

“Professor’s Comments”

(For the October 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.

Summary for this month: Getting there...

OK, so it’s yet another down month, 13th in a row. But I’m going to try to find some silver lining this time. The CPPI price drop for October, -1.5%, was less than it has been most months lately. One shouldn’t put too much credence in the exact return for any one month. More significant I believe is the fact that transaction volume was up rather smartly in October. As of press time, RCA was registering \$5.4 billion of sales in October, 10% more than September and the highest since last December, even though October is not an end-of-quarter month.

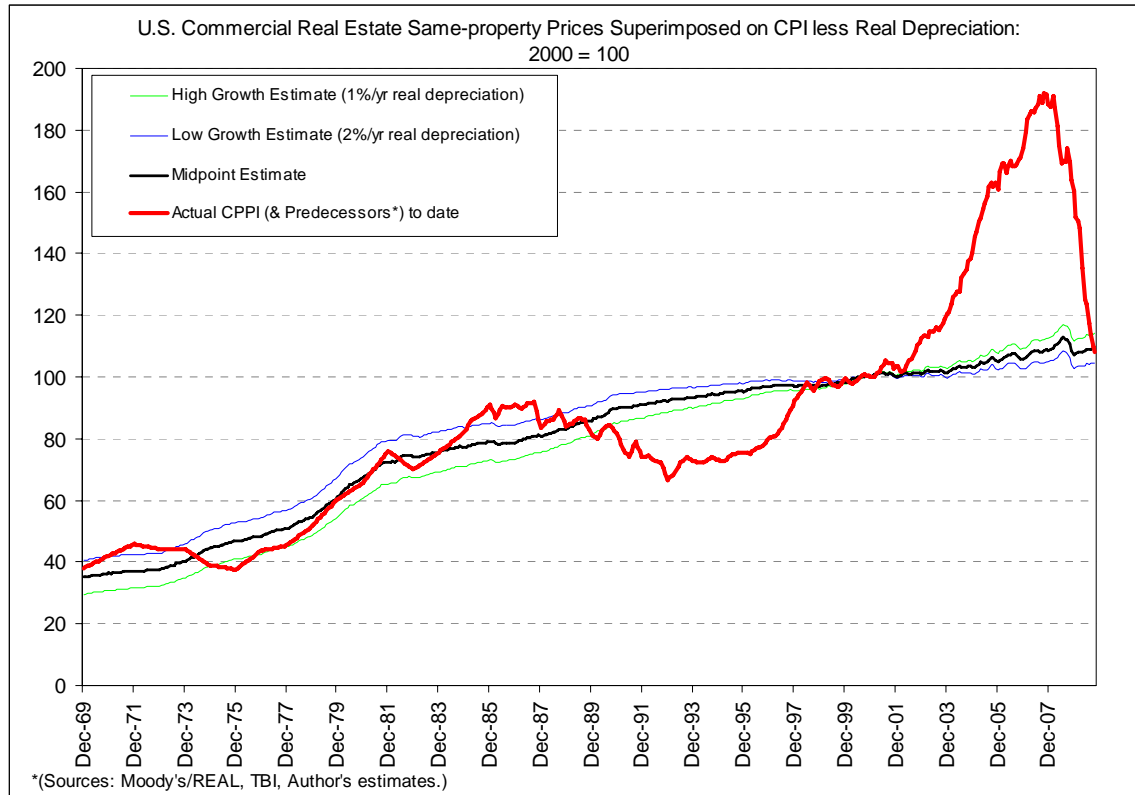
The way markets work, it is impossible to have a decline in prices combined with an increase in traded volume unless the sellers, the supply side of the market, have reduced their reservation prices (the prices at which they are willing to sell) by more than the demand side has reduced its reservation prices (the prices at which potential buyers will buy). In other words, sellers (property owners) are coming closer to the potential buyers in their view about pricing. The way downturns work in private property markets, such a move by property owners is a typical and vital first step in forming a solid bottom in the market prices.

