WHAT MAKES A SUCCESSFUL REIT?
A Quantitative and Qualitative Approach

by

Elaine Vakalopoulos

Bachelor of Science
Northeastern University
1983

SUBMITTED TO THE DEPARTMENT OF URBAN STUDIES AND PLANNING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE MASTER OF SCIENCE IN REAL ESTATE DEVELOPMENT AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

AUGUST, 1993

© Elaine Vakalopoulos, 1993
All rights reserved

The author hereby grants to M.I.T. permission to reproduce and to distribute publicly copies of this thesis document in whole or in part.

Signature of the Author ______________________
Elaine Vakalopoulos
Department of Urban Studies and Planning
August 31, 1993

Certified by ______________________
Marc A. Louargand
Lecturer
Department of Urban Studies and Planning
Thesis Supervisor

Accepted by ______________________
William C. Wheaton
Chairman
Interdepartmental Degree Program in Real Estate Development

ARCHIVES

MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

OCT 04 1993

LIBRARIES

ACKNOWLEDGMENTS

I would like to thank Citicorp Real Estate, Inc. for sponsoring this thesis project. I would like to recognize Andreas Kissal, from the Real Estate division and Jon Tomasson and Sally Strupp from Citicorp Securities Markets, Inc. for providing me with the data necessary to conduct this study. Special thanks go to Deborah Jo Cunningham for gently persuading me to undertake this timely and interesting slant on a widely covered subject.

My deep appreciation is extended to each of the industry professionals who took the time meet with me and permitted me to "pick their brains" during one of the most active IPO periods in REIT history. Without the benefit of their insights and expertise, this thesis would have lacked much valuable substance.

Finally, I am thankful for my friend, S. Paige Warren, who was with me during the witching hour, posing incisive questions and helping me to pull it all together.

This thesis is dedicated to two very important people in my life.

To my husband Gregg Thompson, for maintaining a sense of humor (and his distance) during this extraordinary year,

and

To my mother, who always made sure that I had enough food to eat.

Thank you both for your patience and your love.

WHAT MAKES A SUCCESSFUL REIT?
A Qualitative and Quantitative Approach

by

Elaine Vakalopoulos

Submitted to the Department of Urban Studies and Planning on August 31, 1993 in partial fulfillment of the requirements for the degree of Master of Science in Real Estate Development at the Massachusetts Institute of Technology

ABSTRACT

Real estate investment trusts, specifically equity REITs, have experienced an astounding resurgence in popularity over last eighteen to twenty-four months. This is due in part to their attractive yields, improving real estate outlook and the success of recent initial offerings. After identifying these external influences, they will be set aside, as this thesis examines the generally accepted reasons why some REITs are more successful than others.

REITs that trade at high price to earnings multiples reflect investor confidence in the potential growth of the stock. To what can one attribute the premium that some REITs possess over those that are trading at a discount to their underlying value? In an attempt to answer these questions, a qualitative and quantitative approach was taken. Viewpoints on the characteristics for a REIT's success were obtained from an array of literature and from primary interviews. The attributes cited qualitatively were subsequently tested in a cross-sectional regression analysis for their affect on the FFO multiple, the REIT equivalent to the P/E ratio.

The results of the two approaches varied. The market perceives management as the most important component to a REITs success, followed by product and/or geographic focus, conservative balance sheet and a low payout ratio, amongst a host of other attributes. This finding supports the view that REITs are no longer just an investment in real estate, but an investment in a capable operating company. Contrary to the popular belief, these variables had little impact on the multiple from a quantitative standpoint. The greatest amount of variability in the FFO multiple was explained by the dividend yield and a high payout ratio. This result implies that there is truth to the commonly held notion that REITs are a current yield driven vehicle and the higher the payout ratio, the higher the price of the REIT.

Thesis Supervisor: Marc A. Louargand
Title: Lecturer
Department of Urban Studies and Planning

TABLE OF CONTENTS

INTRODUCTION 6

CHAPTER ONE
REAL ESTATE INVESTMENT TRUSTS 9

AN OVERVIEW 9

A Familiar Investment Vehicle 9

Types of REITs 10

Qualifying as a REIT 13

THE RISE, AND FALL, AND RISE, OF REITs 14

Aggregate REIT Performance Review 14

Mortgage REITs' Exposure 17

A Period of Restructuring 19

The Window of Opportunity 25

LESSONS LEARNED 26

How the REITs of the Nineties Differ 26

A New REIT - The UPREIT 29

COVERING ALL BASES - A SUCCESSFUL OFFERING 32

The "Milestone" REIT 32

Preparing for the Public Market 32

Focused Business Strategy 33

Fully Integrated 34

Debt 34

Dividend Security 34

CHAPTER TWO
MONEY MARKETS, REAL ESTATE & REITS 37

REITs: REAL ESTATE OR STOCK 37

THE INSEPARABLE LINK 38

DO REITS PROVIDE AN INFLATION HEDGE? 41

REAL ESTATE AND SECURITIES PRICING: WORLDS APART 46

IN SEARCH OF THE BEST EQUITY REIT INDEX 49

REIT Index Comparison 49

CHAPTER THREE
WALL STREET SHAPES MAIN STREET 57

VALUATION OF REAL ESTATE INVESTMENT TRUSTS 57

Valuation Approaches 58

Dividend Yield ≠ Cost of Equity 60

Yields Aren't Yielding 62

AT THE CORE of REIT PRICING - CASH FLOW 64

P/E, FFO, GAAP - FLAWS 66

PRICING MODELS and THE DISCOUNT RATE 69

Capitalization of Income 71

Ratio Analysis 73

BEHIND PREMIUM PRICING 76

CHAPTER FOUR
WHAT MAKES A SUCCESSFUL REIT? 79

EXTERNAL AND INTERNAL FACTORS 79

Some Features Are Moving Targets 79

THE INTANGIBLES 85

Hands-on Management Wins Hands Down 85

Financial Strength & Flexibility 92

CHAPTER FIVE
A QUANTITATIVE LOOK AT WHAT AFFECTS VALUE **104**

Objective 104

Methodology 104

Limitations 107

Analysis 109

CHAPTER SIX
INDUSTRY OUTLOOK FOR REITs **116**

Recent Activity 116

Is The Window Closing? 117

Distressed Properties 118

Interest Rates 119

Traditional Lending Remains Sluggish 120

Structural & Legal Changes 121

Institutional Participation and Industry Growth 123

Holding Period 126

CONCLUSION **131**

INTRODUCTION

Equity Real Estate Investment Trusts have been experiencing a resurgence in popularity over the past twenty four months. Twelve equity REIT IPOs have already raised over $3.8 billion during the first half of 1993 alone, this performance far surpasses 1992's activity when eight new equity offerings raised $919 million. The total market value of equity REITs has reached $25 billion mark. The astounding activity to convert real estate into securities has been fueled by a number of factors.

This surge in initial offerings has been driven in part by the recent past successes of other IPOs, low interest rates and investors' search for high current yields. Another reason is the most recent credit crunch, which has evaporated the traditional lending sources, making the public market the most logical and accessible place to raise capital. The most frequent use of this capital is to restructure debt or to make acquisitions at this opportunistic time.

The first half of this thesis serves to provide a broad overview of major elements relating to the industry. Chapter One provides an explanation of the evolution of the REIT, requirements necessary to maintain REIT status and a historic overview of REITs performance over two decades. The industry's peaks and troughs are highlighted as well as some of the REIT profile transformations. At the end of the chapter a example of what a private real estate company had to do to prepare for the public market is explained.

Chapter Two covers the inextricable link between the capital market and real estate. The oft asked question of whether REITs are real estate or stock is discussed. Many hold the view that REITs are a proxy for real estate. Though both are based on real estate income as the basic source of value, when one follows equity REIT returns over time, they more closely track small cap stocks than real estate.

In Chapter Three the methods of valuing real estate and REITs are contrasted. A great deal of literature has been written that argues the flaws and merits of backward looking, appraisal-based valuation versus the forward looking "auction" nature of publicly traded securities.

Most of the factors described earlier that have been contributing to the recent growth of REITs have been exogenous influences. What happens when this "window of opportunity" closes? What attributes must a REIT possess or adopt in order to sustain or retain success.

Chapters Four and Five cover the focus of the thesis which is an attempt to define, "What Makes A Successful REIT." Both a qualitative and quantitative approach was undertaken to answer this question. Opinions and critiques were compiled from a variety of published material and primary interviews with industry professionals were conducted to determine what is perceived to be necessary to have a successful REIT. Success can refer to any one, or all, of the following: a successful IPO offering, where the price in the after market exceed the initial offering price; the stock trades at a premium to the value of the underlying assets; or the stock trades at a high multiple (Price/FFO Multiple). Chapter Six carried this theme through quantitatively. Cross-sectional regression analyses

were conducted to determine if the checklist of criteria indicated qualitatively, could be statistically proven. The results were surprisingly different. Qualitatively, management and focused business strategy were the top two choices. Quantitatively, payout ratio and dividend yield accounted for most of the stock price multiple.

Chapter Seven offers industry opinions on the outlook for REITs as an investment vehicle. As the real estate market approaches a state of equilibrium, and the positive spread factor diminishes, the capital appreciation potential of REIT shares will be derived from internal growth capabilities more than by interest rates or other external economic factors.

CHAPTER ONE

REAL ESTATE INVESTMENT TRUSTS

AN OVERVIEW

A Familiar Investment Vehicle

The concept of securitization of assets has been around quite some time. Since the late eighteenth century, investors have been pooling large sums of funds for the intent of purchasing and developing real estate; they were structured as business trusts. The advantages of these trusts, which were also known as "Massachusetts trusts," disappeared with the Federal Tax Act of 1935 which ruled that the trusts would be taxed as corporations. This ruling was reversed with the enactment of the Real Estate Investment Trust Act of 1960. The REIT Act exempted business trusts from double taxation provided they complied with certain requirements; this left more income available for distribution to shareholders, thereby increasing yields and investor interest. REITs became an alternative to investing in partnerships or the corporate methods of real estate investing. [1]

Essentially, REITs provide an opportunity for small investors to invest in large-scale real estate that they otherwise would not be able to participate in. With REIT investing, there are no barriers to entry such as large down payments, high transaction costs, management intensiveness and illiquidity risk that are associated with direct real estate ownership. Investors with a small amount of capital can invest in a REIT and benefit from the tax advantages available and the freedom to sell his/her shares in the open market within a relatively short period.

For the developer or property owner considering a REIT, it provides an opportunity to access capital in the securities market that may otherwise be difficult to obtain. The decision to investigate the option is usually based on the need to restructure debt, dissolve tax ladened partnerships and/or obtain the greatest value for the real estate for the owner(s). Accompanying this liquidity, however, are some costs. It is a costly endeavor to securitize a portfolio of real estate and it is often difficult for long-time entrepreneurs to endure the scrutinizing of their balance sheets and having their every move questioned. Companies such as Merrill Lynch and Arthur Anderson & Co. consult and analyze on the feasibility of securitization from a real estate perspective for their financial and corporate clients. Richard Salzman, Merrill Lynch's managing director of the Investment Banking Real Estate Group explained it this way:

> Securitization transforms real estate into the equivalent of a corporate credit...Some firms are in such disastrous straits that they don't necessarily even have the capability of restructuring. While there are creative things we can do, there are limits...We have the most success with firms that have problems but who retain some financial stability and have enough wherewithal to absorb losses, as well as add a fair amount of value for themselves. [2]

In order to improve the likelihood of obtaining the "corporate credit," and launching a successful offering, decisions must be made as to which assets remain in the portfolio and which are eliminated. Kimco Realty Corporation, a shopping center REIT, had followed the directives indicated above, and was the first successful offering of any substantial size.

Types of REITs

REITs invest in real estate properties or mortgages with funds obtained from selling shares to investors. Usually REITs are publicly traded, but they may

remain private as well. Equity REITs, which will be the primary focus of this thesis, make direct investments in real property. Shareholders receive income from rents received from the properties and receive capital gains when the properties are sold at a profit. Shares of equity REITs reflect property values, rent trends and market sentiment about real estate. Mortgage REITs specialize in loan instruments and pass interest income to shareholders. Mortgage REITs fluctuate as market interest rates affect profits and suffer when rising interest rates squeeze profits. The third type is called a hybrid or "balanced" REIT, which is a combination of the former two. Generally if there is more than 25% of either one of the two types of REITs, then it would be considered a hybrid. [1] An industry profile of the assets by REIT type is shown in Table 1.1.

Table 1.1

Assets by REIT Type

	December 1991		**December 1992**		**through March 1993**	
Type of REIT	No. in Group	Assets ($millions)	No. in Group	Assets ($millions)	No. in Group	Assets ($millions)
Equity	137	$ 20,132.5	149	$ 22,817.3	155	$ 25,373.7
Mortgage	35	21,596.6	35	22,447.5	38	22,943.2
Hybrid	31	4,756.50	26	4,075.2	24	3,415.7
Total	203		210		217	

Source: NAREIT

Overall, equity REITs have outperformed mortgage REITs, are less volatile and have appreciation potential. Table 1.2 provides a summary of total return performance of all REITs over time.

Table 1.2

Returns by REIT Type

	3rd Qtr. 1992	4th Qtr. 1992	1 Year	3 Year	5 Year	10 Year
Equity REIT	3.8	6.8	14.6	9.6	10.2	13.4
Mortgage REIT	0.1	-2.9	1.9	3.1	-0.2	1.7
Hybrid REIT	7.6	8.6	16.6	5.2	1.8	5.4
All REIT Returns	3.6	4.9	12.2	8.0	6.6	8.4

Source: NAREIT

Most REITs exist perpetually, like corporations. A variation, known as the finite REIT, (FREIT), is a self-liquidating fund that aims to sell all of its assets by a predetermined date and distribute all of the proceeds to the investors. Most popular during the eighties, the typical holding period was between 10 and 20 years and after which time the REIT would liquidate by selling the assets to realize capital appreciation[1] or return of capital. [1] This concept has lost its popularity for at least one very obvious reason: timing. If the real estate market were soft at the time the REIT was scheduled to liquidate, with little active trading, the REIT may have been forced to sell at a discount. If times were good, and prices were promising to go higher than their existing levels, then there may have been a reluctance to sell, and any potential additional appreciation would be forfeited.

Another REIT which was popular a decade ago was the "blind pool" REIT. Rarely found today, blind pools raised funds before the REIT purchased or even identified any properties as targets. Especially if the management did not have an

[1]It was assumed that the value of the assets would appreciate over time.

established reputation or experience, investors ran the extra risk of irresponsible behavior with such an arrangement. In their place, REITs tend to be created for particular purposes, such as buying from the Resolution Trust Company (RTC) or to purchase a specific set of properties.

Qualifying as a REIT

By law, a REIT must be a corporation, business trust or association that is managed by a board of trustees or directors. In order to retain REIT status and exemption from federal taxation at the corporate level, a REIT must derive at least 75% of its gross income from real estate related activities such as rents, dividends, interest and gains from the sale of real estate properties. REITs must invest at least 75% of total assets in real estate assets (including, but not limited to land and improvements, mortgages, up to 10% in another REIT and cash items). At least 95% of its taxable income, (excluding capital gains), must be paid out in dividends. Also, REITs cannot derive more than 30% of gross income from the sale or disposition of real property held for less than four years, other than foreclosed property, so as not to classified as "dealers" of real estate. [1]

Until the passage of the Omnibus Budget Reconciliation Act of 1993, which was signed into law on August 10, 1993, REITs operated under a restriction known as the "Five-or-Fewer Rule," also called the 5/50 Rule. The 5/50 Rule was imposed to ensure that REIT shares were widely held and freely transferable. This rule provided that in order to qualify as a REIT, it had to have at least one hundred shareholders of record and five or fewer individuals could not own more than fifty

percent of the outstanding shares, determined by their fair market value.[2] The anticipation of many in the field is that the modifications provided in the Omnibus Act will attract pension fund investments. There is a disparity of opinions as to whether in fact this will occur. Industry professionals' opinions will be elaborated upon in Chapter Six. The changes to the five-or-fewer rule will permit any pension fund of significant size to own an unrestricted percentage of a REIT's outstanding shares without disqualifying the REIT's tax status.[3] This provision will not be in effect until December 31, 1993.

THE RISE, AND FALL, AND RISE, OF REITs

Aggregate REIT Performance Review

Equity trusts were the first REITs formed following the Real Estate Investment Trust Act of 1960. It took some time for the industry to gain momentum, only five new REITs were formed and total assets only grew to $1 billion by 1968. According to the industry trade association, National Association of Real Estate Investment Trusts, Inc. (NAREIT), from 1969 to 1972, the industry sold between $1 and $2 billion worth of securities each year. [1] Aggregate balance sheet data tabulated in **Exhibit 1** follows the growth, decline and subsequent recovery of the REIT industry from 1972 through 1992.

The most popular REITs during the early seventies were the mortgage REITs. From their 1973 and 1974 peak, at over $20 billion, total assets declined

---

[2]NAREIT. Legislative Bulletin, August 11, 1993.
[3]Ibid.

by nearly two-thirds over the next six years. It was the memory of this performance that created an overall negative image of the entire REIT industry. Unfortunately, the distinction is not often made to recognize that many of the equity REITs of that period survived rather nicely. Nineteen eighty, when total assets were at their lowest level ($7 billion), earmarked a turnaround for REITs. **Exhibit 1** clearly illustrates that as growth began to pick up, at an increasing pace, the volume of equity REITs (property owned) far exceeded the mortgage REITs. Today, at least eight individual REITs have market capitalizations over $1 billion and the entire industry capitalization is over $52 billion (equity REITs account for approximately half of this value).

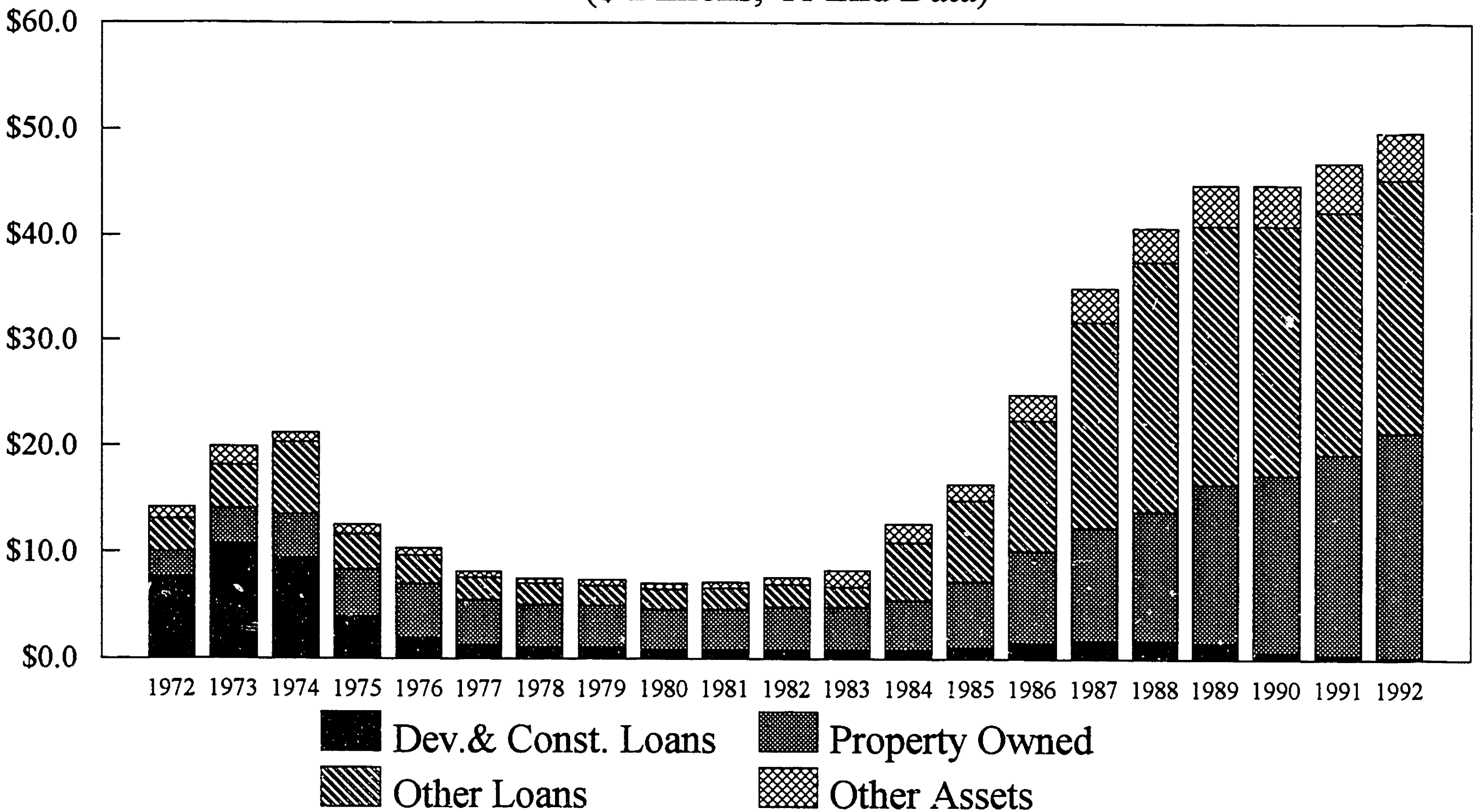
Reasons given for the explosive growth of REITs during the 1960s are the tight lending policies, which resulted in high interest rate and limited available funds for construction and development loans. [1] The credit crunch[4] during 1966 was closely followed by another in 1969, a time when the Federal Reserve as discouraging member banks from excessive lending and prevented banks from raising the prime rate to clear the market. [3] As a consequence, regulated financial institutions' available capital was considerably constricted due to the disintermediation[5] and loans for real estate could not be made. The life insurance companies were also unable to accommodate the demand for mortgage loans because they too, had locked their funds into high yielding bond instruments. [4] The only players willing and able to lend were the mortgage REITs.

---

[4]For a summary of Credit Crunches in the U.S. between 1966 and 1990 see **Exhibit 2** at the end of Chapter One.

[5]Disintermediation occurs when depositors or investors, seeking better yields, withdraw their savings from major institutional lenders and participate directly in financial markets. In this case it was the high yielding bond market.

EXHIBIT 1



Mortgage REITs' Exposure

The real estate construction boom of the early 1970s was funded by a surge in new mortgage REITs. [5] Mortgage REITs increased their earnings-per-share by issuing debt securities and borrowing from banks at lower interest rates than they earned from their investments. By 1972, construction and development loans accounted for over half of the industry investments. REITs began to rely heavily on short-term borrowing and made some speculative long-term loans. Starting in 1973, trusts began to encounter difficulties. Interest rates rose, a national recession took hold and American real estate markets became overbuilt. Builders, operating primarily on borrowed money, began to experience difficulty in selling their completed structures. At the same time, their interest expenses were rising because many short-term loans were tied to the rising prime rate. When the 1973-1975 recession struck and the floating rate soared, the mortgage REITs were caught in a very precarious position, and several became insolvent. [6] As more loans went into default, REITs began to fall out of favor due to dramatically declining earnings and foregone dividends. This mismatch of funds to assets was a primary reason for the REITs' sharp decline. Further, many REITs' loan loss provisions were inadequate, leaving them unprepared for widespread economic downturns.[6] "By December 1974, mortgage REITs declined 73% in value from their peak in 1972." [5] Land development and Construction loans fell from almost $9.5 billion in 1974 to less than $4 billion in 1975 and barely $2 billion in 1976. (Exhibit 1)

October, 1974 was described as "the worst bear market in common stocks since The Great Crash of 1929." [7] It warranted this description because by the

---

[6]NAREIT

time prices had bottomed out, market values had fallen more than 40 percent from what they had been two years earlier. In addition, "an overheated domestic economy and the rapacity of the OPEC countries had sent inflation soaring. In just a year and a half, the cost of living jumped 20 percent. No one emerged unscathed." [6] As discussed earlier, after 1974 all REITs followed the rest of the market on a downward slope, but it was the mortgage REITs that experienced the most catastrophic declines. Many equity REITs did, in fact, remain "unscathed." According to NAREIT records, sixty-three equity trusts maintained dividend payments throughout the real estate recession and continued the path of slow, steady growth as real estate industry fundamentals recovered.

NAREIT President Mark O. Decker affirmed that the problem of the seventies was attributed to the excesses of mortgage-investing REITs' participation in construction and development activities. [8] Another view is that of Morris L. Kramer, a New York tax attorney and a member of NAREIT's Board of Governors. His explanation for part of the demise in the 1960s and 1970s was that trusts became the "darlings of Wall Street; "

> You had every investment banking firm, bank and insurance company getting into the act. Every securities brokerage house pushed to get as many [REITs] going as possible because the fees they were generating were enormous. And the public was buying it...There was often insufficient investigation into the viability of the investments. The real problem stemmed from too much money having to be invested too quickly by too many people. [8]

Financial reporting practices have also been cited as part of the blame for the poor performance of REIT stocks. During the period 1961-1973, investors had faith in REITs. Financial reporting techniques encouraged investor optimism. Reporting practices gave no latitude to individual auditors who might have seen the potential risks. Later, during the period of investor disenchantment, financial

reporting reinforced the negative sentiment and switched from optimistic valuations to pessimistic treatment of REIT prospects. During the workout and recovery period which followed, financial reporting practices encouraged trust managers and auditors to set up large loss reserve provisions, offset against mortgages or real estate held. [9] It appears that they may have become overly reactionary by continuing to assert the need for excess reserves even after the market value of the trust's assets were rising.

