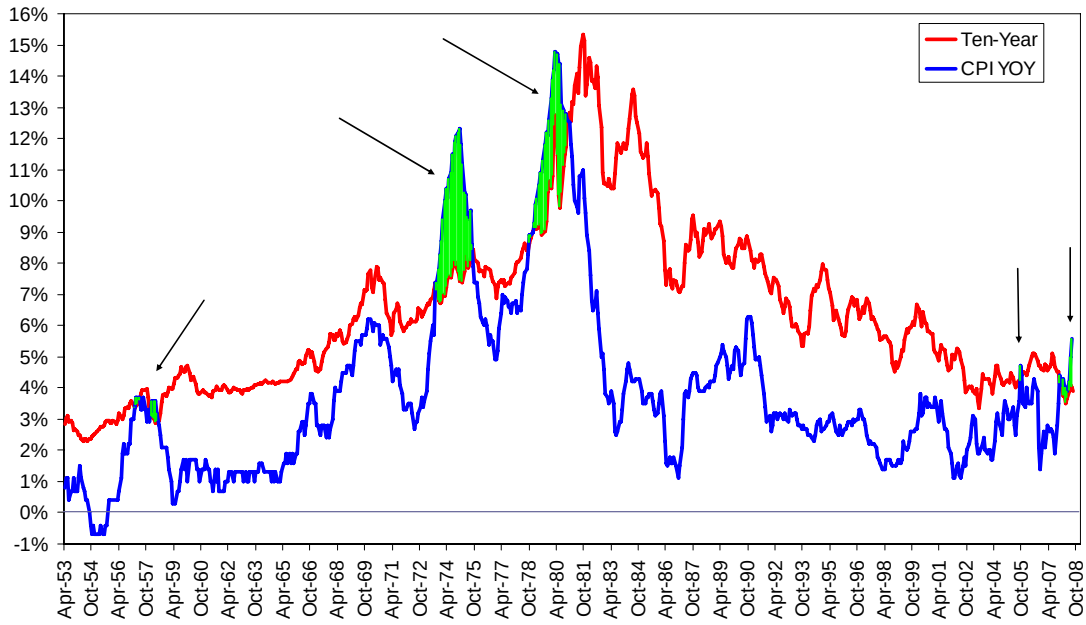
Positive Attitude, Negative Yields

Why would you ever take a known loss, especially in a business that makes it too easy to hand your money over to others? The actual answer is we all do it frequently. Think of insurance; do you really expect to make money on your auto or home insurance at the end of the year. No, the answer is you are willing to take a fixed loss today in exchange for avoiding a greater loss tomorrow.

As options have a large insurance component to them, options buyers do the same thing by accepting a known cost, time decay, in exchange for the potential of making a large return.

What about making a loan wherein you will receive a negative rate of return? At first glance you might say no one is stupid enough to do that, but this is why you should glance at things more than once. This is done on several different levels in the Treasury bond and TIPS (Treasury Inflation-Protected Securities) markets. First, let's compare ten-year Treasury yields against the year-over-year change in the Consumer Price index, and let's not quibble whether a forward-looking financial market should be priced off of backward-looking inflation data. The periods when the "real" ten-year note yield was negative are highlighted in green in Chart 1.

