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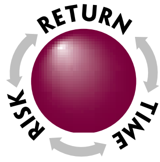

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INVESTING IN REAL ESTATE: LAYING A FOUNDATION FOR IMPROVED RISK-ADJUSTED RETURNS

Stocks, fixed-income securities and real estate make up the bulk of U.S investment assets. At year-end 2000, the aggregate value of real estate investment in the U.S. was $2.1 trillion.[1] Despite the magnitude of dollars invested in real estate, fewer than 25 percent of defined benefit plans currently allocate assets to real estate investments.

There are several reasons why plan sponsors have been reluctant to invest in real estate. Investing in real estate, which is a very broad category covering a wide variety of dissimilar investments, can be intimidating. Moreover, real estate investments are difficult to evaluate. In addition, because certain real estate investments are relatively unpredictable, investors need to consider a variety of real estate investments for adequate diversification. Some plan sponsors shy away from real estate because of the negative experiences of particular sub-classes of real estate that occurred in the 1980s. (For a brief discussion of that experience, see the accompanying sidebar.) However, the performance of real estate over the last five years has been stable with double-digit returns. This experience is likely to increase interest in real estate among pension plans, especially given the projected lower returns for fixed-income investments and recent volatility of common stock prices. In contrast, many core[2] real estate managers are forecasting that returns for real estate will be in excess of 10 percent for 2001.

[1] This figure excludes $800 billion in timber and agricultural land.

A BRIEF HISTORY

Pension funds, in search of diversification and an inflation hedge, began to invest in real estate in the 1970s. This relatively new asset class became popular and grew quickly through the next decade.

Then, in the 1980s, a popular tax shelter artificially inflated demand for new construction. A weak dollar lured foreign investors into a buying binge of U.S. assets, driving prices and development higher. By the end of the decade, the tax shelter had been repealed and foreign demand was waning. With an overbuilt market, high vacancy rates and a weakening economy, the bubble burst. The resulting correction, which took a few years, was characterized by poor returns and virtually no liquidity.

Tax incentives and foreign investment are no longer creating artificial demand. Accumulated knowledge, better tools, information and investment structures, including the transparency and discipline brought by a larger market of publicly traded securities, may reduce such risks in the future.

THE RANGE OF REAL ESTATE INVESTMENTS

Traditionally, the term "real estate" refers to properties that are owned privately by the investor. Over the last few years, securitization of commercial real estate in the form of publicly traded Real Estate Investment Trusts (REITs) has provided opportunities for investors to participate in publicly traded real estate pools.

The investment characteristics of private real estate, publicly traded REITs, and real estate-related debt (*i.e.*, pools of mortgages and construction loans) differ significantly. Public REITs and mortgages tend to have performance characteristics similar to those of stocks and bonds, respectively (although their long-term performance generally depends upon the quality of the underlying properties and external economic factors, such as changes in interest rates, changes in demand for real estate and tax-related property depreciation rules). Real estate[3], on the other hand, behaves as a distinct asset class with unique risk/reward factors and is the focus of this *Segal Advisory*.

INVESTMENT CONSIDERATIONS: CHARACTERISTICS OF PRIVATE EQUITY REAL ESTATE INVESTMENTS

Before deciding whether to invest or (re-invest) in private equity real estate, pension plan trustees should consider the following investment characteristics:

- ***Performance*** Performance refers to the combination of income and realized and unrealized gains and losses. For private investments, unrealized gains and losses depend upon appraisals, which are estimates of actual market value.[4] For this reason

[2] Core is the term used to define the most conservative, broadly diversified, income-producing equity real estate funds.

[3] For the remainder of this discussion, the term "real estate" is used to refer to diversified portfolios of privately owned, investment-grade, commercial real estate.

[4] Most properties are independently appraised just once a year, and the portfolio manager estimates the value for each of the other three quarters. Investment management fees are typically a function of appraised asset values. If the appraisal overstates the "real" value (*i.e.*, the price for which the properties could actually be sold), performance is overstated, and fees are inflated.

