# Lumber Grows On Trees

Nobody likes getting whacked with a two-by-four, which may be why nearly all traders have avoided lumber futures over the years. The cash markets for both stud lumber and oriented strand board (plywood) are highly volatile; OSB is up 91% so far this in this deflationary year. They are subject to housing's ups and downs and the to vagaries of both environmental restrictions and the never-ending U.S.-Canada softwood lumber trade spat.

In addition, lumber buyers often are quite cavalier about the entire concept of risk management. While they certainly could benefit from forward price ceiling agreements, few could withstand the financial stress of an unsuccessful - forever defined as a gain on the cash side and a loss on the futures side - hedge. As a group, they prefer to take their chances and try to pass on their largely hidden increased costs to their final customers. Many commodity buyers regard their customers as their captive risk managers; think about how your natural gas or electric utility regards you.

**The Wealth Effect**

Real estate and financial assets are the two great stores of wealth in the U.S. economy, and there is some evidence to suggest that real estate is the more important of the two in influencing people's economic behavior. I always find this a little odd given the dual nature of housing. You consume housing services to the extent of the opportunity cost of the capital invested less the imputed rental value of the property. It is very difficult to cash out of real estate without either simultaneously lowering the amount of housing services consumed or incurring a greater level of debt. You have to live somewhere, but you do not have to own financial assets.

Housing and stocks do not move in tandem even though both are influenced, albeit differently, by interest rates and demographics. Housing prices can be viewed as an inflation-protected bond yielding the imputed rental value less the considerable holding costs involved with owning a house. The inflation protection aspect caused housing prices to surge in the 1970s when equity prices declined in real terms and "real" interest rates were negative. They are surging today as the holding costs of real estate, chiefly mortgage interest, are falling. As demand for housing rises, so do lumber prices, and therein lies the story.

**Derivatives Don't Kill People...**

Let's roll out a bold statement: The most important development in the general American prosperity of the past quarter-century has been the creation and adoption of financial risk management tools, chiefly interest rate derivatives. Kindly end your stunned silence. Prior to these developments, which began in the 1970s and reached maturity by the mid-1980s, the Federal Reserve could, to borrow a phrase from the then extant "phone company," reach out and crush someone. Or everyone: Savings and loans used to provide most of the funds for mortgages, and the rates they could pay savers were capped by the Fed's Regulation Q. Moreover, they famously borrowed short on time deposits and lent long on mortgages. So when the Fed tightened credit and either flattened or inverted the yield curve, the funds available for mortgage lending disappeared.

Did I mention that Congress created both Fannie Mae and Freddie Mac to "solve" this mortgage-funding problem? How typical of the government to layer on agencies at cross-purposes rather than eliminate the actual source.

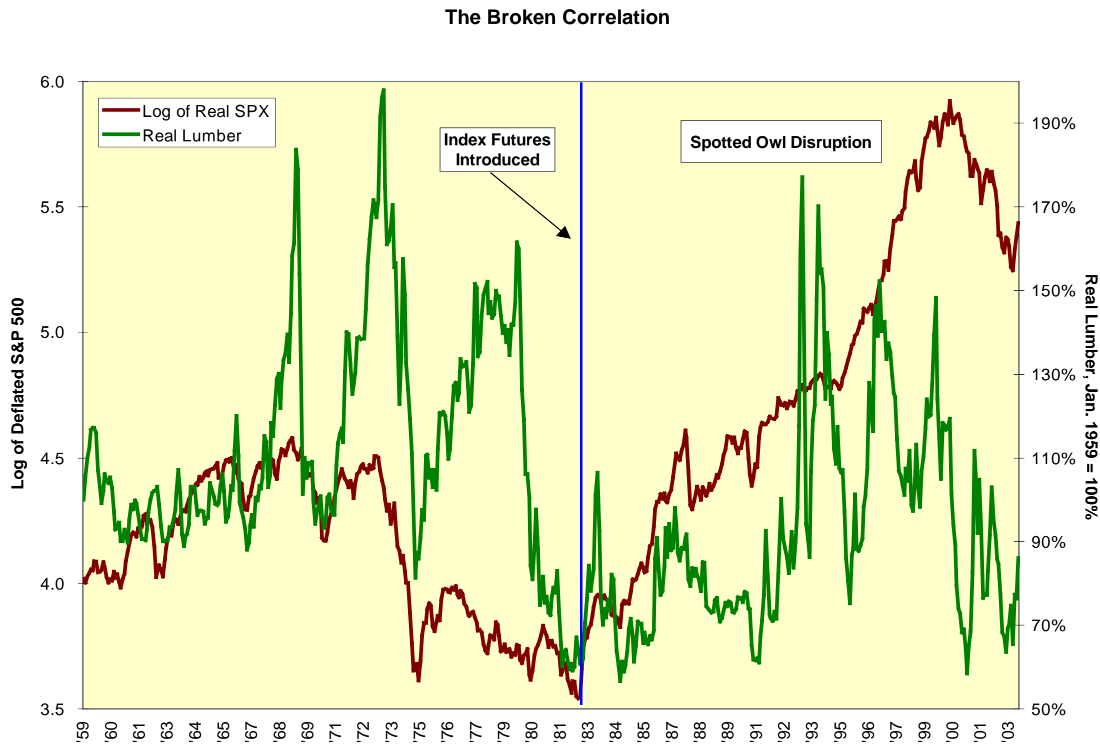
The Fed's practices affected auto loans as well - this was prior to operations such as Ford Motor Credit or General Motors Acceptance - and so the Fed could squeeze the economy as if it were a wad of Silly Putty. Once mortgage securitization began, culminating with the development of the collateralized mortgage obligation in the mid-1980s, the market began to circumvent the Fed. Graduated payment mortgages accommodated those who anticipated rising incomes, adjustable-rate mortgages accommodated those willing to take the risk of rising interest rates, etc.

