A Disconnect in Real Estate Pricing?

Real estate pays a price for being connected to broader capital flows.

PETER LINNEMAN

HARDLY A DAY goes by without talk of today's "disconnect" in the pricing of commercial real estate. The disconnect concerns the historic lows of cap rates, despite weak property fundamentals. As a result, while property cash flows decline, property prices remain high. The best example is the General Motors Building in New York City, which recently traded at a near 5 percent cap rate. However, this phenomenon is not limited to New York trophy office properties; it extends to strip shopping centers and suburban garden apartments.

WEAK FUNDAMENTALS

How weak are property market fundamentals? Focusing on publicly traded real estate companies, for which the best data is available, average funds from operations (FFO) are down over the past year by roughly 4 percent for office REITs and 5 percent for industrial REITs, while apartment REIT FFO are down by 7 percent. Only retail REITs have experienced FFO increases over the past year (6 percent). Over this period, "same store" NOIs are down by even more at apartment, office, and industrial REITs, with only retail REITs registering positive "same store" growth. These declines (for all but retail) are reflective of the rapid increases in property vacancy rates as the bubble economy exploded. [Figure 1]

This weakness is also witnessed by the fact that the Linneman Real Estate Index stands at approximately 125, some 25 percent above a condition of market supply and demand balance. [Figure 2]

While this is lower than a decade ago, it is substantially higher than in 1999, and indicates substantial excess supply.

HOW STRONG IS PRICING?

Based upon NCREIF data, cap rates are roughly 20 percent lower today than roughly 18 months ago. This represents a cap rate decline of 160 to 200 basis points for core properties over this period. While NCREIF data series are notoriously flawed due to lags induced by appraisal bias, it is clear that a substantial movement downward in cap rates has occurred over the past two years, precisely as property markets have been generally falling apart.

Figure 1: U.S. Vacancy Trends by Sector

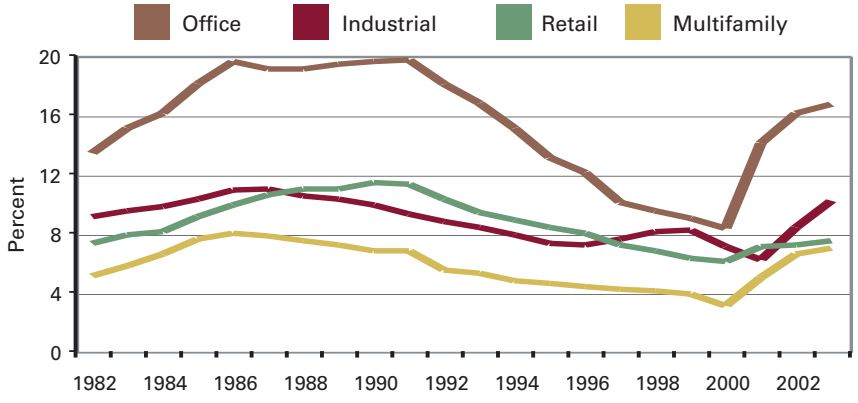
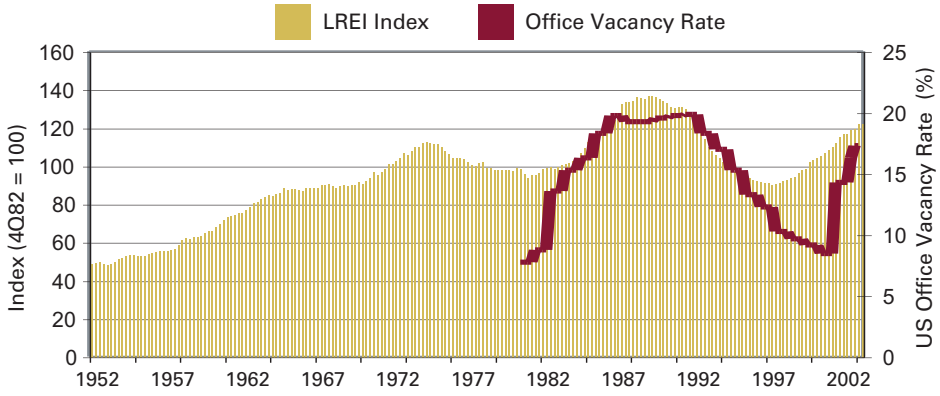