DID YOU KNOW THAT THE RATE OF RETURN FOR THE LEHMAN HIGH YIELD INDEX WAS 6.92 PERCENT THROUGH

(and others), the accompanying graph comparing the annual performance of real estate to that of stocks and bonds should be interpreted cautiously.

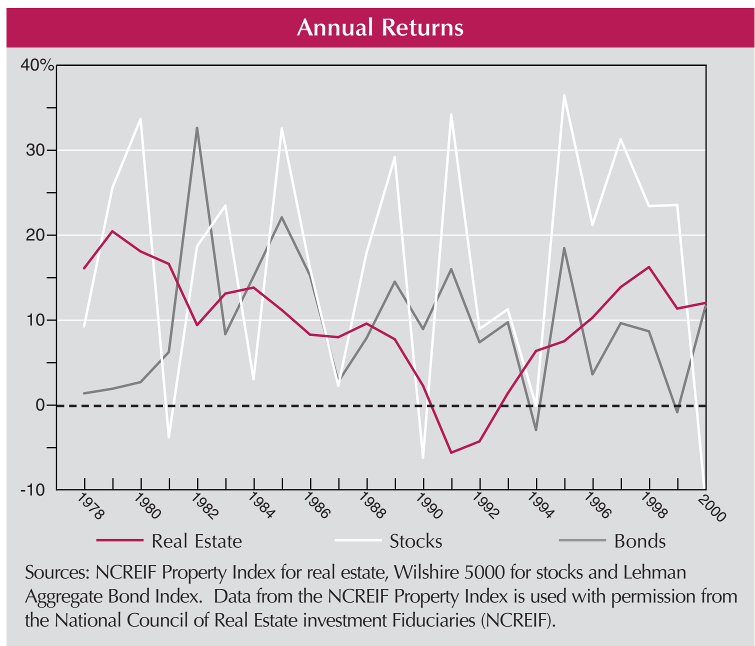
- ***Volatility*** Assessing changes in the current values of commercial properties is difficult because appraisals as of a certain date cannot reflect changes that occur after the appraisal date. As a result, appraisals artificially smooth reported changes in underlying property values. Reported valuations tend to change gradually, producing a fairly smooth (and hopefully positive) performance record over time.

The smooth return stream that results from annual and quarterly appraisals makes real estate a very attractive asset class for diversification. On the other hand, the appraisals cannot reflect the true value volatility that exists in the underlying properties. They make reported performance appear more stable than it really is. It causes volatility and correlation (see below) to be understated, which results in overstated measures of risk-adjusted returns.[5]

The addition of real estate to a portfolio of stocks and bonds may improve risk-adjusted returns to the whole portfolio.

[5] Appraisal-based investment reporting is not unusual. It is used with venture capital and other private investments. Book value (as opposed to market value) accounting smooths reported performance of insurance company annuity and guaranteed interest contracts. So, accounting methods do not always reflect reality. Whether that is "good" or "bad" depends on how it is used and the philosophy of the investor.

Annual Returns



Sources: NCREIF Property Index for real estate, Wilshire 5000 for stocks and Lehman Aggregate Bond Index. Data from the NCREIF Property Index is used with permission from the National Council of Real Estate investment Fiduciaries (NCREIF).

- ***Correlation*** Correlation is a statistical measure of the interdependence of two or more investments. Investors seeking to diversify their portfolio look for a low correlation of performance among their various holdings. Real estate, in particular, has a very low correlation to both stocks and bonds, as shown in the table below.

- ***Diversification*** The addition of real estate to a portfolio of stocks and bonds may improve risk-adjusted returns for the whole portfolio. The expected diversification benefits are so strong that portfolio optimization models will likely recommend the asset class. However, the models ignore the effects of appraisals, higher fees and illiquidity. Once these factors are considered, most recommended allocations fall in the 5-15 percent range.

