



# The Property Market: Dare We Call It Rational at this Point?

by Hugh F. Kelly, PhD, CRE  
Clinical Assoc. Professor, NYU/Schack Real Estate Institute  
Member of NPV Advisors Board of Advisors.  
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In recent months, tumultuous events – economic and political, domestic and international – have dislocated markets for all asset types. Investors have seen prices gyrate with each day's economic news, sometimes without any apparent connection to the long-term earning potential of the assets. Decision-making is a complicated process, but one thing is very simple: good decisions are rarely made by those gripped by strong emotions. Euphoric feelings cloud judgment, as does a sense of despair. The latter now appears to be the imminent threat, perhaps in an even more chilling way than at the depth of the market panic of 2008.

***“Markets can remain irrational longer than you can remain solvent.”***

*John Maynard Keynes*

“Rational markets” have long been a fixture of investment theory, despite long-standing evidence that market behavior is often anything but sane. John Maynard Keynes once acidly remarked, “Markets can remain irrational longer than you can remain solvent.” Simply going along with market trends gives rise to the destructive herd instinct that amplifies cycles into wider and wider pendulum swings, leading to orgies of overpaying and then to massive over-corrections. We have seen both excesses, recurrently, over the past quarter century. What is needed is a measure that signals when cycles are getting out of control, when a reasonable relationship between price and sustainable value is being severed.

## **USING CAP RATES SENSIBLY**

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The relationship between commercial property income and value is at the heart of real estate investment decision-making. Capitalization is a complex process based on numerous assumptions, and fraught with many uncertainties. Investment pricing must incorporate the user-market supply/demand forces at work in a particular location at a given time. It needs to be responsive to the volume trends and yield requirements in capital markets themselves. Real estate, as a leveraged asset, is especially sensitive to the structure of the capital stack – the distribution of debt and equity pieces, which often consist of several investment participants in a sequence of priorities. Further, at the point of purchase, prices must express expectations about the future income potential of the property and its anticipated appreciation.



As a result of such complexities, discounted cash flow analysis is the standard tool utilized for both valuation and investment analysis. Buyers and sellers in the marketplace normally have a strong sense of the interplay between the many variables, since each participant examines many more investments than they actually consummate under conditions of usual liquidity. However, there is no real estate transaction clearinghouse that assembles, much less reports, the range of interpretations and expectations that buyers and sellers employ in arriving at the final negotiated selling price. The best, most comprehensive data available, such as that compiled by Real Capital Analytics (RCA), only reports the initial capitalization rate – data which itself needs to be investigated to assess the idiosyncratic features of each transaction.

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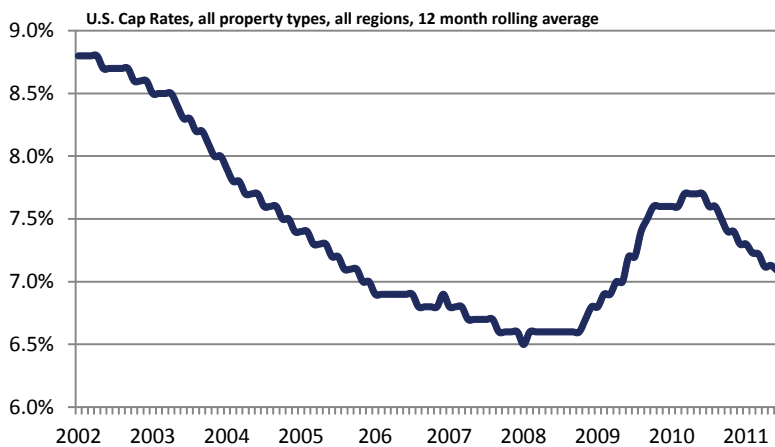
Cap rates, of course, are just snapshots of the relationship of income to price at the point of sale. As such, they are not accurate indications of investment yield. The two are related, though; there is nothing explicitly considered in the discounted cash flow analysis that is not implicitly contained in the cap rate. As such, cap rates are very useful shorthand to gauge real estate investors' future property/market expectations. Cap rate trends, and their absolute level, provide extremely important market intelligence – but only when examined critically.

The first decade of the 21st century has been a roller-coaster ride for cap rates (See Figure 1). Average cap rates (all US markets, all property types) dropped by 230 basis points between 2002 and early 2008, then rose 120 basis points by the spring of 2010, and dipped back by 45 basis points by year-end 2010. To put the numbers into perspective, the 120 basis point increase in cap rates in the 27 months between January 2008 and March 2010 translated to a loss of value, or 'capital destruction', of about \$625 billion (accounting for changes in income due to lower rents and higher vacancy rates). On the other side of the ledger, the precipitous decline in cap rates from 2002 to the end of 2007, pushed values higher by \$1.045 trillion, again controlling for rents and vacancy.

