

# Real Estate

From Verdad's Dan Rasmussen on August 6th:

## The Lasting Value of Real Estate

In a famous [scene](#) from *Gone with the Wind*, Gerald O'Hara teaches his daughter Scarlet a memorable lesson. "Land is the only thing in the world worth working for, worth fighting for, worth dying for," he says, "because it's the only thing that lasts."

Gerald O'Hara was thinking more of plantations than publicly listed real estate investment trusts (REITs), but we decided to test his investment advice by doing a deep dive into public REITs. These companies own and manage income-producing real estate, generating returns through property cash flows and capital appreciation. Public equity REITs trade in most major exchanges and, among other legal requirements, distribute at least 90% of their annual taxable income as shareholder dividends. With high liquidity and high income returns, REITs operate like stock-and-bond hybrids.

We looked at the past 30 years of data on public and private REITs and compared their performance to stocks and bonds. We came to two major conclusions. First, REITs have similar returns to small-cap stocks but with volatility levels more similar to large-cap stocks and a relatively low correlation to both large-cap and small-cap stocks. Second, REITs have performed well against private real estate over long periods of time. Public REITs can thus function as a diversifier in an equity-focused portfolio and are an attractive replacement for private real estate ownership.

### REITs vs. Other Asset Classes

Over the past 30 years, public REITs have been a positive addition to a diversified portfolio. REITs have performed similarly to small-cap stocks over long time horizons and better than large-cap stocks or bonds, with volatility levels lower than small-cap stocks but higher than large-cap stocks or bonds. The following figure shows how REITs have performed relative to bonds, large-cap stocks, small-cap stocks and small-value stocks over five-, 10-, 20-, and 30-year windows.

While REITs have trailed both small- and large-cap stocks in the 10 years following the 2008 housing crisis, returns were comparable to both equity classes in the interval from 1972 to 2017.

What makes REITs an interesting component to a diversified portfolio is the relatively low correlation to other types of equities. REITs historically had a correlation of 0.62 to small-cap stocks and 0.56 to large-cap stocks, whereas small-cap stocks had a 0.78 correlation to large-cap stocks. REIT returns were most correlated to small value stocks.

Figure 1: Annualized Returns and Volatility Across Asset Classes



Figure 2: REIT Correlations with Other Assets

Correlation Matrix					
	REITs	Small Caps	Large Caps	Small Value	Bonds
REITs	1				
Small Caps	0.62	1			
Large Caps	0.56	0.78	1		
Small Value	0.69	0.95	0.77	1	
Bonds	0.19	0.08	0.22	0.13	1

Source: Vanguard, S&P Capital IQ

It should be unsurprising to see the highest correlations between REITs and small-cap stocks, given that average market capitalization of REITs (~\$1B) is comparable to that of companies in the Russell 2000 (\$1.4B). But REITs are noticeably less risky than small caps, with reduced drawdowns. (This is incorrect, as discussed below.) The chart below lists the five worst annual returns for each asset between 1972 and 2017.

Figure 3: Worst Annual Returns, 1972–2017

REITs		Small Caps		Small Value	
1973	-15.5%	1973	-36.9%	1973	-27.4%
1974	-21.4%	1974	-27.6%	1974	-18.9%
1998	-17.5%	1990	-23.6%	1990	-24.0%
2007	-15.7%	2002	-15.5%	2007	-11.1%
2008	-37.7%	2008	-38.0%	2008	-32.9%
Mean	-21.6%		-28.3%		-22.9%
Median	-17.5%		-27.6%		-24.0%

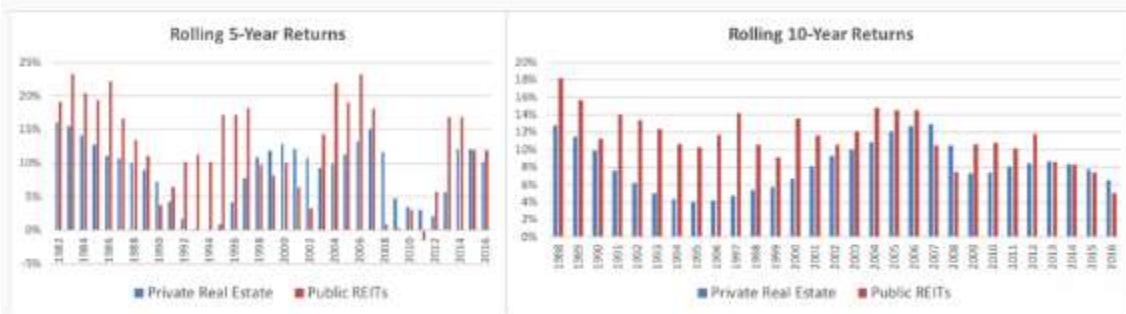
Source: Nareit, Ken French Data

All three classes delivered their worst returns during broad economic downturns. REITs, however, have had a shallower rock-bottom than their small equity counterparts. Over the complete 45-year period from 1972 to 2017, REITs realized the “best worst” median and mean performances, returning equal or better than small caps and generally outperforming small value until the real estate meltdown in 2007-2008. Remarkably, only [two](#) REITs went bankrupt over the course of the housing crisis, even as share prices plummeted new lows.

