(7)

Comparison of Pricing Differences Between the Private and Public Regional Mall Real Estate Investment Trusts

by
Gail McDonough

Bachelor of Science
Babson College
1988

Submitted to the Department of Architecture
in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE
in Real Estate Development
at the
Massachusetts Institute of Technology

September 1995

Signature of Author..
Gail McDonough
Department of Architecture
August 11, 1995

Certified by..
Blake Eagle
Chairman, MIT Center For Real Estate
Thesis Advisor

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

Comparison of Pricing Differences Between the Private and Public Regional Mall Real Estate Investment Trusts

by
Gail McDonough

Submitted to the Department of Architecture
in Partial Fulfillment of the Requirements for the Degree of
MASTER OF SCIENCE
in Real Estate Development
at the
Massachusetts Institute of Technology
September 1995

ABSTRACT

The rapid growth of equity real estate investment trusts (REITs) since 1992 has been prompted by the need or desire of property owners to refinance debt or access capital. Equity REIT market capitalization increased by $30 billion between year end 1991 and year end 1994. This increase provided funds to recapitalize debt no longer available from private market lenders.

During this period owners of regional mall portfolios utilized the umbrella partnership real estate investment trust (UPREIT) structure to change their operating status to REITs. The decision to become a publicly traded REIT was motivated by two factors; the public market was valuing property at greater prices than the private market and the opportunity to defer taxable gains.

The goal of this thesis is to determine what pricing differences exist between the private and public regional mall REITs. Through discussions with industry professionals it became clear that property acquisitions are analyzed in a similar manner in both markets. Differences are purported to exist at the REIT portfolio valuation level. The public REITs are supposedly credited with factors in addition to underlying property value, which are assumed to add value to the REIT.

The implicit property capitalization rate that has been calculated seems to refute the existence of pricing differences between the private and public markets. Differences in the implicit property capitalization rates can be explained by asset quality and portfolio performance. Investors in REITs value the quality of management and other factors as a function of the cash flow that the investment returns. REIT valuation is consistent in both markets, public regional mall REITs do not command a premium.

Thesis Advisor: Blake Eagle

Title: Chairman, MIT Center For Real Estate

Acknowledgments

Thanks to Institutional Property Consultants, specifically Barbara Cambon, for suggesting this thesis topic and providing information for the private REITs, Corporate Property Investors and Retail Property Trust, examined in this thesis. Scott Beggs was of great help in determining the scope of the topic and providing direction to valuable information sources.

Thanks to Tod McGrath, adjunct professor at MIT, for his help in constructing the Implied Capitalization Rate Model. His guidance and intelligence assisted me in determining how to convert REIT financial statements into a consistent format for comparison.

Many thanks to my family, friends, and classmates for their support.

INTRODUCTION

The Question

Between 1992 and 1994 there was an explosion in initial public offerings (IPOs) of real estate investment trusts (REITs). This served as a vehicle for over-leveraged firms to recapitalize debt as well as an investment option for investors. The real estate recession of the late 1980's and the simultaneous devaluation of assets forced many firms to recapitalize property debt publicly as private market sources were no longer available. Wall Street acted as the catalyst and positioned REITs as high yielding investments in a low interest rate environment.

Questions arose as to whether there were arbitrage opportunities between the private and public markets. The arbitrage, many people believed, existed due to the discrepancies in the way assets were being priced in the private and public markets. To what extent does this discrepancy exist? Is it confined only to the assets themselves or does it impact the value of the REIT as well?

This thesis addresses these questions by examining four regional mall REITs, two privately owned and two traded publicly. By isolating the regional mall sector a comparison of both public and private firms that own substantially similar assets can be accomplished. Information about each REIT allows for relative analysis of discrepancies that may or may not exist between the private and public markets.

This thesis posits that, while pricing differences may have existed at one time between the private and public markets, fundamental acquisition methodology and ultimate property value is presently consistent in both markets. Differences between the private and public markets have been professed by proponents of public REITs (including REIT management, analysts, and other Wall Street sources). The supposed value of management and liquidity command that public REITs should trade at a premium to their asset value. Ultimately, though, the investor determines what aspects of an investment are valuable and assigns a financial value. An examination of the return investors command in each market should reflect whether these differences exist.

The Issues

A number of factors contributed to the fury of IPO activity in the early 1990s. Abundant capital for real estate investment in the 1980s came from real estate syndications, savings and loans, banks, life insurance companies, and pension funds. This capital in conjunction with enormous tax benefits of real estate investment set the stage for massive overbuilding. Competition among investors stretched the limits of prudent underwriting practices. Many lenders assumed inordinate risks as developers and investors were granted lenient terms which included higher loan to value ratios and non-recourse loans.

It was a matter of time before the United States commercial property markets reached substantial overbuilt status. Property values eventually plummeted. Once supply of space greatly exceeded demand private market lenders and property owners realized considerable losses. The market's crash caused real estate funding sources to evaporate. Development and investment ground to a halt and liquidity disappeared.

Interest in filling the capital void left by traditional private market sources piqued fee hungry investment bankers as they sought to exploit emerging opportunities. The REIT operating structure facilitated recapitalization of real estate operating companies in the public equity markets.

Wall Street sold property owners on the concept that investors in public equities would accept lower yields for liquidity than the yields real estate investors were demanding in the highly illiquid private market. A low interest rate environment caused public market investors to welcome current yields at eight percent. In comparison, private markets were using capitalization rates in the 10 to 12% range to determine asset values. A capitalization rate is defined as the ratio of net operating income to property value, providing an estimation of current return.[1] The positive spread between the two markets created arbitrage opportunities for public REITs. The public equity recapitalization option looked good to some property operators who otherwise faced the possible loss of assets

---

[1] William B. Brueggeman and Jeffrey D. Fisher. *Real Estate Finance and Investment* (Homewood: Irwin, 1993), p. 319.

due to foreclosure or diminished proceeds from private market sales. Not only were owners able to realize immediate financial benefits, they also maintained control of their assets.

To examine the pricing differences between the private and public markets the regional mall sector was selected. A number of real estate developers utilized the Umbrella Partnership Real Estate Investment Trust (UPREIT) to source capital in the public markets. The existence of private regional mall REITs allows for comparison between the private and public markets.

Comparison between the markets will focus on property level pricing and valuation of REITs. Property level pricing will be examined as to how acquisitions are analyzed. Observation at the REIT level will examine private appraisal methodology and two public market pricing models. The calculation of implicit capitalization rates for each REIT will determine the unleveraged return achieved on total REIT property value as the basis for distinguishing any pricing differences between the private and public markets.

Prior to comparing the differences in pricing between the private and public regional mall REITs background information will be provided for the recent state of the capital markets, the REIT structure and its attractiveness as an investment, a description of regional malls and their investment value, and summaries of the four REITs that were studied and compared.

Chapter One provides an overview of real estate capital markets. Topics examined include capital available for investment in the 1980s, tax laws, overbuilding, deteriorating property values, and the ultimate resurgence of REITs.

Chapter Two focuses on the characteristics of REITs. The structure's attractiveness to property owners and investors is addressed. The UPREIT is described. Specific attention paid to benefits provided to property owners who went public using the UPREIT during the recent IPO boom.

Chapter Three describes regional malls. The unique qualities of this retail asset, investment value, and typical owners are examined.

Chapter Four presents background information on two private and two public REITs. Each REIT's holdings and strategies are analyzed.

Chapter Five presents the methodology for acquisition pricing. Acquisition strategies of each REIT are also discussed.

Chapter Six examines differences in pricing between the private and public REITs. Valuation of REIT portfolios in both the private and public markets are analyzed. Calculating portfolio level capitalization rates allows for comparison of private and public REITs.

Chapter Seven presents thesis conclusions.

CHAPTER ONE

RECENT STATE OF THE COMMERCIAL PROPERTY MARKETS

Public equity REITs provided property owners a means to recapitalize large amounts of debt funded by private lenders during the 1980s. The excessive amounts of capital made available for investment and development during this period prompted overbuilding, eventually leading to considerable writedowns of property values. This devaluation, low interest rates, and pricing differentials between the private and public markets, enabled REITs to emerge as a favored investment vehicle in the early 1990s. Wall Street recognized real estate operating companies as a marketable product and seized the opportunity to recapitalize them.

The market capitalization of publicly traded real estate investment trusts (REITs) has grown significantly since 1992. The growth of total market capitalization and the bulk of growth in the equity sector is shown in the following chart.

Year	Market Capitalization	Equity REIT Share of Market	Equity as % of Total Market
1991	$12.9 billion	$8.8 billion	68%
1992	$15.7 billion	$11 billion	70%
1993	$32.2 billion	$26.1 billion	81%
1994	$44.3 billion	$38.8 billion	87.6%

Source: NAREIT, "The Complete Guide to the Real Estate Investment Trust Industry 1995."

REIT market capitalization by year end 1994 had increased by $31.4 billion from 1991's market capitalization of $12.9 billion. Of this total increase, $30 billion has been in equity REITs. An equity REIT typically owns interests in a specific property type.[2] Factors contributing to REIT growth are examined in this chapter.

THE 1980S AND EARLY 1990S

The rush of capital to invest in property in the 1980s was the impetus for rapid growth in property supply which in turn drove up property values. Economic expansion

---

[2] *Ibid.*, p. 701.

and increased demand for space, causing rents to rise, made expected real estate returns attractive to investors.[3]

The availability of capital was the product of a number of economic events. These included; the 1981 Tax Act, deregulation of the banking industry, and institutional investor interest in real estate. The Tax Act shortened depreciation schedules making real estate an attractive tax shelter. Deregulation of the banking industry increased competition for capital resulting in increased interest rates paid for deposits. The arrival of banks as a source for long term real estate lending affected the historical providers of permanent financing, insurance companies. Institutional investor interest in real estate, as a diversification strategy to offset more volatile stock and bond investments, resulted in the availability of additional capital. Investments were initially placed in existing properties and eventually used to finance new development.[4]

The increased competition for investment in real estate caused lenders to lower underwriting standards. Valuation of real estate assets was determined using discounted cash flows that projected appreciation with generally optimistic underwriting assumptions. Non-recourse debt, shorter loan terms, and increased loan to value ratios (some at greater than 100 percent), contributed to the greater risk lenders assumed in the 1980's. Borrowers and/or partners maintained the majority of the upside for successful properties and lenders assumed the majority of risk if a property was unsuccessful.[5]

The demise of the property market was a function of two factors; the Tax Reform Act of 1986 and the supply of real estate exceeding demand. The Tax Reform Act of 1986 lengthened depreciation schedules, increasing taxable income, and removing attractive passive loss benefits for real estate investors. Passive losses had been utilized by investors as a direct offset to earned income (though a property may have reported a net loss after depreciation, cash flow may have been positive while tax benefits were realized

---

[3] Cohen & Steers, "Real Estate Securities, Status of the U.S. Market," February 1995, p. 5.
[4] *Ibid.*, p. 5.
[5] Joseph Gyourko, "The Long-Term Prospects of the REIT Market," Real Estate Review, Spring 1994, p. 43.

on the net income loss). This legislation served as a disincentive for real estate investors and caused a significant sector of investment demand to exit the capital market.

The deterioration of property values began when the supply of real estate exceeded demand and was further exacerbated as additional construction was completed. Vacancies began to increase and rents began to decrease, culminating in declining property values.

Capital withdrew from the market as real estate market conditions worsened. The precipitous decline in property values rendered many borrowers unable to refinance loans or sell assets to satisfy outstanding debt. The incidence of borrower default increased and the rate of foreclosure accelerated when lenders realized the downturn was not temporary.

The Russell-NCREIF Property Index, a value weighted index of private equity real property investments based on asset appraised values, evidences the decline in property values. Both income and capital returns are computed and indexed to reveal relative changes to total property returns each year. The decline peaked at -12.33% in 1991.[6] From 1990 to 1992 the total index lost more than 28% of its capital value and 38% by year end 1994.[7]

Investment Period Ending 12/31/94	Total Property Return	Total Income Return	Total Capital Return
1990	1.47%	6.71%	-4.99%
1991	-6.07%	6.91%	-12.33%
1992	-4.34%	7.73%	-11.40%
1993	0.57%	8.65%	-7.58%
1994	6.73%	9.16%	-2.28%

Source: Russell-NCREIF Property Index, Fourth Quarter, 1994.

[6] NCREIF and Frank Russell Company, "The Russell-NCREIF Real Estate Performance Report," Fourth Quarter 1994.

[7] Total return is determined as the sum of the income and capital return divided by the appraised value of the investment at the beginning of the year. Segregation of the income return is accomplished by dividing only this portion by the original appraised value. The capital return is the change in the appraised value divided by the original appraised value.

The massive devaluation of real estate prompted increased scrutiny and regulation enforcement of lending institutions by government agencies in the 1990's. Lenders withdrew from the market and commercial banks took significant writedowns on mortgage values. The federal government commissioned the Resolution Trust Corporation to manage and dispose of the accumulating problem loans of failed banks and thrifts.

Regulatory pressures forced insurance companies and banks to deal with their problems on a short term basis. Risk based capital requirements, which demanded greater reserves on foreclosed properties and troubled loans, provided significant disincentive for real estate assets and mortgages to be held. Ultimately, assets were sold at steep discounts so institutions could reduce their real estate exposure and accompanying reserve requirements. Numerous liquidation sales of assets further depressed the property markets.

REAL ESTATE OPERATING COMPANIES

The capital crisis in the real estate markets seriously impacted real estate operating companies who derived profits solely from property operations. These firms had developed numerous properties during the last three decades and continued to provide management, leasing, and redevelopment services to their assets. Many firms were highly leveraged and unable to refinance debt due to the lack of available capital in the private market. Faced with the potential loss of assets and the economic benefits derived from servicing their portfolios, owners of these companies seized the chance to recapitalize in the public markets. The ability to rejuvenate credit lines for acquisitions and take advantage of distressed property sales was an added benefit of becoming a publicly traded REIT.

ARBITRAGE OPPORTUNITIES

Arbitrage opportunities resulted from the spread that could be achieved by refinancing debt in the public market. Real estate companies that went public benefited from public markets using lower capitalization rates to value assets. Therefore, valuation of portfolios at the time of each companies IPO was more financially attractive than asset sales in the private market. Properties being sold in the private market, which was saturated with available product, were priced at capitalization rates 100 to 300 basis points higher than the public market.[8] REITs benefited because property yields were in the eight to twelve percent range and dividend yields on REIT stocks were in the six to eight percent range.[9] Owners could purchase properties and earn returns in excess of those commanded by investors. It was prudent for these owners to access public equity to take advantage of positive spread investing opportunities.

Low Interest Rates

The interest rate environment of 1992 was extremely attractive for recapitalizing real estate operating companies. REITs were touted as high yielding investments, which were more attractive to investors than other investments offering lower yields and fewer growth expectations. Investors were anxious to take advantage of these yields at year end 1992 when the prime rate was at six percent and ten year treasuries were at 6.8 percent.[10]

Wall Street's Strategy

In the early 1990s Wall Street was once again looking for an investment product to sell. The investment banks, initially involved with the liquidation of property portfolios, were eager to resolve the capital crisis. Securitization of mortgage pools became common and the real estate investment trust was the investment vehicle chosen to recapitalize real estate operating company holdings.

Wall Street's willingness to underwrite the conversion of these real estate operating companies to REITs was prompted by the attributes of these firms which provided elements of a credible growth story. The companies were internally managed and provided all services within their firms. Certain property types, namely apartment and

---

[8] Marissa Timm, "Report Card Taubman Centers, Inc.," Information Profits, Inc., April 28, 1994, p. 20.
[9] PCA/KL & Co., "Public Real Estate Equity Securitization A Strategic Analysis," Pension Consulting Alliance, Inc., and Kenneth Leventhal & Company, December 7, 1994, p. 27.
[10] United States Board of Governors of the Federal Reserve System, "Annual Statistical Digest 1992," p. 162.

retail, that had maintained steady income performance through the downturn were targeted for recapitalization in the REIT equity market.

The regional mall operating companies owned extensive portfolios of top-tier malls and were considered extremely marketable to investors. These firms had track records dating back over thirty years and founding principals were to remain actively involved in REIT operations. Management's expertise was sold as a factor that would guaranty future growth and success. Inside ownership by management, typically in the range of 20 percent to 40 percent, was to serve as a guaranty that shareholders and management's interests would be aligned.[11]

Wall Street was confident these firms would succeed. Improving economic conditions and the low levels of debt in the public REITs also contributed to the attractiveness of REITs as an investment. Economic growth was expected to result in increased demand for real estate and increased rental rates.[12] The low level of debt these companies would operate with was marketed as an attribute to public REIT investment. Leverage levels in the public market were not anticipated to exceed 50 percent, with an industry average of approximately 30 percent. This level was significantly less than historical leverage levels of 80 percent or more.[13]

Wall Street's eagerness for an investment product, the need to recapitalize private market debt, and low interest rates provided the environment for REIT transactions to occur. The marketing of management's expertise and involvement, superior assets, and improving economic and property market fundamentals led to successful IPOs for real estate operating companies. Underwriting proceeds were used to retire debt, pay investment bankers fees, and for future acquisitions.

The following is a description of how events unfolded and interacted to create the IPO boom of the early 1990's.

---

[11] Institutional Property Consultants, "A REIT Investment Brief," 1994, p. 8.
[12] Anne E. Mengden, "Interest rates rose - So did REIT prices What was going on?" PREA Quarterly, October 1993, p. 5.
[13] Institutional Property Consultants, *op. cit.*, p. 9.

Real Estate Operating Company IPO's

Wall Street's involvement, the arbitrage opportunities, and the low interest rate environment were the factors that enabled the transition of real estate operating companies to REITs. The availability of capital and favorable pricing of assets in the public markets made it prudent for operators to convert to the REIT operating structure. Improved yields made REITs an attractive investment for investors.

Wall Street effectively postured real estate operating companies as high yielding investments with growth opportunities. Investors seeking higher yields were eager to invest and equity REITs cumulatively appreciated by more than 65% between the third quarter of 1990 and the first quarter of 1993. Demand caused public REITs to trade at premiums to their underlying asset values.[14]

The difference in values between the markets created arbitrage opportunities for public REITs. This arbitrage continued as interest rates remained low during most of 1993.

By the fourth quarter of 1993 interest rates began to rise, the supply of IPO offerings outpaced demand, and acquisition opportunities for the REITs were not as numerous or attractively priced. Prices in the REIT market decreased as yields increased. Evidence of this fact was Simon Property Group's IPO on December 13, 1993. The IPO was priced at $22.25 per share and offering an 8.5% yield compared to Taubman's IPO of one year earlier at $11.00 per share, offering an eight percent yield.[15]

Though interest rates were increasing, by the second quarter of 1994 REIT prices rebounded due to improving economic growth expectations. Institutional investors were also back in the market in 1994 to buy properties prompting improved asset values and reduced spreads between the public and private markets.[16]

---

[14] *Ibid.*, p. 16.
[15] Dean Witter Reynold's, Inc., *op. cit*, Section 5.
[16] Mueller, Pauley and Morrill, *op. cit.*, p. 17.

