



## Cycle Monitor — Real Estate Market Cycles

Fourth Quarter 2010 Analysis  
February 2011

### Physical Market Cycle Analysis of All Five Major Property Types in More Than 50 MSAs.

The U.S. economy had its third quarter of positive employment growth even though the 100,000 net new jobs monthly growth was less than the normal 250,000 job growth expected in a recovery. All five property types had improved occupancies in the second half of 2010 placing the commercial property sector firmly in the recovery phase of the cycle. New construction remained at 40-year lows which should lead to continued occupancy increases in 2011.

Office occupancies **improved** 0.3% in 4Q10, and rents improved 0.4% for the quarter but were down 1.5% annually.

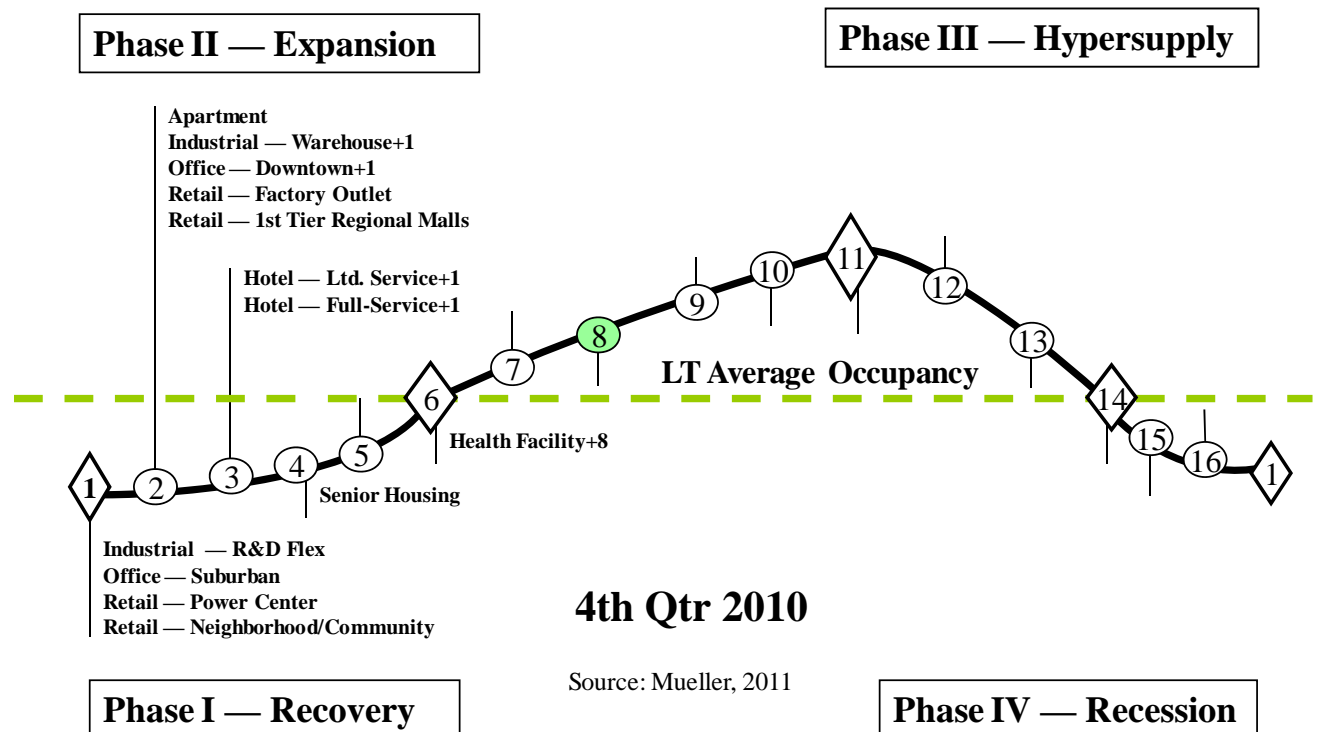
Industrial occupancies **improved** 0.2% in 4Q10, but rents fell 0.45% for the quarter and were down 4.5% annually.

Apartment occupancy was flat in 4Q10 and rental growth **improved** 0.7% for the quarter, and was up 1.9% annually.

Retail occupancy **improved** 0.4% in 4Q10, but rental growth fell 1.0% for the quarter and 3.8% annually.

Hotel occupancies **improved** 1.0% in 4Q10, and RevPAR declined 6.9% for the quarter but **improved** 9.8% annually.

