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Special Edition: Institutional Options: Publicly Traded REITs and Privately Held Real Estate Investments

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Comments

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THE JOURNAL OF REAL ESTATE INVESTMENT TRUSTS

PUBLICATION ABOUT REAL ESTATE INVESTMENT TRUSTS FOR INSTITUTIONAL INVESTORS

SPECIAL EDITION

Institutional Options: Publicly Traded REITs and Privately Held Real Estate Investments

by Lynne B. Sagalyn

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THE JOURNAL OF REAL ESTATE INVESTMENT TRUSTS

A PUBLICATION
ABOUT REAL ESTATE
INVESTMENT TRUSTS FOR
INSTITUTIONAL INVESTORS

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On behalf of the National Association of Real Estate Investment Trusts (NAREIT), we are pleased to present this special edition of *The Journal of Real Estate Investment Trusts*, dedicated entirely to reprinting an executive version of Institutional Options: Publicly Traded REITs and Privately Held Real Estate Investments. This study, authored by Professor Lynne B. Sagalyn of Columbia University's Graduate School of Business, was commissioned by NAREIT and initially presented at a joint NAREIT/Pension Real Estate Association (PREA) conference on February 1, 1996 in New York. The version published here has been updated and expanded for this issue of the *Journal*; a copy of the full version, or reprints of this edition of the *Journal*, may be obtained by contacting the Research Department of NAREIT.

Institutional Options is meant to be a survey of academic research on the issues that confront institutional investors in understanding the significance of the new, large public equity markets in real estate securities. It addresses the history of the growth of the public real estate market, compares private and public REIT structures as investment vehicles, explores governance and performance measurement questions in public and private markets, analyzes the issue of liquidity from both perspectives, and discusses management and investment control for public and private investments.

As you will see, the paper concludes that "the expansion of the REIT market has added a significant dimension" to the menu of choices available to institutional investors, a sentiment we all agree with strongly. As always, we welcome comments, in the form of letters to the editor. And we invite submissions of written contributions for future editions of the *Journal* that address the issues currently confronting institutional investors in REITs.

The Editorial Board

INSTITUTIONAL OPTIONS: PUBLICLY TRADED REITs AND PRIVATELY HELD REAL ESTATE INVESTMENTS

Executive Version

A White Paper prepared for the National Association of Real Estate Investment Trusts

PREFACE

The reemergence of REITs in the early 1990s stands as the dominant downside event of the most recent real estate cycle. With the recapitalization of property assets occurring through the public markets, there is a growing cross-current of price information between the public and private markets for real estate investment. For what is often considered to be one of the last imperfect markets, this process of price discovery represents a dramatic change, even if it proceeds slowly.

In writing this paper, I have been interested in synthesizing what we know about investment performance in public and private real estate markets and applying that knowledge to the current debate about institutional investment strategies for real estate. My goal is education, not advocacy. Yet if I have a bias, as an academic, it is toward open markets and the enhanced provision of information. Information, of course, has been a prime resource for sophisticated real estate investors, and its proprietary nature, a hallmark of market inefficiency.

In the course of researching and writing this monograph, many people graciously gave of their time, willingly shared data, offered insights and put forth their own opinions, thoughtfully, and, at times, vigorously. For data, I want to thank Jeffrey Ennis of Wilshire Securities, Jeff Fisher of Indiana University, Joyce Frater of Equitable Real

Estate Investment, Jeff Helton then of Paine Webber, Eric Hemel then of Morgan Stanley, Jonathan Litt then of Salomon Brothers, Keith Pauley of ABKB-LaSalle Securities, David Sherman of Smith Barney, Bob Staley then of PREA, the editors of *Institutional Real Estate Letter* and Chris Lucas of NAREIT. A special thanks goes to William O'Connor, a student in my Real Estate Capital Markets course, who volunteered eleventh-hour research assistance. Several hours of interviews with academic colleagues and many industry professionals (listed at the end, under References) proved to be invaluable. What I took away from those conversations helped to inform and expand my perspective on many issues. The responsibility for what has been written here, however, remains mine.

A NEW OPPORTUNITY SET

Today's equity-REIT market differs dramatically in size and character from its historical profile. Market capitalization, \$49.91 billion by year-end 1995, is four and a half times larger than in 1992, as indicated in Exhibit 1A, yet the value of the real estate controlled by equity REITs is much larger, approximately \$83 billion.¹ The industry is less concentrated; equity-REIT portfolios are more focused by property type, and more product types are available. Equity REITs are also more likely to be fully integrated operating businesses, self-advised and self-managed, with management having a greater stake in ownership. Whereas prior to 1992, equity REITs were clearly small-capitalization stocks, by 1995, more than half of these firms could be classi-

EXHIBIT 1A.

PROFILE OF THE EQUITY REIT MARKET: 1992, 1995 PUBLICLY TRADED, TAX QUALIFIED

<u>Size and Depth</u>	<u>1992</u>	<u>1995</u>
Equity Market Capitalization (millions)	\$11,009	\$49,913
Implied Equity Market Capitalization ¹ (millions)	NR	58,123
Top Ten Largest: Equity Market Capitalization	5.447	11.313
Percent of Total	49.5%	22.67%
Number of Equity REITs	105	178
without HealthCare REITs	97	171
Number of Equity REITs > \$500 MM Equity Market Cap.	7	32
without HealthCare REITs	5	28
Number of Equity REITs > \$100 MM Equity Market Cap.	27	113
without HealthCare REITs	21	106
Percent Self-Advised ²	56.2%	82.0%
Percent with UPREIT Structure	3.8%	39.3%
Average Insider Ownership ³	NA	14%

Notes:

- Assuming full conversion of operating partnership units; in 1992, there was only one UPREIT (Taubman Centers, Inc.).
- Self-advised means internal management of the investment portfolio; typically self-advised REITs also manage their properties through internal operations.
- As a percent of total equity shares, including partnership units; data for 66 REITs with more than \$100 million in equity market capitalization, as of December 1995.

NR = Not Relevant; NA = Not Available

Sources: Alex. Brown & Sons Incorporated, *ABS Biweekly REIT Valuation Model*, December 22, 1995; Lipper Analytical Services; Merrill Lynch, *Sizing Up the Equity REIT Industry*, August 8, 1994; NAREIT; Salomon Brothers, United States Real Estate Research, *Equity Real Estate Securities Monthly*, June 1995 Review, July 1995.

fied as mid-cap.²

This rapid transformation of publicly held real estate—a transition still in process—created the first viable opportunity for institutional investors to consider investing in real estate through the public markets. First, the public-securities marketplace, with its increasing range of product type and geographic holdings, offers institutional investors the ability to diversify simply by acquiring REITs with focused investment strategies; for small- and medium-size pension funds, this may be the only cost-effective way to build diversified portfolios. Moreover, as demonstrated by the experience-to-date of several large institutional investors, the public markets offer pension funds multiple ways to make equity investments in REITs—by acquiring shares of existing REITs or managed REIT funds in the open market, selling property to an existing REIT or REIT-in-formation (in exchange for shares or cash and shares), and participating in secondary offerings, either through public or private placements.³ Second, publicly traded REITs may offer the only way to acquire exposure to certain categories of real estate. Third, REITs provide enhanced liquidity, but, perhaps more important, the public market appears to be a more efficient pricer of risk and monitor of real estate management than the private market.

These arguments are by no means broadly accepted. Indeed, the dramatic growth of the REIT market and consequent interest among institutional investors has sparked a heated debate among investment professionals and academics about the differences between public real estate securities and private (“direct”) real estate investments, and about optimal portfolio strategies for institutional investors. Many see the public format as a means of addressing key problems and past frustrations faced by pension funds with their direct investments in real estate, at the same time scholarly research has called into question some of the key assumptions underlying that

EXHIBIT 1B.

PROFILE OF THE EQUITY REIT MARKET: 1992, 1995 PUBLICLY TRADED, TAX QUALIFIED

<u>Liquidity</u>	<u>1992</u>	<u>1995</u>
Average Size: Equity Market Capitalization (millions)	\$126.9	\$281.22
Total Capitalization (millions)	201.5	461.83
Median Size: Equity Market Capitalization (millions)	\$36.4	\$184.35
Total Capitalization (millions)	84.6	331.21
Average Annual Trading Volume as a Percent of Shares Outstanding	25.2%	47.9%
Percent Listed on Major Stock Exchanges	91.4%	95.6%
on the New York Stock Exchange	35.2%	63.7%
Number of REIT-specific Mutual Funds	6	24
Aggregate Dollars Invested (millions)	\$341.7	\$2,076.7
Number of Investment Firms Covering REITs	39	59*

Sources: Lipper Analytical Services; Merrill Lynch, *Sizing Up the Equity REIT Industry*, August 8, 1994; NAREIT; Salomon Brothers, United States Real Estate Research, *Equity Real Estate Securities Monthly, June 1995 Review*, July 1995.

* As of 2nd quarter 1995.

investment approach. Others, while acknowledging these issues, cite shortcomings with real estate securities, many of which stem from the relatively small size of the equity-REIT market.

