

“Professor’s Comments”

(For the July 2009 Moody’s/REAL Index returns.)

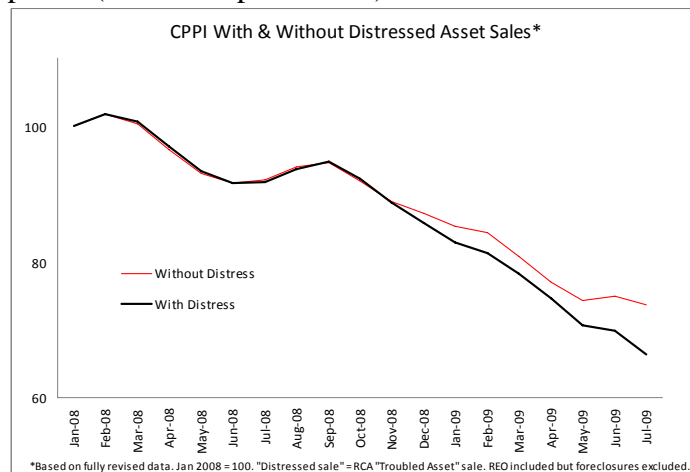
This is a periodic commentary which will generally be posted monthly on the “RealIndices” web site, offering the perspective on the indexes of Professor David Geltner (or occasional guest commentators). Geltner was a leader of the team at MIT that developed the methodology for the Moody’s/REAL Indexes.

Desperately seeking the bottom:

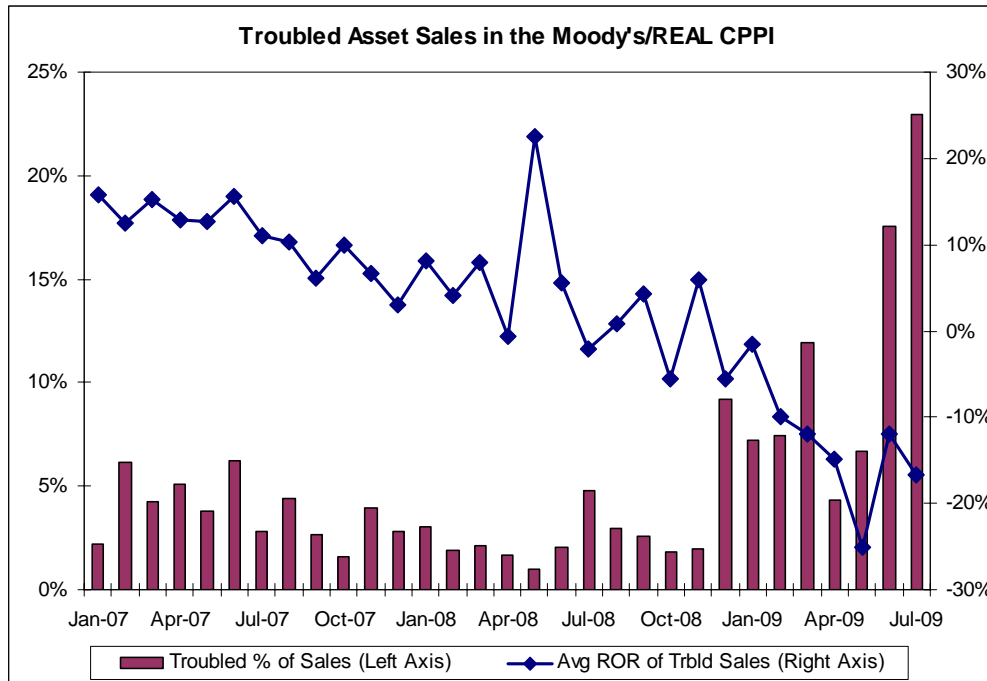
Last week my wife and I were driving along the Taconic Parkway when we passed a bare tree in the median. It wasn’t a big tree, but it had a big black vulture perched on almost every one of its branches. There must have been a dozen in that one tree, all eyes watching the road, just sitting there not moving. I said I wished we had a camera; I’d take a picture and put it in my next commentary for REAL.

