Financial Gravity And Homebuilding

Last Friday's employment situation report gave real estate stocks of all stripes a nasty beating, and not for the first time, either. Ever since the release of the March 2004 employment situation report a year ago in April, interest rates and real estate stocks have had a shock-and-regress relationship. Each new datum suggesting a continuation of the Federal Reserve's rate hiking campaign – not including the ones the Federal Reserve itself has stated in increasingly clear terms – had been met with selling in these groups, only to be followed by renewed buying and a push to new highs.

But houses are made from lumber, and lumber is made from trees, and trees do not grow to the sky. At some point, the real estate market, bubble or not, will return to earth. Yields on ten-year notes, the *causus conundri*, at last are rising along with short-term rates. Let's extend an analysis done in February, one that concluded REITs' outperformance would slow as long-term rates rose, to homebuilding stocks.

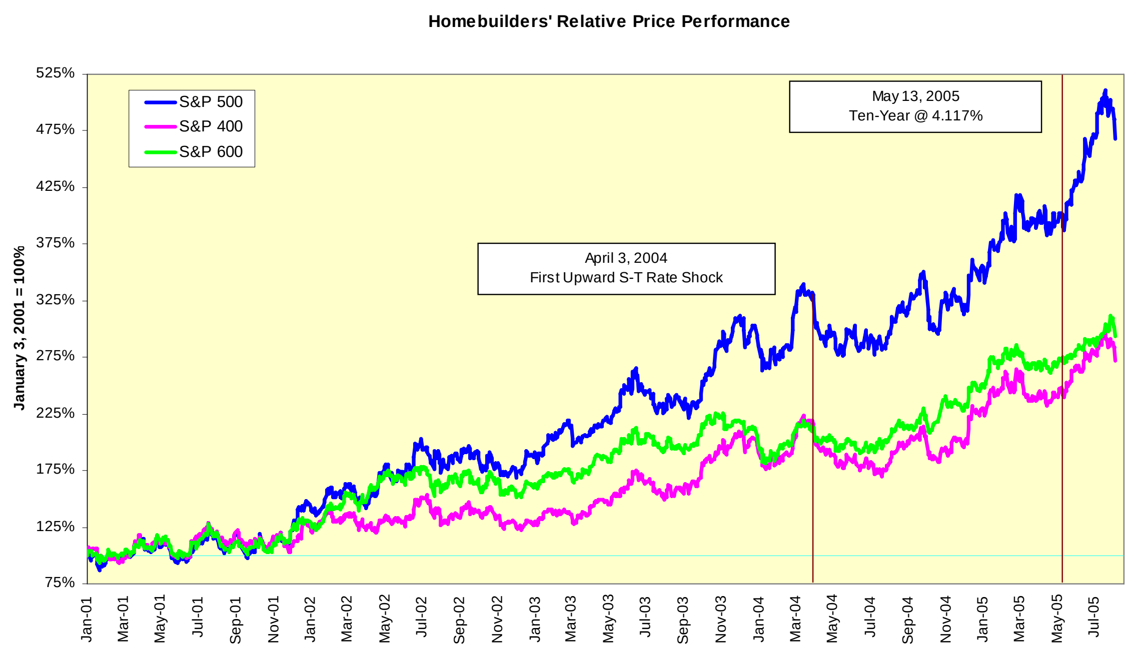
If You Build It

First, let's compare the price performance of the S&P Homebuilding indices divided by market capitalization to their respective broad market indices. The members and weights of the large-capitalization S&P 500, the middle-capitalization S&P 400 Homebuilders and the small-capitalization S&P 600 Homebuilders are listed below.

S&P Homebuilding Indices

S&P 500		S&P 400		S&P 600	
Pulte Homes Inc	29.4%	Lennar Corp	40.9%	NVR Inc	33.1%
DR Horton Inc	28.7%	Toll Brothers Inc	28.6%	Standard-Pacific Corp	21.9%
Centex Corp	24.8%	Ryland Group Inc	16.2%	MDC Holdings Inc	21.4%
KB Home	17.1%	Hovnanian Enterprises Inc	14.3%	Meritage Homes Corp	15.0%
				Champion Enterprises Inc	6.4%
				Skyline Corp	2.2%

The chart below should give free market economists and those who love them some pause. The relative price performance of the various homebuilders did not accelerate in the first year of the Federal Reserve's rate cuts, either in reaction to those cuts or in anticipation of cuts to follow. The relative gains began to accelerate at the market bottom in October 2002.



