

## A Curve Too Steep

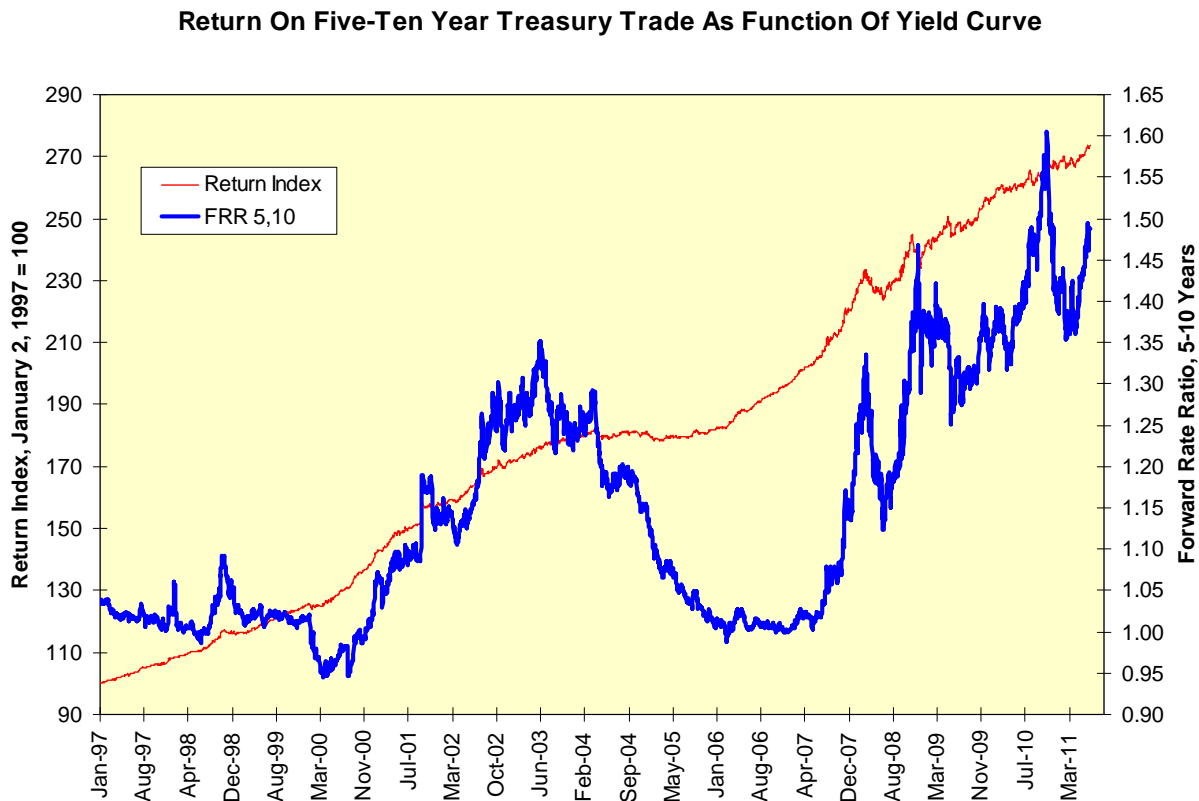
Sometime during Microsoft's glory days as a stock in the late 1990s, *The Wall Street Journal* ran a profile of an ordinary investor who had done the unthinkable: He had bought the stock early and simply held it forever, kind of like a Warren Buffett in training. Yes; apparently doing things like buying-and-holding or its cousin, buying low and selling high is sufficiently remarkable to warrant a profile in a national newspaper.

Yet nothing is that mechanical. Take the act of borrowing cheap and lending dear. I discussed this yield curve trade in [August 2010](#) when I forecast that a duration-neutral bullish flattening trade on the Treasury yield curve, borrowing at short maturities and lending at longer maturities, would work both in dollar return terms and in convexity gain.

What of today? Let's update that analysis. To review, the duration-neutral aspect is simply a hedge ratio to neutral overall interest rate exposure; we would need to trade about 1.84 five-years for every ten-year at last count. Convexity is the rate at which duration, the sensitivity of bonds to interest rates, changes as a function of yields. Convexity is valuable: The higher it is, the more the bond gains as rates fall and the less the bond loses as rates rise. For those of you comfortable with option Greeks, think of duration and convexity as you might delta and gamma.

