



Real Estate Investment Trusts

Canterbury Consulting

What role do Real Estate Investment Trusts (“REITs”) serve in your portfolio?

The information contained within this paper is provided for informational purposes only. Investors should seek professional tax counsel prior to making an investment in REITs.

Introduction

What is the role of publicly traded REITs in a diversified investment portfolio? We explore the merits of REITs for the three categories that form broad portfolio diversification: growth, capital preservation, and inflation protection.

Classification & Structure of REITs

By way of background, a REIT is a security that invests in real estate through property or mortgages and often trades on major stock exchanges. Most REITs receive special tax treatment and typically offer attractive dividend yields. Unlike other real estate companies, a REIT does not develop real estate properties to sell them. Instead, a REIT buys and develops properties primarily to operate them as part of its own investment portfolio.¹

A company must adhere to the following guidelines in order to be classified as a REIT in the United States²:

- 75% of total assets must be invested in real estate
- 75% of gross income must come from real property rents, interest from real property mortgage financing, or from real estate sales
- 95% of taxable income must be distributed to shareholders in the form of dividends
- Must be a taxable corporation
- Must be managed by a board of directors
- Must have at least 100 shareholders
- No more than 50% of shares can be held by five or fewer individuals (i.e., cannot be “closely held”)

REITs as a Growth Asset

In order to be a good fit as a growth asset, an investment must contribute to the following objectives:

- (i) Provide growth of portfolio assets in excess of inflation and spending rates
- (ii) Maintain comparable exposure to the global equity market
- (iii) Exhibit returns uncorrelated to fixed income markets

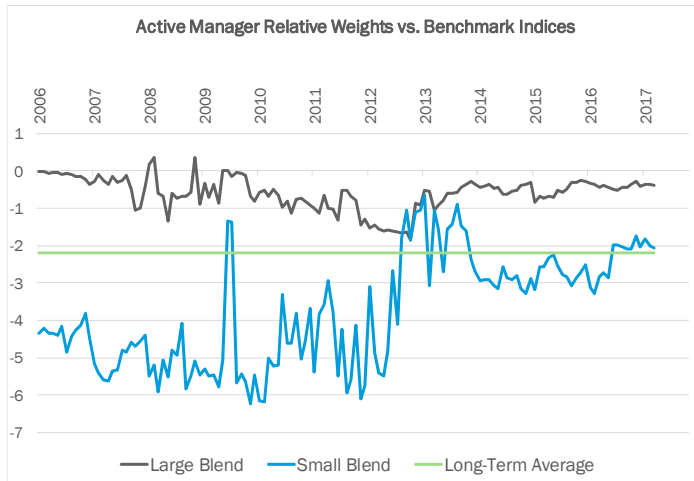
Exhibit 1: REITs have performed well versus other asset categories on a long-term basis

Average Annual Total Returns (%) as of 3/31/2017	10 Yrs	15 Yrs	20 Yrs
FTSE NAREIT All Equity REITs	5.0	10.4	9.8
Russell 3000	7.5	7.4	8.1
MSCI EAFE	1.1	5.7	4.6
MSCI EM	2.7	9.5	N/A
Barclays US Aggregate Bond	4.3	4.6	5.4
BofAML US High-Yield Master II	7.3	8.2	7.1
Barclays Global Aggregate Ex US	2.6	5.3	3.9
Morningstar US Real Asset	4.4	7.0	N/A

Source: Morningstar Direct

In terms of total return, equity REITs have kept pace with equities over the past decade, returning 5% per year. However, extending the time period to the past 15 and 20 years, equity REITs have been the best performing asset class, returning approximately 10% in both periods on an annualized basis. A large factor contributing to outperformance over the longer term periods is the fact that REITs performed exceptionally well during the dot-com bubble bust that crashed equity markets in the early 2000s.

Exhibit 2: Active U.S. equity managers have maintained a constant underweight to REITs over time.



Relative weight = percentage points. Active manager weights are averages of the percentages of total assets invested in REIT securities for equity strategies in each category with reported holdings in Morningstar. Index weightings represented by: S&P 500 and Russell 2000 Index. All data as of March 31, 2017. Source: Morningstar Direct

Active U.S. equity managers, particularly in the small- and mid-cap space, have historically maintained an underweight to REITs relative to their respective benchmarks. The average underweight across the cap spectrum for the last 10 years has been approximately 3%. REITs do not have a lot of the characteristics that most equity portfolio managers are looking for as they analyze stocks based on fundamental characteristics such as P/E, earnings growth, and return on invested capital (ROIC). Instead, they are more suited for analysis by dedicated REIT managers, who specialize in combining top-down analysis (GDP, job growth, inflation, interest rates, etc.) with bottom-up research (ability for a property to generate a growing income stream, capitalized value that can be realized through a sale, etc.) specific to real estate.