The unprecedented growth of the real estate property and capital supply in the 1980s instigated the recent real estate recession. The tremendous need for a new source of capital, to replace that unavailable from traditional private market providers, was resolved by the public capital markets in the form of REITs. Significant growth of the equity REITs over the last few years is a result of this migration of public capital into the property market. Arbitrage opportunities created favorable circumstances for firms to recapitalize and benefit from enhanced property values and positive spread investing. These differences, though, have subsided as the economy and property markets have improved.

In the next chapter we will examine the REIT structure and why the UPREIT structure was more attractive to many real estate operating companies.

CHAPTER TWO

THE REIT

The renewed popularity of the REIT in the early 1990s benefited owners of real estate operating companies and investors. Owners of property were motivated to transition to the REIT structure due to the lack of capital to refinance debt in the private markets, realization of higher asset values in the public market, and deferral or avoidance of tax liabilities. Investors were attracted to REIT's because of their high yields, high dividend payout requirement, liquidity, and the ability to invest in real estate without the expense or problems associated with direct property ownership.

This chapter will provide a brief history of REITs, characteristics of the REIT, their attractiveness to investors, performance measures, and the UPREIT.

HISTORY OF THE REIT

REITs have existed in the United States since the 1880's, but 1960 marked the introduction of REITs as they are known today. The *Real Estate Investment Trust Act* was enacted by Congress in 1960 to facilitate investment by small investors in larger real estate holdings through the pooling of resources.[17] Equity REITs have been an investment option since this time but on a significantly smaller scale than today.

From the 1960s until the mid 1970s, REITs were passive pools of capital that invested in diversified property types. During the 1960s real estate yields were relatively constant at 7.5 to eight percent and mortgage debt yields were in the 5.5 to seven percent range.[18] Investors took advantage of the spread between returns that could be earned from investment in real estate and the cost of financing.

In the 1970's mortgage REITs that issued debt securities to finance real estate development became popular.[19] Financing was accomplished by borrowing short term

---

[17] Institutional Property Consultants, *op cit.*, p.2.
[18] PCA/KL & Co., *op. cit.*, p. 20.
[19] NatWest Securities, "REITs & Convertible Debentures: An Ideal Combination," August 9, 1994, p. 6.

money to lend on a long term basis. Trouble began when interest rates increased and an economic recession negatively impacted REIT earnings. Many REITs discontinued dividends and share prices crashed losing almost 75 percent of value between 1972 and 1974.[20] Equity REIT investment continued to increase from 1975, though at a constrained pace, through the 1980s. Growth peaked at $1.4 billion in 1988. During 1989 the real estate recession dampened growth and in 1990 equity REIT investment declined by $1.2 billion.[21]

In 1992 the REIT emerged as a favored investment vehicle due to the attractive interest rate environment, the need to recapitalize debt, and Wall Street's desire to resolve the capital crisis. These factors led to explosive growth in the REIT equity sector. During 1993 equity REIT capitalization grew by $15 billion and in 1994 growth of $12.7 billion was realized.[22] Following is a description of REIT requirements and investment attributes.

REIT Requirements

The REIT structure allows a real estate company or trust to conform to particular tax provisions and operate as a pass-through entity. A REIT is required to distribute 95 percent of its income and any capital gains from the sale of properties to its shareholders. Therefore, the trust is not taxed as an entity, but shareholders are taxed on dividend income at their regular tax rate and on capital gain proceeds.[23] To qualify as a REIT an entity must meet requirements relating to its organization, sources of income, nature of assets, and distributions of income to shareholders. These detailed criteria are listed in Appendix C.

Benefits Of REIT Investment

Ownership of REIT shares provides numerous benefits to investors. These include a high payout ratio, avoidance of double taxation of income derived by the trust, improved

---

[20] PCA/KL & Co., *op. cit.*, p. 20.
[21] NAREIT, *"The Complete Guide to the Real Estate Investment Trust Industry 1995,"* p. 852.
[22] *Ibid.*, p. 852.
[23] Brueggeman and Fisher, *op. cit.*, p. 696.

liquidity, diversification, and the ability to invest in real estate assets that may be cost prohibitive to individual investors. The advantages of REIT investment have been enhanced by the recent round of IPOs that have expanded the quality and selection of real estate available for investment through REIT share ownership.

Investors are attracted by the requirement that REITs distribute 95% of net income to shareholders, which is only taxed at the shareholder level. Investment in other corporations are often taxed at both the corporate and shareholder level. Many REITs distribute greater than the required amount after adjustments for non-cash expenses, such as depreciation.

Investment liquidity is improved by the ability to trade shares on the stock exchange and the increased market capitalization of equity REITs. REIT shares allow an investor to move more efficiently in and out of real estate investments. Shares can be sold more quickly than a wholly owned asset.

The ability to diversify real estate holdings and avoid the expense of direct property ownership are additional advantages to REIT investment. The opportunity to buy various REITs and access different property types allows improved diversification for investors. In addition, the ability to invest in asset categories where the individual property size and cost is prohibitive appeals to investors.

REIT Investment Performance

Measures of performance that determine the success of a REIT include net income, funds from operations (FFO), funds available for distribution (FAD), multiples FFO and FAD, and the dividend payout ratio. Net income is determined by subtracting operating expenses from revenues. It serves to establish a threshold for distributions to shareholders, but does not accurately reflect a REITs dividend paying ability.

The effect of depreciation is incorporated into the net income calculation. Depreciation is a non-cash expense that is charged to income to reflect use of the economic utility of assets that derive income. A portion of an assets original cost is charged to the current period in which the asset contributed to earnings.[24] This charge, though, can misrepresent the earning potential of an asset.

REIT operating performance is more accurately measured without the full effect of historical cost depreciation. The National Association of Real Estate Investment Trusts (NAREIT), an industry organization, has prescribed FFO as a proxy to better measure operating performance for the REIT industry. FFO is defined as:

> "...net income (computed accordance with generally accepted accounting principles), excluding gains (or losses) from debt restructuring and sales of property, plus depreciation and amortization, and after adjustments for unconsolidated partnerships and joint ventures. Adjustments for unconsolidated partnerships and joint ventures will be calculated to reflect funds from operations on the same basis."[25]

Consistency in reporting FFO has and continues to be an industry issue. Specific guidelines for the addback of depreciation and amortization have been established to define these amounts as those that apply only to assets uniquely significant to the real estate industry. Examples include real property depreciation, amortization of capitalized leasing expenses, tenant allowances or improvements.[26]

FFO is further adjusted by REITs and industry analysts to reflect the amount of cash that is available for dividends. This amount is referred to as funds available for distribution (FAD) or cash available for distribution (CAD). FAD is calculated as FFO less a reserve for recurring, non-revenue generating capitalized expenditures.[27]

The growth expectations of REITs are measured by various multiples of earnings to share price. Industry analysts compute FFO multiples and FAD/CAD multiples to determine the relative strength of earnings of a REIT and the comparative position to its

---

[24] E. Richard Brownlee, Kenneth R. Ferris, and Mark E. Haskins, *"Corporate Financial Reporting,"* (Boston: Irwin, 1994), p. 133.
[25] NAREIT Memorandum, "Funds From Operations," February 10, 1995, p. 1.
[26] *Ibid.*, p. 3.
[27] Salomon Brothers, "Understanding REIT Accounting and Disclosure Will Affect Relative Valuations," *Salomon Brothers United States Equity Research*, December 1, 1994, p. 4.

peer group. The higher the multiple the greater the growth expectation for a particular REIT.[28]

The amount of FAD is compared to FFO to determine what the dividend payout ratio is. High dividend payouts are an attractive characteristic of REITs to some investors. The payout of a majority of cash flow to shareholders, though, can result in under-investment in property maintenance or improvements to enhance future growth. The sustainability of future earnings can be put at risk if reinvestment in the properties is insufficient.

Both the characteristics of REITs and investor demand prompted the resurgence of REIT popularity. The recapitalization of regional mall operating companies were some of the first to take place and use of the UPREIT structure proved more attractive to owners of these firms.

REGIONAL MALL OPERATING COMPANIES AND THE UPREIT

During the IPO boom of the early 1990's the REIT structure did not appeal to a number of regional mall operating companies. Conversion to the REIT format required outright sale of assets to the REIT. Properties owned for considerable lengths of time, that had provided benefits of depreciation to owners and had low depreciable bases, would have resulted in substantial gains and resulting tax liabilities upon sale. This issue was circumvented through the use of the UPREIT which allowed owners to defer tax liabilities. An additional benefit was access to operating partnership units for use in future acquisition transactions.[29]

The REIT structure also did not accommodate business activities outside of REIT property operations. Income derived from third party services, greater than established levels of REIT requirements, would have jeopardized qualification as a REIT. The UPREIT again provided for avoidance of this income recognition problem.

---

[28] Salomon Brothers, "Introducing the Salomon Brothers Regional Mall Pricing Model," *Salomon Brothers United States Equity Research*, April 1994, p. 1.
[29] Kaplan, Lawrence S. & Stern, Craig S., *"REITs and UPREITs: Characteristics, Requirements and Taxation,"* New York, N.Y., p. 9.

THE UPREIT STRUCTURE

Alex Brown & Sons, Inc., a firm specializing in Real Estate Securities, defines an Umbrella Partnership Real Estate Investment Trust (UPREIT) as:

> 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.[30]

Formation of an UPREIT involves several transactions. A property owner contributes properties to a newly formed operating partnership in exchange for partnership interests and the right to convert these units into REIT stock. Simultaneously, equity is raised through a public stock offering for contribution to the partnership in exchange for a partnership interest. Stock proceeds are then used to pay down debt on the properties and fund acquisitions and working capital.[31]

Once established, the General Partner of the operating partnership is the REIT who controls partnership activities. The original property owner is typically a limited partner in the operating partnership.[32]

All active real estate businesses, fee based management, leasing, brokerage, and development services are consolidated into the REIT umbrella. Two vehicles used for accomplishing this consolidation include:

1. Formation of a taxable service company to conduct fee based businesses.
2. Creation of a partnership between the Operating Partnership and the service company.[33]

The primary goal in structuring service company relationships is to avoid violating REIT income requirements. Other income from services provided by the real estate operating companies would have put this in jeopardy. By only owning shares in the operating

---

[30] Alex Brown & Sons, Real Estate Stock Monitor, September 1992.
[31] Kaplan & Stern, *op. cit.*, p. 9.
[32] *Ibid.*, p.10.
[33] *Ibid.*, p. 10.

company, the REIT is receiving dividend income. This income is subject to a 95 percent gross income requirement, which allows dividend income, as opposed to the lower threshold for the 75 percent gross income requirement for earned income.[34] Many real estate operating companies formed operating partnerships to accomplish the conversion of operating income to dividends.

The benefits of the UPREIT structure include the sponsors ability to avoid or defer tax liabilities and the creation of operating partnership units. These units, along with REIT shares, can be used as currency for additional acquisitions. Operating partnership units used as currency for acquisitions provide the same tax benefits to contributors of new property.[35]

A negative impact of the UPREIT structure is the inherent conflict created between contributing partners and shareholders. Tax deferral (and accompanying lower basis of the properties) can result in a sizable tax gain on a property sale. This situation encourages REIT management to avoid sales that trigger deferred gains to a contributing partner. Thus, sale of a property is avoided to protect the partner at the expense of the shareholders.[36] The typical REIT structure would have established a higher basis upon acquisition of the properties avoiding a deferred tax liability.

This chapter has described REITs and the benefits to investors and operators. REITs serve as an attractive vehicle by which investors can invest in real estate. High payout requirements, improved liquidity, diversification benefits, the ability to invest in assets that are cost prohibitive to single investors, and avoidance of the expense and commitment of direct property ownership are benefits to REIT investment. The utilization of the UPREIT structure allowed owners of property to maintain control of their assets, access the public capital markets, continue to operate their businesses, and defer tax liabilities to a more convenient schedule.

In Chapter Three the regional mall as an asset and investment will be examined.

---

[34] *Ibid.*, p. 10.
[35] *Ibid.*, p. 9.
[36] *Ibid.*, p. 9.

CHAPTER THREE

THE REGIONAL MALL

Regional malls have been a favored asset of the retail property class. The large capital required to develop, own, and operate the regional mall have made it more of a business investment than a property investment. The complexity of the regional mall has prompted ownership of these assets in joint ventures, partnerships, private REITs, by institutional investors, and financing of these assets and operating companies by institutional investors. Conversion of a large number of the regional mall operating companies to REITs has resulted in significant numbers being owned in the public REIT format. This chapter will describe regional malls, the reasons they are attributed with a business value, retail factors that affect performance, and why investors are eager to own these assets.

HISTORICAL PERSPECTIVE

Since its inception in the 1950s the regional mall has been an enduring and successful retail store concept.[37] The first regional shopping centers had one anchor tenant and smaller satellite tenants, including grocery stores and variety stores. Many malls were originally one level, open aired facilities that have since been redeveloped. Malls were enclosed, expanded to two or three levels, and retenanted.[38]

During the last twenty five years regional malls have experienced the fastest growth in sales in the retail sector while experiencing a 238% growth in square footage.[39] Retail sales generated in regional malls account for 30% of total retail sales, while regional malls comprise only 5% of the shopping center property class.[40]

---

[37] William C. Wheaton and Raymond G. Torto, "Retail Sales and Retail Real Estate," *Real Estate Finance*, Spring 1995, p. 23.
[38] Homart Development Company, "The Future of Regional Malls 1993-2000," January 1993.
[39] Wheaton and Torto, *op. cit.*, p. 23.
[40] Douglas M. Casey and John Konarski, "A Primer for Shopping Center Institutional Investors," PREA Quarterly, Spring 1994, p. 23.

DEFINITION OF A REGIONAL MALL

A shopping center is described as a group of commercial establishments planned, developed, owned, and managed as a unit related in location, size, and type of shops to the trade area the unit serves.[41] The four categories of shopping centers include; neighborhood, community, regional, and super regional. At year end 1993, there were 39,633 shopping centers in the United States.[42]

Size and anchor composition distinguish regional malls from other retail centers. The Urban Land Institute describes a regional shopping center, also referred to as a regional mall, as:

> "...provides for general merchandise, apparel, furniture, and home furnishings in depth and variety, as well as a range of services and recreational facilities. It is built around one or two full-line department stores of generally not less than 75,000 square feet. In theory, its typical size for definitive purposes is 450,000 square feet of gross leasable area; in practice, it may range from 300,000 to 850,000 square feet. The regional center is the second largest type of shopping center. As such, it provides services typical of a business district yet not as extensive as those of the super regional center."[43]

A super regional center provides:

> "...for extensive variety in general merchandise, apparel, furniture, and home furnishings, as well as a variety of services and recreational facilities. It is built around three or more full-line department stores of generally not less than 100,000 square feet each. In theory, the typical size of a super regional center is about 800,000 square feet of gross leasable area. In practice, the size ranges from 600,000 to more than 1,500,000 square feet."[44]

The massive size of regional malls require sites that range from fifteen to one hundred or more acres. A sales area radius that extends 12 miles with a customer base greater than

---

[41]Urban Land Institute, *Dollars & Cents of Super Community Shopping Centers: 1993*, Washington D. C., p.4.
[42] International Council of Shopping Centers, "The Scope of the Shopping Center Industry in the United States 1994," p. 3.
[43] Urban Land Institute, op. cit., p.4.
[44] *Ibid.*, p.4.

300,000 persons, each willing to travel 30 minutes from their point of origin, are typical attributes.[45]

The significant investment and need to coordinate owner and anchor responsibilities require the existence of operating and supplementary agreements. An operating agreement is a publicly recorded, legally binding document that defines the rights of the developer and anchor to act independently in using their land. The agreement establishes the common goal of implementing the planning, development, and management of a group of commercial establishments as one unit. A supplemental agreement defines the financial agreements between a developer and each anchor concerning development and operation. The financial and operational responsibilities and contributions of each party to the agreement are described.[46]

As of December 1993, there were 1,863 shopping centers in the United States with square footage in excess of 400,000 square feet. A total of 669 with area in excess of 800,000 square feet and 374 with greater than 1,000,000 square feet.[47] Regional malls, as defined in this paper, include both regional and super regional malls.

BUSINESS VALUE OF THE REGIONAL MALL

The operational complexity of the regional mall contributes to its value, often referred to as business value. Business value is a function of the mall's size, operational aspects, and the need to constantly adjust to consumer demands to ensure success of the mall.[48]

Essential attributes of the mall that maximize business value include location in a trade area with a large population base that is relatively affluent, mall size, and anchor

[45] James D. Vernor and Joseph Rabianski, *Shopping Center Appraisal and Analysis*, Illinois, Appraisal Institute, 1993, pp. 6-9.
[46] Vern Tessier, "The Valuation of Regional and Super-regional Malls," Assessment Digest, September/October 1991, p. 5.
[47] Urban Land Institute, op. cit., p.4.
[48] Jeffrey D. Fisher, "Valuation Techniques for the Private Real Estate Market," Indiana University School of Business.

quality.[49] Location of the mall on a high profile, easily accessible site is crucial. The mall should be the only one in its trade area. If not, it should be significantly larger than its competitors in order to capture sufficient market share. Trade area health and quality and a sufficient population base are key components to achievement of high sales levels. At minimum, the strongest three anchors in the market should be in the mall.[50]

The capital and operational demands of regional malls serve to constrain development. The planning and significant investment required prior to development has successfully limited overbuilding of the property type and enhances the value of existing malls. Decisions to develop are constrained by the following:

1. Required commitments from three or more anchors, typically a major department store, who feel a sufficient market exists for their merchandise.
2. The expense of constructing regional malls.
3. Cumbersome development processes, which involve large scale land assembly and local government involvement in the development process, magnify the time and commitment required for project approval and completion.[51]

The existence of these barriers to entry further enhance the value of existing regional malls.

