Equity REIT Property Acquisitions: Do Apartment REITs Pay a Premium?

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Abstract. **Negotiation theory and implied agency costs provide the foundation for the research hypothesis that equity real estate investment trusts (EREITs) may have paid premiums when making real property acquisitions during the 1990s REIT boom. Using a simultaneous equations model and data from the Atlanta, Phoenix and Seattle apartment markets, this research finds that apartment EREITs have paid above market prices for property acquisitions. In Atlanta, a 26.1% premium was evident; in Phoenix, a 27.5% premium was evident; while in Seattle, a premium was not evident. At the property level, the returns to EREITs and private sector or non-securitized investors may differ substantially.**

Introduction

In the last five years, equity real estate investment trusts (EREITs) have become major owners and managers of institutional grade real estate. According to the 1997 edition of the *REIT Handbook*, EREIT total assets at year-end 1996 were $95B. Concurrently, the market capitalization of publicly traded EREITs was $78B, which is a dramatic increase over year-end 1991's $8.7B. Armed with access to both equity and debt markets, EREITs have been able to expand via property acquisition and development, substantially increasing assets under ownership and management.

This increased EREIT market activity has gained the attention of academic and investment analysts as evidenced by continued EREIT related research.[1] Within this foundation of research, however, the question of whether EREITs have paid market prices for property acquisitions has not been empirically tested. If EREITs have paid prices greater than market value for real estate acquisitions, then any implied, but not yet empirically evidenced, structural gains for EREITs in comparison to other real estate ownership forms must also be sufficient to offset potential property acquisition premiums. In essence, if EREITs have paid acquisition premiums, then EREITs must evidence property level efficiencies, in addition to portfolio level efficiencies and

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capital structural efficiencies, in order to make a claim as a potentially more effective ownership structure for real property.

Additionally, the existence of an EREIT price effect would decrease support for the concept of EREIT returns acting as a proxy for direct real estate returns. If the real estate market[2] allows for EREIT transactions to be priced differently than other property transactions, then EREIT return performance, although potentially correlated with appraisal-based returns due to the use of EREIT purchases as sales comparables for property appraisals, actually may not proxy the performance of the general real estate market. Thus, the question of interest is similar to the question, ''Do Syndications Pay More for Real Estate?'' posed by Beaton and Sirmans (1986). Do EREITs pay more for real estate?

Literature Review and Research Framework

Corgel, McIntosh and Ott (1995), in their exhaustive review of research on REITs, segment REIT related research into three general categories—investment issues, financial issues and risk, and return and portfolio diversification issues. Even within these three categories, however, stock price movements and returns are the central focus of research with some measure of return generally being the dependent variable of interest. Research has focused on what affects REIT share performance and how REITs as an asset class perform with substantial emphasis on the integration of EREITs, unsecuritized real estate and the stock market (Liu, Hartzell, Grieg and Grissom, 1990; Ambrose, Ancel and Griffiths, 1992; Liu and Mei, 1992; Gyourko and Keim, 1992; Myer and Webb, 1993; Pagliari and Webb 1995 and others), portfolio efficiency (Kuhle, 1987; Han and Liang, 1995 and others) and inflation hedging (Hartzell, Hekman and Miles, 1987; Park, Mullineaux and Chew, 1990; Bond and Webb, 1995; Yobaccio, Rubens and Ketcham, 1995; and others).

This research takes a related, but slightly different approach than most of the prior REIT research by investigating the effect apartment EREIT acquisitions have on the actual market price paid for real estate within the physical real estate market. Prior empirical research by Beaton and Sirmans (1986) on the effect of syndicators on the selling price of apartments indicated that syndicators did not pay above market prices for their apartment complex acquisitions. Forgey, Rutherford and VanBuskirk (1994) found that institutions disposing of single family property acquired via foreclosure were willing to sell property at a discount to market value. Carroll, Clauretie and Neil (1997) using a different data set and additional model specification, however, did not find this effect. With regard to income producing multifamily real estate, Hardin and Wolverton (1996) found that institutions owning apartments acquired by foreclosure were willing to sell property at a discount to market value. This present research extends these investigations into market participant effects by investigating whether EREITs, one of the real estate growth vehicles of the 1990s, have paid above market prices when acquiring apartment properties. The substantial increase in EREIT capital since 1993, the creation of a substantial number of apartment EREITs, uncertainty on

whether securitized and unsecuritized real estate markets are segmented and the use of EREIT returns as a proxy for real estate make the research topic a question of substantial interest.

