VALUATION AND VARIABILITY: A STUDY OF THE PUBLICLY-TRADED REAL ESTATE COMPANY

by

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Submitted to the Department of Architecture on August 12, 1988 in partial fulfillment of the requirements of the degree Master of Science in Real Estate Development at the Massachusetts Institute of Technology

ABSTRACT

The publicly-traded real estate company is analyzed from two perspectives: that of the investor and that of the real estate developer or manager. For the investor, the public real estate company is an important vehicle by which individuals with limited capital can invest in real estate. Realty stocks are liquid assets which provide investors with the opportunity to participate in the cash flow and appreciation of real estate. For the developer and/or owner of real properties, the public company offers access to capital markets and liquidity.

This thesis first gives a brief history of the public real estate corporation and outlines the characteristics of real estate firms and alternative public structures for developing and managing real estate assets. The historical performance record is then examined for a sample of twenty-six companies over the fifteen-year period from 1973 to 1988. Real estate stock returns are correlated with other investments and macroeconomic indicators. Risk-adjusted returns are calculated for each company and for the portfolio. Returns are also analyzed for various holding periods during the business cycle. Three companies -- Perini Investment Properties, Bay Financial Corporation, and the Koger Company -- are examined in greater detail, in a case study format. Finally, conclusions are drawn and conjectures about past performance and future trends are offered.

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PREFACE

The real estate corporation is a fairly recent phenomenon. A few companies have been in existence since the early part of this century, but it was not until the 1960s that the public realty firm began to proliferate.[14] The real estate industry has traditionally been characterized by the opportunistic entrepreneur who operates "by the seat of the pants" and works on a deal by deal basis. In this industry, the public company is an anomaly, and some believe that it is an inappropriate vehicle for holding and developing real estate.

The examination of the public real estate firm is important for several reasons. First, public real estate companies are a significant portion of the real estate industry, particularly the residential sector. Second, they are an important vehicle by which the small investor, with little capital, can invest in real estate. Third, the analysis of the past performance of real estate companies should provide a basis for expectations about future returns. Fourth, the study may provide some insights into the nature of the real estate securities market.

CHAPTER I

AN OVERVIEW OF THE PUBLIC REAL ESTATE COMPANY

Public real estate companies are formed for four primary reasons: to provide liquidity for the owners, to separate the real estate operations from other activities of the company, to "roll up" existing companies or real estate holdings into a single entity, and, most importantly, to raise capital for new developments.

Many real estate companies begin as small, family-owned businesses and are often general contractors as well as developers. As the development business grows and matures, the owners may become asset-rich but cash-poor. The public structure provides one way of gaining liquidity without selling valuable, cash-producing, real estate holdings. By translating real estate and intangible assets -- such as talent, reputation and track-record -- into stock that is marketable, a developer can increase his personal wealth. A substantial share of the company can be retained, and the proceeds of the public offering may be used to finance other ventures.

Many companies that are not in the real estate business have substantial holdings of office and industrial space and raw land. Large industrial corporations and companies in the

building products industry often have valuable real estate holdings which are under-utilized and poorly managed. Typically, these assets do not contribute to the earnings of the company and most corporate executives have a poor understanding of the value and characteristics of their real estate. Some corporations, such as the Ford Motor Co., formed separate real estate companies or profit-centers to focus on independent development activities. These "spin-offs" have the ability to respond more quickly to development opportunities and can be valued as a separate entity.

Private real estate companies and limited partnerships sometimes merge with other real estate-related entities to form a new public corporation. These mergers, or "roll-ups", consolidate real estate holdings and may provide the owners or partners with the benefits of liquidity, geographic and product diversification, and a larger, financially stronger company.

Perhaps the most important advantage of the publicly-held corporation is its ability to raise capital by accessing the traditional capital markets. Reliance on project-by-project financing limits a developer's growth opportunities; real estate entrepreneurs are often forced to pay high interest rates or joint venture with a partner who provides "front-end" capital in exchange for a large share of the project. A public stock offering gives a company the ability to raise

capital to invest in new ventures and facilitates rapid growth. It also fits the mold with which Wall Street is most familiar, and provides the capital base to attract financing.[17]

HISTORY OF THE PUBLIC REAL ESTATE COMPANY

In the first half of this century, some real estate stocks were traded on the market, but were often considered inferior securities when compared with the stocks of industrial firms. Several factors contributed to this perception. Most real estate firms were relatively small. Their assets typically consisted of a portfolio of distinct properties, thus the true asset value and management was difficult to evaluate. In addition, development firms were speculative in nature, and therefore perceived to be very risky. Income properties were characterized by fairly flat returns, since inflation was low and rents stable. For these reasons, many investors felt that investment in real estate stocks did not offer returns which were high enough to offset the perceived risks.[17]

In the mid '50s, many real estate syndications were formed to provide tax shelters for wealthy investors who were concerned about high post-war federal tax rates. Real estate was an ideal vehicle for sheltering taxes, since profits could be shielded through accelerated depreciation and other

deductions. In the late '50s and early '60s, many of these real estate syndications merged and became corporations.[14] The Glickman Corporation and Major Realty are two examples of well-known corporations which were created through the consolidation of syndications. Tax concerns were the primary stimulus behind the movement from syndicates to corporations. The changes were prompted by the fear that the Treasury would impose regulations taxing management syndicates as corporations, rather than partnerships. Taxes could be minimized by combining several syndicates into one company, since taxable income from one property could be offset by losses on another.[17]

After the merger, investors were given shares of stock in the new company in exchange for their original syndicate holdings, thus exchanging a stake in a single building for a share in a broader pool of diversified properties. These companies offered investors several advantages over the syndication. Because the companies were composed of the assets of several former syndicates, their portfolios were diversified, reducing the risk to the investor. The investor gained liquidity, since his stock could be traded on the market. The formation of these companies also allowed the small investor with little capital to invest in real estate.

Many private real estate companies, particularly homebuilders, also went public in the late '50s and early

'60s. Levitt and Sons was the first and the largest to go public after World War II. The postwar building boom created a situation in which many builders were outgrowing their capacity to generate enough working capital. To grow quickly, these companies needed to broaden their financial base, and the public structure was an attractive option to many.[9]

In mid-1962, the real estate stock market took a sharp downturn. When Robert Futterman, founder of the prominent Futterman Realty, died, it was discovered that the healthy performance of his corporation's stock was due to the fact that dividends in excess of cash flows had been paid out. The price of real estate shares in Futterman plunged, as did the stock of many other companies which were suspected of similar practices. Shortly after Futterman's collapse, the Glickman Corporation's stock fell from $13 to $6 a share, following disclosures that the company had made personal loans to Glickman to fund his private development deals. In June, 1962, the SEC imposed more stringent reporting requirements for real estate firms to prevent future disasters, but the investing public had already become disenchanted with real estate stocks.[17]

The late '60s saw a resurgence of real estate firms in the public market. From 1969-1970, 133 real estate-related firms went public, raising $575 million in initial offerings. This was 3.8% of the total equity raised through stock sales

for all types of companies in these years; real estate investment trusts raised another 12% of the total. Industrial stocks were doing poorly on Wall Street, and the financial markets perceived real estate as having the potential for high profits. The list of companies that went public in this period include Ryan Homes, Leisure & Technology, and the Centex Corporation. Homebuilders were expanding rapidly, and the major players were increasing their share of the market.[9]

Beginning in 1973, the national recession, rising interest rates, and an overbuilt real estate market had a strong adverse effect on the performance of real estate stocks. The market had recovered by 1975, but high interest rates made borrowing costly during the late '70s and early '80s. New stock issues were a more attractive way to raise capital and several companies, including Bresler & Reiner and the Sunstates Corporation, went public during this era.

Strategies for success in the late '70s and '80s have varied depending on the size and type of firm. Those that have fared the best in recent years, such as the Ryland Group, have a broad geographic base. Many of the homebuilders are concentrated in the southwest, and have suffered from the problems of an overbuilt market and weak local economy. Builder/developers who have diversified into other industries have met with marginal success. The Del E. Webb Corporation

was founded in the 1940s and has been a public company since 1960. Webb diversified into the leisure market -- principally Nevada casinos -- in the '60s. The casino operations were quite profitable for a period, but fell on hard times in the '80s. To jack up earnings, Webb sold large parcels of undeveloped land between 1983 and 1986, eliminating its future source of profits in return for short-term gains. The company's stock is now trading at less than fifty percent of the estimated current value of its assets, and Webb may be force to liquidate its holdings and sell off the pieces of the company.[24]

A number of investment-oriented real estate companies went public in the early '80s. Some of these, such as Bay Financial Corporation and Southmark Corporation converted from real estate investment trusts. Others were spin-offs from development or construction-related companies, including the Koger Company and Perini Investment Properties.

AN OVERVIEW OF THE REAL ESTATE COMPANY SECURITY GROUP

The real estate industry is composed of two segments which can be broadly defined by investment objectives. The first category consists of those companies which purchase and develop land and/or buildings for sale. Many of these companies are speculative in nature; they have a short-term interest in the property and are earnings-oriented. This

category consists primarily of land developers and home builders. The second category of real estate company is composed of firms which purchase or develop property to manage as a revenue-generating enterprise over a number of years. These companies hold a portfolio of investment properties for the cash flow they generate and for long term appreciation in value. Their assets may include shopping centers, apartments, office and industrial buildings, and hotels. The investment companies usually derive benefits from tax savings, as well as annual cash flows and appreciation.

A third major real estate group which is often included in discussions of the industry, is the financial services sector. This group includes real estate investment trusts of the mortgage type, mortgage bankers, savings and loans, and commercial banks. The focus of this paper is on companies which are active participants in the development and/or management of real estate, rather than passive suppliers of capital. However, many of these companies are vertically integrated, and may provide financial services and other products.

Most public real estate companies belong to the first category, the developer/builder. Exhibit 1 shows a list of the top 100 homebuilders in the United States of which 34 are publicly-traded. A list of the top 100 commercial developers is shown in Exhibit 2; only three of these companies are

public. The public structure is generally more attractive for homebuilders because of the short-term nature of their projects. A home-building firm usually undertakes a series of development projects, with typical turnover periods of less than two years.[12] Because holding periods are very short, quick profits can be realized, and expenses on developments in progress can be balanced against profits from current house sales. Single-family and condominium development does not offer the tax advantages of depreciable properties, but it does avoid the problem of reconciling long-term growth and appreciation with the need for short-term reportable earnings. Because the construction and sale cycle is short, operating results can be quickly reflected on earnings statements. The large number of new household formations in the '60s made homebuilding a rapidly growing industry, and the need for capital for expansion encouraged many of these firms to go public.[11]

Real estate companies engaging in the development or acquisition of offices, apartment buildings, and retail centers face the problem of operating book losses during relatively long construction and holding periods. Some solved this dilemma by forgoing the profits that could be realized by a long-term holding and managing strategy and adopted a building-for-sale approach. Many of these properties were sold to syndicators, who would package the assets for sale to

high-income individuals in need of tax write-offs. With the Tax Law of 1969, low-income apartment projects were given special advantages, and they became very attractive investments for wealthy individuals.[11]

Some public companies, such as Bay Financial Corporation, have both long-term and short-term interests in real estate and engage in the acquisition of investment properties as well as speculative development. Often, however, these activities are separated. Several entities, such as Koger Properties/Koger Company are composed of one company which is a developer and a separate corporation which holds and manages investment properties. This structure allows each company to pursue its unique objectives and avoids the problems of mixing a cash-flow oriented business with an earnings-oriented business.

Some commercially-oriented development companies attempted to avoid the problem of low reported earnings by using one method of accounting for tax purposes and recasting the figures for reporting to shareholders. By reporting cash flows and current values, as well as earnings and book values, a company's value can be better communicated to the market. This method requires some sophistication on the part of corporate executives, investor and analyst, and has not been standardized or fully accepted by the Securities and Exchange Commission.

