Unreal Aspects Of Real Estate

The heavy snows pelting the Chicago area at the time of this writing made me thankful for the roof over my head and reminded me one more time why the great and ponderous works of human philosophy were created in miserable climates. Here's a question unlikely to be kicked around Maui this weekend: Can a chain of rational responses to policy stimuli produce irrational results, this case real estate prices disconnected from, dare I say, *terra firma*?

Consider the tongue-lashing of the rest of humanity implicit in the minutes of the Federal Reserve's December 14, 2004 meeting:

> Some participants believed that the prolonged period of policy accommodation had generated a significant degree of liquidity that might be contributing to signs of potentially excessive risk-taking in financial markets evidenced by quite narrow credit spreads, a pickup in initial public offerings, an upturn in mergers and acquisition activity, ***and anecdotal reports that speculative demands were becoming apparent in the markets for single-family homes and condominiums*** [emphasis mine].

Interest rates, at their most basic, equilibrate current and future consumption. Higher interest rates discourage consumption and encourage savings, and the lower interest rates produced by the Federal Reserve's historically aggressive rate-cutting campaign of 2001-2003 do the opposite.

We can argue, as many here and elsewhere have done, whether the Federal Reserve's rate-cutting was wise. We cannot argue whether the American citizenry's eat, drink and be merry response thereto was as intended by the Federal Reserve. To complain that people took you up on your offer to borrow money cheaply to maintain consumption and to forestall a deflationary implosion in the wake of the 1990s bubble is disingenuous in the extreme. Would the bonds of both Ford and General Motors be skirting speculative status today had the automobile market of 2001-2003 not been so distorted by 0% financing?

Inquiring Minds

The real estate market at all levels has been affected by these policies; it is fair to conclude prices capitalized the lower rates much in the same way a bond does. A reader posed the following set of questions in regard to real estate:

1. Is it possible to infer the extent to which changes in real estate prices nationwide are driven by changes or expected changes in rates?
2. Can that portion of real estate price changes not explained by rate changes be attributed to demographic waves?
3. Real estate contains an embedded option to refinance. To what extent might the perceived value of this option explain periods of real estate outperformance?
4. Can we infer that at the apparent end of a bond bull market we may also be at the end of a real estate bull market without some demographic or inflationary help?
5. What are the macroeconomic factors that drive real estate, and how important are they?

Clearly it is not possible to answer all of these questions in detail in the time and space provided, so let's focus on the interest rate components of these questions as they apply to prices. The relationship between some of these factors and REITs will be examined in a second article next week.

