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Alternative Investments and the Semi-Affluent Investor

Chapter 4: Real Estate

Research Report
July 2001

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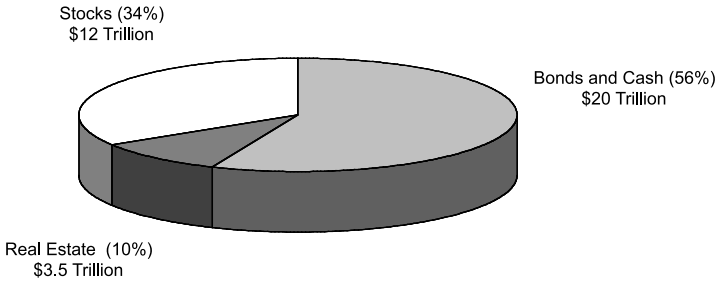
IV. Real Estate

Real estate offers two important benefits: diversification and a hedge against inflation and deflation

Real estate constitutes nearly 10% of the investable assets in the United States. As of December 31, 1998 the real estate market was estimated at more than $3.5 trillion,[72] making it the third largest market segment, behind bonds and cash, and stocks. The absolute size of the real estate market makes it difficult for investors who want to own a portfolio representative of the larger market to ignore this asset class.

Figure 4.1

Domestic Investable Assets
1998



Source: The Real Estate Finance Journal - Winter 1998

Real estate as an asset class offers investors two potential benefits that most other asset classes do not. First, it provides significant diversification benefits to an overall asset allocation, while its long-term returns are fairly predictable. Second, it can serve as a potential hedge against both inflation and deflation.

Diversification

The best argument for including real estate in a portfolio is diversification. Selecting assets with non-correlating returns can improve the risk-adjusted performance of a portfolio. And there are very few asset classes that provide as much diversification benefit as real estate.

Few asset classes provide as much diversification as real estate

During the 10-year period ending December 31, 2000, private real estate produced a 0.02 correlation versus U.S. stocks and a –0.14 correlation to U.S. bonds. REITs, publicly traded stocks of companies that invest in real estate, produced correlations of 0.29 versus stocks and 0.23 versus bonds. According to several studies, investors seeking to optimize their portfolios should have included real estate in their portfolios at least 85% of the time.[73]

Table 4.1

Asset Class Correlations
1991 - 2000

	NCREIF (NPI)	NAREIT	S&P 500	Lehman Aggregate Bond
NCREIF (NPI)	1.00	-0.14	0.02	-0.14
NAREIT	-0.14	1.00	0.29	0.23
S&P 500	0.02	0.29	1.00	0.32
Lehman Aggregate Bond	-0.14	0.23	0.32	1.00

Source: Hedge Fund Research, Inc. and Standard & Poor's Micropal

Three Factor Diversification of Real Estate Allocation

In order to achieve real estate's portfolio diversification benefits, allocations to this asset class must also be diversified from the perspective of three major factors. Similar types of property – regardless of location – often correlate in their returns. Consequently, property type is an important diversification factor. Geographic region is likewise important because real estate valuations within specific geographic regions can correlate fairly closely. Finally, allocations to real estate must be diversified by economic sector – i.e., technology companies, financial services firms, etc. – of the properties' tenants.[74]

Private real estate returns have been more similar to bonds than equities

Dual Attributes Provide Inflation and Deflation Hedges

In theory, investments in real estate have attributes similar to both equities and bonds. They typically will have leases that provide a stream of fixed payments to the property owner that are similar to the coupon payments of a bond. The fixed nature of lease payments provides a measure of protection against deflation similar to that of long-term bonds.

The underlying value of the property, on the other hand, is similar to an equity investment in that it can appreciate or depreciate in value over time. The ability to appreciate in value provides a degree of protection against inflation.