OWNERSHIP OF REGIONAL MALLS

The substantial investment that is required to own and finance regional malls and the complexity of operations has put these assets in an elite ownership class. Often mall ownership is accomplished through the pooling of investor funds. The primary owners of regional malls include; institutional investors, private and public REITs, regional mall development and operating companies, insurance companies, and some wealthy individuals.[52]

The UPREIT format has allowed the restructuring of a number of regional mall developers' portfolios and operating companies to convert their ownership to the REIT

---

[49] Homart Development Company, *op. cit.*
[50] *Ibid.*
[51] Heitman Financial, Ltd., *op. cit.*, p. II-3.
[52] L.J. Melody & Company and Arthur Andersen Real Estate Services Group, "Regional Malls," November 1992, p. 63.

format. As of November 1994 eight initial public offerings (IPO's) for regional mall companies were completed.[53] Some of these firms included Taubman Centers, Simon Property Group, General Growth Properties, Urban Shopping Centers, DeBartolo Realty and the MaceRich Company.[54]

Today it is estimated that 22% of the premier super regional malls are owned by publicly traded REITs.[55] Total capitalization of the public retail REIT sector as of May 31, 1995, was $43.5 billion. REITs specializing in regional malls account for $4.9 billion of this total.[56]

A number of regional malls are owned by private REITs. Private REIT shares are held by institutional investors and avoid public reporting and disclosure requirements. The largest REIT in the United States is a private REIT, Corporate Property Investors. Its market capitalization is approximately $4 billion.[57]

The popularity of the regional mall asset class and the limited stock of superior regional malls generally results in relatively low capitalization rates. Capitalization rates are presently in the seven to eight percent range while some trade at lower rates.[58] The recent return of conventional lenders to the private markets has contributed to lowering capitalization rates for high quality regional malls.[59]

Transactions in the regional mall sector have been minimal due to the lack of available quality product. Therefore, when an acceptable mall is made available the competitive market prices the product aggressively. The availability of regional mall assets is also constrained by the ownership of these assets in REITs. Many of the newly formed public REITs will not sell their mall holdings due to the tax liabilities that would be

---

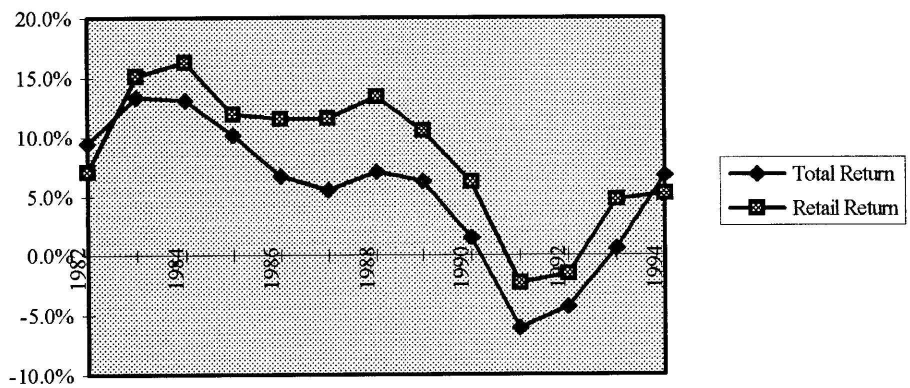
[53] Jonathan Litt, "The Mall Is Dead? Not!" ICSC Quarterly, Fall 1994, p. 16.
[54] Dean Witter Reynolds Inc., *op. cit.*, Section 5.
[55] Invesco, *Mall Equity REITs: An Institutional Investor Overview*, Industry Paper, Fall, 1994, p. 2..
[56] Salomon Brothers Real Estate Securities, "May 1995 Review," Salomon Brothers United States Real Estate Research, June 1995, p. 4.
[57] Tom Zacharias, Corporate Property Investors, Interview, July 11, 1995.
[58] Peter F. Korpacz, "REIT Appetite Impacts Retail Property Market," Real Estate Capital Markets Report, Winter 1995, p. 10.
[59] Jinny St. Goar, "Going the non-REIT route," Institutional Investor, November 1994, p. 155.

realized upon sale.[60] Also, to qualify as a REIT there is a stipulation that an asset cannot be traded within four years of acquisition. Both of these factors contribute to the likelihood that regional malls will not be actively traded assets.

PERFORMANCE AS AN INVESTMENT

Strong income and relatively stable value have made the regional mall a preferred asset for investment in real estate. A comparison of the Russell-NCREIF Property Index Total Return to that of the retail property sector over the last thirteen years shows that retail returns, until 1994, had exceeded the Total Property Return.

NCREIF Total Return vs Retail Return



The retail sector has achieved stable income returns in the six to seven percent range with capital declines during the recent real estate recession.[61] The erosion of capital value for the retail property group was much less than that of other property types during this same period. The regional mall, as a portion of the retail property type, has been further insulated from the erosion of capital value due to the long term nature of its cash flows and prime locational characteristics.[62]

---

[60] Eric J. Savitz, "The REIT Maze Picking a Safe Path Through a Hot Group," Barron's, May 24, 1993, p. 22.
[61] NCREIF and Frank Russell Company, *op. cit.*
[62] Heitman Financial, Ltd., *op. cit.*, p. I-1.

Cash flow security is a function of the long-term nature of tenant leases and additional surety provided by the ability to pass operating expense increases on to the tenant. Further security is provided by the long-term commitment of anchors and the fact that a majority of mall tenants are economically strong national operators.

TRENDS AND OUTLOOKS

Economic forecasts project long term growth in personal income in the 2-2.5% range and retail sales growth in the 1- 1.5% range (in constant dollars).[63] Therefore, constraint in the increase in supply of regional mall space should provide for continued success in this sector for top-tier regional malls. The present trend in the mall industry is for owners to expand and rehabilitate existing product, with minimal new development planned.

The International Council of Shopping Centers, a retail trade organization, tracks planned retail development. Development of 14 regional malls is anticipated over the next few years. Total square footage in these malls is estimated to be 12.9 million square feet, with a geographic concentration in the southern United States.[64]

Following are brief descriptions of regional mall tenants, retail demand and retail sales.

RETAIL TENANTS

The financial success of regional malls is contingent on tenant sales. These tenants include anchors, national retailers, concept stores, and regional and local retailers. All contribute to the health of each other and total mall productivity.

Many anchors experienced financial difficulties during the late 1980s and early 1990s which negatively impacted regional mall operations. The department store chains were overleveraged and fell victim to these unmanageable debt levels and slow economic

---

[63] Wheaton and Torto, *op. cit.*, p. 30.
[64] Michael Tubridy, International Council of Shopping Centers, Interview, July 31, 1995.

growth.[65] Outlet malls, discounters, and value oriented merchants were able to take market share from regional malls. Some of the department stores recovered from this struggle through consolidations and restructurings during the early 1990s. The result was stronger re-emerging anchors who could compete with other retail formats.[66]

The 1980s saw the emergence of concept stores. These are specialty stores of large retailers that serve a small merchandise segment at a particular price point. Examples of concept stores include the Gap (Banana Republic, Gap, and Gap Kids) and The Limited (Abercrombie & Fitch, Express, Limited, and Structure, and Victoria's Secrets).[67] These retailers have been successful and continue to command expansion space, having positive implications for continued rental rate and income growth. It is not unusual for five to six stores per mall to be leased to these concept store entities. The concept stores and their locational preferences serve as a barometer for many mall owners when they are determining whether to acquire or develop a mall.

Regional and local retailers occupy mall shop space and provide substantial cash flow for malls. The success of smaller retailers is dependent upon anchor health and the number of consumers that are attracted to the mall.

RETAIL DEMAND

Retail demand is predicated on changes in population, retail sales patterns, general economic strength, and behavioral choices of consumers. All of these factors must be monitored and adjusted for by regional mall operators to assure continued success.

Expected population growth is anticipated to be half the pace of the 1970's and 1980's resulting in fewer consumers. In addition, aging baby boomers and their changing spending habits, the occurrence of more single parent homes, and anticipated population growth (25% of which will be attributable to immigration), are all expected to impact

[65] Heitman Financial, Ltd., *op. cit.*, p. IV-1.
[66] *Ibid.*, p. IV-2.
[67] *Ibid.*, p. IV-2.

current and future retail sales. The implication of fewer consumers will likely lead to the need for fewer retail stores and ultimately malls.[68]

RETAIL SALES

Despite changes in demand the health of regional mall sales continues to be strong. ICSC data shows a significant increase in average expenditures per mall visit and a decrease in the amount of time per visit. Average expenditures grew from $40.41 to $54.10 per visit between 1986 and 1992, with a decrease in time spent in malls from 75 minutes to 72 minutes for the same period.[69] Seventy percent of the adult population shops at regional malls with an average of four visits per month.[70] Shopping center sales increased 5.5 percent in 1993, up from 5.3 percent in 1992. These statistics bode well for the regional mall's ability to adjust to changing demands of consumers.

Department store sales grew 7.9 percent in 1994, exceeding the average, while apparel stores only experienced a 1.9% increase.[71] The recapture of sales, lost in recent years by department stores, has been achieved with increased emphasis on affordable and fashionable clothing. The impact of this trend, though, may hurt other traditional mall tenants.[72] Historically 45% of regional mall space has been dedicated to apparel. Apparel space is now being reduced due to the declining level of sales, particularly for women's clothing.

Retail sales are the most crucial element of a malls financial success. Sales levels serve as a measure for potential mall tenants, to determine if they want to locate in a specific mall, and serve as a basis for establishing tenant rental rates. High per square foot sales are the primary reason retail tenants desire to be in a particular mall. Malls with high sales levels deliver consumers that will enhance each tenant's profitability, which is crucial because mall tenants can provide over 90 percent of total mall revenue.[73]

---

[68] *Ibid.*, p. IV-2.
[69] Diane M. Kutyla, *The Winds Of Change in Retailing*, ICSC Research Quarterly, May 1994, p. 7.
[70] International Council of Shopping Centers, *op. cit.*, p. 2.
[71] International Council of Shopping Centers, *op. cit.*, p. 1.
[72] The Russell-NCREIF Real Estate Performance Report, Fourth Quarter 1994, p. 7.
[73] Taubman Centers, Inc., 1994 Annual Report, p. 24.

High per square foot sales allow mall owners to charge higher rents than less successful malls. Tenants in malls with lucrative sales are able to pay a greater percentage of occupancy costs. Total occupancy costs consist of minimum rents, percentage rents, and recoverable expenses.[74] All of the regional mall REITs express their rents, which equate to mall tenant occupancy costs, as a percentage of mall tenant sales. Top-tier regional malls with high sales levels command greater rents and a higher percentage of occupancy costs as a percent of sales.

OUTLOOK FOR REGIONAL MALLS

Successful regional mall operators will monitor income and demographic projections and adjust existing tenant mixes to maintain market share. These changes are anticipated to result in 15 percent to 20 percent reductions in the number of regional malls by the end of the decade. Premier regional malls with strong operations will benefit. Less competitive malls will falter and leave customers to be absorbed by the stronger malls.[75]

The regional mall's position as a premier retail asset and its ability to produce cash flow with long-term security continue to make this property type attractive to investors. The opportunity to enhance property value through remerchandising and redevelopment efforts are additional reasons mall assets are in great demand. In the next chapter we will examine four REITs that collectively own 116 regional malls.

---

[74] *Ibid.*, p. 24.
[75] Heitman Financial, Ltd., *op. cit.*, p. IV-7.

CHAPTER FOUR

DESCRIPTION OF TWO PRIVATE AND TWO PUBLIC REITS

A comparison of private and public markets must begin with comparable information. The examination of four regional malls will exhibit the operational similarities of private and public REITs. The two private REITs are Corporate Property Investors (CPI) and Retail Property Trust (RPT). The two public REITs are Simon Property Group (SPG) and Taubman Centers, Inc. (TCO).

All four of the REITs have provided annual reports and a REIT representative was interviewed. CPI and RPT were suggested for study by Institutional Property Consultants, a consulting firm servicing institutional investors in real estate, who recommended this thesis topic. Taubman Centers was selected due to the quality of its regional mall portfolio. Simon Property Group was selected due to its significant market capitalization and the fact that over 75% of its revenues are derived from regional mall assets.

My research methodology involved interviewing REIT representatives and analysts and reviewing annual reports, analyst reports, and IPO prospectuses. Some REIT representatives were eager to address all areas of operations and strategy while others felt certain information was proprietary. Therefore, I have attempted to provide consistent information for all of the REITs.

The characteristics that will be examined for each REIT include; organization, capital structure, portfolio characteristics, investment strategy, and performance. Performance measures were taken from the annual reports, if available, and calculated if not available and sufficient information was provided to do so.

CORPORATE PROPERTY INVESTORS

Organization

Corporate Property Investors (CPI), a private REIT, is the largest REIT in the United States. The REIT was organized in 1971 with an initial capitalization of $75 million to invest in properties net leased to credit worthy corporations. Three former employees of Lazard Freres, an investment banking firm specializing in real estate transactions, formed the REIT.

CPI acquired its first regional shopping centers in 1972 from Edward J. DeBartolo Company, a shopping center developer. Interests in five midwestern regional shopping centers were acquired and initiated their involvement in the redevelopment and management of shopping centers.[76] These activities have continued through acquisition and development in suburbs of major cities such as New York, Atlanta, Boston, and Minneapolis.[77]

CPI is self-managed. All leasing, property management, development management, construction management, supervision of independent on-site managers, financial, and a substantial portion of legal activities are performed in-house. Shareholders are predominantly institutional investors; U.S. pension funds (46%), offshore government entities (22%), offshore financial institutions (23%), and offshore international pension funds (five percent). Individuals, trustees, and officers own four percent.[78] Institutional owners include the pension funds of AT&T, U.S. Steel, Exxon, Nynex, the World Bank, General Motors, the Ford Foundation, the United Nations, and the State of Pennsylvania.[79]

---

[76] Tom Zacharias, Corporate Property Investors, Inc., Interview, July 10, 1995.
[77] Corporate Property Investors, 1994 Information Brochure, p. 19.
[78] *Ibid.*, p. 33.
[79] Michael Liebowitcz and Michael Vachon, "CPI makes its 144A mark despite industry gloom," *Investment Dealers Digest*, March 23, 1993, p. 23.

Capital Structure

Capital is primarily raised through periodic private placements of shares. Existing shareholders have preemptive rights before CPI searches for new investors. Equity capital, totaling $1.6 billion, has been sourced sixteen times during the last twenty-four years. The public bond market has also been used to raise capital. In 1992 a $250 million debt offering was issued. Ninety percent of the offering was purchased by institutional investors, mostly state and corporate pension funds. The issue, priced at 168 basis points over comparable treasuries, was oversubscribed and therefore considered extremely successful. CPI debt issues have been consistently rated A1 by Moody's and AA- by Standard & Poors Corporation.

Following is a summary balance sheet as of December 31, 1994 (in 000's):

Real Estate Assets	$1,571,756
Other Assets	$512,792
Total Debt	$763,531
Property Level Debt	$69,580
Company Level Debt	$693,951
Net Worth	$1,198,482
Shares Outstanding	21,157

Source: Corporate Property Investors 1994 Annual Report

Capital Ratios:

Debt to Equity	23.9%
Property Debt to Equity	20.6%
Current Ratio	3.42

Source: Corporate Property Investors 1994 Annual Report

Portfolio Characteristics

The portfolio is comprised of 26 super-regional shopping centers, five office buildings, one hotel, and one mixed use property. Total portfolio value is approximately $4 billion. Gross leasable area in malls is 29.4 million square feet.[80] Mall square footage

[80] Corporate Property Investors, 1994 Annual Report, p. 16.

ranges from 695,000 to 2,100,000 square feet. The malls contribute 90% of total portfolio revenues.[81]

Property Type	Number of Assets	GLA or Units	Mall Shop GLA
Regional Mall	26	29,405,000	14,810,000
Office	5	2,385,000	n/a
Hotel	1	375 rooms	n/a
Mixed Use	1	Hotel, retail & office	n/a

Shopping centers are located in; Arizona, California, Colorado, Connecticut, Florida, Georgia, Massachusetts, Minnesota, New Jersey, New York, and South Carolina. Office buildings are located in Georgia, New Jersey, and New York. The hotel is located in Georgia and the mixed use in Massachusetts. Thirteen malls are owned with 100% interest and thirteen more are held in joint partnerships. CPI's interest in these partnerships range from 15 percent to 62 percent.[82]

CPI's goal is to improve the "geographic coherence" and average asset quality of the portfolio. Three centers with average sales of $230 per square foot, far below CPI's $340 desired sales level, were sold in December of 1994. Sales in expanded malls, which in square footage is approximately equivalent to those sold, are expected to average $465 per square foot. Conversion of low productivity space to higher sales per square foot will continue to be a primary objective of the REIT.[83]

Redevelopments and expansions have and continue to be substantial in CPI's portfolio. Five centers are being expanded or redeveloped. These projects will result in three new anchors and 575,000 additional square feet of mall space.[84] Expansions should be completed by 1999.[85]

Investment Strategy

CPI's investment focus is on acquiring property whose value can be enhanced through expansion, redevelopment, and remerchandising. Consolidating ownership

---

[81] Tom Zacharias, *op. cit.*
[82] *Ibid.*, p. 14.
[83] *Ibid.*, p. 5.
[84] *Ibid.*, p. 11.
[85] Bill Lyons, Corporate Property Investors, Interview, July 7, 1995.

interests in certain regional malls through the acquisition of minority interests is also a goal of the REIT.[86]

New retail investment strategies have been researched. One was a mall with discount retailers as anchors. However, their investors have preferred they maintain a focused retail investment strategy. Investors view diversification into other retail formats as disadvantageous. CPI sees consolidation of regional mall companies as a source of cash flow growth for members of the retail real estate industry, similar to the recent consolidation of retailers that has taken place. Their goal is to examine all realistic opportunities which would not compromise CPI's asset quality.[87]

Performance

CPI's performance has improved over the last year. Total return has improved by almost four percent.

Measure	1993	1994
Share Price	$134.15	$133.14
Capital Return	-3.94%	-0.78%
Income Return	4.96%	5.89%
Total Return	1.02%	5.11%
FFO	n/a	n/a
FAD	$6.86	$7.14
Dividends	$6.92	$7.90
Payout ratio as % of FFO	100.1%	107.5%
Occupancy	91.7%	93.3%
Sales per SF	$335	$341
Occupancy Costs as a % of sales per SF	13%	13%

Source: Corporate Property Investors 1994 Annual Report

CPI has continued to recognize small capital losses to property value but income returns have increased to almost six percent. Occupancy has also improved by 1.6% to 93.3%. Sales at $341 per square foot are the strongest of the four REITs examined. Dividends include return of capital for dispositions, the reason dividends exceed funds

---

[86] *Ibid.*, p. 2.
[87] *Ibid.*, p. 8.

available for distribution. The following performance summary exhibits CPI's dividend and return history.