And so the CPPI continues to fall, month after month (negative for 10 months in a row, 19 of the past 23 months): “Tomorrow and tomorrow and tomorrow / Creeps in this petty pace from *month to month* /.../ Signifying *something!*” (apologies to Shakespeare). But signifying what?...

It signifies that the vultures are still perched, but enough distressed sellers are coming into the market to keep pushing the index down. Transactions are still incredibly scarce, but there are enough for the CPPI to give a good picture of the change in price level in the closed deals from month to month. Even though “pretend and extend” is reigning supreme, so that most distressed properties are not seeing the transaction arena, in July 23% of the sales in the CPPI were distressed (RCA’s “troubled assets”), the highest percentage ever in the index’s history (breaking June’s record of 18%, which broke March’s record of 12%). This is still a small percentage of distressed sales compared to the housing market. But it is enough to begin to substantially move the index. Without distressed sales the CPPI would have been down less than 2% in July instead of 5%, and over the past three months (since the end of April), distressed sales have pushed the index down roughly 15 points (7% of the peak value) below where it otherwise would be.



The chart below tracks the distressed sales percentage of the index observations by month since the peak, and shows how the distressed sales during the downturn are occurring at substantial and generally increasing lifetime losses (per annum buy-to-sell price change).



So where is the bottom in the commercial property market? It seems that commercial property is practically the only major asset class that is still falling. In housing, the Case-Shiller Index has turned up, even with (indeed in some sense probably because of) all the distressed selling that is going on there. Commercial property transaction cap rates are back up to the 8% neighborhood (or higher) in most property sectors, from as low as 6% at the peak (based on the RCA data, after you infer from the 90-trailing average), and the current cap rates are based on projected NOIs that are 10% to 20% below those of the peak. Nevertheless, the vultures have their reasons for staying perched on that tree...

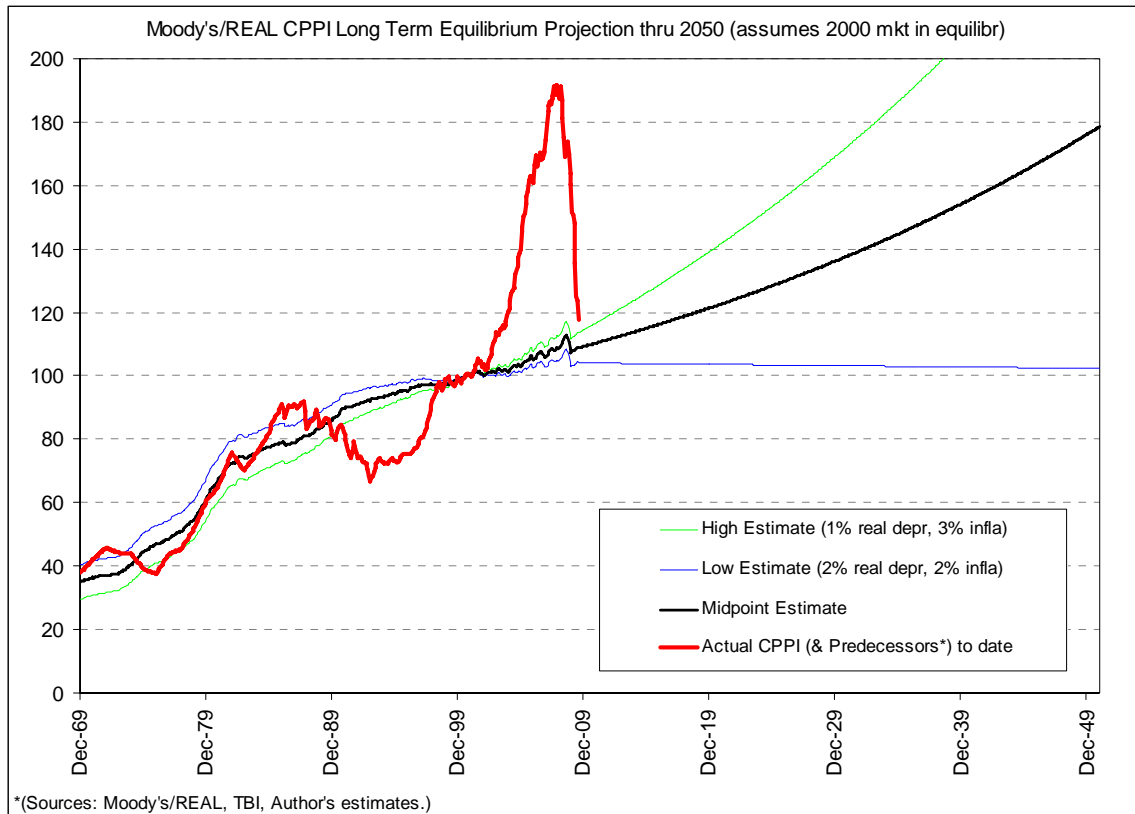
Can we avoid a “negative bubble”?...

