

Follow the Debt:

# Public debt markets could predict REITs' direction

**Lowell Bolken, CFA**

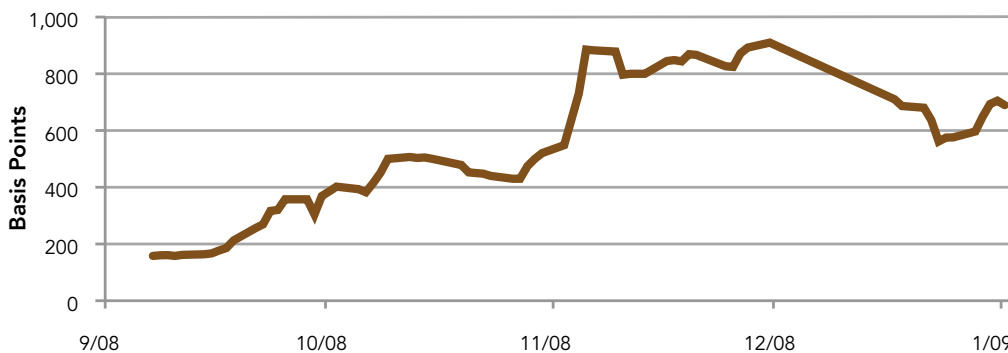
Associate Portfolio Manager  
Real Estate Securities

Commercial real estate, like most other asset sectors, has experienced a severe re-pricing over the past two years. As the U.S. descended into recession in December 2007, it was predictable that values of income-producing properties would face pressure. Higher vacancies and lower rent growth traditionally accompany the downward trajectory in the economy. But during the most recent cyclical run-up in commercial real estate prices, a significant amount of debt leverage was employed to amplify returns. Now as income decreases and the cost of capital increases, debt becomes the enemy. The real estate industry must deleverage to adjust to new realities.

Increasing asset values brought the equity real estate investment trust (REIT) market to a peak in February 2007. But as the specter of residential subprime lending losses and single-family home overbuilding unfolded, investors broadly re-priced risk. The change in sentiment was a proper reaction; valuations in the public markets had reached historic highs, and debt financing had become more reckless. The cracks in the REIT market, however, formed before those in the broader stock market, which peaked in October 2007. Though not as visible, limited transactions throughout 2008 show that private real estate assets have not yet adjusted as severely as the public side. The direction public REIT share prices move in 2009 will partially be influenced by the direction of the economy, which commercial real estate tends to lag. But it will also depend upon the stage REITs have reached in deleveraging, along with the relative cost of capital. With a staggering amount of real estate debt maturing in 2009, further market dislocation will occur. REITs will have to emerge with more heavily equity-weighted balance sheets. Those that are able to

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## Simon Property Group Credit Default Swap Spreads



*Simon Property Group's credit default swap spreads have recently tightened, yet still remain volatile.*

Source: Bloomberg

secure debt funding in 2009 will do so on much more stringent terms, likely using a more diverse group of lending sources.

The good news is that REITs may have a competitive advantage. Generally, REIT debt leverage ratios going into the cycle were much more manageable than their private commercial real estate counterparts. While the typical REIT had debt to total capitalization of roughly 45 percent, the typical private commercial real estate investor borrowed at loan-to-values (LTV) of 75 percent. With a turnaround in the capital markets, REITs are poised to once again tap into capital, though not as cheaply as in the past.

REIT dividend yields now generally range from high single digits to the mid-teens, highly competitive with debt securities. Further, with most REITs trading at significant discounts to their estimated net asset values, they look appealing as a value play. Valuation multiples are at levels not seen since 2003.

What will it take to begin the healing process in public and private commercial real estate? To examine this fully, the relationship between debt financing and commercial real estate must be analyzed.

### **Debt and commercial real estate**

As with other asset classes, commercial real estate companies depend on debt financing to enhance equity returns. Historically, public and private commercial real estate companies have viewed debt financing, particularly secured financing, as a part of a primary strategy for acquiring, developing and operating real estate investments. This is particularly suitable for those commercial real estate investments that generate steady cash flows over a definitive period of time. Long-term leases, the life-blood of office, retail and industrial property types, fit well within this strategy. Property types with shorter contractual revenue streams, such as apartments and hotels, also use debt funding, which is underwritten to reflect the more volatile nature of cash flow.

