RESEARCH

by Norm Miller and Vivek Sah

Market Turning Points

A Look at Commercial Office Markets by Price Segments Over the Past Five Years

The office property markets have seen significant price movement in the past five years, and recent activity has focused on the trophy and troubled ends of the spectrum. Price dispersion may provide a signal of market turning points well before the actual turn.

From the period of first quarter 2005 until third quarter 2010, the value of investment-grade office properties dropped approximately 37 percent from peak to trough using the Moody's Real Capital Analytics CPPI, the CoStar CCRSI or the MIT-based TBI. The peak in office values was reached in second quarter 2007, with the average price at $191 per square foot nationwide across the whole quarter for all classes, not just investment grade, according to CoStar. The lowest value observed to date was in second quarter 2010, with the average price for that quarter at $120 per square foot.

We don't know for certain if we have hit the bottom yet, if we will face a double-dip similar to the housing market straining to absorb all the distress sales or if we are simply bouncing along a rocky bottom. But we can say that the market is now facing a little more price consensus based on the dispersion observed. The dispersion in property prices can be interpreted as an indicator of market confidence in values. More uncertainty in the top and bottom range of values and higher than average bid-ask spreads are observable when we divvy up the market into segments.

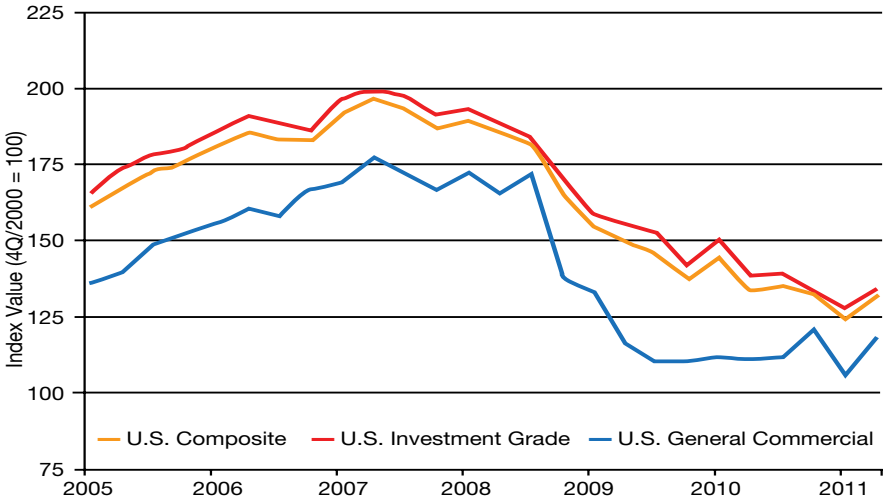
Investment-grade properties represent approximately the top 12 percent of sales transactions by count, yet more than two-thirds of the dollar value of all deals (see "CoStar Commercial Repeat Sales Index Since 2005," below). The upper end of the market is showing the greater volatility, which also could imply that the upper end reacts faster to changing market conditions as we saw in 2008. The indices shown include the general category, which are below investment grade, as well as the transaction-weighted composite. This measure is much broader than the investment grade. We break down these price segments further and show certain trend measures in the graphs on page 52 and then add an additional graph on distress discounts on page 54. The purpose is to see how the dispersion in price changed during this dynamic period.

In the subsequent analysis, office prices are divided in quintiles. Price sensitivity varies for the different quintiles. For a period consisting of 23 quarters from first quarter 2005 to third quarter 2010, our analysis of nationwide transacted office prices reveals some interesting results. The trend in the average price for U.S. office properties from the first quarter of 2005 until the third quarter of 2010 can be

Executive Summary

- **Price dispersion may provide a signal of market turning points well before the actual turn.**
- **The top quintile, which represents the top 20 percent of the price range, shows significantly more price volatility and price dispersion compared with the other quintiles.**
- **The other segment with the greater price uncertainty and dispersion is at the lowest end of the price spectrum.**