## National Property Type Cycle Locations



Source: Mueller, 2011

Glenn R. Mueller, Ph.D. 303.953.3872 [gmueller@dividendcapital.com](mailto:gmueller@dividendcapital.com)

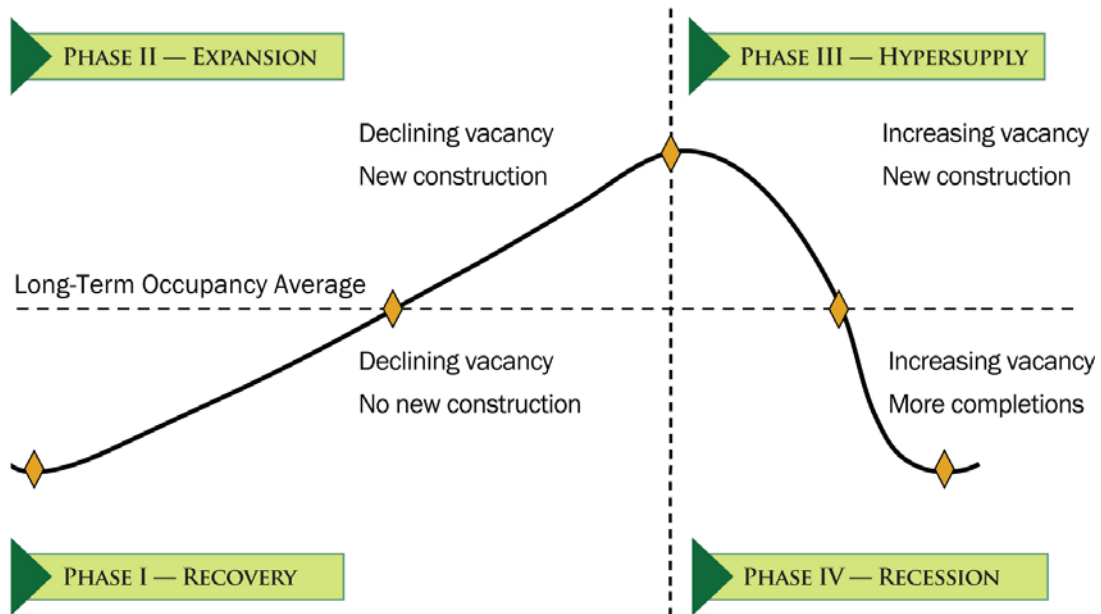
Dividend Capital Research, 518 17<sup>th</sup> Street, 17<sup>th</sup> Floor, Denver, CO 80202

[www.dividendcapital.com](http://www.dividendcapital.com) 866.324.7348

All relevant disclosures and certifications appear on page 9 of this report.

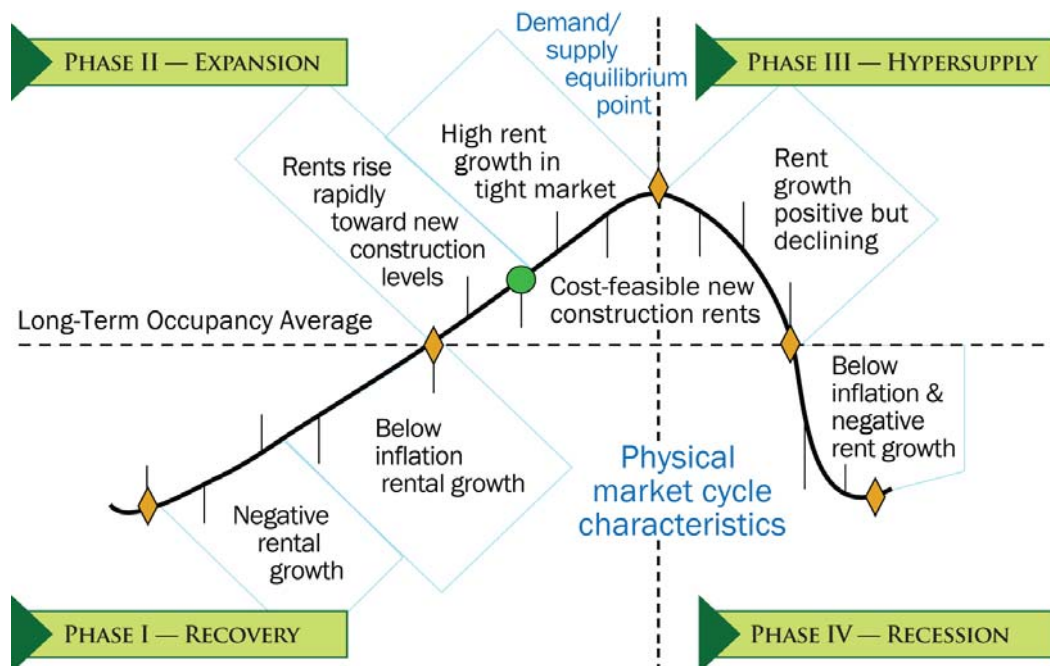
The cycle monitor analyzes occupancy movements in five property types in more than 50 Metropolitan Statistical Areas (MSAs). Market cycle analysis should enhance investment-decision capabilities for investors and operators. The five property type cycle charts summarize almost 300 individual models that analyze occupancy levels and rental growth rates to provide the foundation for long-term investment success. Real estate markets are cyclical due to the lagged relationship between demand and supply for physical space. The long-term occupancy average is different for each market and each property type. **Long-term occupancy average** is a key factor in determining rental growth rates — a key factor that affects real estate returns.