The facts on some, though not all, of the issues being debated are either in flux or unknown. Historical performance data are unlikely to accurately depict the risk and return characteristics of the new public real estate market brought into being by the equity-REIT IPOs, secondary offerings and debt issues since 1992. Both the market and performance characteristics of the new equity REITs are still evolving. In addition, the ongoing process of recapitalization by which owners have been trading assets for stock in public companies, the activity in mergers and consolidations among public REITs and real estate companies or private REITs hoping to go public, and the yet-to-happen exit strategies of the numerous opportunity funds which are amassing real estate assets all indicate a highly fluid market context for several years to come. In short, the market is likely to continue on a path of growth and evolution throughout the decade.

This white paper seeks to inform

the debate surrounding institutional options for real estate portfolio investment. Though institutional advisors and REIT managers may be inclined to think of these choices in either-or terms and competing market shares, given the projections of large future pension-fund flows into real estate, the stakes in the debate do not represent a zero-sum game.⁴

For pension funds, the choice is really about strategy—how to capitalize on the different investment characteristics of these public- and private-market vehicles, over the real estate cycle. It is also about understanding the tradeoffs embedded in the different risk-and-return profiles of these vehicles.

The fundamental differences between public- and private-investment markets are key. Although the form of ownership does not alter the economic fundamentals of real estate, it does structure the risk-and-return relationship, which, in turn, is shaped by the differences in liquidity, information and valuation between public and private markets. The form of ownership also defines the degree of control over investment management and its time and cost.

Of long-term significance is the fact that the trend toward greater public ownership of real estate equates with a movement toward more efficient real estate markets. It also involves a period of price discovery—learning what the public markets can tell us about the pricing of real estate which, until recently, has been dominated by private-market valuation. What we really want to know is whether the performance of real estate in REIT format is different because of public trading, or whether we are just better able to observe the true performance of the asset through the public markets.

SECURITIES VERSUS DIRECT OWNERSHIP: WHY FORM MATTERS

Real estate is a capital-intensive business. Only the very largest pension funds have the flexibility to allocate the large sums needed to build a truly diversified portfolio of “direct” real estate holdings and support the internal staff necessary to oversee those investments. Most institutional investors, in fact, acquire equity interests in real estate through advisor/managers to whom they give discretionary control over investment decision making. Of tax-exempt real estate holdings managed by the top 50 managers as of June 30, 1995, commingled real estate funds comprise the single largest investment format, \$49.4 billion or 48.3 percent of the total.

For all but the largest pension funds, direct investment is not a viable option. Rather than direct versus indirect, the choice set is effectively indirect investment alternatives—in both the public and private market. Hence, what should matter most is the available range and depth of selection among these real estate investment vehicles—their investment strategies, the quality of portfolio assets and management-performance record.

How real estate is owned shapes the investment dynamic through a number of channels, as outlined in

EXHIBIT 2.

COMPARISON OF DIRECT AND INDIRECT OWNERSHIP OF REAL ESTATE

	Direct Ownership ¹	Indirect Ownership ²
<i>Characteristics of Ownership:</i>		
Interest	full or partnership interest in property	partial in financial asset
Liability	unlimited	limited
Transferability Rights	may be limited by partnership	private: limited public: unlimited
Decision-Making Control	complete or commensurate with partnership interest	CREF: ³ none REIT: governance control
<i>Characteristics of the Investment Vehicle:</i>		
Performance Measurability	non-market appraisal valuation	private: periodic appraisal public: daily pricing
Liquidity	illiquid	private: illiquid public: liquid
Commitment Term	long-term	depends on vehicle
Minimum Investment	very large	depends on vehicle
Investment Economies of Scale	none with single assets, unless very large portfolio	potentially available
Agent Relations	negotiated with separate accounts ⁴	private: negotiated public: defined in structure

Notes:

- 1 Direct ownership covers investments managed internally or through separate accounts with an investment manager.
- 2 Indirect ownership vehicles include commingled real estate funds (CREFs), limited partnerships, private REITs and publicly traded REITs, among others.
- 3 CREF = commingled real estate fund.
- 4 Separate-account investment advisory contracts may be fully or partially discretionary; in discretionary contracts the manager has complete or partial authority to execute investment policy. In non-discretionary contracts, the plan sponsor retains final investment authority. Contracts are typically written for three- to five-year terms, cancelable upon 30 days written notice. Commonly, fees are structured to include an acquisition and disposition fee, plus a sliding-scale asset-management fee, which decreases as assets under management for the account increase.

Source: Author's file; Institutional Real Estate, Inc., *Special Report: The Language & Culture of the Pension Real Estate Investment Market*, 1995.

Exhibits 2 and 3. First, legal characteristics of the vehicle define control rights, priorities to financial returns and exposure to operating risk, investment liability and illiquidity. Second, organizational characteristics of the business entity define mechanisms of decision-making control and “agent” relationships between managers and owners which, in turn, shape the costs,

incentives and/or potential conflicts of investment management. Third, because most vehicles exist either in private or public format, but not both, the choice of an investment vehicle for real estate is also a choice between investment markets.

These legal, financial and managerial attributes of the vehicle matter a lot because if investment risk differs, the

nominal returns we observe will reflect compensation for that differential risk. For example, some fraction of the return for real estate held privately, whether through direct ownership or some indirect vehicle, amounts to compensation for illiquidity, even though this premium is difficult to quantify. Since commingled real estate funds (CREFs) and private REITs use a number of business formats to own property, the returns from these funds are not necessarily the "pure" real estate returns one might receive from a directly owned investment in property.⁵

PUBLIC AND PRIVATE REITs: MARKET MIRRORS

A comparison of public and private REITs illustrates how vehicle structure and market condition the performance of indirect investments in real estate. Both are tax-advantaged investment vehicles so long as they meet the legal requirements for REIT qualification,⁶ making the REIT structure attractive to both taxable and tax-exempt investors. Both have shareholder-elected boards of directors to monitor management and govern investment decision making, providing for relatively more investor control than in commingled-fund structures. Both have transferability rights, though these may be more restrictive among private REITs. Both limit investors' liability to the initial contribution, though provisions for additional cash calls may be a part of private REIT offerings. Because of these corporate advantages, the private REIT has been a meaningful part of the overall REIT universe for years.⁷

Similar structures for ownership and governance do not, however, imply similar investment attributes or performance. Private REITs lack liquidity and suffer from the same problems of valuation and performance measurement as privately held CREF investments. As a consequence, even though the structure suggests a ready exit strategy in the future—convertibility to public format—it may not be easy. In downmar-

EXHIBIT 3. COMPARISON OF INDIRECT REAL ESTATE VEHICLES: OWNERSHIP AND INVESTMENT CHARACTERISTICS

	PRIVATE			PUBLIC
	Open-End	Closed-End	REIT	Equity REIT
Characteristics of Ownership:				
Interest	unit	unit	share	share
Liability	limited	limited	limited	limited
Transferability Rights	limited	limited	limited	unlimited
Decision-Making Control:				
property management	passive	passive	passive	passive
investment management	passive	passive	governance rights	governance rights
Characteristics of the Investment Vehicle:				
Performance Measurability	non-market valuation dependent upon periodic appraisals ¹			market-based daily pricing
Liquidity:				
trading flexibility	redemption rights ²	little ³	little ³	major exchanges
mark-to market exposure	none	none	none	daily
Commitment Term	flexible	defined by fund/trust		flexible
Agent Relations:				
asset transaction fees	negotiated separately with each fund manager			included
manager compensation	negotiated separately with each fund manager			included
inside or co-ownership	possible, depends on specifics of each fund			% varies
Sources of Appreciation and Growth:	core assets ⁴ acquisitions	core assets	core assets acquisitions	core assets acquisitions franchise value ⁵

Notes:

- Investment contracts define the frequency and source of appraisal; funds have typically appraised large properties on a quarterly basis, with three of four each year done by internal staff and one by an outside appraiser. As appraisals are expensive, their frequency may vary by fund manager and for size of individual asset.
- Investors in open-end funds may liquidate their units over a certain prescribed time frame, assuming the fund sponsor is able to meet redemption requests through fund cash flow or property sales.
- Two facilities for trading privately held commingled fund units and private REIT shares are in the process of being operationalized: S.M.A.R.T. (Secondary Market Acquisition of Realty Trusts), an electronic marketplace run by Liquidity Financial Group and Institutional Real Estate Clearinghouse, a not-for-profit organization capitalized by 26 investment businesses in 1994. See Eagle 1994. Starting in September 1995, selected private real estate securities will be listed through Bloomberg Electronic Service.
- Internal growth in cash flow through increasing tenant rents and/or reduced expenses as a percentage of revenue and/or changing market demand/supply for asset.
- Value ascribed to the operating entity for its management capability and external growth opportunities.

Source: Author's files.

kets, a revaluation might translate into a devaluation of fund assets, the same problem commingled-fund investment managers only reluctantly confronted in the early 1990s.