10 Year Performance Summary

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Dividend	$5.15	$5.73	$6.10	$6.25	$6.45	$6.80	$6.90	$6.90	$6.90	$7.90
Total % Rate of Return	16.27	19.93	23.85	13.44	14.77	9.76	-2.24	-3.48	1.02	5.11

Source: Corporate Property Investors 1994 Information Brochure

RETAIL PROPERTY TRUST

Organization

The Retail Property Trust (RPT) is a private REIT that invests in regional malls and community shopping centers. RPT was formed in 1986 to invest in Shopping Center Associates ("SCA") which acquires and owns interests in retail properties. SCA is a joint partnership between RPT and O'Connor Retail Partners L.P.(ORP). RPT owns approximately 99% of SCA and ORP is the general partner and owns the remaining one percent.[88]

The O'Connor Group, an investment management firm for institutional investors, is the manager of the REIT and directs all investment decisions. The REIT's initial capital, $260 million, was provided by six outside minority shareholders with whom the principals had established long-term relationships. Current shareholders are primarily pension funds, along with a small number of foundations and endowments.[89]

---

[88] Retail Property Trust 1994 Annual Report, p. 25.
[89] Bruce MacLeod, Retail Property Trust, Interview, July 19, 1995.

Capital Structure

Follow-on offerings in late 1988 and increased the fund to nearly $1 billion from its original market capitalization of $260 million.[90] RPT is presently fully invested and not sourcing new capital. RPT attained an A debt rating in 1992 which has been maintained.[91]

Following is a summary balance sheet as of December 31, 1994 (in 000's):

Real Estate Assets	$651,648
Other Assets	$349,574
Total Debt	$277,843
Property Level Debt	$128,500
Company Level Debt	$149,343
Net Worth	$696,312
Shares Outstanding	38,376

Source: Retail Property Trust 1994 Annual Report.

Capital Ratios:

Debt to Equity	31%
Property Debt to Equity	28.3%
Current Ratio	2

Source: Retail Property Trust 1994 Annual Report.

Portfolio Characteristics

The REIT owns 11 regional centers and four community shopping centers in six markets; New York, Chicago, Los Angeles, Memphis, Fort Meyers and Pittsburgh. The portfolio totals 11.4 million square feet with a current appraised value of approximately $923 million.[92] Following are the portfolio characteristics:

Property Type	Number of Assets	Total GLA	Mall Shop GLA
Regional Mall	11	10,751,000	5,982,000
Community Center	4	683,000	683,000

Source: Retail Property Trust 1994 Annual Report

Square footage in the centers ranges from 129,000 square feet in the smallest shopping center to 1,480,000 square feet in the largest regional mall. RPT shares interests in seven

[90] The O'Connor Group, Company information package.
[91] *Ibid.*
[92] Retail Property Trust 1994 Annual Report, p. 15.

of the properties with joint venture partners. Six are owned with a 50 percent interest and one a 40 percent interest. One of these projects is a development joint venture.[93]

Bruce MacLeod, President of RPT stated,

> "RPT's operating strategy is to buy properties that have repositioning opportunities and this has required a tremendous amount of capital investment and disruption of cash flows each year. 1996 will be the first year of stabilized cash flow."[94]

All of the portfolio properties have had renovations except two, which will be completed in 1995 and 1996. It is anticipated that no major capital expenditures will be required for a number of years. Therefore, the full benefit of these redevelopment's cash flows should impact future earnings.

Five properties were remerchandised or renovated in 1994. Mall space was expanded by 80,000 square feet and some previous anchor positions were redeveloped as mall space and food courts.[95]

RPT emphasizes merchandising to find the right tenants to attract the correct customer base to their malls. Their present strategy is to reduce the percentage of selling area dedicated to women's apparel and focus on better performing retailers in this retail group, such as Ann Taylor and Talbots. Increases will appear in space dedicated to hard goods, food, entertainment, and services. One example is The Westchester, a new development, where 15 percent of gross leasable area is dedicated to hard goods, whereas this allocation would have been five to seven percent five years ago.[96]

RPT is also planning to dispose of Mission Center and Sherwood Gardens, two assets located in California. These assets were acquired in November of 1989 in a portfolio purchase. The original strategy was to dispose of these.

---

[93] *Ibid.* p. 29.
[94] Bruce MacLeod, *op. cit.*
[95] Retail Property Trust 1994 Annual Report, p. 25.
[96] *Ibid.*, p. 3.

Investment Strategy

RPT's investment strategy is to acquire and revitalize quality regional malls. Their goal is an initial attractive return with potential for adding value. RPT, though fully invested, does analyze malls that come on the market and are of the caliber of product they desire.

Performance

RPT's overall performance has improved during 1994. The significant funds used to redevelop and expand portfolio properties has tempered income returns. The impact of increased income is expected to be fully realized as projects are completed within the next few years.

Measure	1993	1994
Share Price	$18.19	$17.67
Capital Return	-3.22%	-2.86%
Income Return	5.05%	5.28%
Total Return	1.83%	2.42%
FFO	$1.07	$1.07
Dividends	$0.95	$0.96
Payout Ratio as % of FFO	88.8%	89.7%
Occupancy	88.0%	89.8%
Sales per SF	$245	$285
Occupancy Cost as % of sales per SF	8%	8%

Source: Retail Property Trust 1994 Annual Report

RPT's total return in 1994 improved slightly over 1993's by .6%. Capital erosion has declined and income returns are increasing. Funds from operations remained at the same level but the dividend was increased by one cent. Occupancy has improved by one percent to almost 90 percent. Sales per square foot has increased drastically due to newly renovated mall space. RPT's relatively low occupancy cost level of eight percent provides potential for improvement in rental rates compared to higher occupancy costs for the other REITs.

SIMON PROPERTY GROUP

Organization

Simon Property Group (SPG) is the largest publicly traded regional mall REIT. Formed in December of 1993, SPG owns a 56.4% stake and is the General Partner of the Operating Partnership of the Simon Property Group, Limited Partnership. Melvin Simon, Herbert Simon, other affiliates, and third party investors exchanged partnership interests in certain shopping centers and the management, development, and leasing activities related to the properties for limited partnership interests in the Operating Partnership.[97] The Operating Partnership is involved in the ownership, operation, management, leasing, acquisition, expansion and development of real estate properties, its primary focus being on regional malls and shopping centers.

Total square footage of the Operating Partnership's portfolio is 58 million square feet. In 1994 it generated $8.5 billion dollars in retail sales. Combined with its affiliated management company, the total management portfolio is 71 million square feet.[98] The portfolio is nationally diversified and offers a range of retail store types that also provide diversification for investors.

The Simon brothers, Melvin and Herbert, began developing retail centers in the early 1960's. Since that time they have successfully developed a number of different retail property types; regional malls, power centers, and specialty retail centers. They are recognized for their success in pioneering the integration of entertainment with the retail shopping environment.

Capital Structure

Public Offerings

SPG completed its IPO on December 13, 1993, realizing net proceeds of $966 million. Concurrently SPG also borrowed $259 million in a private financing transaction.

---

[97] Simon Property Group 1994 Annual Report, p. 36.
[98] *Ibid.*, p. 36.

The proceeds of equity and debt were used to repay existing debt of $986 million, repurchase interests in property partnerships, acquire development land, and establish a working capital reserve. SPG is 93.1% owned by public shareholders and 6.9% by The Simons.[99] Simon inside ownership of the operating partnership is 42.5%.[100]

A secondary offering was sold in April of 1995 which raised $137 million. Proceeds were used to repay bank credit lines which had been used for acquisitions.[101]

Shareholders in the REIT include approximately 50% of both institutional and retail investors. Mutual funds invested heavily at the time of the IPO but have since been replaced by pension fund money. State pension funds include Ohio, Wisconsin, and Florida. Fidelity Investments, an investment manager, also owns two million shares.[102] Following is a summary balance sheet as of December 31, 1994 (in 000's):

Real Estate Assets	$1,829,111
Other Assets	$448,117
Total Debt	$1,938,091
Property Level Debt	$1,738,592
Company Level Debt	$199,139
Net Worth	$101,693
Shares Outstanding	45,212

Source: Simon Property Group 1994 Annual Report.

Capital Ratios:

Debt to Equity	66.5%
Property Debt to Equity	59.2%
Current Ratio	2.3

Source: Simon Property Group 1994 Annual Report.

Portfolio Characteristics

The Operating Partnership's current portfolio consists of 59 regional malls, 55 community shopping centers, 2 specialty retail centers, and three mixed-use properties located throughout the United States with a focus in the mid-west and central states.

---

[99] CS First Boston, Simon Property Group, July 28, 1995, p.7.

[100] Green Street Advisors, Inc. Research, Simon Property Group, Inc., April 24, 1995, p. 11.

[101] *Ibid.*, p. 1.

[102] Steve Sterrett, Vice President Financial Planning & Treasurer, Simon Property Group, Interview, July 28, 1995.

Property Type	Number of Assets	Square Footage
Regional Mall	59	44,900,000
Shopping Center	55	11,900,000
Specialty Retail & Mixed Use	5	1,500,000

Source: Simon Property Group 1994 Annual Report

SPG is involved with a number of new developments. Four regional malls, three in joint ventures, are currently being developed in the United States. Three will be completed in the fall of 1995 and another in 1996. All of these are expected to affect cash flow in 1997. Their most recent flagship developments include The Forum Shops at Caesar's, in Las Vegas, and The Mall of America, in Bloomington, Minnesota. A 60% interest in the Forum Shops is part of the REIT security and management fees from Mall Of America are part of the management companies contribution to the Operating Partnership, although the property is not a property of the Operating Partnership.

Expansion projects at existing malls, at a cost totaling $41 million, will add two anchors and 80,000 square feet of new mall shop space. Also the Forum Shops at Caesar's, with $1100 per square foot sales, is to be expanded by 200,000 square feet at a cost of $90 million.[103]

In addition to development in the United States, SPG is also developing malls in Mexico with joint venture partners. Three regional malls in the Mexico City area and one in Guadalajara, totaling 4 million square feet, are to be completed in 1995 and 1996. The Simons Operating Partnership is contributing development management expertise and providing relationships with United States retailers, with no cash contributed. The Operating Partnership's interest will be 24% ownership interest as a joint venture partner and development and leasing fees.[104] Returns on two of these projects are subordinated to the preferred returns of the money partner. An 11-12% unleveraged return on costs are expected.[105]

---

[103] Green Street Advisors, Inc. Research, Simon Property Group, Inc., *op. cit.*
[104] Kemper Securities, Inc. Real Estate Research, Initiating Coverage Simon Property Group, Inc., April 11, 1994, p. 5.
[105] Steve Sterrett, *op. cit.*

The Simons have established a separate relationship with a pension fund to develop and operate power centers. In addition to development and leasing fees SPG receives a 35% ownership interest, after a preferred return is paid to the pension fund. The pension fund contributes the total original investment.[106]

Another retail development opportunity being considered are unanchored specialty centers. These range in size from 100,000 to 150,000 square feet. Prospective tenants are typical mall shops. Examples include; Eddie Bauer, Gap, Limited, and Barnes & Noble Bookstores. The attraction of these centers is the convenience of shopping in a smaller "mall" close to home. This property type derives mall cash flow (ninety percent of regional mall revenues are provided by mall tenants) from a smaller center while minimizing expenditures of a larger mall.[107]

SPG actively acquired assets in 1994. In September SPG acquired MSA Realty, a small public REIT the Simons had previously sponsored. The acquisition increased their interest to 100%, from 50%, in fourteen power centers. A 50% interest in a regional mall was also acquired. The transaction involved the exchange of 1.8 million shares of SPG common stock and assumption of $145 million of mortgage debt. SPG also acquired four regional malls, totaling three million square feet, in December of 1994. Three of these malls were acquired from CPI.[108] Capitalization rates on these malls were estimated in the 9-9.5% range by SPG.[109] CPI estimated the sale capitalization rate to be in the 8.5 to 9% range.[110]

Investment Strategy

SPG's mission statement is;

> To be the dominant developer, owner, and manager of retail real estate in North America through the creation and enhancement of a high-quality portfolio of properties.[111]

---

[106] Kemper Securities, Inc. Real Estate Research, *op. cit.*, p. 5.
[107] Steve Sterrett, *op. cit.*
[108] Simon Property Group, Inc. 1994 Annual Report, p. 2.
[109] Steve Sterrett, *op. cit.*
[110] Tom Zacharias, *op. cit.*
[111] Steve Sterrett, *op. cit.*

SPG aspires to provide service across the full spectrum of retail product.[112] The stated goal in 1994 was to enhance and grow the portfolio through development of new retail projects, acquisitions of properties, and expanding and renovating new properties.

As evidenced by the considerable development they are engaging in, SPG is actively growing. The structure of their ventures with partners and the variety of product they are involved in shows their more conservative approach and willingness to share both risks and profits.

Performance

SPG realized the expectations they established for their firm and, more importantly, the expectations Wall Street had established for their first year operating as a public company. Their stock has performed strongly and the market seems confident their growth expectations can be achieved.

Measure	1993	1994
Share Price	22 5/8	24 1/4
Capital Return	1.7%	7.2%
Income Return	n/a	8.4%
Total Return	1.69%	15.58%
FFO	$1.92	$2.09
Dividends	n/a	$1.90
Dividend Payout as a % of FFO	n/a	90.9%
Occupancy	85.6%	86.2%
Sales per SF	$279	$276
Occupancy Costs as % of Sales per SF	10.2%	10.4%

Source: Simon Property Group 1994 Annual Report

It is estimated over 76% of portfolio revenues are derived from SPG's regional mall holdings.[113] Total return of 15.58% and increased FFO of $.17 exhibit their operating success. Sales volume in the mall portfolio increased 2.1% to $5.2 billion in 1994 from $5.1 billion in 1993.

---

[112] Steve Sterrett, *op. cit.*

[113] Penobscot Group, Inc., "Real Estate Stock IPO Review Simon Property Group," December 8, 1993. p. 5.

SPG's successful performance is exhibited, in the following chart, by their increased stock price and decreased required yield since their IPO.

Stock Performance Since IPO

Date	Price	Dividend Yield
December 13, 1993	22 1/4	8.5%
May 31, 1995	24 7/8	7.9%

Source: Dean Witter's Equity REIT Monthly Statistical Review

TAUBMAN CENTERS, INC.

Organization

Taubman Centers, Inc., (TCO), became a publicly traded REIT on November 20, 1992. Taubman was the first regional mall developer and operator to utilize the UPREIT structure to source capital in the public markets. TCO is the managing general partner of the Taubman Realty Group Limited Partnership (TRG) and owns a 35.1% interest. TRG owns, operates, develops, and acquires regional and super regional malls throughout the United States. In addition to TCO's 35.1% ownership others who own a portion of TRG include the Taubman Group (22.29%), the GM Pension Trusts (39.87%), and former joint venture partners (2.74%).[114]

Taubman owns the top quality regional mall portfolio in the country. Green Street Advisors, a REIT research firm, describes the quality of their mall holdings as superior to any other REIT portfolio in the country as measured by average size, sales per mall, and sales per square foot.[115]

In the early 1960's Alfred Taubman and a number of associates began their regional mall development, ownership, and management business. The Taubman company formed in 1973 to develop, own, and operate regional shopping malls. Until 1985 each

[114] Taubman Centers, Inc. 1994 Annual Report, p.48.
[115] Green Street Advisors, Inc., Taubman Centers, Inc., May 22, 1995, p. 3.

mall was individually owned and capitalized at the property level. Alfred Taubman had equity in each property partnership in conjunction with one partner per property.

Taubman Realty Group was formed in 1985 to consolidate and own 100 percent interest in these seventeen regional malls. The Taubman family collectively owned 75 percent of the TRG partnership. General Motors (GM), through its pension fund trust, loaned the new TRG entity $625 million and acquired an option to purchase a 50 percent partnership interest in TRG. After the initial transaction, AT&T purchased an 8.2 percent participation in the GM loan and option.[116]

In December of 1991 members of TRG felt limitations of the original business structure did not facilitate acquisition or development of new assets. TRG determined conversion to a REIT would facilitate access to capital and allow for future growth.

Capital Structure

Initial Public Offering

The IPO and conversion to a REIT, utilizing the UPREIT structure, provided an opportunity for Taubman to repay outstanding loans. GM and AT&T were to receive actual cash payments and any remaining debt (and the option to purchase 50% of TRG) was to be converted to an equity interest in TCO and TRG. In addition, TRG could utilize both partnership units and REIT common stock shares as "currencies" for future acquisitions.

Though Taubman management states certain reasons for transition to the REIT ownership structure, GM's desire to liquidate a portion of their investment and increase liquidity on the remaining portion was a primary motivation for the IPO. A significant amount of the proceeds went directly to satisfying part of GM's debt.[117]

---

[116] Taubman Centers, Inc., IPO Prospectus, November 20, 1992, p. 71.
[117] Penobscot Group, Inc., "Real Estate Stock IPO Review," August 15, 1995, p. 5.

Following is a summary balance sheet as of December 31, 1994 (in 000's):

Real Estate Assets	$668,602
Other Assets	$71,209
Total Debt	$872,158
Property Level Debt	$258,836
Company Level Debt	$613,322
Net Worth	$101,693
Shares Outstanding	44,570,913

Source: Taubman Centers, Inc. 1994 Annual Report.

Capital Ratios:

Debt to Equity	72.1%
Property Debt to Equity	56%
Current Ratio	.34

Source: Taubman Centers, Inc. 1994 Annual Report.

Prior to its IPO TRG attained a credit rating to enhance its credibility as a truly legitimate public company. Taubman's rating was recently downgraded from BBB+ to BBB in May of this year.[118]

Portfolio Characteristics

TRG's holdings include 20 regional and super regional malls. The malls are located in affluent trade areas with sixty six of the one hundred wealthiest zip codes within a 20 mile radius of a Taubman owned regional mall.[119] Gross leasable area of the portfolio is 22 million square feet with 9 million square feet of mall shop area.[120]

Property Type	Number of Assets	Square Footage	Mall Shop GLA
Regional Mall	20	22,031,000	9,088,000

The assets are located throughout the United States in; Arizona, California, Colorado, Connecticut, Illinois, Maryland, Michigan, Nevada, New Jersey, Ohio, Tennessee, and Virginia. The regional malls range from 1,900,000 square feet to 563,000 square feet. The average size of a Taubman mall is 1,100,000 million square feet with 454,000 square

---

[118] Salomon Brothers, "May 1995 Review," Salomon Brothers United States Real Estate Research, June 1995, p. 10.
[119] Taubman Centers, Inc. 1994 Annual Report, p. 6.
[120] *Ibid.*, p. 20.

feet of mall shops. Seventy five percent of mall gross leasable area is leased to national chains and ninety percent of income is generated by these tenancies.[121]

Ten of the malls are held in joint ventures.[122] TRG serves as the general partner of the ten joint ventures. Ownership is a fifty percent interest in seven centers, and sixty percent, seventy-nine percent, and twenty five percent in each of the three others.