A Period of Restructuring

The restructuring period for REITs stretched from 1976 to 1983, during which total industry assets stabilized at approximately $7.5 billion. Equity REITs accounted for over 40% of the total industry asset value. The total debt to equity ratio returned to the more acceptable 1:1, share prices doubled and dividend yields averaged between 8% and 10%. Real estate prices were rising and the value of the properties that the REITs had taken at foreclosure also began to rise.

In response to the negative impact of disintermediation a decade earlier, the financial institutions were deregulated in the early 1980s which helped to create a boom period for commercial real estate. REIT assets remained low for the first half of the 1980s as tax-motivated limited partnerships flooded the market and purchased properties which were popular with large institutional and foreign investors. The returns on direct real estate investing were more attractive than on REITs. To strengthen their position, REITs deleveraged during the first half of the 1980s due to high interest rates and the strong equity markets. [5]

The nation had begun to enter into another economic slowdown in the mid-eighties. Major economic markets were over built and investors began to question REITs' ability to meet expected yields. After the record breaking initial public offerings (IPOs) a couple of years before, REITs began to follow the sound of a different drum. "Cash flow-per-share growth, which averaged 13.0% annually in 1980-1985, declined to only 2.5% in the late 1980s...REITs compensated for their sluggish portfolio performance by boosting payout ratios." [5] Inflation and other economic factors started to affect REIT portfolios' performance and REITs could no longer sustain the high payout ratios. The crash of the eighties had done less damage than the seventies, but it served to remind investors of the potential pitfalls. This burst of activity in the direct markets came to an abrupt halt with the enactment of the Tax Reform Act of 1986.

The new codes adversely affected the tax shelter motivation for real estate ownership. The Act eliminated the tax incentives for projects acquired or developed after 1986 by lengthening depreciation schedules, and disallowing non-cash losses from passive investments as shelter income. Consequently, the REIT, which is an income oriented vehicle, was not negatively impacted by the tax code changes and gained favor against other real estate investment vehicles. The direct real estate market's loss was the REIT industry's gain. By the end of 1985, $4.3 billion in new capital was infused in REITs, and another 63 security offerings were completed in 1986, yielding $4.6 billion, **(Exhibit 3)**. Asset growth remained strong for the rest of the decade.

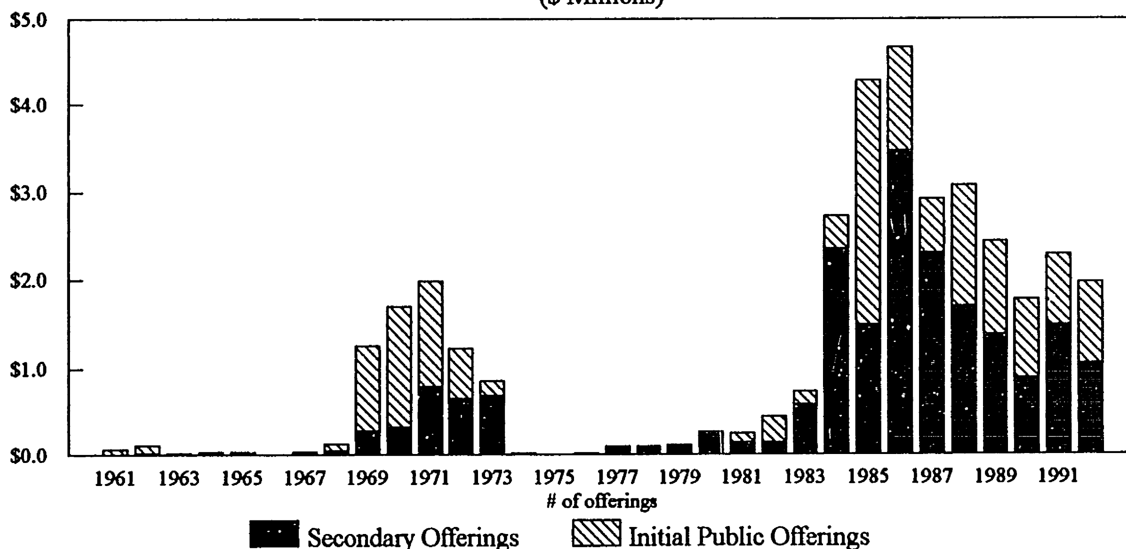
The Tax Reform Act of 1986 provided one other positive effect for REITs. A sentence was added to the Internal Revenue Code that no longer prevented a REIT

from providing tenant services at the REIT property level.[7] REITs had long been frustrated with Congress for not allowing them to manage their own properties. Congress' contention was that in order to remain exempt from corporate taxation, a REIT's income, derived from capital invested, had to be from passive investment activities. There had never been any restrictions against the REIT officers and employees conducting their own administrative, policy making and portfolio management, "white collar" functions. Whereas, the day to day operations such as landscaping, property maintenance and repairs, rent collections and other activities related directly to tenants, had to be performed by an independent contractor. REITs were finally able to gain operational control when a sentence, known as the "stub sentence" was included in the Tax Code. Attorney King maintains that the sentence is "murky" and still excludes REITs from performing certain activities. Nevertheless, it was an action that caused a turning point for REITs as they began to evolve from passively managed "mutual funds of real estate," to active, operating entities.

Nineteen-ninety was the REIT industry's 30th anniversary. By mid 1990, REITs were challenged once again. Not since the mid-seventies had real estate securities taken such a thrashing on Wall Street. At a time when the broader market was surging ahead, property related issues were experiencing new lows. The explanation was that the spree of overbuilding that had begun in the late seventies and continued into the mid-eighties had finally begun to affect even the strongest companies. [10]

[7]William B. King, Esq., Partner, Goodwin, Proctor & Hoar, Boston. Telephone Interview. August 23,1993

EXHIBIT 3



Source: NAREIT

HISTORICAL OFFERINGS OF SECURITIES BY REITS

	ALL OFFERINGS		INITIAL OFFERINGS		SECONDARY OFFERINGS	
	Number	Total ($ Millions)	Number	Total ($ Millions)	Number	Total ($ Millions)
1961	14	$71.90	14	$71.90	0	$0.00
1962	16	$105.90	12	$81.80	4	$24.10
1963	9	$25.80	6	$4.00	3	$21.80
1964	19	$36.20	11	$1.40	8	$34.80
1965	14	$32.60	5	$3.00	9	$29.60
1966	3	$5.80	1	$0.00	2	$5.80
1967	7	$41.50	1	$0.00	6	$41.50
1968	14	$122.40	4	$67.60	10	$54.80
1969	58	$1,256.70	33	$976.70	25	$280.00
1970	72	$1,687.40	41	$1,358.40	31	$329.00
1971	78	$1,987.30	32	$1,183.40	46	$803.90
1972	67	$1,223.30	29	$563.20	38	$660.10
1973	68	$852.10	18	$156.80	50	$695.30
1974	17	$23.70	5	$1.50	12	$22.20
1975	5	$0.40	1	$0.00	4	$0.40
1976	8	$19.70	0	$0.00	8	$19.70
1977	8	$91.90	0	$0.00	8	$91.90
1978	12	$91.50	3	$8.40	9	$83.10
1979	18	$110.50	4	$0.00	14	$110.50
1980	20	$264.00	4	$30.00	16	$234.00
1981	4	$244.70	5	$100.00	17	$144.70
1982	12	$453.60	3	$315.00	9	$138.60
1983	23	$741.00	4	$159.00	19	$582.30
1984	34	$2,729.90	9	$378.80	25	$2,351.10
1985	59	$4,270.60	29	$2,791.90	30	$1,478.70
1986	63	$4,668.90	20	$1,204.40	43	$3,464.00
1987	50	$2,929.20	12	$634.40	38	$2,294.00
1988	37	$3,069.20	13	$1,374.20	24	$1,695.00
1989	34	$2,440.80	11	$1,074.50	23	$1,366.00
1990	24	$1,765.20	10	$882.00	14	$883.00
1991	35	$2,288.60	8	$808.40	27	$1,480.00
1992	32	$1,973.62	8	$919.12	24	$1,054.50

Source: REIT Sourcebook 1992 Edition

A veteran in the industry anticipated, "When this is all over, it's going to make what happened in the mid-seventies look like a walk in the park." What was happening to property related issues was only a reflection of the generally tough conditions in real estate markets nationwide. REIT prices declined sharply in 1990 as REITs finally reduced their dividends. Through the end of September 1990, equity REITs were showing a negative 17.95% total return in contrast to the S&P 500 posting of negative 11.07% total return (with reinvested dividends).[8] One analyst stated that things would have looked much worse if the health care REITs had not posted positive returns which helped the overall REIT picture. [11]

Early in the 1990-1992 period, a new version of a "credit crunch" emerged. Unlike the crunch of the sixties, this tightening of credit was the product an amalgamation of events: the bursting of the financial bubble of the 1980s, which included the stock market crash of October 1987, followed by another collapse in 1989, the signing the Financial Institution Reform Recovery and Enforcement Act (FIRREA) in August 1989, the bankruptcy of Drexel in February 1990, to name a few, in addition to the repercussion of the S&L crisis and a toughening of capital ratios by domestic bank regulators. [3]

As the traditional market for real estate financing constricted, real estate developers and investors went once again to the public markets for capital. But this time the market was more careful. A number of offerings never went to market; they were met with heavy criticism based on perceived conflicts of interest, mispricing and other concerns. Green Street Advisors Inc., a boutique firm providing independent research on publicly traded real-estate securities to

[8]NAREIT

institutional investors, explained that "Mispricing generally occurs when issuers believe their appraisals and aren't willing to take a penny less." [12] There was at least a two year time delay before many real estate owners, enamored by the skyrocketing increases in their properties' values during the eighties, began to realize that the rocket had not only landed, but crashed.

"After prices stabilized at lower levels, the investment appeal of using selected REITs to 'cherry pick' in the depressed real estate markets attracted fresh capital and asset growth resumed in 1991." [5] By the third quarter of 1991, stocks were up by nearly 30%, CDs were at a low of 5% and investors were looking for higher yields in other vehicles. REITs were able to fulfill that requirement, (the average yield for equity REITS as of 9/30/91 was 8.1%). Even though dividends declined faster than cash flow and REITs' payout ratio became more conservative, the outlook from industry analysts for REITs was optimistic. The impetus behind the optimism was that many real estate stocks were at prices well below estimated value of underlying assets. Also, interest and mortgage rates were depressed, so the REITs would be able to refinance debt, and no new construction was occurring (narrowing the gap between supply and demand). [13]

At the end of 1992, the real estate market was still flat. Delinquencies for insurance companies were at an all time high, tenant bankruptcies were prevalent, vacancy rates were in the double digits, especially in the office sector, and rents were still rolling down as leases turned over. [14] This forced many properties into cash-flow crises. Compounding the real estate market inactivity were the stringent underwriting standards and due-diligence processes required by lenders. Though borrowers were frustrated with their inability to obtain the necessary leverage, lenders were unmoved by the borrowers' calls to offer underwriting relief.

Many believe that this tendency to maintain unduly strict standards, was in direct response to the haphazard underwriting standards of old. Nineteen ninety-two was an active and successful year for REITS. According to NAREIT, eight new REITs were created raising $919.2 million; five of them were publicly traded equity offerings totaling $713.1 million. Additionally, $1 billion in equity capital was raised through secondary offerings. A combination of managements' belt tightening, conservative acquisitions and focused business strategy, all may have contributed to the market's encouraging outlook towards REITs as a viable investment opportunity.

The market has already experienced a price correction since last year, but performance and interest in Equity REITs has surged. Through mid-August 1993, twenty-three new REIT offerings closed, raising over $3.8 billion dollars, (all but one were equity REITs)[9]. With another quarter left in the year, 1993 may proceed to be the most active IPO year in over two decades. Today, the average equity REIT dividend yield is approximately 6.5%. This figure is down from the annualized yield of 7.04% reported in April 1993, but are still more attractive than CD and Treasury rates at all time lows.

The Window of Opportunity

Each investment category, whether it is in security, commodity or real estate form, takes its turn in the limelight as the financial world shifts and business cycles turn. It appears as though the REIT industry has overcome its checkered past, is enjoying a terrific present and has an optimistic future (at least for the

[9]Diane Long. NAREIT Research Dept. Interview August 23, 1993.

next few years). The market is continually undergoing changes, legally, structurally and operationally, in order to create a more stable and healthy industry for investing opportunities for private and institutional investors and the REIT entity itself. Bruce Garrison, Senior Vice President and Analyst at Kidder Peabody exclaimed,

> For the first time in my twenty year career, "the playing field is level." REITs are so perfectly positioned, we have to educate investors. Keep in mind what has happened in the world of finance: Wall Street, stocks, bonds and real estate: completely separate but parallel tracks; completely separate groups of individuals buying and selling, and rarely did these lines ever cross. And we're in the midst of what I call, one of the best transfers of wealth in our nation's history. But we're dealing with a very uneducated buyer, so its kind of a slow process.[10]

LESSONS LEARNED

How the REITs of the Nineties Differ

The REITs of the nineties are being shaped, for the most part, by lessons learned from the past. The financial community discovered several weaknesses in REIT structures and are taking steps to eliminate the negative image they developed in the seventies and eighties. Joseph H. Carter, President of Dial REIT saw it this way,

> The current investment image of the real estate industry isn't great, largely because of the overzealous financing and building of the 1980s that effectively forced the industry to do a painful self-evaluation of its practices and philosophies. [8]

[10]Interview, July 23, 1993.

This self evaluation which occurred in the direct real estate markets filtered down to the REIT investment level. Seemingly, REITs are no longer viewed as merely an investment in securitized real estate; by owning shares in a REIT one is buying into an on-going, real estate operating company.

Unlike the boom of REITs in the 1970s, and even in the 1980s when the real estate prices and rents surged, investors are not counting on high returns based on appreciation in real estate property values. Instead, their attention has turned inwardly towards the REIT's competence and its ability to generate steady yields based on the properties' income stream. Current yield is the primary factor motivating REIT investors today. Cydney Donnell manages several real estate securities portfolios at European Investors. She believes that

> The number one lesson that everyone in the real estate industry has learned is that real estate has utilitarian value, and you must be aware of the true demand for your product. There's been, as a result of this, a big rise in the sophistication level of the development and management community. [15]

Commenting on the more conservative nature of REITs today, Seth Werner, a Miami investor who sold his First Capital Financial to Sam Zell of Chicago, explains that decisions are based on fundamental economics and actual numbers, not pro-forma figures.

> In the 1970s, you could almost be a moron and make money in real estate. Before, the forces were inflation, non-recourse fixed rate financing and a good balance of supply and demand. Now you have an oversupply, no inflation and no tax benefits. I don't think you'll see Wall Street jumping back in and doing massive numbers of transactions. Instead, it's going to be done with those people and companies they have confidence in. [16]

As it turns out, Wall Street has jumped in, and is involved in an astounding number of transactions today. In general, most of the new REITs are following a

framework that makes the management more accountable, thereby generating greater investor acceptance. As the REIT industry began to change its image, the first notable transformation was the decline in mortgage REITs. Unlike the blind pool or finite tactics, today's more conservative REITs have placed an emphasis on a few key areas - focused and long term strategies, improved alignment of interests between management and the shareholders and an elimination of conflicts via revised fee structures.

The composition of the REIT has come full circle. In the mid-eighties, most equity REITs' portfolios were diversified, consisting of a mix of property types located across the nation. The popular REIT of the nineties is concentrated by industry (retail, health care), by property type (shopping centers, office, apartments) and/or by location (east of the Mississippi, Washington D.C.). The assumption behind this tenet is that the investor is sophisticated enough to assemble his/her own diversified portfolio by investing in REIT shares of different specialties.

Land development and new construction are rarely undertaken unless the proposed building has been pre-leased or it is in a market area where the supply and demand factors for that property type can support it. When the properties are established and the leases are stabilized, the shareholders have some comfort in the expected yield and future dividend distributions

> We now witness a new found discipline to evaluate income-producing properties based upon the pure economics in place today...In addition, the definition of cash flow used to underwrite real estate is more conservative. (No longer can the owners disguise deteriorating fundamentals impacting those properties by capitalizing the expenditures required to maintain a rental income stream).[11]

---

[11]Bruce Garrison, Kidder Peabody. Interview, July 23, 1993.

Thomas E. Robinson, Director of REIT advisory services for Coopers and Lybrand, upholds that "the success of the REITs of the 1990s is dependent upon their own management and performance as opposed to transaction driven earnings." [8] Prior to the "stub sentence" provision in 1986, there were many layers between the shareholder and the source of the REITs income. Further, there was the question of loyalty of the third party advisors or independent contractors. Beyond the issue of operational control, the greatest dissatisfaction lay with the compensation structure. During the seventies, the prevalent method of payment was fee-for-services; the more services performed, the higher the fees. Some advisors received an annual fee computed as a percent of REIT assets. [4] Asset based management fees, it had been discovered, created incentives for the advisor to buy assets regardless of their quality or price. The higher the price paid for the property, again, the higher the fee earned. Consequently, conflict of interest situations were widespread.

Treatment of fee structures and incentives marks a critical difference between today's REITs and their predecessors. The sponsor is more likely to directly administer the REIT, own a substantial interest in and directly manage the REIT property. Institutional investors favor incentives tied to performance. "If cash flow per share rises over a pre-set amount, for example, senior management might receive bonuses or stock options," [17] In this way, many of the conflicts inherent in the 1970s are eliminated, at least at this level.

A New REIT - The UPREIT

The newest REIT formation, the Umbrella Partnership REIT, known as the "UPREIT," is often the topic of controversy. The UPREIT structure is not an economically driven vehicle, but was created as a technical solution to the technical problems of tax-burdened real estate owners and partnerships. The structure allows real estate owners to pool properties in *exchange* for individual units, for an interest in a larger umbrella partnership which provides the partners with greater liquidity and an escape from immediate taxation. [20] **Exhibit** 4 differentiates the traditional REIT from the UPREIT structure. Alex. Brown & Sons best describes it with the most clarity.

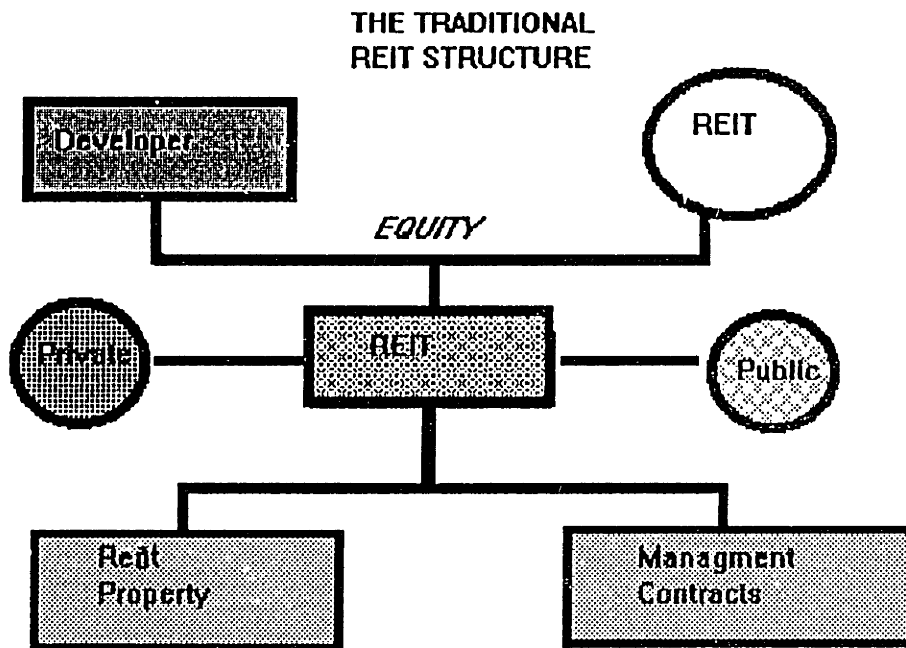
> An UPREIT, rather than owning a direct investment in its portfolio of properties, owns a partnership interest in what is typically a commonly managed, multi-property partnership referred to as an Umbrella Partnership. After paying all of the portfolio operating costs owed by the umbrella partners, the Umbrella Partnership makes a distribution to its partners on a pro rata basis, one of which is the REIT. The REIT in turn, will distribute to its shareholders substantially all of its partnership distribution in the form of a dividend after deducting administrative and public company costs.[12]

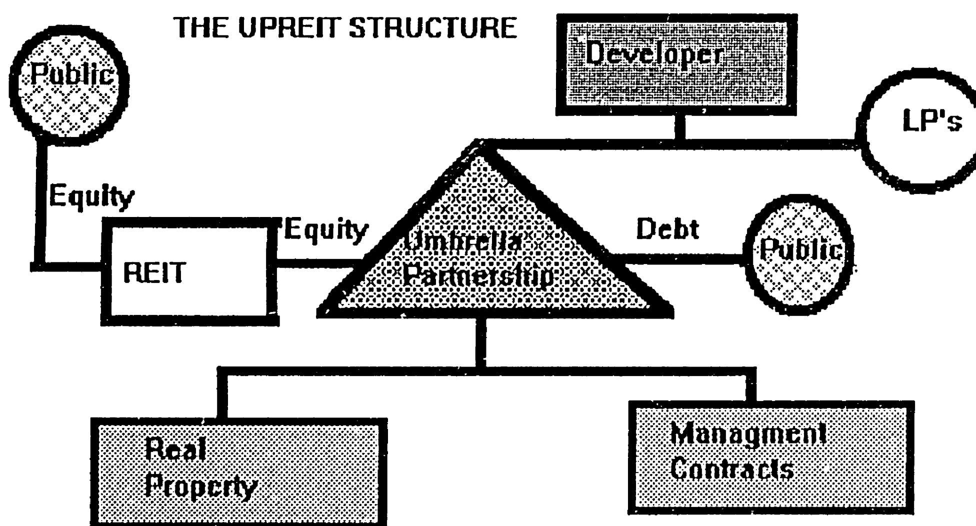
Under REIT income rules, the ownership of partnership interests are treated the same as ownership of the full interest in the property. The UPREIT structure does not protect the transferors, the original partners with the low basis, from tax consequences if a property is refinanced or sold. The inherent flaw is that the UPREIT structure is driven by tax motives for the benefit of the partners, not pure economic decisions for the benefit of the shareholder. If the sale of a property triggers a taxable event to an original owner he may desire to stop the sale, therein lies the potentiality of a conflict of interest. It does beg the question, when was the last time that a large property owner, REIT or otherwise, sold a property instead of a tax-free swap?

---

[12]Alex. Brown & Sons, Real Estate Stocks Monitor. September 1992.

EXHIBIT 4





Source: Arthur Anderson. Real Estate Perspectives - The Quarterly Report

Once these REITs go through an IPO, they will acquire new interests in basically the same way as traditional REITs, or they may form other partnerships to bring property into the umbrella structure. Because UPREITs can be extremely complicated transactions from a tax, legal and marketing perspective, consequently, it is factored into the pricing of these securities.

COVERING ALL BASES - A SUCCESSFUL OFFERING

The "Milestone" REIT

After an unsuccessful attempt to form a REIT two years earlier, Kimco delivered a REIT in November, 1991 which was the first successful offering of its size since 1988, raising $128 million. Within one year it achieved total capitalization that exceeded $443 million through appreciation and additional equity offerings [18] Kimco had hired Green Street Advisors to determine if there was a market for another REIT. A survey of institutional investors indicated that there was. Also, Green Street was retained to ensure that the REIT was free from conflict of interest charges and mispricing. [12] Alex. Brown & Sons' February 1992 Stock Review cited Kimco's success as "an important REIT milestone". Kimco was the springboard for many other REIT offerings of significant size.

Preparing for the Public Market

It was the shift in financing that pushed Milton Cooper, President of Kimco Corp. to take his company public. Kimco had been in operation since 1966. Cooper wanted to have a permanent equity base to instigate change and to have

capital available in the event his retail tenants needed financing. Upon deciding to go public, Cooper knew that it would not be an easy task. It was impo nt to portray independence and an absence of conflicts

> In order to have a successful public offering the portfolio had to be pristine. We had properties with bankrupt tenants, some joint ventures, and others with participating mortgages. To have a pristine issue, yet avoid any conflict, we put those properties in Kimco Holding, a separate company. (there were 45 properties in total) [19]

Kimco regularly audited itself, even as a private firm, which made it easier when they went public. [19] There is an independent board. All interests are perfectly well aligned and Kimco management retained 34% ownership of the REIT.

Focused Business Strategy

Kimco Realty Corporation's IPO is focused by property and by region. One hundred twenty four community shopping centers in 23 states (on the East Coast and Midwest) were included in the REIT. The trust's investment strategy is to acquire shopping centers whose cash flow and property values can be enhanced through strategic re-tenanting, renovation and expansion. Kimco essentially ceased ground-up development in 1981, missing the boom and the glut of the eighties. While it stopped developing it did not stop growing, portfolio growth came from acquisitions. The focus shifted from a 90/10 mix of development to acquisitions to a 95/5 mix of acquisitions to development.[13]

[13]Standard & Poor's Real Estate Securities Stock Reports. 1993

Fully Integrated

Kimco is a full service company. It has the internal resources to handle its own leasing, renovations and rehabilitation of the properties, acquisitions, property management, accounting, legal, architecture and other functions. It also has a sophisticated computer system that allows a relatively small staff to track the entire portfolio. The claim is that their extensive data banks help the company determine the optimum mix of tenants for each shopping center.

Debt

As a result of Kimco's successful offering, the debt burden was significantly reduced. Debt to equity was reduced from 70% before the REIT to 49%. The remainder of the funds can be used for acquiring new properties as they come available.[14] Despite the debt reduction, it is still a higher share than most REITs. Of greatest concern is the floating rate debt component. It has been said that Cooper consciously made the decision to convert fixed rate debt to a floating rate, anticipating that the market would remain in the doldrums and rates would stay low. It has worked in his favor so far, but this advantageous position is temporary and the interest risk remains.

