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REITs vs. Private Real Estate: More Similar than Different

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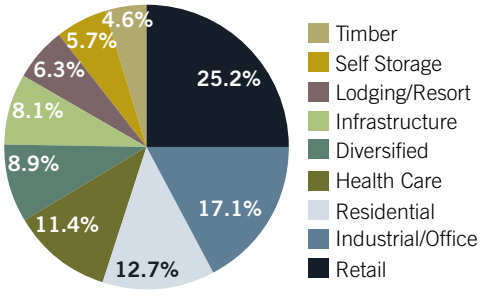
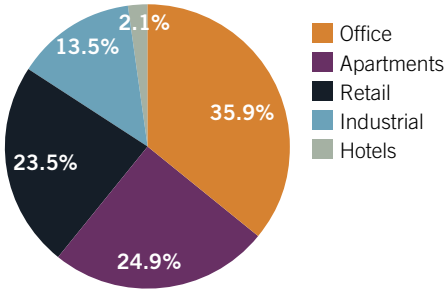
Commercial real estate investments come in two forms: private and public. In the private market, an investor can directly own a property such as an apartment building, manage the asset, and lease the units. The other option is to buy shares of a real estate investment trust (REIT) to gain exposure to a professional company that owns and operates apartment buildings. It is typically more difficult for individual investors to invest directly in property sectors such as malls, hotels, or office buildings, as they tend to be larger in scale and require more capital to purchase and maintain. While REITs and direct real estate both involve ownership of physical buildings and land, they do not have the same short-term investment characteristics (see Exhibit 1, below) and may, therefore, play different roles in an investor's portfolio.

EXHIBIT 1: REITs and private real estate have distinct investment characteristics.

DIFFERENCES BETWEEN REIT AND PRIVATE REAL ESTATE INDICES

REITS	Private Real Estate
Forward-looking	Backward-looking
Daily liquidity	Illiquid
Constant price discovery	Appraisal-based pricing
Levered	Unlevered
Wide range of property types	"Core" property types





Source: (left) National Association of Real Estate Investment Trusts (NAREIT), as of Apr. 30, 2014; (right) National Council of Real Estate Investment Fiduciaries, as of Mar. 31, 2014.

KEY TAKEAWAYS

- Although REITs and private real estate reflect different types of ownership, investors are provided with exposure to similar commercial real estate assets.
- Private real estate returns appear to be less correlated to equity markets with more stable returns in the short run; however, this appearance is due to the way in which private real estate is valued.
- Investors with long time horizons can be indifferent between holding REITs or private real estate.
- Because REITs provide real estate exposure *and* stock market exposure, they may offer additional opportunities for active managers to add value when stock market forces cause REITs to deviate from the value of the underlying real estate in the short run.

Fidelity INVESTMENTS

Equity REITs: an overview

Congress created real estate investment trusts (REITs) in 1960 to make income-producing real estate investments more accessible to individual investors. Prior to the creation of REITs, real estate investment opportunities had been available only to institutions and wealthy individuals, through direct investments in real estate.

To qualify as a REIT, a company must:

- Invest at least 75% of its total assets in real estate
- Derive at least 75% of its gross income as rent or mortgage interest from real property
- Distribute at least 90% of its taxable income to shareholders in the form of dividends

Because they trade on exchanges the way stocks do, REITs are forward-looking investments, with constant liquidity and price discovery through market trading. As such, they have historically been more volatile than direct real estate, which trades less frequently. REITs are also levered, meaning that most REIT companies use a combination of debt and equity to finance property acquisitions. The amount of leverage used by REITs is modest and has averaged 43% over the past 30 years.[1] Furthermore, REITs comprise a wide range of property types, including traditional sectors such as offices and apartments, and non-core sectors such as health care and timber.

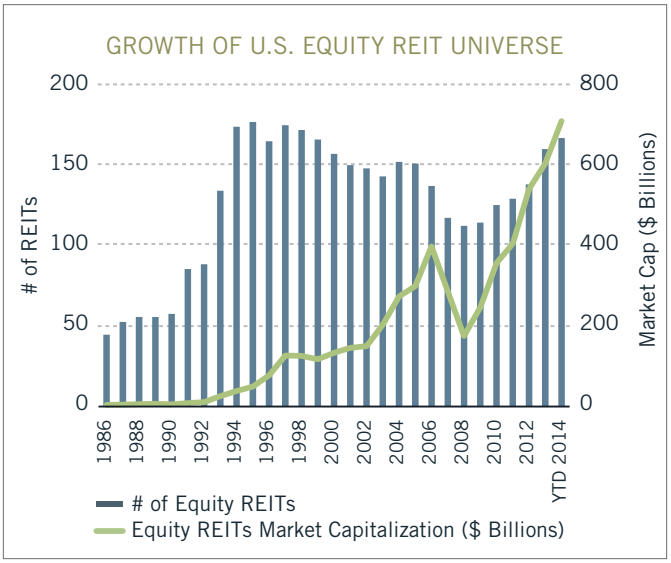
Today, REITs own and manage commercial real estate properties across a diverse group of sectors. According to the National Association of Real Estate Investment Trusts (NAREIT), there are more than 160 publicly traded equity REITs in the U.S. today, with a collective equity market capitalization above $700 billion as of the end of April 2014 (see Exhibit 2, above right).