Can such swings be considered at all rational?

Figure 1

## The Cap Rate Roller-Coaster in the 2000s



Source: Real Capital Analytics

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### ***CAP RATES MUST BE STUDIED IN CONTEXT***

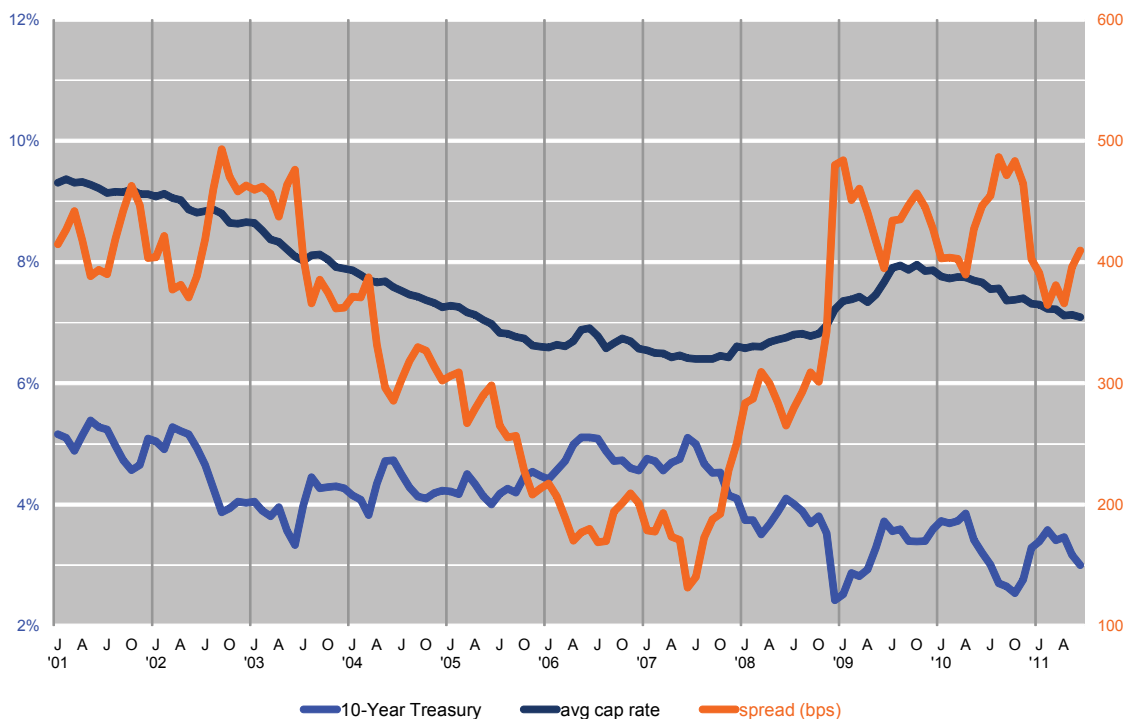
The incipient market recovery of late 2010 – early 2011 is not the first time the sanity of the market has been called into question. Right from the start of the cap rate compression of 2002 – 2003, there was concern expressed about a capital-fueled increase in prices occurring. Market fundamentals had deteriorated after the dot-com bust with 'jobless recovery' persisting into 2003.

The Economist, for instance, published a special section on real estate in May 2003 which presciently diagnosed the housing bubble and said of commercial property, "Strong investor demand has helped keep prices quite high... It seems that investors have failed to notice that the fundamentals of the commercial property market have turned sour."

The Economist's writers quoted RCA data at that time showing that office sales prices in Manhattan had risen 12% from the prior year, despite a 10% decline in rents. Even now, market veterans can recall many industry panels seeking to puzzle out the apparent 'disconnect'.

Yet we are not at all persuaded that 2003 prices were inappropriate, despite the change in fundamentals. Spreads between cap rates and 10-year Treasury rates widened, even as cap rates declined (see Figure 2). The expansion in spreads was evident for all of the major commercial property types. Multi-family cap rates had a 350 basis point spread over 10-year Treasuries, while other commercial property types averaged a 475 basis point spread.