Figure 2: Linneman Real Estate Index



Turning to the valuations of public companies, implied cap rates for the major office industrial, retail, and apartment companies have also declined by roughly 20 percent over the past 18 months. This decline of roughly 160 to 200 basis points is consistent with the NCREIF data. In fact, it is surprising that the retail cap rates have fallen the least, despite their NOI fundamentals remaining strong. Instead, cap rates have fallen most dramatically for those property sectors where fundamentals have deteriorated the most, namely office and apartments. Over the past year, changes in the market pricing for private assets are generally in line with the pricing in public markets, with estimates of REIT market value relative to Net Asset Value (NAV) remaining in the range of 100, with the exception of modest public market premiums for retail.

These pricing patterns are clearly discernable among the day-to-day pricing of well-located, relatively well-leased properties owned by major REITs and institutional investors. However, the pricing for "questionable" properties in weak markets such as Silicon Valley, Austin, Texas, South of Market in San Francisco, Downtown Dallas, and severely challenged retail, indicates that "pure property" has not achieved the same type of strong pricing. In fact, it has been difficult to find bidders for such market-challenged properties, as low short-term interest rates have allowed their owners to keep their reservation prices high, in the hope that things will get better before their loans mature. Transactions for these weak properties have generally been on a "by the pound" basis, trading well below replacement cost of the property.

WHAT IS A CAP RATE?

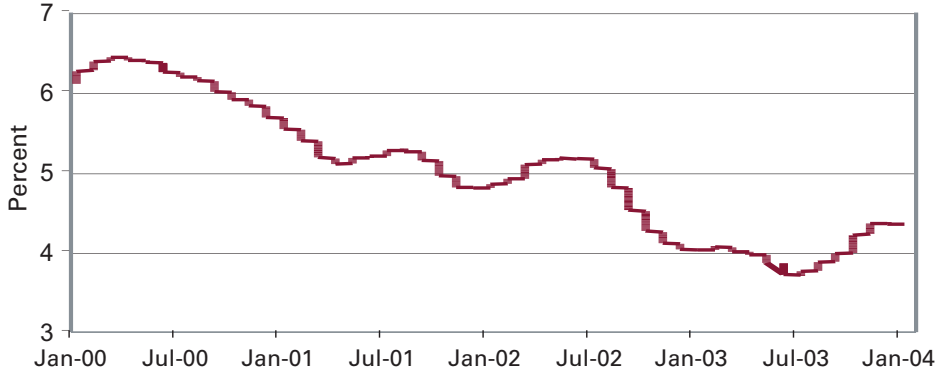
A cap rate is the "stabilized" NOI generated by a property, divided by its value. This metric is relevant only for properties with stabilized NOI. If NOI is not stabilized, this concept lacks meaning as a valuation metric. For stabilized properties, the theoretical cap rate approximately equals a property's discount rate minus its long-term stabilized NOI growth rate. For example, if a property has a 10 percent discount rate and a 2 percent long-term stabilized NOI growth rate, its cap rate should theoretically be approximately 8 percent. This is the so-called Gordon Rule. Using this approximation of the theoretical cap rate for a stabilized property allows us to examine how the cap rate should have moved over the past two years, and to compare actual cap rate movements with the theoretically predicted movements. This, in turn, allows us to evaluate whether there is a disconnect in market pricing.

The discount rate for a property is theoretically composed of three factors: the long-term risk-free rate (approximated by the yield on a 10-year U.S. Treasury bond); the risk premium associated with unexpected outcomes in the property's NOI; and the risk premium associated with the property's illiquidity relative to a 10-year Treasury bond. These three elements add up to generate a property's theoretical discount rate.