Depending on the time horizon, REITs may act both like real estate and stocks. Over short time horizons, the performance of REITs can be similar to that of the broad stock market. However, over longer time horizons, equity REIT performance has been similar to the returns investors have earned from owning the underlying real estate. When compared with the rolling 10-year returns of other asset classes (such as stocks and bonds), equity REIT performance has been favorable, generally ranging from the high single digits to low double digits (see Exhibit 3, right).

Private real estate: an overview

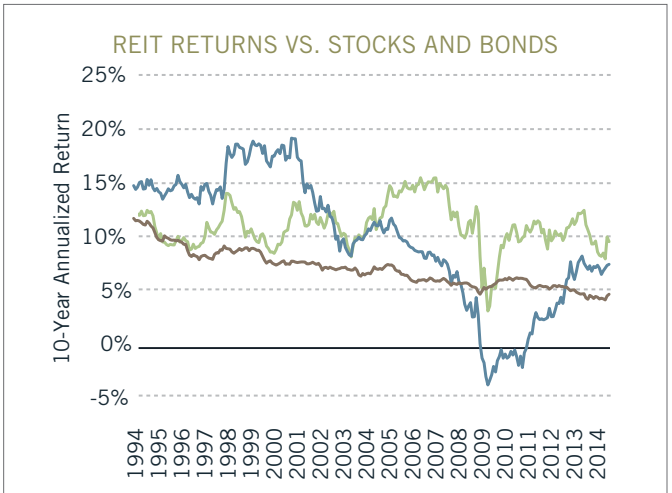
Private real estate involves purchasing a direct interest in one or more real estate properties (e.g., an industrial building). In a private real estate investment, the investor would own a property and receive cash flow payments from tenants as well as participate in capital appreciation of the property over time. Investors can also participate in this market by purchasing properties with any number of partners, which is known as a pool or syndicate.

EXHIBIT 2: The size of the REIT market has soared in the past few decades.



Source: National Association of Real Estate Investment Trusts (NAREIT), as of Apr. 30, 2014.

EXHIBIT 3: Over time, REIT performance has been favorable compared with stocks and bonds.



	10-Year Annualized Return as of 5/31/2014	Average of 10-Year Returns	Standard Deviation of 10-Year Returns
FTSE NAREIT All Equity REITs	9.87	11.30	2.13
S&P 500	7.77	10.12	5.99
Barclays U.S. Aggregate Bond	4.99	7.30	1.66

Past performance is no guarantee of future results. Indexes are unmanaged. It is not possible to invest directly in an index. Source: Fidelity Investments, as of May 31, 2014. Monthly 10-year annualized returns since Jan. 1994. REITs represented by FTSE NAREIT All Equity REIT Index, stocks by S&P 500 Index, and bonds by Barclays U.S. Aggregate Bond Index.

Private real estate values, as represented by the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI), are based on an appraisal process. Although privately held real estate may have leverage, the NPI is reported on an unlevered basis and includes only "core" commercial property types—office, apartments, hotels, retail, and industrial properties.

Comparing REITS and private real estate

In comparison with private real estate, publicly traded REITs have had higher returns over intermediate and long time periods. However, they also have higher volatility, as measured by standard deviation. Exhibit 4 (below, left) compares returns, standard deviations, and Sharpe ratios between REITs and two private real estate benchmarks. The NPI benchmark uses appraisal-based pricing of private real estate properties, and the NTBI benchmark uses transactions-based pricing of private real estate.

Real estate markets are broadly pro-cyclical and follow cycles based on macroeconomic factors such as economic growth and the level of unemployment, as well as real-estate-specific factors such as occupancy rates and the level of new construction of commercial real estate properties. Since REITs and private real estate both involve ownership of underlying commercial properties, the cycles of the two investment vehicles should intuitively be similar. That is, both forms of ownership should track a common real estate factor. Considering the highly liquid and forward-looking nature of REITs, they should lead the common factor with higher volatility. Conversely, with the relatively illiquid and backward-looking nature of the appraisal process, the private real estate market should lag the common factor. The illustration in Exhibit 5 (right) is a theoretical representation of these relationships.