THE "PUBLIC" PROBLEM

The story of Tishman Realty and Construction Company illustrates the problems peculiar to a commercially-oriented public development company. Tishman was founded in 1898 as a developer of tenement buildings and went public in 1928, following the advice of Lehman Brothers. Within a year, the Tishman family, who retained management control throughout the life of the company, had become disillusioned with the public structure, and started to try to buy stock in the company. After the stock market crash, the shares were trading at a quarter of a point, but the Tishman family did not have the cash to buy them back, and focused instead on enhancing the company's profitability. In the '50s and '60s their hard work paid off. Tishman became a national developer and diversified into office buildings and equipment leasing. By the late '60s, Tishman had become the leading owner-builder of high-rise office buildings in the nation.[23] The Tishmans still did not feel that the stock price accurately reflected the value of the company's substantial holdings, and considered conversion to a REIT. This idea was ultimately rejected because the managers felt that Tishman's business -- construction, development, and management -- was irreconcilable with the SEC requirements for REITs that governed the separation of functions and almost complete

pass-through of earnings.[17] In the early '70s, the high rate of inflation had a devastating effect on Tishman's operations. Its vast inventory of property was carried on the books at original cost less depreciation. As operating costs and debt service escalated, Tishman's book assets became lower than its balance sheet liabilities, sinking it into a negative net worth position. This meant that Tishman could not pay dividends, and its stock dropped from $21 a share in early 1974 to $11 a share in mid-1976. The Tishman family, with the assistance of Morgan Stanley, decided that liquidation was the best solution. In late 1975, the company's major properties were sold to the Equitable Life Assurance Company and the proceeds ($11/share) were distributed to the stockholders. The remaining properties were put into a limited partnership, with each stockholder receiving a proportionate share.[25]

For many, the Tishman liquidation confirmed the belief that the public corporation is a poor vehicle for holding real estate. The failure of Tishman to increase its market price to a point where it represented the true value of its real estate assets was a source of great frustration. Robert Tishman, the grandson of the original founder, was the chief executive officer when the company liquidated. He explained that Tishman "went crazy trying to demonstrate to people that the assets were worth more than the stock. We ran charts on value per share. We talked endlessly to analysts, but they

were always transferred to something else whenever we got them educated." [23] This inability to "educate" stockholders and analysts was responsible for the demise of one of the country's oldest and largest real estate companies.

Many of the home-builders also failed after becoming public companies. Of the seventeen public builders in existence in 1963, only nine survived to 1972.[8] Not all of these failures were directly related to the public nature of the company. Many failed because they simply attempted to grow too quickly or were poorly managed. The need for quick growth was stimulated partially by the demand for housing, but was also fueled by pressure from the market and stockholders to show high earnings and short-term profits. As the companies grew and diversified geographically, it became difficult to control quality and costs. Overhead increased and managers were often inexperienced and spread too thin. Skilled labor was hard to find, and a product which was successful in one town often failed when transplanted to a different climate or locale. Often, the original success of a company was due to the skills of its founder, who typically employed a "hands-on" approach and close supervision of his projects. A large, corporate organization required a different approach, which was often incompatible with the entrepreneurial style of the key manager.[8]

Today, the public real estate industry is composed of

homebuilders, office and apartment builders, hotel operators, and property managers. Many of the companies are diversified and engage in both development and management of a number of product types. (see Exhibit 4) Despite the failure of many companies, others have existed for over twenty years and a number have survived three recessions. Thus, it is not clear that there is a "limited future for development-oriented or owner-managed real estate corporations as an important class of common stocks on major exchanges."[17]

Exhibit 1
TOP 100 HOMEBUILDERS (by housing starts)

	RANK	COMPANY		RANK	COMPANY
	1	Trammell Crow Co.-Res.		51	Empire West Companies, Inc.
	2	Cardinal Industries, Inc.		52	The Related Companies, Inc.
*	3	NVRyan Homes	*	53	M/I Schottenstein Homes, Inc.
*	4	U.S. Home Corporation	*	54	Calton, Inc.
	5	Lincoln Property Company	*	55	Homestead Land Development Corporation
*	6	The Ryland Group, Inc.		56	Summit Properties
*	7	PHM Corporation (Pulte Home)		57	Picerne Properties
	8	Weyerhaeuser Real Estate Company		58	Arthur Rutenberg Corporation
	9	Jim Walter Homes, Inc.		59	Hunt Building Corporation
*	10	Kaufman and Broad Home Corporation		60	The Lokey Companies
*	11	Centex Corporation		61	Prometheus Development Company, Inc.
*	12	Fogelman Properties, L.P.		62	NHP, Inc.
*	13	M.D.C. Holdings, Inc.	*	63	Cenvill Development Corporation
	14	William Lyon Company		64	LeCesse Corporation
*	15	Lennar Corporation		65	San-T Development Corporation
	16	Oxford Development Corporation		66	Paragon Group, Inc.
	17	A.G. Spanos Construction, Inc.	*	67	J.M. Peters Company
	18	CoastFed Properties		68	VandenBerghe Construction, Inc.
*	19	Gemcraft Inc.		69	Kaplan Organization
*	20	General Homes Corporation		70	Ira L. Brummell Development Corporation
	21	Property Company of America		71	Flournoy Construction Company
	22	Blazer Building, Inc.	*	72	Oriole Homes Corporation
*	23	Hovnanian Enterprises, Inc.	*	73	AMREP Corporation
	24	Robertson Homes		74	Goldrich & Kest Industries
	25	Lewis Homes	*	75	Shelter Contractors, Inc.
	26	J.L. Mason Group		76	Warmington Homes
	27	The Corcoran Jennison Companies		77	Dominion Developments, Inc.
	28	Pacific Realty Corporation	*	78	Fairfield Communities, Inc.
	29	Pacific Scene, Inc.		79	Weingarten-Siegel Group, Inc.
*	30	Forest City Enterprises, Inc.		80	A-M Homes
*	31	UDC-Universal Development L.P.		81	Burg & DiVosta Corporation
	32	The Artery Organization, Inc.		82	The Mueller Group
	33	Watt Industries, Inc.		83	Calmark Development Corporation
	34	Embrey Investments, Inc.		84	Beazer Properties, Inc.
	35	Holtzman & Silverman Construction Company		85	Savill/Sanderlin Companies
	36	Shelter Canadian Holdings Ltd.	*	86	Union Valley Corporation
	37	Edward Rose Building Enterprises	*	87	International American Homes, Inc.
	38	The Harkins Group		88	The Fieldstone Company
	39	Barnett Range Corporation	*	89	Continental Homes Holding
	40	Centron		90	United Development Management Company
	41	Morris General Building Company	*	91	Del E. Webb Communities, Inc.
	42	Biosam Contractors		92	Elliott Homes
	43	Clark-Wayland, Inc.	*	93	Barratt American, Inc.
	44	The Worthing Companies		94	Griffin Homes
	45	Lieberman Corporation		95	The Grupe Comapny
*	46	Standard Pacific, L.P.	*	96	Miles Homes
*	47	General Development Corporation	*	97	Leisure Technology
	48	The Lusk Company		98	The Milton Company
	49	Mission Viejo Company	*	99	Kimmins Corporation
*	50	Regis Homes Corporation		100	The Baldwin Company

Note: * denotes public company
Source: Builder Magazine, May 1988, pp.170-188

Exhibit 2

TOP 100 COMMERCIAL DEVELOPERS

(by total square footage of office, industrial, retail, multifamily and hotel)

	RANK	COMPANY
	1	Trammell Crow Company
	2	The Prudential Property Company, Inc.
	3	Lincoln Property Company
	4	The Equitable Life Assurance Society
	5	Melvin Simon & Associates, Inc.
	6	The Webb Companies
	7	Wilder-Manley Associates, Inc.
	8	Homart Development Co.
	9	HSW Investments, Inc.
	10	LJ Hooker Developments
	11	Tishman Speyer Properties
*	12	Rouse & Associates
	13	Portman Properties
	14	The Pyramid Companies
	15	Duke Associates
	16	Hillman Properties
	17	Prentiss Properties Limited, Inc.
	18	The MaceRich Company
	19	The Sammis Company
	20	The Morris Companies
	21	Boston Properties
	22	Birtcher
	23	Urban Investment and Development Co.
	24	Opus Corporation
	25	George D. Zamias Developer
	26	The McGuire Group
	27	BetaWest Properties, Inc.
	28	Cabot, Cabot & Forbes
	29	The Irvine Company
	30	Faison Associates
*	31	Forest City Enterprises, Inc.
	32	The Cafaro Company
	33	Hartz Mountain Industries, Inc.
	34	The Prospect Company
	35	The Taubman Company, Inc.
	36	Gerald D. Hines Interests
	37	The Koll Company
	38	The Kranzco Group
	39	Metropolitan Structures
	40	The Skinner & Broadbent Company
	41	Herring Marathon Group
	42	Property Company of America
	43	Carter & Associates
	44	Robertson Homes
	45	Solomon Equities, Inc.
	46	Quadrangle Development Corporation
	47	Leo Eisenberg Co.
	48	Rubloff
	49	CBL & Associates
	50	The Kevin F. Donohoe Co., Inc.
	51	Zaremba Corporation
	52	Laing Properties, Inc.
	53	Balcor Development Company
	54	General Growth Companies
	55	Corporex Companies, Inc.
	56	Breslin Realty Development Corp.
	57	Landau and Heyman, Inc.
	58	The John Buck Company
	59	Kirco Realty & Development, Ltd.
	60	The JGB Companies
	61	The Equitable Group, Inc.
	62	Patrick M. Nesbitt Associates, Inc.
	63	The Stillman Group
	64	Developers Diversified
	65	Lycon Group
	66	Tishman West Management Corp.
	67	The Oliver Carr Company
	68	Jupiter Realty Corporation
	69	Vyzis Company
	70	Transpacific Development Company
	71	Cali Associates
	72	Gosnell Builders
	73	Barker Interests Limited
	74	Paragon Group, Inc.
	75	Delta Group, Inc.
	76	Schurgin Development Corporation
	77	Dominion Developments, Inc.
	78	Richard I. Rubin & Co., Inc.
	79	Daniel Realty Corporation
	80	Price Development Company
	81	Spatz & Co.
	82	Fifield Development Co.
	83	Fusco Corporation
	84	The Hahn Company
	85	Harbert Properties Corp.
	86	Centre Development Co., Inc.
	87	Miller-Klutznick-Davis-Gray Co.
	88	Prescott
	89	Bell Atlantic Properties, Inc.
	90	Flournoy Construction Co.
	91	The Cedarwood Companies
	92	I. Heller Construction Co., Inc.
	93	The Landmarks Group
	94	Clifton Investment Company
	95	TOLD Corporation
	96	Weatherford/Walker Developments, Inc.
	97	Housing Associates, Inc.
	98	New England Development
	99	Polimeni Enterprises, Inc.
*	100	Ford Motor Land Development Corp.