Equity REITs, Acquisition Strategies and Price

Unlike publicly traded stocks and bonds, commercial real estate is sold and purchased via a negotiated transaction. Situations often exist where atypical motivations by transaction participants can be used to move the final negotiated transaction price either upward or downward within a range of potential prices. With respect to atypical motivations placing downward pressure on sales price, such an effect has been manifested with properties obtained via foreclosure having been shown to sell at a discount to market value. Likewise, but with an upward bias, it can be postulated that the real estate market environment within which apartment EREITs made acquisitions during the latest EREIT expansion created a situation whereby EREITs either chose or were forced into acquisition strategies that made over payment for individual properties more probable. Specific conditions, which may have created the upward pressure on EREIT property acquisition prices, are outlined in the following paragraphs.

Although there is substantial debate over the efficiencies of EREITs versus other forms of institutional ownership of real estate,[3] the belief of some EREIT proponents and EREIT managers that EREITs can obtain multiple operating efficiencies[4] does impact EREITs' acquisition strategies. If EREIT managers as buyers of real property believe that they can obtain efficiencies, then they will be more likely to pay a premium in acquisitions. For the purpose of this investigation, any specific EREIT's actual ability to achieve efficiencies is not of importance as a belief in efficiencies alone would be sufficient to move the EREIT toward the higher end of the range of potential transaction prices.

Concurrently, as Graff and Webb (1997) point out, there may be supply constraints that lead to ''apparent bidding frenzies'' within the institutional real estate investment sector when investment managers look to acquire sector specific real estate to balance portfolios. This agency cost effect would also apply to EREITs, especially to those involved in the apartment market as an entirely new investment category was being formulated during the 1990's EREIT expansion. Apartment portfolios were not only being re-balanced, they were being created.

EREITs faced additional market conditions that likely increased asset acquisition related agency costs that may be evidenced in the mis-pricing of property acquisitions. The investment community's demand for individual EREIT size and geographic diversity made an aggressive acquisition policy a necessity. Similarly, EREIT level management concerns over potential forced mergers may have generated an agency cost by making acquisitions a priority. The ability to increase per share FFO by replacing cash equivalents with real assets or using relatively low cost, short-term lines of credit to fund asset expansion would have also caused EREITs to be

aggressive bidders for available apartment acquisitions. EREITs faced an environment that pushed for higher acquisition prices when necessary, as any agency costs associated with mis-priced acquisitions might not be immediately apparent.

For the period under study, there are competing, but not inconsistent arguments for an EREIT premium. A willingness to pay an acquisition premium could be a sound long-term strategic move if EREIT proponents are actually correct and any premium is offset by organizational efficiencies when compared to other forms of real estate ownership. Or, concurrently, the acquisition premium could be evidence of an agency cost associated with the EREIT structure, large capital flows to EREITs and the creation of large real estate portfolios.

In order to accommodate potential EREIT motives for paying higher prices than other (*i.e.*, typical) market participants when acquiring real estate investment properties, the following discussion based on Quan and Quigley (1989) is given.