Taubman, has a proactive management style and does not hesitate to retenant or remerchandise to improve rents. They prefer to negotiate a tenant termination or buyout for underperformers. If a tenant is doing well, Taubman will expand or move them to accommodate mall and tenant needs. The result is an average portfolio lease term of six to seven years. It is estimated that 8.5% of space, at any given time, is being managed in this fashion resulting in a higher vacancy rate.[123]

Current projects include five mall redevelopments and one new development. Redevelopments will add 601,000 square feet of mall space and a few anchors. Taubman's first new development project, in seven years, was started in 1994 with an expected completion in 1997. The Mall at Tuttle Crossing in Columbus, OH, will be 980,000 square feet and have four anchors. This project is being built in conjunction with the Limited, a national clothing retailer, at a cost of $125 million.[124] Five more malls may be developed by the turn of the century.[125]

A value regional mall development of 2.5 million square feet is being planned. The project is expected to cost $140 million and is TRG's first attempt at developing such a mall.[126] These malls combine off-price retailers (T. J. Maxx, Marshalls), manufacturers outlets (Polo, Donna Karan), and retailer's outlets (Nordstrom's Rack). TRG feels this area of retailing has synergy's with it's traditional business; center size, merchandising mix, volume, diversity, and property location.[127] Their decision to enter this new retailing

---

[121] Taubman Centers, Inc., IPO Prospectus, November 20, 1992, p. 25.
[122] Taubman Centers, Inc. 1994 Annual Report, p.20.
[123] Cordell Lietz, Senior Vice President of Acquisitions, Taubman Companies, Interview, June 26, 1995.
[124] Green Street Advisors, Inc., "Taubman Centers, Inc.," *op. cit.*, p. 7.
[125] Cordell Lietz, *op. cit.*
[126] Green Street Advisors, Inc., "Taubman Centers, Inc.," *op. cit.*, p. 7.
[127] *Ibid.*, p. 7.

area, though, has been negatively received by the market. Their share price has declined and analysts are not in favor of this diversification strategy.

TCO's first asset acquisition, in December of 1994, was Biltmore Fashion Park in Phoenix. It was acquired for $110 million, an approximate 8% capitalization rate based on expected 1995 net operating income. The transaction involved $81.5 million in cash and 1,540 partnership units, convertible to 3,000 shares of common stock.[128] The center is zoned for expansion and represents an opportunity to enhance earnings with higher rental rates and improved occupancy.[129]

Investment Strategy

TRG's strategy is to focus on high productivity, dominant regional malls with strong customer franchise. Investment strategy includes acquiring existing malls, expanding existing centers, development of new malls, and diversifying into value retail specialty malls. Growth is also anticipated by increasing interests in TRG's joint ventures.[130]

In December of 1994 the Company's Board authorized repurchase of 500,000 shares of stock in the open market. As of February, 160,000 shares had been repurchased at an average price of $9.50 per share.[131] A vote by management that it believes shares are undervalued.

Performance

Green Street Advisors described TCO's performance as a public company as "uninspiring". TRG failed to meet growth expectations in 1993 due to a miscalculation of the expense of being a public company, primarily due to increased reporting requirements.

---

[128] Taubman Centers, Inc., 1994 Annual Report, p. 39.
[129] Marisa Timm, "Report Card Taubman Centers, Inc.," Information Profits, Inc., April 28, 1994, p.10.
[130] Taubman Centers, Inc. 1994 Annual Report, p. 3.
[131] *Ibid.*, p. 2.

Improved performance in 1994 was canceled when interest rate increases caused the cost of variable rate debt to rise.[132]

Measure	1993	1994
Share Price	11 5/8	9 3/4
Capital Return	0%	-16.13%
Income Return	7.57%	7.57%
Total Return	7.57%	-8.56%
FFO	$0.85	$0.89
FAD	$0.87	$0.89
Dividends	$0.88	$0.88
Dividends Payout as a % of FFO	103.5%	98.9%
Occupancy	86.5%	86.6%
Sales per SF	$325	$335
Occupancy Costs as % of Sales per SF	14.6%	14.8%

Source: Taubman Centers, Inc., 1994 Annual Report

Their two year total return as of December 31, 1994, was -1%. This return was drastically below the NAREIT Equity Index return of 11% per year total return.[133] Sales per square foot increased by over 3% in 1993 and 1994 which was greater than Simon (2%), DeBartolo (-1.2%), Rouse (-0.1%), and General Growth (1.6%).[134] Taubman has been successful in capturing a greater portion of mall tenant occupancy costs than other operators with an average of 14.8% in 1994, up from 14.6% in 1993. This success, though, has not resulted in increased returns and cash flow growth from this aspect of portfolio performance is unlikely.

TCO's inability to meet earnings expectations has caused their stock price to decrease since their IPO and required yield to increase substantially. The following chart exhibits this fact.

---

[132] Green Street Advisors, Inc., Taubman Centers, Inc., *op. cit.*, p. 3.
[133] *Ibid.*, p. 4.
[134] *Ibid.*, p.4.

Stock Performance Since IPO

Date	Price	Dividend Yield
November 20, 1992	11	8%
May 31, 1995	9 5/8	9.1%

Source: Dean Witter's Equity REIT Monthly Statistical Review

SUMMARY

The descriptions of the four REITs portray the significant similarities between the private and public regional mall REITs. They all own and compete for similar assets. Operationally they provide the same services and cater to the same tenants. Their investor bases are also comparable to some extent. The publics may have somewhat less institutional representation, but their investment is still substantial.

On the following page a summary of each REIT's 1994 performance is provided.

PERFORMANCE SUMMARY: JANUARY 1, 1994 TO DECEMBER 31, 1994

Measure	CPI	RPT	SPG	TCO
Market Capitalization	$2,815,997	$678,104	$1,096,402	$434,556
# of Properties	33	15	119	20
# of Regional Malls	26	11	55	20
Regional Mall Assets as % of Portfolio	79%	73%	46%	100%
Share Price	$133.14	$17.67	24 1/4	9 3/4
Capital Return	-0.78%	-2.86%	7.2%	-16.13%
Income Return	5.89%	5.28%	8.4%	7.57%
Total Return	5.11%	2.42%	15.58%	-8.56%
FFO	n/a	$1.07	$2.09	$0.89
FAD	$7.22	n/a	n/a	$0.89
Dividends	$7.90	$0.96	$1.90	$0.88
Dividends Payout as a % of FFO	107.5%	89.7%	90.9%	98.9%
Occupancy	93.3%	89.8%	86.2%	86.6%
Sales per SF	$341	$285	$276	$335
Occupancy Costs as % of Sales per SF	13%	8%	10.4%	14.8%
Weighted Average Cost Of Capital	6.5%	5.5%	7.8%	7.6%
Total Liabilities to Firm Value	23.9%	31%	66.5%	72.1%
Property Debt to Firm Value	20.6%	28.3%	59.2%	56%

Comparatively the private regional malls REITs have significantly lower levels of debt and increased financial flexibility than the public REITs. The cost of capital for the public REITs is also higher. SPG's total return far exceeds the other REITs but these returns, similarly to TCO, are at increased risk to shareholders because of high debt levels.

CPI has the highest occupancy level with 93%. CPI also has the most productive malls with $341 sales per square foot. Though TCO has strong per square foot sales at $335, it's inability to deliver on the growth expectations of the stock market have been detrimental to its stock price and overall company value. This is evidenced by its -8.56% total return for 1994, the worst for all of the REITs.

CHAPTER FIVE

COMPARISON OF PRIVATE MARKET VS. PUBLIC MARKET ASSET PRICING

During discussions with representatives of the studied REITs I have determined asset pricing in the private and public markets is premised on the same analysis. Private and public market REITs utilize the income approach for determining value of potential acquisitions. Typically a cash flow is constructed and capitalized to determine current value and additional assumptions are overlayed to determine investment value. Investment value is a function of the potential a buyer foresees for enhancing a property's value through management, expansion, remerchandising, or redevelopment.

This chapter will describe how the studied REITs evaluate acquisition opportunities and the issues that constrain their valuations.

ACQUISITION ANALYSIS

All of the REITs studied in this thesis prepare diligent analysis of potential acquisitions and see a majority of the same deals. Each REIT representative interviewed stated that the finite supply of top-tier regional malls and the sale of a limited number each year, typically only one or two, make it difficult to find product to acquire. Thus, the market for these assets is extremely competitive. Following are a description of the most important characteristics that are examined and the process by which a regional mall is valued.

Investment Parameters

The valuation of a regional mall is dependent on its cash flow and the future expectation for improving this cash flow. Anchor and satellite tenant health and stability, trade area health, and future potential for expansion contribute to the quality of cash flows.

A successful mall must have anchors that are the most successful in the metropolitan or trade area.[135] These anchors serve to attract consumers that will also frequent mall shops. Financial health of the anchors must be examined at the mall location, as well as at the parent company level. Sales of other company stores in the area will exhibit the anchors health comparatively to these locations.[136] This information may indicate decisions the parent company will make if stores are to be expanded or closed.

The trade area for the mall should be substantial enough to support the desired level of mall sales and preferably experiencing healthy growth.[137] Population and income statistics for the trade area historically and the quality of housing being constructed provide indications as to the continued viability of a mall over the investment holding period.[138]

The opportunity to reposition, expand, or redevelop can enhance a mall's income earning potential.[139] Physical configuration of a mall and site that provide any of these possibilities are attractive to the regional mall REITs. Expansion or development opportunities at competing locations must also be factored into property valuations due to possible implications these may have on future cash flow performance. Potential development will provide an alternate location for an anchor store or competing store to take market share.[140]

Through discussions with industry professionals it became apparent how the qualitative aspects of a regional mall ultimately affect cash flow. These factors must be examined and anticipated to maximize value. Following is a discussion of how investors quantitatively value cash flows.

---

[135] Heitman Financial, Ltd., *op. cit.*, p. V-1.
[136] David M. Sherman, "Perception vs. Reality: Risks in Regional Mall Ownership," National Real Estate Investor, Volume 35, Number 10, September 1993, p. 77.
[137] Heitman Financial, Ltd., *op. cit.*, p. V-1.
[138] David M. Sherman, *op. cit.*, p. 77.
[139] Heitman Financial, Ltd., *op. cit.*, p. V-1.
[140] David M. Sherman, *op. cit.*, p. 77.

Acquisition Valuation

After evaluation of qualitative factors the investor must determine the present cash flow of the property and potential that exists to improve or enhance performance. Current cash flow is determined by examining income and expense information for the property. This amount is capitalized at an acceptable rate of return, to the investor, to establish a current value. Investment value must then be discerned. Investment value is defined as;

> "The specific value of an investment to a particular investor or class of investors based on individual requirements; as distinguished from market value, which is impersonal and detached."[141]

Investment value can be attributed to the opportunity for increasing property value through management expertise, repositioning of the property, expansion, or redevelopment.

Discounted cash flow (DCF) modeling is used to determine what cash flow potential exists for the property upon acquisition. A DCF projects income and expense over a specified time period, typically ten years. These forecasts are typically done on a lease by lease basis, if the information is available, or prepared with information from lease abstracts or a rent roll. Additional accuracy arises out of the ability to forecast new leasing, capital expenditures, tenant improvements, and leasing commissions.[142]

A benefit to the DCF is the ability to use different discount rates to adjust for the quality of tenant rental contributions. Anchor and national tenant income is usually discounted at lower rates than regional and local tenant cash flow. This segregation of income allows for a more accurate valuation of income.

A reversion capitalization rate must also be determined to capitalize cash flow in the year after the holding period. The reversion value ascribes value to future cash flows. This value is added to the cash flow of the last year of the holding term. Cash flow estimates are then discounted at a discount rate, commensurate with the investors required return, to arrive at a current value for the property.

---

[141] *Ibid.*, p. 159.
[142] *Ibid.*, p. 226.

Through discussions with industry professionals it became evident Internal Rate of Return (IRR) analysis is another measure investors use to determine investment value. IRR measures the rate of return on capital that is generated or capable of being generated within an investment or portfolio over a period of ownership.[143] IRR is the discount rate that equates the present value of future cash flows with the initial cash required to acquire the property. This return is compared with the those generated by other investments and the cost of capital. The goal is to determine the most profitable investment and whether the cost of financing is compensated for by the property return.

Following are brief descriptions of each REIT's acquisition strategy and activity level.

CPI Acquisitions

CPI's expansion activities have mitigated their need to acquire additional malls. They examine all opportunities that arise but are not compelled to invest. When they do acquire a mall their primary focus is going in yield and internal rate of return analysis. Currently their required return is an 8% going in yield and a 12% IRR. Acquisitions must be of a high caliber in order to attract retailers they have existing relationships with.[144] General parameters that guide CPI investment decisions include;

- superior quality assets
- larger properties which are more efficient to manage and resistant to competition
- inflation hedging characteristics (percentage rent and pass-through of operating expenses)
- opportunity to improve mall tenant mix
- opportunity to enhance performance and return with management expertise.[145]

CPI's last acquisition was Boca Town Center in Boca Raton, Florida. It has average sales of $480 per square foot and was acquired from Urban Shopping Centers, Inc., a public regional mall REIT.[146]

---

[143] *Ibid.*, p. 311.
[144] Tom Zacharias, *op. cit.*
[145] Corporate Property Investors 1994 Annual Report, p. 5.
[146] Tom Zacharias, *op. cit.*

CPI had recently examined the Homart retail portfolio. Homart is the real estate division of Sears, the retailer, that is presently liquidating office and retail portfolios. Only a few of the properties in the portfolio were of interest to CPI. Therefore, it is more likely they would attempt to purchase assets from the party that buys the portfolio.[147]

RPT Acquisitions

RPT acquires assets that are top quality with additional potential for value enhancement. Investments are made utilizing a long-term strategy that allows for realization of property appreciation. Focus during acquisition analysis is placed on physical quality, purchase price versus replacement cost, current versus market rents, and cash-on-cash returns. The ultimate goal is to eliminate short-term trends and assess fundamental value.[148]

Bruce MacLeod, President of RPT, described the REIT as currently fully invested. When acquisitions are made capital is sourced by contributions from current shareholders or shares are sold without a commitment.

Acquisitions are analyzed for RPT by the O'Connor Group. Recently the Homart, retail portfolio was reviewed and determined not to be of sufficient quality. Only six of the twenty seven assets were of interest to RPT.

SPG Acquisitions

Simon Property Group's acquisition strategy is to purchase assets that are accretive to cash flow and growing at least in pace with their current portfolio.[149] Synergy with their present property holdings is essential. Their analysis of acquisitions focus on cash on cash yield and internal rate of return. Special attention is paid to capital requirements that will arise over the next five to ten years.[150]

---

[147] Bill Lyons, *op. cit.*
[148] The O'Connor Group, Company information package.
[149] Steve Sterrett, *op. cit.*
[150] *Ibid.*

In their first year as a public company one hundred deals were analyzed and only four acquired. Recent acquisitions have not been in major urban areas. Competition for properties in these urban areas, where other investors prefer to invest, make these malls less attractive to SPG. The centers acquired have solid cash flows with significant retenanting opportunities.[151]

During the fall of 1994 SPG had discussions with Equitable about purchasing a portfolio of 19 regional malls. The Equitable deal was not completed and SPG acquired only certain assets. The reason given by SPG for not acquiring the portfolio was the removal of one asset, held in a joint venture with an institutional investor. The high capitalization rate on this mall supposedly made the total capitalization rate for the portfolio acceptable to SPG.[152]

TCO Acquisitions

Taubman has experienced difficulty in finding quality malls. Their single property focus on top-tier regional malls and the few assets that transact each year inhibit Taubman's ability to find acquisition candidates. They look at malls that come on the market, but will not purchase assets that negatively impact the value of their portfolio.[153]

Analysis of acquisitions involves determining cash on cash yield. Property is evaluated in its as is condition with TCO's income estimate. If tenants are rolling they determine lease-up and income assumptions.[154]

Since Taubman Realty Group became a publicly traded REIT, in 1992, they have acquired greater interests in some joint venture assets. Their only property acquisition, however, was Biltmore Fashion Park. A combination of cash and partnership units were utilized in the purchase. One of the sellers preferred partnership units, so taxes could be deferred, and the other partner preferred payment in cash.

---

[151] *Ibid.*
[152] *Ibid.*
[153] Cordell Lietz, *op. cit.*
[154] *Ibid.*

Private and public REITs utilize similar analytical processes to determine value. All examine current cash flow and use discounted cash flows to determine cash flows that can be expected in the future and the present value of these cash flows. IRR analysis is also used to determine the viability of an investment. Therefore, at the property level differences in asset valuation do not seem to exist.

Obviously, the investor with the lowest required rate of return and greatest interest in acquiring an asset will pay the highest price. Factors that affect the decision to purchase assets are investor expectations and the availability and cost of capital.

The expectations of investors direct management to follow a particular strategy. Private REIT investors, typically pension funds, are long-term investors due to the nature of their cash flow needs. For example, the investors in CPI and RPT are institutional investors and use real estate as a diversification strategy.

The public REIT's also have institutional investors, but not to the extent of the private REITs. Increased demands in the public REITs result from having to manage shorter term, quarterly, assessments by Wall Street and the longer term nature of real estate investment returns. The following statement, made by Cordell Lietz of Taubman in reference to acquisitions, shows the unique situation the public REITs are faced with each day:

> "Discounted cash flows are less important for a public company. Analyst have a three year time horizon, and DCF's have no credence. Our focus is on cash on cash return. EBITDA and distributable cash flow are the most important elements for us. Once the effect on earnings is discerned, a total overall rate of return is determined. Taubman may buy on a low initial return if an upside is seen, over a three to five year term the acquisition must be accretive."[155]

Public REITs are reporting to two masters; the public market, where assets are repriced every day and performance judged quarterly, and the real estate market, where investment

[155] Cordell Lietz, *op. cit.*

and operating expertise can result in capital and income appreciation over a longer period of time.

Investor expectations seem to be driving REITs to acquire assets or not. The private REITs are not actively acquiring assets, though they do examine assets that are made available for purchase. The public REITs are considerably more active, especially SPG. The ability to buy from a spectrum of properties has made SPG able to transact in areas the other REITs cannot. Taubman Centers is constrained by the fact that so few top-tier regional malls are available for purchase and any acquisitions of a lesser quality would be detrimental to their overall value.

Availability of capital also affects the ability of REITs to transact and the rate of return a mall can be purchased for. The public REITs have utilized available capital for redevelopment and acquisitions. Their leverage ratios, in the upper 50% range at year end 1994, are considerably higher than the private REITs. The debt levels of the publics, which were reportedly not to exceed 50 percent when the REITs were initially offered, has resulted in some REITs not being able to achieve growth expectations. The negative impact on share price can also further diminish any possibility of debt or equity access.

The inability to raise capital due to a depressed stock price and high existing levels of debt is affecting TCO. Their stock price has declined and their leverage, at 56%, precludes them from accessing capital. Therefore, their ability to grow is constrained.

SPG in comparison has structured numerous joint venture relationships that do not require initial cash investment, but contribution of services for eventual shares in the properties developed. The result is the continuation of their growth through other avenues and with other partners that believe in their capability to perform. SPG's performance has also enabled them to access public equity as recently as this past April.