Dividend Security

A substantial portion of Kimco's income is rent derived from long term leases, most of which provide for base rents and a pro rata share of expenses.

---

[14]Ibid. and Alex. Brown & Sons.

Approximately 60% of the leases also have percentage rent clauses incorporated. Roughly 20% of annual base revenues are from four large retail tenants (Kmart, TJX Companies, Kohls Department Stores and Schottenstein). Since troubled retailers vacated their space, KIMCO released it to other strong retail names. In its IPO prospectus, the trust intended pay out 90% of its funds from operations (FFO). As of May 1993, it was only paying out 75%. The history is short, but the expectation is that dividends will remain stable and there is adequate room for growth.[15]

Cooper took the time to find out what investors really wanted and what the market required for the offering to be successful. Kimco is following a focused and practical strategy. The team's sharp asset management skills will continue to have a strong impact on Kimco's reputation and bottom line.

---

[15]Ibid.

Exhibit 2

Summary of U.S. Credit Crunches

Credit Crunch Year	Rising Interest Rates?	Disin-termed-iation?	Other Shocks	Recession ?	Federal Reserve Easing?	Other Policy Responses	Regulatory and Market Reforms
1966	Yes	Yes	Federal Reserve sent a letter to member banks discouraging excessive lending. President and Congress also called for credit restraint.	"Mini"	Yes	Regulation Q ceilings on savings accounts were held in place while ceilings on large time deposits were raised substantially. Discount window access eased.	Corporate borrowers demanded formal credit lines. Banks gained access to Euromarket liquidity.
1969	Yes	Yes	President and Congress called for credit restraint. Political constraints prevented banks from raising prime rate to clear the market. Penn Central default; run on commercial paper market.	Yes	Yes	Regulation Q ceilings on savings accounts were increased slightly, while ceilings on large time deposits were raised substantially. Discount window access eased.	Switch to policy based on monetary aggregates. Elimination of Regulation Q for large time deposits.
1974	Yes	Yes	Oil shock; New York City budget crisis. Commercial real estate market collapse. Failures of Franklin National Bank and Herstatt. Prime rate held below federal funds rate.	Yes	Yes	Regulation Q ceilings suspended in 1973	n/a
1980	Yes	Yes	Change in Fed operating procedures. Oil shock; Carter credit controls	Yes	Yes	Credit controls lifted	Legislation phasing out Regulation Q ceilings
1982	Yes	Yes	Failures of Drysdale, Penn Square, and Continental Illinois. LDC debt crisis	Yes	Yes	Regulatory forbearance on LDC debt	More stringent bank capital requirements. Change in monetary policy operating procedures. Acceleration of Regulation Q phaseout.
1990	Rates peaked early in 1989	Banks & thrifts lost deposits but did not bid aggress-ively to keep them.	The thrift problem and the passage of the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) in late 1989. Collapse of markets for commercial real estate and junk bonds. Bank Capital crunch	Yes	Yes	Banks encouraged to lend by regulators and politicians. Examination standards regarding commercial real estate lending were clarified. Reserve requirements reduced.	Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) further tightened regulatory oversight of depository institutions.

Source: Federal Reserve Bank of New York - Quarterly Review. Spring 1993

CHAPTER TWO

MONEY MARKETS, REAL ESTATE & REITS

REITs: REAL ESTATE OR STOCK

Real estate and the money markets have always been linked. Due to this interdependence, real estate is sensitive to monetary fluctuations, creating volatility in the assets' market values. [21] Now, with the trend toward securitization of real estate, the relationship between real estate and money markets is becoming even stronger.

Notwithstanding the fact that REITs have been in existence for decades, it seems that the industry is not yet comfortable with how to treat them: as stock or as real estate. Tomes of literature have been written on the subject of securitized real estate. Researchers are constantly publishing their own research findings, opinions on others' findings and new empirical evidence. Researchers have analyzed, re-analyzed and continue to pore over this issue, especially as more data becomes available with time.

As a result of this valuable research, it appears as though the answer to the question of whether REITs act more like real estate or stock is becoming more evident and is slowly being accepted in the industry. Equity REIT performance is more closely aligned with that of capital market vehicles, bonds and stocks, than with real estate. More specifically, studies suggest that REITs are most closely correlated with small stock indices. [22]

This chapter explores real estate's tie to capital markets and the effects of macro-economic conditions on real estate and REITs, with the focus remaining on equity REITs. There will be some discussion regarding the search for an index that best correlates with REIT returns.

THE INSEPARABLE LINK

Ken Statz, Senior Analyst at Goldman Sachs Investment Research, made this statement:

> Lenders, investors, all bought the premise that real estate trades in a different capital market than any other industry. This just is not true.[16]

Rightly so; but as the academics and the industry professionals are becoming more educated about the multifaceted relationship between real estate, the money markets and securities, the texture of the real estate industry continues to change. The concept of securitization of real estate is no longer a novelty; more and more, industry giants such as the Rockefellers and Taubmans are aligning themselves with the capital markets.

The increasing alignment is attributed largely to the "fundamental changes in the ways individuals and institutions look at real estate investment in this era marked by overbuilding, major shifts in federal tax policy, the 1987 stock market crash and other developments."[17] Relevant, too is the maturity of the REIT industry, changes within the industry itself and the accumulated experience of those who have applied and modified the REIT concept in many ways."[18]

---

[16]Interview, July 20, 1993
[17]Coopers & Lybrand Real Estate Newsletter. Winter 1990.
[18]Ibid.

This alignment also has much to do with the availability and cost of capital. To illustrate the inseparable link between real estate and money markets, one only has to look at the cost of money. Interest rates can influence the feasibility of acquiring or developing a project. They are also used to determine property values via the industry-standard "cap rate,"[19] which ultimately affects overall real estate market activity. The Federal Reserve has the power to quickly and drastically expand or contract the money supply and credit. The imposition of regulatory restrictions upon lending institutions, or any number of actions on the part of the Federal Reserve, directly influences the real estate industry via the supply and cost conditions throughout the capital markets.

Presently, commercial banks, thrifts and insurance companies are still on the lending sidelines following the financial credit crisis in the late 1980s and the result of over-extended lending on inflated real estate. A consequence of the higher-risk lending that the banks and other institutions participated in, is a reduction in capital available for loans and the creation a large pool of troubled properties that are now being liquidated at significant losses. Not only have these traditional financing sources withered, but those who are attempting to make loans are being overly cautious and demanding of borrowers. The capital market has been successfully filling the void and is providing real estate borrowers with the necessary capital to take advantage of market opportunities at profitable returns.

Fortunately for REITs, these forces are working in their favor, at least for now. The cost of funds are low while returns on new acquisitions are 3 to 4% higher, providing a growth opportunity through positive spread investing. In

---

[19]Capitalization rates are technically the ratio between net operating income and the market value of the property. Value = NOI/required rate of return.

addition, there is ample capital available for real estate in the public market as evidenced by the onslaught of recent equity REIT IPOs.

> Since all real property investments involve the placement of money in ventures in anticipation of monetary returns, and their values are judged by discounting earnings at money rates; it is difficult to conceive a topic more important to the real estate world than the forces that affect the cost and availability of money. [21]

Change is inevitable. It would be very difficult to predict the factors of the next economic cycle, too many variables can vary: GNP, employment, interest rates, availability of credit, inflation - the list can go on. If interest rates rose, REITs' cost of debt would increase causing profitability to decline; further, the current yields on other investments may appear more attractive on a risk adjusted basis. The investor's required rate of return (also referred to as discount rate or cap rate) incorporates investor requirements for current returns an the expectation of appreciation. "Variations in yields occur because of changing perceptions of the riskiness of holding various underlying assets." [23] Beyond interest rates, other influences include supply and demand cycles, the expectation of tax law changes or inflation. The changing cost of money is a critical aspect of an examination of real estate and capital markets, and at the heart of it is inflation.

> The success of the Federal Reserve in reducing the rate of inflation had a much bigger effect on the real user cost of capital for [owners of real estate] than did the legislated changes in the tax law itself. It is because tax rules ignore inflation, and base tax obligations on nominal receipts and nominal costs, that the decline of inflation caused substantial changes in the real user cost of capital.[20]

[20]Martin Feldstein is a Professor of Economics, Harvard University, and President of the National Bureau of Economic Research. This "Discussion" piece was published from the proceedings of a conference held in September 1992, sponsored by the Federal Reserve Bank of Boston. The topic was "Real Estate and the Credit Crunch."

DO REITS PROVIDE AN INFLATION HEDGE?

Inflation is a subject that has always gone hand in hand with a discussion about real estate. Does the presence of real estate in a portfolio provide a hedge against inflation? Not necessarily. However, some property types are better at offsetting inflation effects than others.[21] [24] Have REITs, as the real estate proxy, therefore become the real estate substitute for inflation protection? The answer from the industry experts is an emphatic "NO."

One industry practitioner is Martin Cohen, President of Cohen and Steers Capital Management Inc.,[22] which manages real estate securities portfolios on behalf of institutional investors. He expressed his opinion this way:

> Sooner or later real estate does respond to inflation like everything else. I think that is another myth that real estate people created in the '70s because pension funds wanted to *hedge* against inflation. So they created the illusion, or created the theory, that real estate was an inflation hedge. If inflation rises, so will rents; but so will house prices, cars and bananas - look at any asset, and you will see a strong correlation with all of them.[23]

An alternate perspective on inflation is provided by Marc Louargand, MIT lecturer, professional portfolio manager and this thesis advisor. Louargand explains,

> The market must be in equilibrium in order for real estate to act as an inflation hedge or if there is high inflation at a time when you

---

[21]Denise DiPasquale & William Wheaton, in their forthcoming book, The Economics of Real Estate Markets, found that residential property tracked inflation across all 44 markets tracked by the Rental Index.

[22]Principals, Martin Cohen & Robert Steers also manage an Equity REIT investment fund, Real Estate Securities Income Fund, Inc., that had over $21 million in assets as of 12/31/92.

[23]Interview, July 20, 1993

> have explosive demand for space. Prices will not rise unless there is demand in excess of the current supply of real estate.

A team of researchers analyzed the economic forces that determine the real rate of return for nonresidential real estate. Their conclusion is that real estate does keep up with expected inflation, but does not outperform it. Their analysis shows that the impact of expected inflation on real estate rates of return is likely to depend upon the macro-environment and specific local market conditions. In "hot" markets, where the demand for real estate exceeds supply, an "increase in expected inflation will lead to unanticipated increases in real estate rates of return; and in cool markets, this may not occur." [25] As Cohen had suggested, such an effect may occur regardless, and if the reaction is not immediate, there will be an eventual adjustment. Jeff Helton, REIT analyst at Kidder, Peabody & Co., explains REITs' reaction to exogenous economic factors this way:

> REITs would suffer from rising interest rates just like stocks would; they're pretty similar in how they behave in that regard... I don't think [REITs] are being bought as inflation hedges now. But [consider] occupancy. If interest rates are going up, it implies that the economy is heating up and you'd presumably have more economic activity: an increase in demand, higher occupancy rates, the ability to raise rents and percentage rents would go up.[24]

Motivated by contradictory findings in literature concerning the inflation-hedging characteristics of financial and real assets, Park, Mullineaux and Chew [26] investigated the relationship between REITs and two different measures of anticipated inflation. The first proxy that they used for the inflation variable was the Treasury bill rate and the second measure was derived from a survey of economists. They conclude that REITs, acting like equities, fail as hedges. Similar results were obtained when the Producer Price Index replaced the CPI in the regression. [26]

---

[24]Interview, July 20, 1993.

Likewise, Chan, Hendershott and Sanders found three factors, plus the change in the discount on closed-end stock funds, that consistently drive both real estate and stock market returns: (1) changes in the risk, (2) changes in the term structure, and (3) unexpected inflation. What is significant in their findings is that equity REIT returns are substantially less sensitive (they claim about 60% as much) to these three events than stock returns. Also, because unexpected inflation has a negative impact, they affirm that real estate is not a hedge against unexpected inflation. [27]

A Working Paper entitled, Real Estate and the Next Recession, published in 1989 by Massachusetts Institute of Technology, addressed the continual changing economy and the effects on REITs and real estate. The authors, Lynne B. Sagalyn and Marc A. Louargand, concluded that different property types react differently during a recession and that all recessions are not alike. **Exhibit 1** summarizes their findings of property performance under different economic periods. Further, they found that properties bundled in securitized fashion behaved radically different from direct holdings under certain economic conditions.

The recession between 1974 and 1975 lasted five quarters and was accompanied by high inflation and energy shocks associated with the oil crisis. Real estate conditions were soft at the time. The second recession occurred between 1981 and 1982 during a tight real estate market. It lasted seven quarters, and though the inflation levels were lower than the former recession, this one was accompanied by an oil crisis, plus tight monetary policy. [24]

According to Sagalyn and Louargand, both direct investments and real estate securities posted negative inflation-adjusted returns in 1974-75 and strong positive

returns in 1981-82, "making it difficult to generalize about real estate's recessionary performance without knowing more about the particular recession."

Possibly, the already strong real estate market in the early 1980s, coupled with double digit inflation, fueled the rental rates' upward spiral and the market perception that they would continue to escalate. As a result of the market believing that property values were higher, and would stay at a high level, returns also increased. With hindsight, we know the consequences of that mindset: lax lending standards, overbuilding and market distress.

Sagalyn elaborated on the uniqueness of each recession in a later paper. [28] She explains that it is difficult to make generalizations about how real estate securities will perform during recessions because "economic cycles in the recent past have not run in tandem with construction cycles." Using a single index Capital Asset Pricing Model (CAPM), she found no statistically significant difference between the estimates of market risk (betas) for equity REITs for the two recessionary periods described. Sagalyn interprets the difference of the lower volatilities and higher returns in the 1980s than in the 1970s in part due to "the market's perceptions of divergent real estate fundamentals during this period," and in part to "the [REIT] industry's problems at the time."

Another result of the Sagalyn and Louargand study was that total REIT returns were higher, and more volatile, than directly held real estate during the same fourteen periods, even though the cash flow streams of the underlying, income-producing assets were relatively stable. The authors conclude that the increased volatility is the "trade-off" for the liquidity that securitization provides.

EXHIBIT 1

BUSINESS SECTOR	***REAL ESTATE PERFORMANCE (1973-1987) Direct Real Estate Holdings***
OFFICE BUILDINGS "An Uneven Track Record"	• Most sensitive real estate sector to macro influences. • Rents more influenced by construction cycle & supply than by inflation and business cycle. • Noticeable difference in income returns during high and low growth of Real GNP. • Suburban investments are more volatile& offer lower yields than CBDs.
INDUSTRIAL/ WAREHOUSE "Banking on Land Use Succession"	• Most stable, lowest risk of all sectors; steady income producers. Opportunity for re-use of land. • Inflation protection due to net leases but greater potential for price volatility. • Least sensitive to business cycles. No change income during high and low growth of GNP. • Supply & demand closely tracked recession & recovery phases of cycle.
RETAIL/ SHOPPING CENTERS "Solid Performance and New Opportunities"	• Performance reflects two investment characteristics: (1) stable, long-term credit leases = steady income yields (2) expectations of consumer spending = volatile valuations • Despite potential upside from percentage rents, not superior inflation hedge. • If new construction slows, older properties will be upgraded to institutional-quality status.
APARTMENTS "Sensitive to Local Pipeline Patterns"	• Less sensitive to economy wide business fluctuations • Sensitive to local economic conditions and supply constraints. • Relatively good hedge against inflation.

Source: L. Sagalyn, M. Louargand

Sagalyn explains that REIT returns may be less sensitive to declines in economic growth versus industrial firms or real estate development companies because of the nature of their earnings. REITs' earnings are tied to multi-year leases, providing a steady stream of cash flow, versus an industrial company (stock), whose earnings are tied to manufacturing activity which is subject to greater sensitivity to the economic environment. [28] Moreover, she explains that

the volatility of REITs versus direct investments can be explained by the difference in the methods used to establish value:

> In securities markets, expectations about future interest rates and business activity are stated and restated through continuous trading by numerous investors, in contrast to periodic estimates captured by private appraisal valuations of direct holdings (which are infrequently traded) made by knowledgeable professionals. [28]

REAL ESTATE AND SECURITIES PRICING: WORLDS APART

It is these "knowledgeable professionals" mentioned above that have the industry specialists up at arms over appraisal data. "An appraiser (even the most prestigious MAI) is never completely independent because he is hired by someone who has a stake in the outcome of the appraisal." [29] The opinion of value is subjective in nature and due to the costliness and the lack of ample market transaction data (due to illiquidity), appraisals are infrequently conducted. For these reasons, and others, there has been much controversy over the subject, sparking endless research studies.

The difference between the way the real estate asset is priced and the way the real estate security is valued is striking. Unlike other investments, real estate is one of the few assets that is not marked to market. Stocks and bonds, which are priced daily in an auction environment, preserved by the laws of supply and demand, are very liquid and trade within a highly efficient system. The approach to valuing equity real estate, by comparison, is archaic, where the value may be determined at one single point in time during a given year, and that value remains until at least the following year when another appraisal is completed.

The Appraisal Institute generally uses three approaches to valuing real estate: the Cost Approach, Comparable Sales Approach and Income Approach. The first one is not really relevant today. The limitations of the comparative method are frequently cited. It is difficult to obtain an objective valuation when actual transactions occur sporadically, and are rarely of comparable nature, especially of institutional grade property. Further, every deal possesses a unique mix of elements. Examples of these transaction-specific elements include, and certainly are not limited to, undisclosed terms of financing, environmental issues, distinct property nuances, tenancy characteristics, seller motivation and urgency of sale - all of which affect value. It is then up to the discretion of the valuer to "guesstimate" the value of the differences in elements, and weigh the impact of local factors upon the project, hence, the controversial "appraisal bias."

Appraising is not a science. The methodology, sample size, choice of cap rate, time frame, and interpretation of exogenous factors, will vary from one valuer to the next, thereby producing different results for the same property. Earlier in this chapter, the imminence of change was discussed. Since change is inevitable, it must be considered and accounted for by the valuer. "Change occurs in diverse patterns; therefore valuation can be mercurial." [21] Given the cost of conducting appraisals, it is unlikely that owners of multiple properties will have them appraised often enough, or within the same economic period, to capture the effects of these changes.

"If relevant information (i.e. some macroeconomic variable that affects asset prices) enters the market as random shocks, then these shocks would be expected to impact stock and bond prices immediately. Their effect on real estate values

would be spread over several periods due to the nature of the appraisal process." [30]

An important distinction must be made on the subject of valuation. The real estate profession bases its opinion of property value by looking backward, whereas the capital market bases the value of stock on what is expected to occur in the future. The major flaw with the real estate approach is that the past is not a good predictor of future performance. Especially since no two assets are identical, and no two economic cycles behave similarly; how could two different real estate investments perform in an identical manner.

Real estate professionals use market data, which is often obsolete by the time it is utilized. They also use Discounted Cash Flow Analysis which is based on estimating future cash flows (which are only as good as the assumptions upon which they are based), given a particular discount rate (required total rate of return), to determine if the income stream is sufficient to make an investment today at a particular price. In the stock market, investors relate a stock's current value to its price/earnings ratio (P/E Ratio). To arrive at an expected price, or value, for the stock, an earnings multiple is applied based on projected future income and expected growth rate as shown in Table 2.1.

Table 2.1

P/E Ratio	**Earnings Multiple**
$Po/Eo = (1-s)/ r - g$	$(EM)_n = (1-s)_n / r_n - g_n$
Current Period (also known as the Dividend Model)	$(EM)_n$ = Earnings multiple at end of period n $(1-s)_n$ = Payout ratio beyond period n r_n = Appropriate discount rate beyond period n g_n = Growth rate of earnings beyond period n

Source: Investment Analysis and Portfolio Management, Sid Mittra & Chris Gassen

The return performance issue becomes convoluted when the returns of the efficiently priced, publicly traded real estate securities are measured against an index based upon appraisal data for infrequently traded, privately negotiated, non-homogeneous real estate assets. Any errors in assumptions made in the public market is corrected relatively quickly.

IN SEARCH OF THE BEST EQUITY REIT INDEX

REIT Index Comparison

Real estate researchers are ever-seeking the perfect index against which to measure REITs. Real estate return indices have been constructed using appraisal-based, transaction-based and synthetically created real estate data; they have been broken down by cross section and time series, only to find that due to the nature of these measures and the assets being measured, the data is inherently loaded with inaccuracies. Financial market indices used include the S&P 500, 10 year Treasuries, 90-day T-bills, small stocks, Frank Russell Property Index, Salomon Brothers and the Wilshire Real Estate Securities Index, to name a few. For more explanatory details on the more frequently referenced indices see **Appendix A.** Table 2.2 offers a brief glimpse at REIT return indices against those of other indices.

One of the most commonly used real estate indices by industry professionals is the Russell/NCREIF Property Index. It is a value-weighted index of total returns, based on the properties' appraised values. The portfolio contains roughly 1500 properties of unleveraged real estate, managed by institutions on behalf of

pension plans. The reason for the opposition to its widespread use is first, the properties in the portfolio may not be representative of the market and second, the appraisal process "smoothes" the actual returns. "The smoothing, in turn, dampens the measured volatility and may also result in biased estimates of correlation." [30]

Table 2.2

NAREIT INVESTMENT INDEX RETURNS
Total Return for Fourth Quarter, 1992

TOTAL RETURN INDEX	4th Qtr	3rd Qtr	1 Year	3 Year	5 Year	10 Year
NAREIT All REITs	3.6	4.9	12.2	8.0	6.6	8.4
Equity REITs	3.8	6.8	14.6	9.6	10.2	13.4
Mortgage REITs	0.1	-2.9	1.9	3.1	-0.2	1.7
Hybrid REITs	7.6	8.6	16.6	5.2	1.8	5.4
S&P 500	5.1	3.1	7.7	10.8	15.9	16.2
Russell 2000	14.9	2.8	18.4	11.7	15.1	11.8
ShearsonLehman Govt./Corp. Bond Index	0.1	4.9	7.6	10.6	10.7	11.5
Frank Russell Property	-5.4	-0.6	-5.0	-3.3	0.6	5.0
Office	-5.2	-1.9	-8.8	-7.8	-3.3	1.9
Apartments	-1.2	1.4	-2.0	1.8	3.7	n/a
Retail	-2.0	-0.1	-2.5	0.4	4.9	9.0
Warehouse	-3.4	-1.0	-4.4	-1.3	3.0	7.0
R&D/Office	-5.6	-0.2	-8.5	-0.4	-0.4	5.6

Source: NAREIT

Another real estate index source is NAREIT's (National Association of Real Estate Investment Trust's). NAREIT provides total returns on a value weighted portfolio of actively-traded equity REITs. The NAREIT share price index is based on actual transactions and is composed of all REITs that trade on the NYSE, AMEX and OTC market.

Even if two analysts chose the same index, a different result would produce a distinct result, because in all likelihood, the sample size, time frame and asset mix

will be different. Unless real estate becomes a more homogeneous industry, (which due to the nature of the asset is impossible), where information is freely traded, (which is also unlikely), and transactions and regularity of appraisals become standardized, (difficult as well), this debate will persist for some time. As Ken Statz succinctly put it,

> It is a unique industry; to say asset class with unique attributes or..there's a lack of data, *that's* unique.[25]

In search of a valid property return index, Gyourko and Keim [31] critiqued studies previously conducted. **Exhibit 2** highlights these studies and Gyourko & Keim's opinion of their relative weaknesses.

Based on their own regression analyses, Gyourko and Keim assert that the stock market based data provides more useful information on the nature of real estate returns than the existing literature suggests. Their finding is that equity REIT returns incorporate changing market fundamentals before appraisers can include the (new) property information in the Russell/NCREIF Property Index. They attribute this result to lags and seasonality in the appraisal process. [31]

S. Michael Giliberto asserts that the absence of correlation between EREITs (equity REITs) and traditional real estate suggests that EREIT returns are not reasonable substitutes for unsecuritized real estate investments. He proceeded to conclude that stock and bond market movements heavily influence equity REITs. "Over the 1978-1989 period, stock and bond returns, (and the January effect dummy) explained about 59% of EREITs total variability." [32]

---

[25]Interview, July 20, 1993.

EXHIBIT 2

Gyourko & Keim	Real Estate Returns and the Stock Market
Researcher(s)	***Methodology* & Problem**
Hoag (1980), Miles, Cole & Guilkey (1990)	*Hedonic technique to estimate transactions prices for broader sets of properties not actually changing hands.* • Generally small sample that trait price coefficients cannot be allowed to vary through time. • Concerns about representativeness of sales prices; typical arms length transactions?
Firstenberg, Ross & Zisler (1988), Wheaton & Torto (1989), Liu, et al (1990)	*Synthetic return series were constructed by applying cap rate data to rental income series.* • Small errors in cap rate series, either in the level or in the timing of a change in cap rate can alter return behavior.
Russell/NCREIF Index	*Appraisal Based return series* • Suspect because of low volatility relative to their significantly positive means; appraisals induce smoothing.
Hartzell & Mengden (1986) Ross & Zisler (1987)	*Equity Real Estate Trusts are another data source.* • Viewed with suspicion in the real estate field because REIT return volatility is higher than that for appraisal-based property series and REIT returns tend to be more correlated with the stock market than with appraisal-based property series.

Source: [31]

Giliberto indicated that the residuals from the regressions of the real estate series on financial asset returns were "significantly correlated." Deutsch [22] simulated Giliberto's study, but substituted a small stock index in place of the S&P 500. Deutsch suggests that the real estate factor which Giliberto attributed to equity REIT residuals was a small stock component not found in the S&P 500. The basis of this conclusion is that the small stock index "caused most of the purported relationship between equity REITs and the Russell-NCREIF index to disappear.

