BROAD OR SPECIFIC: PENSION FUND REAL ESTATE INVESTMENT STRATEGIES

by

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Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE in Real Estate Development at the

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Submitted to the Department of Urban Studies and Planning on December 16, 1994 in Partial Fulfillment of the Requirements of the Degree Master of Science in Real Estate Development at the Massachusetts Institute of Technology

ABSTRACT:

The three trillion dollar pension fund industry is tired of hearing the commonly stated phrase, "...they made millions by starting with billions...". This phrase is usually uttered when people are referring to the performance of pension fund real estate investments during the 1990-1991 recession. This thesis attempts to provide a base of research on pension fund real estate investment strategies that will assist pension funds in their future real estate investing.

The thesis examines the goals and the processes of implementing those goals of the real estate investment strategies of the 4th and the 7th largest US pension funds. Each of these pension funds have multi-billion dollar real estate investment portfolios.

The need for pension funds to select optimal real estate investment strategies is driven by three recent developments: the well-documented havoc which has been wreaked on pension fund real estate investments by the recession, the recent transformation of the real estate industry by the many new real estate investment vehicles which are available, and the current pension fund industry-wide underfunding problem.

In addition to giving many insights into pension fund real estate investing, the analysis of the two pension funds' real estate investment strategies supports the hypothesis that an investment strategy with broadly defined goals and processes to implement the goals may be more successful than a strategy with specific goals and specific implementation processes.

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CHAPTER ONE - INTRODUCTION

I. OVERVIEW

On June 15, 1994, Labor Secretary Robert Reich stressed to Congress that the chronic underfunding of pension funds¹ could produce a crisis similar to the savings and loan debacle. He stated that pension fund underfunding was \$53 billion, or nearly double the 1987 level². (Associated Press, 1994)

Reich stated that the nation's largest underfunded pension liability is General Motors (GM). GM estimated that their pension fund is underfunded by \$24 billion.³ GM officials said that they expect to reduce a significant portion of this underfunding by earning superlative investment returns which will boost the investment performance of the pension fund. The challenge, however, will be developing investment strategies to bring this about at a time when many investment experts forecast a toughening investment climate. (Scism, 1994)

Experts explained that GM, like many big companies (e.g., private pension funds), have been holding down the amount of money they set aside for retirees by betting that they

¹A pension fund is a promise by an organization (e.g., Chrysler, Ohio Police & Fire, etc.) to financially take care of their workers (e.g., employees of Chrysler, police and fire personnel in Ohio, etc.) in their old age. The organization traditionally invests funds in stocks, bonds, and real estate (e.g., assets) and from the assets' investment returns they pay their workers.

²The \$53 billion was as of year-end 1992.

³The \$24 billion was as of year-end 1993.

could reap high rates of return from their pension fund investment strategies. According to a recent JP Morgan & Company study, by the end of 1994 more than half of the 200 largest private pension funds (e.g., General Motors) could be underfunded. Callan Associates says the problem is even worse at the public level, where on average only 89% of the money needed to provide the state and municipal employees with pensions (e.g., public pension funds) has been set aside. (Pulliam, 1993)

According to the Frank Russell Company, investment managers of public and private pension funds are scouring the globe for investment strategies which will provide higher yielding investments. In seeking higher returns, however, the investment managers are accepting higher risks and are putting part of their retiree's nest eggs on the line. (Pulliam, 1993)

It is imperative for pension funds to develop superior investment strategies for investing in stocks, bonds, and real estate. Past research⁴ on real estate investment strategies, though, has typically concentrated on perspectives other than that of pension funds. These perspectives include real estate development companies, life insurance companies, or pension fund real estate investment advisors.

This thesis researches real estate investment strategies from the pension funds' perspective by qualitatively comparing and contrasting two pension funds' real estate investment

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⁴Past research includes, but is not limited to, Adamakakis, <u>Strategic Management: The Evolution of Strategy in A Real Estate Company</u>, 1993; Atkins, <u>Market Research: The Changing Needs For Real Estate Investment Decision-Making In The 1990's</u>, 1991; Cohan, <u>Strategies and Structures for Institutional Real Estate Investors with Troubled Assets</u>, 1992; and Thorton, <u>Real Estate Development Firms as Learning Organizations:</u> Systems Thinking as a Methodology For Strategic Planning In Real Estate Development, 1992.

strategies based on a four quadrant matrix developed in 1993 by P.J. Idenburg. Idenburg's matrix organizes the opinions of many prominent researchers in management studies into four views of strategy development. The matrix is used to examine the pension funds' real estate investment strategies.

This thesis will address the following question: Are organizations that set specific goals⁵ and specific procedures of implementation⁶ to achieve the goals more or less successful than organizations that do not?

The remainder of this chapter provides recent statistics on the pension fund industry and its real estate investments. The chapter also describes the organizations who typically invest a pension fund's money in real estate investments and provides data on these organizations' recent performance.

The chapter then presents various reasons why pension funds have invested, and are expected to continue investing, in real estate. The chapter then briefly describes traditional types of real estate investment vehicles used by pension funds, and reviews various alternative types of real estate investment vehicles which pension funds are just beginning to use.

⁵A specific goal, for example, could be a toaster manufacturer establishing a goal of producing and selling 400,000 red with a white stripe three temperature setting toasters each month of the coming year.

⁶A specific procedure of implementation, for example, could be the toaster manufacturer outfitting the manufacturing plant with the latest in red with a white stripe three temperature setting toaster manufacturing equipment and hiring and training a staff to operate the equipment.

As of September 30, 1993, the assets of the 1,000 largest US pension funds were valued at \$2.7 trillion. The top 200 US pension funds represented about 76% of the \$2.7 trillion, or \$2.05 trillion. As displayed in Figure 1.1, about 9% or \$181 billion of the 200 largest funds' assets are invested in real estate related investments. (Barr, 1994(a))

Figure 1.1 - Top 200 Pension Fund's Real Estate Investments

Real Estate Equities	<i>\$ in millions</i> \$54,404
Real Estate Mortgages	\$49,070
Real Estate Mortgage-Backed Securities	\$77,330
Total Pension Fund Real Estate Investment	\$180,804
Note: Figures as of September 30, 1993	
Source: Pensions & Investments January 24, 1994	

According to the Frank Russell Company, about 70% of the \$181 billion invested in real estate was invested in the last 15 years. (Bergsman, 1993) During these last 15 years approximately 83% of the \$181 billion was invested by the organizations listed in Figure 1.2. (Editor, 1993) The organizations listed in this figure are commonly referred to as Fee Advisors. The Fee Advisors are usually compensated based on the value of the invested asset. LaSalle Advisors, for example, would receive .6%, or \$300,000 for investing \$50 million of Ohio Police & Fire Personnel's Pension Fund. (Editor, 1994)

Figure 1.2 - 7	The 25 Largest	Real Estate F	Pension Fund	Fee Advisors
-----------------------	----------------	---------------	--------------	--------------