Research and findings

Adjusting returns for transactions

When comparing REITs and private real estate, it is important to remember that REIT returns are based on equity market trading, while NPI returns are derived from appraisals. These estimates of property values are based on recent sales and other appraisals of comparable properties, and are therefore lagging indicators. To moderate the smoothing influence of appraisal-based valuations, NCREIF also provides a version of the NPI that is adjusted quarterly by the prices of properties sold. It's known as the NCREIF Transaction Based Index (NTBI). When this transaction-adjusted NPI (available since 1994) is added to performance comparisons, we find that public REITs once again provide higher returns than their private real estate counterparts, but with more volatility (see Exhibit 6, page 4).

As the chart demonstrates, adjusting the NPI by recent transactions more than doubles the volatility. However, volatility still remains below that of REITs, and this apparent volatility gap has caused many investors to favor private real estate over public real estate.

Adjusting for leverage and property type

Although REIT indices are inherently levered and private real estate indices are not, adjusting their returns for leverage, property-type weights, and transactions (similar to the approach taken by Pagliari, Sherer, and Monopoli, 2003)[2] shows that returns for all three comparable series are more similar, especially over longer time horizons. While the volatility of REITs is roughly twice as high as that of the comparable NPI, it is about the same as the transaction-adjusted NPI (see Exhibit 7, page 4). This demonstrates that, after adjusting for differences in liquidity, leverage, and property type, the risk/return characteristics of REITS and private real estate are actually fairly similar.

Modeling the common real estate factor

Given our belief that REITs and private real estate are claims on the same underlying growth drivers, the returns of both should intui-

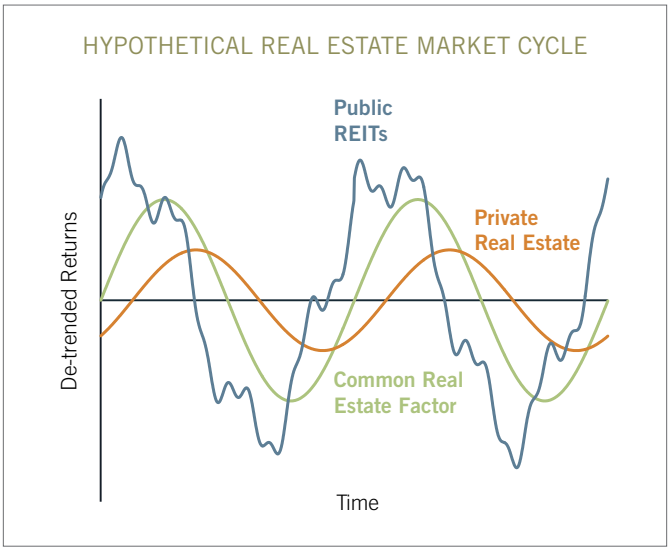
EXHIBIT 4: REITs have historically outperformed private real estate, but have also been more volatile.

REIT RETURNS VS. PRIVATE REAL ESTATE RETURNS

	Average Quarterly Returns			Quarterly Standard Deviation	Annualized Sharpe Ratio
	5 Year	10 Year	Since Q1 1994	Since Q1 1994	Since Q1 1994
REIT	6.93	2.92	3.10	10.17	0.46
NPI	1.95	2.15	2.29	2.30	1.31
NTBI	1.88	2.36	2.70	5.48	0.70

Past performance is no guarantee of future results. Source: National Council of Real Estate Investment Fiduciaries (NCREIF), NAREIT, Fidelity Investments, as of Mar. 31, 2014.

EXHIBIT 5: Public and private real estate returns should follow the same cycle.



For illustrative purposes only.

EXHIBIT 6: Private real estate is less volatile than REITS even when adjusted by recent transactions.

REIT VS. PRIVATE REAL ESTATE, ADJUSTED FOR TRANSACTIONS

	Average Quarterly Returns				Quarterly Standard Deviation		Sharpe Ratio	
	5 Year	10 Year	Since Q1 1994	Since Q2 1980	Since Q1 1994	Since Q2 1980	Since Q1 1994	Since Q2 1980
REIT	2.92	3.76	3.15	3.45	10.43	9.19	0.46	0.48
NPI	0.60	2.10	2.27	2.07	2.37	2.19	1.27	0.75
Transaction-Adjusted NPI	0.61	2.24	2.70	–	5.60	–	0.69	–

Source: NAREIT, NCREIF, Fidelity Investments, as of Dec. 31, 2012 (latest data available).