An allocation to a dedicated REIT manager would help reduce or eliminate the underexposure to REITs experienced by investors who rely on active equity managers to provide exposure to the overall market.

Exhibit 3: The FTSE NAREIT All Equity REIT Index (NAREIT) has exhibited a low correlation to various fixed income indices (data from 4/1/1997 to 3/31/2017).

Monthly Return Correlation

Barclays US Aggregate Bond	0.19
Barclays Municipal Bond	0.21
Citi World Government Bond Index	0.22
BofAML US Treasuries 1-3 Year	-0.10
BofAML US High-Yield Master II	0.61
Barclays Global Aggregate	0.31
Barclays Global Aggregate ex US	0.30

Source: Morningstar Direct

With the exception of high-yield bonds, REITs have exhibited very low correlations to various bond indices over the past two decades. High-yield bonds are more correlated to equities, so it is not surprising that they are also relatively more correlated to equity REITs, although the correlation is modest (0.6). In addition, high-yield bonds compete with REITs, which also carry high yields, for investor capital, particularly when interest rates are low. Overall, however, in terms of maintaining a low correlation to fixed income markets, equity REITs do so since they function similar to equities.

REITs generally attract investment during periods of low interest rates because of their high dividend yields. As a result, it is a widely held belief that REITs will decline during a period of rising interest rates. Historical data does not support this, however. When examining the nine periods of rising interest rates in the modern REIT era (1993-2013), REITs have generated positive absolute returns in seven periods and outperformed the S&P 500 in five periods. Although rising interest rates are a headwind, they generally portend an improving economic backdrop, which is supportive of REIT cash flow and valuation growth.³ Because of their ability to generate high returns uncorrelated to fixed income, and their role in maintaining comparable exposure to the U.S. equity market, investors should consider including a REIT strategy as part of a diversified allocation to growth assets.

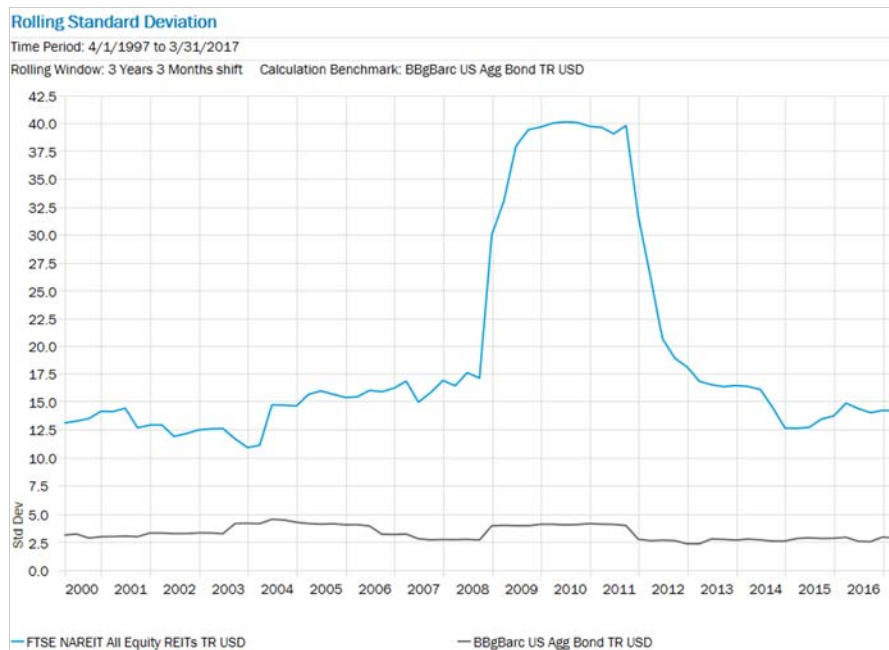
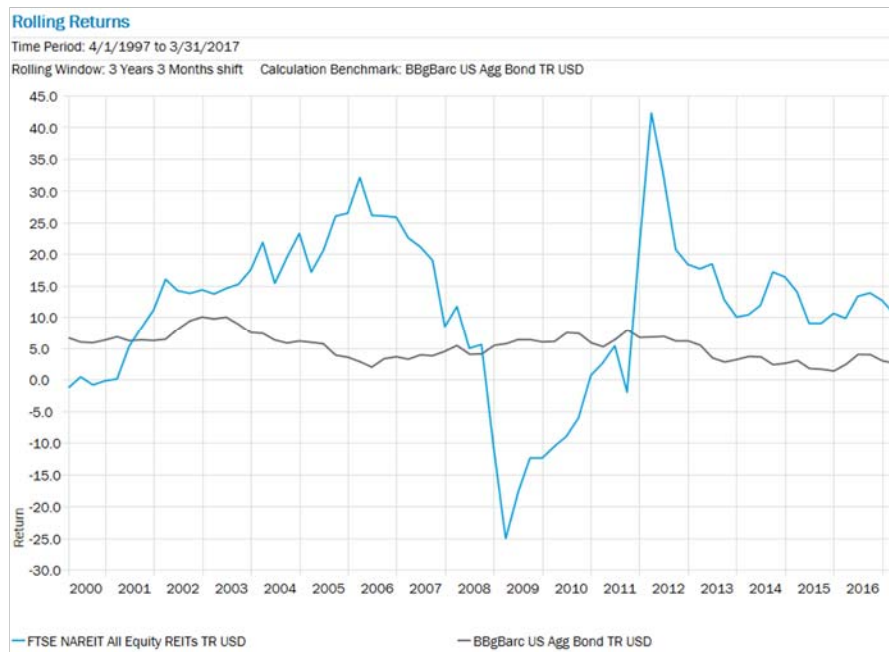
REITs as a Capital Preservation Asset