### **A short history**

For practical purposes, the cap rate (see sidebar on page 3) has been a basic gauge for commercial real estate valuation. It theoretically combines various

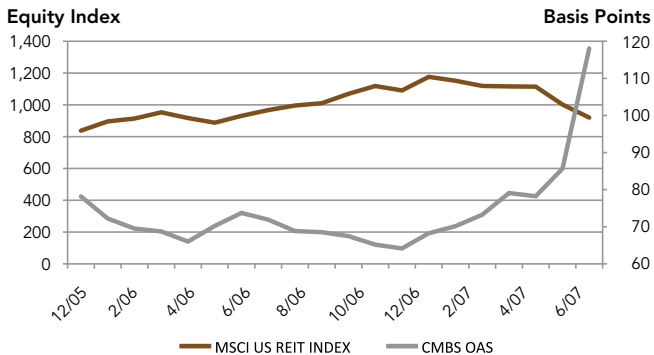
factors to identify the risk/reward of an investment. The lower the cap rate, the higher the growth expectation. In addition to the property and tenant characteristics, the more macro considerations of relative risk spreads and interest rates figure prominently. As lender spreads narrowed during the 2006-2007 peak, cap rates followed a similar downward path. Perhaps the best example of this phenomenon occurred in the Midtown Manhattan office market. Not only was rental rate growth in this market perceived to be unceasing; certain properties were valued less on economic terms than on an intangible long-term ownership premium (sometimes called “trophy” ownership—that is, the concept of an irreplaceable asset). Values were thought to have reached an apex when Blackstone Group acquired the Equity Office (EOP) portfolio in early 2007 for an estimated 5.1 percent cap rate. Blackstone used approximately 90 percent financing, only to turn around and sell the Manhattan properties in the portfolio at an even higher price, represented by a 3.5 percent cap rate. Before the turn in the cycle, some Manhattan properties reportedly traded at less than a 3 percent cap rate.

This period was fueled by the surging commercial mortgage-backed securities (CMBS) conduits, those entities that originated commercial real estate loans on the front-end (or purchased them in the secondary market), and packaged them to create tranches of coupon-paying bonds. These repackaged securities were then submitted to the bond rating agencies for a legitimizing credit rating, and then sold to investors through brokerage channels at a profit to the manager. The demand for higher yielding product carrying investment-grade (or, better yet, AAA) ratings gave the conduits further incentives to become increasingly competitive with their loan pricing on the front end origination. Eventually, the conduits undercut the traditional lending channel: life insurance companies and banks. For example, a life company would quote an interest rate equivalent to 200 basis points above the comparable term Treasury bond, only to be countered by a sub-100 basis point CMBS conduit quote. Further, as demand (and fee potential) increased, the conduits were driven to offer more lenient terms in the form of structure, loan to value (LTV), etc. Valuations ballooned; cap rates decreased further as LTVs increased in some

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cases to as high as 100 percent. That was just the denominator portion of the valuation equation—the numerator (usually projected NOI) in some cases was based on anticipated rent increases three years into the future, as opposed to the more conservative in-place income assumption.

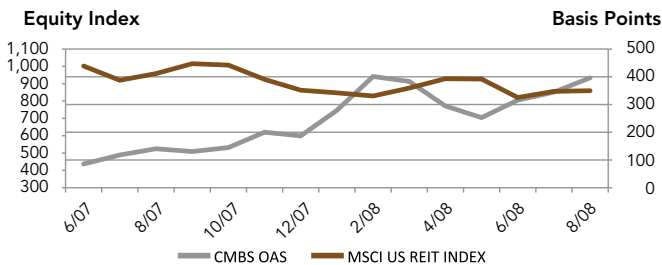
### CMBS Spreads vs. REIT Equities 12/05 - 7/07



Source: Lehman Live, Bloomberg

Taking into consideration the relationship between cap rates and leverage, it's easy to see where the introduction of greater leverage materially inflated valuations for commercial real estate, which then spilled over into the REIT equity market. In the chart above you can see that as CMBS spreads narrowed into the 60 basis point range, REITs (as represented by the MSCI REIT equity index) peaked in February 2007. As the re-pricing of risk began to occur during the spring of 2007, CMBS spreads began to ascend back above the 100 basis point level, and REIT equity valuations began their descent.

### CMBS Spreads vs. REIT Equities 6/07 - 8/08



Source: Lehman Live, Bloomberg

### A cap rate primer

A common commercial real estate valuation tool is the capitalization rate, or "cap rate." The cap rate can be loosely defined as the required rate of return on an investment adjusted for anticipated growth. It can be calculated by dividing the expected flows to a property by the purchase price of the property.