Chart 1: Ten-Year Notes Seldom Trade Below Trailing Inflation

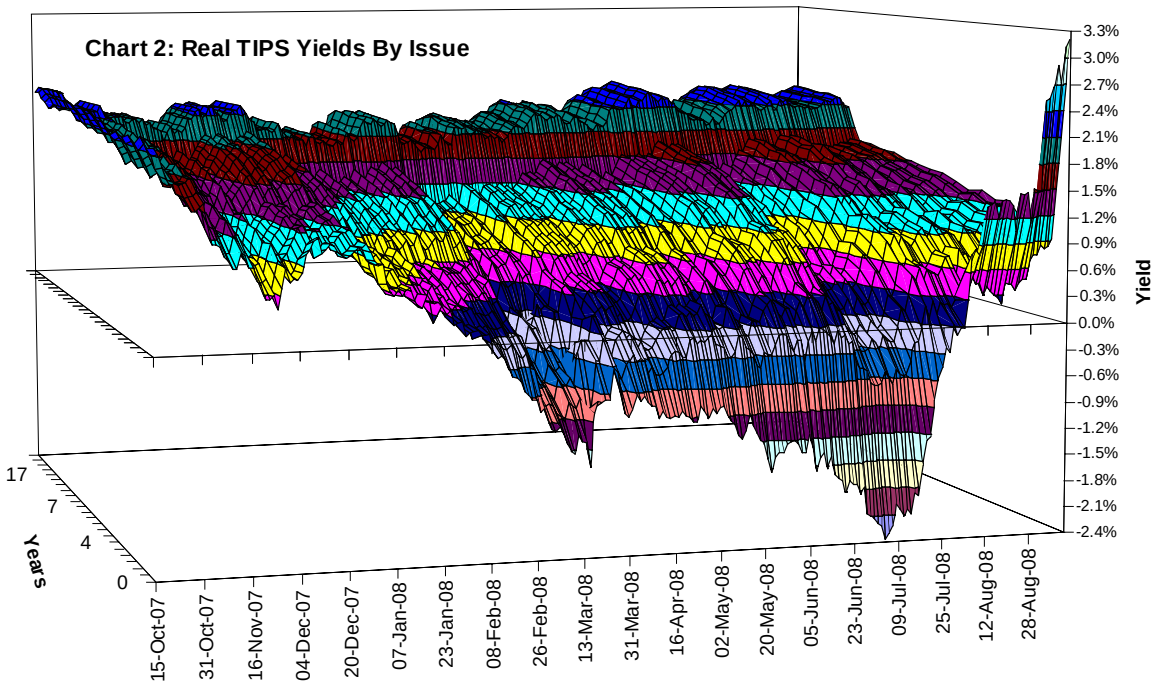


The periods in the 1970s and 1980s should be recognizable to one and all as the periods when commodity prices shot higher during that unhappy era. The periods in 2005 and especially in 2008 occurred during this decade's ongoing rally in nearly all physical commodities.

Looking Forward

Even though TIPS are highly imperfect instruments (see "The Illusion of TIPS Protection," May 2007), they still carry the full faith and credit of the U.S. government and therefore act at least somewhat as a barometer of financial stress. During those periods when financial markets go haywire for whatever reason –and those periods seem to be occurring with greater regularity each year – the yields on conventional Treasury bonds fall. We have come to expect that. However, if the surge into conventional Treasuries is such that yields fall below expected inflation, then the yield on TIPS, the so-called real yield, will go negative. Mechanically, you achieve this by paying more for the bond than it is expected to be worth at maturity.

The credit crunch beginning in late 2007 drove as many as eight TIPS of maturities extending out to July 2012 into negative real yield territory; in fact, the entirety of the February-August 2008 period involved negative real yields for at least some issues. The path of these yields on a bond-by-bond, day-by-day basis is seen in Chart 2. Investors were so afraid of credit risk in non-U.S. government bonds and so afraid of inflation they were willing to take a known negative return to avoid those outcomes.



The map of real yields in Chart 2 provides some insights into issues raised for years by academic economists. First, is the real rate of interest constant across time and across maturities, is it constant for any given maturity over time, or does it vary across both time and maturities? If the TIPS market is at all functional, a far more controversial issue than many believe, then we must go with the last alternative. Chart 2 clearly shows real interest rates varying across both time and maturities.

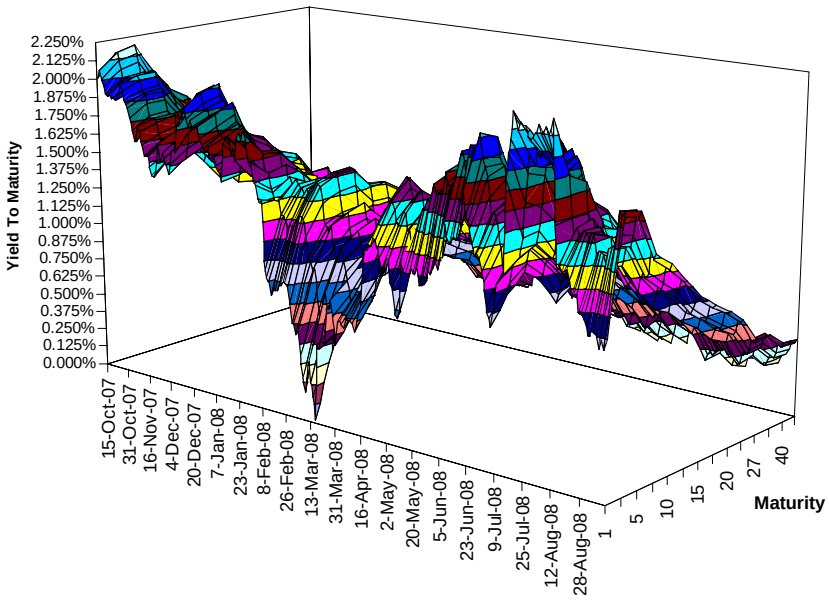
Second, the rate with which real yields turned negative and then crept back toward positive levels provides the best barometer of the financial crisis. You could turn on the television, scour the Internet, read the newspaper or listen to any manner of pundits with their opinions on the credit crisis and not get a better outlook on when and where the credit crisis got worse or better. Negative real yields do not lie; in fact, they do not do a very good job of making it up, either.