In order to be a good fit as a capital preservation asset, an investment must contribute to the following objectives:

- (i) Preserve capital and mitigate volatility
- (ii) Provide measured exposure to the diverse universe of fixed income securities
- (iii) Exhibit returns uncorrelated to equity markets

REITs have historically been susceptible to shocks in the economy and have exhibited volatility six times that of fixed income. As a result, they have not adequately preserved capital or mitigated volatility.

Exhibit 4: REIT rolling returns and standard deviation reveal inadequate capital preservation characteristics.



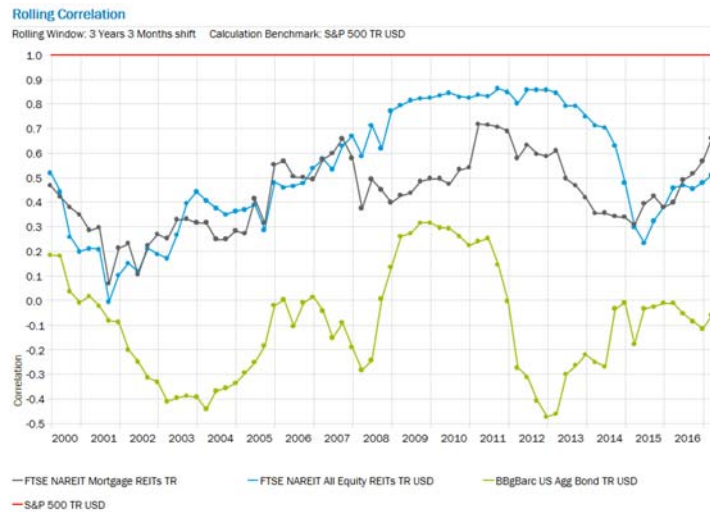
Source: Morningstar Direct

The charts display rolling returns and rolling standard deviations of the NAREIT and the Barclays U.S. Aggregate (“Agg”) over the last 20 years. During times of market stress (i.e. 2008 Financial Crisis) REIT returns fell approximately 50% from peak to trough while the Agg. remained relatively constant. Moreover, REIT volatility spiked approximately 40% during the same time period. REITs behaved similar to equities and precipitously sold off due to their high liquidity profile and the decline of their underlying property values.

In general, REITs have low direct exposure to fixed income securities. In terms of market capitalization, approximately 90% of REITs are classified as equity, where the underlying properties are directly owned. While the collection of rents from properties act as pseudo coupon payments, the properties themselves do not necessarily have finite lives, as compared to bonds.

Conversely, approximately 10% of REITs are classified as mortgage REITs by market capitalization. They may use leverage to own mortgage loans, originate mortgage loans themselves, or buy distressed mortgage loans with the intent of working with the debtor to obtain the property outright. Mortgage REITs share many of the same inherent risks of those in the mortgage sector. Risks include net interest margin squeezing (by way of a flattening yield curve) and potential loan defaults (excess credit risk). Moreover, these REITs grow earnings by increasing their net interest margin, either by lowering short-term borrowing costs or by increasing interest income. As a result, the shape of the yield curve and the interest rate backdrop both have significant impacts on a mortgage REIT’s earnings (i.e., flattening yield curve hurts, steepening yield curve helps).

Exhibit 5: REITs show higher correlation characteristics to equities relative to correlation characteristics of the Barclays U.S. Aggregate.



Source: Morningstar Direct

Both equity and mortgage REITs have historically exhibited higher correlations to equities and lower correlations to bonds. Since REITs do not mitigate volatility, provide sufficient diversification benefits relative to equities, or have significant exposure to the fixed income universe, they are not appropriate as a capital preservation asset.