	(\$ millions)			(\$ millions
Aetna	\$20,332	Alex. Brown Kleinwo	rt	\$1,432
Prudential Asset	\$18,247	Pacific Mutual Life		\$1,423
Equitable Real Estate	\$17,087	McMorgan		\$1,373
CIGNA In vestments	\$9,932	Sentinel Real Estate		\$1,361
Principal Financial	\$8,692	New York Life		\$1,251
Travelers	\$7,969	Allmerica Asset		\$1,043
Copley Real Estate Advisors	\$7,372	Kennedy Associates		\$1,034
JMB Institutional Realty	\$6,867	In vestment Advisers		\$914
John Hancock Financial	\$5,361	Jones Lang Wootton		\$908
J.P. Morgan	\$4,055	Citicorp Real Estate		\$876
Yarmouth Group	\$3,950	Metropolitan Life		\$856
Heitman Advisory	\$3,521	Boston Co.		\$825
TCW	\$3,500	Capital Associates		\$780
GE Investments	\$2,712	Latimer & Buck		\$608
Massachusetts Mutual Life	\$2,685	Bear Steams Asset		\$600
Corporate Property In vestors	\$2,425	Union Labor Life		\$49]
RREEF Funds	\$2,215	First Asset		\$395
LaSalle Advisors	\$2,200	Balcor		\$384
Aldrich, Eastman & Waltch	\$1,500	Wells Fargo Realty		\$341
O'Connor Group	\$1,492	MIMLIC Asset	•	\$325
L.	,		TOTAL	\$149,334
Source: Pensions & Investment.	s May 17, 1993			

The last few years of real estate investing by these Fee Advisors, however, have been characterized by their clients (e.g., pension funds) spending more time totaling their losses than reflecting on their gains. For example, the Employees of the State of Washington Pension Fund lost a stunning 36% of their entire real estate portfolio.⁷ Copley Real Estate Advisors was their Fee Advisor and has subsequently been replaced. (Hylton, 1992) Advised by JMB, Massachusetts, Oregon, AT&T and others lost \$424 million on their real estate investment in Randsworth Trust. JMB also advised the California Employees Pension Fund to invest in Catellus, an owner of raw land in many Western States. The California Employees Pension Fund now has less than a fifth of their original \$398 million investment. (Hylton, 1992)

⁷The 36% loss was as of December 1992.

These pension funds' experiences are only a small portion of pension funds' real estate losses over the last few years. A 1992 article in Fortune Magazine tallied real estate losses by Fee Advisors rather than by specific pension funds. The losses were as follows: Aldrich, Eastman, & Waltch, \$470 million; JP Morgan, \$515 million; Aetna, \$750 million; JMB, over \$1 billion; and the Boston Company, \$1.7 billion. (Hylton, 1992)

These real estate losses have contributed to the underfunding problem in the pension funds. Experts within the funds are using this situation as the impetus to develop investment strategies that provide superior results. The following section presents recent data on why pension funds have typically invested in real estate and why they are expected to continue to do so.

III. RECENT DATA (1992-1994)

Pension fund experts have begun to question the role of real estate investments in pension fund portfolios. Experts point to past unsuccessful real estate investment strategies and the current need for high investment returns in discussing whether strategies should be developed. This is highlighted by recent changes among some of the nations largest pension funds. For example, California Employees Pension Fund is the second largest US pension fund with investments totaling \$77 billion. This pension fund is the largest real estate investor of all US pension funds, with \$17.4 billion, or about 23% of the pension fund invested in real estate. (Editor, 1994) At the end of 1993, California Employees Pension Fund showed a \$300 million decrease in their real estate investments. This prompted Thomas Flanigan, the fund's Chief Investment Officer to publicly comment that the fund is reassessing the role of real estate in their investment strategy. (Barr, 1994(b)) Flanigan's comment summarizes the current thoughts of many major pension funds in regard to real estate investing. While many investment experts plan to retain real estate investments in their investment portfolios, they are struggling to find the most profitable investment strategy.

Advantages to Real Estate Investments

Real estate investments are an important component of pension fund investment portfolios, and despite the setbacks caused by the recession, there is a general belief that real estate is still advantageous. (Weddig, 1992) Real estate investments are excellent for pension funds because the funds represent long-term liabilities (e.g., retirement benefits, disability insurance, etc.). These long-term liabilities are exposed to many risks, including inflation, interest rate, and business cycle to name a few. Real estate investments match these risks well. (Weddig, 1992) Real estate, like other hard assets such as commodities and minerals, is a long-term asset which generally provides some form of inflation protection. (Lenzner, 1994)

Mr. Droms, a Georgetown Finance Professor, suggested that when devising asset allocation plans, a company should consider investing in a hard asset like real estate as well as stocks and bonds. He noted that real estate, more than any other hard asset, will give better long-term returns. (Clements, 1993)

• Disadvantages to Real Estate Investment

Real estate's two major disadvantages are poor liquidity and measurement. Unlike stocks and bonds, real estate does not have a public market where property is continually bought and sold, thereby creating liquidity and daily market values. Consequently, real estate investors cannot determine the value of their real estate investments at any specific moment in time. (Weddig, 1992) After weighing the advantages and disadvantages of real estate investing, real estate investments still remain an attractive pension fund investment. Success in real estate is achievable for pension funds through proper strategic planning. (Weddig, 1992)

• Real Estate As Part of a Pension Fund's Asset Allocation

Real estate should be a part of a well diversified pension fund portfolio despite its poor performance during the recent recession. (Smith, 1992) Mean variance portfolio theory indicates that an optimal investment strategy requires real estate investments to comprise about twenty percent of a pension fund's assets. (Smith, 1992) Currently, the percentage of pension fund asset allocations in real estate is below its optimal level with only five percent of their resources in real estate. Greater allocation in real estate investments will reduce the total pension fund investment portfolio's risk. Furthermore, compared to other assets real estate will more successfully diversify the pension fund. (Smith, 1992)

Investment experts also insist that the asset allocation choice is the first and most important decision for an investment portfolio. An analysis completed in 1991 by Brinson, Singer, and Beebower stated that over a ten year period the investment returns for eighty-two large pension fund investment strategies was almost directly correlated to the pension fund's asset allocation policy. (Clements, 1993)

IV. REAL ESTATE INVESTMENT VEHICLES

The following paragraphs provide information on traditional and alternative real estate investment vehicles.

• Traditional Pension Fund Real Estate Investment Vehicles

Traditional real estate investment vehicles are real estate equities and real estate mortgages. All of the \$150 billion in real estate investments listed in Figure 1.2 fall into one of these two categories. A real estate equity is a piece of property which has been purchased (e.g., an office building) and a real estate mortgage is when money has been lent on a piece of property (e.g., a mortgage on an industrial building). (Editor, 1994)

Commercial Mortgage Obligations (CMOs)

As shown in Figure 1.1, there are about \$77 billion in pension fund assets invested in mortgage backed securities⁸, commonly referred to as either residential or commercial mortgage backed securities obligations. Historically, residential mortgage backed securities obligations have been more popular with pension funds than commercial mortgage backed securities obligations (CMOs). CMOs, however, have recently gained acceptance in the pension fund investment industry. Pension funds are the principal buyers of CMOs because of their attractive yields. Karen Sabath, a partner at Black Rock Financial Management, which raised \$90 million for a CMO fund, thought CMOs could yield 5% more than comparable seven to ten year Treasury's. (Jereski and Pacelle, 1993) According to Commercial Mortgage Alert Newsletter, the total amount of CMOs issued in 1993 was close to \$18 billion. The newsletter predicts that CMOs will be the next large growth area. (Jereski and Pacelle, 1993)

At the end of 1993, New England Mutual Life Insurance Company issued a \$1 billion CMO offering. Goldman Sachs is currently marketing this CMO to pension funds.

⁸Information is unavailable as to what percentage of these mortgage backed securities are residential or commercial.