Exhibit 3 compares five total return and correlation tables; some share the same financial assets but have a different time series. The resulting correlations do not show major deviation. As Deutsch pointed out, equity REITs, showing a high correlation with the S&P 500, are even better correlated with Small Stocks, (Exhibit 3, Table III). Deutsch's EREIT correlations in Table V show a .7083 with the S&P 500 and a .7444 with small stocks. The difference between the two is even greater as shown in Gyourko and Keim's Table IV. The S&P was .65 while that with the small stocks jumped to .82, just .01 less than the correlation between small stocks and the S&P itself.

EXHIBIT 3

COMPARISON of TOTAL RETURNS and CORRELATION TABLES

I. Correlations 1972-1986

	Real Estate	REIT Stock	Stocks	Bonds	T-Bills
Real Estate	1.00	0.18	0.05	0.00	0.04
REIT Stocks		1.00	0.73	0.23	-0.17
Stocks			1.00	0.33	-0.11
Bonds				1.00	0.01
T-Bills					1.00

Source: Real Estate Portfolio Management, 199_. Real Estate & Asset Allocation. Patrick Corcoran, VP, Economic Research. The Prudential Insurance Company of America.

II. Total Returns and Correlations 1978-1989

(A ıualized Quarterly Data)

	Mean %	Std Dev %	Real Estate	EREITs	Stocks	Bonds
Real Estate (1)	11.31	2.81	1.00	0.01	-0.15	-0.36*
EREITs (2)	16.56	12.84		1.00	0.72**	0.45**
Stocks (3)	16.86	15.96			1.00	0.33*
Bonds (4)	9.97	10.25				1.00

**Significant at the 95% Level*
***Significant at the 99% Level*
(1) Real estate returns measured by the RN Property Index
(2) EREIT returns measured by NAREIT's Equity Index
(3) Stock returns measured by the Standard & Poor's 500
(4) Bond returns measured by Salomon Brothers Broad Investment Grade Bond Index.

Source: Journal of Real Estate Research, Vol 2, No.5
Equity REITs and Real Estate Returns, S. Michael Giliberto

III. Correlations (Quarterly Data: 1981 - 1993)

	FRC-NCREIF	FRC-ACLI	Equity REITs	Small Stocks	S&P 500	Lehman Index	Treasury Bills
R-N Index	1.00	-.163	0.317	-0.642	-.1401	-.2910	.4957
FRC-ACLI		1.00	.2662	.2964	.2586	.3420	.0200
Equity REITs			1.00	0.7444	.7083	.4019	-0446
Small Stocks				1.00	08127	.2342	-.0516
S&P 500					1.00	.3355	-.1556
Lehman Index						1.00	0.768
Treasury Bills							1.00

Source: David Deutsch, MIT-CRED Thesis [22]

IV. Summary Statistics (Quarterly Data: 1978(1) - 1990(4), n=52)

Asset Category	Quartrly % Excess Returns (Std Dev)	Correlations: Probablty of observg larger ρ under null of ρ=0					
		Russell-NCREIF	S&P 500	Small Stocks	Long Bonds	Home Apprec.	Unexpectd Inflation
Equity REITs	1.36 (8.46)	.10 (.49)	.65 (.00)	.82 (.00)	.43 (.00)	.41 (.00)	-.20 (.18)
Russell-NCREIF	.39 (1.40)		-.04 (.76)	.07 (.63)	-.35 (.01)	.16 (.27)	.07 (.65)
S&P 500 Index	1.64 (8.26)			.83 (.00)	.39 (.00)	.28 (.04)	-.08 (.60)
Small Stock Indx	1.94 (11.82)				.23 (.10)	.48 (.00)	-.00 (.98)
Long Bond Index	.41 (7.52)					-.02 (.88)	-.44 (.00)
NAR Home Apprectn.	-.85[a] (2.80)						.36 (.01)
Inflation	1.49[b] (1.03)						
90-day Treasury Bills	2.24[b] (.70)						

Notes: [a]*While the mean excess existing home appreciation rate is negative, the average quarter total appreciation rate over the 13 year period is 1.39%.*
[b]*Raw return or inflation rate*

Source: Gyourko & Keim

V. Correlation Total Returns with Returns on Other Assets (Quarterly Data: 1973(3) - 1987(4))

	ALL REITs	Equity REITs	Comm. RECs	Homebldr RECs	PRISA	S&P 500	L-T Bonds	T-Bills
All REITs	1.00	0.900	0.877	0.873	-0.073	0.667	0.007	-0.163
Equity REITs		1.00	0.766	0.766	-0.178	0.719	-0.008	-0.177
Commcl RECs			1.00	0.860	0.003	.772	-0.057	-0.152
Homebldr RECs				1.00	-0.099	0.719	-0.123	-0.181
PRISA					1.00	-0.164	0.166	0.496
S&P 500						1.00	-0.040	-0.159
Long-Term Bonds							1.00	0.763
Treasury Bills								1.00

Source: MIT-CRED Real Estate Performance Study, 1988 (Sagalyn)

The actual literature reviewed was far more extensive than the pieces that are covered herein. Countless research studies have been undertaken to look at real estate and REITs with respect to their valuation, how exogenous factors affect returns, what other assets or financial vehicles are correlated and the indices that should, or should not be used - the list goes on and on. The topics covered in this chapter were narrowed, hoping to provide the reader with a sense of some of the relevant issues and discussions. Chapter Three will examine how real estate securities are valued; what models are used, and what variables are considered when pricing a REIT.

CHAPTER THREE

WALL STREET SHAPES MAIN STREET

VALUATION OF REAL ESTATE INVESTMENT TRUSTS

This chapter focuses on how real estate investment trusts are valued. Some misconceptions and dissentions regarding concepts and methodologies are also defined. In an attempt to better understand how REITs are priced, some of the leading industry practitioners were consulted regarding their methodology. (For a list of the interviewees, see **Appendix B**). These individuals shared their insights on REIT pricing, their opinions on what makes a REIT successful and their outlook for the industry. This chapter covers valuation, the latter topics will be covered in Chapters Four and Five. The following quote is the perfect segue into the subject at hand, as public market efficiency and the fundamental elements that are causing REITs to flourish today are explored.

> [Wall Street] makes hard assets liquid, and it puts a price on those assets that promises that they will be put to their most productive uses. It has never been a place where people exchange money for stocks, bonds and mortgages. Wall Street is a focal point where individuals, businesses and even entire economies anticipate the future. The daily movements of security prices reveal how confident people are in their expectation, what time horizons they envisage, and what hopes and fears they are communicating to one another. [7]

To put REITs in the context of Bernstein's theory, given the robust activity in IPOs and secondary offerings to date, it seems as though investors' thirst for REITs has not been quenched. The market is showing confidence in the REIT's future and anticipates that real estate prices have essentially hit bottom and are, or will

soon be, on the road to recovery. Presently, REITs are acquiring properties at distressed prices, and the future holds the prospect of appreciation in asset value and an increase in rents as the economy rebounds.

Valuation Approaches

There is uncertainty in the market as to what REIT prices reflect. There is trepidation about the fact that real estate securities trade at a "discount" to the "real" market value of the underlying assets and confusion prevails as to why capitalization rates on direct real estate are higher than the implied caps determined on REITs. Some of the reasons for the differences were alluded to in Chapter Two.

There are two schools of thought when it comes to pricing all types of securities: the "fundamental" approach and the "technical" approach. The former view seeks an appropriate earnings multiplier to measure if a stock is over or under priced relative to other stocks. A variety of sources are used, the financial and management position of the company are evaluated and the economic conditions are assessed. Fundamentalists believe that past price history or price changes has no impact on a current price. In contrast, the technical view holds that by studying past information, one can determine current or future price changes.[26]

---

[26]*Technical Analysis of Stocks & Commodities.* Editor's Note: "both groups tend to make these judgements based on philosophy or belief, rather than empirical evidence; and the answer turns to whether the price or price changes are generated by a random walk."

The real estate market looks to the past to make its predictions and the securities market looks to the future with its expectations. The two markets carry a significantly different degree of liquidity risk. The securities markets provide a relatively easy means of mobilizing capital and/or providing an exit strategy for the investor. Stocks trade daily, adding an element of efficiency to the pricing. The property owner's trading arena is thin, and the valuation methodology intonates inefficiencies. The "independent" part of the independent property appraisal process has often been the point of controversy, (considering it is the party seeking the highest value that is paying for the appraisal), and the system is mired with lagged information. Most REIT analysts view REITs as proxies for real estate, and some anticipate that their existence will assist in making the pricing of real estate more efficient.

> There are an awful lot of people out there running around with appraisals in their pockets that are pure fantasy. Anyone really serious about converting properties to a REIT must first realize that it doesn't matter what he paid for the real estate or what some appraiser told him it's worth. The market sets the price, and right now that pricing bears no relation to the original cost or that appraisal they're carrying around with them. [37]

Many have the hope that the efficiency of real estate security pricing will be the foundation for an accurate source of commercial real estate pricing, versus having the commercial real estate market establishing the price for the REIT.

> While financial performance will be a proving point for individual REITs, from a market perspective, much depends upon the evolution of greater market efficiency and enhanced information. The benefits of trading liquidity sought through public securitization, may be secondary to the replacement of appraisal-based valuation with market based pricing. [42]

Dividend Yield $\neq$ Cost of Equity

Yields for long-term Treasuries are hovering at their lowest levels in 16 years (6.67%). Investor demand for riskier, higher yielding securities seems to grow stronger every day.[27] "Yield" is the primary reason why the equity REITs have been showing such strong performance. It is important at this juncture to clarify the use of the term yield, since it is often used loosely. In some situations it may be used to refer to total yield (an investor's total required rate of return or discount rate), while at other times it refers to current yield. Most often its meaning is current, or dividend yield. Dividend yield is equal to the dividend per share divided by the current market share price. This yield is used as a comparison against yields of other investments; for example, "the average equity REIT yields over 6%, more than double the S&P's 2.8% yield." [33] Some reports allude to a REIT's dividend yield as being equivalent to the REIT's total cost of equity. This is only partially true. A REIT's cost of equity is explained in part by the current dividend yield and in part by the implicit dividend growth rate. This is where there can be a misunderstanding of terms. Ken Statz depicted this situation in the following manner,

> When you ask management what their cost of equity is they will tell you 'the dividend yield.' This is absolutely wrong. I would love to hear them tell shareholders, 'You know your dividend, I am going to fix it for five years, because that is your cost, and that is what you want.' Watch the stock price plummet 50%. The investors' reply would be, 'Excuse me, you have a 4% [dividend] yield because you have been growing at 10% per year for the last five years, and we assumed you were going to continue doing so, giving me a total return of 14%. What do you mean you are not going to continue to grow [the dividend]?'[28]

---

[27]Wall Street Journal. July 1, 1993.
[28]Goldman Sachs. Interview date. July 20, 1993.

Visually expressing Statz's scenario is an equation illustrating a REIT's total cost of equity.

Total Rate of Return (TRR) = REIT Cost of Equity		
(1 + Yield) * (1 + Growth) = 12%		**Implicit Dividend Growth Rate Forecast**
Cost of Equity for REIT A with a 5% yield	**= 12%**	**7%**
Cost of Equity for REIT B with a 7% yield	**= 12%**	**5%**

Source: Goldman Sachs Investment Research

For the investor reading investment periodicals or prospecti that describe the cost of raising money at 6%, [the dividend yield] is less than the initial cash yields on properties [10-11%], he or she should be aware that it may not be telling the whole story. One must ask if the 6% represents total expected return or just dividend yield. Analysts also distinguish between one year return investors and those with long term expectations; there is a trade-off between the two returns. In the short-run, investors are predominantly concerned with dividend yield; the long term investors are willing to accept the lower yield today, with the expectation that the total rate of return will be much higher than the current yield. The cost of equity over time is difficult to predict given the many macro-economic influences that can affect the total cost of capital. Statz noted that the current cost of equity is low, in the 12-13% range, and that a key difference between long term cost of equity versus the cost of debt, is that if debt is fixed, the cost is the same today as it will be in ten years.

A final technical note is that yields can be misleading, particularly if the yields are high. One must look behind the yield, to the source that is funding the payout, which is the cash flow, in order to determine if the high yields can be sustained.

With these points aside, the focus will now turn to yields as they relate to REIT pricing.

Yields Aren't Yielding

In a recently published article, a REIT specialist had been asked to give five reasons why REITs have become so popular; he replied, "The first three reasons are yields, yields and yields." The complementary conditions that are enabling REITs to offer attractive yields are low interest rates and a wide choice of aggressively priced real estate. Competing choices are limited on a risk adjusted basis, and optimism about the future of the real estate industry is improving. Over the past couple of years, the cash rich REITs have been able to take advantage of what has been called, "spread investing" or the "positive spread" factor, where the cost of their current equity is less than the asset's initial rate of return. Many equity REITs have been able to successfully raise capital through secondary offerings, and rather than dilute the shareholders current value, it is enhanced as the new capital is properly placed in newly acquired properties that will eventually generating additional cash flow. The anticipated result is a greater total rate of return. [33]

Some have expressed concern that REIT investors are not truly considering the future potential and are only interested in current yield, and that as soon as yields become more attractive elsewhere, they will turn away from the REIT. Is this not the case with any investment option? The investor's goal is to maximize his/her return for a given level of risk. If after an adequate amount of time, the REIT is remiss in achieving the anticipated goal, the market's lack of enthusiasm

for it will be reflected. The investor should not be blamed for "greed for yield." The publicly held company must know its investors' motivations, investment objectives, and the yields provided by competing vehicles.

> An interesting aspect of financial markets is the shifting of investor preferences for the components of equity yield. Often an investor's clear-cut choice is to invest in ventures that will produce relatively high rates of cash flow income and have modest leverage. At other times investors display confidence in asset value growth and are willing to look for a major part, if not all, of their total yield from that component. These changing attitudes may be observed in both realty and stock equity markets. [21]

The important components of a stock are its future income earnings (dividends), future value change (appreciation or depreciation) and expected growth (or retrenchment) of each. The dividend effect suggests that investors will bid up the price of the stock that exhibits a higher income yield, all else being equal. But there is a trade off between yield and growth. Martin Cohen posed this rhetorical question:

> If you take individual investors, and gave them two investments; you didn't tell them anything about the investments except that one yields 7% and the other 9%, which do you think they'd choose?" They would choose the nine.[29]

This behavior is often a mistake because the 9% may have no growth, and the 7% vehicle may have 10% growth of cash flow, which will ultimately be translated into growth of dividends. Further, the 9% might include fee income, gains on sales, and nonrecurring events. Cohen suggests that one really must look at the quality of the cash flow and the growth potential [rather than any premium or discount to net asset value].

---

[29]Cohen & Steers Capital Management Co. Interview, July 20, 1993.

Ken Statz is in agreement with this view; the sale of an asset produces a "one time pop" that could mislead an investor who is only looking at the yield into thinking that it will remain at this level. Statz observes that "REIT managements use dividends to signal future cash flow prospects. Dividend 'signaling' drives REIT stock prices in the intermediate term." He suggests that some management teams may have used this tool to obscure poor portfolio performance and "caveat emptor" is the advice he gives investors who rely on short-term dividend changes to judge the merits of the REIT. [5]

AT THE CORE of REIT PRICING - CASH FLOW

Financial economic theory indicates that the value of any income-producing asset is a function of its expected future cash flows and an appropriate discount factor (adjusted for time and risk). Rent is the primary source of cash flow for real estate and it is a function of among other things, the supply and demand of rentable space. [30] Jordan Heller, a Senior Analyst at Merrill Lynch, concurs. "Fundamentals drive REITs to a certain extent, but they lose the high ground to pure supply and demand."[30]

Some markets have already begun to show strengthening fundamentals; the southwest, for example. It appears as though the wounds of the last few years are healing and the gap between demand and supply is narrowing in the apartment sector. New construction starts are not imminent in the near term, which is allowing rents to inch upwards. The same is true for well-anchored strip centers in

[30]Merrill Lynch. Interview, July 21, 1993.

select markets. It does take time, however, for increases in rent to impact the bottom line.

> The net operating income of the real estate itself is not increasing at a rapid pace. In fact, some of it is still declining...The investment process takes time. It takes about six months to get all the way through to the income statement. When the economy comes back, then we'll start to see some improvement in the fundamentals...then we'll see an explosion in cash flow per share growth. [31]

Real estate stock prices have moved in sympathy with the underlying markets (real estate), although in some cases, because there is a general level of uncertainty as to whether property values have reached the bottom or how much further there is to go, we've seen stock valuations significantly overshoot the real estate decline. It is the opposite of a good market when stock prices often exceed the actual values of properties. Samuel A. Lieber, a portfolio manager and Vice President of Investments at Lieber & Co./The Evergreen Funds, has found one area where there has been a deviation from this pattern, and that is in stocks with high dividend yield.

> Particular examples would be Australian property trusts and US REITS. By and large their portfolios have not been immune to declining property market, yet their share prices have risen because their dividend yields have been very attractive relative to declining alternative investment yields available to stock investors, predominantly individual investors. [15]

Much goes into determining the appropriate price for a REIT. Some of the components are tangible and quantifiable, while others are not. Though the methodology employed by the practitioners may vary there is at least one unanimous opinion: cash flow is the lifeblood of the REIT and is at the core of

---

[31]Cydney Donnell. The Wall Street Transcript. [15]

how the market values it. Cohen describes net rental income as the highest quality cash flow,

> It's recurring, it's contractual, and because of the [structure of some] leases, it has growth potential. A lease that is written up with no increases in rent over time, is worth a lot less than the lease with step ups [or percentage rent].

The industry's primary explanation for the claim that the stock market undervalues real estate companies is that investors look at earnings instead of cash flow. In general, stock market valuation, regardless of industry, focuses on the ratio of a stock's price to its earnings per share. This is known as the price-earnings multiple or P/E Ratio. The use of a multiple versus an absolute figure is logical, otherwise, it would be difficult to a comparable analysis. For REITs, the formula has been customized in an attempt to depict a truer picture.

P/E, FFO, GAAP - FLAWS

The REITs' equivalent to cash flow is referred to as funds from operations (FFO). FFO has become an industry benchmark used for measuring REIT performance and dividend paying capability. FFO has become an industry benchmark used for measuring REIT performance and dividend paying capability. FFO is *net income*, before non-cash charges (such as depreciation), *plus* distributions from joint ventures, *less* gain on the sale of assets and other non-recurring items.[32] Most REITs base their dividend on FFO rather than net income. FFO not only represents cash available for distribution to shareholders

[32]Alex. Brown & Sons. Real Estate Securities Group. ABS was among the original parties that assisted in defining FFO.

but equity REITs consistently pay out more in dividends than earnings. The use of the FFO Multiple is closely aligned with the "fundamentalist's" earnings multiple stock valuation theory.

Depreciation is the reason REITs are able to payout more than earnings. Generally accepted accounting principles (GAAP) require that companies depreciate the assets that they hold over some specified holding period (usually 40 years). This depreciation charge is not an actual cash expense, but is included on the income statement as an expense against operating income. The result is that net income is less than cash flow, FFO.[33]

In addition to finding the P/E valuation inappropriate for REITs because of the depreciation charges, PaineWebber reports that depreciation charges can cause one to misread REIT 'book values' as well. [34] Book value for equity REITs declines as depreciation allowances are claimed. It is commonly held that GAAP accounting is unreliable in portraying real estate assets and that balance sheets can materially overstate and understate true values. The spread between real stock values and the values of the underlying property might be even greater than book values indicate. [4; Kidder Peabody interview] Garrison cited another flaw in GAAP accounting rules. Since they permit the capitalization of many expenses associated with real estate, such as tenant improvements, leasing commissions, and "betterments" to a property, the actual cash flow can be very negative even though the reported new rental income appears very strong.

[33]Ibid.

John Litzius, an analyst with Green Street Advisors, offers a word of caution regarding the use of FFO: "FFO doesn't always ring true."[34] He refers to how some recurring, non-revenue generating costs are defined and hidden from the Income Statement. Examples of these costs include roof replacement, parking lot resurfacing, and installation of new heating and air conditioning systems, etcetera. Most REITs capitalize some or all of these expenditures; Green Street believes in treating them as current period costs. The reasoning is that when a REIT owns multiple properties in its portfolio, these kinds of expenses are likely to recur in some form, each year, presuming that the buildings are at different life cycles. Other costs that Green Street expenses, rather than capitalizes, relate to leasing. These items include costs such as tenant improvements and leasing commissions. As a result, Green Street deducts these costs from the previously described FFO to arrive at funds available for distribution.

In an IPO Review published by independent research firm, The Penobscot Group, the pro forma shareholders equity share price was $2.39 higher using the GAAP method as opposed to the appraisal or "Fair Market Value" basis. The report footnotes that "FFO is not always a totally pure, cash basis calculation." To illustrate, it is cited that REITs with office or retail properties do not uniformly adjust for the straight line treatment of stepped rents under leases. To this extent, "reported FFO for these entities is a GAAP mandated accrual rather than a cash basis calculation."

A different voice in opposition to FFO is that of Arnold Laubich, New Plan's Real Estate Investment Trust's President. He disputes the formula the industry

---

[34]Telephone Interview, July 7, 1993.

uses to determine dividend coverage: "The analysts don't want to include any element of capital gains in what they call funds from operations and we call cash flow. We don't agree with that view." [8] When the FFO definition was originally developed, the argument made against using capital gains was that it would make it more difficult to compare on an apples to apples basis, from one time to the next, if one company uses property sales and another does not. As is the case with any attempt to create standardization and conformity, resistance and doubts will exist. It is understandable why is would be especially difficult with an industry as non-standardized as real estate.

PRICING MODELS and THE DISCOUNT RATE

The Dividend Discount Model

The Dividend Discount Model (DDM) is widely used by stock market analysts across all industries to arrive at a share price. Many REIT analysts and fund managers use it, or a variation of it, as well. At Merrill Lynch Investment Research, Heller utilizes the DDM, and suggested that the Arbitrage Pricing Model or CAPM could also be considered as a format, (the Arbitrage Pricing Model being the better of the two), "then spinning the beta according to what the REIT is made of." Still others like Arthur Anderson & Company and Green Street Advisors have developed their own (proprietary) models known as "The REIT Viability Model" and the "REIT Pricing Model," respectively.

Anderson developed an interactive financial analysis model which takes a portfolio of real estate and structures a REIT. Robert Davis, Managing Director of

Arthur Anderson's Real Estate Capital Markets group in San Francisco explained their approach:

> The model can allocate the economics and tax impact back to the underlying general and limited partners in the partnership. With this analysis, they assist in determining the costs, benefits and executional viability of recapitalizing a portfolio through a REIT IPO.[35]

Green Street Advisors' "REIT Pricing Model," rates just over 40% of the roughly three dozen real estate companies Green Street tracks as "buys". This model provides a tool for "predicting the pricing of shares of equity REITs relative to the underlying current value of shareholder's equity." The results, as described by John Litzius, is not a black box, it is used to determine which stocks are cheap or expensive relative to other REITs. It also tries to quantify which variables have directly impacted pricing.

The Dividend Discount Model, is a formula which derives "the intrinsic value of a share of stock by taking the present value of all expected future dividends." [36] In order to calculate a REIT's value, the dividend stream must be forecasted over time, a growth rate must be considered and an appropriate discount rate must be selected. The potential weakness is that the result is only as good as the forecasts and assumptions made by the analyst.

There appears to be no disagreement that the benchmark for arriving at an appropriate discount rate should be the Treasury rate, some use the ten year rate, others the thirty. A risk adjusted premium (or discount) is then added to this risk free rate. The level of premium depends upon how the analyst values the

---

[35]Arthur Anderson's Real Estate Perspectives - Quarterly Report. Spring 1993.

differences in attributes and risk of the individual REITs. Variations in the choice of discount rate could have a dramatic impact on value. These variations depend upon economic factors, strength of overall REIT portfolio and the management internal strength.

All interviewees agreed that the amount assigned as the discount or premium cannot be reduced to a formula. In the end, it comes down to the individual analyst's experience, judgment and "gut instinct." Simply put by Bruce Garrison: "When we bet on the management team, is it subjective? Yes; end of story." As a former portfolio manager on behalf of pension funds, Ken Statz felt that the methodology of adding or subtracting from risk free rate was acceptable. However, he did allege that most "skirt around the issue". Statz's preferred approach is "Here is the cash flow, what is it worth?" In order to arrive at a share price, the Dividend Discount Model is often supplemented with other methods of valuation.

Capitalization of Income

The pricing system starts with cash flow, but has to take other variables into account as well. Capitalizing the income stream of the portfolio of REIT properties is one approach. Just as real properties are compared for appraisal purposes, a comparable approach is taken with REITs as well. A ratio analysis is routinely conducted. Balance sheet items such as the dividend yield, payout ratio, price to funds ratio are compared. Also rated are qualitative attributes such as business strategy and focus, management expertise, track record, quality of properties and conflicts of interest, to name a few.

Capitalization of income is based on the idea that at any given point in time, the current NOI produced by the properties is related to the current market value. [38] The cap rate is the initial unleveraged yield on the property. In a Penobscot Group IPO Review, two cap rates definitions are provided that have been repeated here in order to clarify this often loosely used term.

> Implicit Property Cap Rate - The effective valuation the [capital] market is placing on property assets through pricing of shares. Calculated by dividing (1) property net cash flow after general and administrative expense but before depreciation and interest, by (2) the result of (a) multiplying shares outstanding times market price per share, and (b) subtracting from (a) all non-property assets and adding to (a) all liabilities.
>
> Imputed Equity Cap Rate - The cash flow cap rate (inverse of a multiple) we have used to calculate market value of assets for purposes of reconstructing a market balance sheet from which they calculate Book and Imputed Equity Value per share.