### Market Cycle Quadrants



Source: Mueller. *Real Estate Finance*. 1995

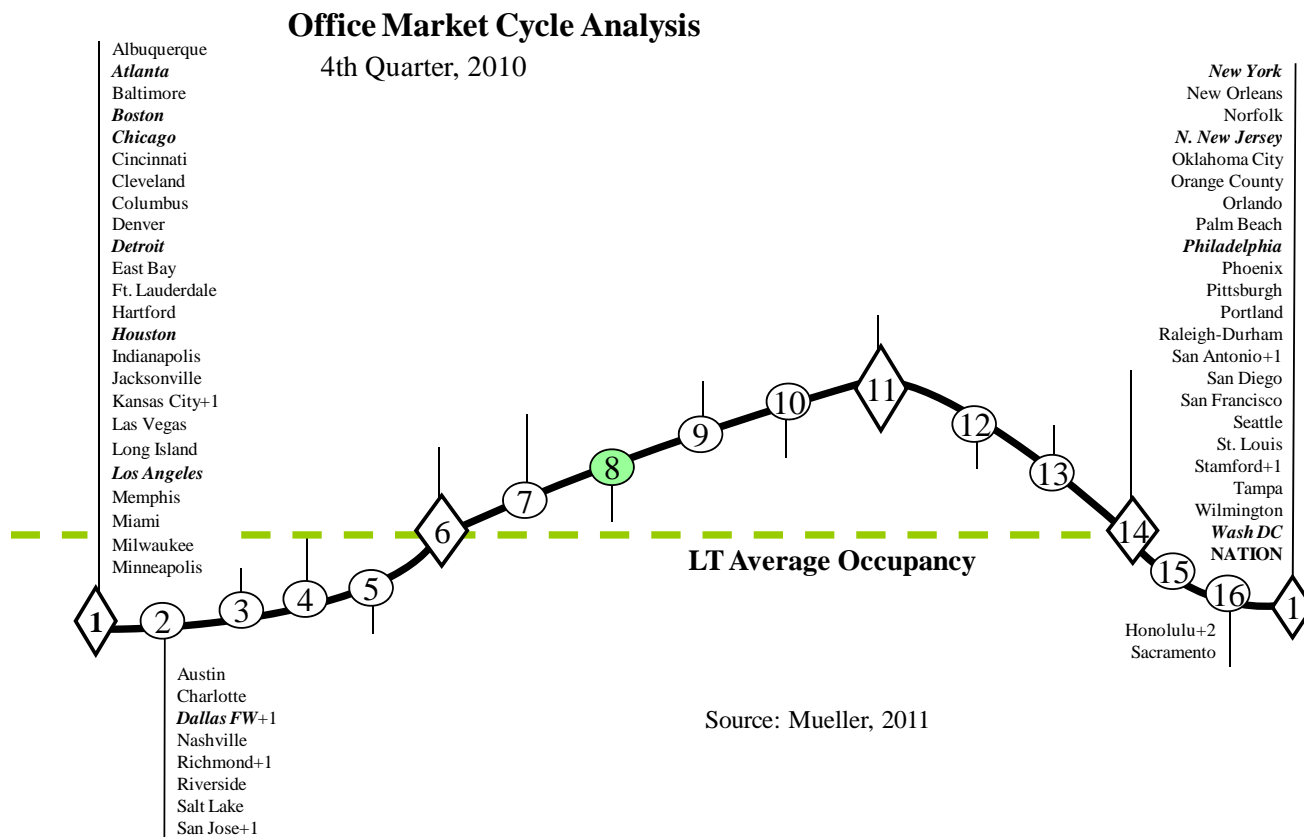
Rental growth rates can be characterized in different parts of the market cycle, as shown below.



Source: Mueller. *Real Estate Finance*. 1995

## OFFICE

The national office market occupancy level increased 0.3% in 4Q10, but was flat year-over-year. The continued slow economic recovery is not producing high enough employment growth to create strong office demand. Office absorption was only seven million square feet, which is less than half the 18 million square foot average seen during the 2005-2007 expansion. Class-A space in the largest markets has seen demand and rental growth, but most other markets are still suffering. Rents increased an average 0.04% in 4Q10, but were down 1.5% year-over-year.

