

# Moody's/REAL Commercial Property Price Indices, September 2008

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## OVERVIEW

In this report, Moody's/REAL National All Property Type Aggregate Index for July measures 169.96, an increase of 0.4% over the previous month. This represents a decrease in prices of 9.7% over July 2007 and is 11.4% below the peak in October 2007. The index is 1.1% higher than it was two years ago. This report is based on data through the end of July.

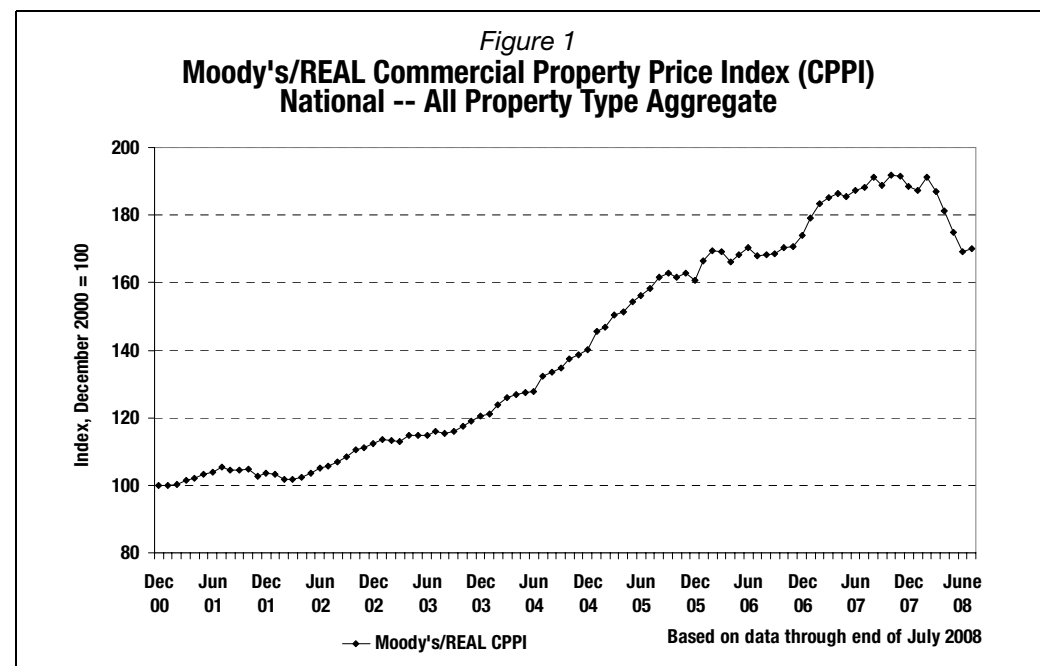


Figure 2

## Current Moody's/REAL CPPI and Change from Earlier Periods

**New This Period: National All Property Type Aggregate**

Repeated This Period: National - Four Property Types  
 Top 10 MSAs - Four Property Types  
 West - Four Property Types

**New This Period:** East - Four Property Types  
 South - Four Property Types  
 Southern California - Four Property Types  
 MSA Office Markets - New York, San Francisco, and Washington DC  
 MSA Apartment Market - Florida

|                                      | Current Index <sup>M</sup> | 1 Month Earlier | 1 Year Earlier | 2 Years Earlier |
|--------------------------------------|----------------------------|-----------------|----------------|-----------------|
| National All Property Type Aggregate | 169.96                     | 0.4%            | -9.7%          | 1.1%            |

|                                       | Current Index <sup>Q</sup> | 1 Quarter Earlier | 1 Year Earlier | 2 Years Earlier |
|---------------------------------------|----------------------------|-------------------|----------------|-----------------|
| National - Apartments                 | 174.51                     | -7.1%             | -10.2%         | 1.1%            |
| National - Industrial                 | 170.72                     | -9.3              | -7.8           | -2.3            |
| National - Office                     | 163.68                     | -5.9              | -7.8           | 2.7             |
| National - Retail                     | 175.59                     | -4.6              | -7.7           | -2.7            |
| Top 10 MSAs <sup>1</sup> - Apartments | 211.25                     | -2.9              | -5.1           | 3.8             |
| Top 10 MSAs - Industrial              | 187.53                     | -4.2              | -3.0           | 1.5             |
| Top 10 MSAs - Office                  | 166.36                     | -2.2              | -2.9           | 6.2             |
| Top 10 MSAs - Retail                  | 187.35                     | -4.4              | -0.8           | -0.8            |
| West - Apartments                     | 175.60                     | -10.9             | -10.6          | 2.8             |
| West - Industrial                     | 170.86                     | -4.3              | -2.5           | 2.1             |
| West - Office                         | 164.31                     | 1.3               | -1.1           | 8.0             |
| West - Retail                         | 188.90                     | -0.6              | -1.9           | -2.4            |

|                             | Current Index <sup>A</sup> | 1 Year Earlier | 2 Years Earlier |
|-----------------------------|----------------------------|----------------|-----------------|
| East - Apartments           | 194.10                     | -4.8%          | 2.1%            |
| East - Industrial           | 170.18                     | -3.0           | 3.8             |
| East - Office               | 173.92                     | -1.8           | 13.0            |
| East - Retail               | 196.32                     | -2.9           | 4.2             |
| South - Apartments          | 148.60                     | -8.0           | -5.9            |
| South - Industrial          | 192.04                     | 2.4            | 14.1            |
| South - Office              | 175.43                     | 0.1            | -0.8            |
| South - Retail              | 175.88                     | -3.0           | 2.2             |
| So. California - Apartments | 206.22                     | -4.0           | -2.3            |
| So. California - Industrial | 197.25                     | -5.8           | 8.6             |
| So. California - Office     | 196.03                     | 6.1            | 13.0            |
| So. California - Retail     | 256.22                     | 5.1            | 12.6            |
| New York - Office           | 228.17                     | 1.6            | 20.7            |
| San Francisco - Office      | 133.97                     | 5.3            | 21.7            |
| Washington DC - Office      | 177.27                     | 2.6            | 8.0             |
| Florida - Apartments        | 185.22                     | -14.1          | -16.7           |

M Monthly series. Most recent data is through July 31, 2008.

Q Quarterly series. Most recent data is through the end of the 2nd quarter 2008. Analysis is based on data from that 2nd quarter.