Note: * denotes publicly-traded company

Source: National Real Estate Investor, Jan.1988, pp.75-100

Exhibit 3

SAMPLE OF PUBLICLY-TRADED REAL ESTATE COMPANIES

NAME	LOCATION	DATE F	LISTED	MARKET CAP.	DEBT (ST+LT)	TOTAL CAP.	DEBT TO CAP. RATIO
AMREP Corp	New York, NY	1959	NYSE	102,686	42,974	145,660	0.30
Bay Financial Corp.	Boston, MA	1971	NYSE	111,408	215,141	326,549	0.66
British Land of America Inc.	New York, NY	1979	NYSE	16,138	44,507	60,645	0.73
Centex Corp.	Dallas, TX	1968	NYSE	723,815	65,263	789,078	0.08
Christiana Companies Inc.	San Diego, CA	1954	NYSE	22,259	20,351	42,610	0.48
Cousins Properties Inc.	Marietta, GA	1972	OTC	243,715	35,492	279,207	0.13
Forest City Enterprises, Inc.	Cleveland, OH	1960	ASE	265,293	82,599	347,892	0.24
FPA Corp.	Pompano Beach, FL	1969	ASE	50,432	138,704	189,136	0.73
Horizon Corp.	Fountain Hills, AZ	1959	NYSE	41,556	26,229	67,785	0.39
Kaufman & Broad	Los Angeles, CA	1961	NYSE	332,433	307,145	639,578	0.48
Koger Properties Inc.	Jacksonville, Fla.	1969	NYSE	303,306	164,943	468,249	0.35
Leisure & Technology Inc.	Los Angeles, CA	1957	ASE	30,045	137,899	167,944	0.82
Lennar Corp.	Miami, FL	1969	NYSE	186,646	13,537	200,183	0.07
Major Realty Corp.	Orlando, FL	1959	OTC	72,779	22,797	95,576	0.24
New Mexico & Arizona Land Co.	Phoenix, AZ	1908	ASE	56,049	19	56,068	0.00
Northview Corp.	San Diego, CA	1960	OTC	44,293	114,160	158,453	0.72
Oriole Homes Corp.	Pompano Beach, FL	1968	ASE	45,624	51,773	97,396	0.53
Parkway Co.	Jackson, MS	na	OTC	61,846	17,730	79,576	0.22
Pulte Home Corp.	Bloomfld Hls, MI	1956	NYSE	568,747	184,990	753,737	0.25
Punta Gorda Isles Inc.	Punta Gorda, FL	1958	ASE	19,610	70,133	89,743	0.78
Rouse Co.	Columbia, MD	1956	OTC	1,052,659	1,037,425	2,090,084	0.50
Ryland Group Inc.	Columbia, MD	1967	NYSE	170,888	137,580	308,468	0.45
Service, Inc.	W. Palm Beach, FL	1956	OTC	99,808	172,073	271,881	0.63
Sonesta Interntl. Hotels Corp.	Boston, MA	1923	OTC	44,685	74,565	119,250	0.63
Southmark Corp.	Dallas, TX	na	NYSE	836,534	1,922,582	2,759,116	0.70
Webb (Del E.) Corp.	Phoenix, AZ	1946	NYSE	222,695	111,371	334,066	0.33
Sample Average				220,229	200,461	420,690	0.44

Notes: (1) Market Capitalization is equal to No. of Shares Outstanding times Share Price (high) in 1987.

(2) The sample is comprised of 26 companies. All have total capitalization in excess of $40 million, were listed in the 1987 edition of Moody's and had price and dividend data continuously available from Trade Line for the period 2:73 - 2:88.

Source: Moody's Bank and Finance Manual, 1987 edition

Exhibit 4

SAMPLE OF PUBLICLY-TRADED COMPANIES BY PRODUCT TYPE

NAME	# of PROPERTIES	# OF STATES	REGION	PROP TYPE	OTHER PRODUCTS
HOMEBUILDERS					
AMREP Corp	na	3	southwest	res-sf,condo	book/mag distributor
Centex Corp.	na	11	divers.	res-sf,condo,land	construction, bldg. matls.
Christiana Companies Inc.	5	3	GA,TX,CA	res-sf,condo	
FPA Corp.	11	3	FL,PA,NJ	res-sf,condo,hotel	contractor,mtg. finance
Horizon Corp.	na	3	southwest	land subdivider	
Kaufman & Broad	na	2	CA,France	res-sf	life ins,financial serv.
Leisure Technology Inc.	11	4	CA,NJ,NY,FL	res-sf,mf retirement	
Lennar Corp.	na	3	FL,AZ,TX	res,comm	mtg. finance
Major Realty Corp.	na	1	FL	res,hotel	
Oriole Homes Corp.	15	1	FL	res-sf,condo	
Parkway Co.	na	na		res	
Pulte Home Corp.	na	12	divers.	res-sf,condo,apt	
Punta Gorda Isles Inc.	5	1	FL	res-sf,condo	
Ryland Group Inc.	na	12	divers.	sf	
Webb (Del E.) Corp.	9	4	sw,NJ	res,hotel,rec.	casino operator
COMMERCIAL COMPANIES					
Bay Financial Corp.	28	13	divers.	office,ind,res,hotel	
British Land of America	na	9	divers.	res,office,hotel,retail	financial services
Cousins Properties Inc.	na	4	southeast	comm,res,office,hotel	
Forest City Enterprises	85	12	divers.	retail,apt,office,hotel	construction, bldg. matls.
Koger Properties Inc.	16	5	se,sw	suburban office	
New Mexico & Arizona Land	16	2	AZ,NM	office,comm,res,hotel	minerals
Northview Corp.	na	5	se,sw	hotel	financial services
Rouse Co.	100	25	divers.	shopping ctr,office	
Servico, Inc.	43	15	divers.	hotel	
Sonesta Interntl. Hotels	5	5	divers.	hotel	
Southmark Corp.	700		divers.	nursing home,apt,office,hotel,retail	

Source: Moody's Bank and Finance Manual, 1987 edition and 10k reports

CHAPTER II

REAL ESTATE SECURITIZATION

THE PUBLIC REAL ESTATE COMPANY IN THE MARKETPLACE

The Accounting Dilemma

Public real estate companies face one major obstacle which has led to the demise of several large firms and prevented many others from going public: traditional accounting practices fail to communicate the underlying market value and performance of real estate assets. The Securities and Exchange Commission (SEC) regulates accounting procedures for public companies, and makes few distinctions between the GAAP rules for commercial and industrial companies and those for real estate firms. This type of reporting emphasizes the earnings performance of a company but does not recognize the unique characteristics of real estate, particularly cash flows and current value. Price-earnings ratios and book value are useful for measuring the value of industrial companies but are misleading measures for real estate, which is a cash-flow oriented business.

Depreciation further distorts real estate values, since it lowers book value but generates tax savings. Depreciation allocates the acquisition costs over the "useful" life of a building. On the books, the value of a property decreases steadily each year, but for most properties, market value

usually increases at a rate close to the rate of inflation. A well-located building may experience far greater appreciation. The portfolios of many public real estate companies contain properties which have a negative net worth, but are in fact, very valuable assets. Depreciation actually enhances the value of real estate, since it shelters taxable income and allows many public real estate companies to pay liquidating dividends which are regarded as a return of capital to investors, and are tax-free.

Analysts and investors have difficulty calculating the actual performance of real estate investments or predicting the value of potential investments. Profits result from long-term increases in property values in combination with tax savings. Thus, cash flows must be analyzed over the entire holding period to generate an accurate measure of total return. Predictions of future earnings and profits must account for both tax effects and capital appreciation, both of which are uncertain and usually undervalued.[12]

To accurately evaluate a real estate company, the analyst needs data on a company's portfolio, including the cash flows and current value of each property. Analysts' valuation of properties must usually rely on estimates by appraisers who are typically retained by the company being evaluated. Unlike more generic products, each piece of real estate is a unique commodity and has its own individual characteristics and

locational attributes. Since real estate is traded infrequently, data on "comparables" is hard to obtain and appraised values can be difficult to substantiate. Market quotations of real estate stocks frequently do not represent the true value of a company, but are based on perceptions of value. Real estate is an inefficient market, and detailed knowledge and expertise is needed to properly evaluate a company and its assets.

There have been some recent developments in the SEC requirements which may lead to more accurate evaluation and communication of the current value of real estate. In the late '70s, the Rouse Company petitioned the SEC to be permitted to publish current values along with book values. For the first time, appraised values were reported to shareholders in a real estate company's annual report.[1] Current value is determined by three standard approaches: replacement cost, comparables, or income approach. The replacement cost approach, as its name implies, uses estimates of the cost of reproducing a property to determine its value. The comparables approach identifies similar properties which have recently been sold, and estimates value by comparing various attributes, such as construction quality and location. The income approach capitalizes net operating income (NOI) by a capitalization rate to determine value. When used together, these three approaches give a fairly reliable estimate of

property value but cannot perfectly predict the price a property would command if it was placed on the open market. Current value reporting does allow investors to make more accurate valuations of the company, and many other public realty firms, such as the Koger Company and Perini Investment Properties, have since adopted this practice.

In 1979, the Financial Accounting Services Board (FASB) issued regulations requiring large public real estate companies to disclose information on changing values, as affected by inflation. FASB does not recognize appraised values, but only inflation-adjusted values based on historical cost. These constant dollar measurements do not accurately reflect actual market values, since they make no adjustment for specific property variables, but are more accurate than book values. FASB contends that appraisals are not verifiable or objective, and does not consider them appropriate alternatives.[1] Current value reporting is allowed as supplemental information, but is not required due to its perceived lack of reliability.

Studies are currently underway to develop standard, uniform practices for current value disclosures. According to a recent Coopers and Lybrand Survey, real estate investment analysts do not feel that present accounting methods account for changing real estate values. This is a major contributing factor to the widespread belief that real estate stocks are

generally undervalued.[1] The uncertainties regarding earnings potential and property values have a negative impact on stock prices and may act as a deterrent to potential investors.

The Stock Issue and Dividend Policy

Another problem that the public real estate company must contend with is the high cost of going public. The stock issue is a complex and expensive process, involving high administrative fees and underwriting costs. Once public, companies must adhere to the SEC's requirements and regulations and must answer to their stockholders. Public companies are also faced with the threat of takeovers. This is especially problematic for those companies whose stock is undervalued in the marketplace. Many companies remain private and raise capital through other means to avoid these regulations and potential pitfalls.

Public companies are judged on the basis of stock appreciation and dividend payouts. However, a large dividend payout is not always an indication of a healthy company. Low dividends may indicate that earnings are negligible. On the other hand, they may signify that the company is retaining earnings for expansion of its operations or the acquisition of new properties. Conversely, high dividends may be distributed when a company borrows heavily to finance its expenditures. They may also be a product of the disposition of an

income-producing asset, and thus will be a one-time benefit and may decrease future earnings.

One goal of many investment-oriented public real estate companies, including the Koger Co. and Perini Investment Properties, is the shelter of taxable earnings. If earnings can be offset by losses generated through depreciation, dividends paid out of cash flow will be considered a return of capital. These "liquidating" dividends are not currently taxable to shareholders as income, although they decrease the investors' basis in the stock. When the stock is sold, shareholders incur capital gains tax on the difference between the selling price and their basis. Thus, liquidating dividends offer the benefit of deferred taxation and the conversion of ordinary income to capital gains. The 1986 Tax Act eliminated the preferential status of capital gains, but many believe that it will be reinstated.

ALTERNATIVE PUBLIC STRUCTURES

Mergers and Acquisitions

Many real estate companies in need of capital choose to merge with other corporations, instead of forming an independent public structure. This route has several advantages: a large corporation provides security, access to capital and credit lines, and liquidity. The acquiring corporation gains a valuable asset, diversity, talent and

expertise, and an entry into the real estate business.[9]

For many entrepreneurial developers, however, the conservative, corporate environment is an anathema. Free-wheeling, independent personalities are incompatible with most large corporate-style operations, and are not willing to give up control over important decisions. Many of the mergers of the '60s broke up as a result of internal management problems caused by conflicts between the original owner of the real estate entity and the corporate executives.