Let's assume that a property sold for \$1 million in an all-equity transaction, and has an annual operating income of \$100,000. To calculate the cap rate, we divide the annual cash flow by the purchase price. This resulting quotient is 0.10, or 10 percent.

$$\text{Cap rate} = \text{cash flow}/\text{purchase price} = \$100,000/\$1,000,000 = 0.10, \text{ or } 10\%$$

Note that the formula can be algebraically adjusted if a cap rate is known, but the value is unknown.

$$\text{Purchase price} = \text{cash flow}/\text{cap rate} = \$100,000/0.10 = \$1,000,000$$

What happens to value when the buyer is able to leverage their purchase with debt? Let's use the 10 percent return hurdle and the annual cash flow of \$100,000. We'll assume the buyer is able to obtain financing at a 75 percent of LTV with a 5 percent interest rate. By definition the purchase price is four times the equity piece at 75 percent of LTV; we can first solve for equity and then purchase price.

$$\text{Purchase price} = \text{equity}/(1-\text{LTV}) = \text{equity}/0.25, \text{ or } \text{equity} \times 4$$

$$\text{Equity} = [\text{cash flow} - (\text{interest rate})(\text{LTV})(\text{purchase price})]/\text{return hurdle} = [\$100,000 - (0.05)(0.75)(\text{equity} \times 4)]/0.10$$

$$\text{Equity} = \$1,000,000 - \text{equity} \times 1.5 = \$400,000$$

$$\text{Purchase price} = \text{equity}/(1-\text{LTV}) = \$400,000/(1-0.75) = \$1,600,000$$

With leverage, the cap rate has decreased to 6.25%.

$$\text{Cap rate} = \$100,000/\$1,600,000 = 0.0625, \text{ or } 6.25\%$$

Last, let's examine the impact of expected rental growth on value. Let's assume 5 percent growth in operating income. We calculate the value by dividing the initial operating income of \$100,000 by 5 percent, the difference between our return hurdle (10 percent) and the growth rate (5 percent).

$$\text{Value} = \text{cash flow}/(\text{return hurdle} - \text{growth rate}) = \$100,000/(0.1 - 0.05) = \$100,000/0.05 = \$2,000,000$$

$$\text{Cap rate} = \$100,000/\$2,000,000 = 0.05, \text{ or } 5\%$$

With expected cash flow growth, the cap rate has decreased from 10 percent to 5 percent. In summary, increases in both leverage and income growth serve to drive up prices and drive down cap rates.

All cap rates are not equal. The required rate of return will depend on the level of risk (regulatory, economic, credit, property specific, etc.).

Source: Advantus

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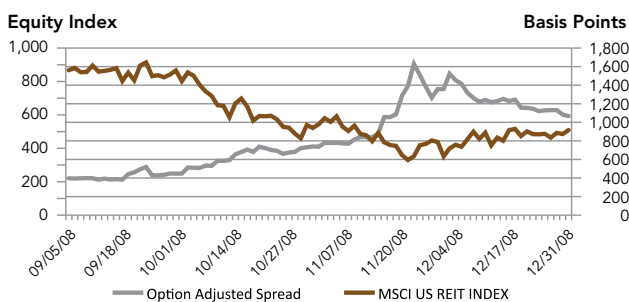
This was only the beginning. Risk re-pricing started a deleveraging reaction throughout the global markets. Suddenly, CMBS bonds fell under greater scrutiny, particularly recent vintages with lenient financing terms and very optimistic income projections. Questions regarding the rating agency process, initially raised in conjunction with the first wave of residential loan foreclosures, began to seep into the commercial real estate arena. In reaction, CMBS spreads surged to unprecedented levels (see chart on page 3).

### Going forward

CMBS spreads moved inversely to REIT equity valuations in late 2007 and 2008. This is not surprising, as the public debt and equity markets reacted to the same information. In previous markets, what was often good for shareholders was bad for debt holders. A secondary equity offering is one example of an event that previously would be viewed negatively for share prices (dilution impact) but positively for debt holders, yet now it could be viewed as a positive event for both.

As the credit market disruption intensified, there was an increase in concern over liquidity. Balance sheet liquidity became a key forward indicator for many REIT stocks as 2008 progressed, particularly those who in the past relied on CMBS or the unsecured debt markets to fund their businesses.