Pre-Payment Complexity

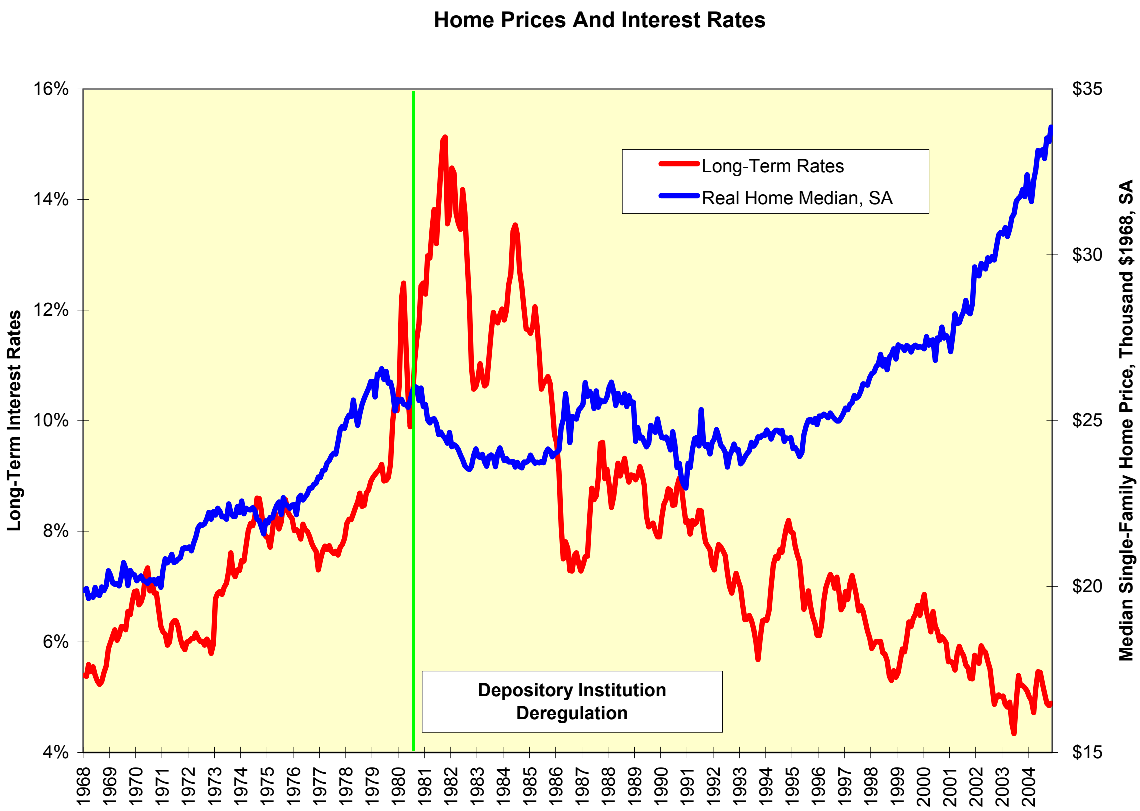
First, the observation that conventional mortgages contain an embedded option on bonds - the mortgagor (borrower) can "call" the mortgage away from the mortgagee (lender) - is an astute one. Any long option has a non-zero value; in this case, the ability of a homeowner to lower payments at some point in the future is worth something. The writers of these options, including our dear friends Fannie Mae and Freddie Mac, can hedge their risks in the interest rate derivatives markets and can seek upfront compensation in the form of higher fees for assuming these risks.

Presumably these embedded options would be at their cheapest whenever the collective expectation is for rates to rise, which would lower their probability of exercise. Real estate can underperform during a rising rate environment if real rates are rising faster than are either expected inflation or personal income. If, however, rates rise in an inflationary environment, real rates can decline sharply or even turn negative, as they most famously did in the 1970s.

If rates are declining during a period of moderate inflation, as was the case in 1993, 1995 and 2002-2004, the prepayment option rises in value along with the price of real estate. Does this prepayment option outweigh the other effects of lower interest rates, principally higher asset prices? Almost certainly it does not.

The Bond Effect

Now let's turn to the big question, and that is whether our collectively rational response to the Federal Reserve's entreaties pushed up real estate prices unsustainably. If we seasonally adjust the National Association of Realtors' median single-family home price and deflate it by the Consumer Price Index and compare it to the Federal Reserve's index of constant maturity long-term rates (30-year between 1987 and 1989, 20-year otherwise), an interesting pattern emerges.



Prior to the removal of Federal Reserve Regulation Q interest rate ceilings and the deregulation of depository institutions in 1980, inflation-adjusted home prices actually rose along with nominal interest rates. This was prior to the widespread adoption of adjustable-rate mortgages, which shift the risk of rising interest rates back to the buyer. Buyers had a positive incentive to enter the housing market before rates rose further. In addition, the structure of the mortgage market was such that refinancing was costly and time-consuming.

After 1980, real home prices and long-term interest rates began to more inversely to one another. The sustained and rapid decline in long-term rates has led to a sustained and rapid increase in real home prices, more than 38% over the past decade. While some of this can be accounted for by demographic factors and increases in real personal income, most of it appears to be explicable by interest rates.

Should the Federal Reserve continue to take umbrage upon our wicked, wicked ways and in their ineffable wisdom declare war on the American consumer, housing prices will of necessity suffer. This will present some significant problems: Not only are houses still the major assets for many families, they are a necessity. I could live on a day-to-day basis without my stocks. Braving a Chicago winter without a house would be another matter altogether.