1 Top Ten MSAs refers to the ten MSAs with the most transactions by dollar volume, in each property type.

A Annual series. Most recent data is through the end of the 2nd quarter 2008. Analysis is based on data from four quarters (3Q07, 4Q07, 1Q08, and 2Q08). Given that the measure is of a rolling four-quarter period, data as of the end of the 2nd quarter can not be compared with that from the end of the previous quarter.

The Moody's/REAL Commercial Property Price Indices (CPPI) measure the change in actual transaction prices for commercial real estate assets based on the repeat sales of the same assets at different points in time.<sup>1</sup>

### Notable Observations and Themes

- Commercial property prices remain virtually flat, with the Moody's/REAL CPPI measuring a 0.4% increase in July.
- Transaction volume fell in July, after an increase in June, but July volume was above the low-point reached in May.
- The largest decrease in prices in this report (14%) was seen in the Florida apartment market, which also measured a decline in transaction volume.
- The three major metro-level office markets covered separately by the Moody's/REAL CPPI showed some evidence of holding up better than the national average, but this evidence is tempered by technical considerations (which will be discussed below).

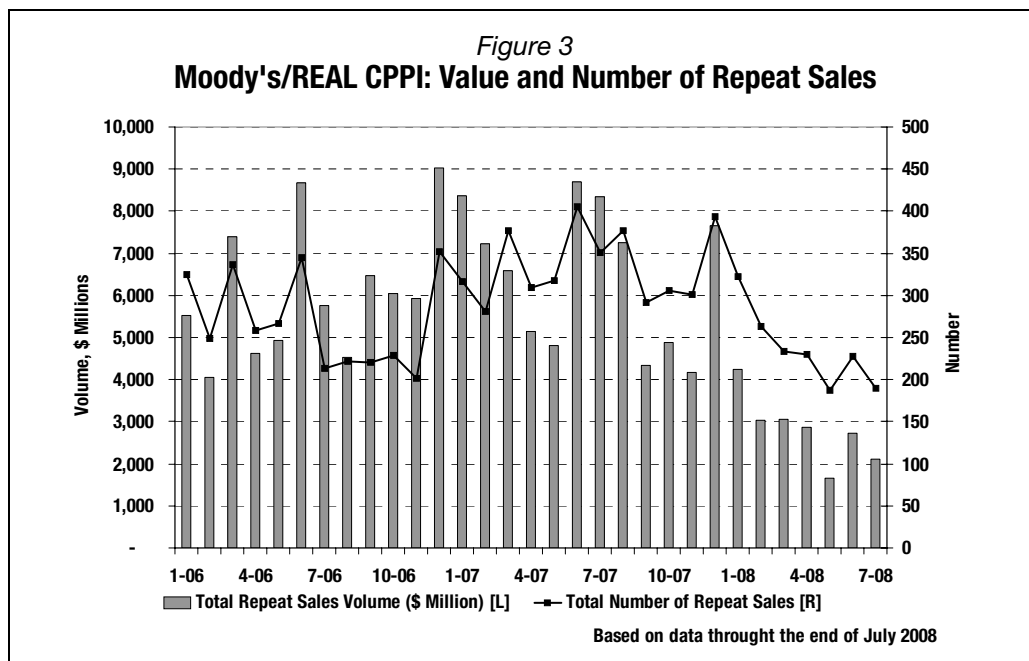
### NATIONAL - ALL PROPERTY TYPE AGGREGATE INDEX FLATTENS OUT IN JULY

The National - All Property Type Aggregate is a monthly series, and this report is based on data through July 31, 2008. Refer back to *Figure 1*, page 1.

Following a total decline of about 12% over the past four months, the CPPI is showing a 0.4% increase in prices for the month of July. This slight increase offers some relief from the steep declines of prior months, but may represent merely a temporary respite in a longer period of falling prices.

### Transaction Volume

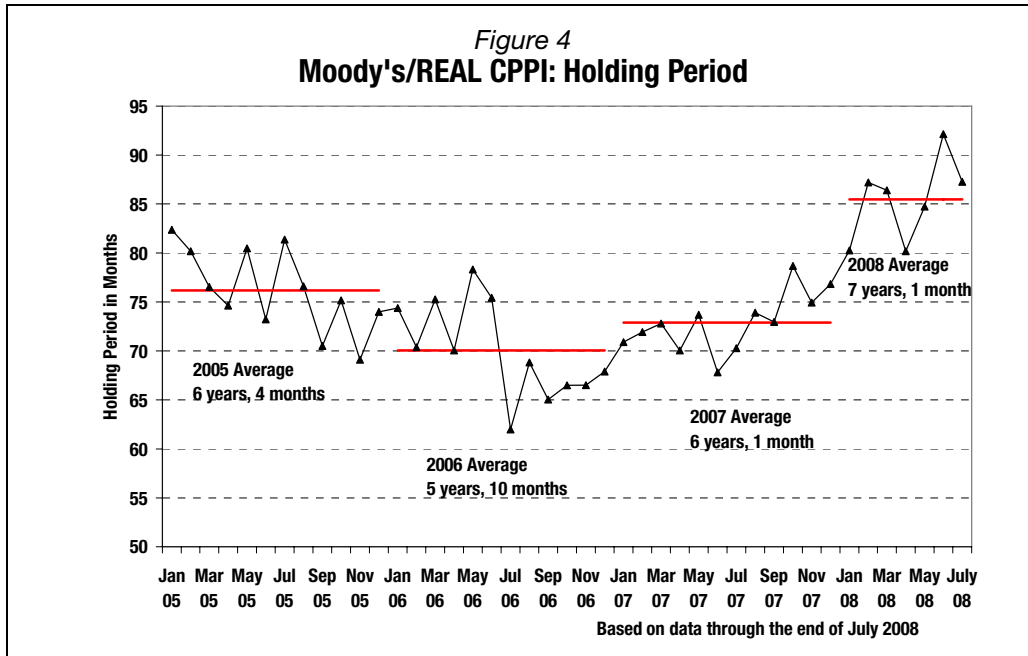
The uptick in transaction volume in June did not continue into July. Transaction volume declined from one month earlier in both number and dollar value. However, June's volume likely included some end-of-quarter effects, so a better comparison might be between July and May. In fact, the transaction volume in July has not fallen back to the low-point reached in May, although the number of transactions in May and July is almost the same. Note as well that the July data is still over 9 times the level required to maintain the statistical viability of the monthly index. Historically, July and August are the slowest months of the year, with a burst of activity in September, and the fourth quarter of the year is typically the most active.



