Prudential Real Estate Investors

Water, Water Everywhere

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Pinehurst

With so much liquidity in the real estate capital markets, not just in the US but globally, the agenda for this year's Pinehurst Real Estate Seminar focused on the challenges of finding investment opportunities in a capital-rich environment. Without question, one of the highlights of the event was Dr. Robert Ballard's presentation at the end of the first day. Dr. Ballard, who is probably known best for finding and exploring the wreckage of the *Titanic* in 1985, was not invited to talk about the capital markets or real estate and, in fact, made no direct mention of either during his fascinating lecture. However, his research and observations about the oceans have a few parallels in the real estate investment market today. In the following summary of the proceedings, we explore three common lessons or themes from Dr. Ballard's life work as a scientist and the real estate discussions among panelists and guests that seem particularly relevant for institutional investors today.

Lesson One: Tremendous Liquidity

The painfully obvious parallel between Dr. Ballard's work and the real estate investment markets today is liquidity – lots of it. Few, if any, attendees were surprised to learn either that the real estate capital markets are awash in liquidity or, as Dr. Ballard reminded us, that water covers more than two-thirds of the Earth's surface. But just as Dr. Ballard's slides of Earth from space inspire a new appreciation for the planet's defining feature, the evidence from the private transaction market and institutional capital markets dramatically illustrates the unprecedented depth and breadth of liquidity in the industry today.

The transaction markets provide the most striking evidence. According to Robert White of Real Capital Analytics (RCA), transaction volumes have soared in recent years. Last year, total transaction volume increased to more than $167 billion, nearly 40% above the previous record level in 2003 and more than double the total volume in 2001. Large-scale transactions have also become common over the last 18 to 24 months, as investors try to put capital to work as quickly and efficiently as possible. More than 230 "trophy" properties, valued at $100 million or more, traded in 2004, according to RCA, more than triple the number in 2001. As large deals have become more frequent,

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portfolio transactions have also surged. Last year, portfolios accounted for more than $35 billion of the total volume versus about $21 billion in 2003. Notably, portfolios now command premiums over smaller, individual asset transactions across all major property types.

The ample liquidity in the transaction market has had a noticeable effect on cap rates. Although rising vacancies and falling rents have hurt property income (the numerator of the cap rate equation) investor demand for real estate assets has kept prices (the denominator) from falling and, in many markets, has caused prices to rise. As a result, cap rates have fallen sharply across all property types in recent years. The table below shows changes in cap rates by property type from first-quarter 2002 through first-quarter 2005 using data from RCA and the National Council of Real Estate Investment Fiduciaries (NCREIF). Although the average cap rates by sector differ somewhat between the two data sources, the recent steep downward trend is clear.

Steep Decline in Cap Rates Across All Property Types

	NCREIF Current Value Cap Rates (four-quarter moving average)			Real Capital Analytics Cap Rates (six-month average)		
	1Q2002	**1Q2005**	**Change (bps)**	**1Q2002**	**1Q2005**	**Change (bps)**
Apartment	7.6%	5.3%	-230	8.5%	6.6%	-190
Industrial	8.8%	6.8%	-200	9.7%	8.1%	-160
Office	8.9%	7.0%	-190	9.7%	7.7%	-220
Retail	9.0%	6.8%	-220	9.5%	7.6%	-190
Average	8.6%	6.5%	-210	9.4%	7.5%	-190

Sources: National Council of Real Estate Investment Fiduciaries (NCREIF); Real Capital Analytics

As Mr. White noted, cyclical capital sources are responsible for some of the recent demand for assets that has contributed to the decline in cap rates. Tenant-in-Common (TICs) and 1031 exchange buyers, private REITs and condo converters have emerged as potent sources of capital in the transaction market in recent years, particularly in the apartment sector. According to RCA, condo converters accounted for more than $10 billion, or about 21%, of all significant[1] apartment sales last year, up sharply from just over $2 billion, or more than 7%, in 2003. And they have remained active this year, acquiring nearly $4 billion (25%) in the first three months alone.

In a handful of markets, "condo mania" is having a dramatic effect on apartment values and cap rates. In Miami and San Diego, for example, sales to condo converters have accounted for 77% and 56%, respectively, of all apartment transaction volume since the start of 2004. Although individual condos in San Diego still command a healthy premium over the unit prices that converters currently are paying, the gap has narrowed considerably in Miami and a few other markets where condo activity has been brisk. The booming residential market's influence is not limited to the apartment sector though. RCA estimates that nearly 17 million square feet of CBD office space has been removed from the market for conversion to other, mostly residential, uses since the start of 2004.

