Connecting the Disconnect

The disconnect between the real estate industry and the broader investment world explains the continuing resistance to increasing allocations to real estate.

BERNARD WINOGRAD

TO REAL ESTATE insiders, real estate investing has never looked better. In many ways, the REIT and CMBS revolutions of the 1990s created more transparency and liquidity for the real estate industry than ever existed. Thanks to the disclosures of public real estate companies and the number of investment analysts who follow the industry, we know more about the economic behavior of the various property types and about how they react to economic conditions than ever before. And thanks to the analysis of CMBS pools, we know more about where the stresses are in debt structures by property type and deal structure than was imaginable in the days when institutional lenders supplied the majority of the industry's long-term capital.

As a result, the markets have been faster than ever to react to oversupply—by cutting back on construction. With the notable exception of the agency-fueled overbuilding in the apartment sector, every property type is putting dramatically less construction in place in response to the decline in demand.

Many micro-adjustments have occurred in individual markets in reaction to public market concerns about overbuilding. The predictions that public markets would make the real estate business less cyclical than ever have not come true in the past 18 months, as vacancies have climbed sharply. But for many reasons, the pain of the cycles has been less. In large part, that is because the real estate industry is less leveraged than in the past. Despite near-record vacancy levels in the office sector, created by the unprecedented collapse in demand over the past few years, relatively few buildings are being foreclosed on or are having their debt restructured.

Part of that is, of course, due to low interest rates, but part of it is certainly because leverage today is rarely more than 70 percent of value, with equity and mezzanine risk capital absorbing sizeable first losses. Hence, the need for liquidity is less despite poor fundamentals. Given that capital markets are better able than ever to price and supply liquidity to real estate, the pain of the down cycle has been muted. For pension funds, there has never been a wider array of options that can be employed to invest in the real estate industry, including public market vehicles and a much richer range of private vehicles, all reflecting the increased complexity of the real estate capital markets.

Everyone in the industry now accepts that real estate investment products can be categorized into different expected return buckets. Twenty years ago, the idea of engineering real estate investments to achieve different levels of expected returns would have been fanciful: not enough data existed to know how to do it. Now, experienced firms that have been in this business for pension funds for thirty years or more can build portfolios with a high degree of confidence that they know which strategies produce specified returns.

It is harder than it used to be to explain why real estate should be in an institutional portfolio and what the best plan is to implement it, because there are so many ways to do it. Rationales can be spun to order: return or diversification, private equity with less volatility, and so on. This can be far more confusing than the original notion that real estate belonged in institutional portfolios as a diversifier and that the only proper way to invest in it was to buy unleveraged properties.

THE CIO'S VIEW

The outsider's view of real estate is very different from this insider's rosy view. To outsiders—still far more numerous than insiders—real estate investing has never seemed particularly attractive. Where insiders see obvious progress, outsiders see things that have always been problematic about real estate investing, and remain so. For example, real estate is still labor- and management-intensive. Managers have a lot more headcount per dollar of assets managed in real estate than in any other asset class, and that is unlikely to change. This is expensive, but managers tolerate it because of the importance of the asset class to their businesses. But plan sponsors have reason to question whether it is worth the time and effort to invest in a demanding asset class that typically represents less than 10 percent of total assets.

Many plan sponsors have seized on the increased public market ownership of real estate to question whether they need to be invested beyond the exposure they get through their public market portfolios, or whether they can get real estate exposure more efficiently by simply creating an allocation to, say, REITs or CMBS. In practice, very few make such allocations unless they already have an explicit allocation to property, which shows that the public markets are, as much as anything, an opportunity to escape the issue for those who are not insiders or have none in their employ.

A lot of the opposition is cultural. Most CIOs do not have real estate backgrounds. They see the world primarily through the prism of the largest asset classes: the equity and fixed-income public markets. Real estate jargon remains impenetrable to them. For example, I am often asked what a "cap ratio" is by people with non–real-estate backgrounds.