In reality, private real estate returns have been more similar to bonds than equities during the past 10 years. From 1991-2000, the NCREIF Property Index (NPI) produced an average annual return of 6.69% with a standard deviation of 3.91%. The Lehman Aggregate Bond Index returned 7.96% with a standard deviation of 3.74%. The S&P 500, by comparison, returned 17.46% with 13.37% volatility.[75]

Table 4.2

Statistical Summary of Real Estate Strategies
10-Year Period Ending December 31, 2000

	Return	Standard Deviation	Correlation to S&P 500
NCREIF Property Index	6.69%	3.91%	0.02
NAREIT	13.60%	12.52%	0.29
S&P 500	17.46%	13.37%	1.00
Lehman Aggregate Bond	7.96%	3.74%	0.32

Source: Standard & Poor's Micropal, NCREIF and NAREIT

These bond-like returns over an extended period of time have sparked widespread debate over the benefits of owning real estate in multi-asset portfolios. A popular academic theory is that, because real estate acts as insurance against inflation and deflation, it should have expected returns that are lower than equities. The investor is paying a "premium" for the insurance.

Evidence Mixed on Inflation Hedging Capability of Real Estate

Recent research found conflicting evidence as to whether real estate truly helps hedge a portfolio against unanticipated inflation. One of the more all-encompassing studies looked at residential real estate, business real estate and farmland. It examined whether these properties acted as hedges against actual inflation, expected inflation and unexpected inflation.

There is conflicting evidence on real estate's ability to hedge inflation

The study concluded that only residential real estate is a quantifiable hedge against actual inflation, only business real estate and Treasury bills are complete hedges against expected inflation, and only farmland and residential real estate were complete hedges against unexpected inflation.[76]

Another recent study concluded that real estate is itself hedged against inflation, but that there are many better alternatives, such as commodity indices, to hedge a portfolio against inflation.[77]

Vacancy Rates Critical to Hedging Capability

A third study found that some property types perform better during inflationary environments than others. But it concluded that vacancy rates were the primary determinant of a property's ability to serve as a hedge against inflation. They must be low for the hedge to be effective.[78]

Vacancy rates are the primary determinant of a property's ability to serve as a hedge against inflation

This dependency on a correct balance between the supply and demand for real estate has been problematic in the U.S. at certain times during the last couple of decades. A series of factors unrelated to the actual demand for real estate have created supply/demand imbalances that have been disastrous for investors.

A large part of the boom in real estate development in the 1980s was due to tax laws that gave inordinately high tax benefits to investors in real estate limited partnerships. Numerous federally insured financial institutions, such as banks and savings and loans, also embarked on commercial real estate lending binges in an attempt to generate enough high yielding assets to offset their high costs of funding.

The combined effect of these two factors resulted in a flood of new commercial and multi-family real estate properties, far in excess of the market's ability to absorb them. It also led to a collapse in real estate valuations as well as hundreds of financial institutions.

Some Institutions Incorporate Timing into Their Real Estate Allocations

The potential for forces not related to the actual demand for real estate to create major disruptions has led some institutional investors to view real estate investing in a more opportunistic fashion. Unlike their approach to fixed income or equity allocations, these organizations in effect rely on some element of market timing in deciding to shift assets to the real estate sector. They also make their investments within narrow sectors of the real estate market instead of taking a broad investment approach.

Investing In Real Estate

Private real estate and REITs differ dramatically in return patterns

Investments in real estate can be divided into two categories – private real estate and real estate investment trusts (REITs). Although both provide diversification benefits in varying degrees, they differ dramatically in their return patterns and the circumstances when they are most appropriate for a portfolio allocation to real estate.

A. Private Real Estate

The private real estate market is considerably larger than the REIT market. As of the end of 2000, the private real estate market totaled nearly $3.5 trillion, whereas the public REIT market had a cumulative market value of $140 billion.

A direct investment in real estate has returns tied to a single property

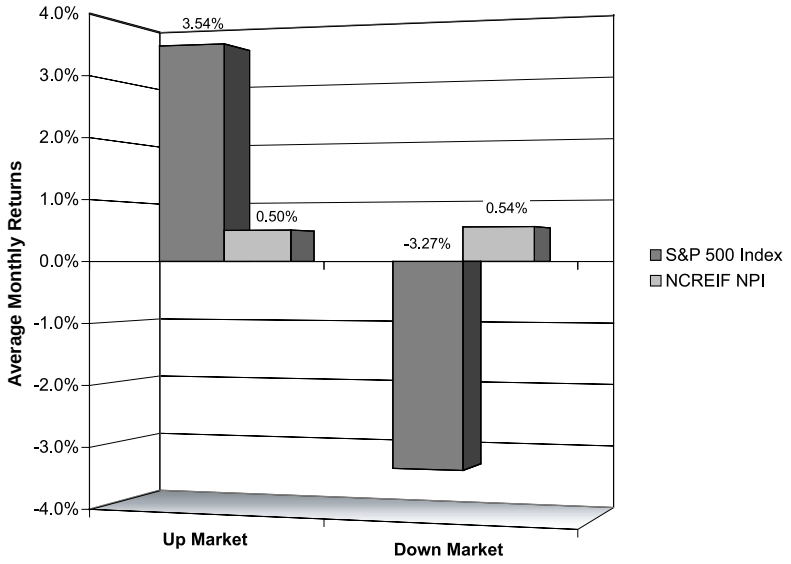
The two primary means of investing in private real estate is through direct investments in individual properties and through pooled investments such as real estate limited partnerships. Direct investments in real estate require substantial expertise in evaluating individual properties, efficient property management and real estate markets in general. They also are concentrated investments with returns tied to a single property.