Phoenix Mutual Life Insurance Company and the Kemper Corporation have also both recently issued \$400 million CMOs. (Jereski and Pacelle, 1993)

While the overall market for CMOs is still in its infancy, CMOs have nonetheless become a major vehicle for providing real estate mortgages on income producing property. Carl Kane of Kenneth, Leventhal & Company believes that the CMO market's potential is enormous and could possibly grow to \$20-\$25 billion a year later in the decade. (Harney, 1993)

• Real Estate Investment Trusts (REITs)⁹

The National Association of REITs' Index revealed a 19.65% total return in 1993, outperforming broader market indexes for the third consecutive year. In addition to superior performance, market demand for REITs in 1993 was high. According to Realty Stock Review, 1993 REIT initial public offerings were over \$8.6 billion¹⁰. (Vinocur, 1994(b))

• Real Estate Mutual Funds

Pension funds and individual investors have been investing heavily in mutual funds which specialize in holding REITs and other real estate related stocks. This is evidenced by the \$100 million increase in Fidelity's real estate mutual fund, the oldest and most successful real estate mutual fund in the nation, with assets approaching \$750 million. (Vinocur,

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⁹A REIT is a real estate company or trust that has elected to qualify under certain tax provisions to become a pass-through entity that distributes to its shareholders substantially all of its earnings in addition to any capital gains generated from the sale or disposition of its properties. (Brueggeman and Fisher, 1993)

¹⁰Information was unavailable on what percentage of this \$8.6 billion was bought by pension funds, individual investors, or other types of investors.

1994(a)) Other real estate mutual funds include Evergreen Global Real Estate Equity Fund, Cohen & Steers Realty Shares, and PRA Real Estate Securities Fund. The PRA Real Estate Securities Fund posted a 1993 return of 38.43%. Investors have recently responded to this excellent performance by investing over \$50 million in PRA's fund, doubling the fund's assets. (Zipser, 1993)

V. THESIS OUTLINE

Three interesting conditions have been presented. First, pension funds are in need of high investment returns. Second, pension funds' real estate investments during the recent recession did not perform as well as expected. Third, investment experts still think pension funds should allocate a portion of their investments to real estate.

These conditions have led pension funds to examine their real estate investment strategies. This thesis will look closely at the real estate investment strategies of two pension funds. The thesis will use recent research in management studies to examine the goals and the processes of implementing the goals of each pension fund.

Idenburg's research, used to examine the pension funds' strategies, is presented in Chapter Two. Chapter Three documents and analyzes the data collected from the two pension funds. Chapter Four compares and contrasts the pension funds in order to draw specific as well as general conclusions about their real estate investment strategies. These conclusions may assist other pension funds that are developing new real estate investment strategies.

CHAPTER TWO - LITERATURE REVIEW AND FRAMEWORK

I. INTRODUCTION

This thesis describes the goals and the processes of implementing these goals of two pension funds. This chapter introduces and analyzes Idenburg's four quadrant matrix. This matrix will serve as a framework in which the investment strategies are examined.

II. IDENBURG'S MATRIX

Idenburg, a prominent researcher in management studies, engaged in a 1993 research project concentrating on strategy development¹¹. Idenburg believed deeply in the importance of strategy development:

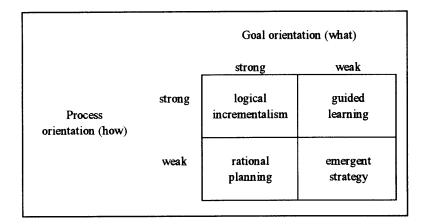
"The future of our organizations is not inevitable. We can influence that future if we know which objectives we must pursue in order to achieve a desired position." (Idenburg, 1993, p. 133)

Idenburg described an ongoing debate about the foundations of strategy development. Ansoff, who published a succinct essay in the mid 1970's on the foundations of strategy development, believes that strategy development is *prescriptive* in that it leads to guidelines for management activities. Mintzberg, who through various publications has made his view on strategy development well known, believes that strategy development is *descriptive* and can only be described in hindsight as a pattern which is not formed deliberately. (Idenburg,

¹¹Strategy development is a field of study within management studies.

1993) There is, however, some commonality between the arguments. Both arguments address specific decisions regarding the use of resources such as finance, people, and time. This issue has been synthesized by Idenburg into two fundamental dimensions: goal orientation (what) and process orientation (how). Idenburg used these two dimensions to organize the many schools of thought on strategy development into four views: logical incrementalism, guided learning, rational planning, and emergent strategy. These two dimensions and four views are displayed as a matrix in Figure 2.1.

Figure 2.1 - Idenburg's Matrix on Four Views on Strategy Development

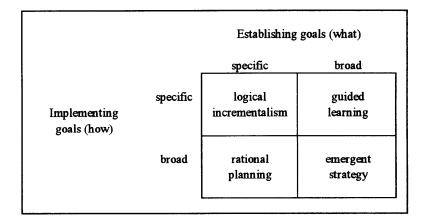


Idenburg's matrix, however, has three confusing aspects which he does not adequately define. The first confusing aspect is how he defines process orientation. It is unclear whether his intention is for this term to be interpreted as the implementation of the goals (e.g., deciding to make a red car) or as the implementation of strategy development (e.g., engaging in a meeting of an organization's top management to decide what the organization's strategy should be concerning auto production and color selection). The second confusing aspect is Idenburg's method of dividing the matrix into strong and weak components. It is unclear whether he intends the terms to be value laden. The third

confusing aspect is his use of the term goal orientation in reference to the establishment of an organization's goals.

Because of the possible confusion in using the matrix, these aforementioned aspects of the matrix have been clarified for this thesis. The matrix has been adapted as displayed in Figure 2.2. The first clarification is that process orientation has been changed to implementing goals. This change implies that this division of the matrix concerns analyzing the processes of organizations implementing their goals. The second clarification is changing the strong and weak terms to "specific" and "broad" to be more value neutral. The third clarification is that the term goal orientation has been changed to "establishing goals" to indicate more clearly that goal orientation is referring to the establishment of goals.

Figure 2.2 - Idenburg's Matrix on Four Views on Strategy Development Adapted



The horizontal axis of the matrix, establishing goals, is divided into specific and broad categories. An example of establishing a goal is when a clothing manufacturer sets a target sales level of 300,000 shirts this year. The division of specific and broad distinguishes between different types of goals. A strategy that is <u>specific in establishing goals</u>, for

example, may define how many and what type of shirt manufactured will sell each month of the summer. A strategy that is <u>broad in establishing goals</u> may only define that it will sell 150,000 shirts in total the first six months of this year in the markets it serves.

The vertical axis of the matrix, implementing goals, is also divided into specific and broad categories. Implementing goals describes when an organization creates processes to implement its goals. An example of this is when the clothing manufacturer establishes a method to sell 300,000 shirts. A strategy that is <u>specific in implementing goals</u> may call for purchasing a fleet of trucks and installing a computerized inventory system to deliver shirts to retail stores during the summer months. A strategy that is <u>broad in implementing goals</u> might only purchase the fleet of trucks. The four views of strategy development are discussed in the following paragraphs.

i. Logical Incrementalism

As displayed in Figure 2.3 in the upper left hand corner of the matrix, the logical incrementalism view is characterized by establishing specific goals and specific means of implementing the goals. An example of this type of organization is a clothing manufacturer¹² whose specific goal is to make 1,000,000 green and blue striped shirts per month. To accomplish this goal, the company hires twenty highly skilled tailors and establishes a specific process to manufacture the shirts by providing shirt sewing training, an employee manufacturing guide, and sophisticated new computerized manufacturing technology.

¹²This clothing manufacturer example will be used and modified (e.g., specific goals and processes to broad goals and processes) throughout the chapter in explaining the four views of strategy development.