1 A summary or short version of the repeat sales methodology is available in a Moody's Special Report. [US CMBS: Moody's Publishes the First Commercial Property Price Indices Based on Commercial Real Estate Repeat Sales Data](#). Sept. 19, 2007. This is available on [Moody's.com](#) > Structured Finance > Commercial MBS > CRE Indices. A very detailed and complete explanation of the methodology is available in a White Paper from MIT. David Geltner and Henry Pollakowski. A Set of Indexes for Trading Commercial Real Estate Based on the Real Capital Analytics Transaction Prices Database. MIT Center for Real Estate. Sept. 26, 2007.

## The Length of the Average Holding Period Reaches New Highs

We continue to see the holding period on paired sales increasing into 2008. While the average holding period in 2006 was five years and ten months, the average for 2008 so far is slightly over 7 years. The holding period has been on the rise since it hit a low in July 2006 of just over five years.

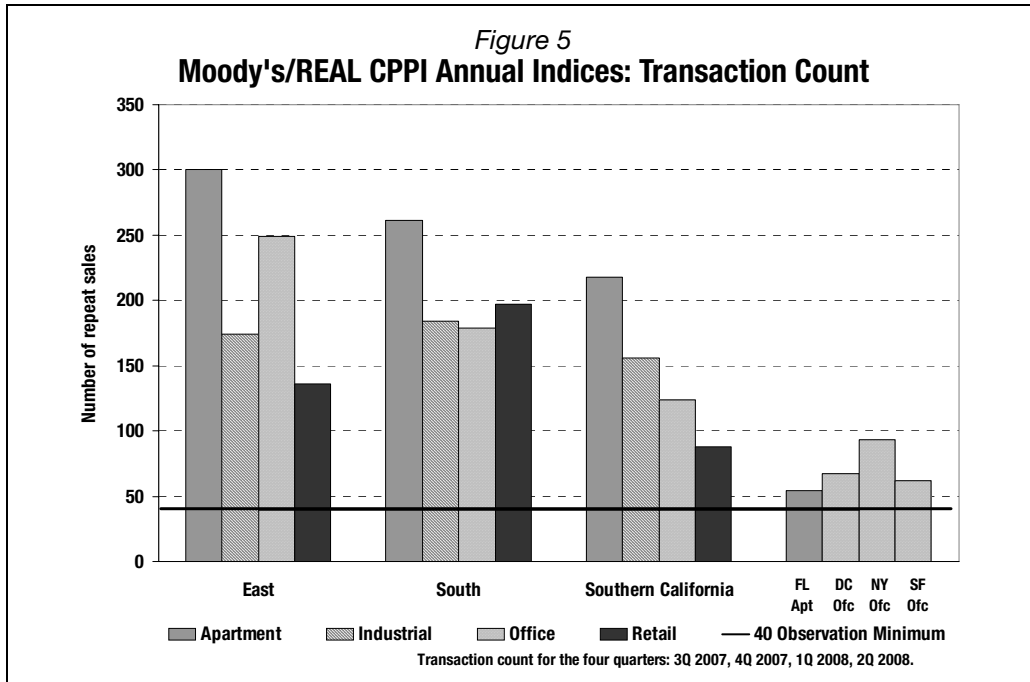


## Sub-Indices Still Exceed the Required Minimum Number of Transactions But Late Drop in Volume May Be Impacting Annual Indices

The annual indices (calculated based on data from the previous year but updated each quarter) include the following sets:

- The Eastern Region - Four Property Types
- The Southern Region - Four Property Types
- Southern California - Four Property Types
- Selected Major Office Markets: New York, San Francisco, and Washington DC
- Florida Apartments

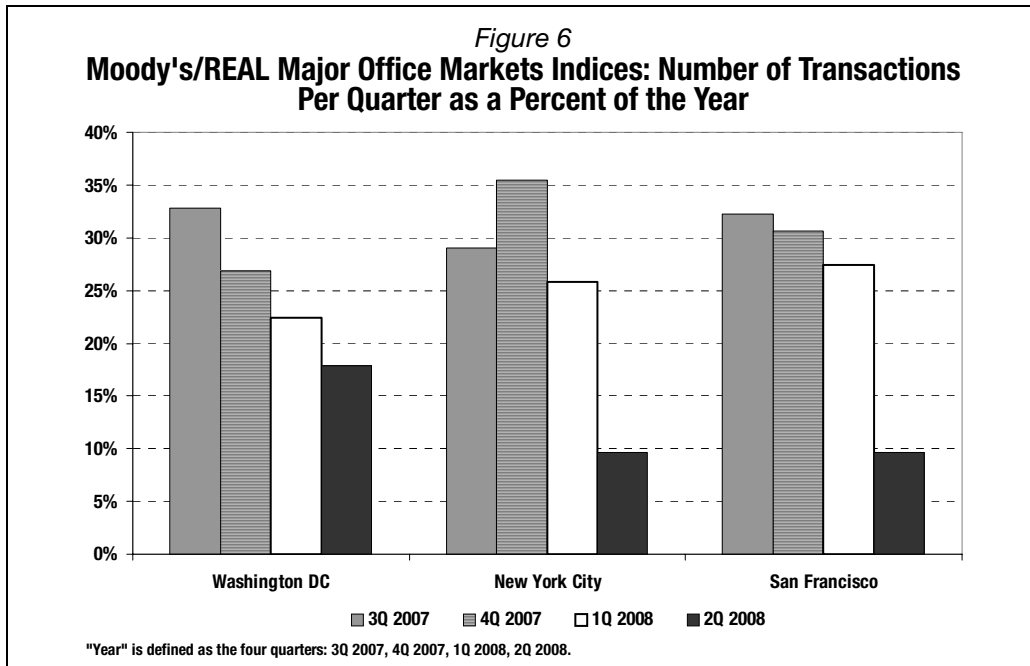
These series require 40 observations per year per property type to achieve the critical mass necessary for a statistically reliable calculation, and all series exceed this requirement. For the previous year (the four quarters 3Q 2007, 4Q 2007, 1Q 2008, and 2Q 2008), many of these sub-indices saw increases in transaction volume, as compared to the year before, while others experienced a drop in transaction activity. However, in many cases, transaction volume dropped off sharply in the latest quarter covered by the current annual period (2Q 2008), and this may at least partly explain how these indices are generally registering greater price appreciation or less decline over the same calendar period than the quarterly indices we reported last month (refer back to *Figure 2*, page 2).



