

## See Housing's Forest Through Trees

The late Tip O'Neill famously said, "All politics is local." The same cannot be said for economics; here the real forces are macro and global in nature. But as a micro and very local exception, I have had the opportunity to watch a teardown and subsequent construction of a new house right next door to me over the past six months. My new neighbor runs a programming outsourcing business in India; many of the carpenters and masons are recent Polish immigrants.

Do business globally, build locally. And if this ongoing operation does not exemplify both the American experience and international mobility of capital, information and labor, what does?

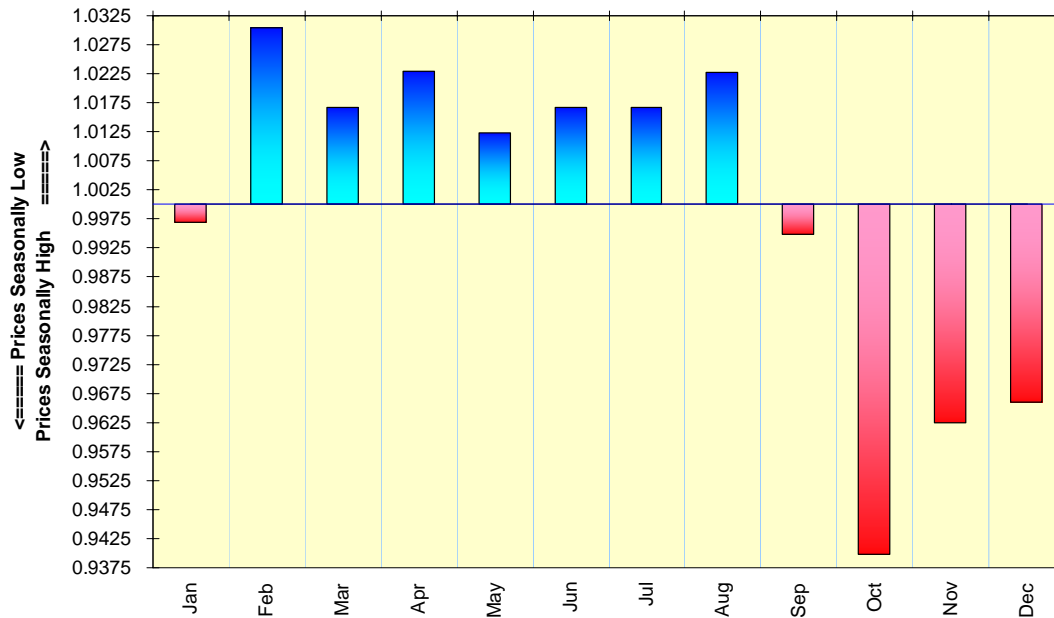
This brings us to another point. The skills of both the masons and the carpenters are ancient; it is safe to assume their professional predecessors and they would be able to change places after a trip in the time machine with only a very short learning curve. We still build houses by hand – one of the few things left still manufactured by hand from quite literally the ground up – and with materials such as wood largely unchanged over the centuries. Lumber prices, the subject at hand, are an excellent barometer of the housing market.

### Seasonal Studs

When the stock market needs an excuse to shoot itself in the forehead and then explain why it was necessary to do so, it can seize on any number of events. We have, for example, seen selloffs related to [consumer sentiment](#) even though sentiment is best viewed as a lagging indicator of the stock market itself. Or, my favorite from a few years back: Big collapses on some disappointing sales out of Cisco Systems, as if the world really depended on a single company. Attention last Thursday was focused on housing, as if this ongoing downturn is new news.

First, we should expect housing to be weak at this time of year; houses are built by hand, remember? If we take a look at the seasonal adjustment factors for 2 x 4 stud lumber, the mainstay of house frames, we see clear and unmistakable evidence the fall quarter is the weakest time of year. As builders typically buy lumber as close to the time of construction as they can to minimize time risk, the seasonal weakness in lumber prices stands as evidence of low demand at this time of year.