The lack of benchmarks of the familiar, investable variety is also a significant drawback for such investors. They have learned that specifying benchmarks is a prime tool for managing risk, and they are so accustomed to being able to do this that they instinctively distrust asset classes such as real estate that have no such benchmarks. Likewise, they are put off by the use of appraisals, which they regard as inherently prone to bias and misuse.

Finally, the fact that it has become more confusing and the number of investment options has multiplied is regarded as more of a nuisance than a blessing. It requires multiple decisions in order to invest. "Do I want real estate?" becomes "Do I want a separate account, a commingled fund, debt, leverage, U.S. only, or overseas as well?"—another example of why the real estate asset class is regarded by many as an energy drain.

SEARCHING FOR RETURN

However, the attractive returns and diversification value of real estate are hard to ignore. CIOs find themselves charged with devising portfolios to meet return objectives that look increasingly unrealistic. Low-return expectations are increasingly the conventional wisdom for all the major asset classes, especially public market ones.

For example, let an investor assume (optimistically) that long-term GDP growth is likely to be 3.5 percent, and that inflation is going to be about 3 percent. Dividends are roughly 1.5 percent. Profits have traditionally grown a little more slowly than GDP, so the fundamental return from stocks could be 7 percent to 8 percent. Stocks today are trading very near their historic median P/E multiple. So, if one assumes that the risks of multiple expansion and contraction are equally weighted, the expected return from one's largest asset class is, at best, about 8 percent—and the average assumed earning rate for pension plans is more than 9 percent. Long-term Treasuries below 4 percent are not indicative of an environment where fixed income will make up the difference.

Corporate plans have the additional pressures of trying to be responsive to corporate accounting and funding considerations, and public plans often deal with difficult governance structures with many political constraints and pressures. Both also have the handicap of operating in an environment that does not encourage certain kinds of innovation and risk-taking. In fact, "inertia" may be another word for ERISA, which has created an environment where there is safety in numbers, and where, if one is going to fail, it is best to fail with lots of company. This makes it hard to break away from the constraints of conventional wisdom.

As a consequence, asset allocation discussions take place within a rather narrow range. Asset allocation studies were the first thing ordered by most plans last year in response to the low-return environment. By and large, they have produced recommendations for only marginal changes in asset allocation. This is not surprising. Using historical long-term expected rates of return and correlations among asset classes to model future behavior never yields radically different answers. Even using some judgment about future expected returns and correlations among the asset classes will get you only so far before you need to back off because the outputs get too scary. Those in real estate are very familiar with this phenomenon. Real estate has always had to be artificially constrained in most optimizer models to get to a plausible number that can be effectively implemented and won't raise eyebrows.

In addition, the way that pension funds apply Modern Portfolio Theory (MPT) creates a powerful incentive to use bench-

marks as a risk-control tool. The portfolio construction logic of MPT requires that asset classes be implemented in accordance with modeling assumptions. Hence, plans use benchmarks to assure that managers play their assigned roles. Tracking error, the degree of deviation from the benchmark, has emerged as a key risk-control metric because of this line of thinking.

Thus, an asset class like real estate, which has no good benchmarks, is a dangerous item and a possible source of uncontrolled risk, with the potential to upset the whole point of the asset allocation exercise. It's easy to see why most CIOs, especially those who have not had long or favorable experiences with real estate, regard real estate as one of the least likely places to look for a solution to their problems.

At the same time, CIOs are unusually open to ideas today, because active management of public market assets is just not adding enough alpha to bridge the gap between the expected returns of the major asset classes and the return they need to hit. In fact, the degree of difference between top-quartile and bottom-quartile performance is well known to be fairly modest in public market asset classes. Data from Frank Russell Co. illustrates the point (see Figure 1). The difference between top- and bottom-quartile equity performance was 1.8 percent and between top- and bottom-quartile fixed-income performance was 0.5 percent over the past 10 years. Coincidentally, an indexed alternative was, in each case, fairly close to the top quartile, either a little above or a little below. Data suggests it is very hard to pick managers who will beat the index in the future. Serial correlation of performance is very low in these efficient public asset classes—and CIOs know it.