Real estate limited partnerships are pooled investment vehicles managed by people specializing in different types of real estate investing. The pool's assets are invested across several properties to provide a degree of diversification to their investors' overall returns.

As shown in Figure 4.2, private real estate has been successful in providing some protection during periods of poor equity performance. From January 1990 through March 2001, private real estate produced an average monthly return of 0.54% during months when the S&P 500 produced negative returns.

Figure 4.2

Returns of Private Real Estate Managers vs. the S&P 500 in Up and Down Markets
(January 1990 - March 2001)



Source: Standard & Poor's Micropal and ncreif.com

Importance of Property Selection

Property selection is a critical factor in generating good returns when investing in private real estate. A recent study concluded that investment performance tends to persist among top-quartile performing properties and bottom-quartile performing properties. In other words, if a property performs well over a period of time, it is likely to continue to deliver good returns for an extended period of time. Conversely, properties that have performed poorly for a period of time are not likely to see improvements in the near term.[79]

Identifying investment properties that will perform well, however, can be very challenging. There is only limited public information on individual real estate markets. Properties are traded infrequently and sales are usually made through privately negotiated transactions instead of public auctions. Each property is also unique, and both property type and location affect valuation.

Private Real Estate Lacks Liquidity

Beyond the difficulties in obtaining adequate diversification, a chief limitation to all private real estate investing is a lack of liquidity. Partnership investments usually have seven to ten year lives.

Direct investments in individual properties are also extremely illiquid. Trades occur infrequently and no organized market of buyers and sellers exists to allow investors to get in and out of positions immediately.

A measure of the lack of liquidity in the real estate markets is reflected in the high transaction costs in this asset class. Real estate transaction costs typically range from 6% to 10% of the property's sale price, as opposed to 1% on mutual funds or 2% to 4% on alternative investment vehicles.[80]

B. Real Estate Investment Trusts (REITs)

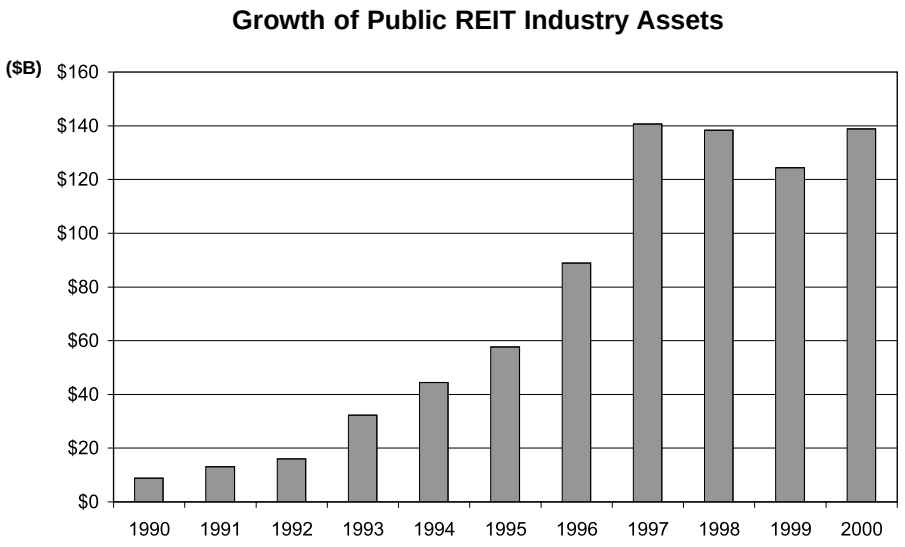
REITs were first created in 1960 and were designed to provide a measure of liquidity for real estate investors. REITs are publicly traded companies whose shares are normally listed on the New York Stock Exchange. Most of them are "equity REITS," which own and manage commercial real estate such as apartments, offices and shopping centers. A few REITs are "mortgage REITS," which lend on real estate or invest in mortgages.