**A Note on the Annual Indices**

From the results of the Moody's/REAL CPPI Aggregate Monthly Index, it is clear that the CPPI registered the end of the bull market in US commercial property in September 2007, and that the significant downturn in realized transaction prices did not occur until the second quarter of 2008 (measuring an almost 10% drop in prices during that period). In addition, that downturn has been accompanied by a substantial drop in transaction volume.

Due to the length of the time span covered by an annual index (four quarters, versus one quarter for the quarterly indices), the index return for the reported year will tend to be weighted somewhat toward the prices prevailing in the portion of the year when the densest trading volume occurred, which in many of the annual indices, for the year ending 2Q 2008, was prior to the major downturn in realized prices. The reported return for the annual index applies to the entire time period (four quarters), and the transactions that are most indicative of the recent downturn (thus far concentrated in 2Q 2008) will tend to be partially offset in the current report by the much larger proportion of the sample that reflects the longer and more liquid period before that downturn (3Q 2007, 4Q 2007, 1Q 2008). See Figure 6.



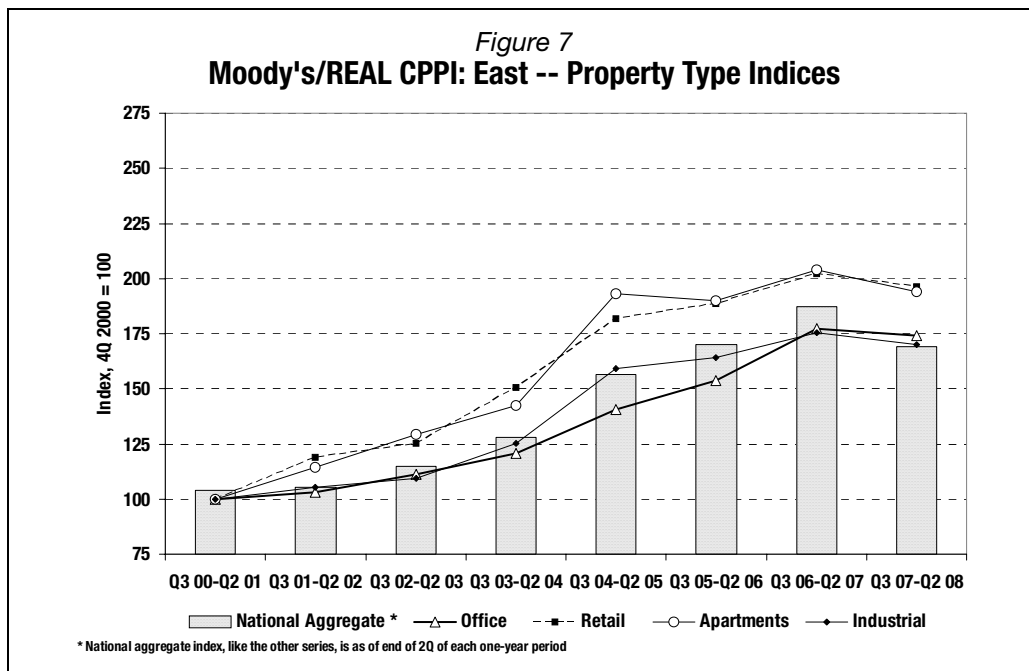
The result of this effect is that the price movements seen in many of the annual indices in the present report do not coincide temporally with the movements seen over the same span of calendar time in the quarterly indices. If a change in market price levels remains over any significant period of time (spanning several quarters, for example), then subsequent reports of the annual indices should largely reflect such price changes, although possibly with some lag from when the price movement actually commenced in the marketplace. Quarterly returns are less susceptible to the intra-period fluctuations in price and volume as higher-frequency returns cover a shorter span of time. For the same reason, monthly returns are even less susceptible.

## EASTERN REGION - PROPERTY TYPE INDICES: THE EAST EXPERIENCES PRICE DECLINES IN ALL FOUR PROPERTY TYPES

The Eastern Region - Property Type Indices for the four major property types are an annual series, based on one year of data on a rolling basis and updated each quarter. This report is based on data for the four quarters: 3Q 2007, 4Q 2007, 1Q 2008, and 2Q 2008, thus culminating with data through the end of the second quarter of 2008.

All four property types saw a drop in prices for the last four quarters as compared to the previous four quarters. Offices in the East are holding up well, when compared to the other property types, with a mild 1.8% decrease in prices. The East Office sector is measuring a 13% increase over a two-year period as well. This relative strength in eastern offices over the past year can be attributed to the New York and DC markets, which both measured increases in prices this year.

Eastern Retail and Industrial both saw about a 3% decrease in prices over the last year, and both property types are showing increases in prices of about 4% over a two year time span.



Finally, the apartment market fared the worst in the East, with a 4.8% decline in prices over the last year. However, it too is showing an increase over two years of 2.1%.

The Eastern Region has seen a decrease in transaction volume<sup>2</sup> in three of the four property types, particularly in the most recent quarter. The overall annual decrease was about 6% as measured by number, or 40% as measured by dollar value. The biggest slowdown in the East was in the office sector which saw a 20% decline in the number of transactions, and the dollar value of transactions was cut in half as compared to last year. This was caused by slowdowns not only in New York and DC, but also Boston and Philadelphia.

Retail and Industrial in the East also saw declines in volume, both in the number and dollar value of transactions. Retail was down 5% by number and over 35% by dollar value, while Industrial was down 9% in number and over 20% in value.