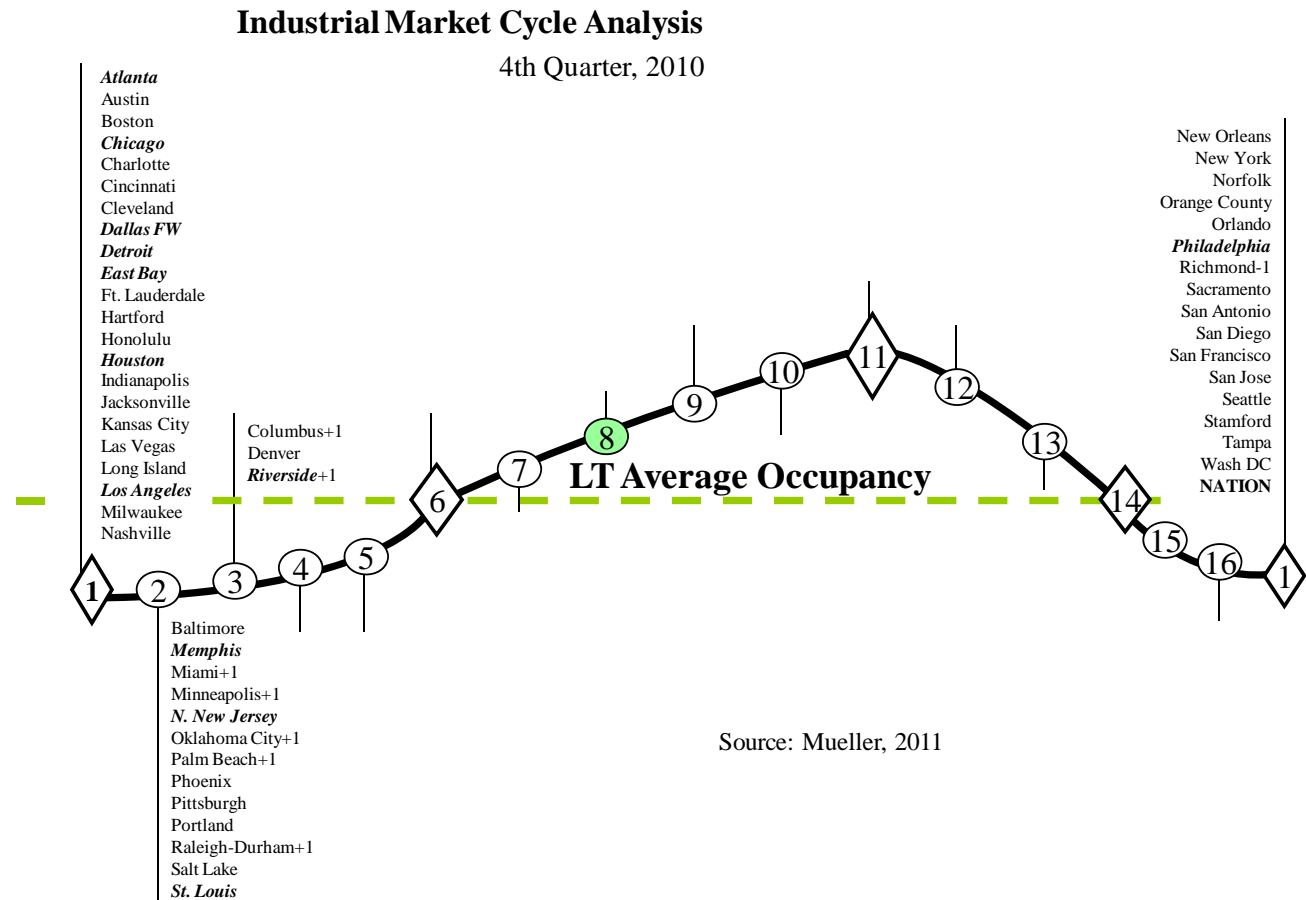


Note: The 11-largest office markets make up 50% of the total square footage of office space we monitor. Thus, the 11-largest office markets are in ***bold italic*** type to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are now shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, i.e., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

## INDUSTRIAL

Industrial occupancies improved 0.2% in 4Q10, which resulted in a 0.2% increase year-over-year. Net absorption was a strong 24 million square feet for 4Q10 which is slightly better than half the 44 million square foot average seen in the 2005-2007 expansion period. Construction was at a historic low of only four million square feet. All the manufacturing and shipping indexes continue at above long-term average levels, which bodes well for future industrial demand. Industrial national average rents were down 0.45% for 4Q10, and down 4.5% year-over-year.