Remember also that October closings (on which the CPPI is based) still reflected deals struck probably typically in September and August or in some cases even earlier. The recent indications of relatively “good news” about the commercial property market have mostly hit the press since then. I’ll go out on a limb (I’ve fallen when I’ve done this before) and predict that we’ll have a genuine uptick in the CPPI before the end of 2009. I can “smell” the pricing bottom.

Where we are in the big picture...

The chart on the following page updates an analysis I have shown in previous commentaries. It presents an extension of the CPPI back to 1969 based on other indices similar in “spirit” in that they reflect same-property transaction pricing (rather than appraisals). Overlaid on this “extended CPPI” is a simplistic model of long-run equilibrium for same-property pricing, based on the hypothesis that 2000 prices were in such equilibrium, and that same-property long-run sustainable prices evolve with the Consumer Price Index less 1% to 2% per year (to reflect real depreciation of the

property). We see that the CPPI is now squarely in the middle of the modeled “long-run equilibrium” property price range, with the CPPI now at 108 and the range now between 104 and 114. This is another reason to have hope that we are now very near the pricing bottom in the current downturn.*



To compare the current downturn with the two previous ones depicted in the chart, in real terms (net of inflation) the 1971-75 price drop was 39% (of the prior peak price), the 1986-92 drop was 43%, and the current drop (so far) is 46%. Thus, we now have a bigger drop in the U.S. commercial property market, and one that has happened much faster, than the two previous cycles going back four decades.† Of course, the chart makes it painfully obvious that the peak preceding the current drop also was higher and sharper. “*The higher they fly, the farther they fall.*” The greater speed of the correction this time probably reflects the greater efficiency in the commercial property market of the 21st century, including better information and the larger role of public securities markets and

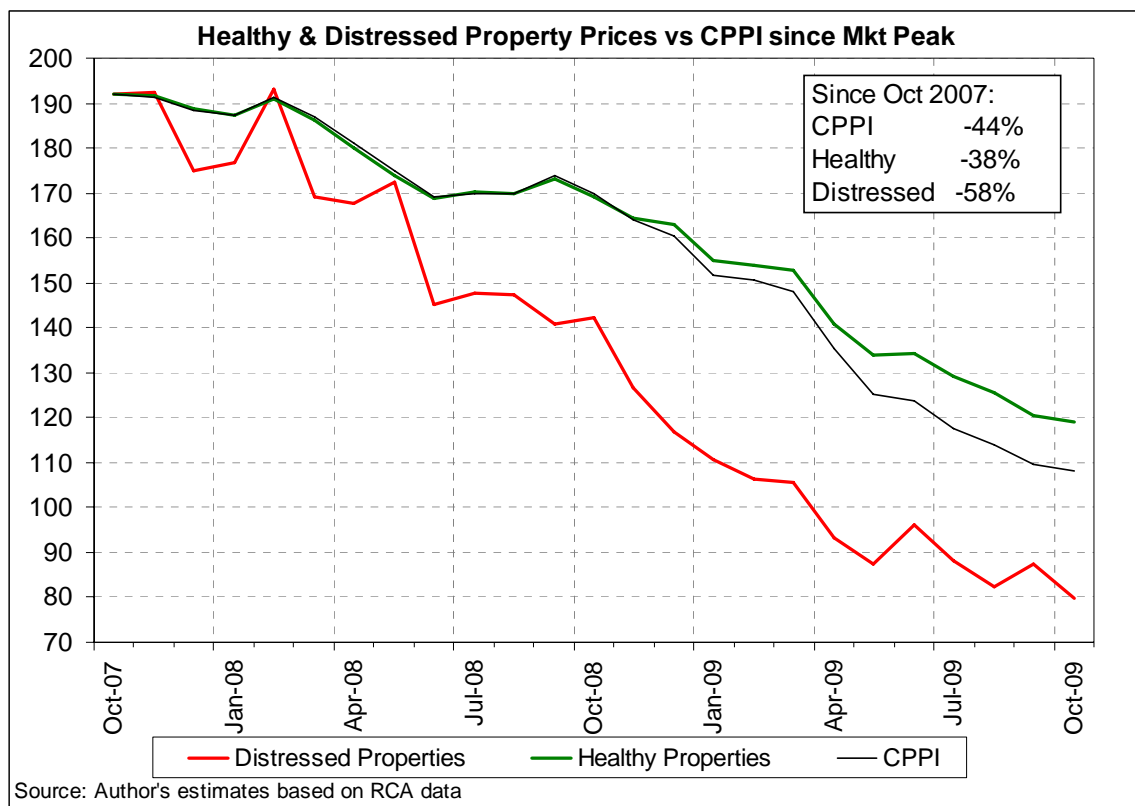
* Granted, in previous downturns the market pricing has dipped *below* the modeled equilibrium, into what could be called a “negative bubble”. I had been afraid that would happen this time as well. But the various efforts to prevent fire-sale dumping of distressed assets onto the market, along with the huge quantity of capital (equity anyway) waiting on the sidelines ready to deploy, suggests that we may be able to avoid the negative bubble this time. (By definition, the negative bubble is not necessary; prices below the equilibrium range provide “super-normal” *ex ante* returns to buyers, more than they should need or is warranted by the amount of risk involved.)

