

## Haven Bids, The Yield Curve And Stock Market Response

The length of time involved in the famous Pavlov's dogs experiment remains unknown, but we can surmise whatever it was would have been shorter had traders been involved. It probably took more than one go-around for the dogs to associate the ringing of a bell with impending chowtime, but it only takes one good two-by-four across the forehead to train traders in pain-avoidance. Examples include how the immediate flight into Treasury bonds during the October 1987 conditioned traders to cover short positions during every stock market wobble for the next twenty years or how every bit of news out of the Middle East triggers buying in crude oil.

Another Pavlovian trigger affecting the Treasury market is global political tension, especially if that tension involves someplace where those in possession of large sums fear losing them along with their heads during the next round of the chess match. This is money seeking a safe haven as opposed to simply a return. Switzerland once served as the premier destination for such flight capital over the years, but their imposition of the so-called franc ceiling in September 2011 along with increased erosion of their once-vaunted bank secrecy has given U.S. Treasury securities along with German Bunds an advantage here.

We saw a direct example of this effect earlier in the year with the Ukrainian crisis in March. When Russia effectively annexed the Crimean peninsula and appeared ready to do the same for eastern Ukraine, funds flowed out of Kiev to the U.S. Several other developments occurred during March, including a large one-time drop in the Federal Reserve's custody account for foreign official holdings of U.S. Treasuries and a decline in the U.S. dollar. Both were thought to be Russia exiting the Treasury market for fear of getting their assets frozen; call it a prudent flight-from-quality if you must.

### The Long End Of The Yield Curve

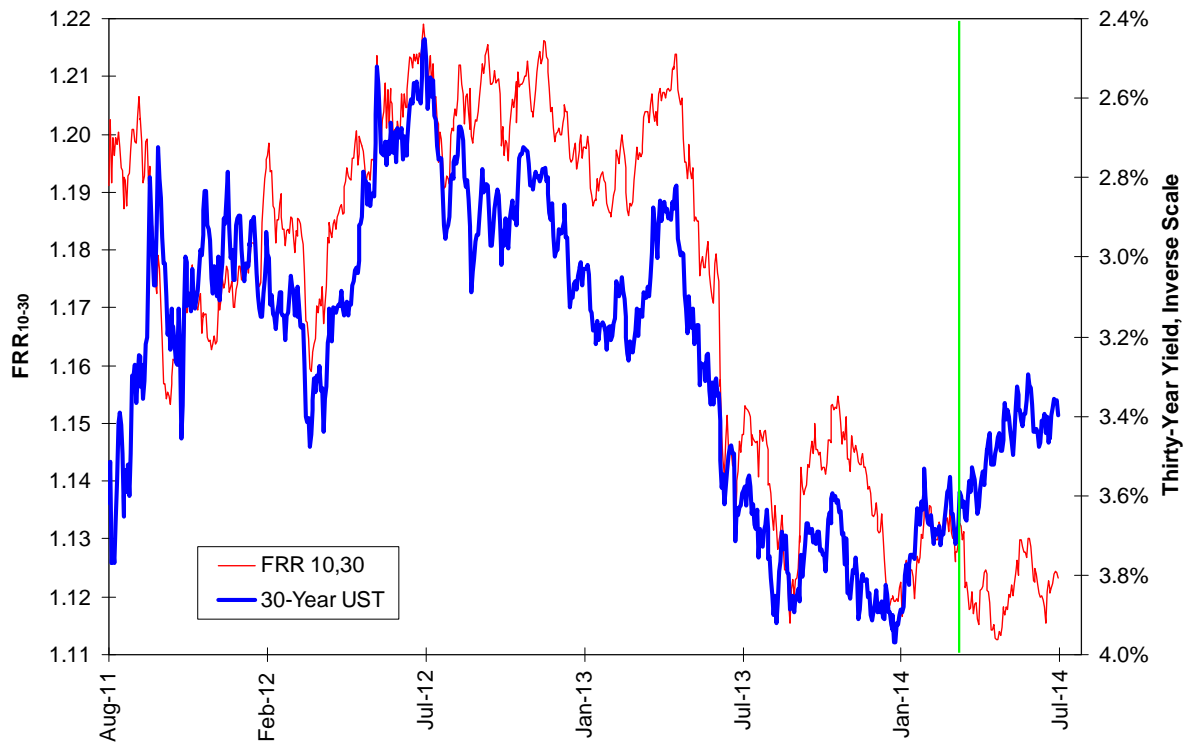
The Federal Reserve has engaged in a number of significant and market-distorting programs over the past six years. In addition to driving short-term interest rates toward zero percent (ZIRP) in December 2008 and engaging in three defined rounds of quantitative easing (QE) in March 2009, November 2010 and again in September 2012, they began targeting the yield curve in August 2011 in what was dubbed Operation Twist. The concept was straightforward: They would sell short-term Treasury securities and buy long-term Treasury securities to produce a bullish flattening of the yield curve. The logic was investment decisions are made on the basis of long-term interest rates, not on the overnight federal funds rate.