Cap rates move inversely with value, vary by property type and geographic location, and are influenced by local economic and demographic trends, quality of property and location and tenants, vacancies, current rental rates and lease rollovers. In traditional real estate asset valuation, the net operating income would be "capped" with a rate typical of the type of property at hand. In today's market, "required" cap rates range may from 8%-12% depending on the type of property and where it is located. The investor is requiring this high yield to compensate for illiquidity and other asset related risks. On the other hand, the implied cap rates produced on Wall Street, for real estate stocks, are much lower. The implicit cap rates from REITs today may range from 6.5%-8%. Why the disparity? Some reasons were discussed at the beginning of the chapter when the

differences in risk, liquidity and efficient data were compared. A new reason, is the perception that shareholders are purchasing more than real estate; they are purchasing a stake in real estate operating companies. The reason they are paying a "premium" is the belief that these companies, with focused business strategies and strong managements, will add value.

Statz thinks people forget that REITs are publicly traded companies; "they're not real estate portfolios. To Statz, the important question to ask is:

> What's the balance sheet look like? If equity costs [REITs]12%, what can they get debt for? What's the magic point where if you put too much debt on, your cost of equity goes up? If you go from 10% leverage to 30%, I don't think my equity shareholder will say, well, I wanted 12% before, now I want 15%. What he'll say is you've really changed my risk exposure on my dividend.

As an aside, in the preceding quote, Statz is referring to total required return, not current yield; a case in point of how one can misinterpret the meaning.

Fred Carr is a principal of The Penobscot Group, an independent REIT research firm. Though Carr analyzes the cap of REIT assets, he discounts its relative weight of importance:

> We are not [as] concerned with NOI and a 'negotiated cap', or a checklist of criteria, or what the real estate itself is actually worth. We are focused on a combination of growth and risk and are interested in what is happening in the markets, what is the property profile and does management have a strategy that is credible?

Ratio Analysis

Every other industry has standard ratios against which individual company performance is measured. Sources such as Value Line, Moody's and Standard & Poor's have been publishing them for years. It is not unreasonable to expect that

the same effort would be made with REITs. As the market capitalization of REITs expands, the information will improve further. Today, with over 200 actively traded, tax-qualified REITs, there is adequate performance data against which to measure new, and existing REITs. Garrison trusts the public markets because "REITs price real estate in 'real time.' "

> We try to gauge opinions from a variety of our clients to find out what they think the stock will sell for. And the best proxy for that is looking for a [REIT] stock that's easily comparable to it. As in the case for Camden, Wellsford was the most comparable. Same property type, basically the same geographic region, so we think that's the best. And it is the multiple [FFO] that is most important.

Analyzing the performance of one REIT relative to a comparable REIT is the standard method to determine an appropriate REIT share price. There are a few ratios that are customarily applied.

The price to funds ratio (Price/FFO) is the sister multiple to the P/E ratio used for stocks in general, but substitutes the FFO measure for earnings. A high price-to-funds ratio indicates a high expected growth rate of funds from operations.

The dividend payout ratio is a reflection of dividend strength. The higher the percent of cash flow it takes to cover the companies' dividend, the less of a cushion to cover the unexpected.

The dividend yield, the dividend paid in the current period over the stock price (Div_1/P_0), will vary according to growth expectations. A high yield may indicate low expected growth or that investors require a high return to compensate for risk.

One analyst trusts return on cost as the single best benchmark. This measure takes the historic cost of assets before depreciation and compares it to NOI. (Book cost includes acquisition, development).

Goldman Sachs also reported the Price to Cash Flow Multiple (Price/FFO) as the key valuation statistic, not dividend yield. In an investment research report, Ken Statz identified that the multiple for a specific REIT is a function of forecasted growth in FFO and quality of the cash flow. Statz illustrated this point by example of two REITs.

REIT A with a 5% yield	65% Payout Ratio	13X
REIT B with a 7% yield	95% Payout Ratio	13.5X

Even though the payout ratios are significantly different, the multiples are comparable. According to Goldman Sachs, the average REITs' price to FFO multiple was 15.6X in January 1993, and has ranged between 7 and 15 over the last thirty years. Cash flow multiples, like dividend yields, vary by property type and regional focus. PaineWebber broke down the average multiples even further.

	Dividend Yield	Cash Flow Multiple
Apartments	≈ 5.2%	≈15.0 - 15.5X
Retail	≈ 6 - 6.25%	≈ 14.5 - 15X
Industrial	≈ 6.5%	≈ 11X
Office	≈ 7.5%	not provided

Source: PaineWebber 4/93

It has been discussed that P/E ratios are used to measure the demand for a stock, and reflected the expected growth of the stock. As a text book stated it,

"P/E ratios fluctuate not only according to changes in the prospects of companies, but in response to psychological factors affecting the market as a whole." [35] A non-academic perspective, from industry investor Cohen was,

> When the real estate recovery really becomes evident and cash flows are growing, [it is] not reflected in the share prices. In other words, they're selling at yields that are like bond yields, where the investor at large is not factoring in growth. When you factor in growth, you will accept a yield lower than a fixed income yield. It might be two years before you will see cash flow growth [generated] internally because the real estate recovery is just starting; leases have to turn-it takes time for increases in rents to begin to affect the bottom line.

It does not always hold true, however, that as vacancies recover, revenues will automatically increase. Where the real estate market is not yet out of its slump, many areas still are still in a tenant's market, and in order to entice the tenant from moving, rents are rolled over at the same if not lower rates.

Assessing the net asset value of the real estate portfolio is another way to estimate value. The total value of the REIT's liabilities are deducted from the total assets' value and the residual is the value of shareholders equity. PaineWebber makes it clear that this calculation is not used to compute the current value of a REIT's common stock - merely its "downside risk should growth suddenly become nonexistent." They use this expected value to approximate a REITs "fair value" in a no-growth environment, finding it inappropriate in a growth environment like today. [34]

BEHIND PREMIUM PRICING

In a December 1992 Barron's article[36], two REITs were highlighted, because of their stellar performance. Washington REIT and New Plan Realty were trading at 42% and 63% over their current value.[37] The point of the article was that these stocks "defied gravity," they were trading at huge premiums to what analysts and portfolio managers believed the companies' properties were worth at the time, and they speculated that the premiums would not be able to keep pace with investors' expectations. A portfolio manager was quoted as jokingly saying, "They're both excellent companies, but they're trading at cash-flow multiples that are so far out of whack that I bang the side of my computer every time they come up on the screen." In the same article, Jon Fosheim, principal of Green Street said about Washington REIT:

> It's probably our single biggest miscall in terms of projecting its performance. But not because we've been wrong on predicting cash flow, because we haven't. The market just keeps awarding the company a higher and higher multiple.

In an attempt to understand why some REIT stocks trade at a "premium" and others at a "discount" to asset value or relative to other REITs, the types of questions posed to the practitioners interviewed were, "Upon what does this occurrence depend?" and "Is the premium or discount quantifiable?"[38] Responses to the first question are highlighted in Chapter Five. The caveat is that what may be viewed as a "clean" or "model" REIT to one analyst, may be brimming with conflicts for another.

> Sometimes it takes a lot of rehashing to get a deal that works for both sides [the sponsor and the market]. The guy with the properties has his price, of course, up here, and the public market has their

---

[36]Barry Vinocur. REITs are Sound But No Bargain. *Barron's*. Dec. 14, 1992
[37]Kidder Peabody Equity Research Industry Report. May 1993.
[38]To the latter question, the most frequent answer was a chuckle, especially when they learned my intent conduct a regression analysis on some REIT variables.

> price down here. Somehow you have got to structure all of the intricacies of each deal to make it acceptable to all sides.[39]

Any mispricing, upwards or down, as a result of insufficient analysis, an inappropriate discount rate or poor judgment will quickly become evident and be corrected when the REIT stock reaches the market.

To summarize the different valuation philosophies, Statz reported "Three Valuation Philosophies" and commented on the problems or merits of each.[40] One approach is to use recent real estate transaction prices to estimate "value" and to buy REITs selling at the biggest discount to this value. The problems he cites are (a) prices in real estate are highly sensitive to liquidity trends (b) prices lag reality, (c) REIT stock price looks forward and (d) REITs do not liquidate. The second approach relates to interest rates. The suggestion is to forecast interest rates and to buy REITs when interest rates are expected to decline, (because the prices would be expected to increase.) The problem, he explained, is that REITs are not interest rate sensitive (low R-Square). Finally, Statz recommends buying growth and selling yield; forecast growth in FFO and buy the REITs with the highest forecast. This is the method which he exclaims, "It works!"

This chapter described the first half of analyzing a REIT, determining the current value of the assets or stock, via a quantitative approach such as the earning multiple forecast, dividend discount model or capitalizing of cash flow. The following chapter assesses the value of the intangible factors in a REIT, those REIT characteristics that qualitatively are considered to attribute to the REIT's success.

---

[39]Jeff Helton, Asst. VP., Kidder Peabody. Interview, July 20, 1993.
[40]Goldman Sachs Investment Research Report.

CHAPTER FOUR

WHAT MAKES A SUCCESSFUL REIT?

EXTERNAL AND INTERNAL FACTORS

Some Features Are Moving Targets

Aside from the legal requirements, there are no mandatory qualities that REITs must assume in order to go public. However, they will attain better pricing if they possess certain characteristics. As described at the end of Chapter One, the successful REITs of the nineties have taken on a far different profile than those of earlier decades. Some of the features that make a REIT successful are moving targets: one period may highlight one product sector or geographic location as the "new" pocket of strength such as office buildings in the northeast, while the next period may favor apartments in the southwest. These moving targets are generally influenced by macro-factors such as demographic changes, business cycles and basic supply and demand conditions. These exogenous events are not within the REIT's control. The attributes at the micro-level, the intangibles that the REIT's can control, seem to be taking on a less elastic shape. As the industry has matu and REIT managements have become more seasoned, there is greater recognition, appreciation and attention to the market's positive and negative responses, and REIT operators are reacting accordingly.

In industry jargon, REITs are referred to as "storybooks." If the REIT can tell a good story, the market will buy it. This does not mean to imply that the market with accept ill-conceived or futile claims because "they sound good." To the

contrary, the market has been very discerning about which REITs will gain favor, and which will not. The previous chapter mentioned two REITs that were trading at multiples much higher than what the analysts felt they deserved, given the underlying value of the real estate in their respective portfolios. Statz's observation of the situation was:

> Looking at New Plan's underlying value may be the wrong approach. Everyone tends to view these companies as if they're worth more dead than alive. In the case of New Plan, and a handful of others, that clearly isn't so. [39]

What was it about Washington REIT and New Plan Realty that had made them favorites? What had the market seen in them that the analysts were overlooking? The short answer is, faith in management. These REITs were viewed as having management teams that possessed a depth of knowledge of the property type they specialized in, the geographic market they traded in, and were perceived as having the ability to "add value." Therefore, they were rewarded with high multiples. In the case of New Plan, one of the largest publicly traded REITs today (market cap exceeds $1 billion), a good part of it was its business strategy. According to Bill Newman, New Plan's Chairman, their investment philosophy is pretty straightforward.

> We will not consider new property unless it is under foreclosure....We only buy well-located, older shopping centers, where the rental schedules were established 15-20 years ago. What that means is that when we renew leases, we get tremendous increases. And if we lose a tenant, it's much easier to replace him when he's paying you one-half of current market levels or less. [8]

Established in 1960, Washington REIT has a long history and a very successful track record. It differs from New Plan, and many other REITs for that matter, because it has a diversified portfolio and is geographically concentrated. As of October 1992, 26 of its 29 properties were in the Washington D.C. area.

One way Washington REIT has been able to retain shareholders' confidence in its future is through its dividend paying ability. The strength of the underlying cash flow is reinforced with the inclusion of inflation hedges such annual escalations set at CPI, percentage of gross sales and fixed percentage increases in their office building, shopping and business center leases.[41] Washington REIT has been commended for its excellent track record, commitment to shareholders, conservatism and low debt to total capitalization ratio. "Management is not going to jump at the first deal that comes along. The CEO is meticulous and that patience has always paid off for shareholders." [15]

The most frequently asked questions are: 'Does the management have a franchise for creating value?' and 'How will the franchise enable the REIT to generate an above average return on an investment?' Part of the answer depends upon the depth of the organization, how well they know markets, and how effectively they execute their strategies. A firm can add value in a number of ways. It can be achieved through development, redevelopment or property repositioning; keen acquisition skills and being vertically integrated (handling all functions in-house allows greater control over business activities and costs). At the income stream level, stable tenant contacts and relations are also intangible benefits that can result in increased tenant retention, tenant attraction and increased occupancy levels; creative lease structuring (including stepped rent increases and/or percentage rent clauses and in anticipation of the market's expected direction, arranging long or short term leases accordingly) also contribute to the overall value. All of these capabilities are assumed to contribute to the growth of dividends and ultimately the shares' value. Essentially, the REITs that

[41]Standard & Poor's Corporate Stock Report, 1993

trade at a premium possess a higher degree of expertise in one or more of these areas that distinguishes them from other REITs.

An examination of the criteria that the industry practitioners identified as essential to a REIT's success will be further explored in this chapter. The conclusions were derived by compiling opinions published in a variety of industry sources, as well as the author's interviews with seven firms that are involved with REITs in one form or another. Six of the interviews were conducted in person and one was over the telephone; the list of the participants can be found in **Appendix B.** Each participant was provided with a copy of the same list of questions, identifying the scope of interest before the scheduled interview. Even though the vantage point of the professionals varied, many responses were identical. On only a couple of occasions were there dissenting opinions on the relative importance or influence of particular REIT attributes. Otherwise, most sources echoed the same key variables.

The focal point of this thesis has been to determine which characteristics are deemed most important for a successful REIT; success being defined as that REIT that is favored by investors and is awarded with a high FFO multiple and trades at a premium to the assets' underlying value. The most frequently cited characteristics for a successful REIT are summarized illustrated in **Exhibit 1.** The items that are checked are those that surfaced during individual interviews or were noted in published material. The total sample size from which responses were derived is relatively small, consisting of fifteen observations (**Exhibit 1(a)** below). However, considering the consistency in responses, it appears that they may present a fair representation of a wider population.

EXHIBIT 1(a)

* **Secondary Data:** Various Publications
All Sources 1993

Individual or Company responses are listed in the following order:

Barry Greenfield	Real Estate Fund Manager Fidelity Investments
Stephen Roulac	Real Estate Consultant
Michael Oliver	President, PRA Advisors
Paine Webber	Research Report
Alex. Brown & Sons	Research Report
Michael Giliberto	REIT analyst, formerly with Salomon Brothers
Deloitte & Touche	Real Estate Strategies Report

NOTE: **Primary Interview** responses are listed in random order

EXHIBIT 1

MOST FREQUENTLY CITED CHARACTERISTICS for a SUCCESSFUL REIT

	•	•	•	•	•	•	•	*	*	*	*	*	*	*	*	%
Experienced Management	√	√	√		√	√	√	√	√	√	√		√	√	√	87%
Proven Track Record		√			√					√		√	√			33%
Fully Integrated Team		√	√		√			√	√	√		√	√		√	67%
Self Advised	√		√		√		√	√	√	√		√	√	√	√	73%
Focus (Product &/or Location)	√	√	√		√	√	√	√	√	√	√	√	√	√	√	93%
No Conflicts of Interest/ Management Incentives	√	√	√		√	√	√	√	√	√		√	√			73%
High Insider Ownership	√	√	√		√	√	√	√	√	√	√		√	√	√	87%
Strong Balance Sheet/ Financial Flexibility	√	√		√	√							√			√	40%
Floating Rate Debt (a) NONE (b) OK w/ Caps	(b)	(a)		(b)	(a)	(a)		(a)		(b)		(b)	(b)			a=27% b=33%
Low Payout Ratio (a) ≤ 90%; (b) ≤ 85%; √ = didn't specify % but said low	(b)	(b)		√	√	(a)	(a)	(a)		√	√	√	√			73%
Predictable Returns and/or Cash Flow Quality		√					√	√			√					27%
Simplicity of Structure	√	√			√											20%
Quality Properties	√							√			√					20%
Choice Locations		√									√	√				20%
Good Trends or Growth Oppties.	√	√		√				√				√				33%
Access to Capital		√													√	13%

• Primary Data: Author's Interviews

* Secondary Data: Various Publications

THE INTANGIBLES

Hands-on Management Wins Hands Down

Universally, the quality recognized as the most critical to a REITs success is its management. This reminds us that the REITs are no longer the passive instruments of old, they are active, operating companies. Many sub-categories fall under the "good management" umbrella. The market looks for a focused and realistic business strategy, strong track record and experience and depth and breadth within the organization. Also striking is the level of emphasis on high inside ownership (87%) and an absence of conflicts of interest. Beyond management, the other consistently identified criteria, not ranked in any particular order, include financial strength and flexibility (conservative balance sheet), capital structure (total debt and levels of variable or fixed debt), quality of properties and growth potential.

Be a Specialist

The unanimous opinion is that REITs focused by property type and/or by geography deserve a premium. The underlying message is that the REIT should concentrate on one thing and the investor will worry about any diversification within his or her own portfolio. Analysts compare pricing relative to other groups in a comparable sector or tier. If one REIT is mixed and has an undefined business strategy, it will be penalized relative to the REIT that has a clearly defined strategies and goals. "The more specialized the REIT, then the greater the capacity to add value."[42] Michael Oliver, portfolio manager of the $108 million

---

[42]The Penobscot Group. Interview, July 15, 1993.

PRA Real Estate Securities Fund in Chicago, said "If a REIT is into three or four things, we walk away."[43]

To be known as a specialist implies that one offers quality, distinction and expertise. This, in turn, translates into the notion that the specialty firm can, and will, more quickly recognize and take advantage of opportunities, as well as foresee or react to adverse situations. Underscoring the management intensive nature of the REIT, Statz presented that "management must have the hustle and intensity if [it is] one of many to get a better return." There has been such a flood of new IPOs lately, and still more in the pipeline, that each REIT, new and old, will have to be that much better to stand out from the rest.

Green Street's viewpoint is that of the institutional investors'; they want specialization in restricted geographic areas and institutional grade properties. When posed with a hypothetical REIT that had resident experts in two different areas, such as shopping centers in the southwest and apartments in the southeast, Litzius replied, "They should do two REITs; can't have a mixed bag." Diversified or unfocused portfolios are less desirable because it is difficult for management to add value. Fosheim had once said,

> I'm going to give my money to a local sharpshooter all day long before I give it to somebody who is trying to be everything to everybody. [40]

Some of the REITs Fosheim included in the "mixed bag" category included MGI Properties, First Union, HRE Properties and Santa Anita. Sharpshooters he had mentioned were Weingarten and Federal Realty. In reality, very few REITs

---

[43]CNBC Television Interview. Money Talks. June 1993.

are "pure." Many have a combination of investments, but generally weigh more heavily in one property sector over the rest. Realizing that the market rewards a more focused strategy, many REITs have been shifting their emphasis towards the 100% concentration mark. Heller recommends, "Don't get caught up in trends. Stick with the fundamentals [and what you know]." Two REITs which have continued to refine their business focus to keep investors' interest are Weingarten Realty and Property Trust of America. Weingarten has strengthened its portfolio and Property Trust has turned its around from a mixed portfolio to concentrate on one sector. These REITs have been chosen time and time again as "top picks" and are highlighted and contrasted in **Appendix C**.

Strong Track Record

Prior to going public as a REIT, each real estate company was a going concern, some for longer periods than others. Barry Greenfield, manager of Fidelity's Real Estate Fund, explained that the management team is crucial to a REIT's success, and that he would be "wary of any developer with less than ten years experience in the real estate business." [41] There is no true minimum or maximum number of years of operation required prior to forming a REIT, but a clear cut record is important to determine credibility, financial history, profits, property maintenance and tenant relationships. Bruce Garrison summed it this way:

> If we don't feel management can cut it as a public company, that's where we'd stop. [We figure they can make it as a REIT] primarily by looking at their past record, how many years they've been in business, how many cycles have they gone through, have they outperformed relative to their competitors, or have they done well relative to other REITS.[44]

---

[44]Kidder Peabody. Interview, July 20, 1993.

Cohen warns that when investigating a company's track record of profitability, be wary of management boasting, 'When we took over the company, there were only $2 million in assets and we grew it to $100 million.'[45] Asset growth is not a measure of profitability. Earnings figures are not good measures either. In this situation, historic cash flows can be useful either to document management's capabilities to grow earnings and/or to demonstrate rates of growth inherent in particular kinds of assets. The figures analysts truly value are (changes in) net income *before* depreciation (FFO).

Full Integration

There is consensus among the experts that full integration is one of the most valuable finds in a REIT's organizational structure. There is a greater degree of control and efficiency when all functions are handled under the same roof. The common feeling is that the REIT should know all of the intricacies relating to their property type, market area, and every aspect of the real estate business.

> You want to make sure that [they] have all of the skills that go into that property type, all the way from ground up development, asset/property management skills, leasing, acquisition, redevelopment...that's where you get your home growth story from.[46]

In other words, they want a fully integrated real estate team. It is so important to Green Street, that they would never invest in HRE Properties of New York. HRE's sites are all over the U.S and property managers are hired in each area, Portland, Denver, North Carolina to handle the assets' affairs.[47] Green Street does not believe the commitment is the same as that of a hands-on management team.

[45]Cohen & Steers. Interview, July 20, 1993.
[46]Kidder Peabody. Interview, July 20, 1993.
[47]John Litzius. Telephone interview, July 7, 1993.

Most agree with this point. [As of July 31, 1993, HRE Properties was trading an FFO multiple of 10.3X as compared to the average of approximately 15.5X.]

Investors will not buy REITs in which management's interests are not aligned with those of their shareholders. Investors are advised to look at what else owners are involved in. Cohen sees conflicts in the case of JMB Properties because it has outside property interests and manages multiple REITs.

High Inside Ownership

One of the most popular recommendations is not to invest in a trust unless the developer and management company have their own money in the trust. Investors want assurances that there is reason for the management of a REIT to care about how the company performs. What are their incentives to stay in and prosper the REIT? Clearly, if it is 80% of their net worth versus 5 or 10%, then there is a greater incentive. The majority agreed that when a REIT is self administered, and management has retained a substantial financial interest, it demonstrates a commitment to see the REIT prosper. The financial stake of management is more important than how many shares they own. A common sentiment is that the outside advisor has only its own financial interests in mind, therefore it cannot truly be looking out for the best interest of REIT. Carr's comment was, "It's not impossible to have a good outside advisor, but it still lends itself to questions." Carr presented Property Trust of America as an example of a very popular REIT that is managed by a third party and related it this way:

> A REIT could be self managed, but management could be entirely asleep. The REITs biggest fear may be that they are taken over, and [they may] purposely keep prices down. The important thing is, What are the incentives to management? The best congruence of interest is when the company is self-managed and has large shareholdings.

Carr sees the issue as being more complicated than "the binary switch: self- or not self-advised."

Avoid Conflicts of Interest

Along with high insider ownership, an independent board of directors is another item on the checklist (not listed in Exhibit 1). PRA did not invest in Tanger Factory Outlet Centers, a recent issue, because the son of the company's CEO and their attorney sit on the five person board, possibly creating conflict. REITs must be careful to avoid self dealing. Properties should not be traded between REITs and their affiliate companies, trust managers or directors.

If there is an outside advisory contract, whereby the advisor is taking a fixed percentage of the total asset value for the management, there is motivation to expand the asset, regardless of profitability. This conflict is the main reason outside advisors have fallen out of favor.

UPREITs are another source of conflict. In Attorney William King's words, "they are a necessary evil."[48] The criticism stems from the original owners' motives to form the umbrella partnership in the first place. Generally, the structure is formed by limited partners that have pooled resources to avoid paying capital gains taxes on their assets. For example, alignment of interests are questioned in a situation where the partners object to selling a property from the original pool, because of the tax consequences. By rejecting a deal that could have been beneficial to the shareholders, the sponsor's fiduciary obligation to them which is to maximize total returns is violated. As mentioned in an earlier section, the more fundamental

[48]William B. King, Esquire. Partner, Goodwin, Proctor & Hoar, Boston. Phone interview, August 1993.

issue is whether the UPREIT structure is flawed because it is tax motivated and not based on economic principals.

Martin Cohen explained that he was "neutral" on UPREITs because as yet he did not have clarification from the IRS. Cohen's partner, Bob Steers had expressed a strong dislike for the UPREIT structure. He described it as "a very flawed structure that only benefits the issuer and investment bankers." On the potentiality of the sale of properties,

> It creates a situation in which management and shareholders may not be on the same side of the table, and frankly, that troubles us. [20]

Proponents of the structure uphold that since the majority of equity REITs rarely sell their properties. If that situation arose, Fosheim suggested "the independent board members could insist on an independent second opinion to place alongside management's before making a decision." [20] Though simplicity of structure was preferred, it was not one of the most critical issues. The UPREIT structure will be discussed again later in the chapter.

Compensation & Incentives

If the management is dedicated and free of conflicts, then the market feels more assured that they are working for the shareholder, not against them or behind their backs. Even with inside management, salaries are subject to a certain amount of scrutiny by fund managers and analysts. Cohen shared that his firm regularly disputes salaries with trusts' management if they feel they are out of line. "We have told Abe Gossman [President of MediTrust] he is not worth his salary. At least we know where we stand."