† Because the current drop has been so much faster, and because income yields were lower going in, the current drop is much greater than the previous ones in terms of total return. Similarly, the short span of the current drop and relatively low inflation rate means that in nominal terms the current drop is much greater than the previous ones, with corresponding implications for potential debt loss severity.

certain forms of derivatives trading.* Of course it may also have to do with the relative height of the preceding peak, as well as the severity of the accompanying economic recession.

“Distressed” vs “healthy” breakouts...

Continuing our separate tracking of properties that have been flagged by RCA as “troubled assets” since the October 2007 market peak, the chart below shows that both the “distressed” (or “troubled”) transactions and the “healthy” (not “troubled”) ones headed down in October, putting the price drop of assets falling into distress since the peak now at -58%, while assets remaining relatively healthy have fallen 38% (compared to the 44% drop in the official CPPI, from 192 to 108). However, once again I must caution against focusing too much on any one month, and I continue to see evidence in the chart that both the distressed and healthy pricing is leveling out.†



* Commercial property derivatives trading is in its infancy, but there is some argument that CMBX trading helped to bring about rapid price correction in the CMBS market. (See the article by Gail Lee in the recent Fall 2009 issue of the *PREA Quarterly*.) The price correction in CMBS, along with that in the REIT market, probably helped to influence and move pricing perceptions in the private market during 2008-09.

† It is of course possible for the CPPI to drop even if both healthy and (already) distressed property prices are not dropping, as more properties fall into distress. During October, however, sales of RCA “troubled assets” were actually a slightly smaller percentage of the CPPI observations (25%) than they were in the previous month (33% in September).

Some real estate economics perspectives on the CPPI...