Consider two parties, a seller and a buyer, negotiating the sale of an institutional quality real property, property *i*, such that:

$$P_i^B = E^B[P_T|I_{(iSB)t}{}^B] + \varepsilon_i^B, \tag{1}$$

and

$$P_i^S = E^S[P_T|I_{(iSB)t}{}^S] + \varepsilon_i^S, \tag{2}$$

where:

P_i^B = The buyer's ceiling price for property *i*;
P_i^S = The seller's reservation price for property *i;*
$E^B[P_T|I_{(iSB)t}{}^B]$ = The buyer's expectation regarding the ultimately negotiated transaction price, P_T, based on the buyer's information concerning property *i*, seller *S* and buyer *B* (including a rationale for paying higher than typical prices) at time *t*;
$E^S[P_T|I_{(iSB)t}{}^S]$ = The seller's expectation regarding the ultimately negotiated transaction price, P_T, based on the seller's information concerning property *i*, seller *S* (including possible knowledge of the buyer's rationale for paying higher than typical prices) and buyer *B* at time *t*;
ε_i^B = Ceiling-price-setting error; and
ε_i^S = Reservation-price setting error.

The values set by the buyer and seller for P_i^B and P_i^S determine three possible outcomes to the negotiation (assuming, for simplicity, that the negotiated outcome hinges solely on price). When $P_i^B = P_i^S$, the property will sell at a single, mutually agreeable price. Secondly, when $P_i^B < P_i^S$, the negotiation will fail to result in a mutually agreeable price, and there will be no sale. Thirdly, when $P_i^B > P_i^S$, the negotiation will result in a negotiated transaction price such that $P_i^B \geq P_T \geq P_i^S$.

The final outcome possibility is of interest here, and three plausible information states are relevant: (1) $P_i^B \geq P_T \geq P_i^S$, and the seller does not know that the buyer is an EREIT and therefore has no knowledge concerning the buyer's potential ability and willingness to pay a price higher than paid by typical market participants; (2) $P_i^B \geq P_T \geq P_i^S$, and the seller does know the EREIT buyer's identity but is uninformed regarding the buyer's atypical, upwardly-biasing price motives; or (3) $P_i^B \geq P_T \geq P_i^S$, and the seller does know the EREIT buyer's identity and is informed regarding the buyer's atypical, upwardly-biasing price motives. Under information states (1) and (2), P_i^S applicable to negotiation with an EREIT buyer would differ little, if any, from P_i^S applicable to negotiation with another ''typical'' buyer. However, under information state (3) P_i^S, applicable to negotiation with an EREIT buyer is expected to be greater than P_i^S applicable to negotiation with another ''typical'' buyer.

The net effect of an EREIT purchase negotiation, vis-à-vis a typical buyer's purchase negotiation, is that $P_i^{B(EREIT)} \geq P_i^{B(TYPICAL)}$ and $P_i^{S(EREIT\ BUYER)} \geq P_i^{S(NON\text{-}EREIT\ BUYER)}$, where the parenthetical superscripts identify the relevant negotiating parties. Therefore, the expected value of P_T when the buyer is an EREIT, is greater than the expected value of P_T when the buyer is typical (*i.e.*, not an EREIT). This is because, as Quan and Quigley (1989:222) note, ''the feasible set of prices from which all transactions must be drawn is the region between the two prices,'' (*i.e.*, from P_i^S to P_i^B), and the transaction price will result from an arbitrary weight ω, $0 \leq \omega \leq 1$, as follows:

$$P_T = \omega\, P_i^S + (1 - \omega) P_i^B, \tag{3}$$

where ω is determined by market conditions and/or relative bargaining power.

Since

$$P_i^{B(EREIT)} > P_i^{B(TYPICAL)}, \tag{4}$$

and

$$P_i^{S(EREIT\ BUYER)} \geq P_i^{S(NON\text{-}EREIT\ BUYER)}, \tag{5}$$

from Equation (3), it follows that:

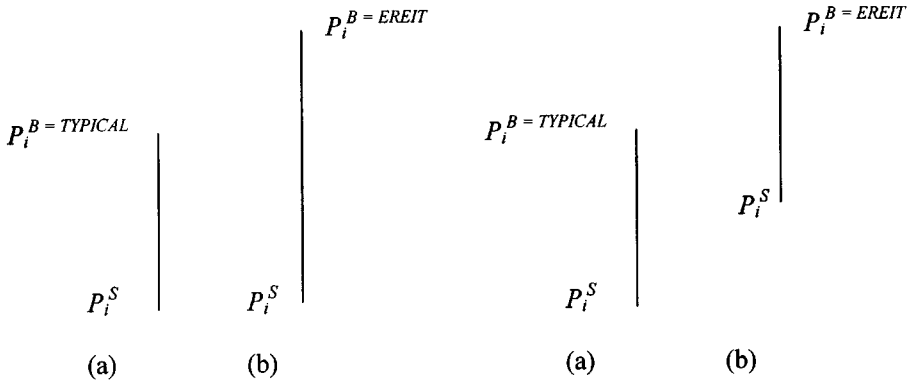
$$E[P_T|\text{buyer is an EREIT}] > E[P_T|\text{buyer is typical}]. \tag{6}$$

This anticipated negotiation outcome is illustrated in Exhibit 1, and leads to the research hypothesis that EREIT real estate purchase prices will be systematically higher than typical real estate purchase prices.

Simultaneous Equation Model of an Ownership Apartment Market

To empirically test this general hypothesis, a simultaneous equation model accounting for the endogenous determination of price and quantity in a competitive market for

Exhibit 1
Ranges of Possible Transaction Prices
EREIT versus Non-EREIT Buyers When $P_i^B \geq P_T \geq P_i^S$



Panel I: Seller is unaware of either the buyer's EREIT status and/or EREIT price motives.

Panel II: Seller is aware of buyer's EREIT status and of EREIT price motives.

In both Panel I and Panel II, $E[P(Range\ b)] > E[(P(Range\ a)]$.

ownership of apartment properties is used. Borrowing from the example found in Davidson and MacKinnon (1993), apartment supply and demand is modeled as:

$$Q^d = \alpha P + Z^d \beta + \mu^d, \tag{7}$$

$$Q^s = \gamma P + Z^s \delta + \mu^s, \tag{8}$$

where Q^d is the quantity demanded, Q^s is the quantity supplied, P is the price, Z^d is a vector of exogenous demand variables, Z^s is a vector of exogenous supply variables, and μ^d and μ^s are random noise. Assuming a competitive market:

$$Q^d = Q^s = Q. \tag{9}$$

Therefore, the market-clearing price P is endogenously determined by the equality of Equations (7) and (8).

Substituting Q for Q^d and Q^s, the demand and supply functions can be rewritten in terms of observable price P and quantity Q as follows:

$$\text{(Demand) } Q = \alpha P + Z^d \beta + \mu^d, \tag{10}$$

$$\text{(Supply) } P = \gamma Q + Z^s \delta + \mu^s. \tag{11}$$

Equation (10) represents the aggregate demand for apartments and Equation (11)

represents the aggregate supply of apartment units. Modeling these two equations simultaneously accounts for the actions of developers who determine the number of apartment units in a given market and investors who trade in developed apartment projects.

Data and Empirical Model

In order to increase the external validity of this study, the data were generated from three large real estate markets with active institutional investment—Atlanta, GA, Phoenix, AZ and Seattle, WA (Shilton, Stanley and Tandy, 1996). The Atlanta data were compiled by the Valuation Services Group of NationsBank's Real Estate Banking Group. The Phoenix and Seattle data were compiled by Comps, Inc. of San Diego, CA, a national firm providing verified comparable real estate sales data. The two data sources reduce the potential for measurement error. The sample data are restricted to institutional sized property sales at the city level.[5] There were no EREIT sellers found in the sample data, they were purchasers only.