Figure 3 reveals that as recently as the beginning of August 2002 (90-day moving average), the yield on the 10-year Treasury bond was 5 percent. [Figure 3]

In contrast, from December 27, 2002 through October 9, 2003, the yield remained below 4 percent. The 10-year Treasury yield hit a low of 3.07 percent in early June 2003. In sum, over the past 14 months, the yield on the 10-year Treasury has been an average of roughly 110 basis points lower than during the previous two years, without any notable change in inflationary expectations. This decline in the yield on long-term Treasury bonds primarily reflects investor "flight to safety" in the face of the bursting stock market bubble and a string of financial scandals. In short, the combination of the global recession, 9/11 psychological trauma, corporate scandals, and the bursting of the stock market bubble worked to generate a cyclically high demand for relatively risk-free cash streams, of which the 10-year Treasury bond is the poster child. And while demand has surged for relatively risk-free investments, the supply of relatively risk-free assets experienced a cyclical reduction, as corporate cash flows and credit weakened throughout the recession. Thus, the declining yields on long-term, relatively risk-free assets reflect a relatively rare combination of an abnormally high demand for risk-free cash streams and a cyclically low supply of such cash streams.

Figure 3: 10-Year Treasury (3-Month Moving Average)



The second element of the discount rate, the property-level NOI risk premium, has been differently impacted depending upon the nature of the property. To the extent that the property is fully leased on long-term leases to relatively strong-credit tenants, this risk premium has been largely unaffected by the current property market weakness. This is the case for properties like the General Motors Building, strip centers anchored by strong retailers, and office buildings leased to credit tenants with little lease rollover in the foreseeable future. In contrast, as property markets weakened, properties with significant lease rollovers, such as apartment buildings, have experienced notable increases in their NOI risk premium over the past two years. While it is impossible to know exactly how much higher the NOI risk premium should be, we suspect that it should be roughly 50 basis points higher. Finally, for properties facing major lease rollovers or with large amounts of vacant space, the NOI risk premiums have risen to such an extent that they are no longer stabilized properties. As such, cap rate valuation analysis is irrelevant for these properties.

With respect to the third component of the discount rate, namely the liquidity premium associated with the property, this continues to decline modestly for all but the most challenged real estate. This reflects the fact that as real estate becomes ever more connected to broader capital markets via CMBS debt funding, the public equity financing of REITs, and the continued investment of investors in real estate private equity funds, the real estate liquidity premium continuously declines. This connectivity means that for the first time in history, capital has remained available even as property fundamentals have weakened.

Combining these three factors suggests that the theoretical discount rates for prop-

Figure 4: Theoretical Discount Rate Changes (Basis Points)

	Theoretical Discount Rate Changes (Basis Points)		
	Safe Property	Typical Property	Destabilized Property
Risk Free	(110)	(110)	(110)
Property Specific Risk	0	50	150
Liquidity	(25)	(25)	0
Total Change	(135)	(85)	40

erties have declined by 135 basis points for safe properties and 85 basis points for more typical properties. [Figure 4]

Thus, in spite of weakening fundamentals, the greater connectivity with global capital markets, combined with massively reduced long-term risk-free rates, has generated notable declines in real estate discount rates for all but the weakest properties.

The improved connectivity of real estate with global capital flows means that not only has real estate capital remained available, but real estate has been a preferred asset class. Real estate's status as a preferred asset class over the past several years is vividly demonstrated by the fact that "mom and pop" private REIT syndicators have raised more than $10 billion over the past two years, in spite of approximately 15 percent front-end load factors. This is the Webster's Dictionary definition of a preferred asset class.

Real estate has been a preferred asset class despite its weakening property fundamentals, because global capital flows to the sector that performs relatively—not absolutely—best. Thus, although real estate fundamentals have deteriorated over the past three years, compared to the collapse of the tech sector, the soaring default rates on corporate bonds, the shock of corporate malfeasance, and the poor performance of the broad stock market, real estate debt and equity has been a relatively attractive safe harbor. As a result, capital has flowed to real estate, as real estate's fundamentals were better than could generally be found elsewhere. This is a benefit real estate has earned by finally connecting with global capital markets. However, this connectivity can also work against real estate. There will soon come a time when, despite better real estate fundamentals, real estate will not be improving as rapidly as other sectors. The result will be a capital rotation into other sectors, even as real estate fundamentals improve.