EXHIBIT 7: When adjusted, the risk/return profile of REITs is similar to private real estate.

REIT SIMILAR TO PRIVATE REAL ESTATE, ADJUSTED FOR LEVERAGE AND PROPERTY TYPE

	Average Quarterly Returns				Quarterly Standard Deviation		Sharpe Ratio	
	5 Year	10 Year	Since Q1 1994	Since Q2 1980	Since Q1 1994	Since Q2 1980	Since Q1 1994	Since Q2 1980
Comparable REIT	1.97	2.49	2.47	2.54	4.87	4.71	0.70	0.55
Comparable NPI	0.60	2.10	2.27	2.07	2.37	2.19	1.27	0.75
Comparable Transaction-Adjusted NPI	0.61	2.24	2.70	–	5.60	–	0.69	–

Source: CRSP/Ziman, NCREIF, Fidelity Investments, as of Dec. 31, 2012 (latest data available).

tively be explained by a similar factor. We call this the common real estate factor. The common factor can be estimated using a mathematical model that attributes some portion of the movements of a particular real estate series to the common factor, while another portion is specific to the individual series. As seen in Exhibit 8 (page 4), the one-year moving average of quarterly returns for the common factor—and the comparable REIT, NPI, and NTBI returns—are all similar. This further supports the hypothesis that REITs and private real estate follow a common real estate cycle.

Drivers of real estate returns

Modeling the common real estate factor allows us to identify drivers of returns. It also allows us to identify drivers that are specific to REIT and NPI returns.

The common factor is explained by the equity markets (reflecting the pro-cyclical nature of both real estate and stock markets), credit spreads (reflecting the cost and availability of credit to finance capital-intensive properties), and real estate market turnover. These findings are all intuitive. It makes sense that real estate does well when the equity markets are doing well, when credit is available, and when transactions are occurring.

After extracting other factors, the short-term variations in returns for REITs and private real estate are explained by market-specific factors. For REITs, these are generally equity market factors, such as the performance of small cap and value stocks. For private real estate, the factors relate to appraisal smoothing. Again, it makes intuitive sense that REIT stocks should be partially influenced by the stock market, and that private real estate values are influenced by appraisals. These factors are summarized in Exhibit 9 (page 5).

Investment implications

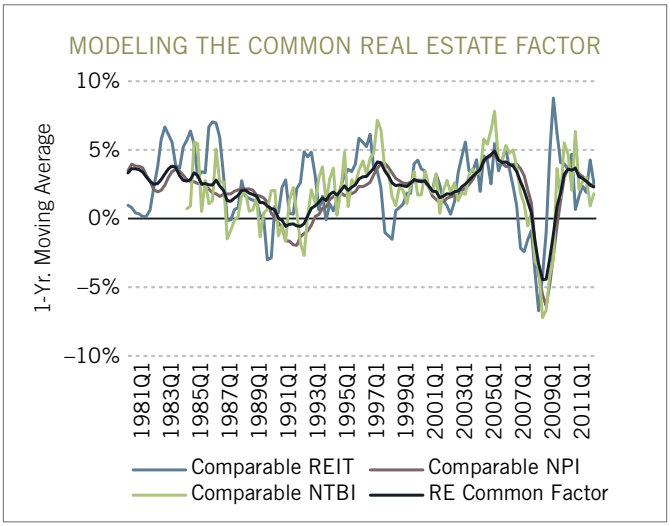
Investors can obtain exposure to real estate through liquid publicly traded REITs or less-liquid direct real estate investments. Both investment vehicles involve ownership of physical buildings and land, and although they have different risk/reward characteristics in the short term, adjusting index returns for differences in leverage and construction reveals more similar performance.

Over a full real estate cycle, many of the vehicle-specific effects of REITs and private real estate cancel out because their returns are exposed to the same common drivers and, therefore, tend to move together. The potential long-term benefits of exposure to real estate are well established, including consistent income generation, diversification, low correlation to more traditional asset classes, the ability to outpace inflation, and the possibility of positive real returns. Our analysis suggests that investors looking for exposure to these long-term benefits of real estate can be indifferent when choosing between owning REITs, private real estate, or both.

In the short run, public and private real estate returns can diverge because of shocks and features that are specific to these different real estate investment options. This divergence suggests there

may be a short- and medium-term diversification benefit to holding both in a diversified portfolio. The volatility of REITs relative to the common real estate cycle can also provide additional opportunities for active management to add value when short-term stock market dislocations cause REIT values to diverge from the value of the underlying real estate. Additionally, some investors may be drawn to the liquidity of REITs.