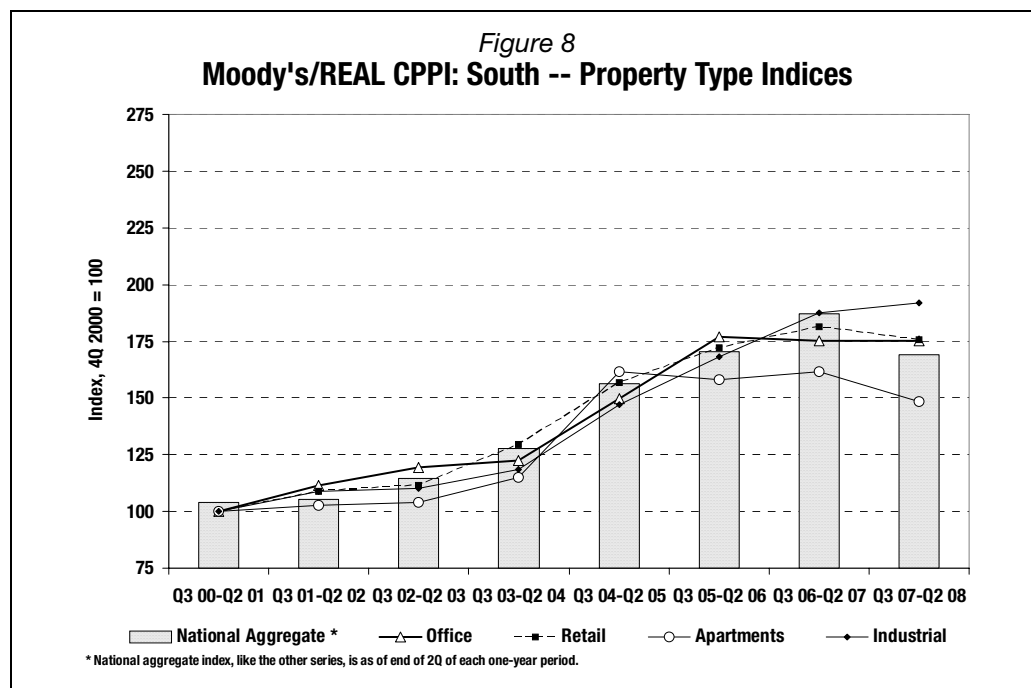
<sup>2</sup> Transactions referred to in this report are the repeat sales observations used to compute the CPPI. While trends in repeat-sales observations may differ slightly from overall total transaction volume trends, they reflect the determination of the CPPI returns.

The apartment market was the only sector in the East to see an increase in the number of transactions (by about 10%), but the change in dollar value was basically flat as compared to the previous period. This relative strength in apartment transaction activity for the East was not driven by the major MSAs in the region, but rather the smaller ones, led by Philadelphia and Charlotte. It should also be noted that this increase in trading volume was not accompanied by a price increase, but rather a price decline, suggesting that owners in this sector may have given up trying to avoid realizing losses.

### **SOUTHERN REGION - PROPERTY TYPE INDICES: ONLY INDUSTRIAL EXPERIENCES GROWTH, IN BOTH PRICES AND TRANSACTION VOLUME**

The Southern Region - Property Type Indices for the four major property types are an annual series, based on one year of data on a rolling basis and updated each quarter. This report is based on data for the four quarters: 3Q 2007, 4Q 2007, 1Q 2008, and 2Q 2008, thus culminating with data through the end of the second quarter of 2008.

Once again apartment prices are the biggest laggard in the South, decreasing 8.0% this year from a year earlier. The softness in Florida apartments is a major contributor to this decline, with prices in that sector declining over 14%. This does not necessarily indicate strength or positive growth in the other markets within the Southern sector, but rather suggests that the other markets in the South are not falling as far as fast, which offsets the declines in Florida.



The South Retail sector also saw decreases in prices, on the order of 3%, despite the fact that South Retail had only 10% of its annual sales volume in 2Q 2008, the lowest of any southern index. This suggests that more recent price drops in South Retail could be even greater but are being averaged with better returns earlier in the year.

The change in prices for the South Office sector was virtually flat, whether looking back over one year or two. The industrial sector is the strongest southern market, with prices increasing 2.4% over one year, and 14.1% over two years, far surpassing the other three property types.

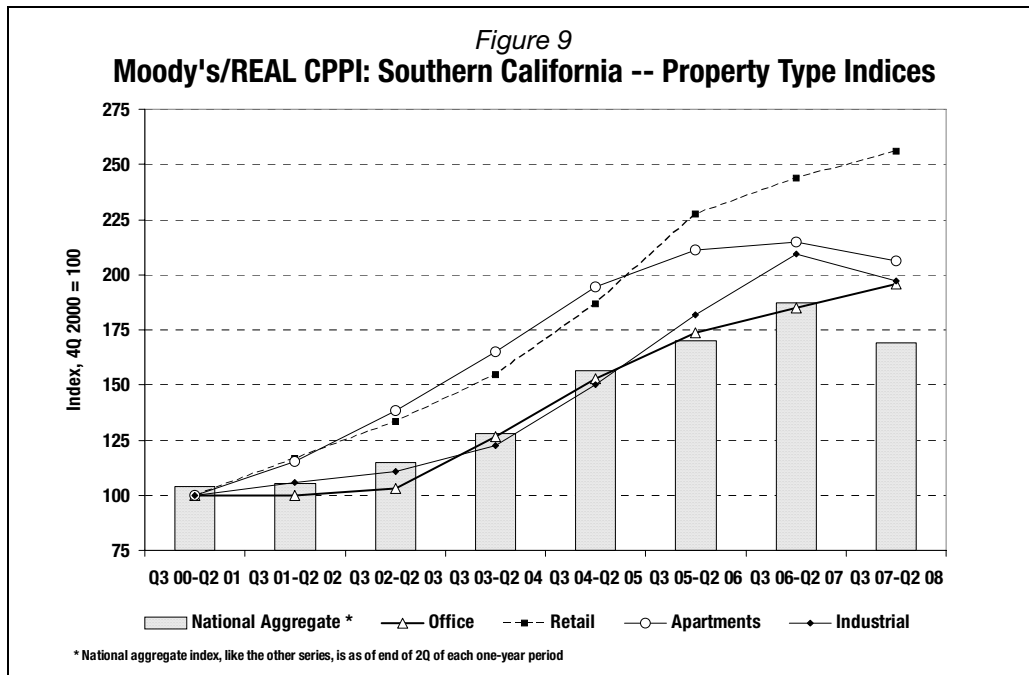
The number of overall transactions in the South has remained virtually flat this year from the previous year. However in dollar value terms, volume is down about 30%. The hardest hit was the office sector, down 11% by number and 40% by dollar. Both retail and apartment experienced milder declines in volume: approximately 6% drop in number and 26% drop in value, although retail volume is down particularly sharply in the most recent quarter. For apartments, this decrease was seen across all of Florida and Texas and can be attributed to no one market in particular. In retail, Atlanta also contributed to the decrease.

Industrial was the only sector to see transaction volume increase in the South. In fact, volume was up even in the latest quarter. By number, industrial transactions were up almost 50%, and by dollar value, the increase was almost 30%. The increase in industrial transactions can largely be attributed to southern Florida and Atlanta.

### SOUTHERN CALIFORNIA - PROPERTY TYPE INDICES: A MIXED BAG

The Southern California - Property Type Indices<sup>3</sup> for the four major property types are also an annual series, based on one year of data on a rolling basis and updated each quarter. This report is based on data for the four quarters: 3Q 2007, 4Q 2007, 1Q 2008, and 2Q 2008, thus culminating with data through the end of the second quarter of 2008.