If private REITs were to go public, presumably they would have to meet the same qualitative criteria demanded by the market of recent equity-REIT IPOs. These include a focused business strategy with product concentration of property assets, financial strength and flexibility evidenced by low leverage and conservative payout ratios, experienced management with a proven track record, few conflicts of interests, significant insider ownership, incentive-based compensation arrangements and fully integrated real estate entities — self-advised businesses with internal property-management operations and external growth opportunities, what Wall Street calls “enterprise” or “franchise” value.

Given the public market’s strong dislike of outside advisory relations and institutional investors’ concern about the alignment of interests in real estate investments, it is logical to expect a move away from outside advisory arrangements in the private market of real estate investment. This appears not to be the case, however.

When governance issues and alignment of interests stand as pivotal considerations for the choice of investment vehicle—and they would seem to be especially important for illiquid investments—there is no substitute for due diligence on the details of individual REIT structures, public or private. A few private REITs do have corporate-governance structures designed to address some of the problems investors faced with commingled funds in the 1980s and early 1990s. Yet, to the extent that sponsors of commingled funds have merely repackaged their advisory and management services in a new format, without providing investor-oriented governance structures assuring significant shareholder voice and control, there may not be a lot that is new in these private REITs.

EXHIBIT 4. CHARACTERISTICS OF PRIVATE AND PUBLIC EQUITY REAL ESTATE INVESTMENT MARKETS

	PRIVATE MARKET	PUBLIC MARKET
Equity Capitalization ¹	\$102.2 billion direct: \$46.4 billion ² indirect: \$55.8 billion ³	\$51.4 billion
Equity Capitalization Size Range	\$25 MM–\$3.5 B	\$7.1 MM–\$2.3 B
Product Offerings	whole ownership joint-venture partnerships limited partnerships open-end funds closed-end funds open-end REITs closed-end REITs separate accounts	equity REITs debt REITs hybrid REITs C-corporations closed-end funds open-end funds separate accounts
Types of Real Estate Portfolios	office industrial/R&D retail (malls, community centers, specialty) apartments specialty (hotel, timber, vacant land, NNN lease) diversified	office/industrial retail (mall, shopping centers, outlet centers) apartments manufactured homes healthcare facilities specialty (hotel, storage, golf, NNN lease) diversified
Primary Investors	individual buyers pension funds investment managers	individual buyers investment managers: specialized mutual funds
Trading Volume	Relatively none	“thin” market

Notes:

- 1 As of June 30, 1995; private figures from *Pensions and Investments*, October 2, 1995; public figures from NAREIT and represent implied market capitalization (assuming full conversion of operating partnership units).
- 2 Equity in separate accounts managed by top 50 managers.
- 3 Equity in commingled funds and co-investments managed by to 50 managers.
- 4 Eagle 1994.

COMPARING INVESTMENT MARKETS

Differences between public and private markets for real estate investments are significant not only because they define liquidity risks, but because the available set of investment opportunities affects the ease and flexibility of implementing real estate portfolio strategies. Ideally, we want to compare these two investment markets in terms of their overall size and product offerings, assessing market depth as well as range

of opportunities for institutional investors. (See Exhibit 4 above.) This is not easy, however.

Using the best information we have on these markets, Exhibit 5 presents a comparison of the total capitalization of the publicly traded equity-REIT market and the privately held market of tax-exempt real estate assets, as of June 30, 1995. With \$133.5 billion under control, these privately held tax-exempt assets managed by the top 50 advisors are 1.6 times the size of the equity-

EXHIBIT 5.
CAPITALIZATION OF PUBLIC AND PRIVATE REAL ESTATE MARKETS BY
PROPERTY TYPE: 2Q1995

PROPERTY TYPE	PRIVATE TAX-EXEMPT ASSETS MANAGED BY TOP 50 ADVISORS		PUBLIC EQUITY REITS	
	Total Reported Invested Value ¹ (millions)	%	Total Implied Capitalization ² (millions)	%
Apartments	\$ 20,027	15.0%	\$20,437	24.7%
Manufactured Homes			1,872	2.3
Single Family	5,340	4.0		
Community/ Neighborhood Retail			12,879	15.6
Regional Malls	37,383 ³	28.0	16,936	20.5
Factory Outlets			2,510	3.0
Office	37,383	28.0	3,926	4.8
Industrial	17,357	13.0	7,330	8.9
Storage			2,730	3.3
Hotel	4,005	3.0	1,716	2.1
Specialty			920	1.1
Diversified			4,253	5.1
Net Lease			2,502	3.0
Health Care			4,669	5.7
Timber	5,340	4.0		
Other	6,677	5.0		
TOTAL	\$133,512	100.0%	\$82,698	100.0%

Notes:

- 1 Total capitalization, including hybrid and mortgage debt, as of June 30, 1995; derived from percentages reported by *Pensions and Investments*, excluding reported REIT holdings except for privately held Corporate Property Investors.
- 2 Implied equity market capitalization (including conversion value of operating partnership units) plus total debt, as of June 30, 1995.
- 3 This value represents all retail types.

Source: NAREIT; Goldman Sachs, *Real Estate Research Monitor*; Bloomberg Electronic Service; *Pensions and Investments*, October 2, 1995.

REIT market (\$82.7 billion); these total-capitalization figures include debt and, in the case of equity REITs, the unconverted operating-partnership units.

Certain property segments are well-represented in the public markets; for example, retail (community/neighborhood shopping centers and regional malls) and apartments, which have approximately the same dollar volume as in the private market. On the other hand, office and industrial segments of the public market are only a fraction of private-market investment counterparts. For niche investments in specialized areas like health care, self-storage and recreation, the public market probably offers a broader set of opportu-

nities, while others such as timber are currently only available through private-market vehicles.

Private markets have been the predominant arena for commercial real estate for two key institutional reasons: the favorable federal-tax treatment accorded to partnerships and the non-recourse nature of mortgage loans. [Salomon Brothers 1994] This dominance is likely to persist, though it is not immutable. Tax laws change, and as the early-1990s experience proved once again, real estate's relative attractiveness to suppliers of capital changes in response to a host of economic and institutional factors. [Downs1991] The long-term prospects for the REIT market today, so different from previous

growth surges, will depend upon macro-level forces affecting the real estate industry and, most critically, REITs' ability to deliver financial performance.

**PUBLIC TRADING, PRIVATE
TRANSACTIONS AND
INVESTMENT PERFORMANCE**

The measurement of real estate investment performance suffers from several well-known problems. There is no universally accepted data series, trading of the asset is infrequent and a centralized exchange for transactions is missing so researchers must use estimates of investment risk and return. Appraisal-based return series like the NCREIF Property Index (NPI) which track privately held real estate understate real estate's true volatility because of technically proven biases, while the NAREIT Index of publicly traded REIT returns covers only a small portion of the institutional real estate universe and, due to the effects of financial-asset movements, overstates real estate's true volatility.

Consequently, *these methodological problems cast a cloud over simple performance comparisons of public real estate securities and private real estate investments, and throw in doubt conventional conclusions about the purportedly superior diversification benefits of privately held real estate.*⁸

Over the past five years, a surge of academic research has examined the character of real estate performance embedded in stock-market data. From these studies we have better estimates of the volatility of real estate returns. We also know that equity-REIT returns are good predictors of appraised-based returns because the public markets appear to incorporate information on changing market fundamentals into equity-REIT returns before that information is impounded into the NCREIF Property Index.

Data on REIT returns also indicate that agency problems flowing from certain types of advisory relations nega-

tively affect performance, and that corporate-like governance arrangements can function as important internal mechanisms for monitoring management. The information content of equity-REIT behavior suggests that the functioning of public markets enhances accountability to investors, and that certain types of market-related events like insider stock trades provide investors with important signals of adjustments in underlying net asset values.

Since all but a few of the 120 research studies⁹ on the financial economics of REITs use data ending in 1992, the historical record is not likely to be an accurate indicator of the risk and return characteristics of the reconfigured public real estate securities market which came into being in 1993-1994. It does, however, provide a factual foundation for the current debate over institutional options.

Five key issues of investment performance surround the relative-merits debate:

- Are equity REITs stock or real estate?
- How do the historical returns of indirect vehicles for real estate investments, public and private, stack up against one another?
- Does the performance of equity REITs mimic small-cap stocks?
- Can equity REITs contribute diversification benefits to institutional investment portfolios?
- How might future performance differ from historical behavior, given the newly composed equity-REIT universe?