The Atlanta data (Exhibit 2) includes 78 sales of large apartment complexes for the time period January, 1993 to May, 1995. Nineteen of the sales are EREIT purchases. The average number of units for apartments in the data set is 293 with the average age at sale date being 11.9 years. The average apartment purchase price is $12,053,082. The aggregate value of the apartment sales in the sample is $940,140,396. The number of units per apartment complex ranges from 102 units to 632 units. The Phoenix data (Exhibit 3) is composed of 105 sales of large apartment complexes for the time period January, 1993 to June, 1996. Sixteen of the observations are EREIT acquisitions. The average number of units for apartments in the data set is 268 with the average age at sale date being 12.8 years. The average apartment purchase price is $9,165,369. The aggregate value of the apartment sales in the sample is $962,363,745. The number of units per apartment complex ranges from 150 units to 856 units. The Seattle data (Exhibit 4) includes 119 sales of large apartment complexes for the time period January, 1991 to June, 1997. Eighteen of the sales are EREIT purchases. The average number of units for apartments in the data set is 256

Exhibit 2
Descriptive Statistics—Atlanta Apartment Sales

Variable	Mean	Std. Dev.	Min.	Max.
Price	12,053,082.00	7,859,599.00	2,940,000	39,500,000
Age (years)	11.94	7.90	1	27
Units	293.49	126.97	102	632
EGI	1,999,844.00	1,023,444.00	850,988	5,511,464
Permits	1,597.00	1,150.00	62	4,102
Population	3,264,694.00	65,470.00	2,230,730	3,160,192

Note: $n = 78$.

Exhibit 3
Descriptive Statistics—Phoenix Apartment Sales

Variable	Mean	Std. Dev.	Min.	Max.
Price	9,165,369.00	6,637,931.00	1,100,000	30,501,000
Age (years)	12.84	6.91	0	31
Units	268.29	123.55	150	856
EGI	1,560,937.00	908,811.00	208,645	4,835,124
Permits	1,607.00	845.00	220	3,899
Population	2,398,576.00	106,497.00	2,230,730	2,568,721

Note: $n = 105$.

with the average age at sale date being 11.4 years. The average apartment purchase price is $11,902,706. The aggregate value of the sales in the sample is $1,416,422,014. The number of units per Seattle complex ranges from 150 units to 750 units. The aggregate value of the sales in the three market samples is $3,318,926,153.

During the period over which the data were compiled, there were eight public apartment EREITs active in the Atlanta market, six public apartment EREITs active in the Phoenix market and five public apartment EREITs active in the Seattle market. A total of fifteen apartment EREITs were included in the sample. Thirteen of the EREITs were active in only one of the markets under study; one EREIT was active in two markets; and only one EREIT was active in all three of the markets. The lack of substantial overlap in EREIT participants at the city level minimizes the effect of a single EREIT market participant.

Apartment sale price is estimated using a simultaneous-equation model with apartment building permits used to proxy for demand for new apartment units. The estimation equations, similar to the model employed by Shilling, Sirmans and Guidry (1991), are detailed below:

Exhibit 4
Descriptive Statistics—Seattle Apartment Sales

Variable	Mean	Std. Dev.	Min.	Max.
Price	11,902,706.00	6,795,546.00	2,392,000	41,125,000
Age (years)	11.42	7.87	1	50
Units	255.86	102.33	150	750
EGI	1,827,320.00	866,606.00	744,510	5,245,275
Permits	1,149.00	535.00	373	2,681
Population	2,157,377.00	59,213.00	2,023,559	2,242,323

Note: $n = 119$.

$$\text{(Demand) } Permits = \alpha_1 + \alpha_2 \text{Ln}(Price) + \alpha_3 Population + \alpha_4 Qtr\ 2 + \alpha_5 Qtr\ 3 + \alpha_6 Qtr\ 4, \quad (12)$$

$$\text{(Supply) Ln}(Price) = \beta_1 + \beta_2 EREIT + \beta_3 Foreclose + \beta_4 EGI + \beta_5 Permits. \quad (13)$$