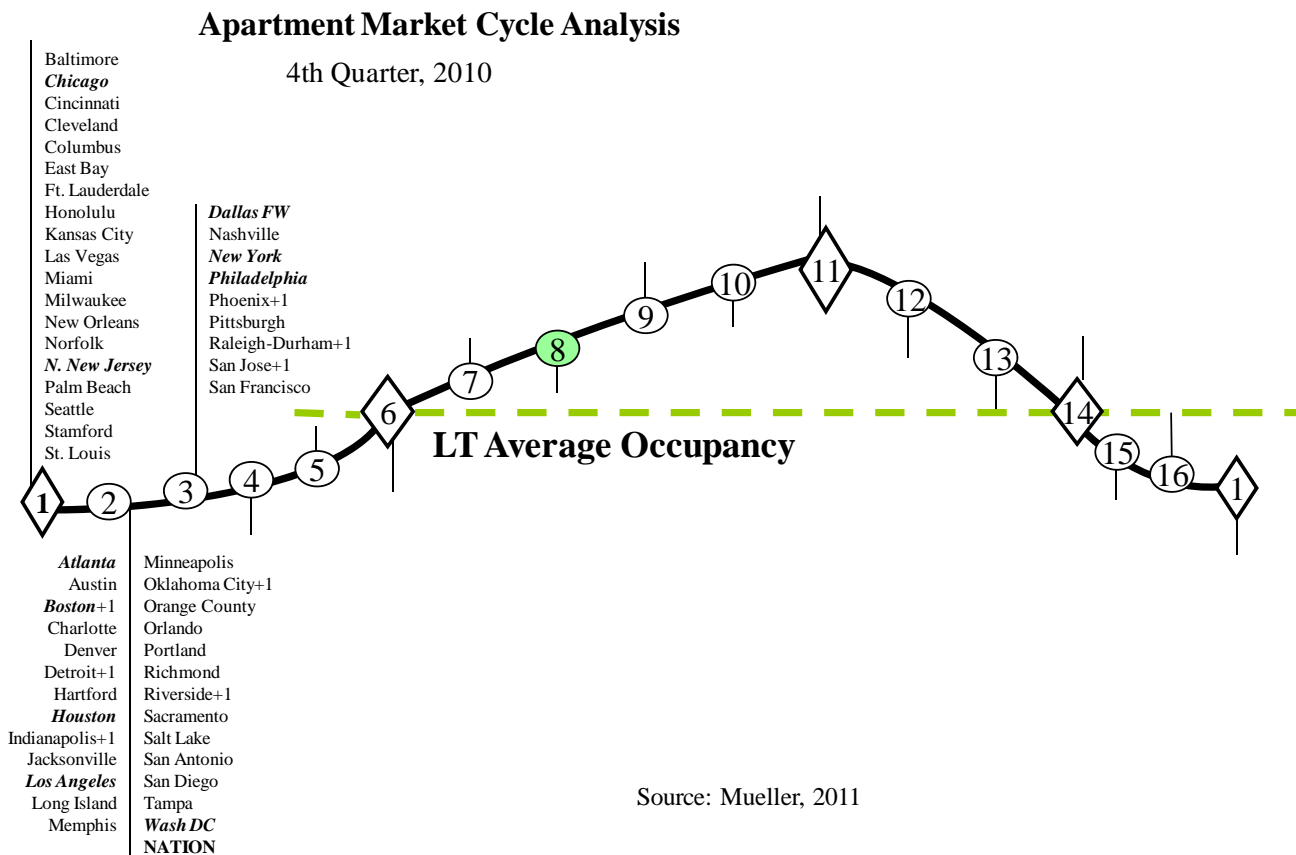


Note: The 12-largest industrial markets make up 50% of the total square footage of industrial space we monitor. Thus, the 12-largest industrial markets are in **bold italic** type to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

## APARTMENT

The national apartment occupancy average was flat during 4Q10, but was up 0.8% year-over-year. The fourth quarter is the lowest quarter for renters to move due to the holidays. Low but steady employment gains of 100,000 jobs per month are expected to keep demand moving forward in 2011, along with continued home foreclosures. The problem is that new construction is expected to pick up in 2011 as there is plenty of debt capital available for apartments from the government sponsored entities (GSEs). With inflation expected to return, we expect to see rental rates increase throughout 2011. Average national apartment rents improved 0.7% in 4Q10, and were up 1.9% year-over-year.