CoStar Commercial Repeat Sales Index Since 2005



Source: CoStar

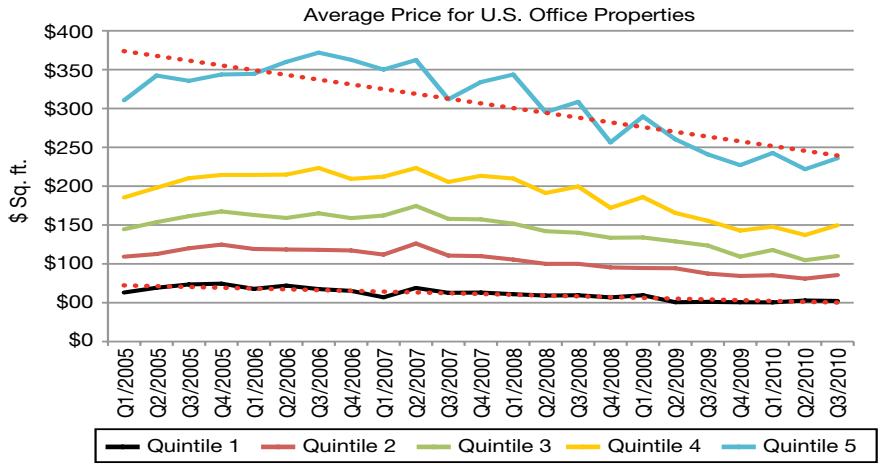
seen in "Average Price by Quintiles," top right. The average price has been standardized to control for the size of the property. Extreme values are also omitted to avoid any data bias.

We can see that as we go down the quintiles (from the highest priced quintile 5, to the lowest priced quintile 1), the trends become much flatter. We added a trend line for the top quintile. This suggests that the drop in prices (peak of average price vs. peak of average trough) is greatest for the top quintile at approximately 40 percent compared with 33 percent for the bottom quintile (with lowest-valued properties), which dropped the least among the five quintiles.

When we look at the standard deviation of the standardized prices in the graph "Price Dispersion by Quintile in Dollars," middle right, the results are similar. However, in this dollar-based graph, the top quintile stands out, so we use percentage standard deviations in the next graph, "Standardized Price Dispersion Shows the Most Volatility at the Top and Bottom," bottom right. Note the apparent high volatility in quintile 5 compared to others. In fact, the standard deviation within the top quintile itself varies quite a bit across the 23 quarters. This may suggest significant uncertainty in the higher-priced properties especially during the turning point in prices.

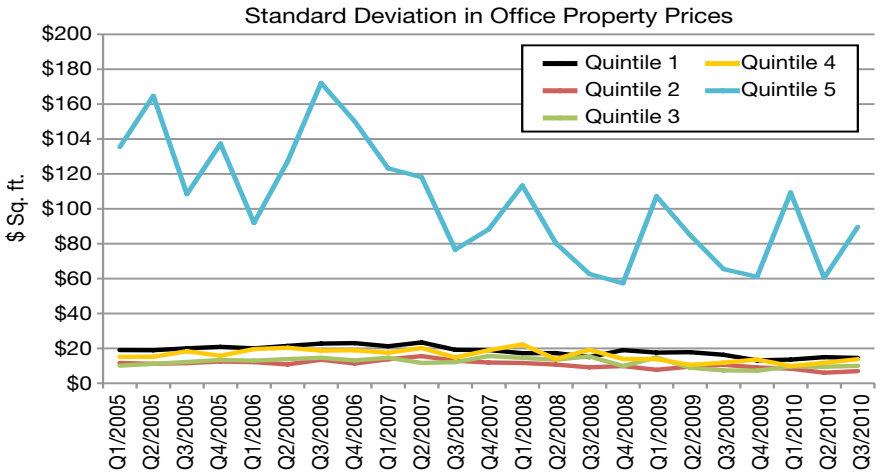
Another thing to be noted for this quintile is that for the boom period from first quarter 2005 to fourth quarter 2007, the average standard deviation was $124 per square foot. It subsequently dropped to $77 per square foot for the next 11 quarters, a period in which office rents and values were on the decline. That is a drop of 38 percent from a period of high activity to low activity. (For our analysis, the high activity period is from first quarter 2005 to fourth quarter 2007, while the low activity period is from first quarter 2008 to third quarter 2010.) For the other quintiles, there is also a drop, but it ranges from 15 percent to 27 percent.