THE COMMON FACTOR IN REAL ESTATE INVESTMENTS

What are REITs—real, financial, or hybrid assets? The returns on publicly traded equity REITs should behave like real estate because qualified REITs must hold a high proportion of their portfolio in real estate-related assets. Yet, trading on public exchanges introduces a stock-market dimension not

present in private, real-asset markets. From the empirical literature, three main conclusions emerge:

- Publicly traded equity-REIT returns and privately held real estate returns reported in the NCREIF Property Index share a strong “common factor” which reflects real estate fundamentals.¹⁰ Different pricing mechanisms used in each market obscure this underlying performance relationship, however.
- Equity REITs are hybrid securities, part stock and part real estate. Investors can capture real estate exposure through investments in equity REITs, though they have to accept the volatility that accompanies market liquidity. Because their returns do reflect the influence of property-market fundamentals, equity REITs are sufficiently different from stocks that they can not unequivocally be categorized as a sector of the equity market.¹¹
- Owing to their transactions-based character, equity-REIT returns contain a forward-looking or “anticipatory” element, which suggests that price movements of publicly traded real estate securities might serve as predictors of private-market real estate price changes. A systematic lead-lag relation exists between the equity-REIT and appraisal-based return series (adjusted for the NPI series’ appraisal-induced “smoothing”), with current changes in equity-REIT returns being reflected in future-period appraisal-based returns for up to one year, and possibly as long as three years.

THE HISTORICAL RECORD OF PRIVATE AND PUBLIC RETURNS

Comparing Appreciation Returns

The NPI has been the de facto benchmark for institutional investments in real estate since the late 1970s, however, that does not mean it is implicitly superior to other sources, namely data from

publicly traded REITs. Three statistical problems rooted in the appraisal process used to determine property values—smoothing, lag and seasonality—bias the return information in the NPI. Smoothing contributes to the artificially low volatility in the NPI, and the infrequency and lack of uniformity in appraisal timing causes the index values to lag changes in actual real estate values.

Adjusting for these methodological problems,¹² the empirical work by Fisher, Geltner and Webb [1993] and Geltner, Rodriguez and O’Connor [1995] offers the most complete set of comparative historical returns for the 1975-1993 period. Over the 1975-93 period, each real estate index appears to record roughly similar movement of ups and downs, though not at the same time; this is especially pronounced with the descent signaling the weakening of real estate fundamentals in the latter half of the 1980s. The equity-REIT index, unlevered, begins to decline in 1985, falling sharply in 1988 and reaching a low in 1990.¹³ The adjusted-NPI begins to decline in 1986 (as the lead-lag relationship suggests), falls sharply in 1989 and continues downward through 1993.

In short, the pattern of value movements in the public and private real estate cycles is similar, but distinguished by a difference in timing. These results, and others, imply that public and private real estate are essentially the same thing—they both represent the same type of underlying assets—but, as Geltner notes, “that public real estate reflects the greater informational efficiency of the public securities markets, while price change in private real estate reflects the inertia and sluggishness of the less efficient private markets.”

Volatility and Market Structure

Not unexpectedly, unlevered equity-REIT index returns are still more volatile than those of the adjusted-NPI. This volatility appears to be driven by relatively high short-run price changes not atypical of publicly traded securi-

EXHIBIT 6.
HISTORICAL TOTAL RETURN PERFORMANCE STATISTICS, 1975-1993
 ANNUAL NOMINAL RETURN STATISTICS

	PRIVATE* REAL ESTATE	PUBLIC** REAL ESTATE	STOCKS: S&P 500	BONDS: LT GOVERNMENT	T-BILLS	INFLATION
Mean	7.88%	11.62%	16.09%	11.03%	7.40%	5.64%
Standard Deviation	10.98%	13.54%	13.59%	12.34%	2.93%	3.25%
Sharpe***	0.04	0.31	0.64	0.29	NA	NA

* Unsmoothed WPI

** Unlevered NAREIT

*** Sharpe ratio equals mean total return in excess of T-bills, divided by standard deviation, a measure of risk-adjusted return.

Source: David Geltner, Joe Rodriguez and Daniel O'Connor. 1995. "The Similar Genetics of Public and Private Real Estate and The Optimal Long-Term Horizon Portfolio Mix," *Real Estate Finance* 12 (Fall): 13-25.

ties, though in the longer-run, real estate fundamentals tend to dominate this short-term "noise" of the stock market. When adjusted for the market-valuation differences, the NAREIT-equity index looks more like the (unadjusted) NCREIF Property Index; its risk and return is lower and nearly all the significant volatility and correlations differences between public and private real estate returns disappear. [Giliberto 1993, Giliberto and Mengden 1995]

Total Returns: Superior Performance for Public Real Estate

For the 1975-1993 period, public real estate has outperformed private real estate investments—by nearly 400 basis points—even after making the requisite statistical adjustments to both public and private real estate data. See Exhibit 6 above.

These superior historical returns might contain an *ex ante* return premium for the small-market capitalization of REITs. Special tax treatment might also be a factor. Some of the superior return may reflect compensation for the higher risk associated with the type of real estate in REIT portfolios (smaller properties in smaller cities than those in the NPI, also lower weighting of office properties which performed poorly over this period). Lastly, this return series may reflect a greater risk premium for greater short-run systematic risk, the "noise" explanation.

Future research will undoubtedly sort through these explanations, but the record of superior equity-REIT returns is not in dispute among academicians.

A Closer Look at Income Returns

Accurately measuring the income component of return is especially important for judging the investment performance of commercial real estate because it dominates the total return, historically. Yet the income component as measured by the NPI is an accounting-based NOI figure which does not capture cash flow from the investment. It also differs from the REIT income return, which is the dividend paid out expressed as a fraction of share price.

The differentiating element impacting the performance record is the treatment of capital-improvement expenditures. The NOI-based number used in the numerator of the NPI income return does not account for these cash-flow expenditures. (REIT dividends, in contrast, are generally paid out from cash flow available after expenditures for capital improvements.) Consequently, it is reasonable to expect that NPI income returns based on distributable cash flow would be lower than the reported income returns, and recently published work by Young, Geltner, McIntosh and Poutasse [1995] confirms this. Under their new formulas, the income return of the NPI for the 1978-1994 period is

more than two-and-a-half percentage points lower—5.04 percent versus 7.70 percent.¹⁴

This is a large revision. Its magnitude underscores the difficulties of making an apples-to-apples comparison of public and private real estate investment vehicles, as divergent accounting practices further compound the different pricing mechanisms in public and private markets.

Commingled Real Estate Fund Returns versus the NCREIF Property Index

The NPI is an index designed to track the "pure" asset performance of real estate in a mixed-asset portfolio, apart from any vehicle-specific impacts or investor perceptions of the quality of management and investment strategy. It does not price management expertise, nor vehicle and agency risks, all of which, in contrast, are implicitly priced in the public market. Because the investment bundles differ, the returns from these indices are not strictly comparable.¹⁵

These differences appear to show up in a simple comparison of NPI and CREF annual total returns from the Wilshire Real Estate Fund Index (WREFI). For the 1978-93 period, the average annual total return of the WREFI was 7.3 percent compared to 8.0 percent for the NPI. Though the pattern of ups and downs for these

EXHIBIT 7.
MARKET-CAPITALIZATION CATEGORIZATION OF EQUITY REITs

NYSE Decile Cutoffs	YEAR-END 1991		YEAR-END 1994	
	Market Capitalization (millions)	Number of Equity REITs	Market Capitalization (millions)	Number of Equity REITs
1	\$ 75,653	0	\$ 110,129	0
2	5,008	0	3,867	0
3	2,230	0	1,590	0
4	1,108	2	863	6
5	653	4	525	12
6	402	4	338	20
7	243	4	224	23
8	147	7	154	27
9	87	6	95	17
10	42	21	56	55
Total Number of Stocks		48		160
Total Market Capitalization (millions)		\$7,700		\$43,300

Source: Joseph Gyourko and Donald B. Keim. 1993. "Risk and Return in Real Estate: Evidence from a Real Estate Stock Index," *Financial Analysts Journal*, September/October; New York Stock Exchange tabulations; NAREIT; author's calculations.

ment, conceptually. Equity REITs differ from most small-cap stocks in the way they create value, primarily through superior ongoing operations and management at both the property and portfolio level—that is, through increasing net revenues from existing assets and value-enhancing acquisitions. In contrast, most small-cap firms create value through new product development or production innovation. From this difference in business activity, we would expect the composition of total returns to differ for equity REITs and small-cap stocks, and that is so: capital gains are the dominant component of total return for most small-cap firms (including commercial property developers) over nearly any time period, whereas equity REITs are dividend-intensive stocks, with growth potential.

RISK AND THE PORTFOLIO CONTRIBUTION OF REAL ESTATE

Diversification is widely perceived to be an important part of investment strategy. In the late 1970s and early 1980s, the case for real estate's inclusion in a mixed-asset portfolio was heavily predicated on this rationale, and backed by estimates of potential benefits based on private-market data reporting very low volatility of returns for real estate. As measured by appraisal-based index data, real estate appeared to be about one-fifth as volatile as stocks, though, by the mid-1980s, this relation had become highly suspect as the knowledge spread that the appraisal process inherently smoothed the return series.