The Twist turned out to be far more effective than many thought at the time. The yield curve started to compress as if someone was squeezing a toothpaste tube; first ten-year rates declined toward five-year rates, then twenty-year rates started to decline toward ten-year rates and finally thirty-year rates joined the party. By the time we got to this year's Ukrainian crisis, much of the action and indeed much of the potential action was at the long end of the yield curve,

Let's measure the shape of this segment of the yield curve by the forward rate ratio between ten and thirty years ( $FRR_{10,30}$ ). This is the rate at which we can lock in borrowing for twenty years starting ten years from now, divided by the thirty-year rate itself. The more the  $FRR_{10,30}$  exceeds 1.00, the steeper the yield curve is; an inverted yield curve at this segment has an  $FRR_{10,30}$  less than 1.00.

Over the course of the Twist era prior to the Ukrainian crisis the  $FRR_{10,30}$  rose as thirty-year yields fell and vice-versa. In bond jargon, we oscillated between bullish steepenings and bearish flattenings of the yield curve. Once the crisis hit, marked with a green line on the chart below, thirty-year yields fell but the yield curve stayed at or below its previous  $FRR_{10,30}$ . The yield curve was flattening bullishly for the first time in the Twist era.

### The Long End Of The Yield Curve In The Twist Era

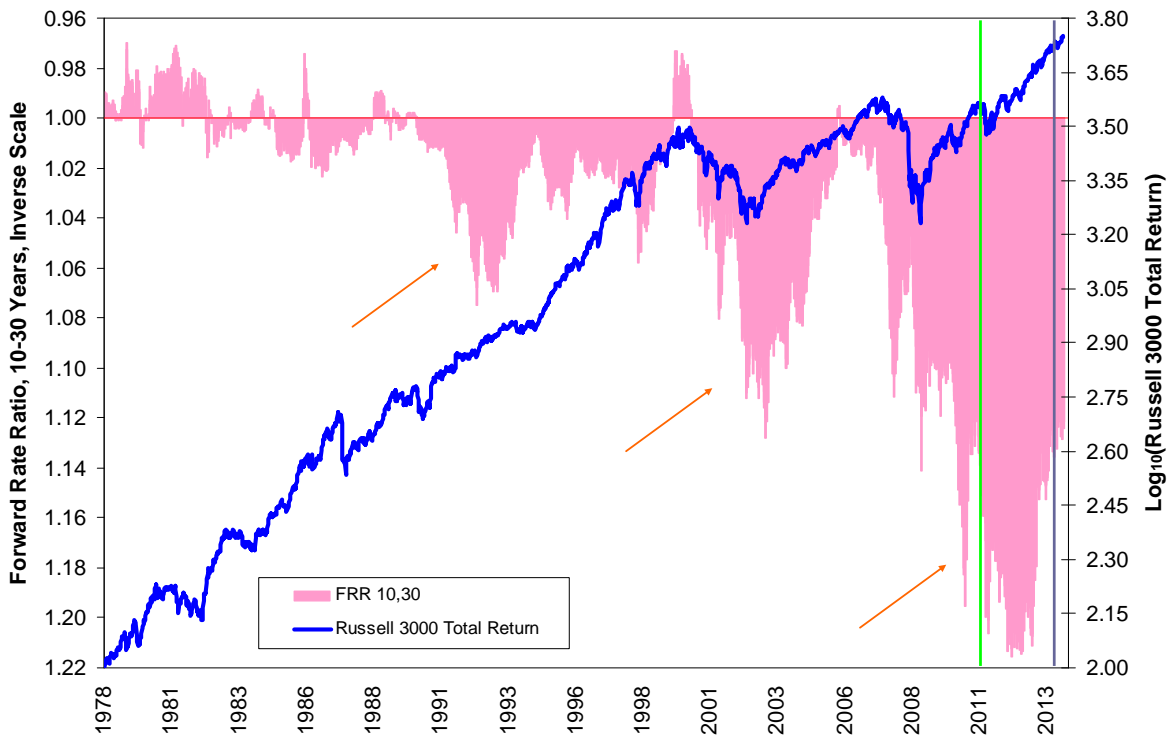


Source: Bloomberg

### Equities And The Long End Of The Yield Curve

As the total return on the broad Russell 3000 index between the start of the Twist and the end of June 2014 was 72 percent, it might be easy to attribute that particular leg of the post-March 2009 bull market to the Twist itself. A longer-term history mapping total returns on a common logarithmic scale against the  $FRR_{10,30}$  should discourage us from making such a simple connection.

