Valuation Navigates Steep Cliffs

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From a pricing and value perspective, the institutional commercial "equity" real estate markets are facing headwinds that were never imagined just 2 short years ago. As we look back, first quarter 2007 marked the beginning of the credit crisis that escalated into the full-fledged credit market meltdown of September 2008. First quarter 2007 also marked the end of a glorious run for commercial real estate that was capped with the sale of Equity Office Properties Trust to the Blackstone Group at a gross value of around $40 billion.

Beginning in fourth quarter 2008, institutional equity commercial real estate values have declined more in a shorter period of time than ever recorded over the past 30 years. (The beginning of the National Council of Real Estate Investment Fiduciaries, or NCREIF, reporting, first quarter 1978, is used as an anchor to mark when institutional commercial real estate became a viable investment alternative to stocks and bonds for major investors looking to place large equity positions in the asset class.)

Exhibit A and Exhibit B provide a glimpse into the past to examine the behavior of commercial real estate values over the past 30 years as the economy worked through five recessions. Exhibit A clearly demonstrates the depth and abruptness of this value correction compared to prior changes. As demonstrated, commercial real estate performance is clearly connected to the economy, with economic downturns inducing the value corrections. The relative amplitudes and correlations between the economy and value changes over time demonstrate certain periods of time that show a bigger disconnect between commercial real estate and the economy. One such disconnect happened in the 1990s when the largest commercial real estate construction boom in our generation was precipitated by heavy bets made by banks. This in turn created a tremendous amount of excess space capacity, and it took 6 years for NCREIF to record a peak-to-trough value correction of 32 percent for **unleveraged**[1] equity commercial real estate.

Exhibit A. Economic Recessions and Value Changes, 1979–2009

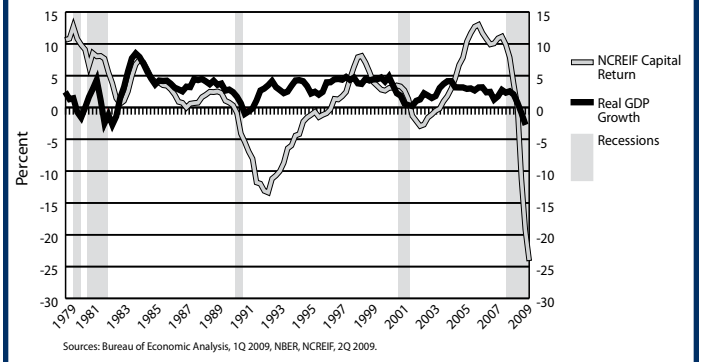
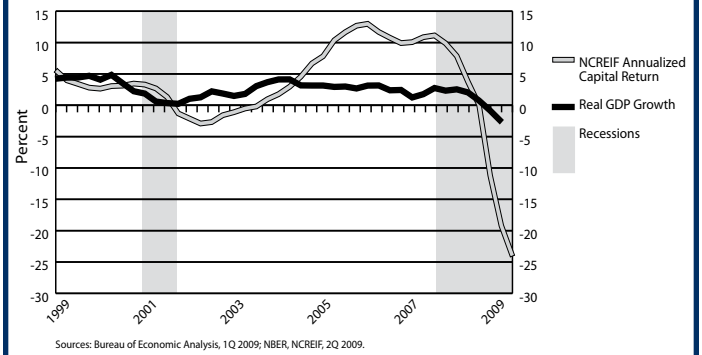


Exhibit B. Economic Recessions and Value Changes, 1999–2009



Turning our attention to the more recent NCREIF value component, we see a value expansion from 2004 through 2008 that far outpaced the expansion in the economy. Coined as the "era of cap rate compression," this was a time when we saw values pushed beyond those supported by the space fundamentals. According to NCREIF, values grew by roughly 45 percent during this 4-year period, and applied to leverage of 50 percent, this translates into a leveraged value appreciation of 90 percent. (We make this point to signal why there was strong motivation to pile on debt.) However, before commercial real estate could follow in the residential real estate market's footsteps of broad-based over-leveraging, complicated derivative structures, and over-building, the world fell into an economic recession that later was declared to have started in December 2007. This declaration of a recession was shepherded in by the