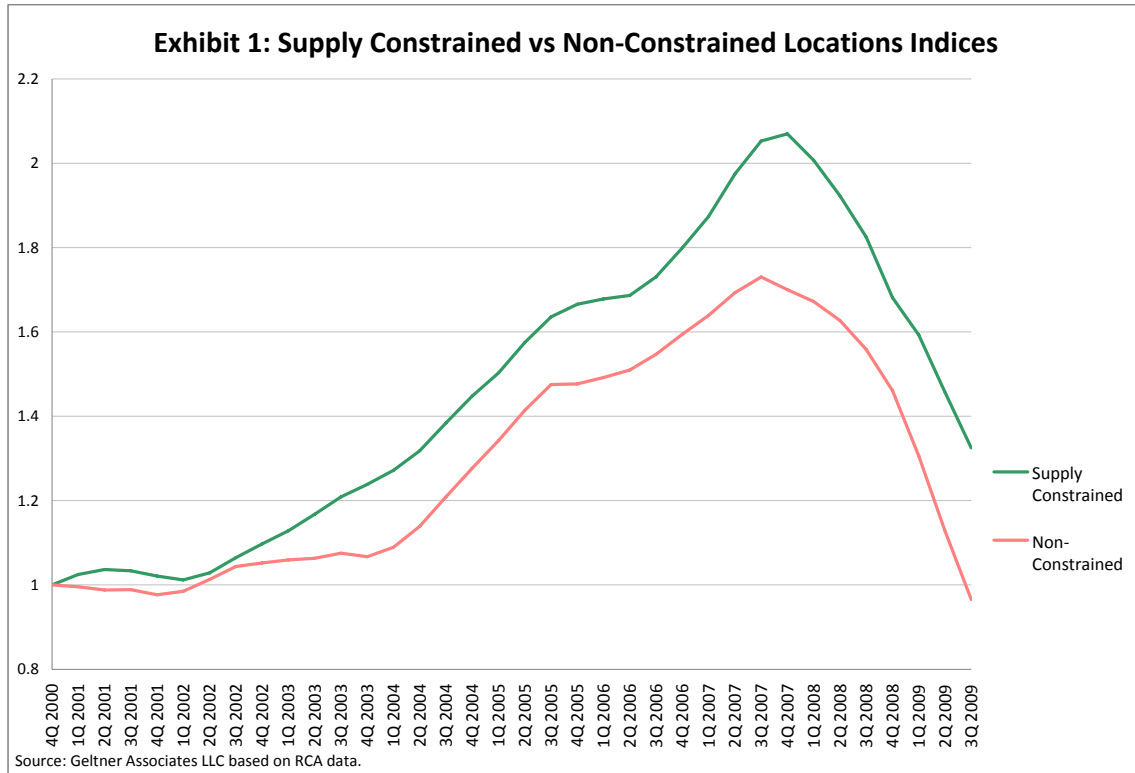
We have been exploring some interesting new break-outs of the CPPI that I would like to share. Using the same RCA repeat-sales database from which the Moody's/REAL CPPI is computed, we constructed quarterly same-property price indices that present interesting break-outs of the all-property price movements, that is, not broken out by property type sector. By aggregating the four property types in the CPPI (apartment, industrial, office, retail) we can explore other interesting dimensions of commercial property price performance. And we now have both an up-market and (what I think is) a pretty complete down-market on which to base such analysis.*

One of the unique and important features of real estate assets is that they are fixed in location. This makes geography, and in particular various dynamic aspects and characteristics of land value or location value, of great interest to real estate investors. Location values are reflected in land values, and therefore tend to apply to all property usage types at a given location. Hence, it can be very interesting to break out commercial property price performance by location characteristics rather than by property usage type sectors. This is what we have done in the indices shown in the chart on the next page.

The chart in Exhibit 1 shows two indices, the green one tracking all CPPI property sales within “supply-constrained” locations, and the orange line tracking “non-constrained” locations. Here we define “supply-constrained” locations very simply, consisting of all six New England states, New York State except for western upstate (Buffalo and Rochester MSAs), New Jersey, the Baltimore-Washington DC metro area, all three West Coast states, and Hawaii.† Everything else is classified in the “non-constrained” index. From inception at the end of 2000, the same-property transactions prices in the supply-constrained locations grew a cumulative 107% to the 2007 peak, versus only 73% for the non-constrained locations. During the downturn since then (through the third quarter), the supply-constrained locations' same-property prices fell 36% (of their peak price), versus a 44% decline for the non-constrained locations (as a percent of their lower peak).