[1] Real Capital Analytics defines "significant" transactions as properties or portfolios valued at $5 million or more.

A lot of the liquidity in the market today, however, comes from "long-term" capital sources – US pension funds, endowments and foundations, foreign institutional investors, public REITs, commercial banks and the rapidly growing CMBS market, to name a few. While falling cap rates have made placing capital more difficult in recent years, they have not (yet) deterred long-term investors and lenders from trying to increase their exposure to the asset class. As Geoffrey Dohrmann of Institutional Real Estate, Inc. noted, the basic characteristics of the asset class – stable cash yields with modest, inflation-like growth in capital values – have not lost their appeal. Although plan sponsors expect real estate returns will moderate, along with the returns for the other major asset classes, real estate remains the most attractive on a risk-adjusted basis.

As long as that perception persists and the outlook for other asset classes remains uninspiring, real estate will continue to attract capital from a wide cross-section of cyclical and long-term sources. Private equity capital almost certainly will remain plentiful for real estate this year. According to Mr. Dohrmann, the average target real estate allocation among plan sponsors surveyed in this year's annual Institutional Real Estate-Kingsley study increased 50 bps, to about 8%, from a year ago. When combined with the 100 bp gap between current and (higher) target real estate allocations, new equity commitments from US institutional investors could exceed $50 billion in 2005. To put this into perspective, at the end of first-quarter 2005 the aggregate market value of the 4,200+ properties in the NCREIF Property Index was about $160 billion.

It's not clear how long the powerful cyclical forces that have attracted some of the capital to real estate recently will continue to favor the sector. Higher long-term interest rates, for example, could cool the housing and condo markets and cause some of the most aggressive capital to withdraw. If this were to occur, apartment cap rates would likely rise, and liquidity would suffer until lower property values and/or rising property income made cash yields attractive again.

However, structural changes since the last market downturn have greatly expanded the capacity of the real estate capital markets. The REIT and CMBS markets barely existed in 1991, at the bottom of the last real estate market cycle. Since then, the market capitalization of the equity REIT market has grown more than thirty-fold, from less than $9 billion at year-end 1991 to more than $275 billion at the end of last year. In fact, four REITs now boast equity market caps greater than $9 billion. Annual CMBS issuance has also increased dramatically, from just $8.2 billion in new CMBS issued in 1991 to more than $127 billion last year.

With property market fundamentals improving and property income nearing a cyclical low, liquidity in the real estate capital markets should remain relatively high in the near to medium term, which should keep downward pressure on cap rates, even if long-term interest rates rise modestly. Over the longer term, the public market infrastructure that now exists should provide access to a larger and much more diverse capital base than the industry has ever known. In theory, better access to capital with a broader spectrum of risk-reward preferences should greatly reduce the risk of a liquidity crisis and, therefore, the liquidity risk premium associated with real estate investments generally. All else being equal, a lower liquidity premium means yields (and cap rates) should also be lower.

Lesson Two: Vast and Diverse Opportunity Set

The second lesson from Dr. Ballard's experience is perhaps only slightly less obvious than the first, but is more in keeping with the real reasons for his reminder that most of the Earth's surface is covered with water. As Dr. Ballard noted, the planet's oceans and other bodies of water are not only massive in scale, they are also incredibly diverse and relatively unexplored. The scientific community has devoted considerably more resources to exploring space and other planets. To illustrate, Dr. Ballard observed that (1) scientists now have better topographic maps of Venus than of Earth, and (2) men walked on the moon about four years before the first scientific expedition ventured to the largest feature of our planet, the Mid-Ocean Ridge, which covers about 25% of the Earth's surface.

The real estate market is also very large and heterogeneous. After all, real estate, in some form, is a necessary input to all economic activity and is an integral part of everything we do, from where we live, to where we work and socialize. Yet despite its scale and ubiquity, most of the real estate market remains relatively unexplored by institutional investors. The obvious implication for investors is that even with the recent interest in the asset class and the sharp downward trend in cap rates, tremendous opportunities still exist.

Some of the potential real estate opportunities that are not part of the institutional investment universe today require specialized expertise and/or vehicles to make them accessible, not unlike many of the undersea regions that have not yet been explored. Even then, it frequently takes time before new concepts and investment products gain acceptance. The REIT and CMBS markets have created a whole range of investment products, from a prison REIT to real estate collateralized debt obligations, that allow investors to target specific sectors and more narrowly defined risk-return characteristics. Although interest in REITs and CMBS has ebbed and flowed since the mid-1990s, when both markets expanded rapidly, public real estate securities have become much more accepted among institutional and non-institutional investors in recent years.