When asked to assess real estate's true volatility, investment professionals, academics and pension-fund managers, in fact, have consistently responded that 50 percent to 75 percent of stock volatility was likely. [Hartzell and Shulman 1988, Hartzell 1989, Hartzell and Giliberto 1990, Giliberto 1992]

If the NPI's reported volatility is not accurate, as both the statistical evidence and professional assessments repeatedly indicate, then it follows that it cannot now be relied upon as a mea-

return series was roughly similar throughout the early to mid-1980s, when property markets began to experience the pressures of overbuilding and weakening demand in the late 1980s, the declines reported by the commingled-fund data were more severe those reported for the NPI. This is not surprising given that less than 50 percent of the Wilshire's Real Estate Fund Index's assets represented 100 percent free-and-clear holdings. The point—the performance of the NCREIF Property Index, which records asset performance, will not track the actual performance of a commingled fund or private REIT, whose performance does reflect how the portfolio is constructed.

ARE REITs REALLY "SMALL-CAP" STOCKS?

Until very recently, the market capitalization of equity REITs could only have generated a small-cap stock classification. REIT holdings displayed other characteristics that signaled the same

"thin" liquidity of small-cap stocks: small turnover ratios, lower institutional investor participation and, compared to other stocks, a relatively small following among security analysts. Not surprisingly, analyses of historical performance showed that the excess returns on REIT investments appeared to move very closely with small-capitalization stocks [McIntosh, Liang, Tompkins 1991; Gyourko and Keim 1992; Liu and Mei 1992].

The familiar statistical analogy between REITs and small-cap stocks is potentially misleading, however. First, the growth in market capitalization between 1992 and 1995 propelled more than half of all equity REITs into a mid-cap stock classification, as shown in Exhibit 7. Also, recent studies using post-1992 REIT data have reported lower correlations between equity-REIT indices and the Russell 2000, compared to the historical relationship. [Young and Redding 1995, Rosen 1995]

Moreover, REITs and small-cap stocks are not the same type of invest-

sure of real estate's potential diversification potential. Likewise, it cannot stand as the first-line defense behind the argument that private investments in real estate are superior to publicly traded equity REITs. Recent research using adjusted-REIT data shows publicly traded real estate can be a significant component of mixed-asset portfolios.¹⁶

A discussion of the specific diversification contribution of equity REITs in mixed-asset portfolios is beyond the scope of this paper. Several general points bearing on the diversification issue are worth stating, however. First, for real estate diversification to have effect within the context of a mixed-asset portfolio, it must reach a critical mass. Second, diversification is not costless. Modern portfolio theory assumes unsystematic risk can be eliminated without cost through diversification, however, empirical evidence suggests that real estate has a high amount of unsystematic risk compared with stocks. This implies that a large number of properties may be necessary to eliminate a significant amount of the unsystematic risk in a portfolio.

THE LIQUIDITY/VOLATILITY TRADEOFF

Investors may willingly trade liquidity for reduced volatility. The sluggishness of the private-market information flow may make changes in real estate prices more predictable, and actually cause some investors to prefer these investments, other considerations being equal. Similarly, real estate investors may refuse to sell at prices that are below the previous period's appraised values, implicitly making the decision to wait until a better offer/value is available.

In the early studies of real estate investment performance, "direct" investment in real estate may have appeared to outperform stocks and bonds on a "risk-adjusted basis" because other risk factors, such as a lack of liquidity, legal and structure complexities as well as potential agency problems, are not adequately captured by the

mean-variance framework of modern portfolio theory which dominates institutional asset-allocation decisions. To practitioners and academics alike, the experience of the 1980s suggests that the seemingly higher returns may have been justified on the basis of these risk factors. The empirical relationship between the risk premiums associated with the lack of liquidity and volatility remains unknown, but it is critically important to understanding the true risk-adjusted differences in performance between public and private markets for real estate investment.

On the question of real estate risk, the intellectual issue confronted by researchers several years ago seems to be settled: there is no reason to doubt that the stock market can accurately price risk for real estate investments. Public-private market pricing anomalies are likely to persist in the data due to hard-to-measure differences in the structure of investment control, agency relations and the nature of the investment itself—operating entities versus property assets. Yet when we are better able to control for these institutional differences, there may be few if any discernible empirical differences in pricing between public and private markets.

At this point, it is worth saying that the serious dispute and controversy between advocates for public and private real estate investments is unlikely to be resolved solely on the basis of empirical knowledge. Where one comes out on this issue depends in part on attitudes toward two key investment parameters—the liquidity/volatility tradeoff and investment control—and, as a result, how one weighs the qualitative arguments and quantitative evidence surrounding the relative-merits debate.

THE LIQUIDITY FACTOR: TRADING AND VALUATION

As a criteria for real estate investments, "liquidity" has taken on additional meaning for institutional investors, in light of their recent experience with commingled-fund investments

during the real estate downturn beginning in the late 1980s. The experience with long redemption queues, difficult dispositions in weak markets and the sluggishness with which reported appraisal-based asset valuations eventually reflected true market values all undercut the credibility of the private commingled-fund vehicle—and recast the significance of public-market liquidity.

Relative to privately held real estate, publicly traded real estate securities offer enhanced liquidity. The equity-REIT market does have less liquidity than the broader stock market, as benchmarked by the S&P 500, yet how investors view this level of liquidity depends upon investment strategy and the values an investor places on timely price information. Beyond trading, what the public market offers investors is continuous, unqualified valuations of real estate investments.

SIZING UP THE LIQUIDITY FACTOR

That today's REIT market is "thin" is something few in the real estate industry or investment community debate. Typically characterized by low trading volumes, few investors and stocks with higher-than-average spreads between bid and ask prices, thin markets offer investors only relative liquidity.

How liquid are REITs, as measured by their bid-ask spreads? One recently published study that examined market spreads over the second half of the 1980s found that REITs became less liquid between 1986 and 1990, though they were no less liquid than small-cap stocks in general. Given declining fundamentals in real estate markets during the period of time under study, this finding implies that REIT liquidity was not strongly affected by conditions in the underlying real estate market. [Nelling, Mahoney, Hildebrand and Goldstein 1995]¹⁷

On the two primary determinants of bid-ask spreads—exchange listing and market capitalization—the new equity-REIT universe ranks dramatically higher today than in 1992. Nearly

two-thirds of all equity REITs are now traded on the NYSE compared to 35 percent in 1992. At year-end 1995, the median equity market capitalization was \$184.4 million compared to \$36.4 million for 1992; nearly one of every six equity REITs had an equity market capitalization in excess of \$500 million. Annual trading volume, as a percentage of shares outstanding, had nearly doubled to 48 percent in 1995 compared to 25 percent in 1992. See Exhibit 1B.

By all the observable market indicators, the thinness of the equity-REIT market has declined substantially since the early 1990s, though the threshold that would meet the test of investor confidence has not yet been achieved. Opinions among professionals as to what would make for more liquidity converge on a few key factors: more large-cap companies, increased daily trading capability, and additional research coverage.

Given the current size and trading volume of the equity-REIT market, large trades would have to be executed over a period of days in order not to move share price. For example, a \$20-million investment in any of the 50 largest companies would take between seven and 61 days to trade, based on the average daily trading volume for the first three quarters of 1995.

When estimates of public-market trading times for individual property types are scaled to terms consistent with the private real estate market, the results indicate that the key advantage of market liquidity does not lie in holding large, single positions in REITs, but rather in the ability to spread the position across a number of REITs, simultaneously gaining enhanced diversification. [Azrack 1995] For example, the combined average-daily trading volume of the ten companies that make up the regional-mall sector totaled 386,000 shares at the end of September 1995. Spread evenly across these REITs, a \$100-million investment could be traded within twenty to thirty days, compared to perhaps six months for a privately held \$100-million investment in

a regional mall. For the apartment sector, because the number of REITs is larger and the typical apartment investment is smaller, the trading advantage appears to be even greater.

Is it "easier" to sell a large direct real estate investment or a large position in public real estate securities? In part that answer depends upon the focus—time-to-execute or execution price. The advantage of timely execution does not necessarily mean selling without a discount, which, for some investors, is the practical meaning of "liquidity."

VALUATION VERSUS TRADING

Mark-to-market valuation is the flip side of market liquidity. In the valuations offered up by the market through daily trading lies the potential for both good news and bad news. This should not, however, obscure the fact that liquidity—in all its meanings¹⁸—is likely to vary over the real estate cycle. When the real estate business is down, it is down throughout the industry. Under those conditions, "selling without a discount" is not possible, regardless of the real estate investment vehicle. *In short, the investment vehicle cannot protect the investment from the effects of the cycle.*

Relative to the advantages of market trading, the concern with thin liquidity for public-REIT investments seems overstated, more theoretical than real. Over short-term horizons (months), changes in the liquidity preferences of investors can strongly influence the returns of small-cap REITs, yet the empirical literature strongly suggests that this is no more so than small-cap stocks in general.