Performance Comparison of Stocks, Bonds and Real Estate, 1978-2000

	Returns	Standard Deviation**	Correlation* Bonds	Correlation* S&P 500	Correlation* Real Estate
Bonds	9.35%	8.09%	1.00		
S&P 500	16.08%	13.65%	0.32	1.00	
Real Estate	9.55%	6.58%	**-0.22**	**0.07**	**1.00**

*Correlation is a statistical measure of the interdependence of two or more investments. A correlation value of 1.00 means that the investments move in lockstep; a value of 0.00 indicates total independence; and a value of –1.00 means that the investments' move exactly opposite of each other.

**Standard deviation is a measure of volatility (*i.e.*, risk).

Sources: Segal Advisors based on annual returns for the S&P 500, the Lehman Aggregate Bond Index and the NCREIF Property Index. Data from the NCREIF Property Index is used with permission from the National Council of Real Estate Investment Fiduciaries (NCREIF).

- ***Income*** Income from large, diversified portfolios of income-producing properties has been fairly stable, averaging 8 percent since 1978. A portion of the income is used to maintain or improve property values.

- ***Inflation Hedge*** Unanticipated inflation, which is not taken into account when assets are valued, can pose a serious risk to financial assets. Commercial real estate can be a powerful inflation hedge when higher expenses can be passed through to tenants as new leases are negotiated.

MAY OF THIS YEAR? THIS WAS A CONSIDERABLE IMPROVEMENT OVER THE EQUIVALENT FIVE-MONTH PERIOD IN 20

- ***Liquidity*** Liquidity refers to the ease and speed with which an asset can be converted into cash. Real estate is not fully liquid because the process of buying and selling properties takes time. Various investment structures have been developed to improve liquidity for investors. Open-end commingled funds permit quarterly deposits and withdrawals, *if* underlying property market conditions permit. When properties cannot be bought or sold, the open-end funds can develop deposit or withdrawal queues.
- ***Fees*** Compared to stocks and bonds, real estate investing is labor intensive with relatively high associated costs. With typical fees of 1.0 to 1.2 percent, open-end funds can be a cost-effective means of real estate investing. Larger accounts realize some volume discounts, while specialized strategies may cost more. Fees may be tied to asset values, which are partly subject to appraisals. In an effort to better align the interests of managers and investors, some fees are based only on realized returns and may include incentive fees tied to performance.
- ***Collateral Benefits*** The higher levels of control that come with private investments can provide unique opportunities to realize collateral benefits of those investments, such as targeted job creation and local economic stimulation. This may explain why public sector funds have a larger commitment to real estate than do corporate plans. Beyond the maximization of risk-adjusted returns, there is potential for collateral benefits to be managed in the best interest of plan participants and beneficiaries.

A TOUR OF PROPERTIES

Income-producing properties include office buildings, retail shopping centers, industrial properties, apartment complexes, including senior living facilities, and hotels. Each property type is subject to its own unique risks and opportunities. Generally, properties are rated in terms of quality, size and location. Quality does not only refer to the physical property, but also to the lease and debt structure. The performance of the property depends upon the vacancy rate, the credit quality and number of tenants, required debt service and the distribution of lease expirations. Property diversification by location seeks to reduce the risk of an isolated economic decline. The notion of "economic location" considers how property values are affected by changes in specific economic factors, regardless of geographic location.