### REITs vs. Private Real Estate

If REITs compare favorably across asset classes, how do they perform against private real estate? The story is much the same: public REITs have performed well against all three types of private real estate over long time horizons. From 1988 to 2013, core private real estate [returned](#) an annual average of 5.8%, value-add returned 6.0%, and opportunistic returned 8.6%, compared to public REITs at 12.4%. Though they’ve trailed private benchmarks over the last five years, REITs have outperformed private real estate in 69% of rolling five-year and 80% of rolling 10-year periods since 1982, with data aggregated across retail, industrial, commercial, and residential properties.

Figure 4: Public vs. Private Rolling Returns, 1982–2016



Source: NCREIF, Nareit

REITs have regularly [outperformed](#) the top quartile of private equity funds net of fees. No less than [fourteen](#) academic studies since 2005 have come to the same conclusion: across geographic regions and valuation metrics, public REITs outperform private real estate in the long run.

There are [structural](#) reasons for public real estate's higher average returns. For one, REITs are more fee-efficient than private real estate. Where private equity funds charge the notorious 2% management and 20% carry fees, REITs post median management fees of only 89 basis points. REITs also manage more real estate without corresponding cost increases; REIT fees actually *decrease* with increasing assets under management.

Second, REITs are better at aligning management incentives with shareholder interests. Almost 90% of public REIT managers are compensated exclusively with company shares, which makes for high decision-making accountability. What's more, managers are frequently required to hold stock grants for several years, which makes them more likely to invest in long-run returns over short-term gains. Other major advantages of public REITs over private real estate include cost-effective property diversification and high liquidity and transparency that subject REITs to capital market discipline.

## Conclusions

Our research suggests that together, high dividend yields, liquidity, transparency, and diversification make REITs historically better performers than their private real estate counterparts, offering investors returns comparable with those of small-cap stocks, but with lower volatility over long time horizons. Though REITs have recently underperformed, public real estate's strong fundamentals and price discount relative to net asset value recommend a robust recovery in the coming years.

The data suggest that Gerald O'Hara was on to something. Real estate may not be the only thing worth fighting for, but REITs provide profitable investment opportunities unlikely to be gone with the wind.

*Acknowledgment: This piece was authored by Verdad summer intern Lauren Spohn. Lauren is a rising junior at Harvard, where she maintains a 4.0 GPA and is a varsity athlete. Lauren is the fourth highest performer ever (out of over 40 interns) on our intern markets exam.*

## Our thoughts

On August 31, 2016 Real Estate became a separate Sector within the S&P, Dow Jones, and MSCI indexes, with 98% of the stocks being equity REITs. As of July 31, 2018 the Real Estate Sector only represented 2.6% of the S&P 500. As we have repeatedly shared, HCM considers Real Estate to be a separate Asset Class that is best invested in by publicly traded REITs. We are currently allocating at least 10% of most clients' portfolios to Real Estate.

Where we disagree with the above analysis is Risk. HCM measures risk based on average Maximum Drawdowns relative to S&P 500 declines of at least 10% since the start of the last Bear Market on October 5, 2007. Utilizing "annual returns" masks the higher relative drawdowns of REITs, as can be seen in the chart below from our website:

Information Technology	25.6%
Health Care	14.5%
Financials	14.1%
Consumer Discretionary	12.7%
Industrials	9.9%
Consumer Staples	6.9%
Energy	6.2%
Utilities	2.9%
Real Estate	2.8%
Materials	2.6%
Telecommunication Services	1.9%



As we note: "While the short-term volatility of REITs can be jarring (as the Great Recession in 2008 demonstrated), with a long time horizon their risk profile dramatically improves. The Morningstar graph below illustrates the realized gains and losses in REITs for one-, five-, and 15-year periods. Of the 42 one-year periods



from 1972 to 2013, only eight resulted in a loss. By increasing the holding period to five years, only one of the 38 overlapping five-year periods resulted in a loss, while none of the 28 overlapping 15-year periods from 1972 to 2013 resulted in losses."