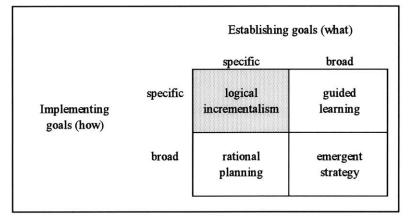


Figure 2.3 - Logical Incrementalism View on Strategy Development

According to Duncan, a researcher in management studies, in the logical incrementalism view the strategy development process is a purposeful, effective, proactive management technique that is capable of improving and integrating all the phases of strategy development. Duncan provides the following example as an illustration of R.J. Reynolds (RJR) using logical incrementalism in their strategy development process:

"For almost a century after its founding, RJR pursued the goal of producing and selling tobacco products. In the 1960s the report of the US surgeon [general] on the harmful effects of cigarette smoking encouraged RJR to reconsider its historical strategy. The Company concluded it should diversify and moved rapidly into diverse areas like consumer goods. In 1962, 98% of RJR's business was devoted to tobacco products. In 1983, less than 50% of the business was devoted to tobacco products. Foods and beverages accounted for almost 30%, shipping for a little over 10%, and energy for another 8%. The mix of RJR's product line changed radically. Clearly Reynolds' was willing to make more than small, incremental movements from present strategies.

A reassessment by management convinced decision makers that the diversification strategy was not working so a decision was made to move 'back to basics'. The Company's energy holdings were sold to Phillips Petroleum and its Sea-Land Containers were 'spun off' under serious financial problems. In 1984, tobacco products again accounted for over 75% of Reynolds' revenues.

In the 1960s RJR faced an inconsistency in its traditional product lines and social environment. As a result it searched for new directions. By deciding to move outside consumer products, the strategy of successive limited comparisons suggested by muddling through was abandoned in favor of the 'amplification' that characterizes logical incrementalism. High oil prices and scarce energy provided the opportunistic windows Reynolds needed to first get in and then the low prices provided the incentive to get out of energy products. Even the informed observer would have difficulty determining exactly when the actual strategic choices were finalized." (Duncan, 1987, p. 36)

ii. Guided Learning

As displayed in Figure 2.4 in the upper right hand corner of the matrix, the guided learning view is characterized by establishing broad goals and specific means of implementing the goals. An example of this type of organization is a clothing manufacturer whose broad goal is to make 12,000,000 shirts this year, without specifying the type of shirt or the

monthly amount manufactured. To accomplish this goal, the company hires twenty highly skilled tailors and establishes a specific process to manufacture the shirts by providing shirt sewing training, an employee manufacturing guide, and sophisticated new manufacturing computer technology.

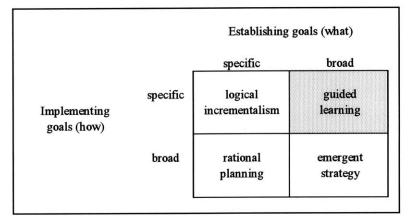


Figure 2.4 - Guided Learning View on Strategy Development

In 1991 Argyris, a proponent of the guided learning view, determined that an organization will succeed in learning only by addressing a basic dilemma: while success depends on learning, most people do not know how to learn. Argyris also believed that this dilemma was compounded because most people in organizations are poor learners.

Many organizations have difficulty addressing this learning dilemma and as a result make two common mistakes. The <u>first</u> mistake is that most managers believe learning is about solving problems. Thus managers focus on identifying and correcting errors in the external environment. In order to promote learning, managers must look inward and reflect on their behavior. They must identify the ways they contribute to the problems and then modify their actions accordingly. Managers must understand that the manner in which they solve problems can be a source of problems in its own right. (Argyris, 1991) After attending a meeting of consultants discussing a recently completed consulting assignment, Argyris noted these consultants looked at the external environment rather than looking within themselves. At the meeting, the lead consultant openly presented some mistakes and asked the other consultants to reflect on these mistakes and on their own performance. The consultants had little trouble discussing the lead manager's mistakes, but when confronted with analyzing their own performance they responded by looking outside of themselves and criticizing the client as being uncooperative and arrogant. (Argyris, 1991)

In effect, the consultants believed they were helpless to act differently, not because of their own limitations but because of the limitations they observed. The consultants' defensive behavior inhibited their learning process. According to Argyris, the consultants exhibited single-loop learning. If the consultants had reflected on their own behavior, identified ways in which they contributed to the problems, and made provisions to change their actions in the future, this would be, according to Argyris, double-loop learning. (Argyris, 1991)

Argyris determined that managers are typically skilled at single-loop learning and are not usually skilled at double-loop learning. The lack of good double-loop learning skills can be attributed to the success that many managers have experienced. Managers consequently have never needed to learn from their mistakes. (Argyris, 1991)

The <u>second</u> most commonly made mistake is that many experts believe that successful learning is only a matter of providing proper motivation. Organizations believe that learning will follow if people have the right attitudes and commitment. Argyris, however, believed that organizations must identify how people use cognitive rules¹³ to implement their actions (i.e., to think) in order to create successful learning. (Argyris, 1991)

iii. Rational Planning

As displayed in Figure 2.5 in the lower left hand corner of the matrix, the rational planning view is characterized by establishing specific goals and broad means of implementing the goals. An example of this type of organization is a clothing manufacturer whose specific goal is to make 1,000,000 green and blue striped shirts per month. To accomplish this goal, the company hires twenty highly skilled tailors, but instead of providing them with specific training, relies on their existing skills.

	Establishing goals (what)		
		specific	broad
Implementing goals (how)	specific	logical incrementalism	guided learning
	broad	rational planning	emergent strategy

Figure 2.5 - Rational Planning View on Strategy Development

¹³According to Argyris, these cognitive rules are a kind of master program stored in the brain, governing all behavior. Defensive reasoning can block learning even when the individual commitment to it is high, just as a computer program with hidden bugs can produce results exactly the opposite of what its designers had planned. (Argyris, 1991)

The rational planning view is concerned with the development and formulation of attainable objectives for an organization. Many techniques can be employed to select these objectives. After selecting particular techniques, rational arguments and analytical considerations are used as the basis for formulating solutions for problems. (Idenburg, 1993)

Rational planning models are based on iterative strategy development. An organization determines its objectives and then chooses between alternative strategies. The organization implements its chosen strategy after assessing the opportunities in its external environment and the strengths and weaknesses of its internal environment. (Idenburg, 1993)

Successful rational planning involves earnest efforts by an organization's top management to develop strategies. These managers base their efforts on the assumption that the world is predictable and the future position and objectives of an organization are quantifiable. (Idenburg, 1993)

Porter, a prominent researcher in management studies, supported the rational planning view through his Value Chain Model which terms important activities of a company "value activities". These activities form value chains where an organization's ability to create synergy among or within the chains gives the organization a competitive advantage. According to Porter, the Value Chain Model:

"...defines the two types of interrelationships that may create synergy. The first is a company's ability to transfer skills or expertise among similar value chains. The second is the ability to share activities. Two business units, for example, can share the same sales force or logistics network. The value chain helps expose the last two concepts (and most important) of corporate strategy. The transfer of skills among business units in the diversified company is the basis for one concept. While each business unit has a separate value chain, knowledge about how to perform activities is transferred among the units. For example, a toiletries business unit, expert in the marketing of convenience products, transmits ideas on new positioning concepts, promotional techniques, and packaging possibilities to a newly acquired unit that sells cough syrup. Newly entered industries can benefit from the expertise of existing units and vice versa." (Porter, 1987, p. 244-245)

iv. Emergent Strategy

As displayed in Figure 2.6 in the lower right hand corner of the matrix, the emergent strategy view is characterized by establishing broad goals and broad means of implementing goals. An example of this type of organization is a clothing manufacturer whose broad goal is to make 12,000,000 shirts this year, without specifying the type of shirt or the monthly amount manufactured. To accomplish this goal, the company hires twenty highly skilled tailors, but instead of providing them with specific training, relies on their existing skills.