The Southern California indices are a mixed bag in this report, with office and retail showing price increases, and the apartment and industrial markets experiencing a drop in prices.



The Southern California office market was the strongest market both within the sector and in this report, with a price gain of 6.1%. However, this increase must be put in the context of declining volume, particularly in 2Q 2008, and so to some extent the increase may be a result of loss aversion on the part of owners. Retail also saw positive gains, with prices up 5.1% this year over last. In the case of retail, however, volume was not down, suggesting that the price increase reflects an actual increase in demand for the sector.

Although Southern California apartments, like all the apartment sectors, saw a decline in prices, the drop in this sector was milder at 4.0%. This suggests the Southern California apartment market is faring slightly better than the rest of the country, especially as apartment volume was actually up on the year and held steady even in the second quarter.

The industrial market performed the worst of the Southern California sub-indices, with a price drop of 5.8%.

Transaction volume is holding up better in Southern California than in the rest of the nation. As measured by number, retail, industrial and apartments in this market all saw increases ranging from 11% to 25%, in contrast to the nation as a whole, which saw milder increases over the same time period. Retail and Industrial saw increases in transaction dollar volume as well, whereas the nation saw decreases in both sectors.

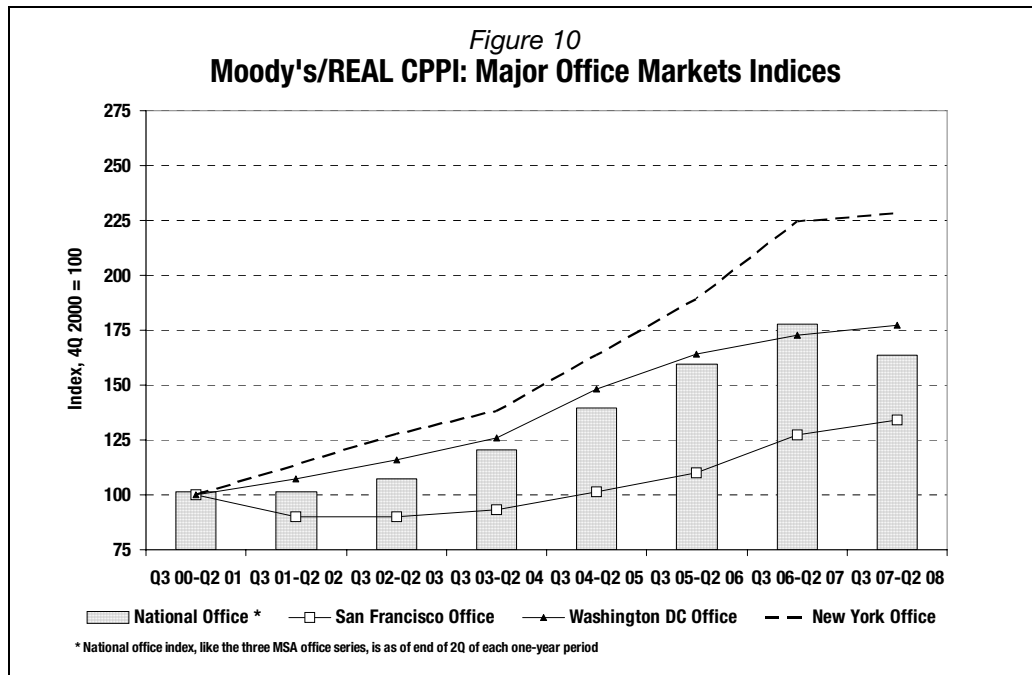
The Southern California office sector saw a decrease in transactions, both in number and dollar volume, of about 15% with an even greater drop in 2Q 2008.

<sup>3</sup> The Southern California sub-index is here defined as including four MSAs: Los Angeles, Orange County, Riverside County, and San Diego.

## MAJOR OFFICE MARKET INDICES: NEW YORK CITY TRANSACTION VOLUME FALLS

Three major office markets consistently experience enough transactions to support at least an annual series for each of those cities: New York, San Francisco, and Washington DC. Like the other annual series using data from four quarters 3Q 2007, 4Q 2007, 1Q 2008, and 2Q 2008, this report culminates with data through the end of the second quarter of 2008.

All three MSA office sectors which the CPPI tracks saw increases in prices over the last year, outperforming the nation. The strongest office market was San Francisco, which experienced a price increase of 5.3%. Although transaction volume is up slightly for the year, it is down sharply in the latest quarter-the period during which the National and Top 10 office indices saw most of their drop in prices. This suggests that the price increase reported here for San Francisco offices may be largely reflecting earlier periods in the year, prior to the second quarter.



Washington DC and New York City experienced modest increases in office prices this year over last, with gains of 2.6% and 1.6% respectively.

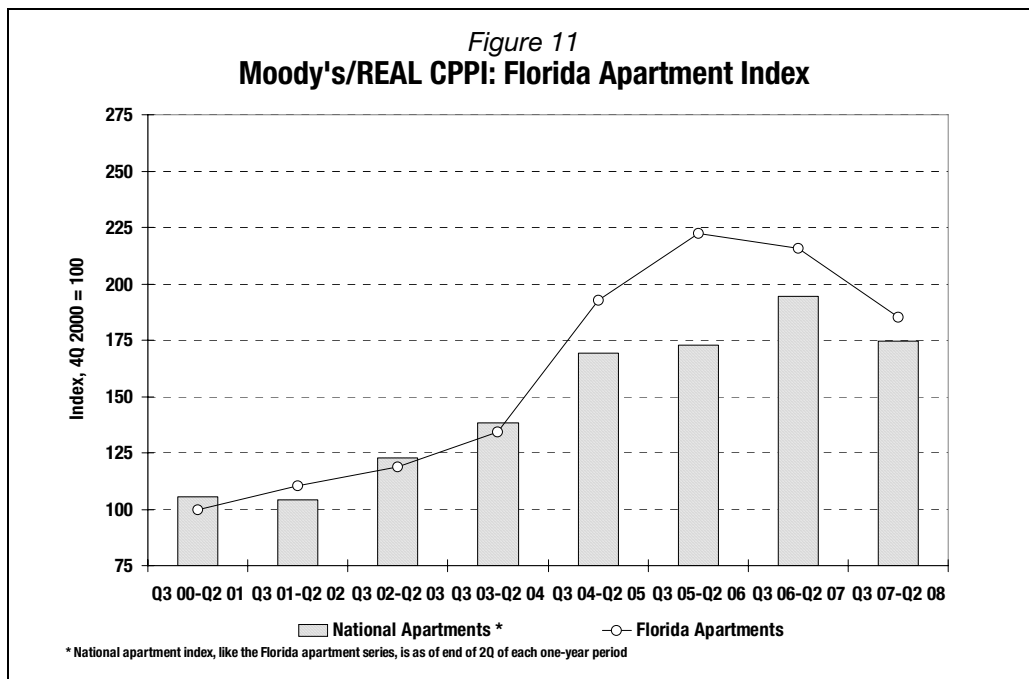
New York City transaction volume fared the worst of these three markets, down about 20% as measured by number, and almost 40% as measured by dollar value. Volume fell particularly sharply in the second quarter. Washington DC saw the dollar volume of transactions drop by about 25% this year, and the number of transactions increased slightly, by about 5%.