Why did real yield on the shortest-maturity TIPS jump higher in late August and early September 2008? The answer is quite simple: This was the period when the Treasury was preparing to nationalize Fannie Mae and Freddie Mac. U.S. Treasuries suddenly became riskier with this transaction, and investors wisely bid yields higher.

The U.S. was not alone in the global credit crisis. It hit the U.K. as well; the British found out the downside of London's emergence as the world's financial center. Pack a lot of smart financial engineers into a very small space and let them trade poorly understood and intrinsically illiquid instruments, and you never know what will happen. Come to think of it, this would make for a good situation comedy for the overpaid, but we digress.

If we duplicate Chart 2 with inflation-linked British Gilts, we see a similarly violent downturn in real yields, but one that never produced negative values. In addition, we can see how real yields fell in both the shortest and in the longest maturities; they remained fairly constant in the ten to twenty-year maturity zone. This suggests we look at the term structure of inflation expectations as well as real yields in both markets.

Chart 3:
Real Yields On Inflation-Linked Gilts Never Went Negative

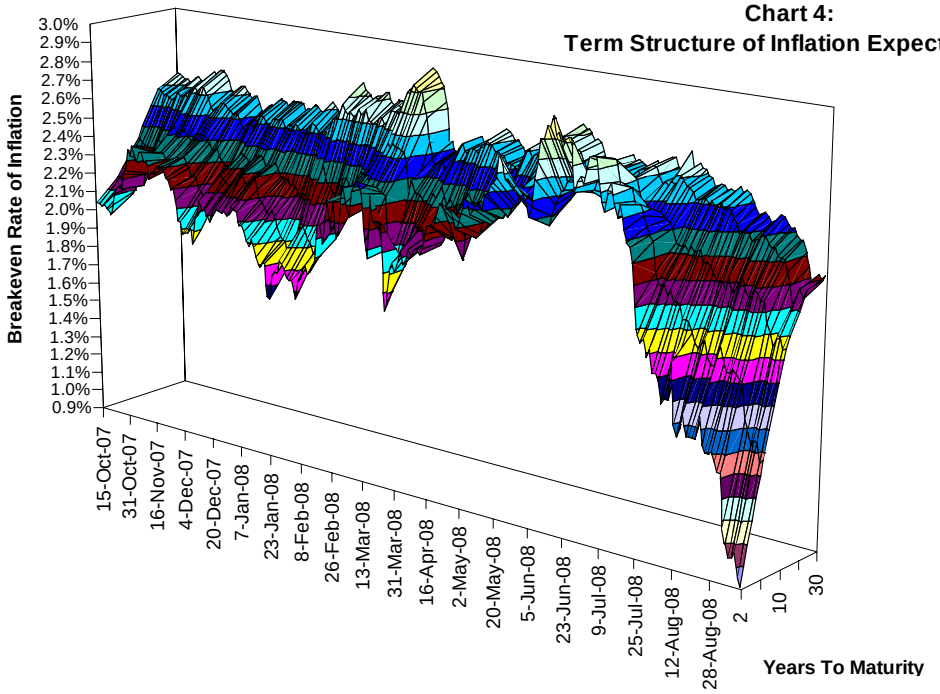


What Do You Expect?