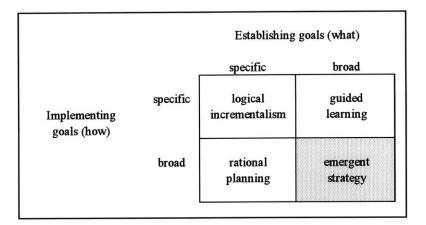


Figure 2.6 - Emergent Strategy View on Strategy Development

In the emergent strategy view, both the establishment and implementation of goals are broad. This broadness makes it difficult for an organization to develop a perspective of the future and develop objectives. It is therefore necessary for an organization to react in a flexible and opportunistic manner to new unpredictable developments. (Idenburg, 1993)

Mintzberg presented an artistic metaphor to illustrate the emergent strategy view. Mintzberg's metaphor described a potter developing a potential project:

"The potter sits before a lump of clay on the wheel. Her mind is on the clay, but she is also aware of sitting between her past experiences and future prospects. She knows exactly what has and has not worked for her in the past. She has an intimate knowledge of her work, her capabilities, and her markets. As a craftsman, she senses rather than analyzes these things; her knowledge is 'tacit'. All these things are working in her mind as her hands are working the clay. The product that emerges on the wheel is likely to be in the tradition of her past work, but she may break away

and embark on a new direction. Even so, the past is no less present, projecting itself into the future." (Mintzberg, 1987(b), p. 66)

In Mintzberg's metaphor,

"...managers are craftsmen and strategy is their clay. Like the potter, they sit between a past of corporate capabilities and a future of market opportunities. And if they are truly craftsmen, they bring to their work an equally intimate knowledge of the materials at hand. That is the essence of crafting strategy." (Mintzberg, 1987(b), p. 66)

III. FRAMEWORK

The Framework, displayed in Figure 2.7, will be used to analyze and compare the two pension funds' real estate investment strategies. The Framework identifies the strategy development view used by each pension fund and provides, for comparison purposes, the size of each pension fund, the amount each pension fund has invested in real estate, and the recent performance of each pension funds' real estate assets.

Figure 2.7 - Framework

		Establishing goals (what)		
		specific	broad	
Implementing goals (how)	specific	logical incrementalism	guided learning	
	broad	rational plànning	emergent strategy	

COMPONENT	PENSION FUND #1	PENSION FUND #2
Total Pension Fund Value:		
RE investments:		
Return on RE:		

The results of the research of the two pension funds are presented in two case studies in the following chapter. The cells of the Framework will be completed (i.e., a box of the matrix is shaded or a row of the chart is completed) as each pension fund is presented. In Chapter Four, the pension funds are compared and contrasted to draw specific as well as general conclusions. These conclusions may assist other pension funds in developing new real estate investment strategies.

CHAPTER THREE - DOCUMENTATION & ANALYSIS OF RESEARCH

I. THE TWO PENSION FUNDS

This chapter provides and analyzes the data gathered from the two pension funds researched. The original intent was to choose the largest¹⁴ private pension fund and the largest public pension fund. The largest pension funds were chosen based on the premise that a large pension fund would, on average, have a larger real estate investment portfolio than a smaller pension fund. In addition, a pension fund with a large real estate investment portfolio may be more likely to be actively developing a real estate investment strategy. There are primarily two types of pension funds (i.e., private and public), and for the results of the thesis to be applicable to the industry as a whole, both types of pension funds needed to be researched.

There were also three limitations on choosing the funds. The first limitation was access to the pension funds. Many pension funds contacted were reluctant to discuss the development of their investment strategies. The second limitation was geographical. The chosen pension funds needed to be within a reasonable driving distance from Boston. The third limitation was time. The chosen pension funds needed to allow access in either June or July of 1994, the time period in which the thesis research was conducted.

The two pension funds that agreed to participate in the thesis are AT&T and New York State Teachers. AT&T, located in Berkley Heights, New Jersey, is the 4th largest pension fund and the largest private pension fund in the US. New York State Teachers, located in

¹⁴The "largest" defined as the largest in investments.

Albany, New York, is the 7th largest pension fund and the 5th largest public pension fund in the US. These two pension funds, displayed in Figure 3.1, have about \$80 billion in assets, with \$6.7 billion invested in real estate investments.¹⁵

Figure 3.1 - Statistics on	AT&T and New	York State 7	Feachers Pe	ension Funds
----------------------------	--------------	--------------	--------------------	--------------

	NY STATE		
	AT&T	TEACHERS	TOTAL
Total Investments	\$40,000	\$40,000	\$80,000
Real Estate Investments	\$3,700	\$3,000	\$6,700
Real Estate As a % of Total Investments	9%	8%	8%

The research methodology employed to gather data from the pension funds was to conduct tape recorded face-to-face interviews. These interviews lasted in duration from one half hour to almost three hours. The director of each fund's real estate investments was interviewed for at least two hours. Access to the other members of each pension fund's real estate group varied between the two funds.

AT&T only provided access to the Director of their real estate investments. He represents 25% (one out of four people) of the total real estate group. The interview was conducted on July 6, 1994 and took place at AT&T's office in Berkley Heights, New Jersey. Additional information was also gathered during phone calls to the Director before and after the interview.

¹⁵The statistics in this paragraph regarding the ranking of the pension funds were provided by the January 24, 1994 issue of Pensions & Investments. The figures on the actual size (e.g., in dollars) of each pension fund and their real estate investment portfolios were provided by each fund.

New York State Teachers provided access to 56% (five out of nine people) of the total real estate group. This access included the ability to conduct two interviews with the director of their real estate investments. The first interview lasted two hours and the second interview was one hour in duration. The other four people interviewed represented 80% (four out of five people) of the senior members of the real estate group. These interviews ranged in duration from one half hour to an hour. All of these interviews were conducted on July 12, 1994, at New York State Teacher's office in Albany, New York. Additional information was also gathered during phone calls before and after these interviews.

The information gathered from each pension fund is organized into two case studies. Each case study, presented in this chapter, is divided into the following three sections: Background, Goals, and Process.

II. AT&T PENSION FUND CASE STUDY

Background

The AT&T Investment Management Corporation (ATTIMCO), a wholly owned subsidiary of AT&T, provides investment management services to the AT&T employee pension fund. ATTIMCO is responsible for managing all of AT&T's pension fund assets. As of December 31, 1993, the pension fund was valued at about \$40 billion with 9% of the pension fund, or \$3.7 billion, invested in real estate investments.

The poor performance of ATTIMCO's real estate investments over the last few years has led ATTIMCO to contemplate whether real estate investments are still suitable for the pension plan. During the last ten years, ATTIMCO's real estate investment portfolio had an average annual return of 3.9%. Over the last three years, however, the average annual return for the real estate investment portfolio was -5.4%.

Despite the recent poor performance of their real estate investments, ATTIMCO decided that real estate investments are important for the pension fund because they provide competitive returns, diversification benefits, and inflation hedging. These reasons have led ATTIMCO to recently establish a Strategic Plan for Real Estate Investing (SPREI).

ATTIMCO's real estate investments are split into two categories: core equity real estate and non-core equity real estate. Core equity real estate investments are real estate equity investments in one of the traditional property types (e.g., office, retail, industrial, and multifamily); they are located within the United States, and they may not contain nonparticipating fixed rate debt. Non-core equity real estate investments are equity real estate investments that do not fit into the traditional property type classifications. The core equity real estate investments consist of almost 80% of the total pension fund real estate investments and are governed by the SPREI. Non-core equity real estate investments are not required to adhere to the SPREI.

The SPREI also allows investments in REITs or entities that hold direct or indirect interests in properties. These types of investments are allowed provided that the assets in the entities' underlying portfolios meet the criteria established for core equity real estate investments.

As displayed in Figure 3.2, the quantitative information provided by AT&T has been incorporated into the Framework.