The cost of capital contributes to the ability of a REIT to purchase assets. The private REITs have a lower weighted average cost of capital. RPT has the lowest at 5.5 percent and CPI at 6.5 percent. The public REITs are in the 7.6 to 7.8 percent range. The higher cost of capital indicates the higher return, which is a function of the increased risk of higher leverage levels, the public REITs must earn on their investments. This increased cost makes it more difficult to purchase assets.

Simon, though, has been able to acquire more assets due to the greater range of assets they have in their portfolio and their expertise in managing these assets. By not being confined to only top-tier regional malls they have been able to access a less competitive retail product market.

In the next chapter we will examine the differences in pricing at the REIT valuation level and the implicit capitalization rate of each REIT to determine if pricing differences exist between the private and public markets.

Chapter Six

Valuation of REIT Portfolios in the Private and Public Markets

This chapter presents valuation methodologies for the private and public REITs and the differences that are believed to exist in pricing. Private market valuation is based on property economic value. Public market valuation considers both property value and the impact of management and other factors on real estate performance. The Implicit Capitalization Rate Model compares the four REITs to determine if public REITs are credited with additional value. The appraisal methodology, public market valuation models, differences said to exist between the two markets, and the Implicit Property Capitalization Rate Model will be described.

Private Market Pricing

The private market focuses on the value of a property and utilizes the appraisal process, which involves a detailed analysis of all elements of property value, to discern market value. Portfolio value is the sum of each property's value. Many industry professionals discredit the appraisal process for having a historical bias to past property market performance and a subjective element because of the need to make assumptions to predict future cash flows.

Regional Mall Appraisal Process

The appraisers duty is to determine market value by analyzing and evaluating current market conditions. Appraisers gather information from buyers, sellers, lenders, property managers, present tenants, prospective tenants, and retail consumers to determine factors that affect the value of a property and the future expectation for performance.[156] Market value is defined as:

> The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and

[156] Vernor & Rabianski, *op. cit.*, p. 162.

> seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus.[157]

The complexity of regional malls requires that property rights, and possible modifications or transfers of rights, be researched to establish a market value. Modifications of property rights can be made by leases, easements, cross-easements, operating agreements, and supplementary agreements. These documents are crucial to determining value because of the implication other's rights can have on mall cash flow.

Three appraisal approaches are used in most property valuation; income, sales comparison, and replacement cost. Only the income and sales comparison approaches are applicable to regional malls. Issues that render the replacement cost approach less useful for regional mall appraisal include; the absence of comparable substantial land sales make land value difficult to estimate and the inability to assign value to the ongoing nature of mall business operations.[158] Estimates of property value arrived at by the income and comparable sales approaches establish a range of value. The appraiser then determines a realistic appraisal value for the specific property.

Income Approach:

The income approach is used when a property is purchased for investment. The income stream is capitalized to determine value and this approach is most relevant to regional mall appraisal:

> The regional shopping center is almost always viewed by owners and potential owners as an investment from which a certain minimum return ought to be realized. Hence the income approach is the one with which the appraiser should be most concerned.[159]

Analysis of leases and property operating expenses should provide sufficient information to determine property cash flows. Income is derived from minimum rents, percentage rents, tenant expense recoveries, revenues from other services provided, and miscellaneous income. Appraisers analyze lease terms and conditions to estimate revenues

---

[157] *Ibid.*, p. 159.
[158] *Ibid.*, p. 170.
[159] *Ibid.*, p. 180.

per tenant, market rents, and concessions to determine financial expectations for space to be leased in the future. Operating expense estimates are determined from property operations or national estimates.

The first year of cash flow after projected acquisition, or the first year of stabilized income, is capitalized to determine a property value. This is referred to as the direct capitalization value. The capitalization rate used is a function of rates utilized in comparable transactions that have occurred in the market. These other transactions must be analyzed to determine that investors are using a similar decision-making process and adjusted to the subject property's specific characteristics.[160]

A discounted cash flow (DCF), as previously described in chapter five, can also be prepared for a specified time period to determine value. The DCF forecast is calculated at the prevailing market return for regional malls.

Comparable Sales Approach

The comparable sales approach is relevant when there are a sufficient number of transactions occurring in the market and sales information is readily available. The objective is to utilize current transactions to estimate the value of the property being appraised. This is done by determining what capitalization rates were utilized in other transactions. Asset quality of each transaction must be considered and the capitalization rate adjusted for differences between the properties. The trouble with utilizing the comparable sales method for top-tier regional malls can be the absence of sufficient transaction volume to determine a trend.[161]

Private market valuation of a REIT portfolio is the sum of individual property values established through periodic appraisals. Property performance, specifically cash flow, is the fundamental element of portfolio value. In contrast public market REIT valuation, which recognizes other factors that supposedly contribute to value, will be examined in the next section..

---

[160] *Ibid.*, p. 235.
[161] *Ibid.*, p. 238.

PUBLIC MARKET PRICING

Pricing of real estate in the public equity market differs from private market property valuation. In the public markets the value of management and other ancillary services are incorporated into an entity value, often referred to as a going concern. This going-concern value is defined as:

> "...the value of a proven property operation; it is considered a separate entity to be valued with an established business. This value is distinct from the value of the real estate only. Going-concern value includes an intangible enhancement of the value of an operating business enterprise which is produced by the assemblage of the land, building, labor, equipment, and marketing operation. This process leads to an economically viable business that is expected to continue."[162]

Therefore, both quantitative (cash flow) and qualitative factors contribute to firm value.

Cash flow analysis in stock valuation is based on cash flow available for shareholder dividends. REIT analysts spend a considerable amount of time analyzing the capacity of a REIT to pay dividends to shareholders. A number of firms, specializing in REIT analysis, have created various valuation models. Models that will be described include those used by Green Street Advisors and Salomon Brothers. Both utilize similar information and statistics to determine prices for public REITs.

The goal of these descriptions is to portray the quantitative and qualitative nature of these analysis'. Value is quantified by certain measures and qualitative factors are overlayed to determine ultimate share value. Also, the valuation models do not determine REIT industry performance but the relative ranking of the public REITs within the same property type.

Green Street Advisors Pricing Model

The Green Street Advisors (GSA) model evaluates both qualitative and quantitative aspects of the REIT to arrive at total value. The model estimates current value of the real estate and adds this to the remainder of the balance sheet to arrive at a

[162] *Ibid.*, p. 161.

current value for shareholders equity. The REIT is also graded on a number of factors that are ranked in relation to peers in its property group. This is done to determine whether the REIT shares should trade at a premium or discount to value in comparison to competing firms.

Real estate net operating income is used to determine current property value. This income number is calculated as earnings before interest and taxes (EBITDA) with general and administrative expenses for the REIT added back, interest income subtracted, and third party fee income subtracted. This calculation is done to isolate property income on an unlevered basis.[163]

The capitalization rate, used to calculate property value, is determined by a number of factors. All of GSA's capitalization rate estimates are based on the ten year treasury bond. This rate is adjusted to reflect cash flow growth expectations and the health of the specific property type. Further modifications are made to reflect the expense of below or above market debt, the value of property management or third party businesses, and eliminate intangible assets (such as capitalized leasing commissions or financing costs).[164]

The income estimate is capitalized at the above described rate to arrive at current property value. This value is added to the remainder of the balance sheet to arrive at a current value of shareholders equity.

Next the REIT is ranked on the following criteria to determine whether it should trade at a premium or discount to value:

1. Franchise value; the ability of management to create additional value through managing existing properties, acquisition, or development.
2. Focus on property type and region.
3. Inside ownership by management.
4. Balance sheet strength, determined by examining total leverage, variable rate debt, and debt maturity risk.
5. Overhead expenses for managing the REIT.

---

163 Green Street Advisors, Inc. Research, "REIT Pricing in a Bear? Market, An update of Our Pricing Model," January 3, 1995, p. 6.
164 *Ibid.*, p. 6.

6. Potential conflicts of interest. In the mall sector this includes the disincentive of REIT management to sell assets upon which they will incur a personal tax liability.[165]

Each of these factors is ranked on a scale of one to five, except franchise value which is ranked between one and ten. Each REIT receives a score based on these factors and is ranked comparatively to other REITs of the same property type. Its ranking is perceived as the REIT's current ability to add value for shareholders.[166]

Upon determination of the premium or discount at which the REIT should trade at, it is applied to the current value estimate to determine a warranted share price. This warranted share price is compared to the existing share price to determine whether the REIT price is over or underpriced.[167]

The Green Street Advisors' model determines the property value and then overlays adjustments for other attributes or detriments to REIT value. Next we will examine the Salomon Brothers pricing model.

Salomon Brothers Regional Mall Pricing Model

The Salomon Brothers Model measures a company's value based on future earnings and a relative ranking to its peers. The model does not predict changes for the REIT industry as a whole, but rankings for the firms within the REIT industry. A capitalization weighted multiple is determined and evaluates where each firm should be relative to its peers.[168]

The pricing model starts with a company's cash available for distribution (CAD), which is defined as funds from operations less recurring capital expenditures. Recurring capital expenditures are those costs associated with new tenant space remodeling, other tenant allowances, and physically maintaining a property on an ongoing basis (costs that cannot be passed through to tenants). Income projections are made for each mall REIT,

---

[165] *Ibid.*, p. 6.
[166] *Ibid.*, p. 12.
[167] *Ibid.*, p. 6.
[168] Salomon Brothers United States Real Estate Research, "Introducing the Salomon Brothers Regional Mall Pricing Model," April 1994, p. 1.

CAD is determined, and a regional mall CAD multiple (a weighted average for the mall sector) is calculated.[169]

Each company's CAD multiple is then adjusted. Both quantifiable and intangible criteria are used which include:

1. Cash flow adjustment: based on the company's expected annual growth in CAD over the next four years.
2. Debt level adjustment; debt to total capitalization ratio is determined. Company's are penalized if CAD per share growth is limited because of its debt level relative to its peers.
3. Interest rate adjustment; determined based on the four year average annual impact of a 100 basis point move in interest rates on both fixed, when it matures, and floating rate debt.
4. Private market real estate adjustment; focuses on isolating the difference between the private market and public market capitalization rates expressed as net operating income that is necessary to bridge the gap between the two markets.
5. Inside ownership adjustment; compares management's ownership in relation to its peers.
6. Internal growth adjustment; factors in the effect expiring leases at lower than current market rental rates will have on cash flow.
7. Portfolio geographic location adjustment; based on the twelve month trailing growth rate in general merchandise, apparel, furniture and other stores (GAFO) sales. Attempt is to allow better performing regions to benefit from higher sales growth and the resulting effect on share price.
8. Intangible adjustment; qualitatively address conflicts of interest in regard to businesses or real estate owned outside of REIT, franchise value, quality of the income stream and track record.[170]

The CAD adjustment is determined by the rank each REIT achieves relative to its peers.

Each company's new CAD multiple is calculated by using the regional mall average and adding or subtracting each company's total adjustment. The new multiple is applied to estimates of distributable cash flow for the year and a target stock price is determined. Total return is determined by the change in the stock price to reach the target price and the current annualized dividend yield.[171]

---

[169] *Ibid.*, p. 1.
[170] *Ibid.*, p. 2.
[171] *Ibid.*, p. 6.

Both public REIT valuation models quantitatively and qualitatively attempt to measure performance and growth expectations.

Differences in Valuation Between Private and Public Regional Mall REITs

In the numerous sources of information that have been researched and interviews conducted for this thesis the prevalent opinion of many public market proponents was public REITs should command a premium to underlying asset value. The supposed benefits to the public REIT vehicle are attributed to the value of management, services the REIT provides, and improved liquidity. Investors are supposedly willing to pay a premium for these attributes. The only detriment to value considered is conflict of interest in valuation of public regional mall REITs. The disincentive for management to sell properties that might trigger tax liabilities is the underlying issue. After evaluation of all factors, REIT shares should trade at a premium to underlying property value for growth potential or a discount for perceived risk.[172]

Other factors considered in the public models have been ignored in this analysis. These factors include debt levels and the cost of this debt. The comparison of the REITs on an unlevered basis precludes these factors from affecting results.

Pricing differences between the private and public markets should exist if investors truly value management, improved liquidity, and the third party service company component of the public REIT more so than the detrimental effect of management's conflict of interest. The existence of a premium seems logical due to the different methodologies utilized by the private and public REITs to value portfolios. Public REITs should, therefore, trade at higher values than private REITs. The result should be higher property value and lower capitalization rates for public REITs.

---

[172] Mueller, Pauley, and Morrill, *op. cit.*, p. 19.

Management's Value

Going concern value of the public REITs attributes value to the operating business of the REIT and its viability to continue successful operations. What drives going concern value is management's ability to enhance performance. The long operating history of many of the regional mall companies and the continued involvement of founding principals were marketed as attributes to public regional mall REIT investment at the time of their IPO's.

Liquidity

Liquidity in real estate investments is improved through investment in public REITs for some investors. The ease of transacting in the public markets is attractive to many investors compared to the time required to sell a wholly owned asset, which can be six months to a year at a minimum for larger assets. Therefore, liquidation of shares should be more efficient in the public markets.

Issues can arise, though, when a large position is owned in a single REIT and liquidation of shares will cause price changes in the stock. An orderly liquidation of the position might not affect the share price but can take a significant amount of time to execute depending on the trading volume of REIT shares and interest by other investors.

To some extent all of the regional mall REITs, both private and public, have similar investor bases. The speed of the transaction may be slower in the private market because a party may need to be found to buy shares. Ultimately, though, shares will transact in either market if they are priced attractively to investors.

Third Party Services

Value of third party management and development services, though not examined in this thesis, do benefit the public REITs by the proportionate cash flow provided from these activities. SPG is a REIT that derives a substantial amount of income, $44 million in 1994, from services provided to third parties.

Conflicts of Interest

The public regional mall REITs benefited by using the UPREIT format to convert their firms to public companies and in the process deferred tax liabilities. The existence of these liabilities creates a conflict of interest between management's desire to continue to defer the payment of taxes and operating in the best interest of shareholders. This is a factor that should be detrimental to the value of public REIT shares.

Differences said to exist between private and public valuation at the REIT level should ultimately affect total REIT property value. Private market REIT valuations do not take management's expertise into consideration, whereas the public markets do. Improved liquidity in the public markets is another reason public REITs should trade at a premium to value. Value added by third party services should add value to REIT share prices, but this factor was not studied in this thesis. The only detrimental factor in the public market valuation is the conflict of interest for deferred tax liabilities. Therefore, public REITs should command a premium to underlying property value in comparison to private REITs if benefits outweigh the conflicts of interest.

In the next section Implicit Capitalization Rates are computed for each of the REITs to discern what valuation differences do exist between the private and public markets.

Implicit Capitalization Rate Model

Methodology

The model was designed to determine the implicit capitalization rate for a REIT. The capitalization rate is the total current unlevered property return for the REIT. Only income derived from property operations, so as not to have any of the firm's other assets adding value unassociated with specific property performance, was used in the calculation. Excluded income included interest income and fees from management or development services. Other income sources are more prevalent in the public REITs, particularly SPG.

The capitalization rate was derived from dividing income of each REIT by the implied property value of the REIT, allowing for comparison of property value between the public and private REITs. Calculations for each REIT can be found in Appendix B.

Implied Property Value

As stated earlier, the implied property value is determined for real property assets. Value for other income has been excluded to the extent that information from annual reports or REIT interviews was provided. The calculation combines value of shareholder equity, an adjustment for excluded income, and the net liabilities of the firm.

Equity value for the public REITs was computed by multiplying the number of outstanding shares by the price of the REIT stock on the date of evaluation. Private equity value was determined by using the year end appraisal value per share times the value of the share. December 31, 1994, was selected to allow for comparison.

All of the REITs required adjustment for non-property revenue excluded from each's income calculation. The value of each REIT was reduced, or proportion of the REIT's share of the operating partnership, to correct for assets not credited with income producing capability. The amount of this adjustment reduced implied property value. Therefore, the net result reduces the implied property value of each REIT.

Net liabilities were computed using the total liabilities of the firm and subtracting the assets of the firm. Real property assets were excluded and adjustments made to exclude non-cash items. The resulting effect of the net liabilities computation offsets liabilities with assets that are valued at 100%. If the REIT owns only a portion of the Operating Partnership, as is the case with SPG and TCO, net liabilities were calculated as the percent ownership to which each is entitled.

The equity value, adjustment for excluded property revenues, and net liabilities are combined to arrive at an implied property value for the firm. This serves as the denominator for determining the capitalization rate of the properties.

EBITDA

In place of net operating income, I have used earnings before interest, taxes, depreciation and amortization (EBITDA). As discussed earlier, net operating income is not a true measure of real estates income producing capability. EBITDA allows for a comparison of all of the REITs on an unlevered basis, whereby individual REIT debt levels will not effect the results. EBITDA was calculated by reconstructing income and expense items (from each REITs annual report) that are relevant to mall operations. Income used in the calculation was from property operations, other income was excluded for all of the REITs.

Modifications were made to improve the consistency of each REIT's financial information. The primary challenge in evaluating cash flow involves determining how certain items are accounted for by the REITs. Issues arise in regard to how each accounts for capital expenditure allowances, straight line rents, land sales, and tenant inducements.[173]

Capital expenditure allowances are reflected for the public REITs, who are considered to be more aggressive in their reporting of FFO by industry analysts. This number has been estimated as the average of Wall Street analyst opinions. Straight line rents result from the use of average rents to calculate revenues. An adjustment is made in the cash flow statement to offset funds not received. Proceeds from land sales were not used in the calculation because of their extraordinary nature and the lack of applicability to the revenues derived from the portfolio of regional malls. Tenant inducements could not be discerned for all of the REITs from the information provided so no adjustments were made.

---

[173] NAREIT Memorandum, *op. cit.*

ADJUSTMENTS

Corporate Property Investors

An adjustment to firm value was made to offset the exclusion of income not derived from property operations.

Retail Property Trust

Income and expense modifications were made to include depreciation and amortization from joint venture interests, a minority interest in FFO, to exclude straight-line rents, and capitalized interest expense for development projects. Firm value adjustments were required to offset the exclusion of income not derived from property operations.

Simon Property Group

Adjustments were made to include depreciation and amortization from joint venture interests and the REIT's share of the same for the management company. Also, joint venture interest expense was included. Reductions were made to EBITDA to allocate non-revenue generating capital expenditures and to compensate for straight line rents included in income.

A firm value adjustment was required to counteract the exclusion of non-property income. The REIT realizes its pro-rata share of these adjustments to the operating partnership.

Taubman Centers

The REITs share of joint venture depreciation and amortization and interest expense were added back. Deductions from EBITDA were made for non-revenue generating capital and for gains recognized on land sales.

An adjustment to firm value was made to account for the exclusion of non-property income. The REIT realizes its pro-rata share of these adjustments to the operating partnership.