Several large conglomerates were at the forefront of the '60s merger movement. Boise Cascade, the lumber company, acquired six major real estate companies in the mid-'60s, International Telephone and Telegraph (ITT) acquired giant Levitt and Sons in 1968 (Levitt was already publicly-held), and Inland Steel, American Standard, and Occidental Petroleum also made major real estate acquisitions. Many of these mergers failed. Often, the previous owners of the real estate companies left within a few years, and moved onto new challenges. Without this entrepreneurial talent and real estate know-how, the real estate entity lost much of its value. Many manufacturing corporations discovered that conservative, finance-oriented operations were incompatible with the fast-paced, entrepreneurial world of real estate development.[9]

With some exceptions -- such as the acquisition of

Mission Viejo by Philip Morris -- the successful mergers were of the cogeneric type: developer/builders merging with other developer/builders. Kaufman and Broad, U.S. Home, Leisure Technology Corporation, and Centex Corporation all expanded in the late '60s and early 70s by acquiring smaller real estate companies. These acquisitions allowed them to diversify geographically and by product type. By using the knowledge and abilities of small, local developers, these companies could expand more rapidly and create a synergy in which the value of the expanded company was greater than the value of all of its separate parts. These mergers were successful because the acquiring company understood the real estate business, as well as the motivations and personalities of the acquired developers.[9]

Real Estate Investment Trust

Other forms of real estate securities also proliferated in the '60s. The most significant of these was the real estate investment trust (REIT). In 1960, legislation was passed which allowed these "trusts" to pass earnings from real estate investments directly to investors without incurring income tax on the trust. (In contrast, corporations are taxed before distributions and stockholders are taxed when dividends are paid.) REITs provided an important source of capital for development, and were often willing to fund risky projects

that other lenders would not.[8]

REITs provide similar benefits -- liquidity and access to capital -- to the public company, but have some inherent differences. The REIT has clear tax advantages over the corporation, but also has some limitations. Functions must be separated; the tax status of a trust is jeopardized if it provides operating and management services to the properties in its portfolio. For a real estate entity, however, profits are closely related to the quality of operations and management and may not be optimized if close control is not exercised. In addition, REITs are required to distribute 95% of taxable income to their shareholders. This requirement severely limits a firm's ability to take advantage of new development opportunities, since capital cannot be retained. Other limitations on the disposition of assets and restrictions on ownership also make the REIT an inappropriate vehicle for many real estate companies, especially those engaged in development. In contrast, a public corporation is able to retain earnings to fund new development and acquisition and is not restricted by requirements governing distribution and ownership.

The Master Limited Partnership

A master limited partnership (MLP) is a recent innovation in the real estate securities industry which allows some companies to realize the value of undervalued assets and pass income and losses through directly to stockholders. The MLP is a partnership which is traded on the stock market. Since it is liquid, it is appealing to many investors who are concerned about long-term involvement in risky real estate ventures. Because it is a partnership, investors are taxed on cash distributions (in excess of capital contributed) but the MLP entity incurs no taxes. Unlike the REIT, the MLP structure allows tax losses to be passed through to the limited partners, thus enhancing the value to the investor.

The first real estate MLP, Ala Moana Hawaii Properties, was created in 1981 to liquidate the holdings of its parent company, the Dillingham Corporation. Since then, about twenty other real estate MLPs have been created to combine, liquidate, or spin off real estate holdings. Limited partner investors in MLPs find them attractive because they are yield-oriented and provide liquidity. Under the Tax Reform Act of 1986, they became especially attractive because income from MLPs can be used to offset passive losses from other investments.[18]

To qualify as a partnership for tax purposes, an MLP must

demonstrate that it does not have more corporate characteristics -- such as centralization of management and limited liability -- than noncorporate characteristics. These restrictions limit the applicability of the MLP structure to real estate. An additional problem with MLPs is the complexity of the tax reporting and accounting requirements. An MLP is required to report each sale or exchange of a partnership interest to the IRS and identify the individual investors. The regulations become even more onerous if the partnership uses a Section 754 election which involves adjusting the basis for each partnership interest traded.[18]

The MLP is an attractive structure for some real estate entities and provides important tax advantages over both the public company and the REIT. It offers many of the benefits of the corporate structure, including liquidity and improved access to capital markets. It also provides a means by which real estate holdings can be consolidated or separated. Onerous reporting requirements and the "noncorporate" characteristic requirements have, until now, been the primary drawback of this structure. However, a recent development -- the Revenue Act of 1987 -- has changed the outlook for MLPs. As of December, 1987, new MLPs are taxed as corporations if they don't meet passivity rules (which are similar to those for REITs.) Existing MLPs are grandfathered, and have until 1995 to restructure.[4]

THE TREND TOWARDS REAL ESTATE SECURITIZATION

The current trend towards the securitization of real estate assets is driven by a large number of investors looking for profitable investments which provide diversification and growth potential as well as liquidity. Real estate has gained the acceptance of the investor market in recent years, and product innovations and the involvement of Wall Street have increased the demand for securitized real estate.[20] The public real estate company has a longer history than other forms of real estate securities, and has retained its appeal by providing a liquid asset which offers current income as well as upside potential and is accessible to the small investor. For real estate companies, securitization offers a reliable, sustained source of financing. The public company is an important segment of the real estate securities group and provides a structure which is the best alternative for many companies.

CHAPTER III

HISTORICAL PERFORMANCE RECORD

A number of studies comparing direct investment in equity real estate with investments in common stocks have been published. [13,15,19] However, little attention has been paid to the historical performance of real estate stocks. Studies of equity holdings in real estate have indicated that real estate investments have historically provided returns approximately equal to those of common stocks, while offering lower volatility and risk. These findings contradict the common belief that real estate is a risky investment offering very high returns to a few fortunate investors. Although equity ownership of real estate may not outperform the stock market, the returns are less variable and therefore more predictable. Furthermore, as part of an investor's portfolio, real estate offers diversification. Because it is often negatively correlated with the stock market -- when the market is rising, real estate values are falling -- real estate lowers the overall volatility of a portfolio. It also tends to perform well during periods of rapid price escalations, thus acting as an inflation hedge.[10]

On the other hand, one might expect the performance of publicly-traded real estate companies to be more closely correlated with the stock market. The return of public

companies is determined by changes in share values together with dividend payments. These returns do not necessarily reflect changes in the underlying value of the real estate assets. Therefore, real estate stock returns would be expected to exhibit greater volatility than the return of equity investment in real estate.

METHODOLOGY

Real estate firms frequently complain about under-valuation of their stocks on the market. This problem, combined with many investors' skepticism about real estate's return and risk characteristics, would tend to have a negative impact on the performance of real estate stocks. To analyze the actual performance of real estate stocks, and challenge the traditional assumptions, an analysis of twenty-six real estate stocks was performed over the fifteen-year period from 1973-1988.

The companies included in the sample (see Exhibit 3) are believed to be representative of the larger players in the industry. Several criteria were used in selecting the firms to be included in the sample. The companies must have had total capitalization (debt plus equity) exceeding forty million dollars, and have been listed in the 1987 edition of Moody's Bank and Finance Manual. In addition, dividend data and quarterly returns adjusted for stock splits must have been

available from Trade Line for the period 1973 through 1988. The sample includes both developer/builders and operator/managers and is composed of fifteen homebuilders and eleven commercial developers.

Three different types of analyses were used to examine the performance of real estate companies. First, the returns of realty firms were correlated with other types of investments and macroeconomic factors to determine the contribution of real estate stocks to overall portfolio returns. Second, the risk and return characteristics were analyzed on a quarterly basis over the fifteen-year period, 2:1973 to 1:1988. This analysis examines the performance of real estate relative to the stock market. Third, the performance was analyzed for various holding periods, corresponding to different phases of the economic cycle. This method also utilizes stock market comparisons, but allows a more in-depth study of the characteristics of the real estate security during recessionary and expansionary periods. It also permits analysis of the change in performance over time.

After analyzing the entire sample of twenty-six companies, the group was divided into two segments: fifteen homebuilders (developer/builders) and eleven commercial developers (investor/managers). (Exhibit 4) Although some commercial developers do not retain their projects as revenue-producing assets, but sell them to generate short-term

earnings, it is believed that those companies included in this category derive a substantial portion of their revenues from the cash flow generated from rents, appreciation, and tax savings. In contrast, the homebuilders generally derive income from the sale of their real estate assets. Many analysts and observers believe that the public form of ownership is more suitable for developer/builders than commercial developers, because earnings can be quickly reflected on balance sheets and the value of the company can be easily communicated to the market. This study compares the two groups of real estate companies, and examines differences in financial performance.

MEASURES OF INVESTMENT PERFORMANCE

Correlation of Realty Stock Returns

Correlation coefficients between the returns of real estate stocks and other investment classes were examined to determine the congruence of real estate companies with other investments. The portfolio diversification potential of an investment is determined by its correlation with other assets, as well as the asset's own intrinsic risk. Macroeconomic factors also influence the pricing of publicly-traded securities; thus, correlations between the realty stocks and the CPI were also examined.

Exhibit 5
CORRELATION OF REAL ESTATE STOCK RETURNS
WITH OTHER INVESTMENT CLASSES AND MACROECONOMIC INDICATORS

Portfolio	S&P 500	L-T Bonds	T-bill	Fed. Funds	CPI
Consolidated	0.758	-0.114	-0.173	-0.234	-0.135
Builder	0.725	-0.137	-0.182	-0.223	-0.105
Investor	0.774	-0.168	-0.161	-0.232	-0.232

Source: Trade Line, Business Conditions Digest, Standard & Poors

Correlation coefficients were estimated from regressions of the returns of each alternate investment or indicator against the returns of the three portfolios over the fifteen-year period.[1] Positive correlation coefficients indicate that returns tend to move together, while negative coefficients indicate movement in opposite directions. A coefficient of zero would indicate that there is no relation between investments; a coefficient of positive or negative one would indicate perfect correlation. Diversification benefits are achieved when two investments are negatively correlated.[2] The highest positive correlations are between real estate stocks and the S&P 500 index; the lowest negative coefficients are found between the federal funds rate and the real estate company portfolios. This indicates that the stock returns of both homebuilders and commercial real estate companies fluctuate in a similar manner to the returns of the S&P 500 index. It also suggests that real estate companies are sensitive to interest rates and perform best when interest

rates are falling. Potential for portfolio diversification exists for the investor whose portfolio contains both stocks and long term corporate bonds or treasury bills, but real estate stocks do not appear to provide diversification for holders of S&P stocks.

Risk and Return

The return of a security is composed of both appreciation (the change in share price divided by the previous period's share price) and income (dividend) yields. Two measures of return were used to analyze the performance of the sample companies: arithmetic and geometric returns. The arithmetic return is the annualized average of the quarterly rates of return for each company. The geometric return is a time-weighted compounded measure of return. It measures the cumulative return, and is impacted by the variability of the quarterly returns. A high standard deviation will lower the geometric return. The arithmetic return is not impacted by the variation of returns, and is therefore a less useful measure of performance.

Measures of risk are important because they form the basis for judging the performance of a security. Following the capital asset pricing model (CAPM), risk is composed of two parts: systematic and unsystematic risk. Systematic risk is the nondiversifiable, market-related risk which is measured

by the beta coefficient of a security. A beta of 1.0 is the average market risk; a beta greater than 1.0 indicates sensitivity to market movements and a beta less than 1.0 indicates insensitivity to changes in the market.[2] Unsystematic, or firm-specific risk is the portion that is related to the individual company. Unsystematic risk can be eliminated if the investor holds a relatively large portfolio (typically defined as over twenty securities.) High systematic risk indicates that the security is positively correlated with the stock market and business cycle and may not provide diversification potential.[7]

The analysis to follow is based on CAPM theory which explains the relationship between expected return on a security and its related risk. CAPM asserts that the expected risk premium should vary in direct proportion to market risk.[2] The theory specifies a simple linear relationship between risk and return.

The investment performance of stocks can be examined in the risk-return context by using a data series of historical returns. By regressing the excess return[2] of a security against the excess return of the capital market index (Standard & Poors' 500), one can estimate the intercept term or risk-adjusted return (a), and the slope coefficient or estimate of beta (b). The risk-adjusted return was calculated for each company, and for the consolidated portfolio of

equally-weighted stocks, and the homebuilder and commercial portfolios.

The results are shown in Exhibit 7, with risk-adjusted returns for the period 1973 to 1988. The results of the regression equation showed a good statistical fit; all stocks except Southmark Corp. had T-statistics greater than 2.0.