#### CMBS Spreads vs. REIT Equities 9/08 - 12/08



Source: Lehman Live, Bloomberg

Although the CMBS market has recently improved (see chart above), there is still a long road ahead. Life insurance companies are suffering from the “denominator” effect in their portfolios: as other asset classes have also fallen in value, commercial real estate exposure mathematically increases. This

poses a problem because of the estimated \$50 billion of CMBS maturities and \$250 billion of commercial mortgage maturities in 2009 alone. Of the REIT debt maturities that are held by life companies and banks, the bulk will probably be refinanced on fairly punitive terms, or simply paid off. Foreclosure is not a welcome alternative, as it would force the lender to take over management and administration of the operations. In all likelihood, it would be less costly for the lender to continue with the current REIT as management if they are operating the property in a high quality manner. Averting foreclosure would also allow the life companies to collect refinancing fees.

It's not clear how the void will be filled for maturing CMBS and unsecured public debt. There are indications that hedge funds and other distressed funds may turn their attention from equity opportunities to commercial real estate debt. Indeed, some unsecured REIT paper is trading at markedly wider yields than their preferred and common stocks, despite being senior in the capital structure. That presents an obvious arbitrage opportunity that some players may find hard to resist. The equity market, however, appears to expect life companies and banks to be substantial lenders in 2009. But we believe the likelihood is that both of these sources may reduce their exposure to commercial real estate in 2009.

We see a continued period of dislocation in both the equity and the debt markets going into 2009. Up until the third quarter of 2008, commercial real estate fundamentals had not yet reflected the downturn in either the economy or the financial markets.

Commercial real estate performance tends to lag the macro economy, so we would anticipate that the fourth quarter of 2008 and 2009 will show weakness in occupancy and rental rate trends across all sectors. However, having already touched an intraday low (November 21, 2008) 75 percent below the February 7, 2007 peak, REIT equities may have priced in cap rate increases and weakening fundamentals. At the same time, the REIT market could remain in a phase of heightened volatility as it continues to test for further bottoms before recovering.

While the current cycle is similar to the 1989-1993 commercial real estate depression, unlike that period, the credit markets globally are now in historic disarray. Without question, a turnaround in the REIT equity

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market will depend on a return to some form of funding liquidity to rescue the debt side of the balance sheet. At that point, the math that is driving cap rates to higher levels will finally reverse.

### Follow the debt

Just as the debt market disruption led the real estate markets into the downturn, it might also provide clues about a recovery. Debt maturities loom ominously in the short term, the CMBS platform as an avenue for refinancing is dormant, and life insurers and banks as secured lending alternatives have been severely weakened. There's been less of a focus on the public unsecured market, which is also generally comatose. Spreads for unsecured REIT bonds have widened to the point where secondary trades have essentially frozen. REIT credit default swap (synthetic securities created to mimic cash bond characteristics) spreads widened to the point where cash bonds issued at an equivalent spread would have translated into a double-digit coupon rate. This is troublesome in that REITs have been accustomed to refinancing existing public unsecured debt by simply rolling over into a new issue, usually with five- to ten-year terms.

Non-REIT unsecured bonds appear to be turning the corner. Corporate bond spreads had also spiked during the debt market crisis, but have since narrowed rather significantly. It's not surprising that the most dramatic tightening has been among those issuers that have either received funding through the federal government's Troubled Asset Relief Program or FDIC guarantees.

For REITs, the unsecured market has recently loosened, and spreads for the most liquid names have begun to tighten. For example, the chart on page one shows that credit default swap spreads on Simon Property Group (SPG), the highest-rated of the group and the

presumptive bellwether, tightened recently to below 650 basis points from a high exceeding 900 basis points (five-year term). Similar cash bonds have also started to show signs of improvement. The spread tightening is especially significant because during this timeframe, Treasury yields have also declined. Theoretically, if SPG could price a secondary issue at a 650 basis point spread over a comparable 1.50 percent five-year Treasury, the resulting 8 percent coupon debt may suddenly be within the range of the new pricing paradigm of the commercial real estate market. If the cap rate environment does settle into a 9 to 11 percent range, we believe unsecured debt issuance becomes economically feasible again.

It is difficult to predict if and when the public debt markets will return to some sense of normalcy. It is likely that REIT equity valuations, all else being equal, would find a new level of support, if this occurs. A renewed source of funding would take pressure off the REITs to forcibly sell or otherwise encumber their assets. When debt markets begin to normalize, the initial stage of healing in the markets will have begun. This is not to diminish the challenges faced by REITs during the economic downturn. Valuation multiples have already reached levels not seen since 2003, and flat to negative growth could potentially cause further deterioration. Yet with every trough in past markets, the prospects for future growth provide the spark for multiples to expand. When some degree of normalcy returns to the public debt markets, it will go a long way towards providing that spark.

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