Adjusted EBITDA was then divided by the implied property value to arrive at the capitalization rate estimates.

FFO MULTIPLES

FFO multiples were also computed for each REIT. Share price was divided by FFO to arrive at the multiple. This was done in an attempt to determine and compare growth expectations of investors in each REIT.

RECONCILIATION OF FFO

Finally, a reconciliation of FFO was also computed for each REIT. The FFO estimate determined by the model was increased to reflect income the REITs were not credited with in the EBITDA calculation. These results were compared to each REIT's FFO estimate.

IMPLIED PROPERTY CAPITALIZATION RATES

as of December 31, 1994

REIT	CPI	RPT	SPG	TCO
Implied Market Value of REIT Properties	$3,088,051	$608,410	$1,969,167	$779,090
EBITDA for REIT Portfolio	$221,004	$48,675	$156,065	$59,231
Implied Capitalization Rate	7.2%	8.0%	7.9%	7.6%
FFO Multiple	17.3	19.1	16.8	13.1

Results

The comparable implied capitalization rates, current return derived from property operations, are relatively consistent for each REIT. The differences in the capitalization rates can be explained by specific mall quality and unique attributes of each REIT's portfolio. Regional malls trade in the seven to eight percent range and all of the REITs fall in this range.

CPI has the highest sales per square foot average at \$341 and the highest occupancy of the REITs at 93.3%. Therefore, the 7.2% capitalization rate seems to be appropriate. The FFO multiple of 17.3 is higher than the public REITs and indicates growth is an important element for investors in CPI.

TCO sales per square foot average \$335, but occupancy is only 86.6%. Though they have an excellent portfolio of top-tier malls, their higher vacancy does effect property performance and ultimately asset value. Their lower FFO multiple, of 13.1, shows TCO is not credited with as substantial a growth story as the other REITs studied.

SPG has fifty-five regional malls in its portfolio. These properties produce 76% of portfolio revenue. Therefore, their 7.93% capitalization rate, higher than the top two regional mall REITs, seems warranted. The influence of shopping centers and the higher rates they trade at are affecting the overall capitalization rate. Their FFO multiple of 16.8 indicates investors believe their growth story and have expectation for future benefits to come from management's activities.

RPT has eleven regional malls in its portfolio of fifteen assets. The greater proportion of shopping centers in the portfolio could partially explain their higher capitalization rate of 8%. The smaller market capitalization of the REIT and greater proportion of redevelopment in the portfolio, expected to impact cash flows in 1996 and beyond, should result in RPT's capitalization rate decreasing as cash flow improvements are realized. The FFO multiple of 19.1 seems to further support the expectation of investors that future cash flows will improve as a result of property improvements.

The reconciliation of FFO resulted in differences in the range of one to seven percent. CPI's difference was one percent, SPG and TCO were both four percent, and RPT's was seven percent. These variations are likely an effect of activities in unconsolidated joint ventures. Differences could result from allocation of income or depreciation and amortization that were not discernible from information in the annual reports. Calculations are provided in Appendix B.

This chapter has examined the process of REIT valuation in both the private and public markets. The implicit capitalization model proves differences in pricing are minor at the portfolio property level. Differences between the REIT capitalization rates can be explained by asset quality differentials and portfolio factors, such as occupancy or ongoing improvements, that affect cash flow.

In Chapter Seven a comparison of pricing differences will be examined and conclusions for the thesis presented.

CHAPTER SEVEN

CONCLUSIONS

To discern the difference in pricing between the private and public regional mall REITs a number of industry professionals were interviewed. I had an opportunity to speak with both private and public REITs, a number of private real estate advisors and investors, and REIT analysts. My objectives were to ascertain what criteria are used to determine investment strategy, how acquisitions are analyzed, and differences in valuation of REIT portfolios in the private and public markets.

These discussions and research have led me to conclude that pricing between the private and public regional mall REITs is efficient, or at least more efficient than the opinions of many public REIT proponents imply. Analysis of acquisitions is done with the same methodology in both the private and public markets; focus is on current return and discounted cash flows are prepared to project current and future performance. Differences in valuation are said to exist at the REIT level. The factors proclaimed to add value in the public markets are management's expertise, improved liquidity in the public markets, and services provided by the REIT. Potential conflicts of interest, in relation to deferred tax liabilities, was the only factor proclaimed as detrimental to value. These differences, assuming investors value the three positive attributes more so than the one negative, should logically result in a premium to underlying property value for public REITs in comparison to private REITs. The calculation of implicit capitalization rates for each REIT refutes the existence of a premium for public REIT value.

The reason for the supposed value of these factors resulted from Wall Street's desire to participate in the resolution of the real estate capital crisis. Lack of capital in the private markets made the public markets the only option for many real estate operating companies to recapitalize debt. Private market providers of funds were few and far between as property owners required funds to refinance. The low interest rate environment and the yields achievable on real estate provided the impetus for the public markets to eagerly fill the void left by private market sources.

Wall Street was able to re-create these real estate portfolios and sell them at a premium by "creating value" with the caveat that seasoned management's expertise, improved liquidity, and third party services would provide benefits unavailable in private real estate investment. These intangible assets were used to make the pricing work for some firms.

REITs were marketed as growth companies at a time when abundant opportunities existed to create value. Growth was anticipated to result from general improvement in the economy, with expected increases in real estate demand and rental rates, and acquisition and development of new product.

The "growth stories" sold were achievable in that particular interest rate environment. REITs were able to repay debt with IPO proceeds and rejuvenate debt financing at lower interest rates. Additional funds were borrowed to acquire assets, which at that time were attractively priced due to the real estate recession, and achieve return goals through positive spread investing. As the economy improved and opportunities to buy assets at a discount evaporated, public REITs have found growth more difficult to achieve. The result has been price corrections in the share price of firms unable to meet investor expectations.

Improved liquidity is the only factor that I would ascribe value to for public REIT share ownership for the average investor. True liquidity, though, is not as evident for investors with large stakes in a particular REIT. Sale of a large REIT share position can cause drastic changes in price. Thus, a liquidation strategy that requires a longer period of time to implement might be prudent for such an investor.

The participation of a number of institutional investors in both the private REITs and as a money source for the original regional mall operating companies makes this liquidity issue less significant in this sector of REITs. Many investors are less concerned with liquidity due to the nature of their cash flow needs and are comfortable with real estate investment.

One obvious exception was GM's desire for Taubman to convert to a REIT in 1992. The IPO provided GM cash proceeds and a better exit strategy for their remaining investment, by conversion to operating partnership units and REIT shares. This decision could have been prompted by their recognition of the few growth opportunities Taubman would be able to take advantage of, due to their focused strategy.

The offering of third party services by the public REITs does add some value but was not examined in this thesis. Logically, the cash flow these services produce would effect overall REIT value. Also, the greater risk of these cash flows (from contracts which are often subject to thirty day cancellation clauses) would temper their reliability and recognition at full value.

The results of the Implied Capitalization Rate Model indicate property is priced consistently in both the private and public markets. The range of capitalization rates was between 7.2 percent and eight percent. Once adjusted for quality and performance differentials are relatively comparable.

Investors in private and public REITs value investments for the cash flow they are able to produce. There is no value attributed for the supposed value of management and other "qualities' of the public regional mall REITs. The public market is not attributing value at the REIT property level.

The model proves that the markets are efficient. The value of management and its ability to improve property performance is reflected in an enhanced property cash flow and the resulting asset valuation.

APPENDIX A

REIT Interviews

The REIT professionals who generously contributed information, perspectives, time, and guidance were of great assistance. Their time, efforts, and accessibility were appreciated. Following are the primary contacts at the REITs that were studied.

Bill Lyons	Corporate Property Investors
Tom Zacharias	Corporate Property Investors
Bruce MacLeod	Retail Property Trust
Steve Sterrett	Simon Property Group
Cordell Leitz	Taubman Companies

Industry Professionals

Many thanks to the numerous industry professionals who generously provided invaluable information and guidance as I learned and researched my thesis topic.

Charlie Beaver	Equitable Real Estate
David Carter	Winthrop Associates
Barry Curtis	Alex, Brown & Sons
Jeff Fisher	Director, Center for Real Estate Studies, Indiana University
Jon Foshiem	Green Street Advisors, Inc.
Tom Johnson	L.W. Elwood
Jeff Johnston	Telerus
John Konarski	International Council of Shopping Centers
Peter Korpacz	Peter F. Korpacz & Associates
George McCanse	Trahan Partners
Sarah Postyn	Yarmouth Group
Michael Tubridy	International Council of Shopping Centers
Floris vanDyijkum	Salomon Brothers
Jay Willoughby	Aldrich, Eastman & Waltch

APPENDIX B

Financial Model Background Information

I. Implicit Capitalization Rate Model.

II. EBITDA & FFO Calculations.

III. FFO Reconciliation.

IV. REIT Balance Sheets and Income Statements.

I. Implicit Capitalization Rate Model

Implied Capitalization Rate Comparison As of December 31, 1994	**CPI**	**RPT**	**SPG**	**TCO**
# Shares Outstanding	21,157	38,376	45,212	44,571
Stock Price 12/31/94	133.10	17.67	24 1/4	9 3/4
Market Value of Common Equity/Appr Value	2,815,997	678,104	1,096,402	434,566
Total Value of Equity	2,815,997	678,104	1,096,402	434,566
Less:				
Adjustment Due to Excluded Non-Property Revenue(Calculated as % interest in REIT)	88,820	25,030	149,934	24,570
Add:				
Total Liabilities	886,066	304,910	2,175,535	1,122,759
Less:				
Cash & Cash Equivalents	56,420	2,457	105,139	10,709
Tenant Receivables & accrued revenue, net		7,645	146,555	9,927
Notes Rec & advances due from Mgmt Co.	108,998	1,932	75,405	5,582
Other assets		12,611	27,174	44,991
Minority Interests			7,966	
Short-term Investments	263,902	40,619		
Construction in progress & pre-construction	60,683			
Land held for development	7,827			
Properties subject to net lease & other	27,362			
Marketable Securities		3,029		
Investments in real estate JV's		281,281		
Total	525,192	349,574	362,239	71,209
Net Liabilities	360,874	(44,664)	1,813,296	1,051,550
% Interest of Net Liabilities	100.0%	100.0%	56.4%	35.1%
Total Interest of Net Liabilities	360,874	(44,664)	1,022,699	369,094
Implied Market Value of Properties	3,088,051	608,410	1,969,167	779,090
EBITDA for Portfolio	221,004	48,675	276,712	168,748
% Interest of EBITDA	100.0%	100.0%	56.4%	35.1%
Total Interest EBITDA	221,004	48,675	156,065	59,231
Implied Cap Rate	7.16%	8.00%	7.93%	7.60%

II. EBITDA & FFO Calculations

Corporate Property Investors

EBITDA Calculation:

	1994
Income	
Rentals & related property income	403,871
Total Income	403,871
Expense	
Real Estate Taxes	(56,892)
Salaries & Related Benefits	(35,953)
Repairs & Maintenance	(30,594)
Utilities	(26,479)
Other	(24,741)
Admin, Trustee, & Other Expenses	(8,208)
	(182,867)
EBITDA	221,004

FFO Calculation:

EBITDA	221,004
Less:	
Interest Expense	51,388
Mortgage Interest	7,033
FFO	162,583
# Shares outstanding	21,157
FFO per share	7.68
P/E Ratio	17.3

Adjustment Due to Excluded Non-Property Revenues

	Amount	Term	Discount Rate	Present Value
Dividends and Interest	5,894	Perpetuity	10%	58,940
Income from Net Leased Properties	2,988	Perpetuity	10%	29,880
Total Adjustment				88,820

Assumptions:

1. Interest income was calculated as a perpetutity.

2. Net leased properties are assumed to be a continuing source of revenue.

Retail Property Trust

EBITDA Calculation:

	1994
Rental Income	70,659
Operating Costs:	
Operating Expenses	22,115
Real estate taxes	6,939
Property & portfolio management fees	5,613
General & Administrative expenses	1,497
Adjusted Operating Costs	36,164
Income before equity in earnings of JV's	34,495
Equity in earnings of real estate JV's	9,660
EBITDA	44,155
Add back:	
JV depreciation & amortization*	6,181
Minority interest in FFO	56
Less:	
Straight-line rent adjustments	1,717
Adjusted EBITDA	48,675

* Footnote: Portion of JV depreciation and amortization addback was calculated as 44.6%. This percentage was determined by dividing the REITs equity in earnings of JV's by total JV earnings.

Retail Property Trust

FFO Calculation:

EBITDA	48,675
Less:	
Interest Expense	(13,214)
FFO	35,461
# Shares outstanding	38,376
FFO per share	0.92
P/E Ratio	19.1

Adjustment Due to Excluded Non-Property Revenues

	Amount	Term	Discount Rate	Present Value
Dividends and Interest Income	2,503	Perpetuity	10%	25,030
Total Adjustment				25,030

Assumptions:

1. Interest income was calculated as a perpetutity.

Simon Property Group

EBITDA Calculation:

	1994	
Revenues:		
Minimum Rent	240,559	
Overage Rent	25,463	
Tenant Reimbursements	162,706	
Total Revenue	428,728	
Operating Expenses:		
Property Operating	91,792	
Real Estate Taxes	44,403	
Repairs & maintenance	23,430	
Advertising & promotion	12,633	
Provision for credit losses	4,238	
Other	6,937	
Adjusted Operating Expenses	183,433	
Operating Income	245,295	
Less:		
Minority Interest	3,759	
Limited Partners interest in the operating partnership	18,951	
Income(loss) from unconsolidated entities:		
Partnerships & JV's	1,034	
Management Company	(1,101)	
	(67)	
Add back:		
REIT's share of Mgmt Co depreciation & amortization**	634	
JV Interest expense	38,124	
JV Depreciation & amortization	26,409	
Total add back	65,167	
EBITDA	287,819	
Adjustments:		
Non-revenue generating capital expenditures	6,782	($.15 per share)
Straight-line rent adjustment	4,326	
Total adjustments	11,108	
Adjusted EBITDA	**276,712**	

* Footnote: Other income less $9,100 in dividend income in 1994, none in 1993.

**Footnote: Computed as 56.4% interest in Operating Partnership's interest of 80% of $1,406 for 1994 and 52.2% interest of 80% of $1,774. (SPG 1994 Annual Report, p. 43.)

Simon Property Group

FFO Calculation:	1994
Adjusted EBITDA	276,712
Less:	
Interest Expense	122,980
JV Interest Expense	38,124
Total Interest Expense	161,104
FFO	115,608
SPG % of FFO	56.4%
SPG FFO	65,203
# Shares outstanding	45,212
FFO per share	1.44
P/E Ratio	16.8

Adjustment Due to Excluded Non-Property Revenues

	Amount	Term	Discount Rate	Present Value
Management Company Dividends and Interest	10,000	5	20%	29,906
Temporary Tenants	18,000	Perpetuity	10%	180,000
Corporate Interest Income	3,500	Perpetuity	10%	35,000
Land Sales	4,000	5	20%	11,962
Lease Settlements	3,000	5	20%	8,972
Total Adjustment				265,840

Assumptions:

1. Management dividends and interest were calculated per REIT analyst industry standard. Calculated in this manner due to the possibility of cancellation of management contracts that have 30 day cancellation clauses.
2. Temporary tenants, carts and kiosks in mall area, is assumed to be a continuing source of revenue.
3. Corporate interest income was explained to be higher than usual due to large cash balances. 50% of the $7 million total was used as a base amount.
4. Land sales are estimated to continue for five years and are discounted at 20%.
5. Lease settlements presently average $3 million per year. Due to the real estate problems of the last few years and the likelihood this amount decreases when the economy is strong, this figure has been projected for five years and discounted at 20%. (Similar to REIT analysts calculation of other less stable cash flows.)

Taubman Centers, Inc.

EBITDA Calculation:

	1994	
Revenues:		
Minimum Rent	111,373	
Percentage Rent	3,788	
Recoveries from tenants	68,075	
Adjusted Revenues	183,236	
Operating Costs:		
Recoverable from tenants	58,355	
Other operating	20,974	
Management, leasing & development services	3,538	
General & administrative	17,942	
Adjusted Operating Costs	100,809	
Adjusted Operating Income	82,427	
Add:		
Equity in income before extraordinary items of unconsolidated JV's	51,263	
Total Income	133,690	
Add back JV Interests:		
Interest expense	26,590	
Depreciation & amortization	12,479	
Total JV Interests add backs	39,069	
EBITDA	172,759	
Adjustments:		
Non-revenue generating capital expenditures	3,120	($.07 per share)
Gain on land sales	891	
Total Adjustments	4,011	
Adjusted EBITDA	168,748	

Taubman Centers, Inc.

FFO Calculation:

	1994
Adjusted EBITDA	168,748
Less:	
Interest Expense	47,732
JV Interest Expense	26,590
Total Interest	74,322
FFO	94,426
TCO % of FFO	35.1%
TCO FFO	33,144
FFO per share	0.74
P/E Ratio	13.1

Adjustment Due to Excluded Non-Property Revenues

Estimated as information was said to be proprietary.

	Amount	Term	Discount Rate	Present Value
Estimate of Other Income	7,000	Perpetuity	10%	70,000
Adjustment				70,000

Assumptions:

1. Estimated as 50% of $14 million total.
   Included in this amount are tenant settlements, garage revenues, land sales, interest income, trash removal, and merchant asssociation fees.

Source: Cordell Leitz, Taubman Companies, Inc.

III. FFO Reconciliation

Reconciliation of Funds From Operations

Corporate Property Investors

Income From Net Leased Properties	2,988
Interest Income	5,894
Total	8,882
Impact on FFO per share	$0.42
Reconciled FFO per share	$8.10
Difference from Company Estimate	No estimate given in annual report

Note: CPI states that distributable funds would be $.63 greater if not adjusted for tenant inducements. When CPI's distributable funds estimate of $7.22 is combined with this $.63, the total is $7.98. An additional $.03 adjustment must be made to include CRC's distribution which is not accounted for in CPI's financial statements but added to the distribution to shareholders. The net difference is $.09 per share.

Retail Property Trust

Dividend and Interest Income	2,503
Total	2,503
Impact on FFO per share	$0.07
Reconciled FFO per share	$0.99
Difference from Company Estimate	$0.08

Reconciliation of Funds From Operations

Simon Property Group

Other Income	44,948
Total	44,948
% Interest	56.4%
SPG Interest in Other Income	25,351
Impact on FFO per share	$0.56
Reconciled FFO per share	$2.00
Difference from Company Estimate	$0.09

Taubman Centers, Inc.