## FLORIDA - APARTMENT INDEX: PRICES ARE DOWN TO 2004 LEVELS

An aggregation of several Florida MSAs provides a sufficient volume of apartment transactions to support a Florida - Apartment series at least on an annual basis: Orlando, Tampa, and the three metropolitan divisions of the Miami MSA: Fort Lauderdale, Miami, and West Palm Beach. Like the other annual series using data from a rolling four quarters, this report culminates with data through the end of the second quarter of 2008.

The Florida apartment market saw the largest decline of any sector in this report, with a 14.1% drop in prices. As illustrated in *Figure 11*, this puts prices down to levels last seen in 2004.

Analysis of the rates of returns for transactions in the three markets which make up the index-Tampa, Orlando and South Florida (Miami, Fort Lauderdale and West Palm Beach)-suggests that the price drop is not being driven by any one particular market, and in fact, this significant decrease in prices is being felt by all three.



Transaction volume is also down significantly in the Florida apartment market: 41% as measured by number and over 50% as measured by dollar value. The drop was highest in Orlando which saw an approximate 80% decrease in the number and dollar value of transaction in the past year.

South Florida saw about a 30% decrease in the number of transactions and an almost 50% decrease in dollar value. And although the number of transactions in Tampa did not change this year as compared to last, the dollar value decreased by almost 30%.

The attached Appendix includes the following:

- A calendar summarizing the report cycle, i.e., which indices are recalibrated in which month. The calendar also indicates the precise release dates for Moody's/REAL Indices for 2008 and the first half of 2009 (*Figures 12, 13, and 14*).
- Charts for the 12 sub-indices that were not recalculated for this report. These are repeated from the previous report so that both data and charts for all indices, whatever the most recent calculation, are included here in one document for investors' convenience (*Figures 15 - 17*).

## APPENDIX

*Figure 12*  
**CPPI: Report Release Cycle, 2008 - 2009**

|                        | <b>JULY</b>    | <b>AUGUST</b>            | <b>SEPTEMBER</b>      |
|------------------------|----------------|--------------------------|-----------------------|
|                        | July 21, 2008  | Aug. 19, 2008            | Sept. 22, 2008        |
| Report to be released: | Aggregate      | Aggregate                | Aggregate             |
| For period:            | May            | June                     | July                  |
| Based on data through: | May 31         | June 30                  | July 31               |
| Report to be released: |                | 12 Quarterly Indices (A) | 16 Annual Indices (B) |
| For period:            |                | 2nd Quarter              | 2nd Quarter           |
| Based on data through: |                | June 30                  | June 30               |
|                        | <b>OCTOBER</b> | <b>NOVEMBER</b>          | <b>DECEMBER</b>       |
|                        | Oct. 20, 2008  | Nov. 19, 2008            | Dec. 22, 2008         |
| Report to be released: | Aggregate      | Aggregate                | Aggregate             |
| For period:            | August         | September                | October               |
| Based on data through: | August 31      | September 30             | October 31            |
| Report to be released: |                | 12 Quarterly Indices (A) | 16 Annual Indices (B) |
| For period:            |                | 3rd Quarter              | 3rd Quarter           |
| Based on data through: |                | September 30             | September 30          |
|                        | <b>JANUARY</b> | <b>FEBRUARY</b>          | <b>MARCH</b>          |
|                        | Jan. 20, 2009  | Feb. 19, 2009            | March 19, 2009        |
| Report to be released: | Aggregate      | Aggregate                | Aggregate             |
| For period:            | November       | December                 | January               |
| Based on data through: | November 30    | December 31              | January 31            |
| Report to be released: |                | 12 Quarterly Indices (A) | 16 Annual Indices (B) |
| For period:            |                | 4th Quarter              | 4th Quarter           |
| Based on data through: |                | December 31              | December 31           |
|                        | <b>APRIL</b>   | <b>MAY</b>               | <b>JUNE</b>           |
|                        | April 20, 2009 | May 19, 2009             | June 22, 2009         |
| Report to be released: | Aggregate      | Aggregate                | Aggregate             |
| For period:            | February       | March                    | April                 |
| Based on data through: | February 28    | March 31                 | April 30              |
| Report to be released: |                | 12 Quarterly Indices (A) | 16 Annual Indices (B) |
| For period:            |                | 1st Quarter              | 1st Quarter           |
| Based on data through: |                | March 31                 | March 31              |

Figure 13

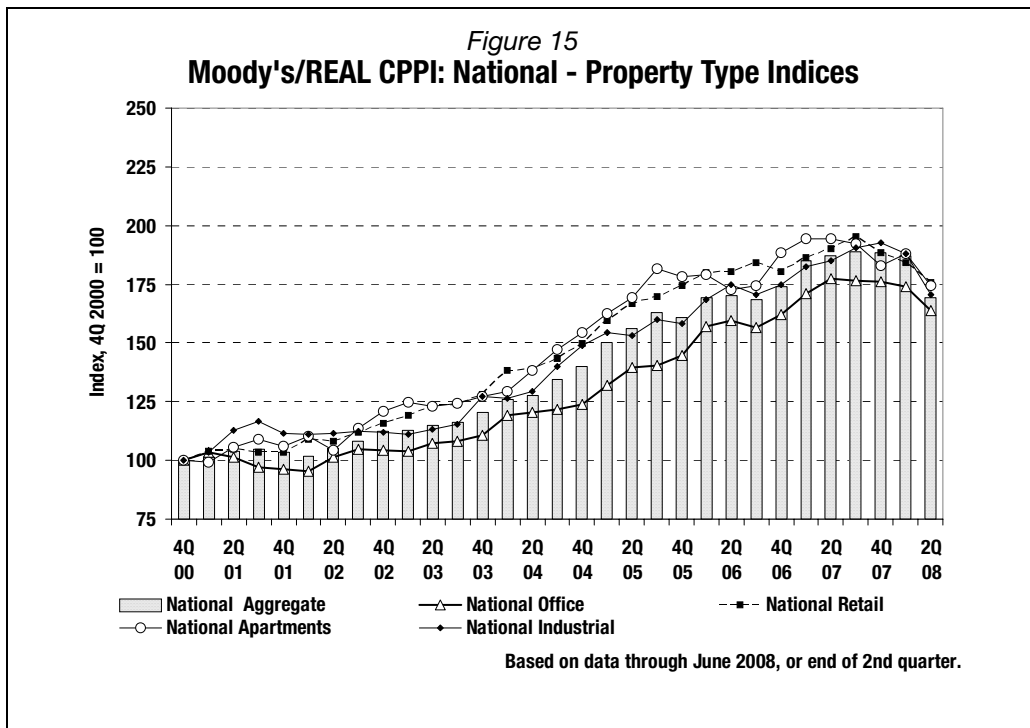
**(A) 12 Quarterly Indices include the following:**