Permits is the number of apartment units authorized in a given quarter. It was derived from data compiled by the Census Bureau reported in Table 3: Selected Metropolitan Statistical Areas—New Privately Owned Housing Units Authorized in Permit-Issuing Places in *Housing Units Authorized by Building Permits*. Ln(*Price*) is the natural logarithm of the apartment property sale price. *Population* is a quarterly estimate for the MSA derived from Regional Economic Information System data. *Qtr* 2, 3 and 4 are indicator variables accounting for seasonal variation in construction starts. *Foreclose* is a dummy variable representing a sale by an owner who acquired the property through foreclosure. Foreclosure status is included in the model to account for its effect on price (Shilling, Benjamin and Sirmans, 1990; Forgey, Rutherford and VanBuskirk, 1994; and Hardin and Wolverton, 1996). *EREIT* is a dummy variable indicating that the purchaser was a real estate investment trust.

EGI is the effective gross income at the time of a given apartment sale. *EGI* captures the exogenous effects (Z^s) of property characteristics, location, condition and vacancy. It represents economic performance at the apartment complex level as determined in the apartment rental market. Pagliari and Webb (1996) recognize the interaction of apartment vacancy rates and rental rates and postulate that effective gross income is a more meaningful measure than other measures used to benchmark property performance.

Equations (12) and (13) were estimated simultaneously on the Atlanta, Phoenix and Seattle data to test the statistical null hypothesis H_o: $\beta_2 = 0$. Results of the empirical analyses follow.

Empirical Results

As indicated, a log-linear regression model is used to model supply with the dependent variable being the natural log of apartment sales price. New construction permits is the dependent variable for the demand model. The estimation results are presented in Exhibit 5. The Atlanta, Phoenix and Seattle models are highly significant and capture most of the variability in the price equations. The adjusted R^2 for the Atlanta price equation is .828; for the Phoenix price equation, the adjusted R^2 is .734; and for Seattle the price equation adjusted R^2 is .819. The adjusted R^2 for the Atlanta demand (*Permit*) equation is .865; the adjusted R^2 for Phoenix is .400; and the adjusted R^2 for Seattle is .407.

The variable coefficients in all sets of equations are as expected. Permits increase with *Population*, and there are seasonal effects. Permitting activity is significantly

Exhibit 5
Simultaneous Equation Estimates Equity REIT Buyer Effect on Apartment Purchase Price

	Atlanta Apartment Market		Phoenix Apartment Market		Seattle Apartmen
Variable	Permits	LN(Price)	Permits	LN(Price)	Permits
Intercept	−42,750.00 (−15.8)**	14.84 (157.2)**	−5,828.00 (−2.9)**	14.53 (115.4)**	−7,667.00 (−4.4)**
EREIT Buyer		0.23 (3.3)**		0.24 (2.3)*	
Foreclosure		−0.10 (−1.0)		−0.09 (−0.4)	
EGI (000,000)		0.55 (18.1)**		0.64 (15.3)**	
Permits (000)		0.07 (2.6)*		0.14 (2.2)*	
LN (*Price*)	−276.69 (−3.3)**		−151.35 (−1.4)		−20.97 (−0.3)
Quarter 2	796.00 (5.7)**		1,087 (−5.9)**		136 (1.1)
Quarter 3	1,276 (9.2)**		−633 (−3.0)**		620 (4.6)**
Quarter 4	558 (4.3)**		−869 (−4.1)**		423 (3.6)**
Population (000)	14.70 (20.0)**		4.40 (6.7)**		4.10 (6.1)**
Adjusted R^2	.8654	.8654	.4002	.7337	.4071

Note: *t*-Statistics are in parentheses.
* Significant at the .05 level.
** Significant at the .01 level.

greater in non-winter seasons in Atlanta and Seattle due to both areas' wet and relatively cold winters, and permitting activity is significantly less in non-winter seasons in Phoenix due to moderate winter weather and extremely hot weather during May through September. *Foreclosure* does not evidence statistical significance in any of the models. The coefficient on *EGI* is positive, as expected, and highly significant; showing the expected connection between an apartment's price and its earning power.