Seasonal Factors For 2 x 4 Stud Lumber  
1971 - 2006

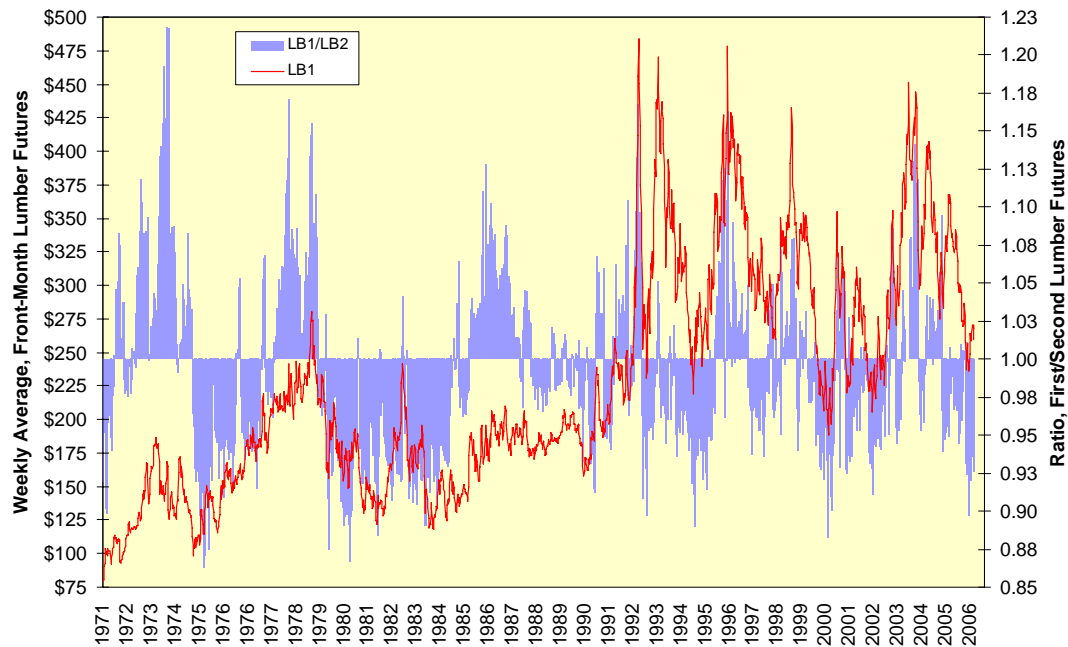


### Board-Level Decision

The lumber futures traded at the Chicago Mercantile Exchange operate in a two-month cycle, and even though the contract is physically delivered with rail cars containing 110,000 board-feet of 2 x 4 random length spruce-pine-fir studs, there is very little intermonth cash-and-carry arbitrage. The spread between the first and second month contracts, now March and May, should reflect short-term fluctuations in demand. Like any other commodity rarely

stored, the front month should rise over the back month when prices rise and fall below the back month when prices fall. This has happened over the contract's history.

**Lumber's Forward Curve Reflects Price Trend**



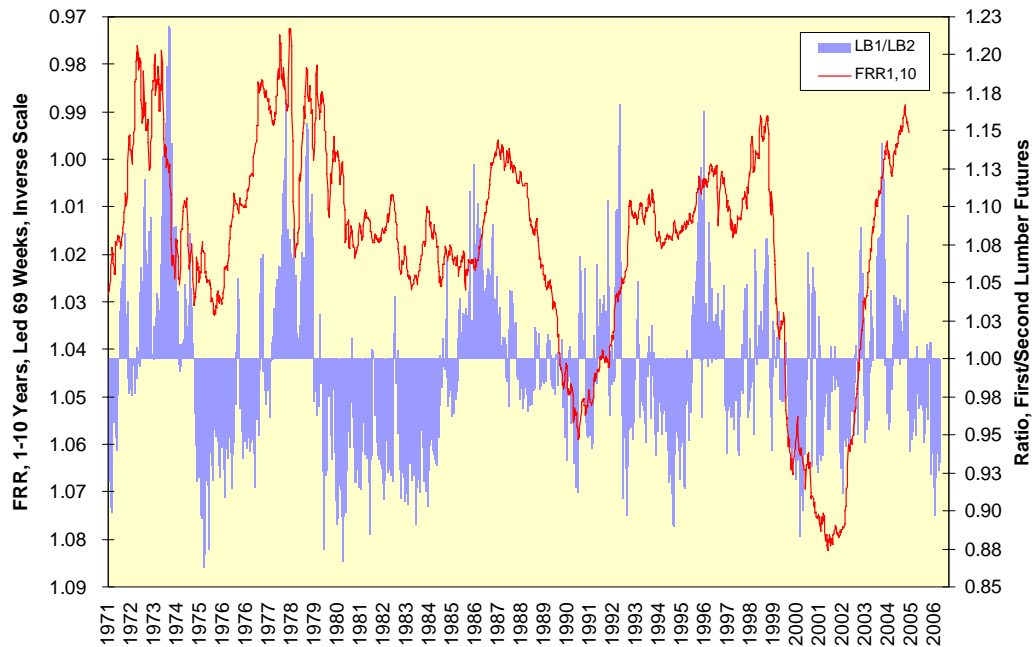
Both the price of the front-month contract and the spread between the first and second month contracts bottomed in mid-November. If previous bottom from when the front-month contract traded below 90% of the second-month contract are any guide, lumber prices should start to rise soon.