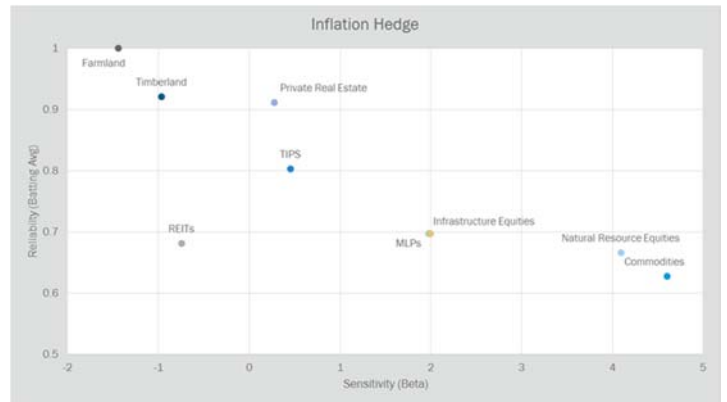
REITs as an Inflation Protection Asset

In order to be a good fit as an inflation-protecting asset, an investment must contribute to the following objectives:

- (i) Preserve purchasing power
- (ii) Generate uncorrelated returns to other asset classes
- (iii) Provide high risk-adjusted returns within the constraints of (i) and (ii)

Historical data reveals that REITs have exhibited sufficient reliability to inflation. Based on quarterly figures rolled back 10 years, REITs have approximately averaged a 70% batting average when inflation occurs. However, REITs have historically exhibited a negative sensitivity (beta) to inflation. The chart below compares REITs to other prominent inflation-protecting assets.

Exhibit 6: REITs exhibit sufficient reliability, but exhibit insufficient sensitivity.



Based on 10-yr rolling data since inception: REITs (1972), Commodities (1991), NR Equities (1996), MLPs (1996), Infra. Equities (2002), Private RE (1978), Farmland (1992), Timber (1987), & TIPS (1997). Source: Morningstar Direct

Although directionally, REITs tend to go up when inflation goes up, the equity-like volatility of REIT returns has made the asset class an insufficient hedge against inflation, as it has often experienced large declines while inflation has crept up or stayed modest. As we have seen over the past few years, REIT performance can be affected as much by stock market sentiment as by underlying property valuations. Additionally, in times of unexpected inflation, property owners are not able to quickly raise rents to keep pace, and required capital expenditures often increase as well. Moreover, mortgage REITs (though a small portion of the REIT market), like bonds, are negatively impacted by rising interest rates and have exhibited a negative correlation with inflation.

The data over the past several decades does not support using REITs to preserve purchasing power.

Exhibit 7: The FTSE NAREIT All Equity REIT Index has exhibited a low to moderate level of correlation to various market indices (data from 2/1/2001 to 3/31/2017).

Monthly Return Correlation	
Russell 3000 TR USD	0.67
MSCI EAFE NR USD	0.63
MSCI Emerging Markets NR USD	0.57
Barclays US Agg Bond TR USD	0.20
BofAML US HY Master II TR USD	0.63
Barclays Gbl Agg Ex USD TR USD	0.34
Morningstar US Real Asset TR USD	0.62

Source: Morningstar Direct

REITs have exhibited low correlation to investment-grade fixed income, and moderate correlation to global equities and high-yield fixed income.

From a correlation standpoint, because REITs do not exhibit a high correlation (above 0.8) to any other major asset class, they qualify as a portfolio diversifier.

Exhibit 8: The FTSE NAREIT All Equity REIT Index has generated moderate risk-adjusted returns compared to other real assets.



Source: Morningstar Direct

From a risk-adjusted return standpoint, REITs have been around the middle of the pack compared to other real asset categories over the past decade or more. They have outpaced commodities and natural resource equities, whose returns have been hampered by recent falling commodity prices. However, REITs have a lower Sharpe ratio than private real estate because they carry additional volatility, despite having the same underlying assets.

REITs offer a compelling risk-adjusted return compared to other real asset categories. Their differentiated characteristics (less sensitivity to commodity prices, exposure to the real estate market) could help them serve a diversifying role in a real assets allocation.

The data on REITs are a mixed bag when it comes to their role as an inflation-protecting asset. Although they have exhibited low historical sensitivity to inflation, their

returns have low correlation to other asset classes, and they offer differentiated, positive risk-adjusted returns. Taken as a whole, the data do not present a compelling case to allocate to REITs as an inflation-protecting asset.

Conclusion

After examining how REITs could fit into an investment portfolio in the different contexts of growth, capital preservation, and inflation protection, we conclude that REITs are most appropriate as a growth asset. They are too volatile to play a capital preservation role, and exhibit too low sensitivity to inflation to play an inflation-

protection role, yet they meet the return, exposure, and correlation requirements for growth assets.

Investors seeking high returns from an asset class that represents a growing part of the U.S. equity market and is uncorrelated to fixed income should consider REITs as a way to meet their long-term investment objectives.

About Canterbury

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Sources

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