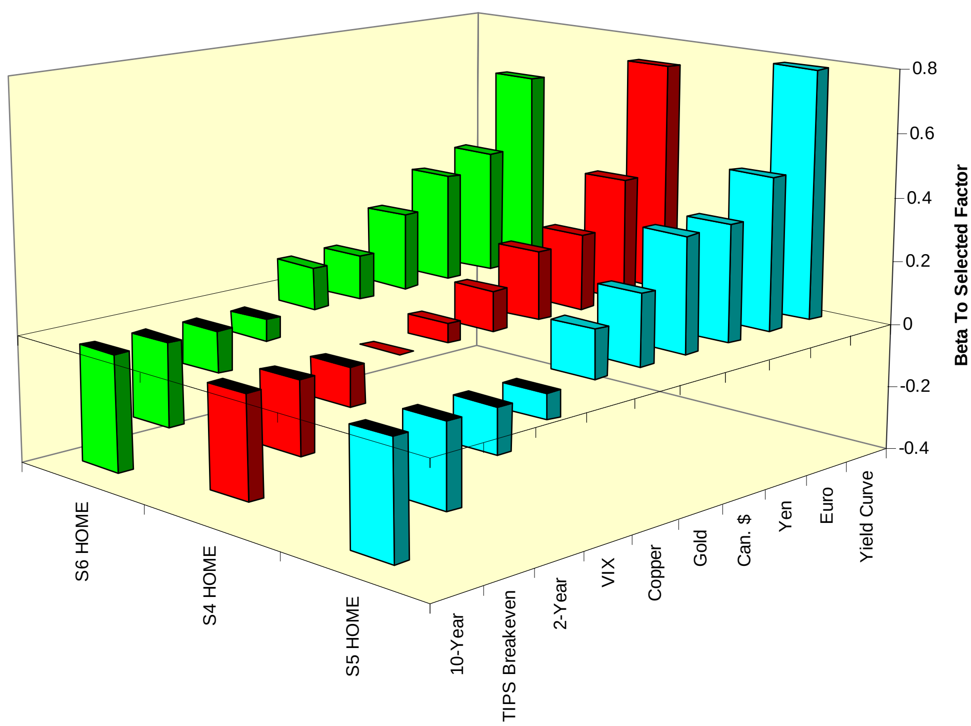
After the April 2004 rate shock, when it became apparent we could not sustain a 1% federal funds rate for much longer, the relative gains slowed. They reaccelerated in early 2005, and then in a move reminiscent of the Nasdaq's final dash to 5,000, really took off between May and August of 2005.

In short, homebuilding stocks did a poor job of discounting the future of the homebuilding industry and reacted after the fact to the industry's success. Given this information, is last Friday's selloff a rational response to market factors or is it simply another creaky step on the stairway to heaven?

Factor Sensitivity

Let's return to an analysis used here last week to measure the importance of various economic factors to the relative performance of the three homebuilding indices. A positive beta in the chart below means we should expect the relative performance of the homebuilding index to increase when the factor does. A negative beta means the opposite; we should expect the relative performance of the homebuilding index to decrease when the factor does.