Fosheim suggests United Dominion Realty Trust as a model for REIT compensation. "Managements also must get innovative when it comes to compensation. McCann [the Chairman] ties his incentive-based compensation to growth in FFO. His bonus doesn't kick in until he's met a hurdle rate of 5%." [38]. One of the things Kidder Peabody looks at when it comes to compensation is option agreements with the officers; are the options available only to the founders or to middle management as well? Analysts are interested to know what level of interest or commitment exists at all levels of management, from the CEO to the property manager who is stationed at the site every day. Kidder prefers incentive bonuses tied to changes in FFO/per share.

> If management says, 'We're going to give ourselves a bonus tied to increase in FFO next year of 5%, irrespective of the shares, we tell them, 'No guys, you could do that with leverage, by increasing the shares, with putting the money to work; you'll drive FFO up but you may not be driving FFO per share up.'

Once again, the more closely that management's actions are aligned with shareholders' interests, and reflect their expectations, the greater the likelihood that it will be reflected in the direction of the share price.

Financial Strength & Flexibility

Low Payout Ratio

Access to debt and equity capital is extremely important to the continued success of the REIT. Without the ability to access capital, the REIT cannot fund acquisitions to fuel internal growth The successful REIT has a history of secure dividends, steady increases, and the promise of continued growth. Barry Greenfield's most important criteria for buying a REIT is the safety of the dividend.

> Don't focus just on a REIT's yield because if the dividend is cut, there goes your high yield. Look at the payout ratio and the trend in vacancy rates of the properties owned by the trust. I get concerned if the payout consumes much more than 90% of cash flow. If vacancies rise, rents and cash flow will probably fall - taking your dividend along with them. [41]

Another important question is, how are they financing the balance sheets to derive the dividend paying ability. How do the financial ratios look; are they too high or low relative to other REITs' in that category. Equity to debt ratios at the REIT and property levels are important in terms of risk and volatility.

> Many of the newer REITs have chosen to finance their balance sheets at the short end of the steeply sloped yield curve. If the short end of the yield curve goes higher, their performance will suffer...This is where there is a parting of ways in terms of strength of balance sheets of some of these REITs. [40]

Almost across the board, a conservative payout ratio was preferred. If 80%-90% of cash flow is paid out, the remaining balance is available for reinvestment to grow the REIT. Carr stated that he is indifferent to the actual payout, "but if the payout strategy is low, then it ought to correspond with a mandatory reinvestment strategy."

Conservative use of Leverage

"Conservative amounts of debt generally maintains investor confidence in a downturn".[49] The level of debt a REIT can comfortably carry depends on the company. It is a function of the REIT's maturity and underlying strength, current financial condition, tenant quality, FFO growth history and potential. If the portfolio is stabilized and has long term leases with tenants the caliber of a K Mart, then more debt may be justified. If it is a heavy acquisitions company, equity may be the better choice. According to Heller, "once you get up into the

---

[49]Greg Sigmund. Asst. VP, Sr. Analyst, AG Edwards & Son. WSJT[15]

big market cap, it's tougher to grow and to make an impact with additional debt." The prevalent REIT posture of late has been to deleverage, pay down the debt, not take on more. The impression is that if the debt is low, the REIT premium will be higher. A point of contention among the experts is what kind of debt is acceptable, fixed or variable, and how much. Quality of debt is just as relevant as the quantity of debt. All in all, the ratio of debt to equity should not exceed fifty-fifty; 40%, 30% or lower, debt to total assets, is the generally accepted proportion.

Financial flexibility is key to having the ability to acquire properties, as well as cover dividends. The most successful REITs have developed this flexibility and are awarded with premiums in the market. The reason for it is that they are poised to take advantage of suitable opportunities which will generate cash flow that will lead to dividend increases and ultimately grow the REIT.

To illustrate, Martin Cohen pointed to two companies in the apartment sector that recently went public. Holly Residential Properties is predominantly invested in the Seattle market. All of its properties were encumbered by debt. In Cohen's judgment,

> The company from day one had no financial flexibility - it is leveraged, cannot borrow more because all properties are encumbered and its cost of equity capital is too high to make profitable acquisitions. The company is dead in the water.

Cohen indicated that the original debt, and the subsequent IPO, were each very costly to arrange, and that the stock price barely made sense from the issuers' standpoint. Holly is one of the first IPOs in a very long time to drop in value after the initial offering. In contrast, Post Properties, had unencumbered properties, started out with a line of credit, retired some of its debt and now has great financial flexibility. It achieved the best pricing of any REIT IPO ever in the

history of REITs.[50] A REIT that has a significant amount of debt reduces its prospects for growing earnings through acquisitions or development.

Raise Capital for Specific Plan

Difficulties arise when REITs raise additional capital that is not readily put to productive use. The most successful REITs raise capital for express uses that will generate cash flow These REITs realize that cash remaining on the books can actually drain earnings and limit cash flow and dividend growth. If the capital raised is only earning 3-4% in a money fund, instead of 10% or 12% from a real estate investment, the REIT will weaken relative to its peers. Even if it is debt capital that was raised at low rates, it is still a burden. If the REIT does not have a plan to readily convert the variable notes into real property or even long-term fixed debt, it heightens the risk of the floating rate rising. Shareholders recognize the absence of productive activity by reflecting it in the stock's returns.

Floating Rate Debt Criticized

Clearly, the greatest risk with variable debt is the exposure to interest rate risk; interest rate risk generally translates into cash flow volatility which affects share value. If interest rates rise, cash flow will decrease and investors will required a higher discount rate to compensate for the additional cost of capital and risk. If debt is fixed, a rise in interest rates would at least give the debt some positive value since it would now be below market rates. Even though some REIT analysts may not impose limits on how much or how little total debt should be on the books, many do have problems with floating rate debt. Unless there is a

[50]Kidder Peabody. Interview.

specific strategy for the use of the short term capital, they would prefer not to see REITs adding it to their balance sheets.

Garrison is concerned about the growing use of short term debt to finance portfolios by many REITs. In his opinion, many of these REITs are "playing with fire," because notwithstanding the positive spreads that are possible on the capital employed today, it could disappear. REITs that utilize short term debt are basically borrowing short to invest long. Garrison distinguishes between an IPO using floating rate debt and an existing REIT using it.

> If it is an IPO, we will not tolerate deriving sponsors' equity by virtue of floating rate debt. We just won't do it. I think that is why Holly did so poorly in this offering. From the standpoint of the REIT that is existing and ongoing, having a small acquisition line relative to the capital structure is very fine with us, because it allows them to build the portfolio; and when they go back to the market for an offering, it's a specified offering, not a non-specified offering, which the market won't tolerate either.

Most borrowers who acquire floating rate debt also take steps to reduce their exposure to rate increases by purchasing interest rate caps or engage other forms of hedging. Simply, the REITs with the strongest balance sheets will obtain the greatest premiums for their stock.

Quality Property

Quality REIT properties are not necessarily Class A or even B buildings, and rarely are they "trophy" properties. Quality refers to a variety of things. One is location; is it a primary or secondary area, what are the employment and population trends, how have competitors fared, is the outlook that tenants are moving in or out. Another measure of quality refers to the assets themselves. Physical attributes such as meticulousness of property care, special or obsolete

features and property "fit" to the locale are certainly considered. Also, quality refers to the tenants' creditworthiness, reputation, lease terms and structure, which leads once again to the quality of the income stream.

> Better companies own better properties; better properties usually mean better locations, good tenants. Shopping centers with Jamesway (which is bankrupt) in remote areas, makes a different portfolio than Walmart. Sometimes C locations have generated good cash flow, but usually you will find a property will not generate maximum cash flow if it is in a lousy location and it looks awful. You find that a lot of these advisors don't pay as much attention to the property as an owner would. We go down to visit them and find them in very sorry states. [Cohen]

In sum, to be viable, a REIT must have good real estate in an area that has growth potential, in order to generate enough cash flow to provide REIT shareholders with the yield that they expect.

The Simpler and The Bigger, The Better

This chapter has described a number of REIT attributes that are rewarded with high multiples and prices that exceed the underlying value of the real estate. They are difficult to measure, but are seriously examined relative to other REITs in the universe by analysts and investors alike.

Other considerations are the REIT's structure and size. The UPREIT structure, which was more fully described in Chapter One, is beginning to gain broader acceptance as the format is being practiced more regularly. To form an UPREIT, a number of real estate partners pool properties, exchanging individual units for an interest in a larger umbrella partnership. They then issue a REIT which raises money in a public offering to purchase units in the UPREIT. Because

it puts another layer between the shareholders and the properties, "It becomes more difficult to convey the story."[51] Cohen submits that:

> For every box in your organizational chart, it is going to cost you money. The greater the distance between the shareholder and the property, like partnerships or advisory contracts, or what have you, the less the valuation of the share price.

Most of the individuals interviewed prefer the simplest structure possible, but also admit that the nature of real estate ownership has always been complicated, making it difficult to have neat little securitized packages. Cydney Donnell at European Investors called UPREITs a "creative structure,"

> All things being equal, I'd rather not invest in an UPREIT. But I recognize that its the only way that some of these deals can get done and if you want to own these assets - and in many cases they're definitely assets we're very much interested in - the UPREIT is a fact of life. [20]

If the company is structured in this manner, it will get figured into the offering's pricing. To resolve the control problem, Merrill Lynch's head of real estate investment banking, Richard Salzman, recommends making the umbrella partnership sole general partner and making sure UPREIT's shareholders own at least 50% of the umbrella partnership. [20] The complexity of a REITs structure varies, and though some analysts may devalue a stock more than another, it does not appear that the success of an otherwise good issue would be thwarted because of it.

If an owner is considering going to all of the trouble and expense to securitize, the majority profess that unless it has a cap of at least $250 million, it will not be worth it. There is skepticism that even REITs with the bare minimum

---

[51]Ibid.

of $100 million in assets cannot be run cost effectively as a public REIT. The trend towards larger capitalization stems from the desire to achieve economies of scale given the high cost to securitize, gain flexibility and become major players and to fulfill investors' demand for liquidity. Robert Vogelzang analyzes and consults on REITs at Arthur Anderson & Co. in Los Angeles.

> Nothing less than $100 million is worth it. If it's a nursing home REIT, need lots of nursing homes to create mass. If shopping center REIT, could reach $100 million easily enough with 3 centers. MUST have enough to have some diversity.[52]

One of the greatest barriers to entry is the high up front charges to form a REIT. These standard administrative and legal fees, which have no relationship to scale, can range from $500,000 to $1+ million, before the investment bankers become involved.

> One of the beauties of today's environment is that we are getting big REITs for a change, and it does attract a wider audience. We only have 5 or 6 REITs that have a market cap over $500-600 million. I think that the wave of successful REITS. I think we're going to see several REITs that'll achieve billion dollar status. [Garrison]

Troubled for an Exit Strategy? Don't Look Here

Entities considering securitization must pay close attention to the success stories, as well as the failures, and learn from their lessons. Although some distressed properties can provide exceptional opportunities for the investor willing to take some risk, when it comes to deciding whether or not to securitize an existing pool of real estate, Mark O. Decker, NAREIT's President, recommends that troubled developers need not apply.

> Public markets today are not an exit strategy for troubled developers. My opinion is that it is not a good dumping ground for anyone. [48]

---

[52]Interview, July 13, 1993.

This sentiment is widely held. "We're not going to get stuck again with a bunch of properties the issuer doesn't want and doesn't care about. Issuers only looking for a source of financing or a never ending stream of fees had better look elsewhere." [38]

On more than one occasion an interviewee would offer his view on banks and insurance companies contemplating forming a REIT. One analyst's comment summarizes the general sentiment,

> They have no credibility regarding managing and adding value to real estate. Unless the properties are gems and they create a completely separate spin off (REIT), it might work. REITs are not a vehicle to unload repossessed properties.

Essentially, the lack of faith in banks' and insurance companies' ability to add value, is a direct result of the events of the recent past and the fact that many of the problem properties being purchased by REITs once belonged to them. Many of the items discussed under the management section of this chapter will be very important to such a REIT prospect. The independence factor could be achieved via a fresh Board of Directors, hiring qualified real estate professionals, preferably ones with experience in the types of assets being pooled, incentive based management and lack of conflicts, these items coupled with "quality" properties, would be key provisions.

No REIT is Perfect - But One Can Try

In closing this chapter, it is important to note that REITs cannot be viewed in a vacuum, nor can each trait be disaggregated and evaluated. The entire product must be analyzed in order to make a fair judgment of its overall merit.

The actual monetary or percent value of the intangible characteristics described in this chapter are difficult to specify. Just how much more does a REIT with a savvy CEO deserve? Why do some REITs trade at 20% more than its competitors, while others in the same category are at 50% premiums and more? Does this indicate that the capital markets move in capricious and mysterious ways or in systematic, efficient ways? Given the history of the capital markets, maybe it is a little bit of both. Nevertheless, what is meaningful is that investors do not award all REITs with high multiples. It certainly is more discriminating than it had been in the past, and it is not making sweeping judgments about the industry on the whole. If a REIT has special features or fulfills investors' demand, it will benefit from favorable market response. It is therefore important to recognize these traits.

Washington REIT and Property Trust of America are two successful REITs that deviate from the standard "criteria of success." The differences in their profile are highlighted in **Exhibit 2**. For a more in depth look at each of these successful REITs, refer to **Appendix C**. The most enlightening discovery from this thesis during the exploration of this topic has been that regardless of "The Checklist," there is room for some deviation and analysts will judge fairly. For example, it would not be fair to say that the southwest is the best place to invest, or that industrial properties are to be avoided because manufacturing is down; there are pockets of good performance opportunities throughout the nation. The package would be locked at in its entirety. For every negative attribute, there will be a positive one to offset it; if not, then it goes no further.

EXHIBIT 2

REIT PROFILE	**Weingarten Realty Advisors** (NYSE - WRI)	**Property Trust of America** (NYSE - PTR)
Real Estate Co.	Organized early 1950s	Organized in 1963
Geographic Focus	Southern US *Favorable Trends: Employment rising (esp. Houston)*	Southwestern US *Favorable Trends: Tightening apartment rental market.*
Property Focus	Shopping Centers 88% Industrial Apartments Other	Multi Family 61% Shopping Centers Office & Indust. Other
Strategy	• Increasing shopping center concentration • Aggressive, selective expansion	• Moving towards 100% apartments. • Niche; was small cap that orchestrated fast growth.
Management/ Outside Advisor	• In-house management services • Fully integrated	• Outside advisor manages daily operations Base annual fee + 16% of incremental FFO
Insiders Own	Approximately 19%	Approximately 22%
Add Value	• Strong development skills • Keen acquisition skills • Attract good anchors • Lease structures tied into sales growth of tenants	• Management turn around in last two years. • Ability to raise "cheap" equity capital (not through costly investment banks)
Equity Cap @ Market	$913 million 22.9m shares outstanding $40 per share	$638 million 35.2m shares outstanding $18 per share
Price to FFO	17.1X	22.9X
Dividend Yield	5.4%	4.5%
Payout Ratio	89%	82%
All Debt to Cap @ Market	13%	12%
Price as % of Current Value	125%	121%

Upper Box: Standard & Poor's Corp, Standard NYSE Stock Reports, October & December 1992
Lower Box: Kidder Peabody Inc., Real Estate Stocks Report, May 1993

The first concern is not *what* or *where* the property is, but *who* owns and manages the properties and *what* is the strength of the cash flow. If the properties have high occupancy levels and favorable lease structures with creditworthy tenants, if management has a track record and an experienced team, in addition to a balance sheet that shows the staying power to overcome obstacles, then even a New York office REIT would be entertained.

The following chapter will attempt to quantitatively identify the variables (characteristics) which are deemed most important to the variability in a REIT's value, the FFO multiple. The results of the cross-sectional regression analyses will be compared to those attributes that have been qualitatively described in this chapter as being important factors to a REIT's success.

CHAPTER FIVE

A QUANTITATIVE LOOK AT WHAT AFFECTS VALUE

Objective

The objective of this quantitative examination was to report on a cross-sectional analysis conducted on a sample of REITs, testing for the significance of the value-contributing variables cited by subjects in Chapter Four. More specifically, which of the characteristics of a REIT account for the greatest variability in its value, as represented by the Funds From Operations Multiple (equivalent to a common stock's P/E Multiple).

Methodology

The methodology adopted to accomplish the above objective consisted of cross-sectional regression analyses (least squares regression). The data collected was divided into two groups. Group One included the equity REIT IPOs that were issued from January through July 1993. Though the sample size may appear small with only twelve (12) observations (TABLE 5.1), but it does represent the universe of new initial public offerings for 1993.

The second Group contained thirty-eight (38) equity REITs (TABLE 5.2), which included Group One. The REITs in this group were selected due to their mass (all but two have a market capitalization greater than $100 million) and the

Table 5.1

REGRESSION INPUT SUMMARY
12 REIT OBSERVATIONS
(1993 IPOs)

	TYPE	IPO Date	IPO $	7/31/93 Price	Diffce. in Price	Shares Outstand.	FFO/sh	Payout Ratio	Debt/ Mkt.Val.	Dividend/ Share	% Inside Own	FFO Multiple	Dividend Yield
Carr Realty*	Office	Feb	$22.00	$25.50	15.91%	14,252	$1.92	88.5%	29%	$1.70	26%	13.28	6.7%
Camden Properties	Resid	July	$22.00	$22.88	4.00%	8,047	$1.86	86.0%	18%	$1.60	4%	12.30	7.0%
Manufactured Homes*	Resid	Feb	$26.00	$36.00	38.50%	7,506	$2.50	81.6%	28%	$2.04	28%	14.40	5.7%
Post Properties	Resid	Feb	$25.50	$28.00	9.80%	19,380	$1.90	98.9%	40%	$1.88	23%	14.74	6.7%
Holly Residential	Resid	June	$23.00	$23.13	0.57%	7,231	$2.07	87.0%	41%	$1.80	6%	11.17	7.8%
Vornado	Retail	May	$35.50	$35.50	0.00%	21,290	$1.90	92.6%	26%	$1.76	41%	18.68	5.0%
General Growth*	Retail	April	$22.00	$24.63	11.95%	37,416	$1.86	79.6%	38%	$1.48	3%	13.24	6.0%
Tanger Factory	Retail	April	$22.50	$27.88	23.91%	7,891	$1.83	91.8%	16%	$1.68	41%	15.23	6.0%
Factory Stores	Retail	June	$23.00	$25.00	8.70%	7,498	$1.93	93.3%	9%	$1.80	12%	12.95	7.2%
Mark Centers	Retail	May	$18.50	$19.83	7.19%	8,551	$1.50	96.0%	19%	$1.44	19%	13.22	7.3%
Tri Net	SLB**	May	$24.25	$24.38	0.54%	6,240	$2.39	92.1%	25%	$2.20	14%	10.20	9.0%
Diversified Development	Retail	Feb	$22.00	$29.00	31.82%	11,618	$1.72	93.0%	39%	$1.60	22%	16.86	5.5%
								AVG=90%					*AVG=6.6%*

* UPREIT
**Sale Leaseback

NOTE: All are self advised

Source: Bloomberg/Citicorp

Table 5.2

REGRESSION INPUT SUMMARY
38 REIT OBSERVATIONS

	Type	Shares Out-standing (millions)	FFO / Share	Payout Ratio	7/31/93 Price	Debt/ Mrkt. Value	Div / Share	% Inside Own.	FFO Multiple	Div Yield	Self Advised =1
Bradley REIT	Retail	10,702	$0.72	83%	$9.50	26%	$0.60	11%	13.20	6%	0
BRE Properties	Res.	9,531	$2.51	96%	$34.75	20%	$2.40	3%	13.80	7%	1
Burnham Pacific	Mixed	12,878	$1.09	128%	$19.00	38%	$1.40	37%	17.40	7%	1
California REIT	Mixed	9,118	$0.52	38%	$2.00	70%	$0.20	10%	3.80	10%	0
Camden Properties	Res.	8,047	$1.86	86%	$22.88	18%	$1.60	4%	12.30	7%	1
Carr RE	Office	14,252	$1.92	89%	$25.50	29%	$1.70	26%	13.28	7%	1
Copley Properties	Mixed	3,600	$1.12	71%	$11.00	50%	$0.80	13%	9.30	7%	1
Dial REIT	Retail	8,265	$1.14	77%	$11.00	42%	$0.88	1%	9.60	8%	1
Diversified Development	Retail	11,618	$1.72	93%	$29.00	39%	$1.60	22%	16.86	6%	1
Factory Stores	Retail	7,498	$1.93	93%	$25.00	9%	$1.80	12%	12.95	7%	1
Federal Realty	Retail	27,700	$1.30	118%	$27.13	22%	$1.54	6%	20.90	6%	1
General Growth	Retail	37,416	$1.86	80%	$24.63	33%	$1.48	3%	13.24	6%	1
Holly Properties	Res.	7,231	$2.07	87%	$23.13	41%	$1.80	6%	11.17	8%	1
HRE Properties	Mixed	5,297	$1.51	72%	$15.83	27%	$1.08	20%	10.50	7%	1
IRT Properties	Mixed	21,053	$0.93	90%	$12.25	33%	$0.84	3%	13.20	7%	1
KIMCO	Retail	20,018	$2.47	76%	$36.00	26%	$1.88	29%	14.60	5%	1
Kranzco	Retail	8,064	$1.78	103%	$24.63	38%	$1.84	4%	13.80	8%	1
Manufacturers	Res.	7,506	$2.50	82%	$36.00	28%	$2.04	20%	14.40	6%	1
Mark Centers	Retail	8,551	$1.50	96%	$19.83	19%	$1.44	19%	13.22	7%	1
Merry Land	Res.	17,228	$0.96	92%	$17.83	28%	$0.88	28%	18.60	5%	1
MGI Properties	Mixed	9,432	$1.37	58%	$13.00	33%	$0.80	4%	9.50	6%	1
New Plan	Mixed	48,794	$1.06	122%	$23.38	2%	$1.29	10%	22.10	6%	1
Pennsylvania REIT	Mixed	8,643	$1.83	98%	$24.87	5%	$1.80	13%	13.60	7%	1
Post Properties	Res.	19,380	$1.90	99%	$28.00	40%	$1.88	23%	14.74	7%	1
Property Trust America	Mixed	35,236	$0.83	99%	$19.38	4%	$0.82	6%	23.30	4%	0
REIT of California	Mixed	9,192	$1.37	93%	$16.50	9%	$1.28	2%	12.00	8%	1
Santa Anita	Mixed	11,256	$1.98	69%	$17.50	48%	$1.36	16%	8.80	8%	1
Sizeler	Retail	4,739	$1.18	88%	$14.63	49%	$1.04	10%	12.40	7%	1
Storage Equities	Ind.	17,315	$1.31	64%	$13.00	18%	$0.84	5%	9.90	7%	0
Tanger Factory	Retail	7,891	$1.83	92%	$27.88	16%	$1.68	41%	15.23	6%	1
Taubman	Retail	123,962	$0.85	104%	$14.00	23%	$0.88	21%	16.50	6%	1
TriNet	SLB *	6,240	$2.39	92%	$24.38	25%	$2.20	14%	10.20	9%	1
United Dominion	Res.	41,426	$0.73	96%	$14.00	27%	$0.70	8%	19.20	5%	1
Vornado	Retail	21,290	$1.90	93%	$35.50	26%	$1.76	41%	18.68	5%	1
Washington REIT	Office	28,225	$0.90	98%	$22.50	0%	$0.88	2%	25.00	4%	1
Wellsford	Res.	9,102	$1.98	85%	$26.00	24%	$1.68	32%	13.10	7%	1
Weingarten	Retail	23,447	$2.35	91%	$41.50	8%	$2.15	22%	17.70	5%	1
Western	Retail	16,474	$1.24	90%	$14.13	31%	$1.12	4%	11.40	8%	1

* Sale lease back.

availability of complete and congruent data. Group Two consists of an equally dispersed selection of REIT concentrations (residential, commercial and mixed).

The FFO multiple was the only dependent variable selected for this analysis. It provides a consistent measure across companies unlike other measures such as FFO/share or total capitalization, which are absolute figures that cannot be properly and uniformly compared. P/E ratios are commonly used as a tool to measure the intrinsic value of a firm. High P/Es indicate that investors are optimistic about the future of the company. No exogenous factors are represented in the model.

Prior to running regressions, a correlation matrix was created for both sets of observations to determine the strength of the relationships between the independent variables (TABLE 5.3). All of the regression models were conducted at a level of significance of .05. Regressions for each groups was initiated using the same combination of multiple variables (listed in Regression Input Summaries - Tables 5.1 & 5.2). The regression combinations that included variables with P-values greater than .05 were eliminated from the equation.