FUNDING PLAN LIABILITIES

What are CIOs doing about their predicament? There's a lot of quiet panic and a certain amount of hard thinking. Apart from those who are just holding on and hoping for the best, two main schools of thought exist about how to react.

The first school advocates changing the benchmark to focus on plan liabilities instead of targeted rates of return. The argument is that pension plans are not foundations and endowments, but rather pools of capital designed to fund two sets of liabilities. One of those is known—the benefits due to retirees. The other is unknown—the benefits that will ultimately be due to today's active employees. That first liability looks very much like a fixed, long-term liability and, the argument goes, is best funded with a like amount of long-duration, fixed-income assets. By this line of reasoning, the pain that plans are feeling today is entirely attributable to funding fixed liabilities with risk assets such as equities. Plans would be better off settling for lower returns, to the extent that they can determine their liabilities, and restricting the use of risk assets to funding active employee liabilities.

This is an appealing line of thought in many ways and is very familiar to those in the U.S. life insurance business. They build portfolios all the time to fund relatively predictable costs, such as the payouts on death benefits. And they generally build them out of long-duration, fixed-income assets to minimize risks. European life insurance companies thought it was cheaper in the long run to fund predictable liabilities with equity because the long-term portfolio returns would be higher. While that looked like a winning strategy in the 1990s and made them into fairly aggressive acquirers, they are generally in rather bad shape at the moment, because the short-run reality has not looked much like the long-run expectation. This is a graphic illustration of the risk of getting overly focused on the long term.

Despite the appeal of the logic, this idea is unlikely to gain much of a following among U.S. pension plans. It makes the most sense for a plan that is overfunded, with a relatively high proportion of retired liabilities. In such plans, the sponsor's shareholders have little to gain from outperformance and a lot to lose from underperformance, so a board of directors can feel it is reasonable to forego the upside to protect against the downside.

For underfunded plans, by far the majority today, there is plenty to gain and little more to lose by going for returns. And moving heavily into long-duration, fixed-income investments would simply lock-in losses and require a lowering of assumed rates of return, with potentially disastrous accounting results. In the 1970s, a return of inflation threatened the implicit assumption that liabilities for retirees are fixed—many sponsors voluntarily raised benefits for retirees in that era—and it could happen again. Most plans will elect to roll the dice on the higher-expected,

Figure 1: Asset Returns by Quartile (10 Years Ending 12/31/02)

ASSET RETURNS BY QUARTILE				
	1st Quartile	Median	3rd Quartile	Range
	%	%	%	%
U.S. Fixed Income	8.1	7.7	7.5	0.5
U.S. Equity	11.0	10.2	9.1	1.8
International Equity	9.2	6.3	5.0	4.2

Source: Frank Russell Co. (FRC); FRC Active Core Fixed Income Universe; FRC Market-Oriented Accounts Universe; FRC Non-US Equity Portfolio Universe.

Note: Universe returns calculated using time-weighted returns, gross of manager fees.

long-term return offered by equities and hope for the best, especially given the low level of long-term rates. Unlike European insurance companies, defined benefit plans are supposed to focus on long-term horizons in setting investment policy.

The second school of thought takes the opposite tack and looks for ways to take more risk in as controlled a fashion as possible. Papers being published argue that the excessive use of tracking error as a risk-control tool can lead to an inadequate risk appetite in the aggregate. The implied response is to begin looking for investment strategies that are not benchmarked to market indexes but rather offer a chance for returns regardless of market conditions. This is the underlying appeal of hedge funds, a catch-all term that covers many different kinds of investing. What they all have in common is a promise of returns that do not swing with markets. Examples are long/short equity strategies, merger arbitrage, and fixed-income arbitrage.