Practically speaking, how much liquidity exists in the public market is a relative judgement which depends, in part, upon the scale of investment. For example, trading liquidity that readily exists for the retail investor or small-pension fund owning shares in the hundreds or low thousands would not necessarily exist for investors holding large

positions in public companies. What the thinness of this market really underscores is the fact that *both public and private real estate markets need a more heterogeneous base of investors for there to be greater liquidity for real estate investments.*

MANAGEMENT AND THE INVESTMENT DECISION

Linked to deeply disappointing performance during the real estate downturn, issues of management have taken a front-and-center position in today's debate about public- versus private-market real estate investment options. For private-market managers of institutional real estate assets, whose fees are typically accounted for apart from the performance of the real estate, the stakes are obvious, and large.¹⁹ For public-REIT managers, whose companies are being valued inclusive of management's ability to produce profits and enhance value—as operating entities rather than passive portfolios of assets—insider ownership and an absence of conflicts of interest are likely to affect share prices.

Both set of managers are having to make adjustments to meet the new demands of the institutional-investment community for a greater voice in governance, more disclosure and better reporting of asset performance, and better alignment of interests between managers and owners through co-investments and incentive-based compensation arrangements. The relationship between real estate managers and investors is not inherently a public/private markets issue. As with other attributes, however, the differences in real estate investment vehicles manifest themselves across the market dimension.

INVESTMENT CONTROL

Given the significance of active management for real estate investment, the ability to exercise control over property acquisition, capital structure, property management, and disposition would seem to be a key decision parameter

for knowledgeable investors possessing the financial power to adopt a separate-account investment strategy. The data on how pension funds have invested their real estate allocations validate the popularity of separate-account investing. Interestingly, however, survey data from *Pensions and Investments* imply that only 38 percent of separate-account funds managed by the top 50 real estate advisors are in nondiscretionary accounts²⁰—which is to say that *most investors who use separate-account investing do so to custom-tailor an investment policy to meet their objectives, but not necessarily to exercise full control over management decisions at the property and portfolio level.*

Though public-REIT managers exercise discretion similar to managers of commingled funds and discretionary separate accounts, there are at least two differentiating incentives facing these agents. First, among the post-1991 REITs, there are almost no external-advisory relationships (as there commonly are with private REITs), which means that managements are likely to have few competing interests for their time and access to product. Second, the managements of publicly traded REITs are continually evaluated by the market with regard to their discretion.

High payout ratios, for example, appear to serve as a monitoring device for shareholders.²¹ With a REIT continually having to go back to the market for new capital (where investment bankers and other market participants monitor management decisions), this dependence reduces the internal monitoring costs of shareholders. Alternatively, shareholders might feel less pressure to monitor the investment decisions of managers if the company had a strong historical record of investment performance. In such cases, those REITs actually have greater dividend discretion, which would be revealed in lower payout ratios. Based on data for a four-year period from 1985 to 1988, empirical research strongly indicates

EXHIBIT 8.

COMPARISON OF INFORMATION SOURCES IN PUBLIC AND PRIVATE MARKETS FOR INDIRECT INVESTMENTS¹ IN REAL ESTATE

Type of Information	Private Market	Public Market
Share (unit) Price/Value	periodic appraisals ²	daily public trading
Investment Performance:		
Individual Investment	proprietary report ³	public domain
Comparative Analysis	consultant service ⁵	analyst coverage ⁴
Asset Profiles	property specific: investment prospectus ⁶	portfolio specific: annual report, 10K
Asset Transactions:		
Acquisitions	proprietary report ⁸	news announcement ⁷
Dispositions	proprietary report	news announcement
Capital Raising:		
Equity	proprietary report ⁵	news announcement
Debt	proprietary report	news announcement
Insider Trades	NR	market tracking service ⁹
Financial Audits	standard practice ¹⁰ proprietary report	required: annual report

Notes:

- 1 Indirect investments targeted to institutions include REITs (public and private), commingled funds (open- and closed-end) and limited partnerships.
- 2 Investment contracts define the frequency and source of appraisal; funds have typically appraised large properties on a quarterly basis, with three of four each year done by internal staff and one by an outside appraiser. As appraisals are expensive, frequency may vary by fund manager and single-asset size.
- 3 Proprietary reports are prepared and distributed to institutional clients (and their consultants) on a quarterly basis; these include financial and operating reports and cover investment performance, asset-transaction announcements and other information of note, for example, completion of capital raising in a closed-end fund; information on redemptions (in open-end funds) would be unlikely.
- 4 Investment banks (sell-side) and independent (buy-side) analysts routinely publish comparative stock information (financials and operating performance), individual-REIT reports, market profiles and updates as well as general reports on real estate markets and investment trends.
- 5 Consultants typically advise pension funds on portfolio strategy, manager selection and performance monitoring; as part of that services, from reports on funds held by their clients, they might prepare comparative performance statistics. See *IREI* 1995a, p. 24.
- 6 The investment prospectus will describe the assets unless, as often is the case, funds are taken into a blind pool with specific property transactions completed afterward. In this case, the quarterly performance report will present detailed descriptions of the assets.
- 7 Public companies routinely issue public news announcements on property transaction as well as changes in dividends and management; in turn, these are accessible to the investment community through on-line services as well as the REIT industry's monthly publication, *REIT Watch*.
- 8 Though not made in the form of an announcement to the public, descriptive information on recent transactions and the marketplace, as well as a directory of providers, is compiled by Institutional Real Estate, Inc. and published quarterly in *Institutional Real Estate Universe*.
- 9 For example, Bloomberg Electronic Service.
- 10 Since commingled funds are not classified as "mutual funds," managers of these funds are not subject to the annual audit requirement of the Securities Exchange Commission (SEC). Following ERISA regulations, pension funds report to the U.S. Department of Labor (DOL), which also does not require an audit. If, however, audited statements of investments are submitted to pension funds, then they can report to the DOL at a lower level of information. Further, most trust and partnership documents require an annual audit. For these and other reasons relating to their roles as fiduciaries, fund managers have multiple incentives to do annual audits of their commingled funds.

NR = Not Relevant

Source: Author's file

that the capital markets function as a monitor for management-investment decisions, in effect, as an external auditor. [Wang, Erickson, Gau 1993]

AGENT PROBLEMS AND THE STRUCTURE OF INVESTMENT VEHICLES

The structure of management compen-

sation is one attribute that clearly differentiates externally advised and internally managed real estate investments. Direct investment through an advisor typically involves a set of activity-specific fees for acquisition, property management, and disposition of the asset, as well as investment management. These fees are fixed, hence any profits from lean operations would go straight to the advisor, unless some or all of the fees are tied to performance. The same would be true for commingled-fund investments.

In comparison, with a self-administered and self-managed REIT, there are no external-advisor fees; management expenses are internal to the operations of the company, which means that economies of scale and the benefits of a lean operation would, in general, accrue to shareholders, either as dividends or through higher share valuations. These differences in fee arrangements should flow through to the bottom line, all else being equal.

Apart from fee structure, the external-advisor structure—in both public and private investment vehicles—has been troublesome because of its close association with conflict-of-interest situations. Advisors are the key position to influence decisions about the timing and terms of capital improvements, acquisitions, dispositions, and tenant leases as well as contracts for property management services and debt financing, including whether or not some or all of those services are provided by affiliated entities. The potential for conflict exists when contracts are negotiated on a nonarms' length *and* noncompetitive basis, when business transactions are conducted with related parties or affiliates, and the advisory firm has business opportunities to own property and/or perform services (as property managers, leasing agents, acquisition agents, developers) for others which might be competitive with the client's investment.

For example, as a manager of several clients' property interests in the same highly competitive space market,

in which client's building do you place a major multi-year tenancy or in whose portfolio, an attractive acquisition? When an advisor has multiple clients, this potential conflict is structural — how to allocate management time and/or potential investment and business opportunities among competing clients of the advisor. The move among REITs to self-administration eliminated this particular problem and its perceived negative impact on company profitability.

Where there is potential for conflict, what matters most is the presence of mitigation mechanisms built into the structure of the investment vehicle through governance structures and policies, management covenants, contractual incentives, insider ownership, and disclosure. Fully assessing the alignment-of-interest issue means examining the details of individual vehicle structures, including specific contracts governing management relationships. [Sagalyn 1995]

As with other aspects of management discretion, the public market acts as an external monitor. While it is easy to say that the level of information reported by public companies is not as comprehensive or as standardized as might be desirable, open-market competition is the quiet stimulus in the system that produces more publicly available information than what is generally available on privately held pooled-fund investment options. Most importantly, it allows for *comparable* stock analysis. Continuously increasing REIT coverage by markets analysts fuels this monitoring function. See Exhibit 8.

THE MANAGEMENT AGENDA: OPERATING ENTITIES VERSUS ASSETS

Publicly traded REITs are being evaluated as operating entities capable of business growth, not bundles of assets as in the case for privately held investments. Be it directly owned property, units in commingled funds or shares of private REITs, these property interests are

priced off of property-specific valuations; they accord no value to the portfolio for external-growth opportunities, even should the potential exist as it might with some private REITs. Since this "franchise factor" is priced in the public market, it shapes the management agenda of public REITs in ways that have no analogue in the private market of real estate investments.