* The break-out indices shown here and in the next section are made possible not only by the aggregation of the property types, but also by the use of a new two-stage index computation procedure in which the index is computed first at the annual frequency in four quarterly-staggered versions (like the Moody's/REAL annual indices), and then a mathematical technique is applied to convert the final index frequency to quarterly. The result is very effective at cutting through random noise in the index without inducing a significant lag bias. (A similar technique is already applied to the official Moody's/REAL CPPI for the monthly all-property index, only the frequency conversion is from quarterly to monthly rather than from annual to quarterly. The technique is described in detail in an April 2008 methodology white paper titled “Supplement 1”, available on the MIT/CRE web site CPPI page.)

† The idea is that most of the major metro areas in these states, where most of the CPPI-tracked properties (which generally exceed \$2,500,000 in value) are located, tend to have more onerous land use controls or development regulations and requirements, making it more difficult or expensive to develop new buildings and thereby add supply to the space market.



Overall from 4Q2000 through 3Q2009, supply-constrained locations yielded a 32.5% gain, versus a 3.4% loss in value for the non-constrained locations. On average that is 3.5% per year less price increase in the non-constrained locations.* However, it is important to remember that this refers only to same-property price change, not total return. And the price change includes the effects of capital expenditures (that is, such expenditures are *not* netted out of the index return).† However, absent some combination of higher cap rates and lower capital expenditure rates to make up the 350 basis-points *per annum* difference in price growth, the implication would be that non-constrained locations did provide a lower average total investment return at the property level than that provided by the supply-constrained locations during the 2001-09 period. (Of course, this still does not necessarily imply that supply-constrained locations were a bargain, as they may be more risky than non-constrained locations, hence requiring a higher average return in equilibrium.‡)

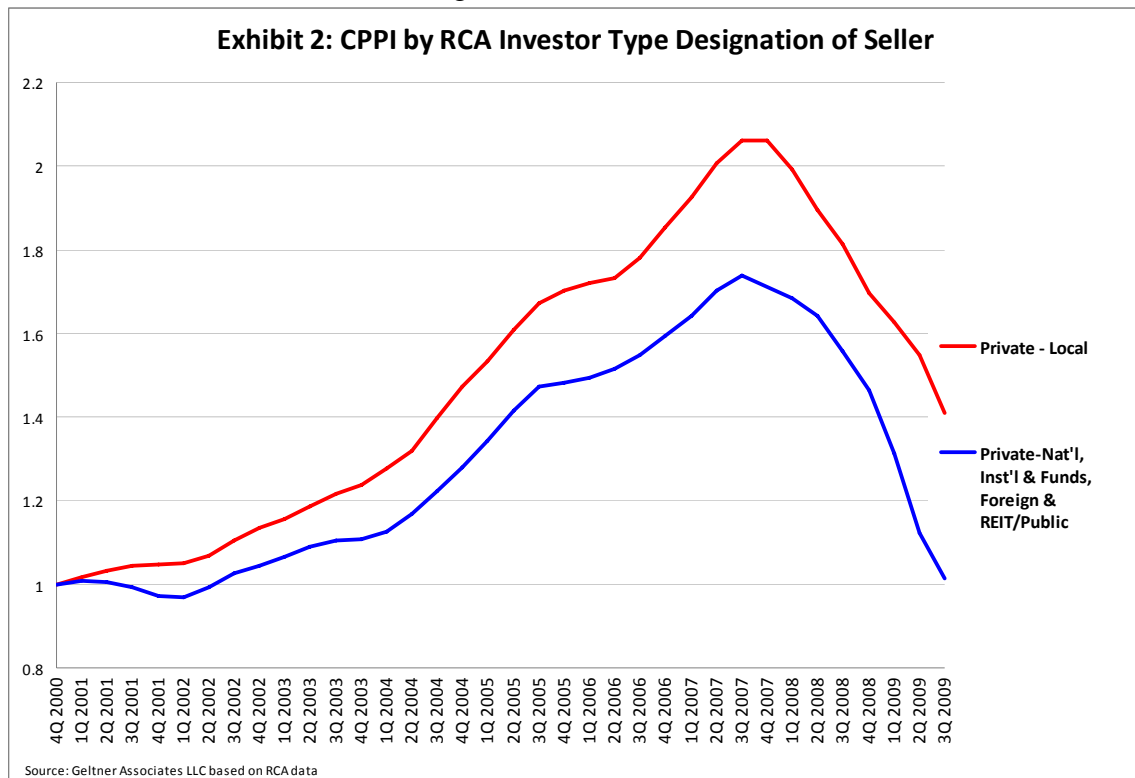
* $(0.966/1.325)^{(1/8.75)} - 1 = -0.0355$.

