

The Orwellian World Of TIPS

If an economist awoke from a coma circa 1979 and surveyed the scene, what would he find? Let's tick down a list: Gold over \$700 per ounce, crude oil futures at record highs, the dollar at a new low against the euro, the Federal Reserve and its fellow central banks poised to cut short-term interest rates, etc. Our groggy-eyed practitioner of the Dismal Science could be forgiven for thinking the world of double-digit inflation had continued.

Now tell him we have had this instrument called TIPS since January 1997. Not only is their payoff linked to changes in the All-Urban CPI, not seasonally adjusted (CPI-U), but their yield gap or "breakeven rate" to conventional Treasury bonds can be read as a measure of expected inflation. He would have to chuckle at what this measure would say.

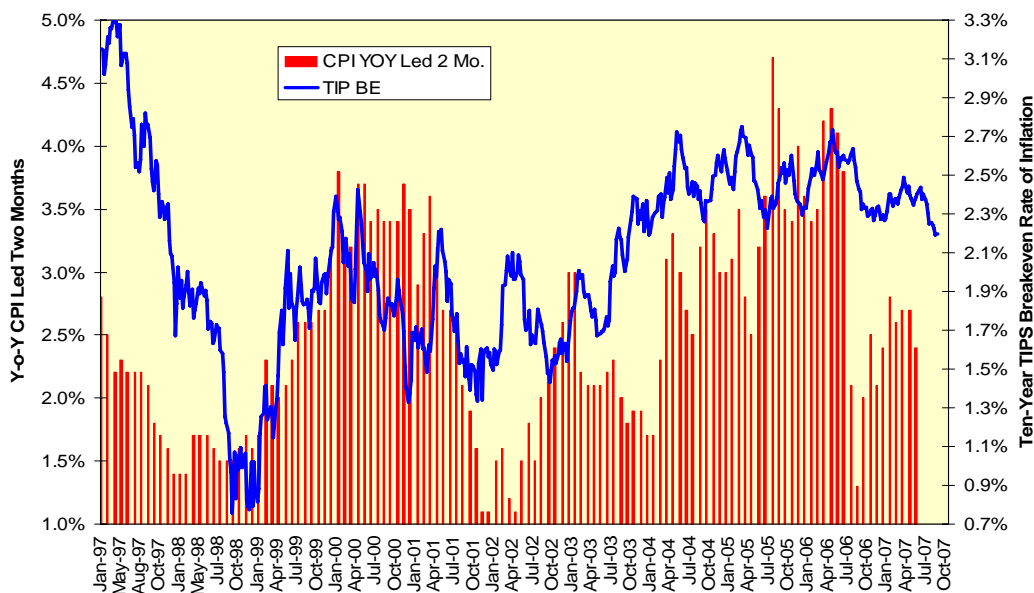
Go ahead, ruin his day. At the time of this writing, the expected rate of inflation is 2.254 percent, and that is up from 2.19 percent after the release of August employment data on September 7. As recently as May 2006, this rate was just over 2.7 percent. But really, who amongst us really believes the CPI-U will average 2.254 percent over the next ten years? Is this what the TIPS market is telling us, or is there another process afoot?

Inflation Insurance

As discussed last [December](#), we can view the TIPS market as insurance against inflation. Both the U.S. Treasury and the many purveyors of TIPS products would like you to believe this insurance is either free or very cheap. It is neither, which is exactly what you should expect. The cost of the insurance, which is paid by you, the investor, in the form of lower yield received, should equilibrate the prospective total return of TIPS and Treasuries. Any actual gain from holding TIPS has to derive from future reported inflation coming in higher than the breakeven rate at time of purchase.

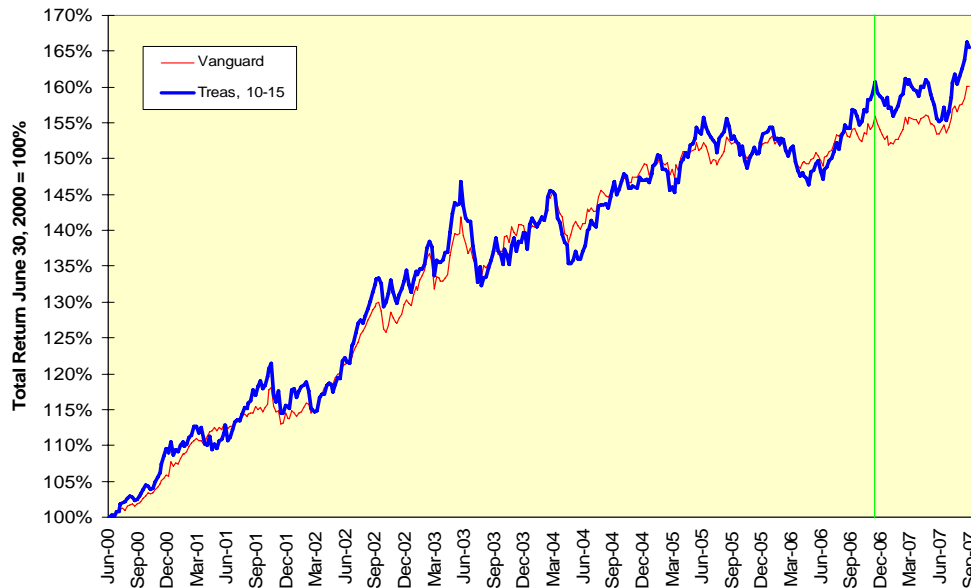
Betting on the forecasting ability of the TIPS market is a fool's errand at best. The best statistical fit between breakeven rates and the CPI-U has breakevens leading reported values by two months on average. Interestingly, if we go back to July 1997, ten years before the last datum, the market was forecasting an average annual rate of increase in the CPI-U of 2.75 percent. The actual rate of increase has been 2.6 percent. In other words, a July 1997 purchase of TIPS would have underperformed Treasuries by virtue of realized inflation coming in less than expected inflation.