Both Fannie Mae and Freddie Mac wrap themselves in the flag and take credit for making mortgage funding available to the grateful masses. That is self-serving nonsense. They simply leveraged their lower cost of funding into a greater market share of what would have existed by virtue of interest rate derivatives alone. If we were to fragment Fannie Mae and Freddie Mac, remove their implied puts from the government and put them on equal footing with other mortgage market participants we would get the same results with lower systemic risk.

**It Shows Up In Lumber**

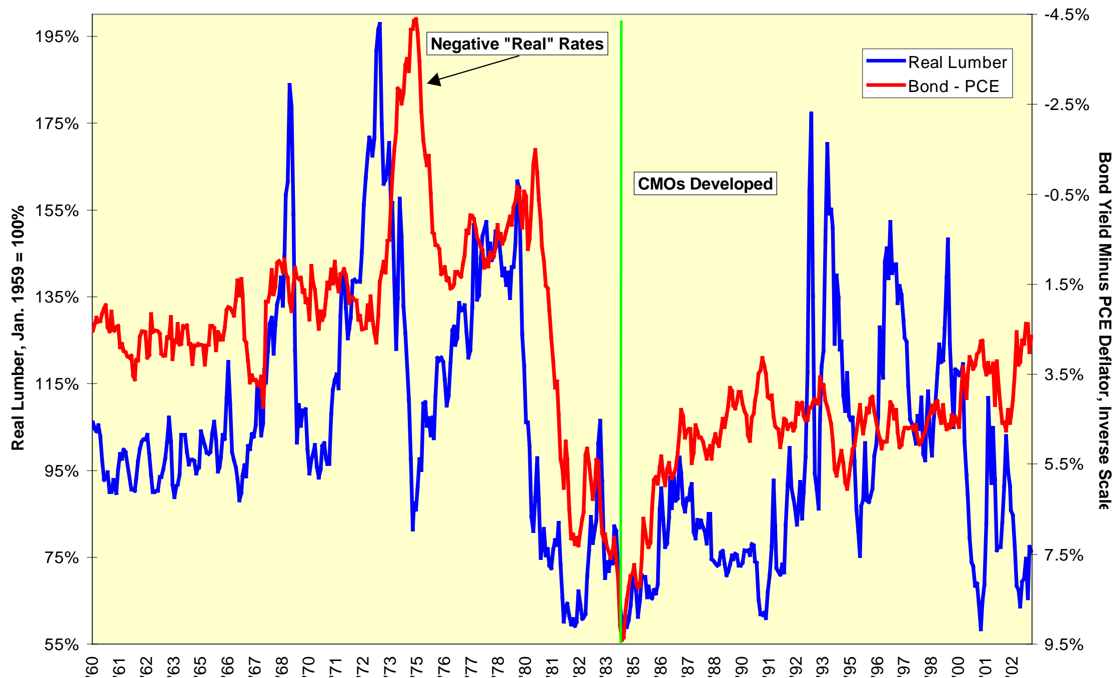
Talk is cheap; where are the supporting data? If we compare deflated lumber prices to the logarithm of the deflated S&P 500, we can see a different level of lumber price volatility before the 1982 introduction of stock index futures

by the Kansas City Board of Trade than in what came after. Three precipitous drops in price are visible, in the 1969-1970, 1973-1974, and 1980-1981 periods.




The 1973-1974 drop was associated more with the oil shock recession than with interest rates, but the other two drops were induced by interest rate-induced recessions. The price volatility in the latter period can be attributed to the 1993 spotted owl disruption in the lumber market and then to the on again - off again tariffs on Canadian lumber imports.

Real lumber prices took a jump in the 1975-1979 period, a time of rapid price increases in real estate. This period coincided with negative real interest rates as defined by long-term bonds less the personal consumption deflator's annualized rate of increase. These rates stimulated housing demand and led to a strong recovery in lumber prices. After the development of CMOs, the relationship between lumber prices and interest rates predictably became random.




Real interest rates at present are heading back toward levels last seen during the pre-Volcker era, but real lumber prices are at the low end of their historic range. Should we expect to see them rise strongly from here? That is doubtful: One reason behind high housing prices is a relatively weak supply response. Builders simply cannot locate the sites necessary for new housing starts, and that dampens lumber demand.

Weyerhauser, which should be strong during a housing boom, has struggled of late; it has underperformed the S&P 500 this year with a total return of 6.8%. If the people who grow the trees cannot cash in, and if futures traders seldom trade more than 1,000 contracts per day of lumber, then why should you get involved in either at this stage of the housing cycle? A two-by-four is to be avoided, not sought.