On average, the S&P 500 explained 57.5% (R^2) of the total variation in the quarterly returns. It explained 52.5% of the developer/builders' stocks' variation, and 60.1% of the investment/management companies' variation. The average quarterly excess return was 1.8%, or about 7.4% annualized. All companies except four evidenced excess returns, indicating that investors in real estate stocks are well-compensated for bearing a relatively high level of risk. The high risk-adjusted returns contradict the CAPM theory, since the returns are higher than can be justified by the risk premium. This suggests that the market for real estate stocks is not efficient, possibly due to a lack of information or education of investors.

The sample of fifteen homebuilders has a higher beta and a lower R^2 than the sample of eleven commercial real estate companies. These findings suggest that the developer/builders' returns are more sensitive to market movements and that a lower percentage of their variation in returns can be explained by the S&P's variation. In other

words, the homebuilders' returns may be more sensitive to factors which have less impact on industrial stocks and stocks of commercial real estate companies. The homebuilder sample also has a higher average risk-adjusted return, suggesting that the market for homebuilders' stocks is less efficient than the market for investment real estate stocks. This finding is surprising, since the valuation of builder/developer companies is fairly straightforward relative to the valuation of investment-oriented real estate companies. However, the relatively small size of the sub-samples could produce biased results.

The relationship between the S&P 500 and the sample of real estate companies is shown graphically in Exhibit 8. The patterns of returns are synchronous, but the real estate companies exhibit a greater amplitude of cyclical fluctuation. This can be explained, in part, by the much larger size and greater diversity of the stock market sample. It may also be explained by the composition of returns. 94% of the average quarterly returns of the real estate companies' are in the form of stock appreciation. In contrast, the S&P 500 index shows an average appreciation component of 64% over the fifteen year period. (see Exhibit 6) The income (dividend) component tends to be more stable than the appreciation component, therefore the S&P is subject to lower volatility of total returns.

Exhibit 6
MEASURES of VARIATION and COMPOSITION of RETURNS
Quarterly Average 2:73-1:88

	Average Quarterly Returns			
	Total	Apprec.	Income	Std.Dev.
Real Estate Companies				
-Consolidated	5.88%	5.51%	0.37%	21.59%
-Homebuilders	6.21%	5.94%	0.27%	25.93%
-Commercial Cos.	5.38%	4.90%	0.48%	17.82%
S & P 500	3.12%	1.99%	1.13%	9.22%

Source: Trade Line, Standard & Poors

The homebuilder companies exhibit more volatility than the commercial companies. This may be explained by the different orientations of the two segments of the industry. Commercial companies are investment-oriented. They tend to hold properties which generate cash flow through lease payments. Tenants of office and retail space typically have three to five year leases, thus cash flows are fairly stable, except in a prolonged recession or in a severely overbuilt market. In contrast, homebuilders are very vulnerable to the economy's upswings and downswings. Profits are contingent upon a high volume of home sales, and there are few housing starts in periods of high interest rates or recessions. Some homebuilders have diversified into the apartment sector of the residential market; these tend to have more consistent returns. As shown above in Table x, income is a larger percentage of the total return for investment-oriented

companies. Because income is more stable, consistent dividends can be paid to investors, and stock returns are less volatile.

The amount of leverage may also have a significant impact on the volatility of a company's returns. Companies which are highly leveraged are more risky, and are sensitive to changes in interest rates. Most real estate companies carry a significant amount of debt (Exhibit 3), thus high volatility is not surprising. [See Exhibit 9 for individual company returns.]

Holding Period Returns

Returns for both the S&P 500 index and the portfolio of real estate companies were examined for various holding periods between 1973 and 1988. This fifteen-year time span encompasses two major recessions, 1974-1975 and 1981-1982. The minor, two-quarter, recession of 1980 was omitted from the holding period analysis, as its magnitude and duration were not sufficient to produce significant variation in returns.

The standard deviation of the consolidated portfolio is more than twice that of the S&P index for the fifteen-year period. This measure of the volatility of investment returns is consistently greater for the real estate portfolio over all holding periods examined. An inspection of the actual returns -- Exhibits 10 and 11 -- for these holding periods indicates

dramatic fluctuations in returns from upswing to downswing for both the S&P and the portfolio. The variation, as expected, is much more extreme for the real estate companies.

Although a high degree of volatility for real estate companies does not come as a surprise, it is interesting to examine the change in volatility over time. The standard deviation during the 1974-1975 recession is more than twice that for the 1981-1982 recession. Likewise, the standard deviations for the upswing and downswing periods of the '70s were much higher than those for the corresponding periods of the '80s. This can be explained, in part, by the severity of the recessions and magnitude of recovery. The '70s was a decade of high interest rates and inflation, and an examination of the S&P 500 index also shows greater volatility of returns during this period. The portfolio of real estate companies, however, appears to have become less volatile relative to the S&P index in recent years. During the '70s, for both upswing and downswing periods, the standard deviation of real estate companies was about three times that of the S&P 500 index. During the '80s, the standard deviation was about one-and-a-half times that of the S&P, suggesting that real estate companies have become less volatile, relative to other companies, over time.

This phenomenon may be explained by several factors. First, all companies in the sample are at least fifteen years

old. As firms mature, they typically become more diversified and therefore less risky. Older companies are usually larger, and risk a smaller percentage of their equity on each new venture. Experienced personnel may also lower the risk, and volatility, of a company's performance.

An examination of the composition of returns suggests a second reason for the increasing stability of real estate stocks. The income component has become a larger component of the total return in the 1980s. Although dividend payments still account for only about 10% of the return, they appear to be more significant than during earlier periods. Since dividends are often paid even when a stock is not appreciating in value, a larger income component tends to produce less volatile returns.

A third factor which may be contributing to the decrease in the volatility of real estate stock returns is a change in the market for these stocks. If the market is becoming "educated" about real estate investments, it may tend to place more emphasis on the underlying real estate assets when evaluating a company. Since these values -- with some notable exceptions -- are not typically subject to severe fluctuations, a reduction in volatility could be expected.
The size and type of investor also impacts the volatility of a stock. When many of a company's shares are held by a few large investors, trading can be erratic and influence the

volatility of stock prices.

Macroeconomic factors may also affect the variability of public real estate firms' returns, as may changes in tax laws, housing policy, and other government policies.

These explanations for the decrease in real estate stocks' volatility are hypothetical; a more detailed study of each company, as well as more recent entries to the real estate company industry, would be needed to verify these conjectures.

Exhibit 7

REGRESSION STATISTICS AND RISK-ADJUSTED RETURNS 2:73-1:88

	risk-adjusted return	beta	R^2
Market Return - S & P 500 index	-	1.000	-
Portfolio of 26 companies	0.018	1.772	0.575
Homebuilder portfolio	0.020	2.034	0.525
Commercial portfolio	0.015	1.493	0.601
HOMEBUILDERS			
AMREP Corp	0.025	1.546	0.280
Centex Corp.	0.009	1.943	0.475
Christiana Companies Inc.	0.022	1.915	0.241
FPA Corp.	0.006	1.313	0.243
Horizon Corp.	0.001	1.293	0.138
Kaufman & Broad	0.011	2.652	0.496
Leisure Technology Inc.	0.001	2.284	0.339
Lennar Corp.	0.042	2.829	0.457
Major Realty Corp.	0.038	1.103	0.083
Oriole Homes Corp.	0.016	2.155	0.346
Parkway Co.	0.022	1.103	0.073
Pulte Home Corp.	0.077	2.733	0.337
Punta Gorda Isles Inc.	-0.016	2.111	0.384
Ryland Group Inc.	0.033	2.621	0.530
Webb (Del E.) Corp.	0.017	1.884	0.310
COMMERCIAL COS.			
Bay Financial Corp.	-0.001	1.353	0.192
British Land of America Inc.	-0.011	1.794	0.202
Cousins Properties Inc.	0.033	1.348	0.226
Forest City Enterprises, Inc.	0.011	1.770	0.434
Koger Properties Inc.	0.012	1.744	0.339
New Mexico & Arizona Land	0.005	1.595	0.421
Northview Corp.	0.046	0.707	0.064
Rouse Co.	0.015	1.657	0.482
Servico, Inc.	0.029	1.343	0.312
Sonesta Interntl. Hotels Corp.	0.054	1.304	0.297
Southmark Corp.	-0.020	1.829	0.367

Note: T statististics for all companies except Southmark are greater than 2.0

Source: Trade Line, IDD Information Services, 1988

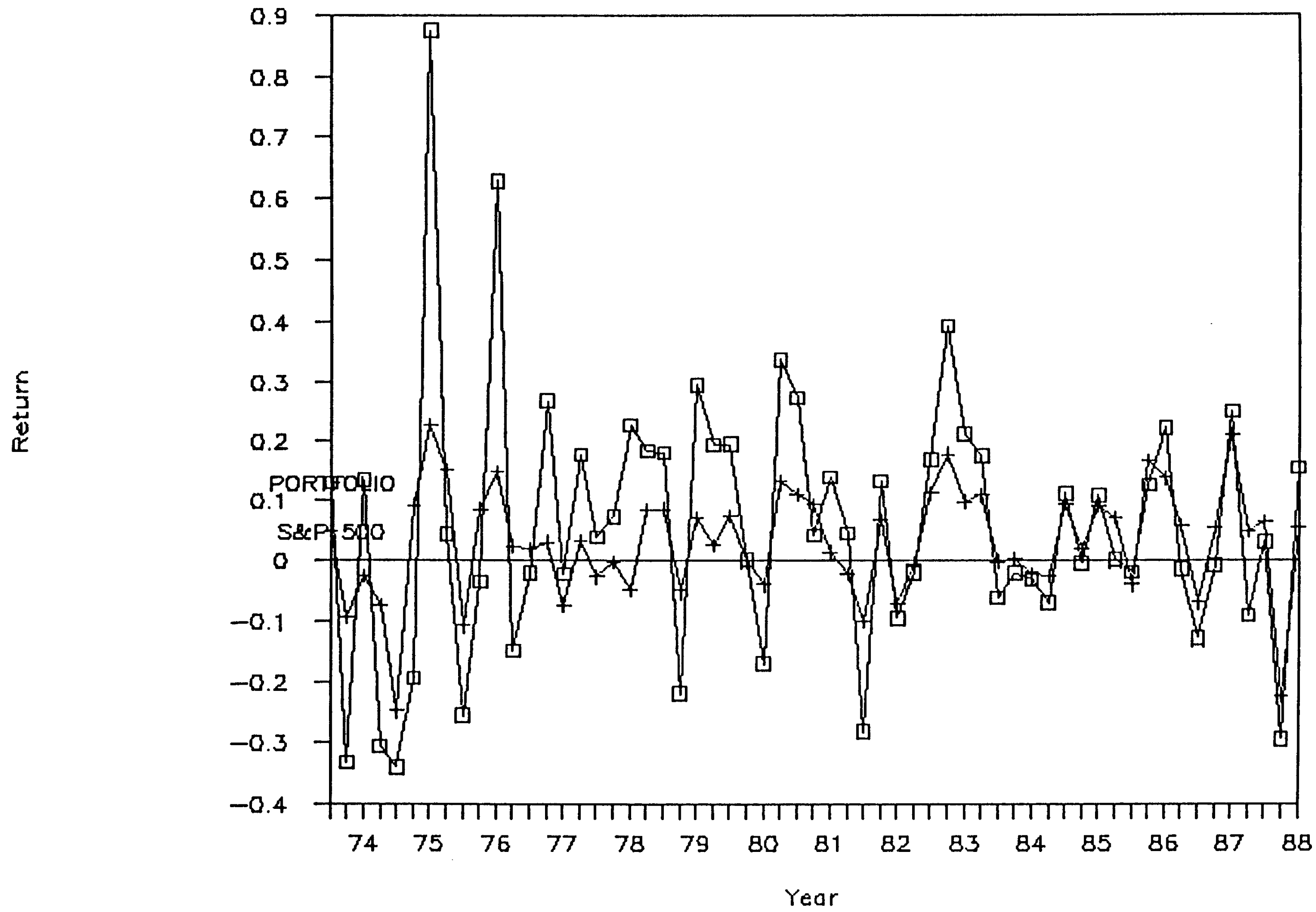
PORTFOLIO/S&P 500
1973–1988
Return
Year
PORTFOLIO
S&P 500
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88