TIPS And Reported Inflation



Let's update a chart from last December comparing the total return of the Vanguard TIPS fund against the Merrill Lynch index of 10-15 year Treasury bonds. At the time, marked with a green vertical line, the equilibrated return path of the two investments was obvious. TIPS have underperformed significantly in 2007 as breakeven rates have declined. We can infer TIPS are too cheap, Treasuries are too expensive or some combination thereof.

TIPS Underperforming In A Declining Breakeven Environment



Disaster Insurance

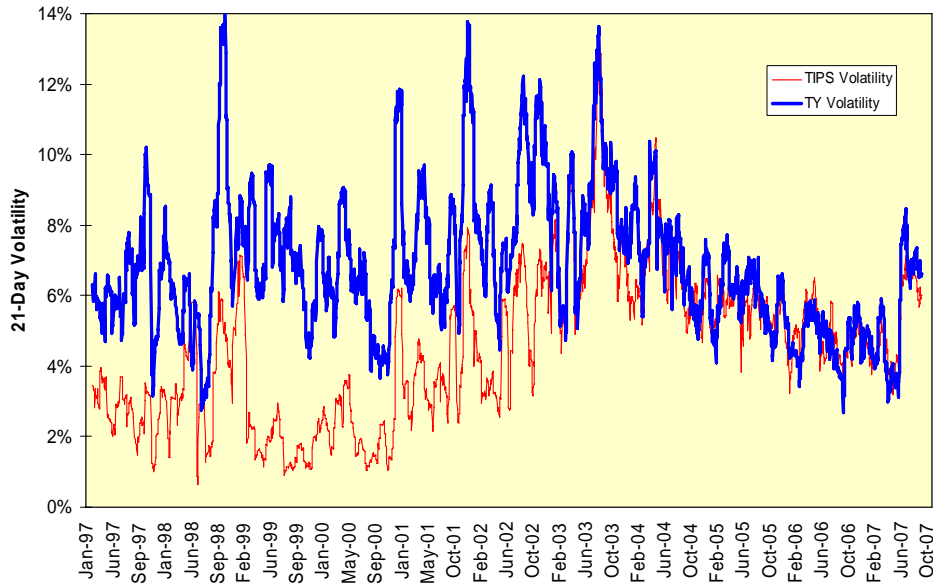
Much of the Treasury market's rally since July can be attributed to a flight from riskier credit market instruments and from equities. The willingness to accept lower Treasury yields in exchange for their perceived safety is another form of insurance.

It is not hard to conceive that panic buying of Treasuries could raise the price of this disaster insurance far faster than buying of TIPS could raise the price of inflation insurance. After all, insuring against what some have termed "Armageddon" must be a more primal and indeed animal instinct than insuring against some concept like a rising CPI-U.

If we allow for this possibility we can state the TIPS market's collective judgment on inflation is not amiss, but rather it has been overwhelmed by a rush into Treasuries. The price of insurance for both has risen during the last two months. If we construct two synthetic bonds, one a constant-maturity ten-year Treasury with a 6 percent notional coupon and the other a constant-maturity ten-year TIPS with a 3.5 percent notional coupon, we can compare their realized 21-day volatilities.

Both jumped during the mid-July to mid-August rout, and while both have fallen in September, the TIPS volatility has fallen more. This is evidence the cost of disaster insurance has stayed over the cost of inflation insurance. In a crisis, what should we expect?

Comparing Real And Nominal Ten-Year Historic Volatility



As an aside, the long-term comparison of these two volatility series is interesting in that TIPS volatility was significantly less than Treasury volatility between 1997 and 2003. This was a period of various financial crises, including the Asian crisis, the LTCM/Russian crisis, the Brazilian devaluation and the dotcom implosion amongst others.

Once those crises past and the Federal Reserve executed its final reduction in the target federal funds rate in May 2003, TIPS volatility rose to Treasury volatility and remained there until August. Our ideal scenario, the Goldilocks market for relative volatility, would be for both measures to decline together as they did in 2004-2006.

I knew we would miss that credit bubble when it was gone.

For now, though, TIPS appear cheap relative to Treasuries. Whether you will receive a reward based on realized inflation exceeding today's 2.254 percent breakeven is problematic; forecasting tomorrow is difficult enough without trying to forecast the average of the next ten years.