The stabilized, long-term NOI growth rate, the second component of the theoretical cap rate, has remained largely unchanged over the cycle for properties with long-term leases to high-credit tenants. These "safe" properties have had the good fortune of not having leases rolling over into the current soft-

ness, or into the softness that will prevail in the next several years. For these "safe" properties, their lease structure protects them and, as a result, their stabilized NOI growth rate has been unaffected by the current market softness.

For more typical properties, with existing vacancies and notable lease rollovers during the next five years, long-term NOI growth rates are actually modestly higher today than several years ago. This is because by late 2001, it was apparent that substantial excess supply would occur in most property markets, and that NOI growth rates would weaken. But the worst years of this NOI deterioration have already occurred. Looking forward, the long-term expected NOI growth rate is modestly higher than two years ago. "The worst is behind us" effect means that over the past year, stabilized annual NOI growth rates for typical properties have risen by 50 to 100 basis points. While this may seem counterintuitive, it is obvious that expected long-term NOI growth rates are higher as one moves through the down phase of a cycle relative to the peak.

Returning to the Gordon model of the theoretical cap rate, namely the discount rate minus the long-term stabilized NOI growth rate, for "safe" properties the theoretical cap rate is roughly 185 basis points lower than prior to 14 months ago, while for more typical properties it is approximately 160 basis points lower. It is important to note that many properties that were considered "stabilized" two years ago are no longer remotely stabilized, and the cap rate valuation approach is irrelevant. The most notable examples are the once "hot" properties in Silicon Valley or the Boston tech corridor.

Our analysis suggests that, theoretically, cap rates should have fallen for most stabilized properties by roughly 20 percent over the past 14 months, in spite of weakening property fundamentals. Such movements do not reflect a "disconnect" in pricing, but rather a new connectivity with the theoretically expected outcome. [Figure 5]

Importantly, the movements in actual cap rates over the past 14 months are basically in line with this expected movement.

Of course, this does not mean that every real estate transaction has been correctly priced. In fact, we suspect that some aggressive property buyers are incorrectly focusing their valuation analysis on short-

Figure 5: Theoretical Cap Rate Changes (Basis Points)

	Theoretical Cap Rate Changes (Basis Points)		
	Safe Property	Typical Property	Destabilized Property
Theoretical Discount Rate	(135)	(85)	40
Minus: Long Term NOI Growth	50	75	N/A
Equal: Theoretical Cap Rate Change	(185)	(160)	N/A

term interest rates, which have declined by roughly 300 basis points. These purchasers are either knowingly or unknowingly using real estate to make a highly leveraged bet on short-term rates remaining at their historic lows. This may (or may not) prove to be a profitable bet. However, this is not real estate pricing, but rather the use of real estate as the vehicle through which to execute a highly leveraged yield curve arbitrage. This seems to explain the more "disconnected" transactions we have seen. But in general, we conclude that the broad pricing of both public and private real estate is "connected" today.

WHERE DO WE GO FROM HERE?

There are clouds on the horizon. The most notable cloud is that we expect long-term risk-free rates to rise 60 to 100 basis points over the next 12 months. In addition, as real estate begins its slow move through the upside of the cycle, the long-term stabilized NOI growth rate will modestly decline. Together, these factors suggest that cap rates will revert by 75 to 125 basis points over the next 12 to 24 months. This will be somewhat mitigated by the continued improved liquidity of real estate via public markets, securitized debt, and large liquid private equity funds. However, we believe that as other sectors of the economy improve, there will be a rotation out of relatively safe cash streams (including real estate) and into riskier assets. Stated differently, we expect a cyclical decline in the demand for relatively risk-free cash streams, at the same time that a cyclical increase in the supply of relatively risk-free cash streams occurs. This should result in a widespread cap rate reversion of roughly 100 basis points. This is the price that real estate pays for being connected to broader capital flows. We expect that this cap rate reversion will be widely heralded as a new "disconnect" in real estate pricing. People will ask, "How is it that as real estate fundamentals slowly improve, pricing is deteriorating?" The answer will be that in interconnected capital markets it is not enough to "do better;" rather, one must do better than the alternatives.