REITs are similar to closed-end mutual funds

REITs are similar to closed-end mutual funds in that they allow investors to diversify their holdings, receive professional management and are not taxed at the corporate level. Shares are publicly traded and priced daily.[81] However, many REITs are active businesses that sell, acquire and develop new real estate.

The publicly traded REIT market is growing rapidly. It has grown from less than $6 billion in total assets in 1990 to more than $140 billion by the end of the second quarter of 2001.[82] Nearly 200 REITs currently trade on national stock exchanges and the increased liquidity of these vehicles is reflected in that their average daily trading volume has increased from about $28 million per day in 1992 to more than $400 million as of April 2001.[83]

Figure 4.3



Source: NAREIT

There is debate as to whether investments in REITs are analogous to investments in real estate

There is, however, a great deal of debate as to whether investments in REITs are analogous to investments in real estate. While owning real estate, many REITs may be viewed as operating businesses whose performance can drive stock prices. The higher correlation of REITs (in comparison to private real estate) to traditional asset classes in large part reflects the dependency of these vehicles' earnings on their operating businesses, capital allocation strategies and broad-based fluctuations in the equities markets. Consequently, for many institutional investors, REITs are an additional asset class, separate and distinct from real estate itself.

REIT share prices can also be much more volatile than private real estate. Recent research suggests, however, that much of private real estate's low volatility is due to appraisal-based valuations. This reliance on appraisal valuation methodologies creates a "smoothing" effect on private real estate prices that does not necessarily represent the actual value of the underlying properties had they been sold on that date.[84]

Table 4.3

Comparison of REITs vs. Private Real Estate	
REITs	Private Real Estate
More closely correlated to traditional asset classes	Less correlated to traditional asset classes
More Volatile	Less Volatile
Priced daily	Appraised quarterly or annually
Liquid	Illiquid
Core business goes beyond real estate	Core business is real estate
Must respond to public oversight	Does not have to respond to public oversight
Easily accessible by small investor	Hard for small investor to access
Hard for large investor to access	Easy for large investor to access

C. Real Estate Benchmarks

Although there are several benchmarks for real estate investments, the most widely used index for private real estate is the National Council of Real Estate Investment Fiduciaries Property Index (NPI). The National Association of Real Estate Investment Trusts (NAREIT) Index and the Morgan Stanley Real Estate Index (RMS) are the most widely used indices for benchmarking REIT investment performance.

C. Real Estate Benchmarks

Table 4.4

	Overview	Characteristics
National Council of Real Estate Investment Fiduciaries Property Index (NPI)	Created in 1978, it tracks the performance of unleveraged equity investments in apartment, office, retail, industrial, and hotel properties held by U.S. pension plans.	• Represents more than 3,000 properties with market values totaling in excess of $99 billion. • Tracks total return of properties calculated on the basis of current income plus an apprais al-based appreciation component. • Cannot be purchased. • Only quarterly returns given.
National Association of Real Estate Investment Trusts (NAREIT)	Created in 1972, it tracks the performance of all publicly traded real estate investment trusts. REITs in this index typically are leveraged 50%.	• Represents 198 REITs with market values totaling in excess of $140 billion • Tracks total return of REITs using transaction-based pricing. • Five different sub-indices available (Composite, Equity, Mortgage, Hybrid and Top 100). • Market capitalization weighted. • REITs added to index in the month when they become public.
Morgan Stanley Real Estate Index (RMS)	Created in 1994, it tracks the performance of all publicly traded REITs except for healthcare REITs and smaller REITs.	• Represents 116 REITs with market values totaling in excess of $125 billion. • Tracks total return of REITs using transaction-based pricing. • Market capitalization weighted. • Rebalanced quarterly at minimum, daily if necessary.

