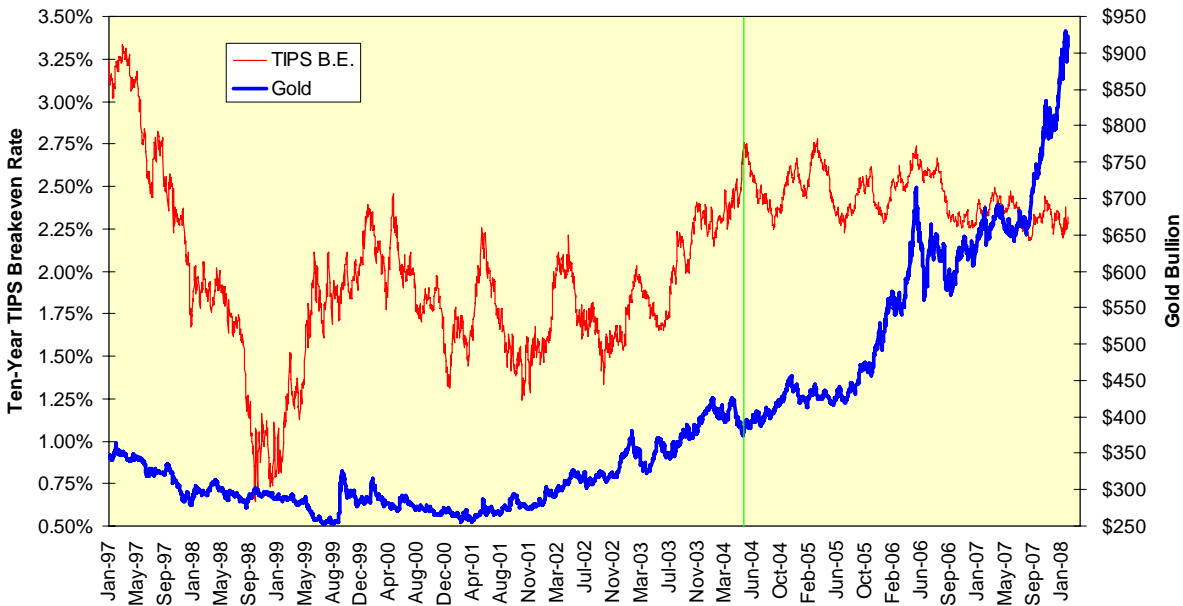
Let's round up some of the usual suspects normally but erroneously associated with inflation, such as gasoline, gold and the shape of the money market yield curve. The price of gasoline, as all of us have noticed, has increased fairly substantially since the spring of 1999. And yet if we look at the chart below, we are hard-pressed to find any sort of relationship between wholesale gasoline prices and TIPS breakevens since their May 2004 peak (noted on all subsequent charts with a green vertical line).

TIPS' Breakeven Ignored Gasoline



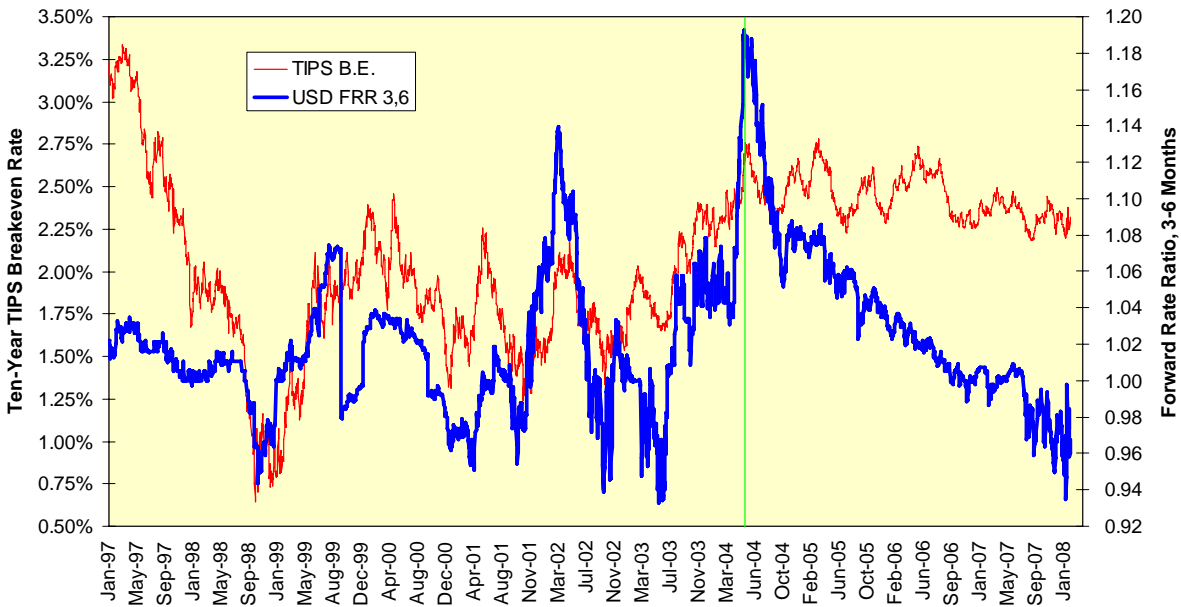
What about gold? As first noted here in [May 2003](#), gold should rise when expected inflation exceeds the short-term interest rate cost of holding gold. And yet gold has more than doubled since May 2004 while TIPS breakevens have remained confined.