[1]RERC stresses that this is about **unleveraged** commercial real estate investments due to the fact that leverage exacerbates the direction of a value change, and in the case of a write-down, e.g., 50-percent leverage or debt during this period of a 32-percent value write-down on the gross asset, translates into a write-down of 64 percent (32 percent gross value change/50 percent cash equity). Throughout this article, the comments, analyses, and data will be focused on unleveraged analysis, and readers can convert the impact to a leveraged position, if desired.

discovery of the worst financial bubble since the Great Depression, and was the result of the greed and excesses in the residential market.

Many experts in the commercial real estate industry believed and many pundits had expected that our industry would escape the perils of the subprime residential market and mayhem on Wall Street. This was not the case, however, and in fourth quarter 2008, NCREIF recorded the largest single-quarter decline in history, followed by significant value declines in the first half of 2009, where values have declined by more than 24 percent over the past 12 months, as of June 30, 2009. This decline is pronounced and significant in its abruptness and in the speed at which the value adjustments are being recorded, and leaves the industry asking: How far and how long will this value correction persist?

Examining the Impact of Cap Rates on Values

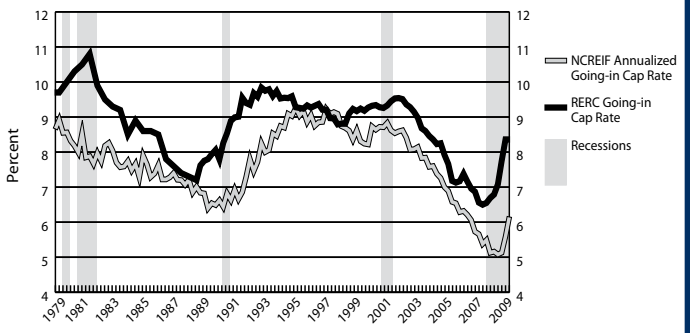
To determine how far and how long this value correction can persist, we will first examine the cap rate expansion era and the pursuing cap rate retreat in the face of a full-blown credit crisis. Exhibit C charts both reported cap rates from NCREIF and from RERC. NCREIF cap rates are based on net income divided by the beginning market value, with additional adjustments in the denominator (refer to NCREIF definitions and performance measurements for complete understanding of the calculation), whereas, RERC cap rates are surveyed required cap rates based on institutional respondents' experience and opinions and which parallel the NCREIF reporting entities. Each cap rate offers its own respective strengths and weaknesses, but these data series are consistent in the historical sense and provide us with a means to address where we stand from a value adjustment perspective, as formulated from a cap rate vantage point.

From first quarter 2002 and until fourth quarter 2007, cap rate compression claimed 300 basis points according to the RERC data and almost 311 basis points according to the NCREIF data. However, it is important to note that the cap rate starting point in 2002 was also a period when we were coming out of a recession and entering a jobless recovery. Given this perspective, a more relevant period to isolate the cap rate era for reviewing the historical data and analyzing value trends is first quarter 2004 through fourth quarter 2007. During this period, we extract a RERC cap rate decline of 200 basis points and a NCREIF decline of 210 basis points. If net operating income (NOI) is held static, this translates into value changes of roughly 31 percent for the change, or delta, in RERC data and 38 percent for the NCREIF data. The NCREIF value component reflected an increase during this period of around 45 percent. The inference can be made that approximately 85 percent of value changes on "average" rested with cap rate compression.

However, we must be careful with this assessment as there were some markets and certain property types that had rents (and resulting NOIs) that were being highly fueled by the excesses of Wall Street financial companies, frothy residential markets (Florida and Arizona), and strong construction expansion locations (Las Vegas). The rental side of the equation will be addressed in more detail later in this article, with this section honing in on the cap rate impact on values of the past and the future.