Source: National Council for Real Estate Investment Fiduciaries, NAREIT, Morgan Stanley

Weaknesses in Real Estate Benchmarks

One of the strongest criticisms of the NPI is that it does not accurately reflect the day-to-day price movements of real estate. Unlike the S&P 500, the NPI is not transaction-based. Total return is not measured by purchases and sales, but instead by current income plus an appraisal-based factor.

Although property appraisals are used extensively in real estate transactions, they have not accurately reflected real estate prices. For example, a government study found that 10% to 15% of the $1.3 billion in losses suffered by private mortgage insurers over one two-year time period could be attributed to inaccurate and fraudulent appraisals. Similarly, between 10% and 40% of the $420 million loan losses suffered by the Veterans Administration in one year were caused by inaccurate or dishonest appraisals.[85]

Part of the problem with appraisal-based valuations is that they have been shown to be subject to seasonality biases and thus, do not account for increased demand in summer months. They also do not adequately reflect regional economic changes in their estimates.[86]

Smoothing, Seasonality and Lagging

The NPI relies on appraisals that can be nine months out of date

The use of appraisal-based valuations is further exacerbated by the frequency with which properties are actually appraised. Although property values in the NPI are calculated quarterly, appraisals are conducted only annually. Consequently, most of the data in the benchmark is based on appraisals that might be as much as nine months out of date.[87]

This reliance on potentially stale appraisals creates several weaknesses in the NPI. First, the index does not reflect the true price volatility of its underlying properties. The quarter to quarter, or even daily, changes in valuation by most of the properties in the index are not reflected in the benchmark.

Second, the index tends to show artificially large movements in the fourth quarter of each year. About 37% of all appraisals are conducted during this time period – more than any other quarter – causing the largest shift in the overall value of the index. Properties appreciate or depreciate throughout the entire year, but most of this change is first reflected in the last quarter of each year.[88]

Third, the NPI tends to lag market trends. A lack of current appraisals for each property each quarter causes the benchmark to trail actual prices during market upturns – thus producing lower returns – and trail market prices in downturns, thus overstating performance.

The resulting lag creates a "smoothing effect" on the return stream for the asset class, making it appear less volatile. Although real estate returns over time (as measured by the NPI) appear to be only as volatile as bonds, academic research suggests that their true volatility is closer to equities.[89]

REIT Indices Also Imperfect

The NAREIT is the most comprehensive index, but the RMS provides intra-day price quotes, making it more popular among REIT managers

The NAREIT and RMS indices attempt to be broad-based indices reflective of the entire REIT market. But both have imperfections. The NAREIT encompasses every publicly traded REIT, making it the most comprehensive of the two benchmarks. It also does not include Real Estate Operating Companies (REOCs), such as non-REIT ownership and development companies, nor does it include gaming or hotel companies, which derive much of their revenue from non-real estate related activities. However, it is not universally used because intra-day quotes are not available. Prices are only available at the close of each day, making many REIT managers foresake this benchmark for the RMS.

The RMS, while it does provide intra-day quotes, also has its weaknesses. First and foremost, it does not include every publicly traded REIT. It excludes healthcare REITs, which comprise 4% to 5% of the total REIT market. It also excludes REITs that are smaller than $100 million in market capitalization.[90]

D. Evaluating Private Real Estate Managers

Degree of specialization is an important factor for evaluating real estate managers. The more focused on a particular property type, the greater the ability of the manager to capitalize on the pricing and informational inefficiencies of an asset class. Similar factors may change the values of office buildings in a different fashion than for retail or industrial properties.[91]

In addition to specialization, successful managers understand real estate cycles and how they affect various property types. They also share the ability to:

- ♦ Select properties in good locations without overpaying
- ♦ Select a good property manager
- ♦ Control costs

E. Evaluating REIT Managers

Evaluating REIT managers is similar to evaluating long/short hedge fund managers. Comparing how they do during down markets is perhaps the most telling statistic of skill level, particularly given that most investors view REITs as conservative or defensive investments.

During strong markets, when property prices and rents are rising and vacancy rates are declining, virtually all REITs do well. REIT success in up markets is largely about location.

In down markets, however, good REIT managers build the foundation for the later creation of substantial wealth. They have built the relationships necessary to raise capital that will allow them to acquire properties cheaply. They are also able to minimize the flight of tenants – or replace them quickly – when poor economic conditions prevail. The ability of REIT managers to attract high-quality tenants is also a strong sign of good management, as is their ability to select good properties and allocate capital appropriately.[92]