For Whom The Bond Bell Tolls

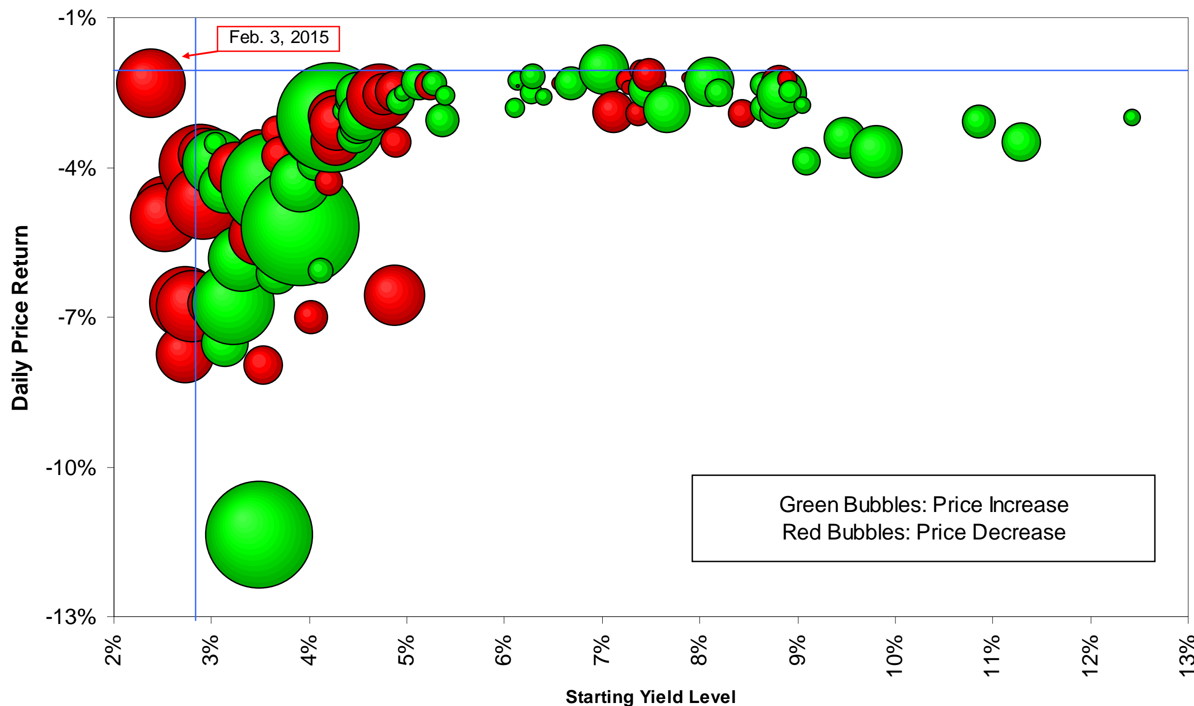
There are so many ways to date yourself in this business, and by "dating yourself" I am not referring to some of those frontiers in human-cyborg interaction that promise to create a new generation of odious Internet gazillionaires. As Eric Clapton sang, "I've had enough bad love / I need something I can be proud of."