Exhibit C charts the RERC "required" cap rate at 8.4 percent, which is the same as last quarter, and now stands very close to the level recorded in first quarter 2004 at 8.5 percent. However, NCREIF "reported" cap rates today are around 6.15 percent (please note that the annualized income return of 6.15 percent is lagging based on the NCREIF Income Return Formula, and the simple cap rate [NOI/market value] is 6.5 percent annualized), with 2004 NCREIF levels reported at around 7.6 percent. Such analysis suggests that NCREIF will continue to experience cap rate increases. This can be further examined by looking at the historical spreads between RERC and NCREIF cap rates.

Exhibit C. RERC Cap Rates and NCREIF Cap Rates, 1979–2009



Sources: RERC, NBER, NCREIF, 2Q 2009.

Exhibit D and Exhibit E allow us to further explore whether cap rates have halted their retreat upward and if NCREIF cap rates have increased at the same relative level as RERC cap rates. As shown, an intraocular review of RERC "required" cap rates is normalizing and appears fair and reasonable. An examination of RERC cap rate spreads versus NCREIF cap rates demonstrate some level of difference and a persistent trend. From 1999 to 2008, the difference between RERC cap rates and NCREIF cap rates ranged from 50 to 120 basis points with an average of around 90 basis points. However, beginning in first quarter 2008, the difference spiked to 280 basis points and now stands at 220 basis points (based on the reported income return of 6.15 percent). Therefore, to see NCREIF cap rates realign with RERC required market cap rates, we would need to see NCREIF cap rates go up by another 130 basis points to settle into that average spread of 90 basis points. This is also consistent with the approximate 140-basis-point difference between the first quarter 2004 NCREIF cap rates and today's cap rates. Through this exercise, we will use 100 basis points required upward adjustment to NCREIF cap rate. Drawing it all together suggests that ceteris paribus (all else equal), NCREIF values could decline by another 15 percent solely attributable to cap rate increases.

Exhibit D. RERC Spread of Cap Rates vs. NCREIF Cap Rates, 1999–2009

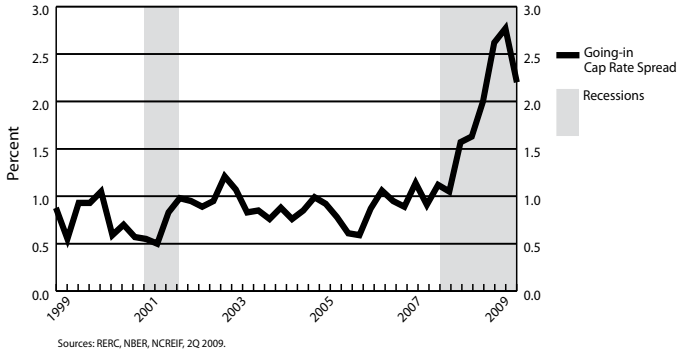


Exhibit E. Spread of Cap Rates and NCREIF Capital Changes, 1999–2009

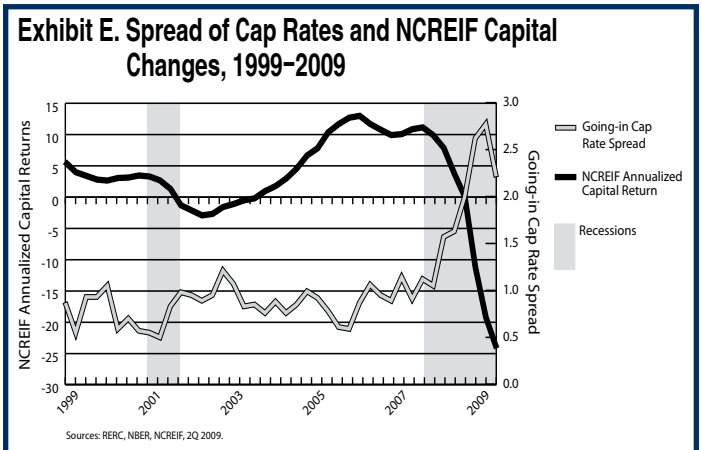
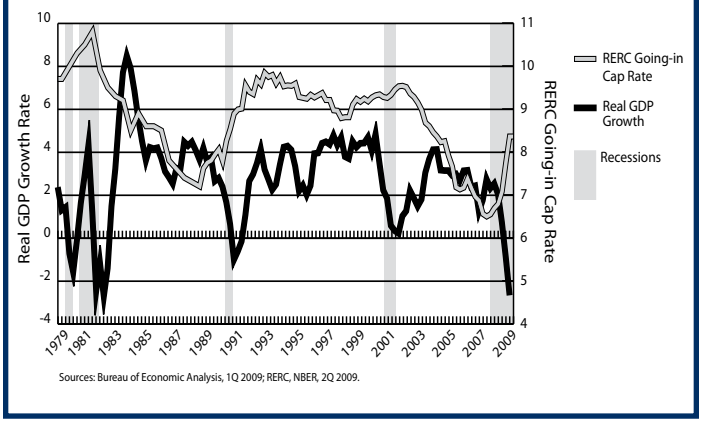