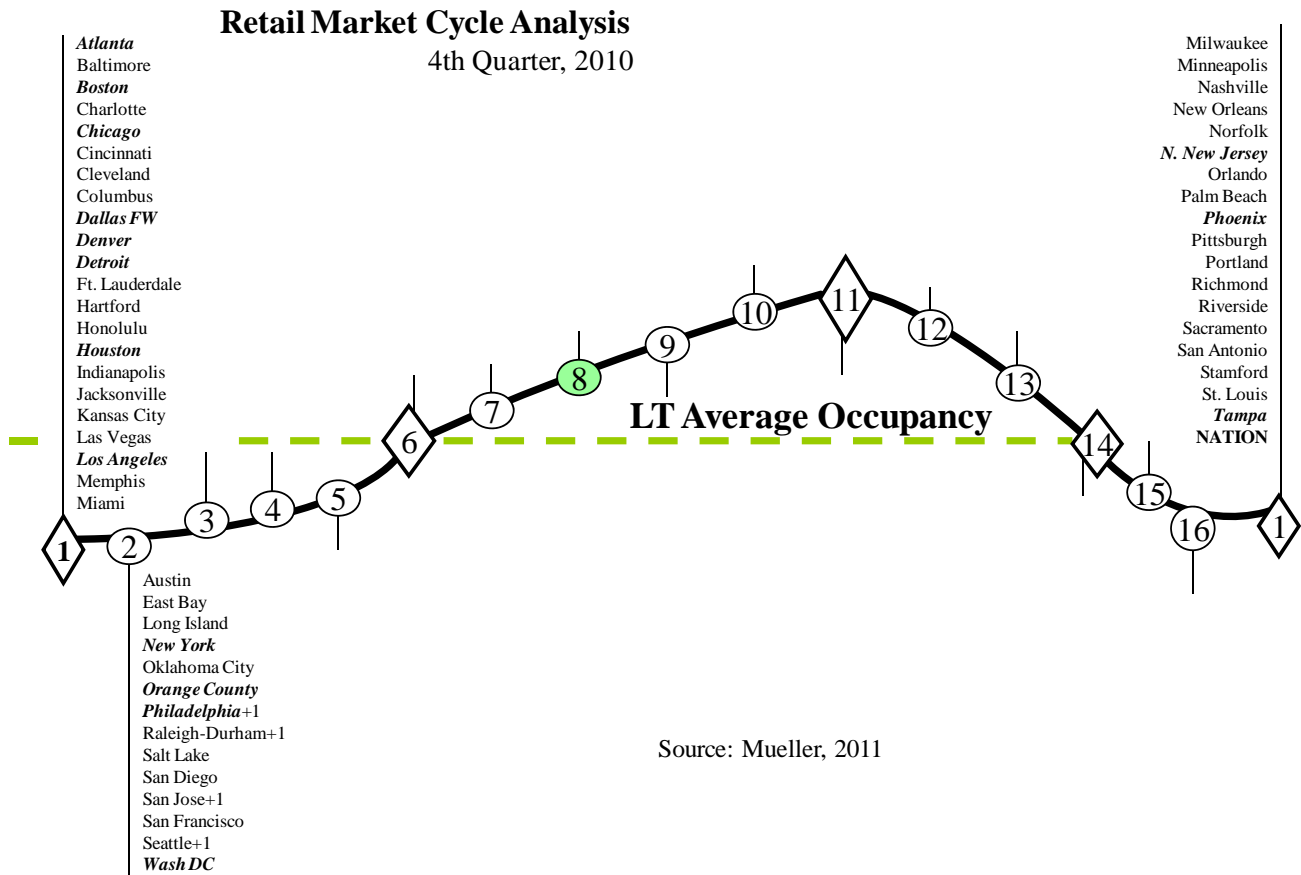


Note: The 10-largest apartment markets make up 50% of the total square footage of multifamily space we monitor. Thus, the 10-largest apartment markets are in **bold italic** type to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

## RETAIL

Retail occupancies improved 0.4% in 4Q10, and were up 0.7% for the full year of 2010. The headlines on bankruptcies of major chains like Blockbuster caused most people to feel that retail was still in a downturn, but the holiday season rebound in sales helped many retailers to begin expansion plans after multi-year contractions. The largest success stories were discount chains like Dollar General who opened many new stores during 2010. Retail tenants are still in the driver's seat and able to negotiate lower rents. Rents were down 1.0% in 4Q10, and were down 3.8% year-over-year.