	Establishing goals (what)		
i	specific	broad	
specific	logical incrementalism	guided learning	
broad	rational planning	emergent strategy	
	-	specific specific logical incrementalism broad rational	

Figure 3.2 - Partially Completed Framework

COMPONENT	AT&T	NYSTRS
Total Pension Fund Value:	\$40 billion	
RE investments:	\$3.7 billion	
Return on RE:	-5.4% ¹⁶	

¹⁶The -5.4% is the average annual return on AT&T's real estate investments for the period 1991 through 1993.

<u>Goals</u>

ATTIMCO's asset allocation group¹⁷ periodically establishes expected investment returns for the different types of investments and estimates the level of risk that the fund is exposed to. The asset allocation staff has applied this risk and return analysis to real estate investments and has determined that the pension fund's optimal range of real estate investments is 10% - 15% of the total pension fund. SPREI has adopted this estimate as the acceptable level of real estate investments.

AT&T's real estate investment group (REIG) has decided to de-leverage (i.e., minimize any investments that involve debt) the real estate investment portfolio. REIG prefers all new investments to be without co-investors (i.e., it prefers to buy a piece of real estate without any partners).

REIG has identified that a main function of their real estate investment portfolio is to invest in real estate investments that hedge inflation. Retail properties generally provide more inflation hedging as compared to other types of real estate property. REIG's real estate portfolio, therefore, is heavily weighted with retail properties.

REIG has observed that there are many new real estate investment products in the marketplace and decided it will primarily remain a real estate equity investor. It has, however, made provisions in its SPREI to purchase REIT stocks.

¹⁷ATTIMCO's asset allocation group determines the asset allocations for many different types of possible investments (e.g., stocks, real estate, etc.) for the pension fund. This group is staffed with skilled finance asset allocation personnel.

Because of marketplace conditions, a few retail properties owned by REIG have been converted into REIT stocks. Ownership of these REIT shares has provided the flexibility for REIG to participate in this new product without having to invest additional funds. This opportunity will allow REIG to evaluate the new products for their investment performance.

AT&T's investment strategy has elements of establishing specific goals. The establishment of specific goals is evidenced by AT&T identifying the types of investments that are acceptable (e.g., non leverage, no partners, core real estate investments) and unacceptable (e.g., leveraged, partners, timberland). As displayed in Figure 3.2, the two views that possess specific establishing goals are logical incrementalism and rational planning.

Process

One of REIG's key role, as identified by SPREI, is to select, monitor, and evaluate the Fee Advisors. REIG assigns each Fee Advisor specific tasks related to the real estate investments. REIG seeks only highly experienced Fee Advisors with proven expertise and resources to accomplish the tasks.

REIG establishes a scope of work for each Fee Advisor and evaluates their performance. REIG retains responsibility for approving all new investment proposals, additional investing in existing investments, and all annual business plans for each investment. In addition, REIG monitors the ongoing operations and performance of all the investments and establishes standardized reporting procedures for the Fee Advisors.

Currently, REIG has fifteen Fee Advisory relationships. While many of these relationships have existed for many years, some are new. In general, a new Fee Advisor is engaged when an existing Fee Advisor resigns or is terminated, the real estate investment portfolio

increases in size, or REIG requires a specific expertise that is not currently found within the existing relationships.

SPREI has established a four-step process for selecting a Fee Advisor. The first step is for REIG to compile a list of qualified advisors. Step two is for REIG to review the advisor's qualifications. In reviewing the qualifications, REIG may engage in a request for proposals process or discussions with the desired firms. The third step is to generate a list of finalists. These finalists will each make a presentation to REIG. The final step is for REIG to negotiate ATTIMCO's standard Fee Advisor contract with the chosen advisor.

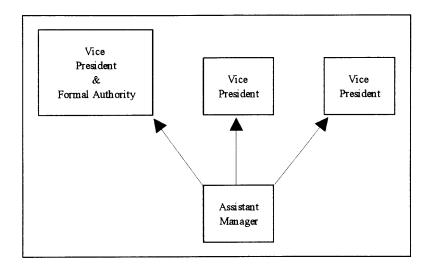
SPREI has also established an ongoing Fee Advisor evaluation process. SPREI reviews the performance of the investments, the relationship with REIG, and their ability to continually meet REIG's needs. The process includes a formal semi-annual meeting with REIG and the submission of quarterly and annual operating reports. Lastly, SPREI evaluates the Fee Advisor's daily interaction and communication with REIG.

REIG, an organization consisting of four professionals, provides all of ATTIMCO's real estate investment management services. A Vice President of Real Estate Investments runs REIG. This vice president reports to the President of ATTIMCO. The other three members consist of two Vice Presidents of Real Estate and one junior level professional called the Assistant Manager.

The four members of REIG are organized horizontally. Three professionals of the group have the same title and the fourth professional's time is allocated among the other members. When REIG acts as a collective whole the aforementioned vice president is formally in charge. REIG's organizational structure is displayed in Figure 3.3.

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Figure 3.3 - Organizational Structure of ATTIMCO's Real Estate Investment Group



All of REIG's members have a finance background, an MBA¹⁸, and several years of work experience. The Group Head has been involved with ATTIMCO and has run REIG for the last fifteen years. The other members' tenure with ATTIMCO average about five years.

REIG interacts with the Fee Advisors by conducting daily phone conversations which enables the Fee Advisors to learn what types of investments REIG is actively seeking. The Fee Advisors will only submit an investment proposal if they know that REIG is seeking (i.e., if the investment proposal adheres to the established guidelines) that type of investment. Upon submission of an investment proposal, REIG holds a meeting which enables all members to state their opinion and form a consensus.

¹⁸MBA is a Masters in Business Administration. One member of REIG is currently pursuing an MBA.

AT&T's investment strategy has elements of specific means of implementing goals. The specific means of implementing is evidenced by three formal processes established by REIG. First, is how to select a Fee Advisory. Second, is the written guidelines instructing the Fee Advisor how to manage the investments. Third, is the structure of REIG in which the Fee Advisory relationships are managed.

Thus, AT&T's real estate investment strategy possesses specific means of implementing goals. As displayed in Figure 3.4, the logical incrementalism view, possessing both the establishment of specific goals and specific means of implementing goals, has been shaded in the Framework.

		Establishing goals (what)	
	1	specific	broad
Implementing goals (how)	specific	logical incrementalism	guided learning
	broad	rational planning	emergent strategy

Figure 3.4 - Partially Completed Framework

COMPONENT	AT&T	NYSTRS
Total Pension Fund Value:	\$40 billion	
RE investments:	\$3.7 billion	
Return on RE:	-5.4% ¹⁹	

¹⁹The -5.4% is the average annual return on AT&T's real estate investments for the period 1991 through 1993.

III. NEW YORK STATE TEACHERS PENSION FUND CASE STUDY

Background

The New York State Teachers' Retirement System (NYSTRS) was established in 1921. The sole purpose of NYSTRS is to administer and invest the pension fund from which most New York State public school teachers (employed outside of New York City) receive retirement benefits.

NYSTRS is governed by a ten member board and has more than three hundred employees. Total membership (e.g., school teachers) is over 200,000. As of December 31, 1993 the pension fund was valued at about \$40 billion with approximately 8% of the pension fund, or \$3 billion, invested in real estate investments.

NYSTRS real estate investments over the last few years have done well as compared to other pension funds' real estate investments. NYSTRS real estate investment portfolio has averaged a 7.3% annual return each of the last three years. NYSTRS achieved this performance without a written comprehensive real estate investment policy. As displayed in Figure 3.5, the quantitative information provided by NYSTRS has been incorporated into the Framework.