Endogenous supply and demand schedules are appropriately signed in all of the estimation models. The negative coefficient on Ln(*Price*) in the demand models is indicative of the expectation of a downward sloping demand curve. Conversely, the positive coefficient on *Permits* in the three supply models is indicative of the expectation of an upward sloping supply curve. Ln(*Price*) is statistically significant in the Atlanta demand model, and *Permits* is statistically significant in the Atlanta and Phoenix supply models.

The null hypothesis of $\beta_2 = 0$ is rejected at the .01 level (p-value = .0016) in the Atlanta apartment market model and at the .05 level (p-value = .0241) in the Phoenix apartment market model. The null hypothesis is not rejected in the Seattle apartment market model. Rejection of H_o in two of the three models provides supports for an alternative hypothesis that EREIT buyers have paid prices greater than prices other market participants were willing to pay. When the coefficients from the two models with statistically significant, EREIT *Buyer* coefficients are transformed into percentages (Halvorsen and Palmquist, 1980), EREITs active in Atlanta have paid prices 26.1% above the market, and EREITs active in Phoenix have paid prices 27.5% above the market.

Conclusion

The findings from this research indicate that EREITs have, at times and within specific markets, paid premiums for apartment acquisitions. During an unprecedented period of asset growth and increased market capitalization, apartment EREITs, by paying, at times, more than competing property investors were willing to pay, acquired substantial portfolios of apartment assets. EREIT buyers paid a premium of 26.1% in the Atlanta market and 27.5% in the Phoenix market. Even though no premium was found in the Seattle market, there is preliminary support for an agency cost associated with apartment EREITs' acquisition strategies. The lack of a premium in the Seattle market implies that market conditions and capital flows at the local real estate market level may mitigate an acquisition premium. For example, EREITs may not have seen Seattle as a core market during the period under study, reducing any potential bidding frenzy, or they may already have had sizable investments in the Seattle market and not have been active purchasers. Additional research is necessary to determine how individual market conditions might reduce the potential for property acquisition agency costs.

During the period under study, unsecuritized investor groups were unwilling to pay the premiums for real estate acquisitions that securitized EREIT managers, and by implication, EREIT investors were willing to accept as a cost of creating apartment

portfolios. Because regulatory constraints on capital retention at the individual EREIT level require secondary stock offerings as a source of additional equity capital, continued growth of EREITs will require the investment community's continued acceptance of possible property acquisition premiums, implying that EREIT investors are willing to accept property specific returns that may be less than those being realized by traditional unsecuritized investors making direct investments in real estate.

Finally, the persistence of any EREIT premium must be investigated. As the EREIT industry matures and data become more readily available to all participants in the EREIT market, corporate and industry strategies and the allocation of capital will be affected. Additional investigation by property type and replication of the results presented in this research over different time periods and market conditions are justifiable research topics. Other types of institutional and non-institutional investors are worthy of investigation as are the potential beneficiaries of the noted acquisition premiums.

Notes

[1] Examples include the two recent special editions of the *Journal of Real Estate Research* focusing on REITs and the creation of a special section of *The Wall Street Journal* on REITs. There is also a *Journal of REITs.*

[2] The focus of this study is the market for real property and not the market for securitized real estate assets.

[3] Equity REIT efficiency is not the focus of this paper. The existence of acquisition related agency costs for EREITs would indicate an additional required comparison between the REIT form of investment and other forms of real estate investment. However, without substantiation of EREIT efficiencies versus other ownership forms, a property acquisition agency cost would negatively impact the REIT ownership structure.

[4] See Linneman (1997) for a summarization of positive equity REIT attributes and Vogel (1997) for a contrasting assessment.

[5] The smallest apartment complex used in the study was a 102-unit project in Atlanta with an institutional buyer and seller. The sample excluded non-institutional sized observations. The lower bound in each data set was derived using the smallest EREIT acquisition at the city level.

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