**Figure 2**  
**Risk Premiums in Cap Rates Fell to Insanely Low Levels –**  
**But Have Been Priced for Value Since 2009**

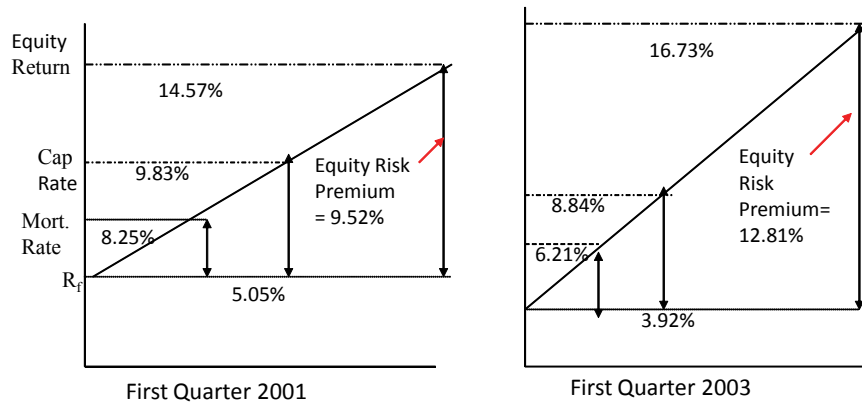


Source: Real Capital Analytics

Moreover, since mortgage rates had dropped as well, the leveraged return on equity increased and the risk premium on equity rose on a 75% loan-to-value investment by 329 basis points (see Figure 3). Anthony Downs of the Brookings Institution was correct in describing market conditions as “a Niagara of capital”, but the inference that investors had put fundamentals aside is far too simplistic. True, the markets were more risky in 2003 than in 2001, but cap rates – once analyzed – showed that buyers were being paid (handsomely, in fact) for the additional risk they were undertaking.

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**Figure 3**  
**Early 2000s Cap Rate Compression:**  
**Did Equity Risk Premiums Price Market Fundamentals Appropriately?**



However, continued cap rate compression caused risk premiums to evaporate considerably by mid-decade. By 2005, capitalization rates for multifamily assets had dropped on average to about 200 basis points above the 10-year Treasury rate, with other commercial property types having overall premiums of 300 to 350 basis points. To focus on the apartment market specifically, a quintet of scholars (Chichernea, Miller, Fisher, Sklarz, and White, 2008) looked at cap rate premiums across metro markets in 2005, and found extremely aggressive bets across a range of Sunbelt markets. The unlevered cap rate premium in San Diego was just 66 basis points, 152 basis points in Miami, and 229 basis points in Austin. Soon thereafter the naked bet on extrapolated growth, of course, led to massive losses as vacancy rates in those markets headed toward double-digit territory. Slower growth markets like Portland (OR), Washington DC, and Columbus (OH), actually had higher multifamily risk premiums in 2005, and have since sustained better occupancies in the post-2007 economic downturn.

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Unpacking the components of the cap rate helps us understand more acutely the misadventures then being launched in the market. The Barron's/John B. Levy national mortgage survey put prime 10-year commercial lending rates at just 5.41% in May 2005, when the comparable risk-free Treasury was yielding

4.14%. So the risk premium earned by the debt component of the capital stack was 127 basis points, a substantial compression from the spreads of 2001 and 2003. Worse yet, the equity risk premium on a 75% LTV mortgage had dropped from 12.81% to just 8.83%.

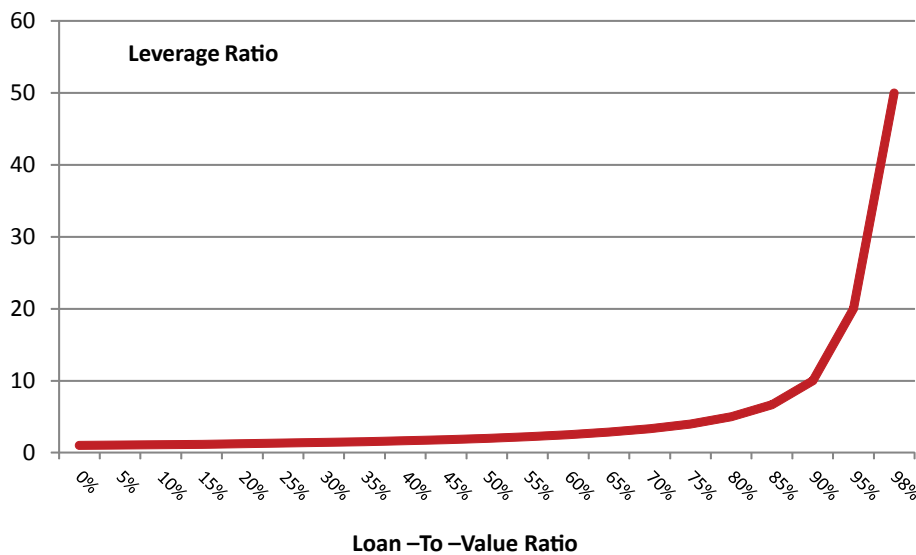
From that point the slide into insanity accelerated. By the spring of 2007 10-year Treasury yields had risen to 4.75%. Mortgage rates ratcheted upward, too, but only by 50 basis points or so, to 5.92%. Still, cap rates continued to drop, averaging 6.7% according to RCA data. That meant that the equity yield rate on a 75% LTV mortgage dipped to nearly 9%, and the equity risk premium was just 4.29% - far too low by historic norms to compensate investors for the panoply of risks inherent in the commercial property market.