## Equity Returns Surged After Post-Twist Flattening

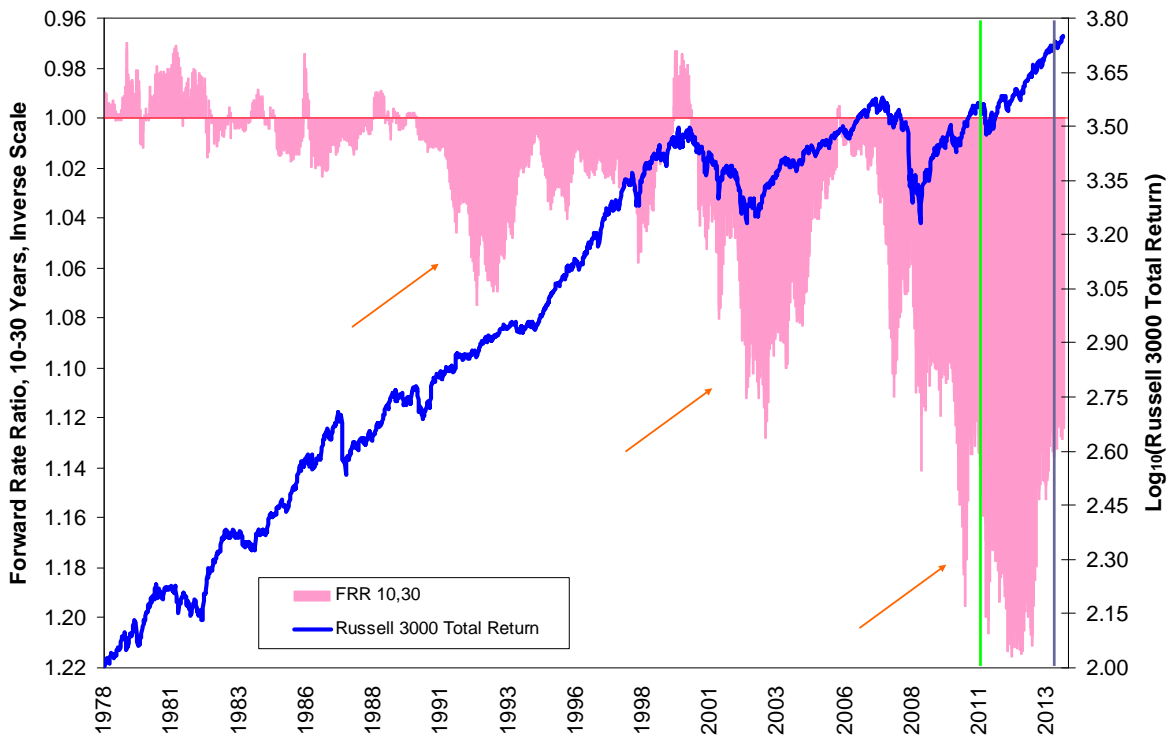


Source: Bloomberg

The long-term history of the  $FRR_{10,30}$  and indeed of shorter-segments of the yield curve since the late 1970s has been dominated by three successively longer and deeper steepenings of the yield curve, marked with arrows. Each time the economy got into trouble, an occupational hazard of being an economy, the Federal Reserve responded by driving the short end of the yield curve lower and holding it there for longer, culminating in the post-2009 QE extravaganza.

The relationship between the  $FRR_{10,30}$  and equity returns was different in each of these three episodes. The first, during the 1992-1993 period when the Greenspan Federal Reserve lowered the target federal funds rate to 3 percent, a level then considered astonishingly low, was over and done with before the late 1990s bull market started. The second, during the 2001-2004 period when the Greenspan Federal Reserve lowered the