## The Dollar And Prospective Treasury Returns

The philosopher George Santayana once said something profound, but who can remember it anymore with all the blogging, texting and tweeting?

The author wrote a piece way back in 1998 about the precious metals’ complete lack of movement for a trading generation. An e-mail came in from what was obviously a retail commodity broker in the Ft. Lauderdale area who asked, "Will gold ever get over \$500 again?" Fair enough; the response went along these lines:

Ever is a long time. Had someone asked me in 1981 if long-term Treasury yields would ever fall below 6\% again, I would have said, 'Yes,' even though it seemed improbable at the time. So, yes, gold can get over $\$ 500$ again, but not within an immediate trading horizon.

Gold was trading around $\$ 300$ per ounce at the time and did not close over that level for good until the second quarter of 2002, four years later. By mid-2010, that same broker or his spiritual successor might reverse the question and wonder whether short-term interest rates would ever rise over $1 \%$ again, and if long-term Treasury bond yields went over $6 \%$, would grass be growing in the streets? Let's not even contemplate the question of whether gold will ever fall below $\$ 300$ an ounce again.

## The Dollar And Bonds

If we go back to the era of high Treasury yields and the major and politically engineered decline in the dollar between 1985 and 1988, we would find few who would have disagreed with the statement a declining dollar posed a threat to the U.S. Treasury market as foreign creditors had to demand higher yields in recompense. Indeed, one of the major contributors to the liquidity premium, or spread between long- and short-term interest rates is currency volatility.

However, facts can be disagreeable things and have been known to wreak havoc on perfectly good economic theories, some of which can take the better part of an afternoon to concoct. U.S. Treasuries began a bull market in September 1981, and with some spectacular corrections along the way, such as 1994, 1999 and 2009, have continued in that bull market all the way into mid-2011 even as the simple mathematics of fixed-income investing dictate the party will be over once interest rates approach $0 \%$ along the yield curve.

Fixed-income indexers split the yield curve up along the maturity spectrum. The categories we will follow here are calculated by Bank of America-Merrill Lynch, and include the segments of 1-3, 3-5, 5-7, 7-10, 10-15 and 15+ years. We can calculate their net carry returns, or total return minus the opportunity cost of three-month LIBOR and display these time series along a common (base-10) logarithmic scale going back to January 1995. This can be mapped against the Bloomberg correlation-weighted U.S. dollar index (see "Weighting For Correlation," July 2011) also displayed on a common logarithmic scale.

## Net Treasury Carry Returns And The Dollar



We would be hard-pressed to look at this chart and tell you what the long-term dependence of net Treasury carry returns on the dollar is. Yes, bonds rallied during the dollar's 2008-2009 financial crisis rally and fell once the crisis was over, at least over for the first time, and the dollar fell again for the remainder of 2009, but that would ignore the long-term rallies in Treasuries between 2002 and 2008 and again in 2011 when the greenback was taking it on the chin.

Should we stop here and taunt the Fates by declaring, "Mission Accomplished?" No; we need to add a linking variable such as the shape of the money-market yield curve. Here we will use the same tool so common to many of our analyses, the forward rate ratio between six and nine months $\left(\mathrm{FRR}_{6,9}\right)$. This is the rate at which we can lock in borrowing for three months starting six months from now, divided by the nine-month rate itself. The more the $\mathrm{FRR}_{6,9}$ exceeds 1.00 , the steeper the yield curve is and the greater the expectations for higher short-term interest rates in the near future are.

The theory - there is that word again - behind the $\mathrm{FRR}_{6,9}$ as a linking variable is lower prospective hedgeable shortterm interest rates allow bond investors to carry their position for at least another six months without fear of increased funding costs; the steeper $\mathrm{FRR}_{6,9}$ used to be associated with a stronger dollar, but that was until an era of "perma-expectations" for higher interest rates emerged in 2009. These expectations were rolled forward continuously in a manner akin to a tavern with a "Free Beer Tomorrow" window sign (see "Investing Under Constant Expectation," Active Trader, November 2010).

## Prospecting For Returns

Now let's map three month-ahead net carry returns for the various maturity segments noted above against the dimensions of the preceding three-month change in the dollar and the $\mathrm{FRR}_{6,9}$. Colored bubbles denote positive returns, white bubbles denote negative returns; the diameter of the bubbles corresponds to the absolute magnitude of the return. The last datum used, from three months ago, is highlighted in an opposite color and the current values of the dollar's change and the $\mathrm{FRR}_{6,9}$ are marked with a green bombsight. Finally, an arrow is drawn from the three month-ago datum to the current value.

Three-Month Ahead Returns On 1-3 Year Carry


Three-Month Ahead Returns On 3-5 Year Carry


Three-Month Ahead Returns On 5-7 Year Carry


Three-Month Ahead Returns On 7-10 Year Carry


Three-Month Ahead Returns On 10-15 Year Carry


Three-Month Ahead Returns On 15+ Year Carry


## Key Takeaways

For all of their apparent complexity, these charts lend themselves to three major observations. First, gains in the dollar of more than 10 percent over the preceding three months are followed by gains in the Treasury market. The stronger greenback pulls in portfolio investment.

Second, there is a maturity-dependent response to declines in the dollar of more than 10 percent over the preceding three months. The longer the maturity, the greater the number and magnitude of negative returns is. Global creditors to Uncle Sam can live with a weaker dollar for their shorter-term investments, but they start to get nervous about their longer-term investments when the dollar weakens.

Finally, there is a maturity-dependent response to the $\mathrm{FRR}_{6,9}$. At shorter maturities, prospective Treasury gains are positive for both very steep and very flat money-market yield curves. At longer maturities, prospective returns turn negative as holders become nervous about the $\mathrm{FRR}_{6,9}$ being unsustainable at those levels and future carry costs rising.

Does any of this confirm or deny the 1980s-era supposition a weaker dollar would damage the Treasury market? Only at the extreme: If long-term creditors see the currency weakening rapidly and the yield curve steepening beyond reason, they will unload their long-term holdings. Then they will tiptoe back into the U.S. market as most of Uncle Sam's creditors recognize the need to finance their major customer's deficits.

To mix metaphors from past eras, what we see here are Bond Vigilantes practicing compassionate conservatism. They are as hooked on financing the debt, at ever-lower yields and with a currency in long-term decline, of a customer unwilling and increasingly unable to pay them back. Considering the experiences of creditors over the centuries lending to too-large debtors, you would think they would have learned the lessons of history, but to paraphrase Santayana, all we learn from history is people do not learn from history.