Limitations

The REIT industry is small, and still relatively young by capital market standards, but is rapidly changing. In the most recent past (and present) the momentum of the REIT population growth has been tremendous. As a result, meaningful trend data for the newest REITs is insufficient to develop a significant trend analysis for the new generation. To assimilate daily data for that purpose

Table 5.3

CORRELATION MATRICIES

12 REIT OBSERVATIONS

	IPO $	7/31/93 Price	Div Yield	FFO / Share	FFO / Multiple	Debt/ Mrkt. Val.	Shares Out-standing	Diff. In Price	Div / Share	% Inside Own.	Payout Ratio
IPO $	1.0000										
Price as of 7/31/93	0.7763	1.0000									
Dividend Yield	-0.4299	-0.7036	1.0000								
FFO/Share	0.3243	0.4275	0.2413	1.0000							
FFO Multiple	0.5768	0.7111	-0.8964	-0.3245	1.0000						
Debt/Market Value	0.0884	0.1431	-0.1494	0.0967	0.0931	1.0000					
Shares Outstanding	0.2331	0.1306	-0.4421	-0.2271	0.3038	0.4626	1.0000				
Difference in Price *	-0.1703	0.4858	-0.5441	0.1523	0.3675	0.1049	-0.0956	1.0000			
Dividend/Share	0.3948	0.3865	0.3718	0.8849	-0.2523	0.0238	-0.3740	0.0029	1.0000		
% Inside Ownership	0.5202	0.6735	-0.5561	-0.0183	0.7293	-0.1622	-0.0918	0.3656	0.1394	1.0000	
Payout Ratio	0.0650	-0.1218	0.1732	-0.4121	0.2351	-0.1729	-0.2915	-0.2475	0.0550	0.3548	1.0000

38 REIT OBSERVATIONS

	Shares Out-standing	FFO / Share	Payout Ratio	% Inside Own.	Self Advised	Div Yield	Price	Debt/ Mrkt. Val.	Div / Share	FFO / Multiple
Shares Outstanding	1.0000									
FFO/Share	-0.3238	1.0000								
Payout Ratio	0.3238	-0.0045	1.0000							
% Inside Ownership	0.0087	0.2739	0.1595	1.0000						
Self Advised	0.0045	0.4330	0.3755	0.1980	1.0000					
Dividend Yield	-0.3514	0.0448	-0.3339	-0.2119	-0.0477	1.0000				
Price per Share	-0.0584	0.8065	0.3727	0.4080	0.4247	-0.4275	1.0000			
Debt/Market Value	-0.2320	-0.1319	-0.4899	0.0289	-0.0609	0.5420	-0.4114	1.0000		
Dividend/Share	-0.2184	0.9214	0.3547	0.3025	0.6065	-0.0130	0.8818	-0.2712	1.0000	
FFO Multiple	0.4322	-0.1481	0.7365	0.1682	0.1333	-0.8312	0.4176	-0.8115	0.0996	1.0000

* Between IPO and 7/31/93.

was beyond the scope of this thesis. It is this new breed of REITs that is most interesting, especially to potential REIT sponsors who are considering securitization in today's environment. Hence, the 12 observation regressions were run despite their limitations.

Much of the published data is incongruent in terms of reporting dates. The data compiled in this analysis was most complete for the recent period ending July 31, 1993. The source was Bloomberg Data Services provided by Citicorp Securities Markets, Inc. (Real Estate). Select data points that may have been unavailable for a REIT in the Bloomberg reports would have been extrapolated or supplemented with information from one or more of the following sources: Standard & Poor's Real Estate Securities Stock Report, Kidder Peabody's Stock Review (5/11/93) or REITWatch, published by NAREIT.

Analysis

Of the twelve IPOs that closed through July, six were focused on retail properties and four were residential - the two real estate sectors perceived to be the strongest today. All are self-administered, insiders own an average of 20% of the equity and the ratio of total debt to market averages 27% (the highest was Holly Residential at 41%, much of it floating rate). The average dividend yield was 6.6% while the payout ratio averaged 90%. When the IPOs were added to the larger sample, minor variations resulted. Average dividend yield declined to 5.98%, the payout ratio rose to 90.9%, and the level of inside ownership decreased to 14%. Aside from the ability to ascertain better results with additional samples, the variation in these statistics between Group One and Group Two, may have been affected by the average maturity of the REIT, and that the average size of the

REIT expanded. In either case, it is a far different profile from REITs of earlier decades.

There is no evidence of strong multicollinearity[53] between the independent variables Payout Ratio and Dividend Yield; the correlation coefficient is highly negative (-.8312 with 38 observations; -.8964 with 12 observations). The first least squares regression models that were run for each of the two Groups included the greatest number of independent variables. The multi-variable regression for both cases produced a similarly high adjusted coefficient of determination (Adj. R-Squared), however, the use of multiple variables increased the probability of multicollinearity and only a select few variables provided significant P-values. Upon eliminating the insignificant variables, (those with P-values > .05), the independent variables with the most explanatory power in predicting the variability of a REIT's FFO Multiple were the payout ratio and the dividend yield. The Adjusted R-Squared for Group Two's best regression model was .9250. Its equation follows:

FFO Multiple = 17.06 + 13.46 (Payout Ratio) - 225.38 (Dividend Yield)

This result indicated that only 0.075 of the variability in the multiple remained to be explained by other variables, the intangibles. Of the .075, inside ownership accounts for roughly .0295. The coefficients for each variable indicate how that variable affects the FFO Multiple. The dividend yield coefficient was consistently a high negative number in all regression models; in this "best" regression model, the

---

[53]Multicollinearity refers to situations in which some of the explanatory (independent) variables are highly correlated with each other.

coefficient was **-225.375.** The following equation relates that for every one percent change in the yield, the FFO multiple will decrease by 2.25X.

Table 5.5

REGRESSION
ACCOUNTING FOR THE HIGHEST VARIABILITY
38 REIT OBSERVATION

Dependent Variable (Y) = FFO MULTIPLE

Regression Statistics	
Multiple R	0.963354
R Square	0.928051
Adjusted R Square	**0.923939**
Standard Error	1.193209
Observations	38

Analysis of Variance

	df	*Sum of Squares*	*Mean Square*	*F*	*Significance F*
Regression	2.0000	642.7555	321.3778	225.7266	0.0000
Residual	35.0000	49.8312	1.4237		
Total	37.0000	692.5867			

	Coefficients	*Standard Error*	*t Statistic*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	17.05803	1.8047	9.4518	0.0000	13.3942	20.7219
Dividend Yield	***-225.375***	16.4564	-13.6953	**0.0000**	-258.7834	-191.9667
Payout Ratio	***13.46325***	1.2536	10.7401	**0.0000**	10.9184	16.0081

REIT investors appear to be placing a great deal of emphasis on yield (as the market analysts has been asserting). If yield is the main thrust, the strong negative correlation between the dividend yield and the multiple is in line with the traditional theory that if dividend yield is high, expected growth prospects are low, keeping the price/earnings multiple low. The dividend yield and payout ratio have a moderate inverse relationship, indicated by a -.3339 correlation coefficient.

The two coefficients were significant with robust t-statistics. The payout ratio coefficient was positive, proving the direct relationship between payout to movement of the multiple. The higher the expected payout ratio (and the higher the expected growth rate of earnings, not shown here), the higher the earnings multiple. The multiple will decline, as the investors adjust their required rate of

returns for various risks and changes in expectations. For those investors interested in the "pure dividend play," a higher payout ratio would be welcome. However, by paying out more of its earnings, the REIT has little left to reinvest in the company, diminishing growth prospects which once again, leads to a lower multiple.

As REIT prices drop, the valuation of the entire REIT enterprise is reduced. The question is, is a lower multiple relative to other REITs a negative thing. If the REIT reduces its payout ratio, it retains more in house to apply towards growth opportunities, such as acquisitions. Depending upon the objectives of the REIT sponsor, it will either follow the dividend strategy or the growth plan. To achieve or maintain target dividend payments, managements adjust their payout ratios to reach their target level.

In some cases the regression results derived for the small and the large data sets matched, and in other cases the relationships varied substantially. The differences were attributed to the limitations of a small sample. Table. 5.5 showed the best regression output for the 38 REIT observations. Consult Table 5.4 for a summary of key components of other regressions conducted. Following is a brief look at results that differ or are in accord with expectations or the qualitative perspective.

Debt to Total Market Capitalization

For Group Two, the correlation between debt and the dependent variable was -.6115. The negative correlation, as well as the negative coefficient (-17.66), indicates that an inverse relationship between the level of debt a REIT carries and

Table 5.4

SUMMARY OF REGRESSION OUTPUT
38 and 12 REIT Observation Series

Independent Variables	38 REIT Observations			12 REIT Observations		
	Adjusted R-Square	P-Value(s)	Co-efficient(s)	Adjusted R-Square	P-Value(s)	Co-efficient(s)
Div/Share	-0.0180	0.5519	0.8340	-0.0299	0.4272	-2.6880
Inside Ownership	0.0013	0.3125	6.3780	0.4850	0.0062	13.2000
Payout Ratio	0.5298	0.0000	19.1950	-0.0391	0.4604	9.6760
Dbt/Market Value	0.3566	0.0000	-17.6600	0.0931	0.7729	2.0600
Self-Advised	-0.0095	0.4247	1.8550	n/a	n/a	n/a
Div. Yield	0.6823	0.0000	-8.9710	0.7840	0.0001	-189.3750
Inside Ownership & Div/Share	-0.0244	0.3894	5.7640	0.5839	0.0022	14.1120
		0.7607	0.4489		0.0933	-3.8470
Div/Share & Payout Ratio	0.5479	0.1261	-1.5500	-0.0684	0.4122	-2.8350
		0.0000	20.9053		0.4406	10.2780
Payout Ratio & Inside Ownership	0.5191	0.0000	18.9700	0.4286	0.9136	-1.1133
		0.6544	1.9757		0.0114	13.3756
Div. Yield & Payout Ratio	**0.9239**	**0.0000**	**-225.3750**	**0.9520**	**0.0000**	**-204.1060**
		0.0000	**13.4632**		**0.0002**	**16.5600**
Inside Ownership & Div. Yield	0.6733	0.9316	-0.3151	0.8542	0.0346	6.0470
		0.0000	-284.9880		0.0003	-150.1310

how much the market is willing to pay for it. The higher the level of debt, the lower the multiple. The regression analysis was significant and the results affirm the practitioners' belief that low debt or conservative balance sheet will be awarded with a higher multiple. The low Adjusted R2 (.36) does not explain a material variance in price but supports that the market is willing to pay more for unlevered REIT earnings.

Inside Ownership

Two of the most popular attributes cited by REIT industry professionals, do not appear to be supported by this statistical analysis. Property focus or specialty in a property did not produce any explanatory results. The correlation between inside ownership to FFO Multiple was very low and poor regression statistics with Group Two; whereas, the correlation was high (.73) and the P-Value low for the same independent variable with the IPO data set. The latter result could either be interpreted to mean that the level of inside ownership has recently become more important for new offerings, or again, the sample is too small to explain. When insider ownership was added to the model that included payout ratio and dividend yield, the Adj. R2 increased by .0295. Even though inside ownership is believed by the industry to be important, it cannot be statistically proven.

Despite the limitations in this analysis, this information may be useful to a prospective REIT sponsor, as a preliminary look at which characteristics are quantitatively measurable in defining what affects a REIT stock's price/earning multiple, versus the intangibles earlier described. This is not to undermine the "perceived" characteristics, a successful REIT is contingent upon dollars and sense.

The newest equity offerings, evolving into a new breed, are of the most interest, and worthy of taking a closer look when sufficient data can be collected to support statistically legitimate conclusions.

The significant variables found in this analysis do not correspond with the value contributing characteristics described qualitatively in Chapter Four. In theory, the dividend model demonstrated that under simplified assumptions, the dividend policy is irrelevant when the internal rate of return equals the appropriate discount rate[54] In reality, as these regression results showed, dividend policy does matter. The real REIT stock world has recently experienced a price "correction." Prices declined over what were considered to be "inflated" levels. Investors are not yet placing much faith in, or willing to pay for, growth in real estate in the immediate future.

Further study in this area is warranted. As the industry grows, and more adequate data is available, the trends for successful IPOs and secondary offerings, can be empirically proven. If managers gain the reputation of steadily growing the income, internally and through acquisitions, and the its capitalization on the whole expands, investors will adjust their expectations accordingly against those REIT owners that claim to be adding value through pseudo growth (spread investing, acquiring risky, poor performing properties with nothing to show.) The investor should look at more than the yield, and the REIT should cover all bases.

[54]The Dividend Model was developed by Myron Gordon. [35]

CHAPTER SIX

INDUSTRY OUTLOOK FOR REITs

Recent Activity

In the last eighteen months, REITs have shown unprecedented growth. By July 1993, twelve new offerings were completed with a market value in excess of $3.8 billion, surpassing the 1992 activity of eight initial public offerings totaling approximately $920 million. Not only are REITs growing in number, but most that are preparing to securitize are reflecting a better understanding of what investors require. All of these new REITs are competing for capital and are fighting to be heard by the major investment banking firms, which are already inundated with new issues.

Many skeptics have expressed warnings that this REIT boom will attract less desirable operators. These operators include spin-offs from financial institutions "desiring to expunge crummy properties from their inventories." [44] Green Street's Litzius predicts, "At the end of the boom, look for the IPOs that are trying to cut corners. We're starting to see it already."

Some REITs will work out and others will not. The market, for the most part, will recognize the short-term players and factor it into their own decision making process. The entities that are seriously considering securitization, with the goal of long-term survival, should be closely observing the recent, successful equity REIT IPOs.

Is The Window Closing?

In view of the external factors presently contributing to the REIT fervor, low interest and inflation rates, depressed real estate prices, continued constraints in traditional financial community, improving fundamentals, the most frequently asked question is, "Is the window of opportunity closing?" Inevitably, yes, but there are no prominent signs indicating that it will be anytime soon.

The outlook for equity REITs over the next few years is positive. As long as the performance of existing REITs does not disappoint investors, they will remain popular. Interest rates are expected to remain low, making the high yielding REIT the preferred investment choice over fixed income vehicles. The financial community will still be working out its problems from the 1980s' credit crisis and will be slow to return to their traditional function of lending money. In the meantime, the banks, S&L and other institutions are amongst the greatest contributors to the vast pool of properties available for sale, usually at deep discounts. Since Wall Street cannot seem to get enough of the IPOs, it suggests that REITs will continue to have access to capital to grow through acquisitions opportunities. The newest development is that legislation just passed, lifting the restriction of the "five-fifty" rule. This rule prohibited any five investors from owning more than 50% of a REIT's stock. Some speculate that this will help spur growth for the REIT industry, others question it. It is too soon to measure the impact, however its elimination cannot hurt. Following is a closer look at the near-term expectations of some of these forces.

Distressed Properties

Regardless of how many properties have already been sold at foreclosure or distressed prices by institutions, private owners and the Resolution Trust Corporation, there will be no shortage of inexpensively priced properties on the market over the next couple of years. Alex. Brown and Sons expects that the liquidity crisis in U.S. real estate finance will intensify over the next few years. REITs are one of the few buyers left with access to cash, allowing them to take advantage of the opportunity to purchase real assets being liquidated at bargain prices. Cohen forecasts that "as investors become more comfortable with the real estate recovery story, growth in cash flow, which is perhaps two years away for many REITs, will be full reflected in companies share prices."

Barry Greenfield is the manager of Fidelity's Real Estate Investment Portfolio, a fund that was ranked 177 out of 1,526 (top 12%) of all equity funds for the year ended June 30, 1993, according to Lipper Analytical Services. More than 80% of the fund consists of equity REITs. Greenfield is a major player who believes that with the exception of office buildings, particularly suburban properties, "both the short term and long-term outlook for real estate and REITs are steadily improving. And once REITs have caught their breath, they'll [prices] move even higher." [45]

As the economy begins to strengthen, the hope is that vacancies will decline and rents will begin to escalate, diminishing the volatility of the cash flow stream. The real estate market is not in equilibrium yet, but there are microcosms of it in progress in certain parts of the country. Alex. Brown & Sons established a forecast for the 1993 performance of three primary REIT sectors (TABLE 6.1) However, at

the individual REIT level, one cannot make sweeping assumptions. It is not true or fair to say that the best place to invest is in the southwest, or the worst property focus is office/R&D. All aspects of an issue must be investigated and weighed to determine its feasibility. Alex. Brown & Sons' established a forecast for the 1993 performance of three primary real estate sectors.

TABLE 6.1

THE OUTLOOK FOR THREE BIG REIT GROUPS			
REIT GROUP	Total Return Year to Date	Current Yld 12/11/92	WHAT TO EXPECT IN 1993
APARTMENTS	22.6%	5.96%	Occupancy rates are rising, which makes apartment REITs the place to be in 1993
OFFICE BUILDINGS	11.9%	4.45%	In 1993 these REITs may succumb to poor fundamentals in commercial real estate
RETAIL	11.7%	6.03%	Even a mild recovery in retail sales should continue to lift these REITs.

Source: Fortune Magazine 1/11/93 (provided by Alex. Brown & Sons)

Interest Rates

As long as interest rates remain low, the dividend yields that REITs offer will continue to be more attractive than fixed income securities. In this case, the outlook for interest rates is in equity REITs' favor.

Goldman Sachs had predicted in mid-July that "if short-term rates change materially this year, a decline still seems more likely than an increase." [5] Table 6.2 highlights their forecast for medium and long-term rates as well.

Table 6.2

Interest Rate Forecast				
	Current Rate	**Short Term (1-3 mos)**	**Med. Term (3-6 mos)**	**Long Term (12-18 mos)**
Federal Funds	**3.0%**	**3.0%**	**2.5%**	**3.0%**
		2.5-3.0	*2.2-2.7*	*2.7-3.2*
30-day Commercial Paper	**3.1%**	**3.1%**	**2.6%**	**3.2%**
	2.7-3.2	*2.3-2.8*	*2.3-2.8*	*2.9-3.4*
30-Year Treasury Bond	**6.7%**	**6.5%**	**6.3%**	**6.5%**
		6.3-6.8	*6.0-6.5*	*6.2-6.7*

SOURCE: Goldman Sachs Economic Research July/August 1993

On August 9, 1993, Goldman Sachs' prediction became truth. The thirty-year rate hit a sixteen year low at 6.25%. Mickey Levy, chief financial economist at NationsBank, remarked that long term interest rates can fall even lower. "Given the weak economy, favorable inflation trends and recessionary conditions overseas, I don't see any fundamental reasons for interest rates to go back up in a hurry."[55]

Historically, a down cycle is followed by an upturn, and interest rate lows do eventually rise. When the spread between REIT dividend yields and bond yields narrows, investors will at that time reassess what they will require as a new risk-adjusted total rate of return.

Traditional Lending Remains Sluggish

REITs are still providing the liquidity real estate has been looking for since traditional financing sources evaporated and there is little to indicate that underwriting standards are relaxing. REITs will be a key capital source for many

[55]Deficit Spurs Bonds and Stocks. Wall Street Journal. August 10, 1993.

property owners, developers and those seeking to keep financing in place but cannot rewrite loans coming due under the old underwriting standards. Analysts at Kidder Peabody believe that this fundamental change in the way real estate is financed is positive. The fact that the tax laws no longer favor private ownership is "a very healthy thing."

> Where before it used to be subsidized by tax laws, now, it has to compete with capital along with every other industry group. Its going to mean that real estate is going to be a much better industry to invest in long term. All these wild cycles are going to be muted, and markets will move toward equilibrium before you attract capital...
>
> ...The big caveat in the whole macro picture is whether the banks will use their greedy element again to relax all of the terrific improvements that have made with capital standards, lending limits and other criterion that apply to being more conservative.

Litzius infers that many companies have gone public as a result of the credit crunch. He believes that many of these firms would prefer to stay private, and securitization will slow if/when the conventional financing sources resume their traditional role.

Structural & Legal Changes

Not only has the concept of securitization become popular, but the more complex REIT formation, the UPREIT, has also become more prevalent. Four of IPOs completed in 1993 are UPREITs but there is not enough history to determine their long-term success. Deloitte & Touche explained that the disadvantage of the UPREIT format is its "complexity and its attendant impact on governance and financial disclosure issues," but expect they will gain investor favor in time.[56]

---

[56]Deloitte & Touche. Real Estate Securities. Winter 1993.

Dean Witter reports that UPREITs will entice private companies to go public, which in turn will deliver better quality portfolios to market.

> As the investment community becomes more accepting of the UPREIT structure, we expect the number of REITs owning institutional grade, trophy properties to increase. Consequently, those pension funds that presently will only invest in top-quality real estate assets will now be able to continue doing so through a publicly traded REIT. [46]

Due to the complicated nature of the partnerships entering under the umbrella format, analyzing and pricing the offering becomes more difficult. Many advisors see the UPREIT structure as a potentially powerful tool for real estate owners to gain access to the securitization market and restructure their debt. They also anticipate that investors will grow more accepting of UPREITs as they become more familiar. It is difficult to judge the notion that investors will accept UPREITs as they become more widespread. Each transaction must still be scrutinized individually. The investor must consider any conflicts, the sponsors' reasons for securitizing, and the value of the benefits to be passed on to the shareholders.

The evolution and growth of the REIT industry will likely continue to generate creative formats. Gary Cutson, a senior tax manager at Price Waterhouse in Atlanta, stated that "REITs are not the salvation of the real estate industry" [16] With regards to the industry's future, Cutson offered, "One way for these REITs to grow is to do non-taxable like-kind exchanges, where they trade a mature property for one they can enhance the value of." [16] If the REITs, and UPREITs, are structured properly, they will direct liquidity in the market, if they are not, investor trust in the vehicle will wane again, the reputation will be tainted and there will be a new wave of workouts in the future.

Institutional Participation and Industry Growth

Despite the surge of activity in the REIT market over the last couple of years, the interest from pension funds has remained weak. Though their interest in commercial mortgages is gradually increasing, a survey conducted by the Pension Realty Advisors showed that only 23 percent of the pension funds surveyed were interested in acquiring shares of publicly traded real estate operating companies and REITs. Of those that were interested, the motivating factor seemed to be the liquidity crisis in real estate commingled funds[57] Apparently, pension funds do not view REITs as a proxy for direct real estate investment.[58] New Plan Realty Trust Chairman William Newman expressed his views this way:

> American pension funds are sort of myopic when it comes to what's right under their noses. Why should a British pension fund see something that an American institution doesn't? One of the reasons is that British pension funds have been investing in US real estate a lot longer than their American counterparts which are too concerned about quarter to quarter performance.
>
> One of the problems is that they're not clear on whether it's a stock or real estate. While it's obviously both, they've got to look at us as real estate. And real estate cycles usually last between five and ten years, not quarter by quarter. [8]

Even with the recent passing of the Omnibus Act which lifted the five-or-fewer rule, it is a widely expressed opinion that if REITs are going to have market influence, they must grow in scale. As of April 1993, one percent of the $4 trillion in commercial real estate was comprised of REIT assets [34]. This is extremely small compared to European and Asian countries where between 5% and 30% of income producing properties are owned by publicly traded companies.[59]

---

[57]Mellon/McMahon. Property. Vol2. No.2. Winter 1992.
[58]PREA Quarterly. April 1993.
[59]Ibid. Deloitte & Touche.

Securitized commercial real estate addresses some of the problems institutional investors have with direct investing: high transaction costs, liquidity, lack of information, illiquidity.

> Securitization lowers transaction costs and improves the quality and quantity of real estate information at lower cost. The constant trading of real estate securities and the ability to create short positions will also ensure efficiency. The risk associated with liquidity will be diminished since investors will be able to quickly adjust their positions rather than be required to engage in a lengthy transaction. [29]

Cohen does not believe that many institutions want to get back into real estate. He expects that if they decide to get back into the direct market,

> They will look at the waterfront of choices, and they'll remember how illiquid the direct property investments were, how onerous the fees that were charged by the advisors, they'll remember the (lessons), they'll look at the REITs and say, look at these guys, they earned 30% over the last three years, and that's real estate. So I think they'll look at REITs as an alternative and go after the names that have an air of respectability

The field experts have distinct attitudes concerning the importance of institutional participation. The two popular perceptions had been that the industry's size and the restrictions of the 5/50 rule constrained the growth of the industry, by preventing large investors from channeling their capital into real estate through publicly traded REITs. Of late, there have been changes in both areas. Martin Cohen turns to institutional participation as one of the most important factors going forward.

> Without the institutional participation, it is the chicken and the egg. The institutions wouldn't participate because the REITs were too small, they couldn't put enough money to work. But as more REITs are created, it attracts more institutions, the more institutional interest that there is, the more you can create. That's the cycle that we're in now.

Fred Carr, does not see the new legislation as having a major impact.

> No pension fund wants to own more than 10% of real estate anyway. Eliminating the 5/50 rule won't facilitate bringing pension investors into the industry. Don't have liquidity in a 10-15% position. What's needed is $1-5 billion market cap REITs.[60]

Michael Giliberto, who was with Salomon Brothers at the time, agrees.

> The market needs to treble in size before it offers the liquidity and size of investment that big institutional investors want...Nor will institutional investors rush to move their property into REITs; that would mean acknowledging large falls in the value of many assets. [47]

At Kidder Peabody, it was expected that the equity REIT market would have grown to $25-50 Billion within the next few years even without the elimination of the 5/50 Rule. Alex. Brown reports that by providing the real estate industry with capital, the REIT industry will expand tenfold by the end of the decade to approximately $400 billion. Another reason why REITs should be attractive to pension funds because earnings distributed by REITs to tax-exempts avoid unrelated business income tax (UBIT).[61]

It is reported that REITs now in progress are in the $500 million to $1 billion range. The emphasis is on scale in order to create liquid and efficient markets for the securitized real estate industry, "the vehicle must have the necessary size and investor breadth. Investors must have the ability to move large sums of money without moving the market. Size not only enhances liquidity, but pricing large securities issues gives analysts incentives to cover the issue." [29]

---

[60]Interview. July 1993.

[61]Diane Wilson. Interview July 1993. Wilson is a tax specialist at Arthur Anderson.

Holding Period

W. Pearce Coues, chairman of MGI Properties, whose major holdings are apartments advises trust shareholders to look at their investment on a five year basis.

> It's clearly a long-term opportunity - the problem being that oftentimes the public expects very quick results. REITs really are the opportunity for the non-active investor to buy liquidity, management and value creation - a package that you can't get as an individual. [8]

Much of the recent interest (over the last 18-24 months) has come from mutual fund players, including equity-income funds, balanced funds and utility fund managers. Fidelity, Dreyfus, T.Rowe Price Growth and Income. What has drawn these investors is the same incentive that has drawn others - yield and future growth potential. Regardless of whether an investor is an individual or a mutual fund, it is difficult to expect one to hold shares of an issue that is not showing signs of improvement or recovery. If the opportunity cost to carry the real estate securities becomes too high, it is only natural to expect that for a given level of risk, the investor will exchange the REITs for investments providing better yield and or growth prospects. For the same reason investors transferred out of other investments to capture REITs' attractive yields, they will just as soon abandon them when a better opportunity presents itself.