target federal funds rate to 1 percent, started after and ended before the downturn in equities and their 2007 highs. The third and current period saw the steepening begin just before the bull market took off and remain there for almost six years. The Twist and Ukrainian crisis are marked with green and gray vertical lines, respectively.

## Equity Returns Surged After Post-Twist Flattening



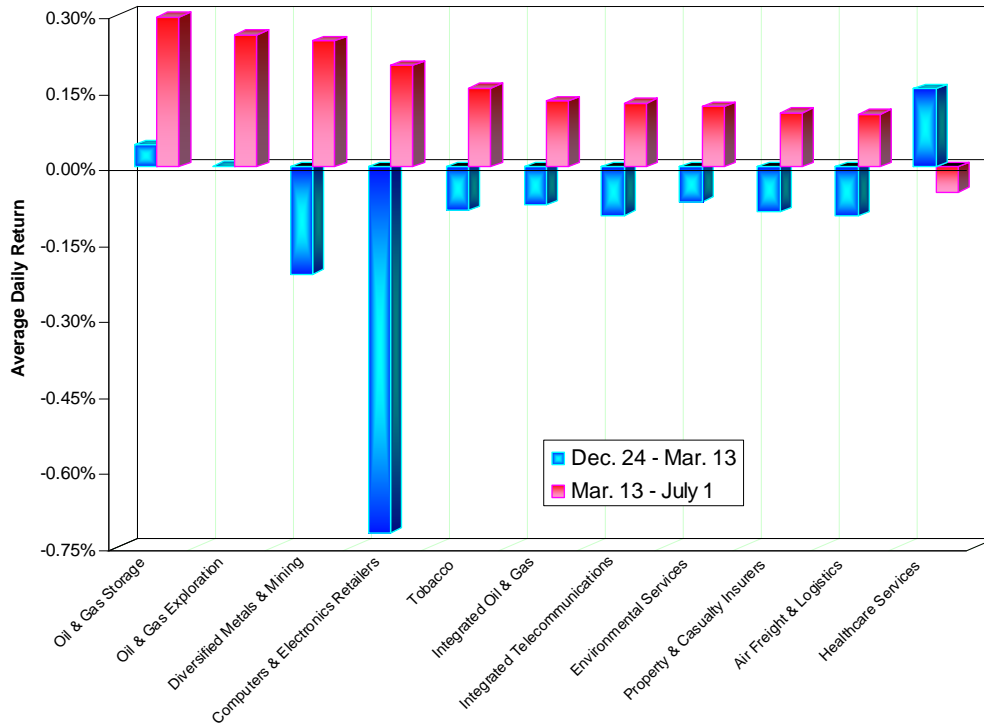
Source: Bloomberg

### Industry Group Impact

Now let's isolate around the period of the Ukrainian crisis and ask the simple question whether the changes in the  $FRR_{10,30}$  between the December 2013 peak of a bearish steepening cycle and the Ukrainian crisis and the period thereafter ending on July 1, 2014 affected returns for industry groups as defined by Standard & Poor's. The entire period was characterized as well by the tapering of the Federal Reserve's QE purchases, something of less importance than many believed (see "How Markets Learned To Ignore QE Nuance," May 2014).

