

*A partnership between the UCLA Ziman Center for Real Estate and the UCLA Anderson Forecast*

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Monthly condensed analyses of crucial real estate and economic issues offered by the UCLA Anderson Forecast and UCLA Ziman Center for Real Estate. Here, David Shulman, senior economist, UCLA Anderson Forecast and UCLA Ziman Center for Real Estate, points out how traditional retail, office and hospitality markets are threatened by technological change.

## **Technology vs. Commercial Real Estate:** *Retail, Office and Hotel Markets Face Major Disruptions*

By David Shulman, Senior Economist, UCLA Anderson Forecast and UCLA Ziman Center for Real Estate

On the surface, the commercial real estate asset market is booming. The prices of “institutional grade” real estate have surpassed the prior boom levels of 2006-2007, the commercial mortgage backed securities (CMBS) market has risen from its nadir in 2009 and is half way back to the level of 2007, interest rates remain extraordinarily low, and commercial construction generally remains constrained. Capitalization rates (net operating income divided by purchase price) for high quality properties are in the 5% range or lower and investors in a yield-starved world are willing to accept 10-year pro forma internal rates of return in the 6-7% range. We are in truly heady times.

**“Much of the existing office stock is technologically obsolete.”**

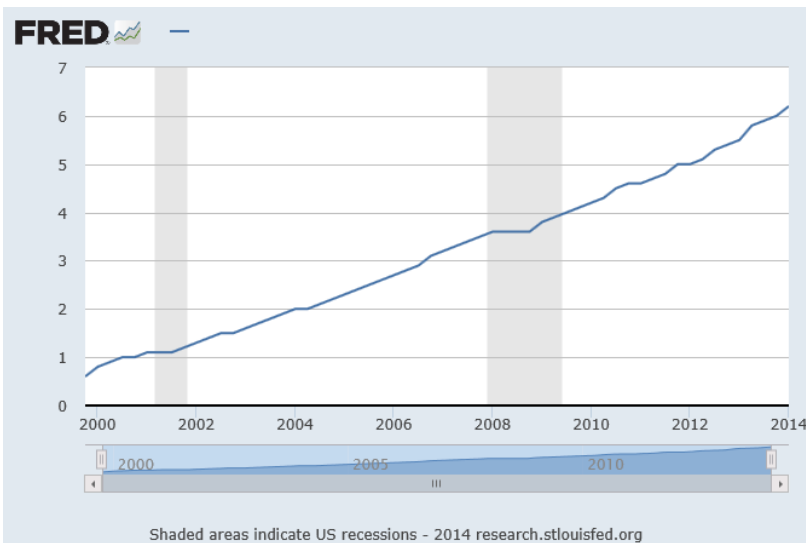
But beneath the surface, commercial real estate, with the notable exception of apartments, faces the challenge of disruptive technology that is undermining tenant, as opposed to investor, demand for commercial real estate. Put simply, disruptive technology is defined as a low-cost solution that offers lower performance but, represents a true value at the price. Think tablet computers compared to personal computers.

This letter, extracted from the UCLA Anderson June Economic Forecast, discusses the property types most threatened: Retail, Office and Hotel.

### **Retail**

Fifteen years ago fear of internet competition stalked the retail real estate world. Then the fears were premature; today it is reality. The share of retailing going to e-commerce has risen from 1% in 2000 to 6.2% today (See Figure 1). Indeed if you strip out the non-e-commerce intensive automobile, gasoline, retail food and restaurant groups the share of retail spending devoted to e-commerce doubles to 12.5%. In fact, since the recession lows e-commerce sales have advanced 110% while retail sales ex- autos have risen just 23%; not a pretty picture. Slowly but surely e-commerce is eroding the very foundations of retail real estate.

Figure 1: E-Commerce Sales as a Percent of Total Retail Sales, 2000Q1 – 2014Q1



Although the top tier malls appear to be thriving, underlying sales growth has been eroding over time. For example Simon Property Group, the nation's largest mall owner, has reported consistently rising leasing spreads (new leases above existing leases), with sales growth stagnating. This trend is not sustainable. Simply put, retailer profitability is eroding in the face of sluggish consumer spending and greater pricing transparency induced by smart phones and to the detriment of the mall; retailers are upping their own e-commerce games. Thus it is no surprise that mall operators are keen to add more restaurant tenants into their mix and they too will have to up their investment in technology. Thus the travail of the B-malls might just represent the canary in the coal mine.

Source: U.S. Department of Commerce via FRED

Similarly, power and community and even neighborhood centers are facing digital competition. Home Depot is no longer expanding its store count as it is now concentrating on e-commerce. Although there are e-commerce retail food distribution models, the entrance of Amazon into this arena certainly bears watching. Needless to say e-commerce is making huge inroads into kitchen, bath personal care and pharmacy items. Look out, Bed, Bath and Beyond.