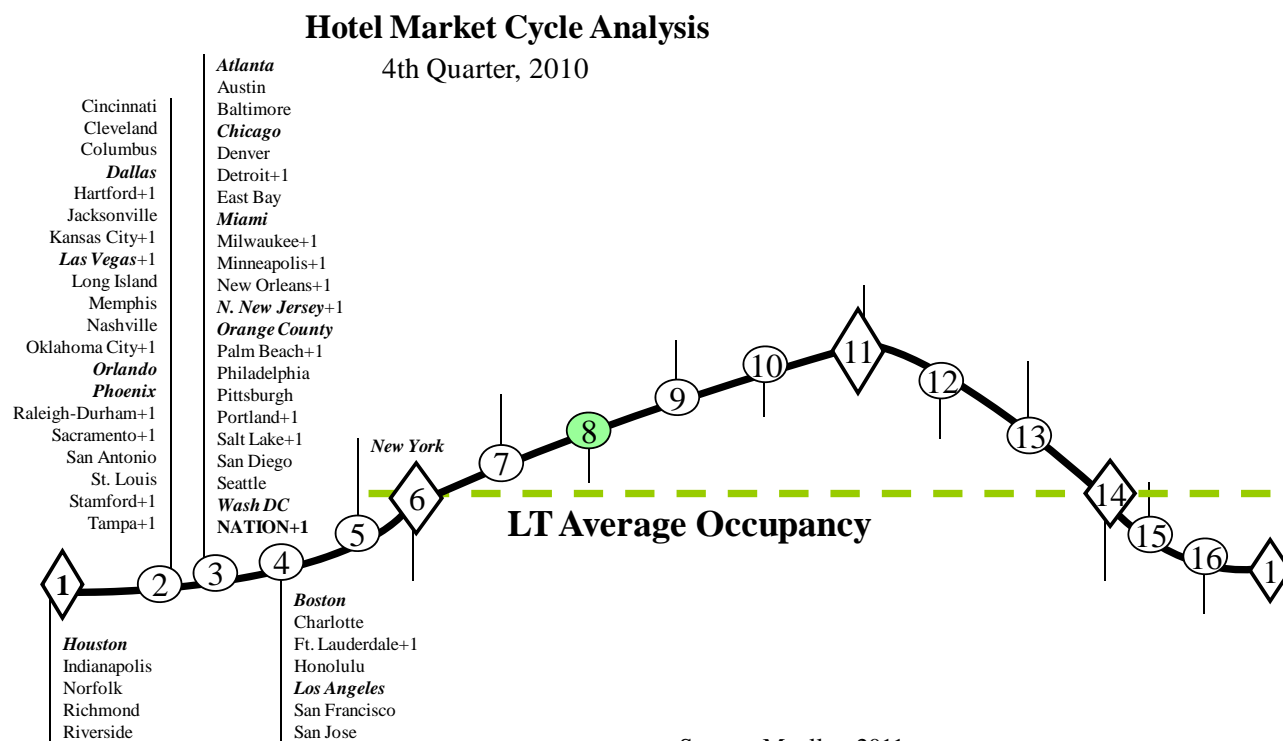


Note: The 15-largest retail markets make up 50% of the total square footage of retail space we monitor. Thus, the 15-largest retail markets are in **bold italic** type to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

## HOTEL

Hotel occupancies improved 1.0% in 4Q10 and were up 3.8% year-over-year. This fourth quarter of occupancy improvement was enough to move the hotel national average forward to point 3 on the cycle graph, confirming that hotels are now halfway through the recovery phase of the cycle. Business and leisure travel picked up during the quarter as airlines held their lower prices until just before the holiday season. Hotel RevPAR was down 6.9% in 4Q10 as hotels dropped room rates to entice holiday travelers, but was up 9.8% year-over-year.



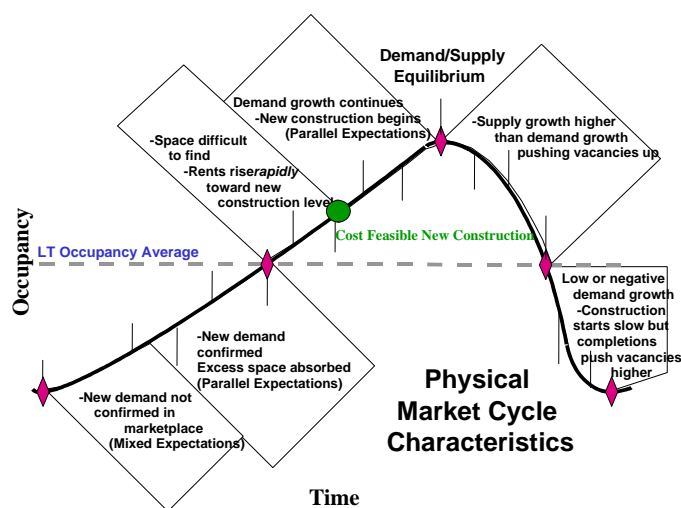
### MARKET CYCLE ANALYSIS — Explanation

**Supply and demand interaction is important to understand. Starting in Recovery Phase I at the bottom of a cycle** (see chart below), the marketplace is in a state of oversupply from previous new construction or negative demand growth. At this bottom point, occupancy is at its trough. Typically, the market bottom occurs when the excess construction from the previous cycle stops. As the cycle bottom is passed, demand growth begins to slowly absorb the existing oversupply and supply growth is nonexistent or very low. As excess space is absorbed, vacancy rates fall, allowing rental rates in the market to stabilize and even begin to increase. As this recovery phase continues, positive expectations about the market allow landlords to increase rents at a slow pace (typically at or below inflation). Eventually, each local market reaches its *long-term occupancy average* whereby rental *growth is equal to inflation*.

**In Expansion Phase II, demand growth continues at increasing levels, creating a need for additional space.** As vacancy rates fall below the *long-term occupancy average*, signaling that supply is tightening in the marketplace, rents begin to rise rapidly until they reach a cost-feasible level that allows new construction to commence. In this period of tight supply, rapid rental growth can be experienced, which some observers call “rent spikes.” (Some developers may also begin speculative construction in anticipation of cost-feasible rents if they are able to obtain financing.) Once cost-feasible rents are achieved in the marketplace, demand growth is still ahead of supply growth — a lag in providing new space due to the time to construct. Long expansionary periods are possible and many historical real estate cycles show that the overall up-cycle is a slow, long-term uphill climb. As long as demand growth rates are higher than supply growth rates, vacancy rates will continue to fall. The cycle peak point is where demand and supply are growing at the same rate *or equilibrium*. Before equilibrium, demand grows faster than supply; after equilibrium, supply grows faster than demand.