Humor me by allowing me to extend my simple model of a “long run equilibrium value” for the Moody’s/REAL CPPI that I have introduced in previous editions of this commentary (e.g., see in particular my June and July commentaries on the April and May index results).

The chart below takes the CPPI and extends it backwards in time through 1970 by splicing other indices that are in the same “spirit” as the CPPI in that they represent estimates of transaction-based same-property prices for stabilized properties in the U.S. commercial real estate market. * This record of actual historical same-property price

* In the chart, the TBI published by the MIT/CRE is used quarterly prior to 2001 back through 1985, and an unsmoothed version of the NPI (and predecessor comingled funds based indices) is used annually from

evolution (the price change as would be experienced by investors) is depicted by the red line in the chart. Super-imposed on this is a simple (indeed, admittedly “simplistic”) model of same-property price evolution that may represent a sort of “long-run equilibrium” (by which I mean a “sustainable”) price level path. The model consists of two assumptions: (i) the market was at such a “sustainable” level at the end of 2000 when the CPPI was pegged to a value of 100, and (ii) commercial properties tend to depreciate in real terms (net of inflation) at a rate of 1% to 2% per annum (even after routine capital improvement).



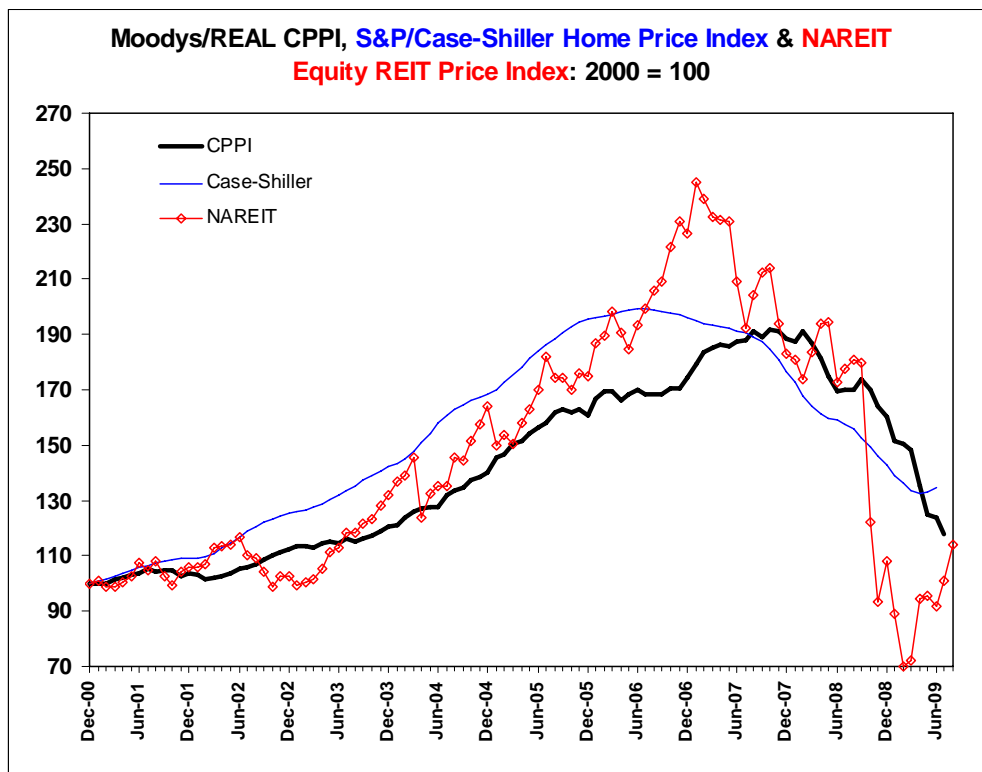
The result is the range of historical nominal (current-dollar) values indicated between the green and blue lines (with the midpoint being the black line, and all indexed to 100 at the inception of the CPPI in 2000). This is simply a line tracing out the Consumer Price Index (CPI) less 1% to 2% per year and indexed to pass through the value level of 100 at December 2000 (same as the CPPI at that point). The overall chart spans 80 years, from 1970 through 2050, with the period beyond the present projected bounded by two alternative inflation assumptions: 3% per year (for the high – green – growth path) or 2% per year (for the low – blue – growth path).