## Office

Aside from a few exceptions such as Manhattan, San Francisco, San Jose, Seattle, and Houston, the office market remains in the doldrums. The national office vacancy rate stands at a high 16.8% and has only marginally come down from its recession peak of 17.5% (See Figure 2).

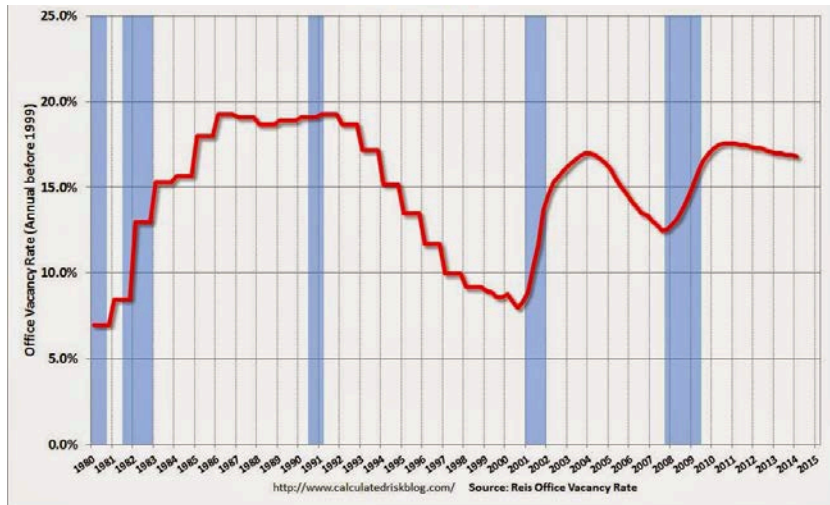
Under the impetus of changes in technology and technology-oriented tenants, the space demanded per office worker is dramatically contracting. Instead of 200 square feet of office space per worker, office space is now being designed around utilizing 150 square feet per worker. Moreover in many new buildings for tech-oriented tenants space planners are now allotting only 120 square feet per worker.

Why is this happening? First, technology has reduced the demand for file space and reference rooms as records have become digitized. Second, technology firms emphasize collaborative work environments utilizing open floor plans. The densification of work spaces has not been limited to technology firms as Goldman Sachs, Credit Suisse and Unilever have adopted floor plans allocating 150 square feet per worker.

What this means is that much of the existing office stock is technologically obsolete. It is no easy task to go from 200 square feet per employee to 150 square feet or less. At higher employment densities, existing buildings have issues with elevator, restroom, ventilating and fire stairwell capacity. Further in suburban markets with limited mass transit, the traditional parking ratio of 4 spaces per 1000 square feet of office space will prove to be inadequate.

Thus even in high vacancy markets we will see new construction to accommodate the new workplace of the 21st century. Put bluntly, even at higher rents an office building in a dense configuration can cost less on a per employee basis than a lower density building.

Figure 2: National Office Vacancy Rate



Sources: [Calculatedriskblog.com](http://www.calculatedriskblog.com) and REIS

What is new is the rise of the “sharing economy” where individuals offer up their own houses, apartments or rooms to be made available for temporary rental.

The prototype of this new form is Airbnb, the web-based service offering private accommodations in people’s homes. Earlier this year, Airbnb received venture financing establishing a \$10 billion value for the firm. That is greater than the market capitalization of Hyatt Hotels. This is truly disruptive competition. It doesn’t have to be as good as a hotel room. All it has to be is cheap and convenient. It is not surprising that the regulation-heavy cities of New York and San Francisco are making moves to stifle this new form of hotel competition under the guise of protecting rent control. There is also the issue of collecting hotel taxes where the owner is responsible for both collection and payment of the tax. Airbnb is in the process of seeking legislative change to allow it to collect and pay the required taxes. Meantime, a recent perusal of the Airbnb found a host of accommodations in or near Westwood Village at prices ranging from \$50-\$350 a night.

We do not expect investors will focus on the technological disruption facing retail, office and hotel real estate until capital market conditions become less favorable. There is too much money pouring into real estate to worry right now. Simply put, the worriers don’t get the deals. Nevertheless, when the capital markets turn, investors will wake up to the changing landscape for commercial real estate.

For a discussion of disruptive technology see, Christensen, Clayton M., “The Innovator’s Dilemma: When New Technologies Cause Great Firms to Fail,” (Boston: Harvard Business School Press, 1997)

As a result the national office vacancy rate will stay high for many years to come. And it should surprise no one that urban office buildings are being converted to residential use and suburban office buildings are being “scraped” to make way for high density residential development.

### Hotels

Technology has made the hotel business far more transparent. There are a host of online services that supply up-to-the-minute pricing data for hotel rooms throughout the world. There are also consumer reviews available for practically every hotel in America. More than ever, hoteliers have to be on their toes. All of this has been true for about the past decade.