Exhibit F. RERC Cap Rates and GDP Changes, 1979–2009



Looking Out for the Next Economic Headwind

Except for the lag of NCREIF reported to required market cap rates, RERC views that the worst is behind us from a cap rate valuation risk analysis perspective. This is demonstrated in Exhibit F, where we have provided historical RERC required cap rates versus changes in real GDP. Even in the face of a weak economy, RERC cap rates are stable from the last quarter. We always caution readers, however, that not all cap rates are created equal, and a cap rate is not a one-size fits all. It takes much experience, judgment, and an understanding of the net operating income characteristics of a specific property in a specific market to use the cap rate to arrive at a reliable valuation conclusion. The cap rate metric is a language that the market likes to use to measure

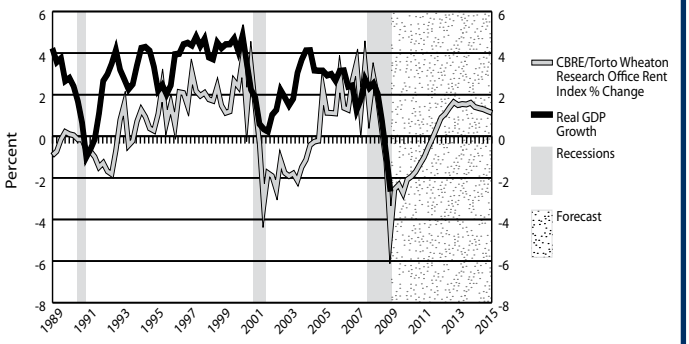
the overall direction and pricing behavior of commercial real estate. The cap rate is the denominator of the valuation equation, and we now look to the numerator, or NOI, which is a function of rents.

We recognize that commercial real estate has a bond quality consisting of contract leases with various degrees of duration, ranging from 1 day for hotels to 10 years or more for office/industrial leases. As we shift our focus to the next market challenge of the future of commercial real estate rents, we need to keep this duration factor in mind. RERC views the aforementioned cap rate adjustments to be more structural in nature, while the climate for rent adjustments is more cyclical, although we are in a downturn that has significant weight and unprecedented headwinds to overcome, as reflected in Exhibit F with recent quarter-over-quarter GDP.

As we venture into an examination of the economy, we should remember that an improving employment picture will be one of the last elements of an improved and healthy economy. As such, we recognize the connection between commercial real estate and the economy ultimately rests mostly with the jobs forecast—a lagging indicator. This factor, along with the duration of leases, translates into that issue of commercial real estate lagging the economy and the performance of the financial markets. We initially had hoped that the lagging characteristics of commercial real estate would help us avoid a major value correction. This was not to be the case, as the destruction and deceit in the financial markets was simply too overwhelming and too pervasive. Given that backdrop, we now look to the rent forecast for office and industrial properties in light of where the economy has taken us.