The results should be surprising to those who think stock market returns are a prisoner of monetary policy as opposed to factors intrinsic to firms, industry groups and economic sectors. There are 144 active industry groups in the S&P 1500 Supercomposite index, and only eleven of them accounting for 7.84 percent of market capitalization had statistically different returns between the two periods at an 80 percent confidence interval. Only two groups, Diversified Metals & Mining and Computers & Electronic Retailers, were different at a more standard 90 percent confidence interval, and in both cases the difference was attributable to a rebound from a very bad December-March period.

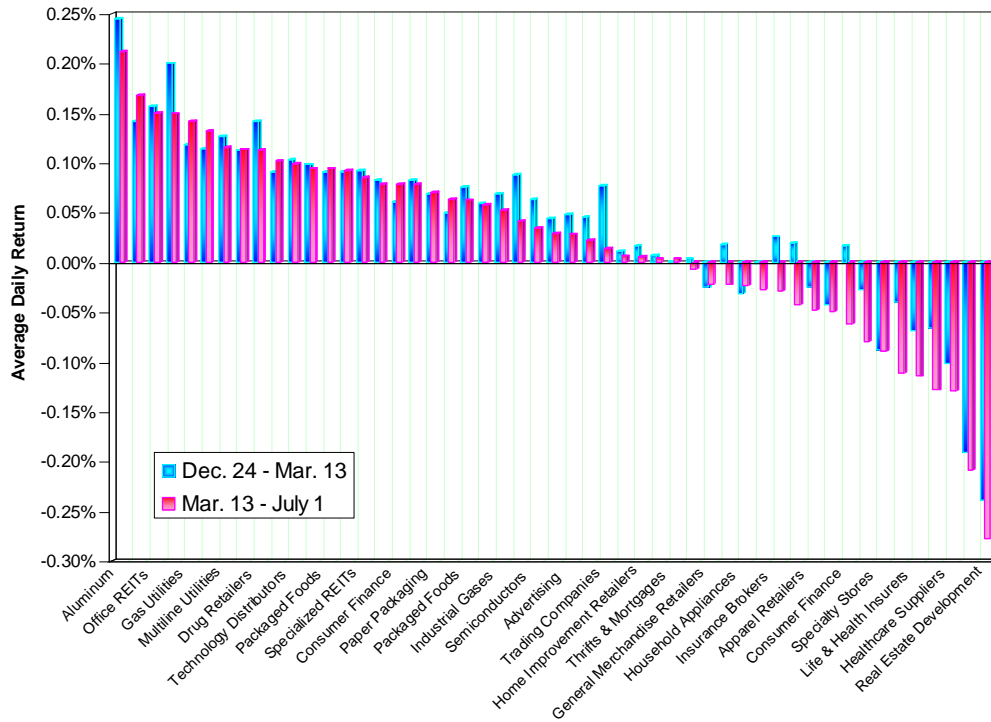
**Groups With Significant Return Shifts  
>80% Confidence Level Post-Yield Curve Shift**



Source: Rosewood Trading

Now for those of you old enough to remember trading cards, let's turn it over and ask which groups' returns were unchanged across the yield curve's shift. A total of 51 groups, more than one-third of the total and accounting for 29.57 percent of market capitalization, were different at less than a 10 percent confidence interval. Restated, the major shift in the yield curve from a bearish steepening to a bullish flattening compounded with an artificial flight into long-term Treasuries did not matter for more than one-third of the stock market's groups by number and almost 30 percent by capitalization.

**Groups With Insignificant Return Shifts  
<10% Confidence Level Post-Yield Curve Shift**



Source: Rosewood Trading

The temptation to explain all markets in terms of external factors, even seemingly powerful and related ones, should be resisted until some basic analyses are conducted. Interest rates and yield curves may seem important to stock market return patterns, but believing something does not make it so.