| APARTMENT             | RETAIL             | OFFICE             | INDUSTRIAL             |
|-----------------------|--------------------|--------------------|------------------------|
| National Apartment    | National Retail    | National Office    | National Industrial    |
| Top 10 MSAs Apartment | Top 10 MSAs Retail | Top 10 MSAs Office | Top 10 MSAs Industrial |
| West Apartment        | West Retail        | West Office        | West Industrial        |

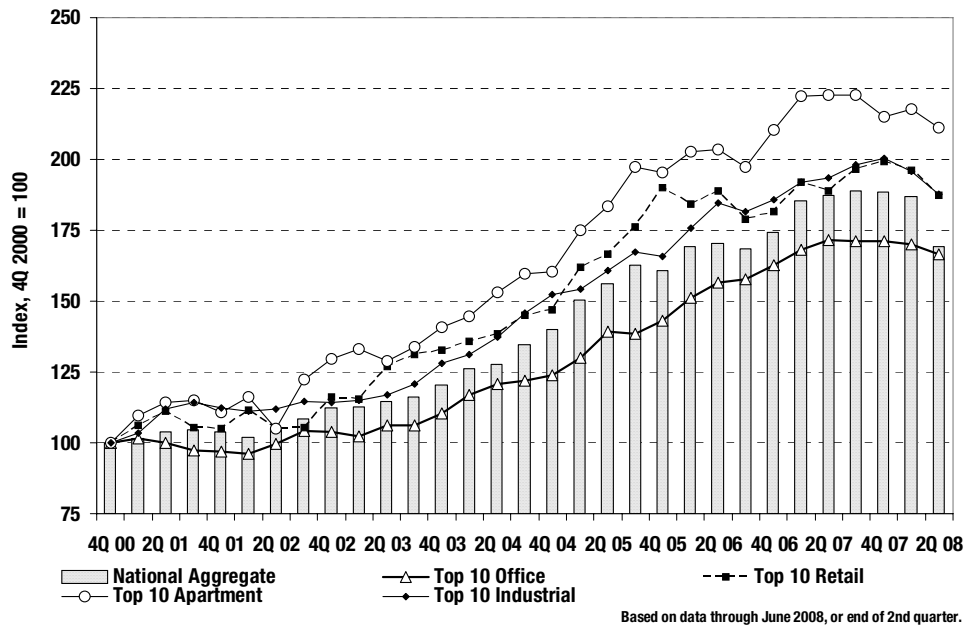
Figure 14

**(B) 16 Annual Indices with Quarterly Releases include the following:**

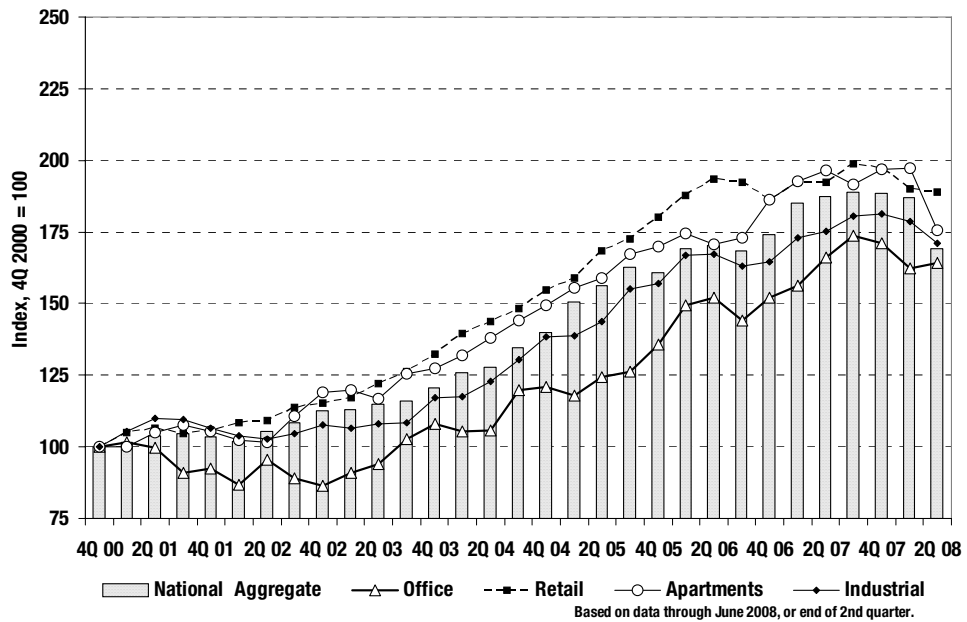
| APARTMENT                | RETAIL                | OFFICE                | INDUSTRIAL                |
|--------------------------|-----------------------|-----------------------|---------------------------|
| East Apartment           | East Retail           | East Office           | East Industrial           |
| South Apartment          | South Retail          | South Office          | South Industrial          |
| So. California Apartment | So. California Retail | So. California Office | So. California Industrial |
| Florida Apartment        |                       | New York Office       |                           |
|                          |                       | San Francisco Office  |                           |
|                          |                       | Washington DC Office  |                           |



**Figure 16**  
**Moody's/REAL CPPI: Top Ten MSAs -- Property Type Indices**



**Figure 17**  
**Moody's/REAL CPPI: West -- Property Type Indices**



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