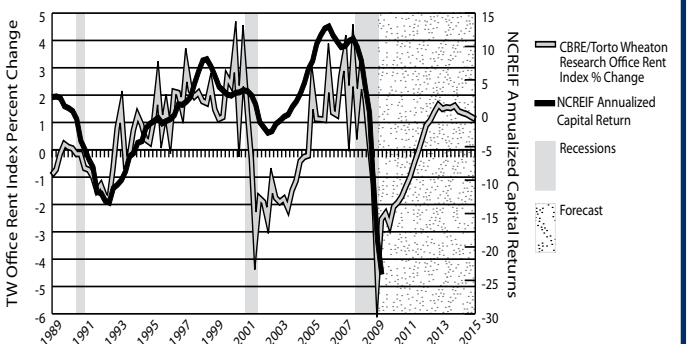
Exhibit G and Exhibit H confirm the high correlation of rent to the economy, and as the economy is cyclical, so too are rents and forecasted rent levels for office and industrial properties. Further, the delta of Exhibit H between the office rent index and the NCREIF capital component is visible. Commercial real estate valuations are based primarily on the discounted cash flow methodology that captures the future direction of rents, expenses, and capital items. According to Exhibit G and Exhibit H, for the most part, the current valuations

Exhibit G. Office Rent Changes and GDP Changes, 1989–2015 (Forecast)



Sources: CBRE/Torto Wheaton Research, NBER, 2Q 2009; Bureau of Economic Analysis, 1Q 2009.

Exhibit H. Office Rent Changes and NCREIF Capital Changes, 1989–2015 (Forecast)



Sources: CBRE/Torto Wheaton Research, NBER, NCREIF, 2Q 2009.

have imbedded into the forecast the rent level declines that have been created by the economic recessions. Further, the recovery of rents will be a slow and drawn-out process, but they are being incorporated into value conclusions. There are still properties that need to take their marks from a rent perspective, but this is not the hidden storm like the cap rate expansion seen over the past 12 months.

Beyond rents, there is the troubling arena of high vacancies. The space markets still hold risk as we navigate a terrible economy, but the commercial real estate market has been better this time around versus that of the 1990s in keeping the space market dynamics in check. This was due primarily to the capital spigots getting turned off shortly after the Equity Office Properties Trust transaction. The level of more value or price write-downs for commercial real estate from a space market or rent perspective probably rests between 5 percent and 10 percent. This is in addition to the write-downs already taken, and the further re-pricing from cap rate normalization.

Setting Our Sights

Commercial real estate has been and always will be a long-term, strategic investment that will compete with stocks and bonds. To move on from this point in time, regardless of where you stand, takes courage, conviction, and decisiveness. These characteristics are needed to survive and to strategically place one's investment portfolio for a future that will be brighter than today but much different than the past 5 years. It is hard to muster up the courage to tackle the day-in and day-out challenges to right-size investment positions, but committed investors are doing just that, while asking hard questions about how much further and how long this valuation downside variance will continue, both from the perspective of cap rate changes and space market dynamics.

Based upon this analysis, we draw and offer the following conclusions:

- RERC's second quarter 2009 required cap rates have flattened out from first quarter at a level of 8.4 percent;
- RERC's required cap rates have returned to the level of first quarter 2004 (prior to the era of cap rate compression), and are up almost 200 basis points over the past year;
- NCREIF reported cap rates as of second quarter 2009 are at 6.15 percent and need to go higher to match market expectations;
- NCREIF cap rates are still 140 basis points below levels of first quarter 2004;
- As of second quarter 2009, the NCREIF value component is down 24 percent on an "unleveraged" basis for the past year;
- The NCREIF value component could see another downward value adjustment of 10 percent to 15 percent due to cap rate changes over the coming 6 months;
- Cap rate changes are structural in nature (a return to normal levels);
- Space market rent and vacancy pressures are, for the most part, baked into current valuations;
- Space market dynamics are not a hidden problem, but could reduce values by an additional 5 percent to 10 percent;
- Based on where we are and what we anticipate for future valuation declines due to cap rate and space market adjustments, we will see peak-to-trough value declines range from 35 percent to 45 percent on an unleveraged basis; for leveraged positions of 25 percent to 50 percent, we will see value declines of 50 percent to 90 percent;
- Investors get it, and they are acting with courage, conviction, and decisiveness; and
- Commercial real estate continues to be a long-term, strategic investment that belongs in a mixed asset portfolio.