Unfortunately, there are problems with the idea that hedge funds can be the solution. Foremost is the question of size. In total, hedge funds today manage almost $600 billion in assets, which is up dramatically in recent years. Traditionally, their investors have been high-net-worth individuals, and their sponsors have been small organizations. Turnover among funds has been high, and funds that fail sometimes do so spectacularly—not an appealing thing for pension plan sponsors. There are real reasons to worry that this is simply another investment idea that will get showered with more capital than its infrastructure can absorb, like real estate in the 1980s and venture capital in the 1990s. Only time will tell.

Another major trend among the group that wants to take more risk is to dial up the intensity of their approach to each asset class. If they have substantial amounts of their portfolio indexed, they look for enhanced indexing ideas. If they have a fixed-income allocation, they look for ways to enhance its yield. When pension plans begin asking that question they are on insurance industry turf—most U.S. life insurance companies have had no other way to increase their returns than to look for such opportunities in the fixed-income markets. So we have seen an increase in the willingness of plan sponsors to consider ideas like private placements and mortgages. While some plan sponsors have concluded that the right response to market conditions is to increase their exposure to real estate, others are skeptical.

THE ARGUMENT FOR REAL ESTATE

It is important for skeptics to review the traditional arguments for real estate, which have stood the test of time well. First, real estate has been proven to be a good diversifier of portfolios, one that lowers volatility of results in a way that enhances risk-adjusted return. Second, real estate is an income generator. One of the consequences of lower funding ratios in pension plans is a need for more current income. Otherwise, making benefit payments can force untimely and expensive liquidations of investment positions to protect target asset allocations. This issue will only get worse as the workforce ages and payout ratios rise. While it's already a big issue for some plans, this is still a secondary issue for most.

Third, important changes in the industry have taken place over the past decade. Liquidity and transparency are up, cyclicality is down or, at least, its risks are muted, and leverage is lower. These are big changes, and the fact that we take them for granted does not mean that outsiders are aware of them. It's also important to examine the long-term track record of the asset class. The range of returns from top quartile to bottom quartile in real estate investing has been similar to those from equities, and the overall returns have been comparable (see Figure 2). This result is slightly better than last year's numbers, given how well real estate performed versus equities in 2002.

There is a big difference between the private and public asset classes. Serial correlation is much more common among managers of private asset classes. The relative inefficiency of private markets makes it possible for investment managers to build sustainable competitive advantages over other market participants. The odds that a good manager in real estate will con-

Figure 2: Asset Returns by Quartile (10 Years Ending 12/31/02)

ASSET RETURNS BY QUARTILE				
	1st Quartile	Median	3rd Quartile	Range
	%	%	%	%
U.S. Fixed Income	8.1	7.7	7.5	0.5
U.S. Equity	11.0	10.2	9.1	1.8
International Equity	9.2	6.3	5.0	4.2
Real Estate	11.9	10.0	8.7	3.2
Leveraged Buyouts	35.7	4.3	2.0	33.7
Venture Capital	51.9	26.2	-5.2	57.1

Source: Frank Russell Co. (FRC); FRC Active Core Fixed Income Universe; FRC Market-Oriented Accounts Universe; FRC Non-US Equity Portfolio Universe; Venture Economics Buyouts Universe;* FRC Real Estate Open-End Commingled Funds Universe.

Note: Universe returns calculated using time-weighted returns, gross of manager fees.

* Denotes cumulative vintage-year composites performance. Returns calculated using internal rate of return, net of manager/partnership fees. Median is overall universe internal rate of return.

tinue to be successful are a lot better than the odds that a good equity manager will continue to outperform.

Finally, it's time to discuss the difficulty of implementation. The primary reason real estate is thought to be a time-consuming asset class is the desire to use a different model for investing in this asset class than in others. If all that investors want to do is pick managers, there is no reason why real estate is more time-consuming than any other asset class. Qualified consultants can help sort through the choices.