We can isolate generic breakeven rates of inflation by subtracting on-the-run TIPS or inflation-linked Gilts yields from their corresponding on-the-run Treasury issues. No real theory exists as to what the term structure of these expectations should be; like yield curves of nominal yields themselves, they have been observed both in inverted and steep structures. If, for example, the market was to become convinced the Federal Reserve or another major central bank was serious about fighting inflation through tight money, we should expect the curve of inflation expectations to invert. The steeper the forward curve, the more inflation expectations rise over time, the more the markets are saying the central banks are feeding inflation.

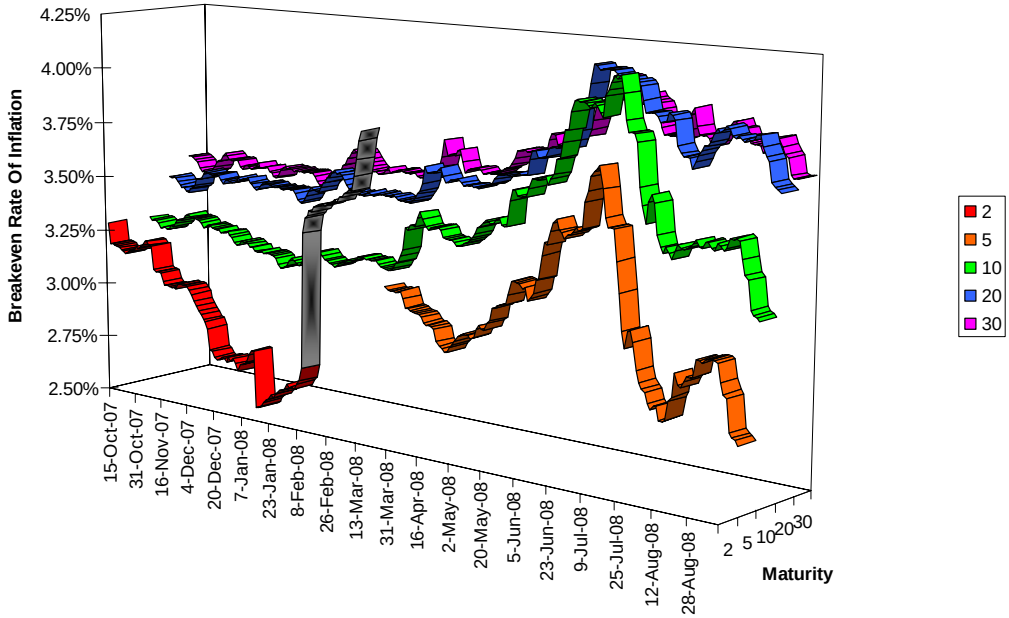
At the very time real yields in the U.S. were turning negative in February-March 2008, the forward curve of inflation expectations was getting steeper by virtue of long-term breakeven rates rising, as seen in Chart 4. By the time real TIPS yields turned positive in late August, the forward curve of inflation expectations turned negative by virtue of short-term breakeven rates collapsing. In both cases, the market expected inflation to rise in the future.

Chart 4:
Term Structure of Inflation Expectations



A corresponding picture for the British market, depicted in Chart 5, has a different structure. It inverted in February, noted with the grey segments for the two-year maturity, but that series ended on March 17, 2008, the very day when Bear Stearns was rescued from bankruptcy. This makes it near-impossible to draw a conclusion about the market's behavior inferences.

Chart 5:
Term Structure Of U.K. Inflation Expectations Remained Positively Sloped



The two-year series was replaced by a five-year series, and the forward curve of inflation expectations steepened. By late August, the British term structure of inflation expectations had the same shape as its American counterpart, a very steep forward curve produced by declining short-term breakeven rates of inflation.

Central Bank Behavior

The Federal Reserve claims to watch futures and options on federal funds (see "A Simple Bet on the Fed," May 2008) closely for clues on how the market is interpreting its intentions. They claim to pay attention to various

inflation-linked markets as well, including the vibrant market for inflation swaps and other cash market derivatives. This is very good; we all need feedback on whether we are performing as expected.

Watching a market and listening to a market are very different things. What good is feedback if you ignore it? The message from the credit crisis was the central banks bungled affairs so badly that investors were willing to take negative real returns on their investments for an extended period – no, make that negative real *pre-tax* returns – simply to escape monetary mismanagement. When those real rates turned positive again, inflation expectations rose. That is a very bad tradeoff; we have every right to expect monetary policy.