EXHIBIT 8: Real estate's true risk/return properties plus vehicle-specific components explain REIT and private real estate returns.



Source: CRSP/Ziman, NCREIF, Fidelity Investments, as of Dec. 31, 2012. Data measures quarterly returns.

EXHIBIT 9: Multiple factors affect real estate returns.

REIT AND NPI RETURN FACTORS

Common Real Estate Factor	=	Equity Market Returns + Credit Spreads + Real Estate Market Liquidity
REIT Returns	=	Common Real Estate Factor + Small Cap Stock Factor + Value Stock Factor
NPI Returns	=	Common Real Estate Factor + Appraisal Smoothing

Source: Fidelity Investments

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In general the bond market is volatile, and fixed-income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.)

Fixed-income securities carry inflation, credit, and default risks for both issuers and counterparties.

Investing involves risk, including risk of loss.

Past performance is no guarantee of future results.

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All indices are unmanaged and performance of the indices includes reinvestment of dividends and interest income and, unless otherwise noted, is not illustrative of any particular investment. An investment cannot be made in any index.

Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

Stock markets, especially non-U.S. markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest rate, currency exchange rate, economic, and political risks, all of which are magnified in emerging markets.

Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall, and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments. Additionally, bonds and short-term investments entail greater inflation risk, or the risk that the return of an investment will not keep up with increases in the prices of goods and services, than stocks.

Leverage can magnify the impact that adverse issuer, political, regulatory, market, or economic developments have on a company. In the event of bankruptcy, a company's creditors take precedence over the company's stockholders.

Endnotes

[1] As measured by the ratio of debt and preferred equity to enterprise value. Source: Center for Research in Security Prices (CRSP)/Ziman Real Estate Data, as of Dec. 31, 2012. Calculated based on data from the CRSP/Ziman Real Estate Database. ©2014 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business.

[2] Pagliari, J., K. Scherer, and R. Monopoli. "Public versus Private Real Estate Equities" *The Journal of Portfolio Management*, Vol. 29, No. 5 (2003), pp. 101–111.

Index definitions

NAREIT®, the National Association of Real Estate Investment Trusts®, is the worldwide representative voice for REITs and publicly traded real estate companies with an interest in U.S. real estate and capital markets.

NCREIF, the National Council of Real Estate Investment Fiduciaries, was established to serve the institutional real estate investment community as a nonpartisan collector, processor, validator, and disseminator of real estate data for performance measurement, research, investment analysis, and education.

FTSE NAREIT Equity REIT Index is an unmanaged market value- weighted index based on the last closing price of the month for tax-qualified REITs listed on the NYSE.

S&P 500®, a market capitalization-weighted index of common stocks, is a registered service mark of the McGraw-Hill Companies, Inc., and has been licensed for use by Fidelity Distributors Corporation.

Barclays® U.S. Aggregate Bond Index is an unmanaged, market value-weighted performance benchmark for investment-grade fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities with maturities of at least one year.

The Center for Research in Security Prices (CRSP)/Ziman Real Estate Data Series identifies and classifies by property-type REITs that have traded on the major exchanges since 1980. The stocks in the CRSP/Ziman series are linked with CRSP for REIT returns and with Compustat for financial statement data, and a value-weighted index is constructed from this combined data set.

Privately held real estate returns are calculated quarterly from the NCREIF Property Index (NPI), a value-weighted, appraisal-based index to measure property returns for benchmarking and informational purposes. An appraisal is an estimate of a property's market value based on recent sales of comparable properties, replacement cost, and other appraisals of similar assets. Properties are appraised on a rolling or staggered basis. Based on factors that are already in place, appraisals are not instantaneous and are therefore lagging.

The NCREIF Transaction Based Index (NTBI) is based on properties in the NPI that were sold during the quarter. As such, the NTBI is complementary to the appraisal-based NPI, and is considered to be more comparable to other transaction-based financial market indices. The NTBI is calculated in two stages. First, for all properties sold in the quarter, NCREIF calculates the average ratio of the sales price divided by the appraisal, lagged two quarters. Second, this ratio is multiplied by the NPI level, also lagged two quarters, to convert the result into the NTBI transaction-based price index. The lagged appraisal is used instead of the current appraisal because the appraisal price may be influenced by a subsequent sale within two quarters.

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Standard deviation shows how much variation there is from the average (mean or expected value). A low standard deviation indicates the data points tend to be very close to the mean; a high standard deviation indicates that the data points are spread out over a large range of values.

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