To avoid the most time-consuming aspect of overseeing real estate, investors should resist the temptation to retain control over the process. The idea that retaining control will improve results grew out of a different era in real estate investing. But little to no evidence exists that those who retain control have fared better than those who simply signed up for commingled funds, and the record is now long enough to acknowledge that fact.

TIMING

The most difficult question of all: Is it the right time to get into real estate? This is a particularly difficult question because most insiders at the moment think the attractive investment opportunities in real estate are relatively sparse. But here again there is a disconnect between the CIO's and the insider's perspectives. The starting point does matter in the success of a real estate investment program, but it matters less than in other asset classes, and that is why answering this question correctly requires more understanding of the issues confronting CIOs.

Let's return to the question of long-term expected returns, starting with bonds. Yields on long-term Treasuries since 1953 have averaged 6.6 percent and are currently around 4 percent (see Figure 3).

If the ending yield in 10 years is the long-term average of 6.6 percent, then the rate of return from investing in long-term Treasuries will be 4.2 percent for that time period. If rates go to zero, the return still will not exceed 6.0 percent. So the return from Treasury bonds over the next 10 years is likely to be between 4 percent and 6 percent (see Figure 4). Move up the risk spectrum as much as you like to take credit risk to add value to that outcome, but it's unlikely to add more than 100 basis points over a 10-year period.

It has been better. From 1981 to 1991, when long-term Treasury yields started at about 13.5 percent and ended at 7 per-

Figure 4: Treasury Ten-Year Returns on Investment

Ending Yield	Total Return
0.0%	6.0%
2.3%	5.5%
6.6%	4.2%
15.3%	2.0%

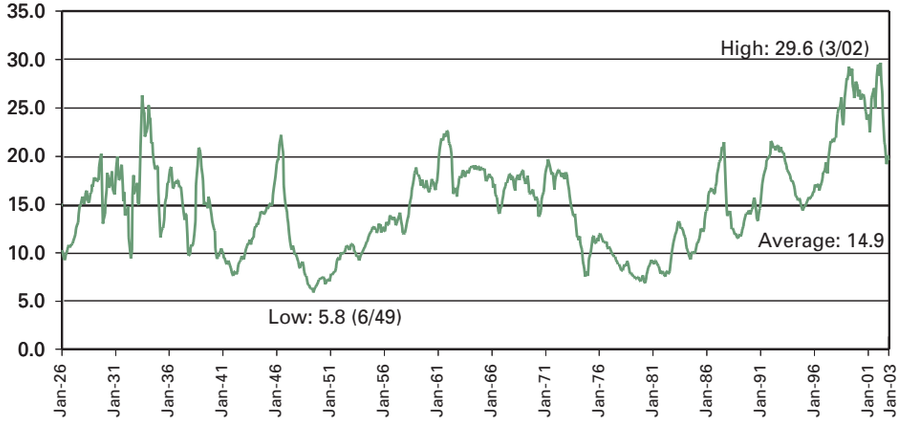
Source: Prudential Investment Management.

Figure 3: Treasury Yields*

Source: Federal Reserve Board.

*Note: Interest rates, 10-year constant maturity securities, % p.a.

Figure 5: P/E Ratios



Source: Prudential Investment Management.