**Hypersupply Phase III of the real estate cycle commences after the peak/equilibrium point #11 — where demand growth equals supply growth.** Most real estate participants do not recognize this peak/equilibrium’s passing, as occupancy rates are at their highest and well above long-term averages, a strong and tight market. During Phase III, supply growth is higher than demand growth (hypersupply), causing vacancy rates to rise back toward the long-term occupancy average. While there is no painful oversupply during this period, new supply completions compete for tenants in the marketplace. As more space is delivered to the market, rental growth slows. Eventually, market participants realize that the market has turned down and commitments to new construction should slow or stop. If new supply grows faster than demand once the long-term occupancy average is passed, the market falls into Phase IV.

**Recession Phase IV begins as the market moves past the long-term occupancy average with high supply growth and low or negative demand growth.** The extent of the market down-cycle will be determined by the difference (excess) between the market supply growth and demand growth. Massive oversupply, coupled with negative demand growth (that started when the market passed through long-term occupancy average in 1984), sent most U.S. office markets into the largest down-cycle ever experienced. During Phase IV, landlords realize that they will quickly lose market share if their rental rates are not competitive; they then lower rents to capture tenants, even if only to cover their buildings’ fixed expenses. Market liquidity is also low or nonexistent in this phase, as the bid-ask spread in property prices is too wide. The cycle eventually reaches bottom as new construction and completions cease, or as demand growth turns up and begins to grow at rates higher than that of new supply added to the marketplace.



Source: Mueller, Real Estate Finance, 1995

This Research currently monitors five property types in more than 50 major markets. We gather data from numerous sources to evaluate and forecast market movements. The market cycle model we developed looks at the interaction of supply and demand to estimate future vacancy and rental rates. Our individual market models are combined to create a national average model for all U.S. markets. This model examines the current cycle locations for each property type and can be used for asset allocation and acquisition decisions.

## Important Disclosures and Certifications

**I, Glenn R. Mueller, Ph.D. certify that the opinions and forecasts expressed in this research report accurately reflect my personal views about the subjects discussed herein; and I, Glenn R. Mueller, certify that no part of my compensation from any source was, is, or will be directly or indirectly related to the content of this research report.**

The information contained this report: (i) has been prepared or received from sources believed to be reliable but is not guaranteed; (ii) is not a complete summary or statement of all available data; (iii) is not an offer or recommendation to buy or sell any particular securities; and (iv) is not an offer to buy or sell any securities in the markets or sectors discussed in the report.

The opinions and forecasts expressed in this report are subject to change without notice and do not take into account the particular investment objectives, financial situation or needs of individual investors. Any opinions or forecasts in this report are not guarantees of how markets, sectors or individual securities or issuers will perform in the future, and the actual future performance of such markets, sectors or individual securities or issuers may differ. Further, any forecasts in this report have not been based on information received directly from issuers of securities in the sectors or markets discussed in the report.

Dr. Mueller serves as a Real Estate Investment Strategist with Dividend Capital Group. In this role, he provides investment advice to Dividend Capital Group and its affiliates regarding the real estate market and the various sectors within that market. Mr. Mueller's compensation from Dividend Capital Group and its affiliates is not based on the performance of any investment advisory client of Dividend Capital Group or its affiliates.

Dividend Capital Group is a real estate investment management company that focuses on creating institutional-quality real estate financial products for individual and institutional investors. Dividend Capital Group and its affiliates also provide investment management services and advice to various investment companies, real estate investment trusts, and other advisory clients about the real estate markets and sectors, including specific securities within these markets and sectors.

Investment advisory clients of Dividend Capital Group or its affiliates may from time to time invest a significant portion of their assets in the securities of companies primarily engaged in the real estate industry, such as real estate investment trusts, or in real estate itself, and may have investment strategies that focus on specific real estate markets, sectors and regions. Real estate investments purchased or sold based on the information in this research report could indirectly benefit these clients by increasing the value of their portfolio holdings, which in turn would increase the amount of advisory fees that these clients pay to Dividend Capital Group or its affiliates.

Dividend Capital Group and its affiliates (including their respective officers, directors and employees) may at times: (i) release written or oral commentary, technical analysis or trading strategies that differ from or contradict the opinions and forecasts expressed in this report; (ii) invest for their own accounts in a manner contrary to or different from the opinions and forecasts expressed in this report; and (iii) have long or short positions in securities or in options or other derivative instruments based thereon. Furthermore, Dividend Capital Group and its affiliates may make recommendations to, or effect transactions on behalf of, their advisory clients in a manner contrary to or different from the opinions and forecasts in this report. Real estate investments purchased or sold based on the information in this report could indirectly benefit Dividend Capital Group, its affiliates, or their respective officers, employees and directors by increasing the value of their proprietary or personal portfolio holdings.

Dr. Mueller may from time to time have personal investments in real estate, in securities of issuers in the markets or sectors discussed in this report, or in investment companies or other investment vehicles that invest in real estate and the real estate securities markets (including investment companies and other investment vehicles for which Dividend Capital Group or an affiliate serves as investment adviser). Real estate investments purchased or sold based on the information in this report could directly benefit Dr. Mueller by increasing the value of his personal investments.

© 2011 Dividend Capital Research, 518 17<sup>th</sup> Street, Denver, CO 80202