Other opportunities require investors to think beyond the immediate and familiar opportunity set. Although not all property investments are appropriate for institutional investors, limited institutional investment in a particular sector or niche can provide attractive opportunities for investors to earn excess returns by venturing outside the mainstream, accepted product types. As remarkable as it might seem now, US institutions invested very little equity capital in the apartment market before the mid-1980s. Today, however, most institutional investors consider multifamily an essential part of any core real estate portfolio. Similarly, while retail has always been part of the institutional real estate universe, new formats – power centers in the 1990s and lifestyle centers more recently – have greatly expanded the opportunity set.

Finding the next "new, new thing" is never easy or without risk. However, as the retail and apartment examples demonstrate, investment opportunities need not be radically different or entirely new ideas to warrant consideration in an institutional portfolio. In the current capital-rich environment, smaller "niche" sectors, such as senior housing and self storage, and international strategies offer attractive opportunities for investors to take advantage of compelling fundamentals and long-term demand trends in more capital-constrained markets. Senior housing

and self storage properties have existed for many years, but have attracted relatively little institutional capital, despite having public companies dedicated to owning and operating both types of properties. That may change, however, as investors recognize the powerful demographic trends that drive long-term demand for senior housing and the striking similarities between the operating and performance characteristics of self storage and multifamily properties.

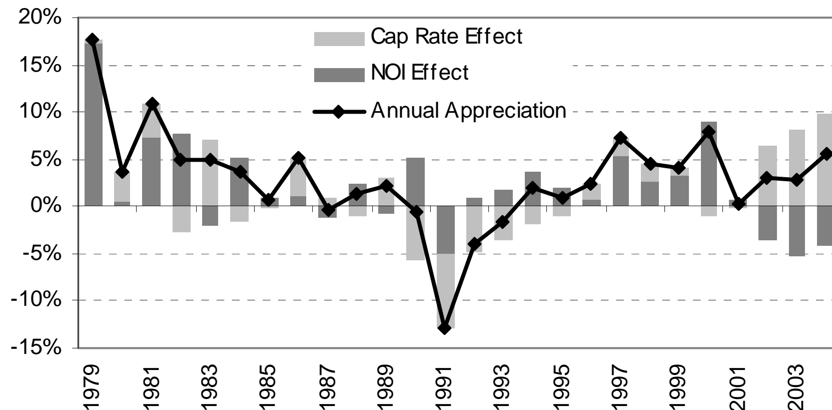
International strategies should also attract more capital from US institutions as investors become more comfortable with the idea of investing overseas and with the vehicles that are available for doing so. According to the Institutional Real Estate-Kingsley survey, US institutional investors' appetite for international real estate continues to increase. Foreign property investments are expected to capture more than 8% of the equity capital flows from US institutional investors in 2005, more than double the amount (3%) in 2004. The non-US share of the global real estate market is twice as large than the US market and offers the full spectrum of risk-return investments, from core to opportunistic, allowing investors to pursue return enhancement and/or diversification strategies.

Still other opportunities may be obscured today by evidence that, from a historical perspective, suggests that asset prices are too dear. Experience can be an invaluable guide, but it can also be misleading, if we do not carefully examine data in the context of the environment from which it came. Dr. Ballard's discovery in 1977 of deep-sea hydrothermal vents and the exotic organisms they sustain surprised scientists who, until that time, believed life could not exist in the absolute darkness at such depths. To be sure, today's cap rates are at or near historically low levels across virtually all property types. However, as Mr. White and Dr. Youguo Liang, Prudential Real Estate Investors' head of research, both noted, asset prices have not appreciated as much as falling cap rates might suggest and, in many markets, remain below replacement costs.

RCA transaction data shows that unit prices have risen modestly in the office and industrial sectors over the last few years. Since first-quarter 2002, unit prices for suburban office properties have grown about 3.6% per year, roughly double the annual price appreciation for CBD properties, while unit prices for warehouse properties have increased about 4.7% per year. Apartment prices have expanded much more dramatically, about 12% per year, largely due to the activity of condo converters, who have bid aggressively for assets in recent years. And retail unit prices, not surprisingly, have risen the most, growing more than 13% per year over the last three years.