Consider the issue of growth potential. Though REITs must continually access the capital markets for debt or equity capital, several options exist: (1) core (or "same-store") growth from existing assets, including renovation and repositioning of assets; (2) portfolio growth from development of new projects, acquisitions of individual properties or portfolios of real estate companies; (3) expansion of third-party management services; (4) portfolio leverage and (5) management efficiencies. Investments in publicly traded real estate companies — where shareholders are really buying assets, management and a value-added franchise — should, as one investment manager said, produce returns greater than net-asset-value (NAV) returns. Viewed from a corporate-finance perspective, bundling projects into a publicly traded firm can add value by creating a liquid asset from a relatively illiquid one, the caveat being that the benefits of liquidity are realized only with the inherent costs of the required management team, which are reflected in share valuation. [Capozza and Seguin 1995]²²

The typical closed-end commingled-fund investment, in contrast, can only generate increased portfolio returns through growth from existing assets in the portfolio or leverage. In other words, when one buys an asset directly or makes an investment in a closed-end commingled or pooled real estate fund, there is no future claim on management for the next growth opportunity, as there is with an operating entity.

The efficiencies of investing in a company versus buying assets directly transcend the public-private distinc-

tion. A private REIT structured as an operating entity offers the same potential advantages for management efficiency and portfolio growth. Compared to the typical arrangement whereby property is owned through a series of joint-ventures or limited partnerships, each with specifically crafted investment goals, investment criteria, and reporting systems, the company format allows investment decisions to be implemented on a portfolio basis and duplicate management and reporting systems to be eliminated.

The logic of using the public format for an operating real estate company rests most heavily on the argument that capital for growth can be accessed more efficiently than with the typical private-market arrangements, joint-venture equity, and project-based debt. While consolidating property assets under a corporate umbrella (public or private) allows for balance-sheet financing, being public affords added flexibility in the raising of debt and equity, from public or private source—in other words, to maneuver in all quadrants. This flexibility to manage capital structure in ways that lower the cost of capital is the public REIT's compelling potential advantage over indirect, private formats for equity investment in real estate.

TOWARD BROADER, MORE EFFICIENT MARKETS

The character of today's real estate markets requires sophisticated investors to take a broad perspective and evaluate the full menu of investment formats available in both private and public arenas. The expansion of the REIT market has added a significant dimension to that investment menu, and, as this white paper has explained, each format—publicly traded REITs, privately held securitized investments and direct real estate investments—presents a distinct risk-and-return profile. The way these investment are valued, as operating entities or assets, differs, but this is

only one piece of the comparative pricing picture.

Price anomalies occur, in general, because investors in public and private markets may have different time horizons, different investment strategies, different attitudes toward liquidity, different tolerances in accepting certain types of real estate risk. (They may not, in technical jargon, want to be on the same point of the efficient frontier.) Therefore, investors in each market are likely to respond differently to short-term cyclical events—interest rates, quarterly earnings reports of tenant groups such as retailers—as well as long-term secular opportunities—strategic business shifts and asset recapitalizations. To one or the other investor, real estate may be selling at a discount, an opportunity justifying a contrarian-securities strategy or the direct acquisition of assets or companies at premium prices.

Price anomalies also reflect inefficiencies in the transfer of information between public and private real estate markets. One reason especially important for the real estate industry to push strongly for increased market efficiency lies in the industry's need to assure future access to long-term capital, particularly pension-fund capital. *For real estate capital markets to function more efficiently, there must be easier price discovery and a broader, more diverse set of participants actively engaged in both public and private investment markets.* This means establishing trading mechanisms for illiquid pooled-fund investments²³ and fostering a larger capitalization of the public real estate market because both actions will increase the range of portfolio choices and enhance real liquidity for institutional investors.

A NEW DISCIPLINE?

Originally intended by Congress as a passive investment vehicle for small-scale individual investors, REITs cannot easily retain a large proportion of their free cash flow to internally finance capital improvements or portfolio expansion.

As a result, public REITs are continually dependent upon access to the markets. This dependence is only partially attributable to the tax-qualifying requirement that REITs payout 95 percent of taxable income; high payouts of cash flow are also expected by the public market because REITs (like utilities) are perceived as income stocks or hybrids, not pure growth stocks. Although REITs clearly do not have the same discretion over dividend policy as publicly traded real estate C-corporations, more discretion exists than is commonly acknowledged.

Exercising that discretion, however, involves a tradeoff—tolerance of lower income returns in exchange for larger total returns. This is a tradeoff only the strongest REITs can contemplate. To be better perceived as growth stocks, REITs would have to lower current payout ratios—without cutting the dividend²⁴—retaining much of the current-period increases in cash flow to support additional portfolio growth. This is easier said than done because the market's acceptance of this tradeoff depends upon the company's management expertise and strength of its track record, as well as its balance sheet.

It is worth pointing out that this issue—retention versus distribution of cash flow—is surfacing as a concern of publicly traded real estate investments. Though the issue is equally important to investors in privately held pooled-fund vehicles, it is infrequently discussed, presumably, because accounting conventions for reporting the performance of these funds focus on NOI-level income returns which do not equate to free cash flow. [See Geltner, Rodriquez, O'Connor 1995.] Historically, real estate managers, especially those of open-end funds, have not disclosed the returns which they realized on reinvested cash. In contrast, REITs, like other public companies, can invest nondistributed cash flow, but in doing so, they must provide a good return on that cash or suffer the response of Wall Street.

Is the payout requirement a struc-

tural constraint on REIT growth or an enforced path toward disciplined growth? As a positive force, the need to maintain the dividend return creates a certain kind of discipline. Conceivably, it could act as an effective restraint against entering into highly speculative deals at the end of the real estate cycle. Because of the dividend's importance, REITs may find it hard to buy or build assets on a 80/20 return projection—80 percent capital appreciation and 20 percent income. As a result, they are likely to operate in a narrower band, for example, 60/40 to 40/60. If at the end of the cycle, they cannot get the 60 percent income component, they might not go forward with a deal. If the REIT can work as this type of restrained investment vehicle, then it is very different from the private market. If so, it would also hold the potential to help mitigate the volatility of the real estate cycle.²⁵

Coping with the impacts of the real estate cycle and cultivating dedicated sources of long-term capital have been constant challenges for real estate. The recapitalization forced upon the industry in the first part of the 1990s stands as a dramatic reminder of the extraordinary costs of the real estate cycle. Greater stability is in the long-term interest of all players in the real estate industry. A stronger, more diverse public component of the industry—which provides liquidity, offers competitive information and comparative pricing, and imposes a new discipline—is a necessary part of that scenario.

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NOTES

- 1 Real estate assets controlled by equity REITs can be approximated by adding to equity capitalization, the debt outstanding and the implied market capitalization for operating-partnership units of UPREITs (the nontraded shares). At best this is an approximate figure because it does not account for the unknown amount of mortgage debt held by the operating partnerships, and includes a small amount of nonreal estate assets held by REITs such as cash and government securities. Because REITs are also valued for their management expertise and franchise value and may hold management contracts for the third-party owned assets, this figure, as one review noted, may not refer, 100 percent, to "hard" assets. Ascribing a specific figure to the value of management expertise or third-party management contracts is not, however, possible.
- 2 Changes in stock-market benchmarks and the development of an equity-REIT index also indicate the evolving maturation of the REIT industry. As of June 30, 1995, the Russell 1000 includes 12 REITs with market capitalizations in excess of \$550 million, and equity REIT representation in the Russell 2000 is now at 95, accounting for 4.7 percent of the total market capitalization of the index, up from 4.6 percent (67 equity REITs) in 1994. [Litt 1995a, Kostin 1994] The industry also now has a publicly traded REIT index, sponsored by Morgan Stanley, that is listed on the American Stock Exchange ("RMS"). A market-capitalization-weighted index of total returns, it is comprised of 89 equity REITs that have at least \$100 million in market capitalization. [IREI Summer 1995]
- 3 For example, IBM sold property to IRT Property Company for cash and shares; with property contributions, IBM participated in the formation of General Growth Properties; and, likewise, Ohio State Teachers Retirement System participated in Excel Realty Trust; General Motors and AT&T participated in the Taubman Centers IPO; and most recently, Ameritech Pension Fund swapped property for stock with Public Storage. Through secondary private placements, the Dutch pension fund ABP bought a big position in New Plan Realty Trust as did the Oregon Public Employees Retirement System in Equity Residential Properties Trust and, more recently, pension-fund advisor Aldrich, Eastman & Walch invested in Bedford Property Investors. On REIT private placements, see Stearns 1994.
- 4 According to Institutional Real Estate, Inc.'s (IREI) annual reader survey, new pension-fund capital going into real estate in the next three years will be on the order of \$30 billion. [IREI 1995b]
- 5 Open-ended commingled real estate funds were designed to offer institutional investors diversification and improved liquidity (through redemption rights) over direct real estate investment. As with REITs, they could achieve cash-flow growth from existing-asset rent increases, cash-flow reinvestment and additional property investments from newly raised equity. Though a mutual fund, institutional investors in these open-ended real estate funds had less of an opportunity to benefit from economies of scale since management fees were typically based on asset valuations. The redemption rights offered by the open-ended fund also proved to be a poor substitute for market liquidity.
- 6 To qualify for exemption from corporate federal income tax, a REIT must (1) distribute at least 95 percent of its otherwise taxable net income to shareholders; (2) earn at least 75 percent of its gross income from real estate in the form of rents, mortgage interest, or capital gains from the selling of real estate; (3) hold at least 75 percent of its assets in real estate, claims against real estate, cash or government securities; (4) have at least 100 shareholders, without any five or fewer individuals owning more than 50 percent of the shares; (5) refrain from short-term speculative buying and selling of real estate, which generally means holding assets for at least four years; and (6) be managed by a board of trustees or directors.
- 7 For example, in 1992, of the 150 tax-qualified equity REITs, 45 were not traded on one of the three major stock exchanges; by mid-1995, the private-REIT members of NAREIT numbered 54. Several private REITs, notably, Corporate Property Investors and LaSalle Street Fund, had over \$1 billion of assets. [NAREIT 1995]
- 8 The problems are not solely those of data. While we can readily identify the key differences in public and private pricing—valuation, control, and management—we do not know how to measure some of the factors we cannot control for empirically, liquidity for example. This point I owe to Joe Gyourko.
- 9 This section draws on a recent published literature review of 111 of these studies, Corgel, McIntosh and Ott 1995.
- 10 For example, an analysis by Mengden and Hartzell [1986] first showed a high correlation between equity-REIT dollar dividends per share and the income per unit figures of PRISA (Prudential Realty's open-end commingled fund) for the 4Q1977 to 3Q1986 period. Giliberto and Mengden [1995] recently showed positive correlations between