During the months of May and June, REIT prices underwent a slight "correction," dropping approximately 4-5% from the previous months' levels. Barry Greenfield, manager of Fidelity's Real Estate Investment Portfolio [where REITs make up more than 80% of the fund], asserts that

> The 'correction' in REIT prices definitely isn't over. There's still another 4-5% to go. When the market gets to those levels, I move from nibbling into aggressive buying. [45]

It important to note that this viewpoint is from a large scale buyer, whose interests are in purchasing issues at below their true value, or at least at the lowest price possible. Promoting such statements may influence investor perceptions, lower confidence to result in a self-fulfilling prophecy.

In closing the industry outlook section, Table 6.3 summarizes Value Line's composite statistics from 1990 through 1993 and provides estimates looking out to 1998 for the twenty (20) REITs (equity and mortgage) it covers.

Table 6.3

COMPOSITE STATISTICS: Real Estate Investment Trusts

1990	1991	1992	**1993E**	**1994E**	**96-8E**		
533.5	533.3	538.5	**573.8**	**625**	**665**	**Gross Income**	**($ Mill)**
146.3	133.5.	147.4	**180**	**185**	**350**	**Net Profit**	**($ Mill)**
27.4%	24.8%	25.7%	**28.8%**	**27.8%**	**33.2%**	**Net Profit Margin**	
2.16	2.21	2.49	**2.9**	**3.2**	**3.7**	**Loans & Real Est.**	**($ Bill)**
5.2	4.7	6.0	**4.0**	**4.0**	**3.0**	**Loss Reserve**	**($Mill)**
9.5%	9.2%	8.8%	**8.5%**	**8.5%**	**8.5%**	**Average Interest Paid**	
85.1	122.6	75.7	**30.0**	**30.0**	**13.0**	**Short Term Debt**	**($Mill)**
1003.3	992.1	1021.1	**1125.0**	**1135.0**	**1310.0**	**Long Term Debt**	**($Mill)**
1316.1	1519.0	1755.4	**1950.0**	**2025.0**	**2055.0**	**Net Worth**	**($Mill)**
73.1%	71.1%	72.5%	**71.5%**	**71.5%**	**69.0%**	**% Cap Funds to Total Cap**	
2.2%	2.3%	2.2%	**2.0%**	**2.0%**	**2.0%**	**% Expenses to Assets**	
10.4%	9.9%	8.7%	**9.5%**	**9.0%**	**12.5%**	**% Earned Total Capital**	
10.8%	10.1%	8.8%	**9.5%**	**9.0%**	**15.0%**	**% Earned Net Worth**	
96%	79%	114%			**235%**	**% Premium Over BookValue**	
20.1	24.3	26.0			**21.0**	**Avg. Annual P/E Ratio**	
1.49	1.55	1.58			**1.6**	**Relative P/E Ratio**	
8.4%	8.1%	7.2%			**6.5%**	**Avg. Annual Div. Yield**	

E = VLine Estimates

The overall picture Value Line provides is for a steady performance of increasing revenues and net profit margin. The balance sheet remains conservative

on the debt side with only a slight increase in long term debt. Earnings ratios appear to be optimistic (% Earned Net Worth) and the premium over book value more than double the 1992 level. It is assumed that the P/E Ratios indicated in the table refer to the traditional stock P/E and not FFO.

CONCLUSION

As data was gathered in response to the question, 'what makes a successful REIT?,' the sub-question that was never asked was, 'successful to whom?' It appears to be a fair question, but as we refer to the "successful" REIT of the nineties, the inherent assumption is that what is good for management should be good for shareholders, and vice versa. One of the primary conclusions drawn from this study, was that high inside ownership, among several other management related items, is perceived to be the key to why some REITs trade at higher multiples and can sustain a premium over the value of their underlying assets. The more closely aligned the REIT sponsors' interests are with those of the shareholders', the greater the potential for earning a price premium. One way management can demonstrate its long-term loyalty towards growing the REIT is to maintain a substantial financial interest in it. Of particular interest is whether these "criteria of success" are equally advantageous to each party, the shareholder and the management.

The overwhelming consensus is that equity REITs are the most viable REIT investment option. The mortgage and hybrid REITs do not offer the stability and growth potential, not to mention tangible asset backing. What is little known, but true, is that while mortgage REITs suffered during the economically turbulent periods of the past two decades, most of the equity REITs survived.

As real estate securitization is examined, the motivations behind a private real estate entity's choice to go public and an investors' motive for purchasing real estate securities, should be examined. Can their interests truly be in alignment? The real estate owner, manager or developer, deciding to undergo the scrutiny of

the public's eye today, would only do so if the benefits that the capital market provides, exceeds the high cost of securitization. Aside from the monetary cost, is the cost that comes with loss of control. Through the capital market a real estate owner can access funding to acquire new properties, to minimize the cost of capital through a debt restructuring, and to contribute to the reduction of total cost of equity by taking advantage of the low current yields investors require. Finally, it provides a means of maximizing the value of real estate held, especially during a soft market, can serve as an exit strategy from partnerships and/or provide added value by postponing tax liabilities.

On the other hand, the shareholder's interest in real estate securities is based on obtaining the greatest return for his/her invested dollars on a risk adjusted basis. This, essentially explains the shareholder's side of the story. REIT investors have favored real estate securities because they offer a competitively high yield. There is the benefit of an annual stream of cash flow, as well as equity build-up from retirement of mortgage debt and potential growth in property values. Further, the stock market investor buys securities for a prime benefit, liquidity. The REIT buyer today is optimistic about the future direction of the industry. If it continues, demand for the securities will rise, and the yield will adjust according to reflect the growth component. However, as soon as conditions deteriorate, the investor need not remain locked into the real estate business. Shareholders have the ultimate benefit of liquefying their real estate interests and trading into an industry that offers a better risk adjusted return. This reaction is no different from than any other investment strategy.

REIT investors face the same systematic risks as owners of any other corporate common stock. As research has shown, securitization increases the

apparent volatility of the real estate returns over the cycle and like other stocks, equity REITs, perform best when the economy is on the upswing and worse when the econon.y is stagnant. Dividend distributions may vary reflecting fluctuations the performance of REIT assets and share resale values are affected by general market fluctuations and by changes in performance of the REITs asset portfolio.

Presently, the real estate fundamentals are beginning to show an upturn and some pockets of the country and specific product sectors, specifically apartments and shopping centers, are beginning to show signs of recovery. Supply and demand conditions, employment, regional industry trends and population growth and stability, all contribute to the performance of real estate. Improving the overall picture is the low interest and low inflationary climate. Understanding that these favorable exogenous conditions will not last forever, it is important to define what fundamental characteristics are perceived necessary for a REIT to possess or adopt, in order to sustain success when these factors disappear.

From the interviews conducted and published opinions, highlighted below are the characteristics ranked highest on the list of priorities. All the categories are management related:

Experienced Management	87%
Self Advised	73%
No Conflicts of Interest	73%
High Insider Ownership	87%
Product or Geographic Focus	93%

The market commands to see depth and breadth of management talent; it provides assurance that within the structure, there lies the know-how to take advantage of opportunities, and the wherewithal to perform under competitive

conditions and overcome adversity. The market has become sophisticated to the extent that as it analyzes REITs, it focuses on the operators of the real estate more than the assets themselves. The appeal of REITs today is not that an investor believes he is buying shares in a portfolio of income producing real estate, but shares in an operating company. The value lies in the operator's ability to maximize this income and "add value" for future earnings potential and appreciation. Investors will avoid REITs that look like exit strategies for beleaguered developers, insurance companies or banks unloading distressed properties, especially if they lack a long range plan. A sponsor's track record before and after the offering will be evaluated. In order to maintain these high multiples, REIT management will continually have to prove itself over time.

To compare, investors purchase shares in Microsoft over other software companies, because of their faith in the company's future potential. Having watched the company become a leader in the field within a short period of time, the expectation is that the strength behind Bill Gates and his savvy management team will continue to develop state of the art software to fuel greater earnings. This scenario poses no difference with the REIT, where managers have the skills to turn under performing assets around by raising tenant quality, occupancy levels and cash flow. REITs' hands-on approach involves proficiency in all areas of portfolio management from the property level to the financial end.

The type of shareholder the REIT attracts will depend upon the company's strategy. It will attract either the current yield buyers or those looking for long term growth. The REITs following the growth strategy will pay lower dividends and trade at a higher multiple to reflect the implicit growth rate. The high

multiple reflects investor expectations that the REIT will grow its cash flow and ultimately grow the dividend.

A company with hands-on management is highly desirable. Since the tax Act in 1986, most REITs restructured and are now self-advised. Of the thirty-eight equity REITs in the sample in Chapter Five, only four were advised by outside parties. The debate is that the outside advisor could conduct REIT affairs with the same efficiency or attention, since they manage more than one REIT at a time, or possess the same inherent concern for the REIT's well-being. As in any situation, there are exceptions if the rest of the package is reasonable. Along the same vein is the issue of conflict of interest. If there are persons or entities related to the REIT that could benefit management at the cost of the shareholder, the REIT will be penalized through its pricing.

The reasoning behind the choice of high inside ownership is logical. If management retains a significant share of ownership, there is comfort that it is in their own best interest to grow the REIT. However, there are no rules exacting how much or how long these shares must be held; management may own 20% at the outset of the issue, and 2% the following year. Contrary to popular belief, this feature did not provide any significant quantitative results. high insider ownership did not account for a significant amount of variability in the FFO multiple in the regression analysis. Examples supporting the statistical result are three companies that are trading at premiums ranging from 11-42%, which own only three percent or less of the REIT shares. They are REIT of California, IRT Properties and Washington REIT. For more details, consult **Exhibit 1**.

EXHIBIT 1

REITs Trading at a Premium to Underlying Value

	% Premium	FFO Multiple	% Inside Ownrshp	Payout on FFO	Property Type
New Plan	63%	24.62	10%	122%	Retail
United Dominion	45%	36.07	8%	96%	Resid
Washington REIT	42%	22.62	2%	98%	Mixed
KIMCO	27%	12.81	29%	76%	Retail
IRT Property	25%	13.17	3%	0%	Retail
Property Trust of Amer	21%	17.72	6%	99%	Resid
Burnham Pacific	18%	15.88	37%	128%	Mixed
REIT of California	11%	9.89	2%	93%	Mixed
Federal Realty	10%	18.52	6%	118%	Retail
Bradley Real Estate	4%	10.93	11%	83%	Retail
Penn REIT	2%	13.35	13%	98%	Retail

Source: Kidder Peabody Stock Report. May 1993. Selected Stocks.

The most important attribute now being cited is a focused business and/or geographic strategy. The reasoning behind this doctrine is also rational. The argument, "you can't be all things to all people" rings true. If one were an experienced residential property owner, it would be difficult to be proficient at shopping center tactics as well. Further, if a firm was concentrated in the southern California area, maintaining control of, and remaining abreast of the market activities in the northeast may prove to be difficult. For the shareholder, the focused strategy, where the REIT intricately knows its product and market, is the preference. The notion is that the chances of maximizing returns are improved and the shareholder has the option of diversifying his or her own investment portfolio by buying shares of REITs with different focus.

Is this, however, the most successful strategy for the REIT itself. Having realized that this has been the market's preference, many REITs have transformed their diversified portfolios into more homogeneous, concentrated ones

over the last few years. As long as that product sector or geographic area has reached bottom, and is expected to turn up, this strategy works. Yet, it appears that this situation could prove perilous when the next down cycle hits and these REITs are carrying all of their eggs in one basket. REITs cannot disengage themselves from the real estate industry as easily as the shareholder can.

The other highest ranking response is not management related. Seventy-three percent of the opinions compiled, indicated that a low payout ratio was preferable; eighty-five to ninety percent being the ideal range. The rationalization is that by retaining more of its earnings, the more conservative REIT will build reserves which will cover any unexpected expenses and will increase the prospects of growth. Interestingly, payout ratio was one of the two most significant variables in the regression analysis. On its own, it accounted for 53% in the variability of the FFO multiple. Coupled with the dividend yield, the R-Squared increased to .9239. This result quantitatively confirms that REITs are a dividend play. (The R-Squared of the dividend yield alone was .6823) indicating that changes in the dividend structure will reflect a significant change in the REIT price. Of late, the REIT stock world has experienced a price "correction." Prices declined over what were considered to be "inflated" levels. Though the market sentiment reads that real estate will rebound, its faith, and willingness to pay high multiples for it now may have been premature. It is difficult to rely on the long term growth when the short term recovery has barely begun.

Psychologically these intangible factors that are cited certainly are relevant to the REITs image, they are difficult to quantify and have about them an air of

subjectivity. Though the securities market may not be perfect, it is more efficient than the direct market. It is important to realize that these criteria are moving targets. What is considered important today, may be a nemesis tomorrow. Even if a REIT adopted every desirable feature cited, there would be no guarantee of success. The components cannot be dissected; the REIT must be analyzed in aggregate. There are few "pure" REITs in the market today. Even for those REITs that possess some unfavorable attributes, the overall performance can be very successful when all of the other parts fit.

REITs are in a unique environment today. With so much recent activity, a privately held real estate owner, developer or manager considering securitization may find this information beneficial. Upon deciding to move forward, one could only hope for these market conditions again; a favorable outlook as overbuilt real estate markets gradually strengthen, low inflation and low interest rates. The macro-economy certainly plays a role in which REITs have the potential for greater returns in the near-term, based on the real estate product sectors and the U.S. locations they have specialized in. As the market approaches a state of equilibrium, and the positive spread factor diminishes, the capital appreciation potential of REITs' shares will be influenced more by internal growth capabilities than by interest rate trends and external economic factors.

Finally, through the combination of more polished individual REITs and improving market efficiency through the entry of more and larger REITs, the REIT industry is posturing itself for a positive and more stable future.

APPENDIX A

Common Sources of Data Used for Measuring Investment Performance

NAREIT-Equity share Price Index and Dividend Yield Series (EREIT's)	Monthly index computed based on share prices of REIT's which own and manage real estate assets. Security prices used in the index are obtained from the NYSE, AMEX, and NASDAQ system. Dividend data are collected by NAREIT. Properties owned may be levered or unlevered. Index values are available from 1972 to the present.
Goldman Sachs & Co.- Unlevered Equity REIT Total Return Index (EREITs)	Quarterly index based on a subset of equity REITs that have used little or no financial leverage. The index is compiled from REIT security prices and dividends. Index values are available from 1974 through 1986.
Frank Russell Co.- Property Index **(FRC Index)**	Data is contributed by members of NCREIF, who currently own approximately 1,000 properties with an aggregate value in excess of $11 billion. The FRC Index is calculated quarterly and consists of monthly data on (1) net operating income and (2) beginning-and end-of-quarter appraised values for all properties. Actual sale prices are used, as available. All properties are owned free and clear of debt. Quarterly index values are available from 1978 to the present.
Common stocks- Standard & Poor Corp. **(S&P) 500**	Daily index based on common stock prices for the 500 corporations with highest market value of common stock outstanding. Data available from the financial press. Dividend data compiled by Wilshire and Associates and include in a monthly and annual total return index by Ibbotson Associates, Chicago. Daily index data available from 1926 to present.
Corporate Bonds- Salomon Brothers High-Grade Corporate Bond Index	Monthly index based on high grade, long term (20 year) bond prices. Interest based on bond coupons and total returns (interest, beginning, and ending index values) compiled by Ibbotson Associates, Chicago. Daily index available from 1926 to present.
Government Securities	U.S. Treasury bills and bonds. Price data obtained from *The Wall Street Journal.* A monthly total return series compiled by Ibbotson Associates, Chicago. Daily index data available from 1926 to present.
Salomon Brothers- Total Rate of Return **Index-mortgage securities**	Monthly index, based on over-the-counter prices obtained on mortgage pools containing $500 billion in FHA-VA residential mortgages with GNMA payment guarantees, or conventional mortgages with FNMA or FHLMC payment guarantees. Monthly index available from 1980 to present.

Source: Real Estate Finance, Bruggeman, Fisher and Stone, Eighth Edition

APPENDIX B

Personal Interviews

Arthur Anderson & Co., SC Los Angeles, California	Diane M. Wilson Robert J. Vogelzang
The Penobscot Group Boston, Massachusetts	Fred S. Carr, Jr. Principal
Merrill Lynch New York, New York	Jordan Heller, CPA,CFA First VP Securities Research
Kidder Peabody & Co. New York, New York	Bruce Garrison, CFA, Senior VP John Moran, CFA, VP Jeff Helton, CFA
Cohen & Steers Capital Mgt. Inc. New York, New York	Martin Cohen Principal
Goldman Sachs & Co. New York, New York	Ken Statz
Green Street Advisors, Inc. Newport Beach, California	*BY PHONE* John Litzius

APPENDIX C

TWO TOP PICK REITs. TWO MANAGEMENT PHILOSOPHIES.

In the interviews conducted by the author, and in a variety of publications, two REITs were repeatedly named as top picks, Property Trust of America (PTR) and Weingarten Realty Investors (WRI). The purpose of this comparison is to illustrate that REITs that deviate from the "checklist of successful traits" can be as successful as the prototype REIT. The negative impact of the undesirable attribute can be diluted, provided that all of the other factors are moving in a positive direction.

WRI and PTR have been avid about staying on top of the market and making internal changes and improvements in order to retain their favored status. Both have financial flexibility, easy access to capital, solid growth trends and entrepreneurial management. The stocks had been trading at premiums to their underlying real estate value, have shown consistent 5-10% growth in cash flow and dividends, and the total return is estimated to be approximately 12-15% which is appealing to investors.[62] The key difference is that one is a fully integrated company, while the other is managed by an outside advisor.

---

[62]Standard & Poor's Real Estate Securities Report and Kidder Peabody Research Report, May 1993.

Property Trust of America

Green Street was the only one found to have placed PTR on a "sell" list. Even though Green Street recognized that it is an extremely well-run REIT, and has been doing an excellent job acquiring properties, the conflict of interest potential and high cost of the external advisor makes it undesirable to them. Virtually everyone else recognizes PTR as having made sharp management decisions, turning the company around over the last two years, to become a major player in the apartment sector. In 1987 the REIT had 39% of their portfolio in shopping centers and only 20% in apartments, by the end of 1991, the shopping center holdings dropped to 16% and apartments rose to 61%. [S&P Stock Reports]. It thought the Santa Fe/Albuquerque/Colorado Springs corridor was underbuilt and bought all the apartment buildings it could. Now it is profiting from a tight rental market in the southwest [Fortune 4.19.93] Yields dropped from 8.0% in 1988 to 5.8% by the third quarter of 1992 to 4.3% by April 1993. Top brass, Bill Sanders was able to raise equity capital without going through expensive investment bankers which benefits the shareholders significantly.

Weingarten Realty Investors

The Wall Street Transcript named Stanford J. Alexander, President and CEO of Weingarten Realty, the gold award winner in the REIT industry (the selection is based on interviews with 40-60 industry executives, analysts, academics, journalists and other industry professionals). Some have suggested that Weingarten be used as the benchmark. [15]

WRI is the only publicly traded, major shopping center company in the southwest. They have excellent management, a conservative balance sheet, access to the capital and are located in an area on the upswing. The malls are anchored by major supermarkets and tenants like Wal-Mart.

Expansion has been aggressive, yet selective. Weingarten has become a dominant player in Houston and extended its reach into new markets and territories, without overextending investment standards, financial or managerial resources. They have a very savvy management team and their acquisitions skills are reputed to be "ruthless." WRI continued to grow its cash flow and increase dividends even during Houston's worst economic period. Further, the lease structures are such that increases are built in and are often tied to the growth of tenants' sales.

BIBLIOGRAPHY

[1] National Association of Real Estate Investment Trusts Inc., *REIT Sourcebook.* 1992 edition.

[2] Patric Dolan. Wall Street Applying Its Skills. *REAL ESTATE FORUM.* March 1991.

[3] *Federal Reserve Bank of New York* - Quarterly Review, Vol 18, No.1. Spring 1993

[4] Gaylon E. Greer & Michael D. Farrell. Chapter 25, Real Estate Investment Trusts *Investment Analysis for Real Estate Decisions 1988*

[5] Ken Statz. *REIT REDUX.* Goldman Sachs Investment Research. August 12, 1992.

[6] Daniel A. Blumberg. Why Real Estate Investment Trusts are Good Investments. *Real Estate Review.* Winter 1986.

[7] Peter L. Bernstein. The Improbable Origins of Modern Wall Street. *Capital Ideas.* 1992.

[8] Patric Dolan. REIT Industry Assets Soar. *REAL ESTATE FORUM.* October 1991.

[9] John C. Edmunds. Why REIT Stocks Are Undervalued. *Real Estate Review.* Fall 1982

[10] Barry Vinocur. Property Related Securities Continue to Take Drubbing. *Barron's.* July 23, 1990.

[11] Barry Vinocur. Property Linked Funds Suffer Further Erosion. *Barron's.* October 15, 1990.

[12] Barry Vinocur. Suddenly A New Equity REIT Comes Into View. *Barron's.* September 23, 1991.

[13] The Upside of the Downturn in Real Estate. *Business Week.* January 21, 1991.

[14] Barry Vinocur. REITs Share Prices May Be Too Rich. *Barron's.* November 9, 1992.

[15] Commercial Real Estate and REITs: Special Report. Roundtable Discussion. *The Wall Street Transcript* Volume CXVII, No.14. September 28, 1992.

[16] Richard Colletti. REITs to the Rescue? *Florida Trend.* January 1993.

[17] Barry Vinocur. A Blast From the Past. *Barron's.* June 7, 1993

[18] Real Estate That Really Pays. *Fortune.* November 2, 1992.

[19] Public Was the Way to go at Kimco. *Chain Store Age Executive.* May 1992.

[20] Barry Vinocur. They're Downright Ga Ga Over UPREITs. *Barron's* December 28, 1993.

[21] James E. Gibbons. *Real Estate and Money Markets.* Published by American Society of Real Estate Counselors. 1991.

[22] David A. Deutsch. On the Use of Equity REIT Returns for Deriving a Discount Rate for Unsecuritized Commercial Real Estate. *MIT Center for Real Estate Thesis.* Massachusetts Institute of Technology, February 1993.

[23] Charles Froland. What Determines Cap Rates on REITs. *Journal of Portfolio Management.* Summer 1987.

[24] Lynne B. Sagalyn and Marc A. Louargand. Real Estate and the Next Recession. *MIT Center for Real Estate Working Paper.* Massachusetts Institute of Technology, 1989.

[25] Yoon Dokko, Robert Edelstein, Marshall Pomer, and E. Scott Urdang. Determinants of the Rate of Return for Nonresidential Real Estate: Inflation Expectations and Market Adjustment Lags. *AREUEA Journal*, Vol 19, No.1, 1991.

[26] Jeong Yun Park, Donald J. Mullineaux, It-Keong Chew. Are REITs Inflation Hedges? *The Journal of Real Estate Finance & Economics* 3:91-103, 1990.

[27] K.C. Chan, Patric H. Hendershott and Anthony B. Sanders. Risk and Return on Real Estate: Evidence from Equity REITs. *AREUEA Journal* Vol. 18, No 4, 1990.

[28] Lynne Sagalyn. Real Estate and the Next Recession. *MIT Center for Real Estate Working Paper #2.* Massachusetts Institute of Technology, 1989.

[29] Robert Gorlow, David M. Parr and Louis Taylor. The Securitization of Institutional Real Estate Investing. *Real Estate Review.* Spring 1993.

[30] R. Brian Webb, Mike Miles and David Guilkey. Transactions-Driven Commercial Real Estate Returns: The Panacea to Asset Allocation Models? *Journal of the American Real Estate and Urban Economics Association* V20,1: pp325-357, 1992.

[31] Joseph Gyourko and Donald B. Keim. What Does the Stock Market Tell Us About Real Estate Returns? *Journal of the American Real Estate and Urban Economics Association, 1992, V20,3: pp. 457-485.*

[32] S. Michael Giliberto. Equity Real Estate Investment Trusts and Real Estate Returns. *Journal of Real Estate Research. June 1990.*

[33] Standard & Poor's. *The Outlook.* May 5, 1993.

[34] PaineWebber Real Estate Securities. The REIT Revolution is Here. April 19, 1993.

[35] Sid Mattra & Chris Gassen. *Investment Analysis and Portfolio Management.* copyright 1981

[36] Bodie, Kane and Marcus. *Investments.* copyright 1989.

[38] Barry Vinocur. Where Have All the New REITs Gone? *Barron's.* June 13, 1992.

[39] Barry Vinocur. What are New Plan's Plans. *Barron's.* May 27, 1991

[40] Barry Vinocur. *Barron's* May 24, 1993

[41] Still Room in the Boom for REITs. *Fortune Magazine.* April 19, 1993

[42] Charles B. Warren. Real Estate Appraisal in the 1990s: Estimating Value in an Illiquid Market. *Real Estate Review.* Spring 1993.

[43] Mark L. Berenson and David Levine. Business Statistics 3rd edition, 1986.

[44] Gary Weiss. When Is It Un-Real Estate. *Business Week.* March 29, 1993

[45] Barry Vinocur. REIT Shares Take Some Lumps. Barron's. May 3, 1993

[46] Dean Witter Equity Research Report. December 1, 1992.

[47] The REIT Stuff. *The Economist.* November 28, 1992.

[48] Jane Everhart. The Rising Tide of Securitization: Real Estate's Next Great Capital Source. Real Estate FORUM. October 1992.