By definition, property earnings, or net operating income (NOI), and cap rates *together* determine real estate pricing. As Dr. Liang observed, while the capital market forces that drive cap rates have been quite strong in recent years, property market fundamentals, which drive real estate earnings, have been extremely weak outside of the retail sector. As a result, while cap rates have plunged, falling property income has offset some of the impact on asset values. The chart below shows annual property appreciation, based on NCREIF data, decomposed into the approximate contributions of the "NOI Effect" and the "Cap Rate Effect."

Property and Capital Market Forces Determine Asset Prices



Sources: NCREIF; Prudential Real Estate Investors

The contrast between the property market downturn in the early 1990s and the recent downturn is striking. Unlike the last market downturn, when the combined effects of a severe capital crunch and weak property market fundamentals caused asset prices to fall sharply, ample liquidity has more than offset the steep downturn in property income since 2000. Although capital market forces could abate over the next year or two, particularly if long-term interest rates rise, the recovery in property market fundamentals should have a positive effect on asset values.

Lesson Three: Technology Transforms Location

The final take-away from Dr. Ballard's presentation recalls a key theme of the Pinehurst meetings a few years ago, when the potential impact of technology on the economy and real estate dominated many of the panel discussions and casual conversations among attendees. For Dr. Ballard and others whose work requires exploring distant places that can be impractical, dangerous or impossible to reach in person, technology promises to greatly reduce the constraints of physical location. Increasingly, Dr. Ballard and his research teams conduct their expeditions to the ocean floor without ever leaving the surface. Deep-sea robotic submersibles and powerful communication technologies allow Dr. Ballard's team, along with scientists and students all over the world, to remotely explore parts of the ocean that previously either could not be reached at all or could only be studied for relatively short intervals.

The once-hot debate about the effects of technology and the implications of a "new economy" has cooled considerably since the tech bubble burst in early 2000. However, technology continues to reshape relationships throughout society and the economy. On the surface, technology – telecommunications and information networks, in particular – might seem to diminish the importance of location, allowing knowledge workers, like Dr. Ballard, to work from almost anywhere in the world, often more efficiently and productively. But that flexibility only changes the criteria, and their relative weightings, on which location decisions can and will be based. Distance may become less important, but location still matters.

The demographic trends in the US over the last two decades and the projected pattern of continued population migration toward the south and west offer some clues as to where economic activity and, therefore, demand for real estate are most likely to occur over the medium to long term. According to the US Census Bureau, the South and West regions have captured about 85% of the annual population growth since 1970. Over the last 25 years, annual population growth in the Midwest and Northeast regions has averaged about 0.4% versus 1.5% in the South and 2% in the West. Certain urban markets, such as New York, Chicago and Boston, have also experienced positive, sustainable population growth over the last decade or so due to an urban renaissance.

For real estate investors, the recent interest in the asset class will make differentiating between primary markets, those that are most likely to benefit from long-term technology and demographic trends, and secondary markets particularly important. Consecutive years of record capital flows from yield-hungry investors have caused cap rates to converge across markets and property types. When liquidity pressures eventually subside, markets and sectors that have experienced significant cap rate compression due to hot, cyclical capital sources will face the greatest risk of cap rates reverting to their mean. Over the longer term, markets that lack some competitive advantage – quality of life, cost, infrastructure, existing agglomerations or critical mass of industry or other reasons – will likely underperform those that have one or more features that appeal to people and businesses whose location decisions are relatively unconstrained by distance.

Concluding Thoughts

Despite the excess returns and robust capital flows into the real estate sector in recent years, the liquidity in the US property markets is not likely to recede anytime soon. Cyclical and long-term capital sources continue to favor a wide range of real estate investments, public and private, over many alternative investment opportunities today. Lingering uncertainties about the strength of the US economy, which span the spectrum from fears that the economy is cooling to worries about it overheating and igniting inflation, and the lackluster outlook for stocks and bonds will continue to make the stable, secure cash yields that characterize most real estate investments appealing, particularly as the property markets recover.

The weight of capital and intense competition among investors and lenders will continue to make finding attractive transactions challenging. But the large size and rich diversity of the global real estate market provide a wealth of investment opportunities within the narrowly defined institutional universe and in less-explored niche sectors and new markets. However, as is usually the case when capital converges on a particular sector or asset class, excess liquidity also creates risks for investors that usually are only obvious once capital pressures ease and underlying fundamental trends re-emerge as the primary performance drivers. Although it's not clear how long the current level of liquidity in the real estate market will persist or how much of the capital that is available today is cyclical, experience and expertise seem more critical than ever to finding opportunities and managing risks.

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