Exhibit 9

QUARTERLY RETURNS FOR REAL ESTATE COMPANIES 2:73 - 2:88

	Quarterly Average	Standard Deviation	Coeff. of Variation
PORTFOLIO			
S&P 500	3.12%	9.22%	2.96
Consolidated	5.88%	21.58%	3.67
Homebuilders	6.21%	25.93%	4.18
Commercial	5.38%	17.82%	3.31
HOMEBUILDERS			
AMREP Corp.	5.78%	27.33%	4.73
Centex Corp.	5.45%	26.20%	4.81
Christiana Cos.	6.27%	35.94%	5.73
FPA Corp.	4.23%	24.66%	5.83
Horizon Corp.	3.26%	32.14%	9.86
Kaufman & Broad	6.01%	26.31%	4.38
Leisure Technology Inc.	4.37%	36.15%	8.27
Lennar Corp.	9.26%	38.63%	4.17
Major Realty Corp.	6.65%	35.34%	5.31
Oriole Homes Corp.	6.11%	33.81%	5.53
Parkway Co.	5.30%	37.78%	7.13
Pulte Home Corp.	12.41%	43.51%	3.51
Punta Gorda Isles Inc.	2.36%	31.46%	13.33
Ryland Group Inc.	8.18%	33.20%	4.06
Webb (Del E.) Corp.	6.41%	28.23%	4.40
COMMERCIAL COS.			
Bay Financial Corp.	3.28%	28.50%	8.69
British Land of America	3.20%	36.67%	11.46
Cousins Properties	6.96%	26.21%	3.77
Forest City Enterprises	5.50%	24.86%	4.52
Koger Properties	5.32%	27.62%	5.19
New Mexico & Arizona Land	4.42%	22.95%	5.19
Northview Corp.	7.14%	25.80%	3.61
Rouse Co.	5.45%	21.99%	4.03
Servico, Inc.	6.29%	22.14%	3.52
Sonesta Interntl. Hotels	8.73%	22.05%	2.53
Southmark Corp.	2.58%	28.10%	10.89
Mean	5.80%	29.91%	5.94

Source: Trade Line

Exhibit 10
HOLDING PERIOD ANALYSIS
ANNUALIZED RETURNS FOR PORTFOLIO OF 26 REAL ESTATE COMPANIES

TIME PERIOD	TOTAL	APPR.	INCOME	EXCESS	COEFF. of VAR.
AVERAGE ANNUAL RETURN					
3/73-2/88	25.70%	23.95%	1.75%	16.34%	1.834
GEOMETRIC RETURN					
3/73-2/88	15.91%	14.09%	1.81%	5.48%	1.834
Business Cycle					
Peak-Trough					
4/73-1/75	-34.74%	-38.06%	3.31%	-40.38%	-8.217
3/81-4/82	11.66%	10.01%	1.65%	-1.72%	2.124
Recession					
1/74-1/75	-17.35%	-19.30%	1.94%	-24.22%	6.571
3/81-4/82	11.66%	10.01%	1.65%	-1.72%	2.124
Downswing(P-T)					
4/73-1/75	-34.74%	-38.06%	3.31%	-40.38%	-8.217
3/81-4/82	11.66%	10.01%	1.65%	-1.72%	2.124
Upswing(T-P)					
1/75-2/81	49.50%	47.97%	1.54%	38.83%	0.930
4/82-2/88	17.20%	15.78%	1.42%	5.40%	1.431
Cycle					
Peak-Peak					
4/73-2/81	18.95%	16.77%	2.18%	9.65%	1.749
2/81-2/88	11.54%	10.12%	1.42%	2.52%	1.918
Trough-Trough					
1/75-4/82	43.14%	41.49%	1.64%	31.23%	1.038
4/82-2/88	17.20%	15.78%	1.42%	5.40%	1.431

Source: Trade Line, IDD Information Services, 1988

Exhibit 11
HOLDING PERIOD ANALYSIS
ANNUALIZED RETURNS FOR S&P 500 INDEX

TIME PERIOD	TOTAL	APPR.	INCOME	EXCESS	COEFF. of VAR
AVERAGE ANNUAL RETURN					
3/73-2/88	13.10%	8.20%	4.90%	4.20%	1.478
GEOMETRIC RETURN					
3/73-2/88	11.21%	6.36%	4.85%	2.55%	1.478
Business Cycle					
Peak-Trough					
4/73-1/75	-12.05%	-16.08%	4.03%	-18.78%	-3.689
3/81-4/82	10.84%	4.71%	6.12%	-0.98%	1.612
Recession					
1/74-1/75	-7.32%	-11.67%	4.35%	-14.38%	-14.026
3/81-4/82	10.84%	4.71%	6.12%	-0.98%	1.612
Downswing(P-T)					
4/73-1/75	-12.05%	-16.08%	4.03%	-18.78%	-3.689
3/81-4/82	10.84%	4.71%	6.12%	-0.98%	1.612
Upswing(T-P)					
1/75-2/81	15.80%	10.51%	5.29%	6.92%	0.958
4/82-2/88	18.48%	14.24%	4.24%	10.61%	0.935
Cycle					
Peak-Peak					
4/73-2/81	7.44%	2.50%	4.95%	-0.91%	2.059
2/81-2/88	13.86%	9.29%	4.58%	5.03%	1.195
Trough-Trough					
1/75-4/82	14.85%	9.40%	5.45%	5.39%	1.064
4/82-2/88	18.48%	14.24%	4.24%	10.61%	0.935

Source: Business Conditions Digest, 1988

CHAPTER IV.

CASE STUDIES

Three companies were chosen to illustrate the advantages and disadvantages of the public structure for an investment/management- oriented real estate company. This segment of the industry was selected for the case study analysis because it is most affected by the accounting valuation problem. Two of the three companies -- Perini Investment Properties (PIP) and the Koger Company (TKC) -- were formed by spinning off the investment, cash-flow oriented business from the development, earnings-oriented business. Bay Financial Corporation was originally a real estate investment trust, and has retained both development and property management in one corporation. Returns for the three companies are shown in the following table for the period 3:84 through 2:88. A more detailed examination of Bay Financial's and Koger's performance since 1973 is presented in Exhibits 17 and 18. (Perini Investment Properties has only been in existence since 1984.)

Exhibit 12
AVERAGE QUARTERLY RETURNS 3:84-2:88

	Total	Appr.	Income	Std. Dev.	Coeff.of Variation
Perini	3.20%	2.80%	0.40%	10.30%	3.21
Bay Financial	-0.14%	-0.32%	0.18%	13.90%	-100.48
Koger	4.09%	1.90%	2.20%	6.90%	1.68

Source: Trade Line

PERINI INVESTMENT PROPERTIES

Background

The Perini Corporation was originally a family-held construction company specializing in heavy construction, particularly roads, bridges, and high rise buildings.[3] Perini went public to provide liquidity for the Perini family and to raise capital to fund projects. In the late '50s, Perini had become involved with the development of West Palm Beach, a new Florida community. The development of new communities can be especially problematic for real estate companies, since it requires a large influx of capital in the early stages of the project, and profits are not realized for many years. By 1960, Perini had sunk twenty million dollars into the project; this money was raised through loans and internally generated through the construction business. Perini's lenders became very nervous about the extent to which their resources and those of the company had been committed to this project, and pressured Perini to go public. This coincided with the need

to break up the family estate, and in 1961, Perini became a public company.

Perini continued its development activities at West Palm Beach, but until the mid '70s, the company's real estate operations remained a "stepchild". Real estate had never made money, and the company's investment in the Golden Gateway Center in San Francisco exacerbated the problems. This mixed-use project, which was begun in the mid '60s, suffered large losses and illustrated the inherent problems with the real estate operations at Perini. In general, Perini's real estate assets were poorly managed, earnings were not maximized, and the company had no portfolio strategy. In 1974, Perini almost decided to get out of the real estate business, and devote all of its resources to the construction operations. First, however, management decided to attempt to salvage the real estate division.

Tom Steele, current Chief Executive Officer of Perini Investment Properties, identified the two major characteristics of Perini's real estate division in the mid '70s. It had very valuable assets, but a weak organization. Steele decided that the company had to be reorganized, and devised a strategy for optimizing the value of all of the company's assets. In the '70s, all of Perini's assets, from apartment buildings to construction equipment, were held in the same corporation. Steele realized that these assets had

to be split up, so that cash flow-oriented assets could be separated from earnings-oriented assets. At that point, income properties were "getting lost in the corporate balance sheet" and were grossly undervalued. To solve this dilemma, the company decided to concentrate on generating earnings through developing and building properties for sale, rather than investing in income properties for the long term.

By the early '80s, management was reconsidering this decision. Steele and others felt that the exclusion of investment properties would limit the growth opportunities of the company. They also felt that this policy resulted in the underutilization of some of the key personnel's experience in asset management. They decided to create a new public company by "spinning off" the cash-flow business, represented by the company's interests in the Golden Gateway Center, the Alcoa Building, (a 25-story office building in San Francisco) and some commercial/industrial buildings in Massachusetts.

Organization

This new company, Perini Investment Properties (PIP), was formed in 1984 to maximize the market's valuation of the real estate assets and enhance shareholders' value. Previously, the market did not know how to value Perini's investment properties and did not understand how they fit in with the company's primary businesses of construction and development.

When the separation of the cash-flow oriented business -- PIP -- was announced, the market substantiated management's assessment that the companies would be worth more when separated. Before the spin-off, Perini Company's stock had been trading at $28 per share. After this event, Perini Corporation's stock still traded at $28, and PIP's stock traded at $12, for an overall increase of 43%. At that time, 3.2 million shares were outstanding; therefore, the total market valuation increased by $38 million.[22]

Perini considered other structures for its investment holdings, including the REIT and the master limited partnership (MLP). Management determined that the REIT was not an appropriate vehicle, because of the passive management regulations, and the SEC rules requiring distribution of 95% of taxable income. In addition, the creation of a REIT may have been considered a taxable event, whereas the division of assets and formation of a new company was not. The MLP structure was also considered, but the heavy record-keeping requirements were a drawback. Perini executives also felt that a change in the tax status of the MLP was imminent, and feared that the partnership, if created, would be taxed as a corporation. In retrospect, Steele concedes that they were wrong on the timing (since the tax regulations have just recently been changed) but correct about the long-term effect.

After much consideration and reflection, Perini

determined that a public operating real estate company was the best vehicle for holding its investment properties. It was the most flexible, and allowed the company to retain cash flow to fund its operations and new acquisitions. The shareholders also benefitted because the spin-off was considered a non-taxable distribution. The assets of Perini Corporation were divided; each shareholder retained his/her old shares in this company and gained new shares in PIP. Shareholders retained their old basis, and thus would pay capital gains tax when the shares were sold, instead of being taxed on ordinary income from distributions.

Performance

PIP's performance in the last four-and-one-half years has been quite strong, averaging 14.33% per year. Returns have been stable during this period, with a standard deviation of 10.3%. The biggest hurdle that PIP faced after becoming a separate entity was communicating the true value of the company to shareholders and market analysts. PIP convinced the SEC, after much negotiation, to allow the company to report cash flow per share, as well as earnings per share.