Other Income	8,981
Related Party Revenues	4,917
Total	13,898
% Interest	35.1%
TCO Interest in Other Income	4,878
Impact on FFO per share	$0.11
Reconciled FFO per share	$0.85
Difference from Company Estimate	$0.04

IV. REIT Balance Sheets and Income Statements

Corporate Property Investors

Financial Statements as of December 31, 1994

Balance Sheet

	1994
Assets:	
Real Estate Investments:	
Operating Properties	1,571,756
Construction in Progress	60,683
Land held for development	7,827
Properties subject to net lease and other	27,362
Reserve for possible investment loss	(12,400)
	1,655,228
Cash and cash equivalents	56,420
Short-term investments	263,902
Receivables and other assets	108,998
Total Assets	2,084,548
Liabilities & Shareholders Equity:	
Mortgages Payable	69,580
Notes & Bonds Payable	693,951
Accounts payable and other liabilities	122,535
Total liabilities	886,066
Shareholders equity	1,198,482
	2,084,548

Corporate Property Investors

Statement of Income

	1994
Income from operating properties:	
Rentals and related property income	403,871
Expenses:	
Real Estate Taxes	(56,892)
Mortgage Interest	(7,033)
Salaries and related benefits	(35,953)
Repairs & Maintenance	(30,594)
Utilities	(26,479)
Other	(24,741)
Amortization of dept store and tenant indcmts	(13,265)
Depreciation	(57,006)
	(251,963)
	151,908
Income from net leased properties and other	2,988
Interest income	5,894
Interest expense	(51,388)
Administrative, trustee and others expenses	(8,208)
Income before non-recurring & extraord items	101,194
Non-recurring gain on sales of properties	36,118
Income before extraordinary items	137,312
Extraordinary loss from prepayment and refi mortgage debt	(88)
Net Income	137,224

Retail Property Trust

Financial Statements as of December 31, 1994

Balance Sheet

	1994
Assets:	
Operating Properties	729,021
Less accumulated depr & amort	77,373
	651,648
Investments in RE JV's	281,281
Mortgage notes receivable	1,932
Tenant and other receivables	7,645
Cash and cash equivalents	2,457
Short-term investments	40,619
Marketable securities	3,029
Other assets	12,611
Total Assets	1,001,222
Liabilities & Shareholders Equity:	
Bonds payable, net of discount	149,343
Construction loan payable	87,500
Mortgage notes payable	41,000
Accounts payable	17,857
Dividend payable	9,210
Total liabilities	304,910
Minority interest	8,670
Commitments and contingencies	
Shareholders Equity:	
Common shares of beneficial interest	809,323
Accumulated deficit	(121,555)
Unrealized loss on marketable securities	(126)
Total Shareholders Equity	687,642
Total Liabilities & Shareholders Equity	1,001,222

Retail Property Trust

Statement of Operations

	1994
Revenues:	
Rental Income	70,659
Interest and dividend income	2,503
	73,162
Operating Costs:	
Operating expenses	22,115
Real Estate Taxes	6,939
Property & portfolio mgmt fees	5,613
General & Admin expenses	1,497
Loss from reduction in carrying amount of properties sold or to be sold	-
	36,164
Operating Income before equity in JV's	36,998
Equity in earnings of RE JV's	9,660
Operating income before int exp, depr, amort, & minority interest	46,658
Interest Expense	(13,214)
Depreciation & Amortization	(23,003)
Minority Interest	(56)
Net Income	10,385

Simon Property Group

Financial Statements as of December 31, 1994

Balance Sheet

	1994
Assets:	
Operating Properties	1,900,027
Less accumulated depr & amort	70,916
	1,829,111
Cash & cash equivalents	105,139
Tenant receivables and accr rev	146,555
Notes rec & advances due from Mgmt Co.	75,405
Deferred costs, net	85,878
Other assets	27,174
Minority interest	7,966
Total Assets	2,277,228
Liabilities & Shareholders Equity:	
Mortgages & other notes payable	1,938,091
Accounts payable & accrued expenses	102,750
Accrued distributions	40,807
Cash distributions & losses in excess of net investment in partnrshps & JV's, at equity	57,064
Investment in Mgmt Co	16,875
Other Liabilities	19,948
Total Liabilities	2,175,535
Commitments and contingencies	
Limited Partners Interest in Oper Prtnrshp	44,386
Shareholders Equity:	
Common stock	5
Class B common stock	1
Capital in excess of par value	135,565
Accumulated deficit	(78,264)
Total Shareholders Equity	57,307
Total Liabilities & Shareholders Equity	2,277,228

Simon Property Group

Statement of Operations

	1994
Revenues:	
Minimum rent	240,559
Overage rent	25,463
Tenant reimbursements	162,706
Other income	44,948
Total revenue	473,676
Expenses:	
Property operating	91,792
Depreciation & amortization	75,945
Real estate taxes	44,403
Repairs & maintenance	23,430
Advertising & promotion	12,633
Provision for credit losses	4,238
Other	6,937
Total operating expenses	259,378
Operating income	214,298
Interest expense	122,980
Non-recurring interest expense	27,184
Income (loss) before minority interest	64,134
Minority interest	(3,759)
Income (loss) before unconsolidated entities	60,375
Income (loss) from unconsolidated entities:	
Partnerships & JV's	1,034
Management Company	(1,101)
	(67)
Income (loss) of the operating partnership before extraordinary items	60,308
Extraordinary items	(17,980)
Income (loss) of the operating partnership	42,328
Less limited partners interest in the operating partnership	18,951
Net Income (loss)	23,377

Taubman Centers, Inc.

Financial Statements as of December 31, 1994

Balance Sheet	1994
Assets:	
Properties	843,960
Less accumulated depr & amort	175,358
	668,602
Cash & cash equivalents	10,709
Accounts & notes receivable	9,927
Accounts receivable from related parties	5,582
Deferred charges and other assets	44,991
Total Assets	739,811
Liabilities & Shareholders Equity:	
Unsecured notes payable	499,372
Mortgage notes payable	183,989
Other notes payable	188,797
Other note payable to affiliate	
Accounts payable and other liabilities	77,102
Distributions in excess of new income of	-
unconsolidated JV's	173,499
Total liabilities	1,122,759
Commitments and contingencies:	
Accumulated deficiency in Assets	(382,948)
	739,811

Taubman Centers, Inc.

Statement of Operations

	1994
Revenues:	
Minimum rent	111,373
Percentage rent	3,788
Recoveries from tenants	68,075
Other	8,981
Related party revenue from mgmt, lsg, devlpmt	4,917
Total revenue	197,134
Operating Costs:	
Recoverable from tenants	58,355
Other operating	20,974
Mgmt, lsg, and development services	3,538
General & Administrative	17,942
Interest	47,732
Depreciation & amortization	27,653
Total operating costs	176,194
Income before equity in unconsolidated JV's and before extraordinary items	20,940
Equity in income before extraordinary items of unconsolidated JV's	51,263
Income before extraordinary items	72,203
Extraordinary items	(44,731)
Net Income	27,472
Allocation of Net Income	
General Partners	22,489
Limited Partners	4,983
	27,472

APPENDIX C

REIT Requirements

(i) 75% of the value of the REITs total assets must be in real estate assets, cash, and government securities.

(ii) 75% of gross income for each taxable year must be derived from rents, interest on obligations secured by mortgages, gains from the sale of certain assets or income attributable to investments in other REITs.

(iii) 95% of gross income must be derived from rents, dividends, interest, and gain from the sale or disposition of certain assets.

(iv) Short-term gains from the sale/disposition of stock or securities held for less than six months and gain on sale or disposition of real property, excepting property involuntarily converted or foreclosed on, held for less than four years must represent less than 30% of gross income.

(v) Distributions to shareholders must equal or exceed 95% of REIT taxable income.[174]

---

[174] Brueggeman and Fisher, *op. cit.*, p. 697.

BIBLIOGRAPHY

Alex Brown & Sons, "ABS REITMonth," Alex Brown & Sons Real Estate Securities, May 1995.

Alex Brown & Sons, "Real Estate Stock Monitor," Alex Brown & Sons Real Estate Securities, September 1992.

Brownlee, E. Richard, Ferris, Kenneth R., and Haskins, Mark E. *Corporate Financial Reporting*, Illinois: Irwin, 1994.

Brueggeman, William B. and Fisher, Jeffrey D. *Real Estate Finance and Investments.* Illinois: Irwin, 1993.

Cannon, Susan Ethridge, and Howe, Keith M.. "Reconciling Finance And Real Estate Valuation Models," *Real Estate Finance*, Vol. 12, No. 1, Spring 1995, pp. 48-55.

Carr, Fred. "Evolving Criteria for the Evaluation of REITs," (Six pages distributed at the NAREIT CEO Conference at Rancho Mirage, CA, April 6, 1995).

Casey, Dougal M., and Konarski, John. "A Primer for Shopping Center Institutional Investors," *PREA Quarterly*, Spring 1994, pp. 22-26.

Cohen & Steers Capital Management, Inc., "Real Estate Securities, Status of the U.S. Market," February, 1995.

Corporate Property Investors, *1994 Annual Report*, February 1995.

CS First Boston. "Simon Property Group," *CS First Boston Equity Research - Americas,* July 28, 1994.

Dean Witter's Equity REIT Monthly Statistical Review. "The REIT Book," Dean Witter Reynolds, Inc., May 1995.

Downs, Anthony. "Public, Private Market Valuations Do Diverge," *National Real Estate Investor*, pp. 20-24, 84.

Fiedler, Lawrence E. and DeVoe, Lambert T. "The Explosion of Commercial Property Securitizaton," *Real Estate Review*, Winter 1995, pp. 5-17.

Fisher, Jeffrey D. "Cash Flow versus NOI: An Analysis of Capital Expenditures for Malls," Forthcoming *Real Estate Finance*, Summer 1995.

Fisher, Jeffrey D. "Valuation Techniques for the Private Real Estate Market," Director, Center for Real Estate Studies, Indiana University School of Business.

Forseter, Murray & Hazel, Debra. "Meeting of the Minds With The Reit Stuff, Heads of Real Estate Investment Trusts Hold Roundtable Discussion," *Chain Store Age Executive*, Volume 69, Number 5, May 1993, pp. 122-132.

Geltner, David. "Commercial Property Prices and Values: Learning From The Roller Coaster Ride," prepared for *PREA Quarterly*, September 1993, pp. 1-5.

Giliberto, Michael S. "A Look at Wall Street & Main Street Pricing," *PREA Quarterly*, Summer 1994, p.29.

Giliberto, Michael S. "Pension Fund REIT Strategies," *PREA Quarterly*, Fall 1994, pp. 9-10.

Graydon, Linda. "Real Estate Still Alive in '95! What Have We Learned?" *PREA Quarterly*, Winter 1995, pp. 14-15.

Graydon, Linda. "Form Over Substance," *PREA Quarterly*, Fall 1994, pp. 16-20.

Green Street Advisors, Inc. Research. "Real Estate Stock Index," January 3, 1994.

Green Street Advisors, Inc. Research. "Real Estate Stock Index," May 25, 1995.

Green Street Advisors, Inc. Research. "REIT Pricing in a Bear? Market An Update of Our Pricing Model," January 3, 1994.

Green Street Advisors, Inc. Research. "Simon Property Group, Inc.," April 24, 1995.

Green Street Advisors, Inc. Research. "Taubman Centers, Inc.," May 22, 1995.

Green Street Advisors, Inc. Research. "Taubman Centers, Inc. Update," January 3, 1994.

Gyourko, Joseph. "The Long-Term Prospects of the REIT Market," *Real Estate Review*, Spring 1994, pp. 42-46.

Homart Development Company. "The Future of Regional Malls 1993-2000," January 1993.

Hylton, Richard. "A REIT To Run From," *Fortune*, Vol. 126, No. 7, October 5, 1992, pp.24,28.

Heitman Financial, LTD. "Investment in Regional Malls," Company Publication.

Institutional Property Consultants. "A REIT Investment Brief," 1994.

International Council of Shopping Centers. "The Scope of the Shopping Center Industry in the United States 1994."

Invesco. "Mall Equity REITs: An Institutional Investor Overview," Fall 1994.

Kaplan, Lawrence S. and Stern, Craig S. "REITs and UPREITs: Characteristics, Requirements and Taxation," prepared by *Kenneth Leventhal and Company*, pp. 1-16.

Kemper Securities, Inc. Real Estate Research. "Initiating Coverage Simon Property Group, Inc.," April 11, 1994.

King, Donald A. and Redding, Kim G. "An Analysis of Public vs. Private Real Estate Equity," PREA Quarterly, Fall 1994, pp. 12-13.

Korpacz, Peter F. "REIT Appetite Impacts Retail Property Market," *Real Estate Capital Markets Report,* Winter 1995, pp. 10-12.

Kutyla, Diane M. "The Winds of Change in Retailing," *ICSC Research Quarterly*, Vol. 1, No. 1, May 1994, pp. 5-8.

Kutyla, Diane M. "Shopping Center Definitions: Basic Configurations & Types," *ICSC Research Quarterly*, May 1994, pp. 8-10.

Lashine, Nancy. "Real Estate Asset Class or Industry Sector," *PREA Quarterly*, October 1993, pp. 31-33.

Liebowitz, Michael, and Vachon, Michael. "CPI makes its 144A mark despite industry gloom," *Investment Dealers Digest*, March 23, 1993, p. 23.

Ling, David C. and Ryngaert, Michael. "REIT Initial Public Offerings 1991-1994: Evidence on Initial Underpricing and After-Market Performance," *Department of Finance, Insurance, and Real Estate, Graduate School of Business Administration, University of Florida*, December 12, 1994, pp. 1-27.

Litt, Jonathan. "The Mall Is Dead? Not!" *ICSC Research Quarterly*, Vol. 1, No. 1, Fall 1994, pp. 16-21.

McDonnough, Clinton D. "REIT Industry," *The E & Y Kenneth Leventhal Real Estate Journal*, Summer 1995, pp. 11-13.

Melody, L.J. & Company and Arthur Andersen Real Estate Services Group. "Regional Malls," November 1992.

Mengden, Anne E. "Interest rates rose - So did REIT prices What was going on?" *PREA Quarterly*, Spring 1994, p. 5.

Mengden, Anne E. "REITs Hit A Bump In The Road Implications of a REIT Share Price Correction," *PREA Quarterly*, January 1994, p. 13.

Mengden, Anne E. "The REIT Capital Raising Boom What Does It All Mean?" *PREA Quarterly*, October 1993, p. 5-6.

Miller, Jim. "Commingled Real Estate Fund Liquidity: Is An End To The Crisis In Sight?" *Pension World*, Vol. 29, No. 9, September, 1993, pp.10-13.

Morgan Stanley & Co. "Public vs. Private Market: Which Offers Better Real Estate Values?" *Morgan Stanley & Co., Inc. Research*, December 9, 1994.

Morgan Stanley & Co. "How Profitable Is It? A REIT Investor's Guide to Measuring Cap Rates on Acquisitions," *Morgan Stanley & Co., Inc. Research*, May 9, 1994.

Mueller, Glenn R., Pauley, Keith R., and Morrill, William K. "A Primer for Private and Public Equity Choices in a Real Estate Portfolio Management Context," *Real Estate Finance*, Spring 1995, pp. 12-21.

NAREIT Memorandum, "Funds From Operations," February 10, 1995.

National Council of Real Estate Investment Fiduciaries and Frank Russell Company, "The Russell-NCREIF Real Estate Performance Report," Fourth Quarter 1994.

NatWest Securities. "REITS & Convertible Debentures: An Ideal Combination," NatWest Securities Corporation, August, 9, 1994.

O'Connor Group, "1994 Company Information Brochure."

PCA/KL & Co. "Public Real Estate Equity Securitization A Strategic Analysis," Pension Consulting Alliance, Inc., and Kenneth Leventhal & Company, December 7, 1993.

Penobscot Group, Inc., "Overview: The UPREIT Structure," Boston, MA, pp. 1-4.

Penobscot Group, Inc., "Real Estate Stock IPO Review Simon Property Group, Inc." December 8, 1993.

Penobscot Group, Inc., "Real Estate Stock IPO Review Taubman Centers, Inc." August 15, 1992.

Pharus Realty Investments, Inc., "Pharus Realty Stock Report, Regional Malls," August 8, 1994.

Retail Property Trust. *1994 Annual Report,* March 8, 1995.

Richards, Geoffrey, "Retail REIT IPO Window Closes, But Hope Springs Eternal," *National Real Estate Investor*, Vol. 37, No. 5, May 1995, pp. 53-54, 56,58.

Salomon Brothers. "Introducing the Salomon Brothers Regional Mall Pricing Model," *Salomon Brothers United States Real Estate Research,* April 1994.

Salomon Brothers. "Real Estate Capital Markets: Consolidation Gains Momentum," *Salomon Brothers, United States Real Estate Research*, March, 1995.

Salomon Brothers. "Real Estate Securities Monthly: May 1995 Review," *Salomon Brothers, United States Real Estate Research,* June, 1995.

Salomon Brothers. "Understanding REIT Accounting and Disclosure Will Affect Relative Valuations," *Salomon Brothers, United States Real Estate Research,* December 1, 1994.

Savitz, Eric J. "The REIT Maze Picking a Safe Path Through a Hot Group," *Barron's,* May 24, 1993, p. 22.

Sherman, David M. "Perception vs. Reality: Risks in Regional Mall Ownership," National Real Estate Investor, Volume 35, Number 10, September 1993, pp. 75-77.

Simon Property Group, Inc. *1994 Annual Report,* March 1995.

St. Goar, Jinny, "Going the non-REIT route" Institutional Investor, Vol. 28, No. 11, November 1994, p. 155.

Staley, Bob. "Plan Sponsor Demand For Real Estate Continues To Grow," *PREA Quarterly*, Summer 1994, p. 30.

Stearns, Kenn. "Real Estate Gets A Legislative Shot in the Arm," PREA Quarterly, October 1993, p. 17-19.

Tash, Carl B. "The Regional Mall as an Investment in the 1990's," *Real Estate Finance Journal*, Summer 1993, p. 89-91.

Taubman Centers, Inc. *1994 Annual Report*, March 1995.

Taubman Centers, Inc. *Initial Public Offering Prospectus*, November 20, 1992.

Tessier, Vern. "The Valuation of Regional and Super-regional Malls," *Assessment Digest*, September/October 1991, pp. 2, 4, 5, 8-13.

Timm, Marissa. "Report Card Taubman Centers, Inc.," *Information Profits, Inc.*, April 28, 1995.

Vernor, James D., and Rabianski, Joseph. *Shopping Center Appraisal and Analysis.* Illinois: Appraisal Institute, 1993.

Wheaton, William C., and Torto, Raymond G., "Retail Sales and Retail Real Estate," *Real Estate Finance*, Spring 1995, pp. 22-31.

Winograd, Bernard, and Lietz, Cordell A., "Assessing The REIT Opportunity For Pension Funds," (paper prepared by The Taubman Company), February 1995, pp. 1-6.