The model suggests that the current sustainable level of the CPPI would be in the range of roughly 105 to 115. The current value of the CPPI as of July stands at under 118. It is interesting how well this simple model tracks the central tendency of the historical index

1984 back through 1970. All three spliced series include the effect of (that is, they don't remove) routine capital expenditures in the price evolution.

values all the way back to 1970. Starting from a value of 100 in 2000, the model predicts (“backcasts”) the 1970 value of the nominal index to be 35. The actual value at that time of the “extended CPPI” was 38. Note that the extended CPPI in the chart describes parts of three distinct historical cycles: a peak in 1971 followed by a trough in 1975; a second peak in 1987 followed by a trough in 1992; and a third peak in 2007. In real terms the magnitude of the 1970s peak-to-trough price drop was 39% (measured as a percent of the peak value); the 1980s-90s peak-to-trough drop was 43% after adjusting for inflation; and the current drop from the CPPI inflation-adjusted peak in August 2007 through July 2009 is 41% in real terms.

This long-run perspective suggests that the current fall in transaction price levels should as of July be very close to running its course. And of course there are other such indications. The chart below compares the CPPI with the Case-Shiller home price index (10-city composite) and the NAREIT Equity REIT price index, all indexed to 100 in 2000. The Case-Shiller turned up after a cumulative real price drop of 37%, less than the current real price drop in the CPPI, even though housing was probably in worse shape than commercial real estate going into the downturn (although housing has also benefitted to date from much greater government bailout money). The NAREIT Equity index took a 73% real hit from January 2007 to February 2009, but has since bounced back smartly and as of August was 56% below its peak in real terms. If we assume REITs had roughly 2:1 leverage going into the downturn, this would imply asset value declines of 35% to 40% from peak as perceived by the REIT share market as of last February, but only 25% to 30% by August. Combined with news from the macro-economy that the recession has likely bottomed out, and there is a pile of evidence that the CPPI ought to be at a bottom.



But there remain a couple of inter-related reasons why the vultures are staying in their tree. The first reason is that the massive recession that the economy has experienced, even if it is bottoming out, will continue to wreak havoc with commercial property NOIs probably for a couple years, as rent rolls and rental markets gradually adjust. Even more serious is the huge overhang in mortgage par value outstanding, and the “maturity time bomb” that implies. RCA estimates that over \$1.3 trillion worth of property value (at peak), perhaps over one-third of all commercial property, now has underwater equity (and debt), based on the magnitude of the transactions and refinancing that occurred during the property boom and the magnitude of the decline since then that is measured in the CPPI. The result is rapidly piling up distressed properties (RCA estimates over \$100 billion worth by July), only a trickle of which have so far been resolved or entered the transaction market.