Ten-year Treasuries are down 275 basis points from the spring of 2007, but mortgage interest rates have only adjusted by 30 basis points, increasing the risk premium to the debt position by near two full percentage points. Cap rates, according to RCA, are averaging 7.1% (all regions, all property types).

Note, too, that to provide an apples-to-apples comparison, the 75% LTV was held constant for all the foregoing calculations. Those who lived through the market, however, can testify that leverage levels soared as we moved into the latter part of the decade. As leverage expands, so does risk – and so should risk premiums. When that relationship breaks down, that's when the dots become 'disconnected.' As Figure 4 illustrates, the Leverage Ratio (value divided by equity) rises in a parabolic arc as LTVs exceed 80%.

Figure 4

**Leverage Ratio Increases Risk Exponentially**



## **COGNITIVE DISSONANCE IN THE SUMMER OF 2011**

What is the state of affairs in the asylum now? Signs pointed to a remarkably shocking return to rationality earlier this year, although the thin volume in the investment market and its intense selectivity made us cautious about any optimistic generalizations. Nevertheless, investors seemed to be 'on their meds'. It is encouraging that, as the debt-ceiling circus played out in Washington in July, real estate investors prudently stepped to the sidelines.

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One of the core assumptions of risk-pricing is being challenged in an unprecedented way. U.S. Treasury instruments have been the benchmark for a "risk-free" rate of return. That status has been dramatically called into question by the S&P downgrade of the U.S. sovereign debt credit rating. The markets, other things being equal, should have responded by lowering the price of Treasuries, with a concomitant increase in interest rates. However, by September, 2011, the constant maturity yield of the 10-year Treasury fell below 2.0%. Investors implicitly affirmed the "safe harbor" character of U.S. debt. This had been anything but a certainty, but as investors process this information (assuming no stunning rise in the weeks ahead), the calculus of real estate risk pricing will be recalibrated.

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At a 75% LTV, that equates to an equity risk premium of just 7.2%, much thinner than in 2003. And, as the market has de-levered, lenders are requiring more equity in the investment. If the LTV in a 7.1% cap rate investment is 65% instead of 75%, the indicated equity yield is 8.4% and the equity risk premium is about 6.4%. These rates strongly suggest that the decrease in market volume in the summer of 2011 reflects a sensible adjustment to risk pricing.

It must be pointed out, though, that history indicates that market conditions, at mid-2011, are very favorable for the performance of commercial mortgages. The most authoritative study of commercial mortgage default rates (Esaki, L'Heureux, and Snyderman, 1999) shows the lowest incidence of default coming from loans originating in post-recession years such as 1977 and 1992, when property values are comparatively low and deal volume is relatively soft. Loans made at market peaks, when capital is abundant, vacancy relatively low and rents high (such as 1973 and 1986), have cumulative default rates of 20% to 25%. The Federal Reserve has signaled its intentions to keep interest rates low through mid-2013. If mortgage lending increases to take advantage of the high spreads available, the risk-premiums available to equity could be very favorably altered later this year and early next year.



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As indicated in the opening paragraph of this essay, there are many moving parts to be considered in the relationship between commercial property income and value. Certainly, an increasing volume of investment activity in 2011 impacted cap rates, and a slowdown in activity could push rates up once again. Further, lenders could loosen their underwriting, although this is unlikely in the present climate of uncertainty. We will make no attempt to forecast all those variables in this short article. However, we will suggest that all market participants keep a close eye on the direction and magnitude of change in the risk premiums embedded in capitalization rates. When the spread above Treasuries narrows to less than 350 basis points for cap rates, 300 basis points for mortgages, and 950 basis points for levered equity, cue the Billy Joel music: "You May Be Right, I Might Be Crazy."