INVESTMENT STRATEGIES

Real estate may be held for its income and appreciation potential, or it may be developed/improved for resale. Investment strategies, which target the various stages in the life of a property, are discussed briefly below:

- ***Construction, Development and Redevelopment*** New construction and development of commercial and residential properties is a high-risk investment with the potential for high returns during the "lease-up" phase. Once a property is fully leased, its performance is primarily a function of expected cash flow and changes in valuation. Diversified portfolios of such properties offer the most conservative approach to private equity real estate. Finally, older obsolete properties offer potential rehabilitation and/or repositioning opportunities.
- ***Perpetual*** Income-producing real estate is a long-term investment owned directly or through participation in open-end commingled funds. An adequately diversified portfolio of commercial properties requires an investment of about $100 million. For most pension funds, open-end commingled funds offer immediate and cost-effective access to well-diversified, income-producing commercial real estate portfolios.
- ***Finite Life*** Strategies involving development, rehabilitation, or repositioning are well suited for funds with limited investment horizons, such as closed-end commingled accounts, limited partnerships and *private* REITs (which are different from publicly traded REITs). Funds with finite lives typically offer higher return potential, but with higher risk and the lowest liquidity. Contracts frequently include features to temper the liquidity risks. Investors can participate on advisory boards, and they may have powers to replace the investment manager, thus achieving "manager liquidity" in lieu of portfolio liquidity. Finally, some funds with finite lives allow investors to "call" distributable income, thus accelerating cash flows from the funds.

Deciding on the "right" allocation in real estate can be challenging.

DECIDING ON THE "RIGHT" ALLOCATION

Deciding on the "right" allocation in real estate can be challenging. On average, real estate has represented about 15 percent of the aggregate value of U.S. stocks, bonds and real estate. However, as the stock market has risen the relative proportion of invest-

ment in real estate has declined, reaching a low of 9 percent at the end of 2000.

An investor that wanted to be "neutral to the market" would allocate investments to stocks, bonds and real estate in the same proportions that exist in the combined market. Some investment managers recommend 15-20 percent allocations in real estate. They emphasize the benefits of diversification and inflation hedging and point to income potential and the relative importance of real estate in the U.S. economy.

Plan sponsors, however, tend to prefer more modest allocations, given the various risks, as well as their indirect ownership of real estate through their stock investments. The following table shows the average allocations, by sponsor type over time:

Average Allocation in Real Estate

Type of Plan Sponsor	1998	1999	2000
Corporation	3.3%	2.5%	2.2%
Public Employee Retirement System	3.3%	3.3%	3.4%
Jointly Trusteed Pension Fund	4.1%	4.2%	4.0%

Despite increasing investments in real estate, its relative percentage declined as stocks surged.

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CONCLUSION

Investment in a diversified and professionally managed portfolio of commercial real estate has the potential to provide a source of returns, income, diversification and inflation protection. However, as an illiquid, appraisal-based asset class, real estate poses a unique set of risks, which must be understood. Pension plans that are considering investing in, or allocating additional assets to, real estate are advised to seek expert assistance before taking action.

Segal Advisors, Inc. would be pleased to be of assistance on any of these matters. Clients of The Segal Company may obtain more information about Segal Advisors and an introduction to an investment expert from Segal Advisors, through their benefits consultants. Other readers of this Segal Advisory *may contact John Shanklin at (312) 984-8510 or the following E-mail address: jshanklin@segalco.com.*

MARKET INDEXES

	Year to Date as of 5/31/01	One Year Ago: Year to Date as of 5/31/00
S&P 500 Index	-4.37%	-2.82%
Russell 1000	-4.90	-1.72
Russell 1000 Growth	-12.21	-3.11
Russell 1000 Value	0.98	0.35
Russell Mid-Cap Index	-1.03	2.10
Russell 2000 (Small Cap)	3.29	-5.23
Wilshire 5000 Index	-4.18	-5.03
MSCI EAFE	-10.97	-7.67
Three-Month Treasury Bill	1.72	2.40
Lehman Int. Gov't/Credit	3.70	1.43
Lehman Long-Term Gov't/Credit	1.31	3.73
Lehman Government	1.80	3.13
Lehman Credit	4.85	0.16
Lehman Mortgage	3.56	1.50
Lehman Aggregate	3.23	1.87
Lehman High Yield	6.92	-3.18

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