The vultures are figuring that this dam must break, and when it does, prices will fall even farther. The index model can help to quantify a perspective on this line of thinking, for the long-run history chart described previously offers the vultures some excuse to stay in their tree for now. In both of the two previous troughs depicted in that history, the price index fell for more than three years (we’re just shy of the 2-year anniversary of the current downturn), and in those two previous troughs the price index temporarily dipped far below the simple model trend line. In 1975 the price index was 20% below the trend line midpoint at that time, and in 1992 it fell to 28% below. The trend line midpoint currently (as of July) stands at approximately 110 in the CPPI, some 8 points below the index’s July level of 118.

What if, when investors get burned by a big real estate crash, they need for the asset class to present them with very fat juicy super-normal return expectations for a few years, in order to get them to put their money back into real estate? After 1975 commercial real estate produced average total returns net of inflation of 10% per year for six years (through 1981). After 1992 commercial real estate produced average total returns net of inflation of 11% per year for six years (through 1998). Those were risk premia comparable to the stock market’s long-term average risk premium, twice the size of traditional real estate risk premia, and in both cases there was then a pause or plateau, arguably near the equilibrium property price level. Only by dropping 20% to 30% below the long-run trend line could such super-normal returns be produced (without going into another positive bubble). Such a “negative bubble” today would bring the CPPI down to around 80 in a worst case scenario, 30 to 40 points below where it currently stands.

Weighing against such a dire result are several considerations:

- There may be more money poised on the sidelines today, with fewer other good investment alternatives, than there was in either the 1970s or the 1990s (the recent success of REITs in raising cash being an indicator in support of this hypothesis).*

* Bob White, President of RCA, has suggested that the greater weight of global financial capital, and the lower interest rates, of today compared to the 1970s and 1990s, implies sustainable average cap rate levels between 8% and 9% going forward for commercial property, compared to 9% to 10% in the 1970s and

- The advent of large quantities of distressed selling will not necessarily drive prices down lower than they already are, if they are sufficiently low already, for example, massive distressed selling in the housing market is no longer pushing prices down in that market.
- There remains the possibility of Federal Government cash infusions specifically aimed at commercial real estate, conceivably going beyond just getting the currently in place TALF and PPIP programs working better (particularly if bad commercial mortgages begin to bring down large numbers of local and regional small-midsize banks).
- In principle, super-normal return expectations should not be necessary to attract capital, nor does it seem like it should be necessary for unlevered stabilized properties, which are essentially “cash cows”, to provide risk premia equal to those of the stock market. And the banks and servicers who will end up holding the REO may have as much patience as the vultures.

So the game of “chicken” continues, “tomorrow and tomorrow and tomorrow creeps in this petty pace”, and we’ll await the next monthly update of the CPPI to see if there is any new hint of who might be starting to blink. But I hope we begin to level off, because I see no reason to think that negative bubbles are any less costly or any less to be feared than positive bubbles. History need not be destiny.

-David Geltner, September 2009.

(See www.realindices.com for an archive of past issues of “Professor’s Corner”.)

1990s. This would suggest that the CPPI value of 100 in 2000 would be too low to benchmark the current sustainable level for the index, too low by about 12% (i.e., the current long-run sustainable range for the CPPI would be between 115 and 130). Against this argument is the possibility that investors will now demand greater risk premia for real estate investment, more like stock market risk premia, after the property market’s performance in the current downturn in which it did not provide diversification and may fall almost as far as large-cap stocks did: The recent peak-trough loss in real total return was 52% in the S&P500 from its October 2007 peak to its February 2009 trough; so far in commercial property the equivalent number is -36%, but we’re still dropping.