The Liquidity Connections



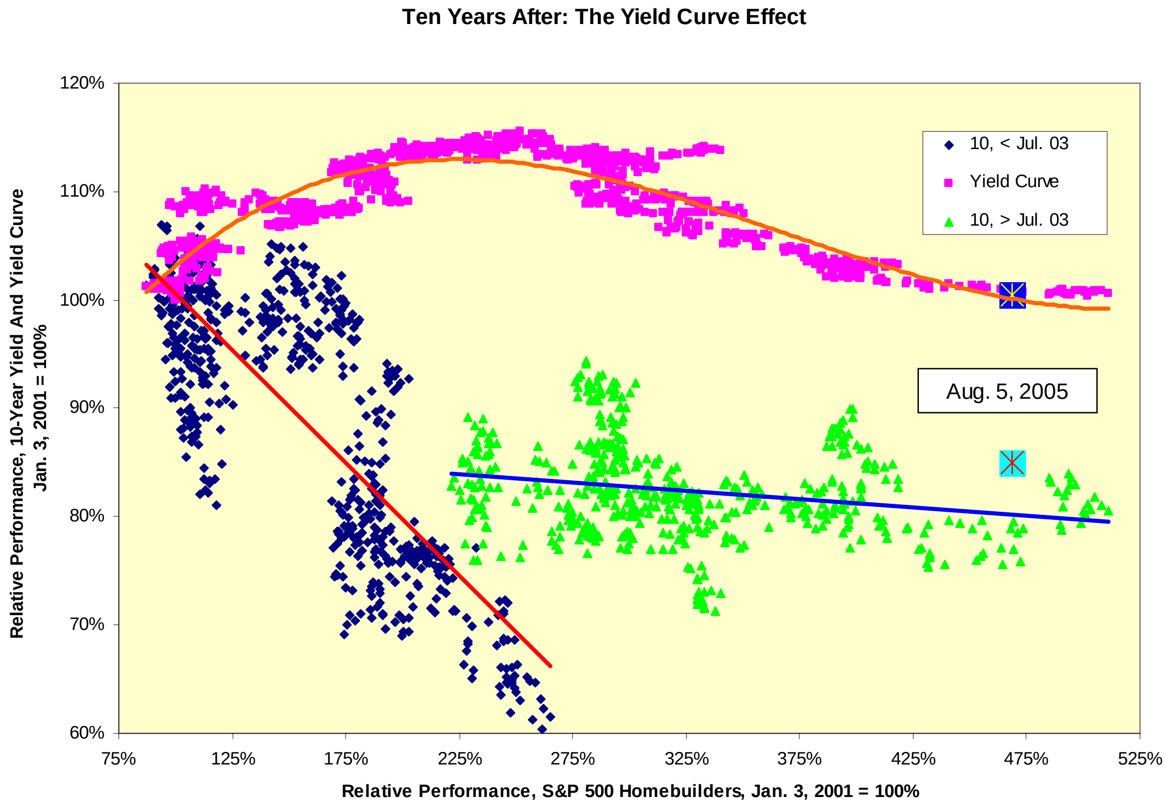
For example, as the yield curve gets steeper, as it most certainly did between 2001 and early 2004, we should expect homebuilders to outperform, and they did. But as noted here in May, the yield curve has been flattening like a pancake even as homebuilding stocks kept on chugging higher. What factors were offsetting the yield curve? We can cross the dollar off the list: Homebuilders have positive relative betas to the euro, the Japanese yen and the Canadian dollar.

The most conspicuous offset to the yield curve getting flatter has been the ten-year note's yield itself. As yields rise, we should expect homebuilders to underperform. We can add inflation expectations as measured by the TIPS market and copper prices – copper, as noted in March, is an excellent measure of economic health – to the picture. And in case you are wondering, the surge in energy prices has no statistically significant relationship to homebuilder's relative performance.

Combining Factors

In some ways, then, the homebuilders were the ultimate beneficiaries of both the yield curve's historic 2001-2004 steepening and its equally historic 2004-present flattening. They acted like a "carry trade" during the steepening, one that benefits from borrowing cheap short-term money and lending at the long end of the curve, and therefore moved higher with other such beneficiaries as the foreign currencies and gold. Once the curve started to flatten, it flattened with declining inflationary expectations and with stable yields at the long end of the curve.

We can illustrate this by mapping the relative performance of the S&P 500 Homebuilders against both the yield curve as measured by the forward rate ratio between 2 and ten years and against ten-year note yields themselves over two different time segments related to the yield curve. The yield curve reached its maximum steepness on June 24, 2003, hovered near those levels, and then started to flatten inexorably by July 15, 2003. We will use the latter date to split the data sample.



Prior to July 2003, Homebuilders' relative performance to the S&P 500 reached 275% as ten-year note yields fell to 60% of the January 3, 2001 level. After July 2003, the Homebuilders relative performance reached 510% of the S&P 500's even as yields rebounded to 80% of their January 2001 level. The August 5, 2005 employment report numbers are highlighted.

Even a small backup in ten-year yields, one occurring in the absence of a steepening yield curve, has been sufficient to knock the Homebuilders' relative performance down. If we are to see a move higher in yields – and that is by no means given – in combination with a yield curve still flat under Federal Reserve pressure – and that's a better forecast – we should see continued relative erosion in the homebuilding sector.