Note: Based on trailing 12 months reported (operating) earnings

Figure 6: Equity Ten-Year Returns on Investment

Final P/E Ratio	Expected Returns
5	-6.2 %
15	4.4 %
19	6.9 %
30	11.8 %

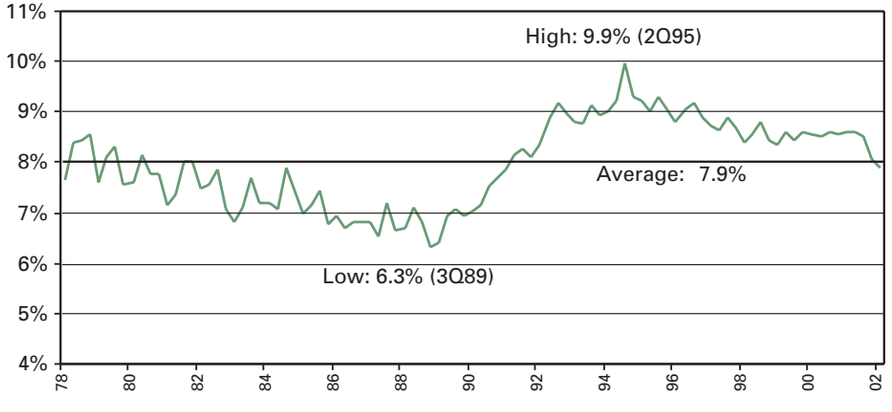
Source: Prudential Investment Management.

cent, the return from Treasury investing alone was almost 16 percent. But we're not starting at 13.5 percent. Rates cannot fall far enough to make a meaningful difference over the next 10 years, and returns certainly won't be helped if they rise instead. So let's go back to equities. Figure 5 shows the history of P/E ratios. Roughly speaking, the range is from 5x to 30x. The long-term average is 15x. Today we are at about 19x. We know that dividend yields are about 1.9 percent, so we can start there. Let's assume that dividends grow by 5 percent a year, reflecting growth in profits in excess of almost any reasonable long-term estimate of GDP growth.

Figure 6 illustrates what total returns from stock investing will look like over the next 10 years if P/Es remain the same, or if they go back to historic averages, historic lows, or historic highs at the end of the 10 years. The range is -6.2 percent to 11.8 percent, low by historical standards, and not even better than bonds in all cases. A lot of interesting arguments have been made about why P/E ratios should trade in a higher range in the future than they have in the past, but you must believe that they will end close to the range set at the end of the last decade to achieve a total return for stocks in the low double digits over the next 10 years.

Now, finally, let's look at the history of real estate cap rates. Figure 7 shows that it is fairly stable, from a little less than 6.5 percent to a high of about 10 percent. The NCREIF Property Index is at about 8 percent today. Income returns from NCREIF were 8.3 percent for the most recent four quarters ending the first quarter of 2003, and capital expenditures, which we should subtract to get to a cash return comparable to a dividend yield on stocks, have averaged 2.5 percent of value. Thus, the expected return from NCREIF investing in 10 years is equal to the starting cash yield plus inflation plus the valuation effect of a change in cap rates, and results in a range of roughly 6.2 percent to 10.8 percent, depending on whether cap rates go to the bottom or the top of their historic range (see Figure 8).

Figure 7: NCREIF Current Value Cap Rates, 1978-2002



Source: NCREIF.

WHERE SHOULD CAPITAL FLOW?

If we put all this together, the problems investors can run into by focusing only on the long term become clear. These projected returns for the next 10 years don't look anything like the long-run returns used by most mean variance optimizer models (see Figure 9). Pension fund investing is a long-term activity, but a medium-term view is important as well, and must be factored into asset allocation.

You can see why the worries about whether this is a good time to get into real estate seem exaggerated. Admittedly, it may not be the best time in the history of the NCREIF return series to start a program. But to a CIO, real estate today looks like a decent relative bet, given where the other major asset classes are starting. This is why those who are increasing their real estate allocations have done so.

Figure 8: Real Estate Ten-Year Returns on Investment

Ending Cap Rate	Total Return
9.9 %	6.2 %
6.3 %	10.8 %

Source: Prudential Investment Management.

Figure 9: Forecast 10-Year Total Returns

	Low	Mid-point	High
Bonds	2.0%	4.2%	6.0%
Stocks	–6.2%	4.4%	11.8%
Real Estate	6.2%	8.3%	10.8%

Source: Prudential Investment Management.

Originally presented as a talk at Prudential's 2003 Pinehurst Real Estate Seminar in May 2003. The author is indebted to Ron Kaiser of Bailard, Biehl & Kaiser; while the analysis is somewhat different from the one Kaiser used, the conclusions are broadly similar.