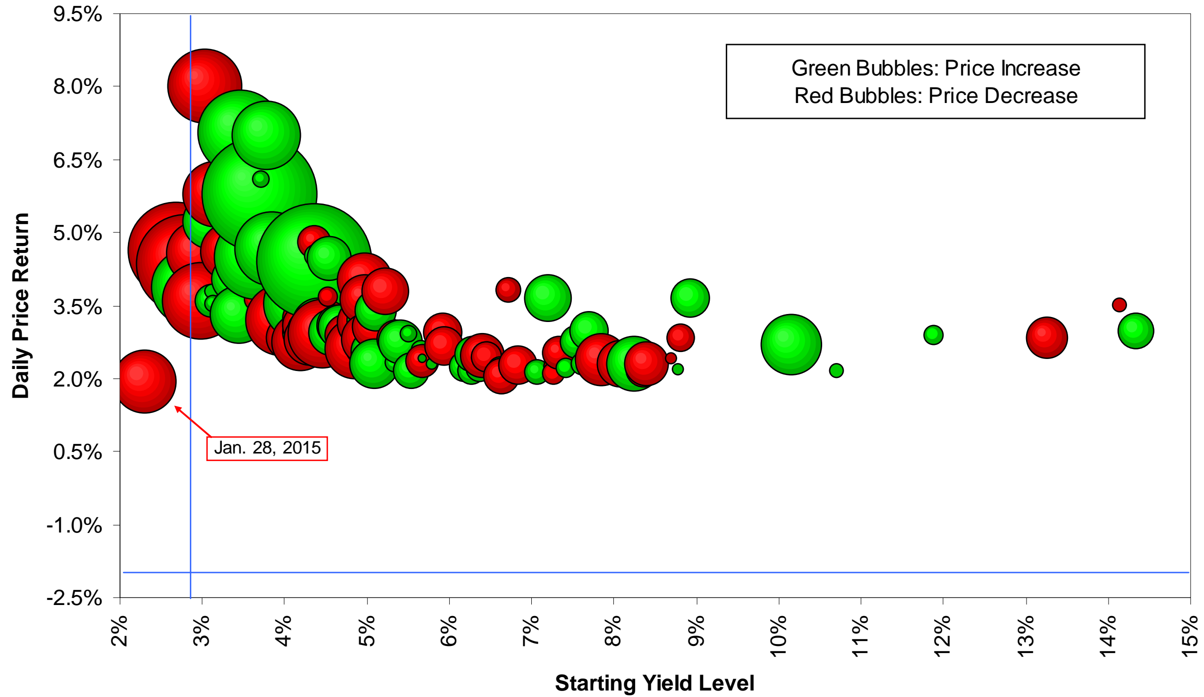
The thirty-year Treasury provides a sort of carbon-14 dating service; it was the most wildly successful financial futures contract of the late 1970s and early 1980s, and it was based on the cheapest-to-deliver bond with a notional 8% coupon. This was lowered to 6% starting with the March 2000 contract. Those were the days before junk bonds from even junkier countries were yielding what used to be considered a stimulative federal funds rate.

Go Big Or Go Home

Last Friday's selloff in the thirty-year was one of 110 days since 1981 when the price change fell below a 97.5% confidence interval. A second such day occurred on February 3, 2015, two trading days after the thirty-year's yield hit its bull market low. For the sake of symmetry, there have been 137 trading days when price changes exceeded the upper bound of a 97.5% confidence interval, the last of which was January 28, 2015. If it seems like rock-and-roll has returned to the long end of the yield curve, it is because it has.

Now here's the kicker, for those of you who like kickers: The predictive capacity of these large days for 21 day-ahead price returns is not robust at all. Let's map these forward returns as a function of the daily price returns on the days outside of the ±97.5% confidence interval and the starting yield level. Positive returns are depicted in green, negative returns are depicted in red; the diameter of the bubbles corresponds to the absolute magnitude of the return. Last Friday's environment is marked with a bombsight, and I have noted where the January 28 and February 3, 2015 data points occurred. We will not know the 21-day return from last Friday until early April.





The average 21 day-ahead price return for a 6% notional coupon thirty-year bond following large negative price changes has been $0.011; the average return following large positive price changes has been $0.0017. Given their respective standard deviations of $0.071 and $0.049, the two series are statistically different at a 73% confidence level.

This low significance level may not reconcile with your gut feeling and the "hot knife through butter" principle that states whenever a market declines/rises rapidly, it signals an imbalance and a trend change. We know bond yields both in the U.S. and most certainly in the Eurozone have been uncomfortably low in nominal terms and often negative in implied real terms, but that has been true for a long time. There are many reasons to sell bonds, the fact they just got clobbered is not one of them.