### The Trade Over Time

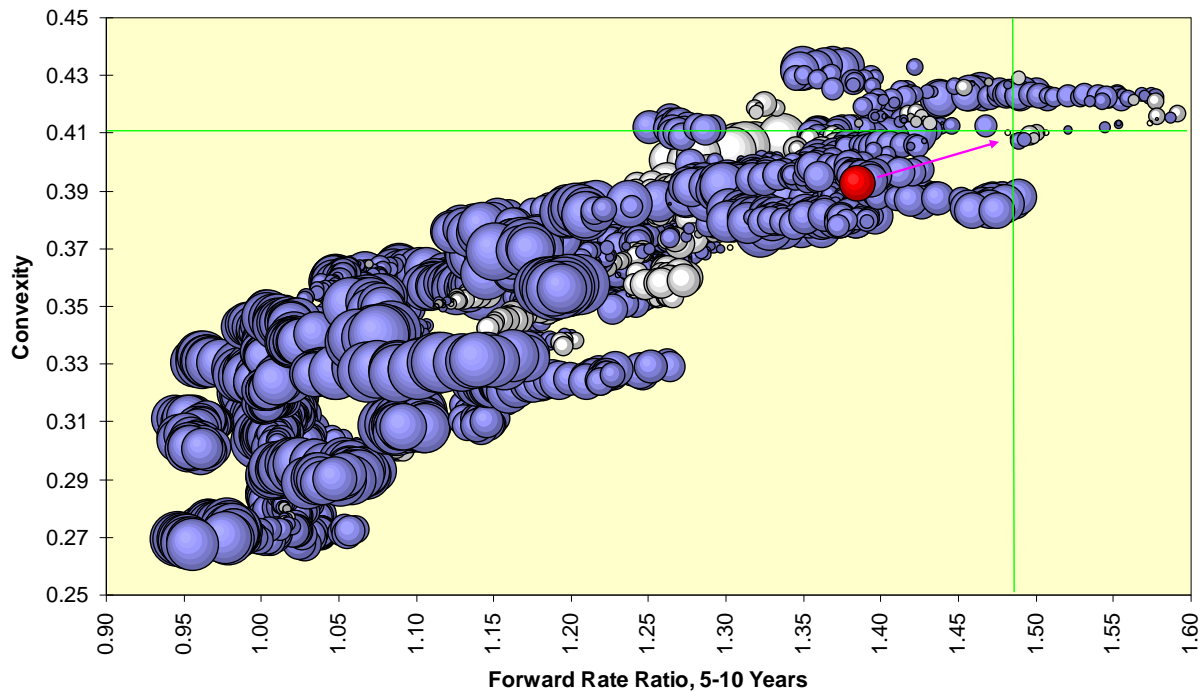
The chart below depicts the indexed return on our short five-year / long-ten-year Treasury trade going back to 1997 along with the forward rate ratio between five and ten years ( $FRR_{5,10}$ ). This is the rate at which we can lock in borrowing for five years starting five years from now, divided by the ten-year rate itself.



The return has been impressive over the past year and the  $FRR_{5,10}$  is right about where it was then as is the net convexity gain on the trade, not shown.

What about the prospective returns, the only thing that really matters to most? ?” Let's map the three month-ahead returns on the bullish flattening trade as a function of convexity and the yield curve. The blue bubbles depict positive returns; the white bubbles negative. The last datum used is highlighted in red, and the current market environment is marked with a green bombsight.

### Three Month-Ahead Return On Five-Ten Year Trade As Function Of Yield Curve And Convexity



We can see the yield curve has become much steeper over the past three months and the net convexity of the trade has pushed higher as well. What does life in the northeast corner of this chart look like? The answer is not encouraging. Not only are there a smattering of white bubbles, or negative returns, up where we are living, but the blue bubbles are much smaller.

This is equivalent to saying that the trade has become too rich up here; you are best waiting for the yield curve to flatten and long-term rates to rise before you think about putting on a bullish flattener. This suggests in turn the recent bullish run in long-term bonds may be hitting short-term resistance even though their prospects are good in the long run. Restated, borrowing cheap and lending dear is in conflict with buying high and selling higher, and if that does not violate some Wall Street adage, it should.