† The CPPI database does include substantial filters aimed at eliminating property transactions that would reflect structural expansion, renovations, or redevelopment and rehabilitation expenditures. We believe that these filters do a good job of keeping the CPPI reflecting pretty much only “routine” capital improvement expenditures which are normally financed out of the cash flow generated by the property itself. More detail about the filters is available in the September 2007 CPPI methodology white paper available on the MIT/CRE Moody’s/REAL Index web page.

‡ In eight years of annual-frequency volatility from 2001-2009, the supply-constrained locations’ price returns show volatility of 11.7% vs 10.5% for the non-constrained locations returns, based on calendar years (ending in 2008). However, based on third-quarter ending years (through 3Q09), the annual volatility was 16.2% for the supply-constrained locations versus 18.4% for the non-constrained locations.

Different investor types or property sizes ...

Location is not the only aggregate break-out of interest (that is, aggregated by property type sector). The chart in Exhibit 2 below shows a break-out according to RCA's designation of the "investor type" of the seller.* RCA designates a number of investor types. Apart from a small category labeled "User/Other", all the investor types are included in one or the other of the two indices shown in the Exhibit. The red line tracks "Private-Local" investors, relatively small entrepreneurial investors who are concentrated in one or a few markets generally within the same state or MSA. The blue line tracks all the other of RCA's seller investor type categories: "Private-National", "Institutional", "REIT/Public", "Fund", and "Foreign".



When broken out in this manner, a clear distinction emerges. The Private-Local investors clearly out-performed the other types over the sample period. During the upswing from 2000-2007 the Private-Locals grew their average same-property prices a cumulative 106%, versus 74% for the others. During the current downturn (through 3Q09) the Private-Locals have lost 32% of their peak value, versus a 42% loss for the others. Overall for the 2001-09 period the differential same-property price growth performance averages 3.7% per year in favor of the Private-Locals.

* Recall that the CPPI is based on repeat-sale transaction observations. The seller investor type referred to here is the party who purchased the property in the prior sale, owned it in the meantime, and then sold it in the second sale of the repeat-sale pair that forms the observation from which the CPPI is computed. These are thus the investor types that actually *experienced* the round-trip price-change performance tracked by the indices.

It is important to note that the difference between these two break-outs is not just a difference in investor types, but also in property sizes. Among the Private-Local investors tracked by RCA the average second-sale price was \$9,250,000. Among the others it was \$26,200,000. With this in mind, the differential price-growth performance shown in the Exhibit surely carries through to at least that much differential in total investment return performance at the property level, as smaller (less expensive) properties generally carry higher cap rates on average than otherwise similar larger properties, and smaller properties probably also tend to have lower capital expenditure rates.*

Perhaps REAL should publish a “Private-Local Investor Index” that passive investors could use to synthetically invest with this most successful group of real estate investors... (But who would take the short side?)

-David Geltner, December 2009.

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

* Again, of course, it could be that the smaller properties owned by the local investors are more risky than the larger institutionally-held properties. However, during the 2001-09Q3 period, annual-frequency volatility was 11% in the Private-Local Index, 10% in the Others Index for the eight calendar years 2001-08, but for the eight years ending 3Q2009 the annual volatility was 14.6% for the Private-Locals versus 17.2% for the Others. Approximately half of all of the official CPPI observations are in the Private-Local category.