Average Price by Quintiles



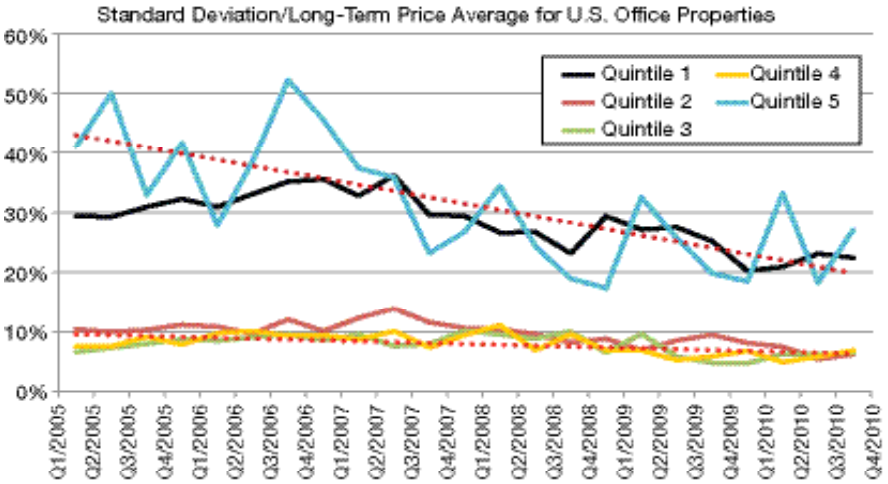
Source: CoStar

Price Dispersion by Quintile in Dollars



Source: CoStar

Standardized Price Dispersion Shows the Most Volatility at the Top and Bottom



Source: CoStar

So what does all this mean? These ratios could indicate the uncertainty behind the prices observed in the market. At the turning point in the market, we see significant price dispersion, especially in the top-priced quintile.

"Standardized Price Dispersion Shows the Most Volatility at the Top and Bottom," page 52, illustrates the ratio of the standard deviation to the long-term average price, a more standardized measure of the market price dispersion. Both the top quintile and the bottom quintile are seen as having greater price dispersion. The ratio is not only very high in absolute terms for these two quintiles, but it also has a steeper negative slope than the other middle three quintiles. We can see that the ratio averages approximately 38 percent and 32 percent for the top and bottom quintiles, respectively, for the high activity period. For the other quintiles, it ranges from 8.5 percent to 11 percent, almost one-third of the top and bottom quintiles. For the low activity period, the ratio drops to approximately 25 percent for the top and bottom quintile. During this period, in the other three middle quintiles (quintiles 2, 3 and 4), the ratio is quite stable with the range being from 7 percent to 8 percent. This may not be said for the top and bottom quintiles, with the ratio dropping by 22 percent for the bottom quintile and by 35 percent for the top quintile. Also, the ratio is very high irrespective of the time period for these two quintiles. This again suggests uncertainty in these two price segments.

These ratios could indicate the uncertainty behind the prices observed in the market. At the turning point in the market, we see significant price dispersion, especially in the top-priced quintile.

When we look at the type of property transaction, there are obviously distressed sales coming into the picture in recent years, which will affect the indices and price dispersion. Distressed sales include sales of REOs, foreclosure sales, deeds in lieu of foreclosures and short sales. Of the total of 10,081 sales in our sample, there are 220 distress sales. Of the total of all distress sales, 79 percent of them have occurred in the past three years, from 2008 to 2010. An analysis of the discount on distressed properties for 2010 reveals that office properties have the lowest discount among all property types. The discount was calculated using a hedonic regression model with factors such as age of property, loan to value, city of transaction (top 10 MSAs versus others), owner user or not, and price range of the transaction (low, medium or high) used to explain the price of the property. The graph "Impact of Distress Compared with Non-Distressed Sales," below, shows the discount on distressed office properties is the lowest at 14 percent, while it is highest for apartments and retail properties at 22 percent. These will influence the repeat sales indices as well as the price dispersion.

CONCLUSION

We see that the top quintile, which represents the top 20 percent of the price range, shows significantly more price volatility and price dispersion compared with the other quintiles. At the same time, it is unlikely to be significantly affected by the distressed sales, which tend to be in the lower price quintiles. The other segment with greater price uncertainty and dispersion is at the lowest end of the price spectrum. In both of these extreme quintiles, we see price dispersion increase significantly well before and during turning points in the market. ❖

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Notes: The data used in this study is from CoStar, and the authors would like to thank them for providing it for this research. Data was filtered to take out extreme values to avoid any bias. Thus, we use averages rather than median values. Use of either of the measures will not change the results or their interpretations. An additional filter on the age of the property was used to eliminate properties that are very old. Data consisted of only those office properties that were constructed on or after 1970.

Impact of Distress Compared with Non-Distressed sales

Source: CoStar