TIPS' Breakeven Ignored Gold's Rise



Well, what about the other part of that gold equation, monetary largesse? If we measure the shape of the money market curve by the forward rate ratio between three and six months, the rate at which we can lock in borrowing for three months starting three months from now, divided by the six-month rate itself, we see how the money market yield curve has flattened substantially since May 2004.

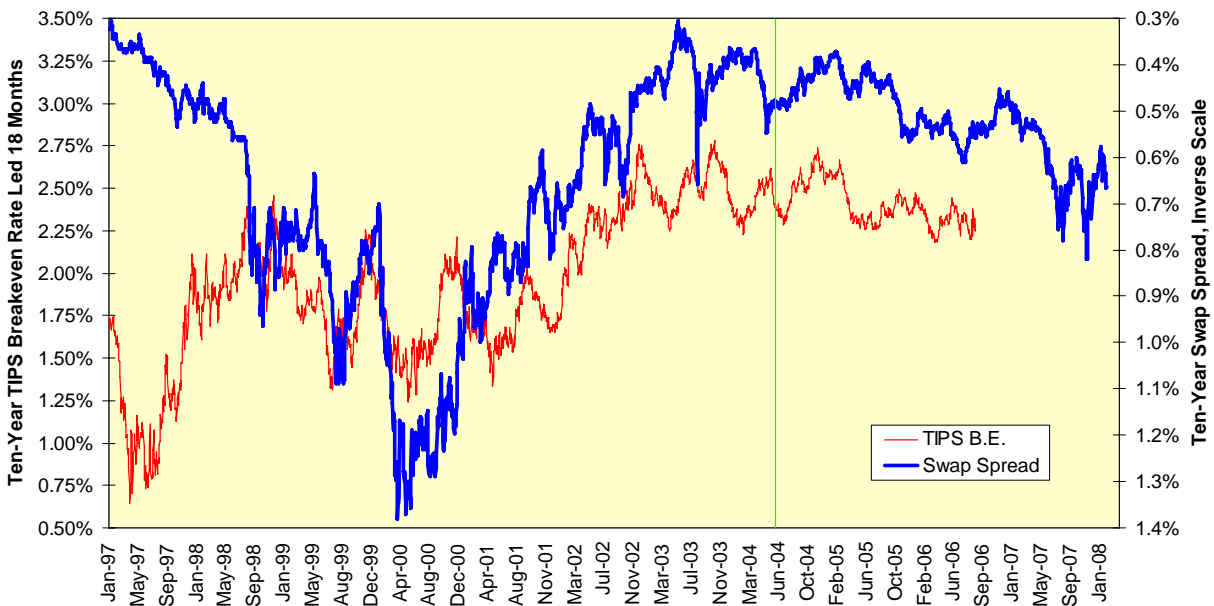
TIPS' Breakeven Peaked As LIBOR Curve Flattened



This flattening – any number less than 1.00 indicates the three-month rate exceeds the six-month rate – has proceeded through the seventeen consecutive rate hikes between June 2004 and June 2006, the subsequent period of the Federal Reserve being on hold and the 225 basis points of rate cuts since September 2007. This flattening seems to exert downward pressure on inflation expectations.

Next, let's take a look at ten-year swap spreads, last discussed here in [December 2007](#) in the context of a negative outlook for corporate bonds. These spreads, plotted inversely below, have been compressed recently by the flight-to-quality into ten-year Treasuries, but have been on a secular rise since the mid-2003 low in interest rates. These spreads lead TIPS breakevens by eighteen months on average; rising swap spreads today should keep TIPS breakevens 18 months from now under pressure.

TIPS' Breakeven Levelled With Swap Spreads



What in turn pushes swap spreads higher? A steeper yield curve and rising bond volatility, both of which are present given the Federal Reserve's recent slapdash approach to monetary policy, do.

Here is the paradox. Inflation is a monetary phenomenon and we are in a looser monetary environment, but the Federal Reserve's policies are producing both a flatter money market yield curve and rising swap spreads, and these in turn push inflation expectations lower.

So when you look at those low TIPS breakevens, do not think the market is nuts. It has outperformed the collective forecasting skills of the nation's economists (insert your own joke here) and it reflects powerful financial variables while ignoring rising physical commodity prices.