Exhibit 13
PERINI INVESTMENT PROPERTIES
Cash Flow and Earnings per Share

	1987	1986	1985	1984	1983
Net Cash Flow/Share	$1.14	$1.00	$0.80	$0.69	$0.92
Earnings/Share	($1.58)	($0.44)	($0.08)	$0.57	$0.79
Dividends paid on Common Stock	$0.57	$0.48	$0.20	$0.20	na

Source: 1987, 1985 Annual Reports

In its annual report, PIP presents a side-by-side balance sheet showing current market value of its properties along with book value. The appraised value of the properties less outstanding debt less deferred taxes yields a current value net worth number which represents liquidation value. This number is divided by the number of shares outstanding to calculate net equity per share. The objective of these unorthodox accounting procedures is to equate market price per share with net current value per share. PIP, like most public real estate companies, trades at a substantial discount from this number.

Exhibit 14
PERINI INVESTMENT PROPERTIES
Discount to Net Current Value (as of December 31)

	1987	1986	1985	1984	1983
Shareholders' Net Equity					
-Cost Basis	(3,612)	4,448	7,300	(7,058)	846
-Current Value Basis	101,494	94,290	84,223	57,475	58,317
Shares Outst'g	4,304	4,371	4,373	3,292	3,233
Price/Share	15.38	14.25	11.50	11.63	na
Capitalization	66,174	62,287	50,290	38,270	na
Market-to-Current Value as % of Equity	65.20%	66.06%	59.71%	66.58%	na

Source: 1987 Annual Report, Trade Line

The fact that the underlying value is still not reflected in the marketplace makes PIP, and other undervalued real estate companies, a target for takeovers. In May, 1987, an investor group led by Robert Goodman approached PIP with an offer to buy the company at $21 a share. This offer was rejected, as was a new offer in April, 1988, of $19 a share. Goodman owned 7.4% of the 3.26 million shares, but the Perini family had a 30% controlling interest in the company.[5] PIP called its convertible preferred stock in April, and bought back about one-third of the 1.03 million shares. The remaining two-thirds of the preferred stockholders converted their shares to common stock, with expectations of further appreciation. Many of the shareholders are interested in long-term appreciation, in keeping with the objectives of the

company, but others would welcome a short-term gain. If the latter group sells to Goodman, a hostile takeover may be possible. In PIP's case, however, a takeover attempt would probably be thwarted by the family's controlling interests.

Current Status

PIP's stock is currently trading at $18 a share, or about 76% of asset value. PIP is continually working to equalize net current value with market value. The value is currently not reflected in the marketplace because of two factors. First, the stock sells at a high multiple of cash flow. As the company matures, it should be able to generate higher cash flow relative to the current value of its properties, become more profitable, and increase dividends. Second, the company is discounted because liquidation value may not always equal net current value. Current value is determined by appraisals, which are not generally recognized as accurate, reliable estimates of fair market value.

PIP is currently trying to increase cash flow per share by restructuring its portfolio through tax-free exchanges. In the future, it hopes to narrow the gap and achieve parity with net current value. In the short term, however, cash flow may decrease as new properties are acquired and the portfolio is diversified. PIP's assets are currently concentrated heavily in the San Francisco area and the office market. By

diversifying geographically, and by product type, the outlook for the long-term health of the company will be enhanced.

A temporary decrease in cash flow should be offset, in the long run, by a better balanced, less risky portfolio of assets which will maintain its value. Steele believes that many of PIP's shareholders have some understanding of real estate and are interested in long-term appreciation rather than short-term gains. For this reason, they are willing to tolerate a temporary dip in cash flow and earnings in return for enhanced value in the future.

BAY FINANCIAL CORPORATION

Background

In 1971, Cabot, Cabot, and Forbes (CC&F) formed a real estate investment trust with eight properties.[4] This trust operated for about six years, and was engaged primarily in land acquisitions, land purchase-leasebacks, and development loan financing. By 1976, management at the CC&F Land Trust had become dissatisfied with the REIT structure. Shares in the trust, which had been trading at $29 in 1973, had fallen to $1.5 in 1976, following the recession of 1973-1974. To maximize the potential of the trust's land holdings, they felt that more active involvement was required. Passive management regulations governing REITs prevented the trust from providing operating and management services to the properties in its

portfolio. In addition, key personnel were convinced that involvement in the development process would allow them to realize higher profits, since this business provides the greatest value added. In 1977, the CC&F Land Trust disqualified as a REIT. In 1978, the name was changed to Bay Colony Property Company, and the relationship with CC&F was discontinued. The company's decision to go into the development business was an easy one: it owned land, and wanted to maximize profits.

Organization

The corporation was organized as a parent company, Bay Financial, with two subsidiaries: Bay Colony Properties (BCP) and Bay Colony Development (BCD). Separate entities were formed to insulate each from potential problems of the other and to separate the development business from the operations and management division. Bay Financial currently develops, owns, and operates properties and attempts to maximize cash flows and long-term appreciation.

In 1980, Bay Financial reformulated its strategy and developed a business plan: seven target markets -- Boston, Philadelphia, Washington D.C., Atlanta, Jacksonville, Phoenix, and Dallas -- were identified, and a goal of a 20% compounded growth rate was established. The geographic decisions were based on the market knowledge of Bay Colony's managers,

locations of properties in its current portfolio, market forecasts, and a desire for diversification. The company also decided to diversify by product type, since it wanted to make the highest and best use of the land in its portfolio. Bay Colony currently develops and operates residential, office, and industrial buildings, as well as hotels. It still has substantial holdings of undeveloped land, and a number of projects in construction.

Performance

Bay Financial's performance over the last fifteen years has been weak; of the twenty-six companies in the sample study, Bay Financial was one of four with negative risk-adjusted quarterly returns. (Exhibit 7) In other words, investors were not compensated for the risk of their investment. A more detailed examination of the company's performance is presented in Exhibit 17. Returns have been very volatile, and were lower than the returns of the consolidated portfolio for all periods studied. Bay Financial did particularly poorly during the early to mid-70s. At this time, it was still a REIT. The company's performance appears to be improving, and may show greater improvement as more projects are built and leased and the company achieves closer parity with the current value of its assets.

Bay Financial has encountered similar problems to those

of Perini Investment Properties, and other public real estate operating companies. Management is constantly trying to close the gap between fair market value and shareholders' value. Andrew Neher, Chief Financial Officer, explained that Bay Financial's situation is particularly problematic because a large portion of its portfolio is composed of properties in various stages of lease-up, projects under construction, and raw land holdings. The company does not have a strong track record of completed projects, and thus the future value of its portfolio is very difficult to establish. Attempts to convince the public to "buy the future" can be successful for a mature company, such as the Rouse Company, but Bay Financial is currently trading at $16.25 per share, or less than 50% of the appraised value of its assets. Cash flow per share is not reported, since 83% of Bay Financial's investments are non-income producing. Included in the non-income producing category are fourteen projects (44% of total investments) on which construction is complete and leasing is underway. An additional 7% of Bay Financial's investments are currently under construction. The remaining 32% of non-income producing investments is primarily land holdings. Cash flow should improve, as projects currently in the lease-up and construction phases become income-producing assets.

Exhibit 15
BAY FINANCIAL CORPORATION
Discount to Net Current Value (as of May 31)

	1987	1986	1985	1984	1983
Shareholders' Net Equity					
-Cost Basis	53,448	62,205	58,000	56,578	47,254
-Current Value Basis	132,523	151,448	130,678	105,129	82,273
Shares Outst'g	3,354	3,351	3,185	3,097	3,174
Price/Share	$22.50	$24.63	$23.00	$19.50	$14.00
Capitalization	75,465	82,535	73,255	60,392	44,436
Market-to-Current Value as % of Equity	56.94%	54.50%	56.06%	57.45%	54.01%

Source: 1987 Annual Report

Bay Financial is a prime takeover target by those who believe that its assets are substantially undervalued by the market. In 1986, Country and New Town Properties (CNTP), a British company interested in acquiring property in the United States, bought 20% of the company's shares from Paragon, a Texas investor. CNTP subsequently increased its share in the company to 42%. CNTP was recently bought by the Pennant Corporation, an Australian company, which now controls 49% of the stock. An additional 46% of Bay Financial's stock is owned by two other corporate investors: the Depository Trust Company and Morgan Guaranty Trust Company. Neher attests to the difficulties of operating a public real estate operating company which suffers from the discount problem, and is an easy victim in an asset-hungry market.

Current Status

In the past few years, Bay Financial's managers have often considered the idea of taking the company private. Neher gave two primary reasons for his discontent with the public structure. First, the investing public has a short-term view, and demands consistent results, and high earnings/share. As a consequence, the market substantially undervalues the company, and it becomes an easy takeover target. Second, the corporate structure is not compatible with the development business. According to Neher, entrepreneurial project managers cannot be compensated with a piece of the project they develop because it is owned by the company's stockholders. In addition, corporate managers spend a substantial amount of their time dealing with reporting requirements, takeover attempts, and other activities which detract from their ability to focus on the real estate development and management business. For Bay Financial, the public structure has been "a constant battle that we shouldn't be in." (Neher)

Bay Financial is currently analyzing alternate structures. One plan under consideration would involve converting the operating properties in its portfolio to a REIT. The company could then concentrate on the investment advisor business, and be a private developer of other

projects.

THE KOGER COMPANY

Background

The Koger Co. dates back to 1895, when the O.P. Woodcock Company was formed.[5] Woodcock was a general contractor and developer in Jacksonville, Florida and was acquired by Ira Koger in 1954. In the late '50s, Koger entered the development business and opened the first suburban office park in the United States. Since that time, Koger has been exclusively involved with the development, ownership and management of suburban, mid-rise office buildings in the southeast and southwest.

Koger Properties Ltd., a Florida limited partnership, merged with Woodcock in 1969, to form Koger Properties Inc., a public corporation. In 1976, Koger sponsored a limited partnership, the Koger Partnership, Ltd. to purchase completed buildings in Koger office parks. This partnership currently owns 87 buildings, and has over 4,300 limited partners. The partnership was designed as a pure real estate investment, and provides tax-sheltered cash distributions to its investors.

In 1980, Koger restructured its operations, spinning off a new entity, the Koger Company (TKC), as an operating real estate portfolio. This restructuring allowed Koger to separate its earnings-oriented construction and development

business from its cash flow-oriented property management and ownership business. Koger transferred 136 completed and fully leased office buildings to TKC in 1980, and a separately-owned corporation was formed. Prior to the restructuring, Koger's stock was trading at about $24 a share; by the first quarter of 1983, the aggregate value had almost doubled: Koger was selling at $23.50 a share and TKC for $23.34. As with Perini, the market confirmed that the development and operating divisions were worth more separated than together.

Organization

These three separate entities give the investor a choice in levels of risk and return. The construction/development company (Koger) is the most volatile and risky. The partnership and TKC are more stable businesses and provide a steady return to investors. The partnership was formed to appeal to relatively large investors, interested in tax benefits. The main benefit of TKC is its liquidity; TKC also permits the small investor to have a piece of the business.[3] Management is shared between the three entities, and all completed properties are sold from Koger to either TKC or the partnership.

TKC is a cash flow business which currently owns 171 suburban office buildings. TKC has an agreement with Koger for the exclusive right to purchase all completed and leased

properties in twelve cities. Funds are advanced to Koger in the form of secured interim loans for the development of new projects; this financing is then applied against the purchase price of the buildings. TKC raises capital by borrowing, or by issuing new stock.

TKC pays out almost 100% of its cash flow in dividends, most of which comes from depreciation and is therefore a tax-free return of capital. This practice, however, necessitates regular public offerings to avoid sinking into negative net worth (the properties are carried at original cost) and to replenish the capital account. This dilution of stock could be avoided by selling or trading properties. Because the buildings are appreciating in real terms, their market value is considerably higher than book value. Koger's management, however, feels that the properties are too good to sell, and does not want to incur a taxable event.[21]

Performance

Koger Properties' performance has been quite strong over the fifteen-year period presented in Exhibit 18. Returns show more variation than the portfolio average, but performance during the '80s has improved. Koger Properties' coefficient of variation for the entire holding period is 2.6, compared with 1.8 for the consolidated portfolio and 4.2 for Bay Financial. Since the spin-off of the Koger Company from Koger

Properties, each company has done very well. TKC's returns have averaged three percentage points above the portfolio average; Koger's have been even higher, more than ten percent above the average for the consolidated portfolio. The relative stability of the company's returns may be attributed, in part, to the fairly high percentage of the return which comes in the form of dividends. This has insulated investors, to some extent, from the depreciation of the stock during recessionary periods.