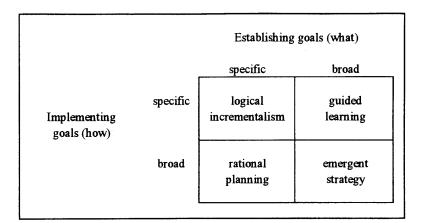


Figure 3.5 - Partially Completed Framework

COMPONENT	AT&T	NYSTRS
Total Pension Fund Value:	\$40 billion	\$40 billion
RE investments:	\$3.7 billion	\$3 billion
Return on RE:	-5.4% ²⁰	7.3% ²¹

<u>Goals</u>

NYSTRS started investing in real estate mortgages at the pension fund's inception. Real estate equity investing, however, began approximately in the mid-1980s. The real estate investment portfolio for the past six years has ranged in size from a low of 8% to a high of 10% of the total pension fund.

NYSTRS recently engaged a consultant well versed in asset allocation strategies. The consultant suggested, and NYSTRS accepted, a recommended asset allocation of 15% of the pension fund to be invested in real estate. This 15% is split into 8% for real estate

²⁰The -5.4% is the average annual return on AT&T's real estate investments for the period 1991 through 1993.

²¹The 7.3% is the average annual return on NYSTRS real estate investments for the period 1991 through 1993.

mortgages and 7% for real estate equities. These allocations are the targeted real estate investment asset allocation of the pension fund.

The primary goal of NYSTRS Real Estate Department's (RED) equity real estate investments is to create an equity real estate portfolio of high quality properties that will enhance the long term investment performance, diversify the asset base, and reduce the volatility of returns for the pension fund. Another objective of NYSTRS' equity real estate investments is to maintain a core portfolio. This core portfolio will consist primarily of completed and substantially leased, multi-tenant properties with an established performance history. The core property types consist of office, retail, industrial, and multi-family residential.

NYSTRS may also invest in non-core equity real estate. These types of investments may include nontraditional property types (e.g., timberland, hotels, etc.) and properties that may need development and/or require specialized expertise to enhance the value of the investment. NYSTRS prefers investing in real estate equities where they are the sole investor, or where it can obtain a controlling interest.

NYSTRS' primary goal of debt real estate investment is to provide the highest possible risk adjusted investment returns from many different types of debt real estate investments.

NYSTRS' overall (i.e., equity and debt) investment strategy has been made flexible for two reasons. One reason is that as investment market conditions change the fund may take advantage of emerging opportunities. The other reason is because NYSTRS believes each real estate investment is unique and consequently needs to be sufficiently analyzed in order to achieve successful investments. NYSTRS' investment strategy has elements of establishing broad goals. This is evident by its lack of a comprehensive real estate investment policy. NYSTRS has established a general overall flexible goal of achieving the highest possible risk adjusted investment return from many different types and structures of real estate investments.

This section has provided information that indicates that NYSTRS' real estate investment strategy possesses broad establishing goals. As displayed in Figure 3.5, the two views that possess broad establishing goals are guided learning and emergent strategy.

Process

NYSTRS real estate investments are categorized into real estate equities and real estate mortgages. There is a written real estate investment policy for equity real estate investments²². Real estate mortgage investments, however, do not have a written investment policy.

NYSTRS' written real estate equity policy provides general guidelines for RED to achieve the highest possible risk adjusted investment returns on current and future real estate equity investments. The policy requires NYSTRS to retain third party Fee Advisors to manage its equity real estate investments. The Fee Advisors will be required, among other items, to submit a detailed annual business plan for each investment. These plans will be updated on an annual basis with the objective of maximizing risk adjusted returns. NYSTRS currently uses eleven Fee Advisors to manage their equity real estate investments.

²²The equity real estate investment policy was initially established in December of 1988 and was revised in July of 1994.

The policy establishes guidelines for how these Fee Advisors will manage their relationship with NYSTRS as well as manage the properties. There are reporting requirements (e.g., monthly property operating statements) for the Fee Advisors.

The policy also addresses two different potential future equity real estate investment opportunities. One type is smaller equity investing²³. The policy has established different guidelines for investing in industrial investments. The policy allows the Fee Advisors to make more decisions than they would for the larger investments by setting forth more guidelines in advance. As long as the Fee Advisors adhere to these guidelines, they have more leeway to make decisions.

The policy also recognizes that REITs are becoming popular real estate investments. The policy states that guidelines and investment criteria for a REIT investment program will be developed at a later date. The policy has recognized that this could be a new type of investment and has decided to wait before establishing guidelines.

NYSTRS does not have a written real estate mortgage investment policy. They invest in mortgages directly and through contractual relationships with insurance companies. The former method has been used since the inception²⁴ of mortgage investing and the latter method was implemented a few years ago.

²³Historically, a NYSTRS equity real estate investment was typically greater than \$20 million. A "smaller" type of equity real estate investment is between \$3 million and \$20 million.

²⁴The inception of mortgage investing was over seventy years ago.

The direct method does not use a Fee Advisor relationship. NYSTRS act like a bank in these types of investments. Real estate owners who need a mortgage apply to NYSTRS for the mortgage and NYSTRS decides if it wants to make the mortgage. These types of mortgage investments are typically greater than \$20 million and many times they are greater than \$50 million.

NYSTRS also makes mortgages through a joint agreement with insurance companies. In this method both parties are equal participants in the mortgage investment. The insurance companies in these agreements, unlike NYSTRS, have offices or representation throughout the US. This greater exposure allows NYSTRS greater access to many different types of borrowers. These transactions are typically smaller than by the direct method.

In the direct method, the large size of the investments usually makes each investment unique, rendering a general set of guidelines inapplicable. In the joint method with insurance companies, the insurance company has contractually agreed to a fiduciary responsibility. This responsibility can expose the insurance company to a significant amount of risk if they are negligent.

NYSTRS provides their real estate investment management services with an organization consisting of nine professionals. RED's top management is the Real Estate Investment Officer. This officer reports to NYSTRS' Assistant Executive Director (i.e., the "Chief of Investments") who is responsible for reviewing all investments made by RED.

The nine members of RED, as displayed in Figure 3.6, are organized within four functions: real estate mortgages, real estate equities, real estate servicing, and new real estate

investment ideas. The Real Estate Investment Officer is responsible for each of RED's functions.

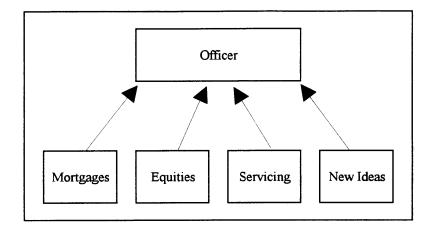


Figure 3.6 - Organization Structure of NYSTRS' Real Estate Department

The mortgage function is conducted by two individuals. Each of these individuals are at the same level. The equity function is conducted by two individuals. These individuals are organized in a senior and junior hierarchy. The servicing function is conducted by three individuals²⁵. The senior member is responsible for the servicing function, while the other two junior positions assist the senior position. The remaining function, new investment ideas, is accomplished by one individual.

Also, it is customary for RED to conduct an extensive due diligence survey before approving any type of investment. This survey includes inspecting the site, engaging

²⁵The main purpose of servicing is to collect the mortgage payments from the borrowers. Other responsibilities include inspecting the properties, paying real estate taxes, and maintaining a relationship with the borrower. Also, if a property is foreclosed upon or a borrower stops making their mortgage payment, this department is instrumental in curing this problem.

architectural and engineering studies, and completing financial analysis and a third party appraisal.

NYSTRS' investment strategy is difficult to categorize as either having specific or broad elements of implementing goals. An argument can be made that their process is specific because about half of their investment activity is governed by written guidelines specifying requirements for how the Fee Advisors manage the investments. An argument, however, can also be made that implementing goals is broad because about half of their investment activity is governed without written policies and procedures.