### The Yield Curve Connection

Now let's haul out the statistical artillery and see whether the forward curve in lumber, linked as it is to housing, has any effect on the yield curve. After all, the Federal Reserve might be tempted to relax or tighten credit in response to conditions in the housing market and thus influence the short end of the yield curve, while the mortgage market might affect long-term credit demands and thus influence the long end of the yield curve.

The intermonth spread in lumber futures does in fact lead the yield curve as measured by the forward rate ratio (FRR) between one and ten years. This is the rate at which we can lock in borrowing for nine years beginning one year from now, divided by the ten-year rate itself. The lead time is centered on 69 weeks, or a little more than five calendar quarters. This is not significantly different from many of the 18-month lead times seen in monetary policy.

### Lumber's Forward Curve Leads Yield Curve

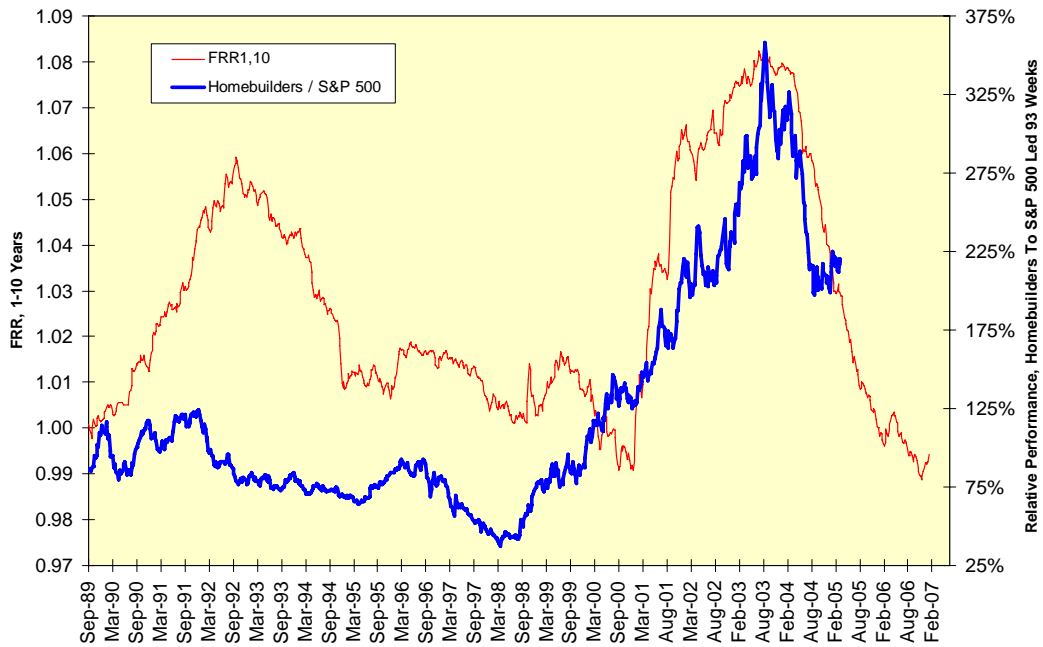


### Homebuilding Stocks

What, if anything is the importance of the relationship between the yield curve and homebuilding stocks? The yield curve leads the relative total return of the S&P 500 Homebuilders index to the S&P 500 itself by 93 weeks on average. The flatter the yield curve, as evidenced by a FRR less than 1.00, the worse the future relative performance of homebuilding stocks.

If the chart below is any indication, the homebuilders, last visited here in [August 2006](#), are going to be living in a world of pain for a while. If we add the two lags calculated, the 69 weeks between lumber's forward curve and the yield curve and the 93 weeks between the yield curve and homebuilders' relative performance, we get 162 weeks. That is more than three years of further underperformance by the homebuilders. That would take us into 2010 and the six lean years would offset homebuilders' six fat years between 1998 and 2004.

### Yield Curve Leads Homebuilders Lower



All industry cycles take time. The recent long period of outperformance in energy stocks was the first for that sector in a quarter-century, and technology has gone through some pretty spectacular booms and busts, no? Home may be where the heart is, but it is where the wallet should not be for the foreseeable future.