The Koger Company, unlike most public real estate operating firms, has been extremely successful in communicating the value of its assets to investors and analysts. In fact, the outlook for the company is perceived to be so good that it trades at a premium to the net asset value of its portfolio. This anomaly can only be explained by Koger's impressive track record.

Exhibit 16
THE KOGER COMPANY
Discount to Net Current Value (as of December 31)

	1987	1986	1985	1984	1983
Shareholders' Net Equity					
-Cost Basis	58,274	62,232	41,560	9,033	21,390
-Current Value Basis	246,175	241,813	230,515	184,887	181,610
Shares Outst'g	12,369	11,568	9,905	7,686	7,552
Price/Share	$26.50	$29.63	$25.25	$24.25	$23.13
Capitalization	327,779	342,702	250,101	186,382	174,649
Market-to-Current Value as % of Equity	133.15%	141.72%	108.50%	100.81%	96.17%

Source: 1987 Annual Report, Trade Line

Koger's history of success is attributable to good management and careful strategy. Although the company is diversified geographically, it builds only one product type - suburban office buildings. The company uses prototype designs and does some of its own design and general contracting. This approach eliminates "middlemen", saves on architectural and engineering fees, and makes prediction of costs more reliable. These savings translate into a 20% to 30% cost advantage over competitors, and Koger can offer lower rents and keep its buildings fully leased. Many of its tenants are blue chip, triple-A rated tenants who are located in various Koger buildings throughout the southeast and southwest. Management believes that tenants are attracted by a familiar product, as well as good services and low rents.

Koger's low costs, concentration in suburban, sunbelt markets, and selective marketing of high credit rate tenants has insured its success, even during recessions and in overbuilt markets. The company can break even at about 65% occupancy in most office parks, but has averaged over 90% occupancy for the last 25 years. These factors, combined with low leverage -- with assets of $479 million (current value), only $171 million, or 36%, is carried in debt -- have made Koger and TKC very profitable companies, and have also earned them a reputation as solid, low risk investments. TKC trades at a premium to its net asset value because investors and analysts are confident about future performance.

Current Status

Koger's management has recently issued a proposal to merge the Koger Company with Koger Properties. Form S-4 was filed with the Securities and Exchange Commission on June 24, 1988 and a special stockholders' meeting called for July. The plan to merge the companies was prompted by several factors, including the Tax Reform Act of 1986 (TRA '86). Under the new alternative minimum tax (AMT) for corporations, earnings and profits replace book income as the measuring factor in 1989.[6] TKC, which was formerly a non-tax paying entity, would be significantly affected by the AMT, since it would incur taxes on the difference between income for tax purposes

and income for accounting purposes. Since depreciation schedules are also lengthened under TRA '86, annual deductions are lower and taxable income may be increased. TKC would incur tax liability under the new tax law, reducing its returns. Distributions to shareholders might also be taxed. By combining TKC with Koger (which is already a taxpayer), taxable gains from one division can be offset by losses from another, increasing opportunities for tax shields.

In addition to the tax issue, Koger's management felt that the separation of the development arm from the operations division was causing some inefficiencies and confusion. By consolidating, the company would become a stronger organization better able to raise funds at an attractive rate. The combined financial strength and resources would improve Koger's access to the markets and lower its cost of capital.

After the merger, Koger plans to sponsor a REIT which will have a similar function to the current operations of TKC. The REIT will buy completed, fully-leased properties from Koger and may advance funds to the company to be utilized for the development of new properties. Koger believes that the REIT is currently the optimal structure for holding an operating real estate portfolio, because of the new tax laws which favor pass-through entities as the preferred holder of income-producing properties. TKC will not convert directly to a REIT because it would be taxed on the difference between

current value and book value of its assets upon conversion. The merger of the companies and subsequent sponsor of a REIT will be a non-taxable event.

SUMMARY of CASE STUDIES

The case studies illustrate different strategies that income-oriented companies have adopted for dealing with the peculiarities of the public structure. No one strategy can be offered as a model, because each company has unique organizational and product characteristics. Each is also at a different stage of maturity, has unique goals, and may appeal to a different class of investor. However, some generalizations can be made.

Investors and analysts base their estimates of a company's value on proven performance and success. Therefore, a company like Perini Investment Properties which is relatively young, or Bay Financial Corporation which does not have a track-record of generating income-producing assets, will go through a "trial" period when it is undervalued relative to estimates of the fair market value of its properties. The success of the Koger Company suggests that the market favors relatively low-risk companies which generate a steady stream of tax-free cash flow to investors.

The successes of Koger and Perini, and the market's response to each company's "spin-off" strategy, support the

notion that earnings-oriented businesses do not mix well with cash-flow-oriented businesses. By splitting development from ownership and management, the value of each entity may be enhanced.

Changes in tax laws, such as the new alternative minimum tax regulation, can have a significant impact on the relative attractiveness of the public company structure. Although private companies also bear the risk of detrimental tax law changes, the problem is magnified for public companies which must consider their shareholders' tax status, as well as the company's. Complex and costly regulations and reporting requirements are also a drawback to the public structure. Takeover attempts are another threat which can detract from management's ability to focus on the business of operating and developing real estate.

For each company, all of these issues must be weighed against the corporate structure's advantages of liquidity, access to capital, and flexibility of operations.

Exhibit 17

BAY FINANCIAL CORPORATION - HOLDING PERIOD ANALYSIS

TIME PERIOD	TOTAL	APPR.	INCOME	EXCESS	COEFF of VAR.
AVERAGE ANNUAL RETURN					
3/73-2/88	13.76%	3.13%	10.63%	1.38%	4.19
GEOMETRIC RETURN					
Full Period					
3/73-2/88	-1.82%	-3.28%	1.08%	-9.94%	4.19
Business Cycle					
Peak-Trough					
4/73-1/75	-67.77%	-71.12%	6.87%	-71.20%	(0.73)
3/81-4/82	6.25%	6.25%	0.00%	-5.70%	2.84
Recession					
1/74-1/75	-72.50%	-75.42%	6.39%	-75.59%	(0.70)
3/81-4/82	6.25%	6.25%	0.00%	-5.70%	2.84
Downswing(P-T)					
4/73-1/75	-67.77%	-71.12%	6.87%	-71.20%	(0.73)
3/81-4/82	6.25%	6.25%	0.00%	-5.70%	2.84
Upswing(T-P)					
1/75-2/81	18.41%	18.41%	0.00%	9.01%	1.84
4/82-2/88	7.86%	7.16%	0.66%	0.28%	2.25
Cycle					
Peak-Peak					
4/73-2/81	-10.40%	-12.29%	1.29%	-18.10%	5.23
2/81-2/88	8.67%	8.11%	0.52%	-0.10%	2.34
Trough-Trough					
1/75-4/82	16.03%	16.03%	0.00%	6.09%	1.95
4/82-2/88	7.86%	7.16%	0.66%	0.28%	2.25

Source: Trade Line, IDD Information Services, 1988

Exhibit 18
HOLDING PERIOD ANALYSIS

KOGER PROPERTIES INC.

TIME PERIOD	TOTAL	APPR.	INCOME	EXCESS	COEFF OF VAR
AVERAGE ANNUAL RETURN					
3/73-2/88	23.04%	16.36%	6.68%	13.83%	2.60
GEOMETRIC RETURN					
Full Period					
3/73-2/88	8.50%	2.62%	4.47%	-0.40%	2.60
Business Cycle					
Peak-Trough					
4/73-1/75	-40.87%	-40.96%	0.37%	-46.62%	9.67
3/81-4/82	-6.91%	-13.54%	7.73%	-17.65%	35.09
Recession					
1/74-1/75	-23.86%	-23.99%	0.44%	-31.05%	3.11
3/81-4/82	-6.91%	-13.54%	7.73%	-17.65%	35.09
Downswing(P-T)					
4/73-1/75	-40.87%	-40.96%	0.37%	-46.62%	9.67
3/81-4/82	-6.91%	-13.54%	7.73%	-17.65%	35.09
Upswing(T-P)					
1/75-2/81	29.64%	24.93%	4.05%	19.20%	1.55
4/82-2/88	27.96%	17.23%	9.52%	19.26%	1.10
Cycle					
Peak-Peak					
4/73-2/81	0.04%	-3.02%	3.39%	-8.52%	3.45
2/81-2/88	13.17%	4.15%	8.84%	3.96%	1.91
Trough-Trough					
1/75-4/82	21.84%	16.60%	4.73%	11.22%	1.80
4/82-2/88	27.96%	17.23%	9.52%	19.26%	1.10

THE KOGER COMPANY

TIME PERIOD	TOTAL	APPR.	INCOME	EXCESS	COEFF OF VAR
AVERAGE ANNUAL RETURN					
4/82-2/88	21.97%	11.44%	10.53%	13.637%	0.878
GEOMETRIC RETURN					
4/82-2/88	20.29%	9.92%	10.36%	12.03%	0.878

Source: Trade line, IDD Information Services, 1988

CHAPTER IV

CONCLUSION

The public real estate company has been examined from two perspectives: that of the investor and that of the real estate developer or manager. As demonstrated by the historical performance record, investment in real estate stocks does not offer the benefits of direct holdings of real estate. Real estate stock returns tend to be synchronous with the returns of the S&P, and thus do not provide diversification for most investors. Real estate stocks do not appear to act as an inflation hedge, since the returns are negatively correlated with inflation indices. However, the analysis suggests that the primary benefit of investment in real estate companies is a high level of risk-adjusted return. The market for real estate stocks appears to be an inefficient one in which the investor is well-compensated for the risk he bears. As the market becomes better-educated, and real estate stocks become more heavily traded, this inefficiency may disappear. At this point, it appears that the investor can profit by taking advantage of the inefficiency in the marketplace. Real estate stocks are an appropriate investment for the small investor with little capital. Large corporate investors, however, can probably achieve greater diversification and higher potential profits through direct investment in real estate properties.

For the real estate developer or owner, the public structure is attractive because it offers liquidity and access to capital. For some companies, particularly cash-flow oriented companies engaged in property ownership and management, the problem of communicating true asset value is a significant drawback. As companies mature, reporting standards improve, and the market becomes increasingly sophisticated, this problem may become less acute. The public company must contend with other problems, including onerous regulation and reporting requirements and changes in tax laws. The suitability of the public structure for a company depends on a variety of factors and individual characteristics. The publicly-traded company is a legitimate vehicle for many developers and income-oriented real estate companies, and is an important segment of the real estate securities market.

NOTES

1. Correlation coefficients were estimated by regressing the real estate stock returns against the returns of the Standard and Poors 500 index, an index of long-term corporate bonds, the 90-day Treasury bill, the Federal Funds rate, and the Consumer Price Index. Real estate stock returns are based on prices from the last day of each quarter; all other returns are based on quarterly averages.

2. Excess return is defined as the quarterly return (income plus appreciation) of a stock minus the quarterly return of the 90-day Treasury bill.

3. This section is based on an interview with Thomas Steele, Chief Executive Officer, Perini Investment Properties on June 23, 1988 and on information from annual reports.

4. This section is based on an interview with Andrew Neher, Chief Financial Officer, Bay Financial Corporation on July 8, 1988, and on information from annual reports.

5. This section is based on telephone interviews with Seabury Stoneburner, Chief Financial Officer, and W. Lawrence Jenkins, Secretary, the Koger Company during the month of July, 1988. Information from annual reports and from Form S-4 filed with the Securities and Exchange Commission on June 24, 1988 was also used.

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