The organizational structure of RED, however, is a loosely managed group that allows each member to formulate their own decisions. This ability of the members is similar to the manner in which the potter constructed her pottery. Both individuals engage their processes without a clear picture of the structure²⁶ of the end product. Rather, they use their past experiences and judgment to structure or form the investment or clay guide into a final product. This condition is typical of a view possessing broad means of implementing goals.

In NYSTRS, a RED member's recommendation on a potential investment is typically the most important factor in approving or denying the investment. The written guidelines,

²⁶The "structure" of an investment, in this thesis, means deciding, for example on what type of real estate to invest in, how much money to invest, and how the investment is structured (i.e., who gets what under different scenarios). It is true, that typically NYSTRS knows the general structure of its end product (i.e., an equity or debt investment) in advance. But, the actual "structure" of the investment is not known in advance and the "structure" is what the members of RED use their experience and judgment to create while they analyze the potential investment.

while important, are usually used as a reassurance²⁷ that the member's decision is within established procedures. NYSTRS' investment strategy, because of the member's influence, is characterized as having broad means of implementing goals. As displayed in Figure 3.7, the emergent strategy view, possessing both broad establishing goals and broad implementing goals, has been shaded in the Framework.

		Establishing goals (what)	
		specific	broad
Implementing goals (how)	specific	logical incrementalism	guided learning
	broad	rational planning	emergent strategy

Figure 3.7 - Partially Completed Framework

COMPONENT	AT&T	NYSTRS
Total Pension Fund Value:	\$40 billion	\$40 billion
RE investments:	\$3.7 billion	\$3 billion
Return on RE:	-5.4% ²⁸	7.3%29

²⁷"Reassurance" is meant to imply that the written guidelines, for example, might require RED to complete an appraisal of the potential investments. But the interpretation of the appraisal is the responsibility of RED.

²⁸The -5.4% is the average annual return on AT&T's real estate investments for the period 1991 through 1993.

²⁹The 7.3% is the average annual return on NYSTRS real estate investments for the period 1991 through 1993.

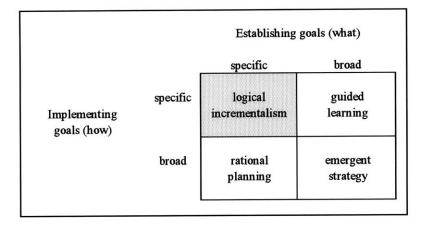
CHAPTER FOUR - COMPARISON AND CONCLUSION

I. COMPARISON OF THE TWO PENSION FUNDS

The two pension funds examined both have total values of approximately \$40 billion and they both have similar sized real estate investment portfolios. AT&T's real estate investment portfolio is approximately \$3.7 billion and NYSTRS' real estate investment portfolio is approximately \$3.5 billion. The two pension funds, however, have had different success with their real estate investments. AT&T's average annual return on their real estate portfolio over the 1991 through 1993 period was -5.4% and NYSTRS' average annual return, over the same period, for their real estate portfolio was 7.3%.

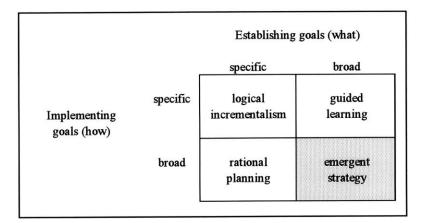
As well as having almost opposite results with their investment returns the two pension funds' real estate investment strategies are characterized differently, as displayed in Figure 4.1. AT&T's strategy can be characterized as using the logical incrementalism view of strategy development, while NYSTRS' strategy can be characterized as using the emergent strategy view of strategy development.

Figure 4.1 - Completed Framework



AT&T's Strategy Formulation View

NYSTRS' Strategy Formulation View

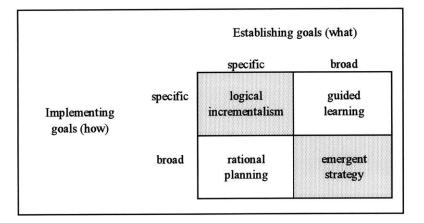


COMPONENT	AT&T	NYSTRS
Total Pension Fund Value:	\$40 billion	\$40 billion
RE investments:	\$3.7 billion	\$3 billion
Return on RE:	-5.4%	7.3%

As displayed in Figure 4.2, these two views are polar opposites of each other. Organizations that use the logical incrementalism view typically establish specific goals and establish specific processes in which to implement these goals (e.g., the R.J. Reynolds example). Contrary to this view, is the emergent strategy view. Organizations subscribing to this view typically establish broad goals and broad processes of implementing the goals (e.g., the example of the potter developing her pottery).

Figure 4.2 - AT&T's Logical Incrementalism View

&



NYSTRS' Emergent Strategy View

AT&T and NYSTRS, as presented, have different views on the strategy formulation process. AT&T, for example, has established a specific goal of investing in non leveraged, no partners, core (e.g., equity investing in traditional property types), while NYSTRS has established a broad goal of achieving the highest possible risk adjusted investment return from many different types and structures of real estate investments.

AT&T also implements their goals with specific processes, while NYSTRS implements their goals with broad processes. AT&T, for example, manages their investments with a

combination of detailed guidelines instructing the Fee Advisors how to manage the investments and an internal organizational structure that effectively manages the relationships between AT&T and the Fee Advisors. NYSTRS is similar to AT&T in that it has written guidelines, but these guidelines are only used for equity investing (i.e., about half of their real estate investment portfolio). Furthermore, these guidelines are not the primary means in which NYSTRS implements their investment goals. NYSTRS primarily relies on the experience and judgment of the individual members of their real estate group to effectively structure successful investments. These individuals are given ample latitude to analyze and structure their real estate investments.

In comparing and contrasting the two pension funds' investment strategies a hypothesis can be developed. The pension fund that has a "broad" real estate investment strategy has been more successful than the pension fund with a "specific" real estate investment strategy. This thesis, therefore, hypothesizes that in the pension fund real estate investment industry, broad based investment strategies are more successful. It should be noted, however, that this hypothesis has been based upon only two pension funds' investment strategies. To further confirm or refute this hypothesis examinations of additional pension funds' investment strategies should be undertaken.

II. CONCLUSION

In Chapter One, a question was presented. Are organization's that set specific goals and specific procedures of implementation to achieve the goals, more or less successful than organizations that do not?

This question has been addressed in the previous section which presented the hypothesis that pension funds' investment strategies that are based upon broadly defined goals and broadly defined processes of implementation to achieve their goals are more successful than organizations that develop their investment strategies based upon specific goals and specific implementation procedures to achieve their objectives.

In conclusion, the research has provided some potential insights into the real estate investment strategies of two pension funds. These pension funds represented a large private (4th largest US pension fund) and a large public (7th largest US pension fund) pension fund. As was stated in chapter one, an objective of the thesis was to begin a base of research on pension fund real estate investment strategies; the next researcher interested in this topic will expand this base of research.

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INTERVIEWS

- On July 6, 1994, Joseph Russo, Vice President Real Estate Investments for the AT&T Investment Management Corp. Pension Fund was interviewed.
- On July 12, 1994, Abbott Davis, Real Estate Investment Officer for the New York State Teachers Retirement Systems Pension Fund was interviewed.
- On July 12, 1994, Ronald P. Blaauboer, Assistant Real Estate Investment Officer for the New York State Teachers Retirement Systems Pension Fund was interviewed.
- On July 12, 1994, Alan S. Byer, Mortgage Investment Analyst for the New York State Teachers Retirement Systems Pension Fund was interviewed.

On July 12, 1994, John Virtanen, Mortgage Investment Analyst for the New York State Teachers Retirement Systems Pension Fund was interviewed.

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