- the cash flows of equity REITs and direct property investments of the NPI. Using a different approach in an earlier study, Giliberto first eliminated the stock-market imprint on equity-REIT returns, then tested the residual values for their "pure" real estate behavior by regressing them against NCREIF returns data. [1990, 1993] Other researchers have cited the high correlation of equity-REIT returns with contemporaneous home appreciation rates from the existing-homes price series of the National Association of Realtors as another piece of evidence of a fundamental link between the securitized income-property market and unsecuritized property market. [Gyourko and Siegel 1994]
- 11 Gyourko and Siegel explain this point in terms of an apparent cycle in historic REIT returns: "The data suggest that if investors perceive that overbuilding depresses rental growth and, thereby, property values, then equity REIT returns lag the S&P 500 Index for a considerable time until property market fundamentals improve. The cumulative compound return on a portfolio of equity REITs then begins to converge with, and ultimately surpasses, that of the S&P 500. The past eighteen months [early 1993 to summer 1994] appear to mark the beginning of another convergence stage." [1994, p. 15]
 - 12 These adjustments include correcting private-market real estate data for appraisal smoothing; adjusting public-market real estate data for the effect of leverage; and removing stock-market volatility from the public-market equity REIT data. See the full-version of the white paper for a detailed discussion.
 - 13 These findings are repeated in another study that uses a different method for the "smoothing" correction. [Barkham and Geltner 1993] The timing is interesting in light of findings of other statistical studies that compare the performance of equity REITs with the broader stock-market behavior. This body of research presents a diverse and confusing set of empirical findings, reflecting a host of methodological differences [see Corgel, McIntosh and Ott 1995, pp. 26-27]. One study [Chan, Hendershott and Sanders 1990] finds no excess returns to equity REITs over the S&P 500 for the 1973-87 period, while others [Hartzell and Mengden 1987, Sagalyn 1990] find equity-REIT returns outperform the S&P 500 between 1972-1987, while others [Martin and Cook 1991, Chen, Hsieh and Jordan 1993] find evidence of out-
 - performance during selected years, in particular, 1980 to 1985. This, of course, was a period of time when property fundamentals were strong.
 - 14 Although 60 percent higher than where it started at the end of 1977, the increase in the appreciation index as measured by the revised formulas would still be less than inflation, as the CPI increased by 137 percent over the same period of time. As the authors note, even with capital improvements accounted for, the NPI registered a real (inflation-adjusted) value decline. [Young, Geltner, McIntosh, Poutasse 1995]
 - 15 As discussed in the full version of the white paper and emphasized in the Green Street report on private REITs, "characteristics of the vehicle itself, unrelated to the real estate owned in the vehicle, carry important price and total return ramifications. For example, with public REITs, corporate governance, G&A costs, depth and strength of the vehicle's management, balance sheet issues, and other variables, are all unrelated to the underlying real estate, but nevertheless have a lot to do with those REIT's performance for their shareholders." [1995, pp. 4-5] REIT share prices also reflect other characteristics of the structure such as operating-partnership units (for UPREITs), restricted stock, and management holdings. In private markets, the pricing of similarly complex interests may not be complete.
 - 16 See a recent study of diversification in the equity-REIT market [Gyourko and Nelling 1994] and an asset-allocation simulation [Mueller, Pauley and Morrill 1994; Hartzell, Wurtzbech, Watkins 1995].
 - 17 In a broader-based comparison of NASDAQ and NYSE-listed REITs for a single year, 1990, NASDAQ REITs were found, not surprisingly, to be less liquid than those listed on the NYSE, both in terms of larger dollar and percentage spreads. In addition, market capitalization appeared as a key determinant of REIT bid-ask spreads, and spreads were lower on equity REITs than mortgage or hybrid REITs and among those REITs with large holdings by institutional investors.
 - 18 Liquidity is one of those concepts that has several meanings. It appears to mean any one or more of the following: (1) the ability to sell quickly; (2) the ability to sell quickly and with little or no price discount; (3) the ability to sell a sizeable quantity of stock during a market downturn; (4) the existence of two-way mar-
 - kets over an extended period without undue disruptions or difficulties in establishing fair value; (5) or the time it takes to change financial exposure. Mike Miles notes that this last definition is synonymous with strategic flexibility, and, from that perspective, what matters most is whether the best execution of a particular real estate investment strategy is found in the public or the private markets. See Miles [1994].
 - 19 Institutional Real Estate, Inc. has estimated that over the next ten years these stakes involve: \$168 billion in real estate and real estate-backed investment assets, \$78 billion in equity real estate assets, \$1.1 billion in asset-management fees, \$630 million in property-management fees, between \$5 billion and \$18 billion per year in new investment capital, between \$40 million and \$80 million in new asset-management fees each year, and between \$22 million and \$45 million in new property-management fees each year. [IREI 1995a, p. 2]
 - 20 Tax-exempt assets under discretionary control of the top 50 real estate advisors total \$95.991 billion; since commingled and pooled funds are, by definition, discretionary accounts and assuming that co-investments are also, the residual dollars, \$22.084 billion must represent those funds that are under nondiscretionary management; expressed as a proportion of all direct separate-account dollars (in millions) (\$22.084/57.816), this equals 38.2 percent.
 - 21 Although REITs are required to payout 95 percent of taxable income, in practice, this tax-qualifying regulation is not a binding constraint. It is well-known that payout ratios, typically, are well in excess of this minimum, meaning that REITs do have an opportunity for discretionary dividend policy.
 - 22 Capozza and Seguin's analysis of these costs identifies a "style" component which is strikingly similar to the recent REIT-IPO market's preference for focused companies with low leverage. Using reported general and administrative expenses (G&A) as a measure of management costs for a sample of 75 publicly traded REITs analyzed over an eight-year period from 1985 to 1992, they found three style dimensions—size, focus, leverage—to be significantly related to company G&A. Expressed as either a percent of share price or percent of assets under management, G&A is smaller when the REIT is larger, more focused or less levered. Management strategy, they concluded,

has a significant impact on REIT valuation.

- 23 With the creation of the Institutional Real Estate Clearinghouse and S.M.A.R.T. (Secondary Market Acquisition of Realty Trust Shares), this process is already underway. See Eagle 1994.
- 24 Crown American Realty is a case in point. On August 8, 1995 the REIT unexpectedly announced a 43 percent dividend cut, which resulted in a 29 percent drop in its share price. "The dividend cut is not what concerns us, as much as the reason given for the cut" wrote Jonathan Litt of Salomon Brothers. "Crown America cut its dividend not because it could no longer afford to fund the dividend from cash flow, but because the company had redevelopment opportunities within the portfolio that management felt it could not fund from alternative sources. We believe when a company chooses to be a REIT, it implicitly is agreeing to pay the dividend (similar to a company which issues and services debt)." [Litt 1995b]
- 25 This point I owe to Leanne Lachman. As one reviewer noted, however, others in real estate question whether REITs may lead the industry into another round of overbuilding. Under pressure to keep FFO growth strong and with lower costs of capital, publicly traded REITs might play a significant role in the production of new buildings during the next cycle. No different from private developers, they would face the potential timing risk which comes from the pipeline effect – a one- to two-year lag between the identification of an undersupplied market and the delivery of space. The question is still whether there will be a new discipline, whether REIT management or REIT analysts will pay better attention to the supply-demand imbalance than their predecessors in the development business. [Gordon 1996].

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