

2023 CEM Benchmarking Study Highlights REIT Performance

24-year study reveals allocations, returns, volatility, and risk-adjusted performance of 12 asset classes.

Highlights

- REITs had second highest average annual return of the 12 asset classes covered.
- REITs had a low correlation with equities.
- REITs outperformed all styles of unlisted real estate.

Introduction and Methodology

CEM Benchmarking’s 2023 study, sponsored by Nareit, provides a comprehensive look at realized investment performance across asset classes over a 24-year period (1998-2021) using a unique dataset covering more than 200 public and private sector pensions with nearly \$4.4 trillion in combined assets under management. One of the unique benefits of the CEM dataset is that it provides the actual realized performance of the assets

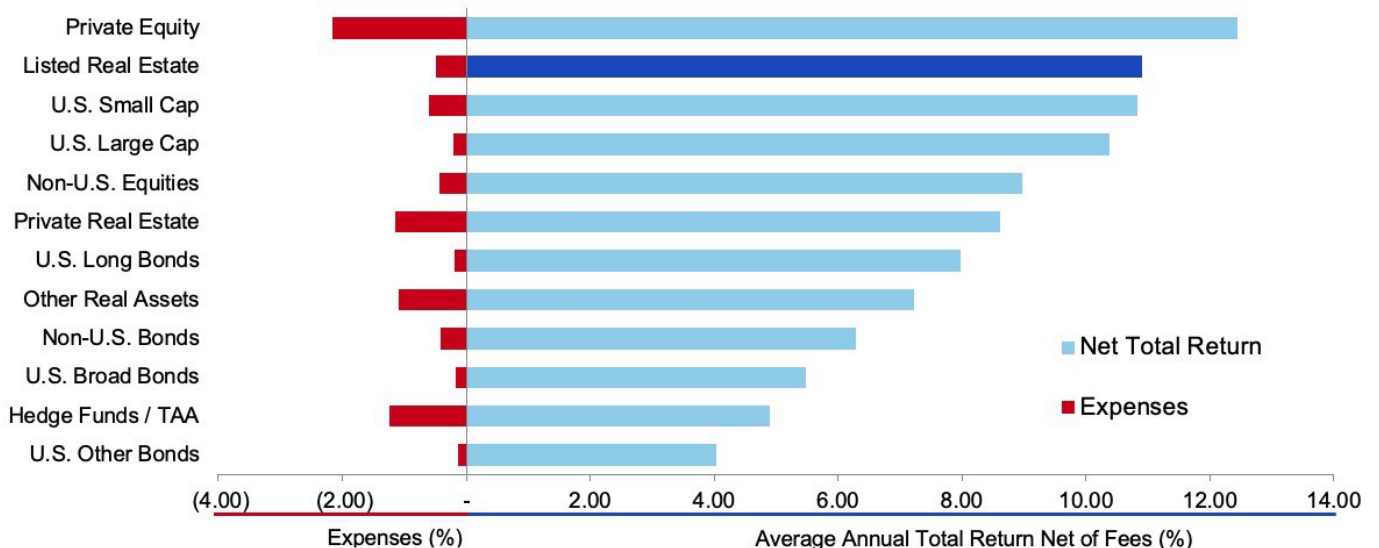
chosen by plan managers and trustees.

The study compares gross and net average annual total returns as well as correlations and volatilities for 12 asset classes with appropriate adjustments for reporting lags associated with illiquid asset classes (unlisted real estate and private equity).

The 2023 study also compares the performance of different styles of unlisted real estate including internally managed, core, value added/opportunistic, and fund of funds.

REITs Outperformed Most Asset Classes: 1998 to 2021

Annual Net Total Return and Expense by Asset Class for U.S. Defined Benefit Pension Funds 1998 - 2021



Source: CEM Benchmarking, 2023.

Returns

Over the 24-year period covered by the study, there are striking differences in performance across asset classes. The figure on the previous page summarizes average annual net returns and expenses for the 12 asset classes.

- Listed equity REITs had the second highest average annual net return over the period, 10.9%.
- Unlisted real estate produced average net returns of 8.6% over the period, nearly 2.3% less than REITs.
- The two worst performing asset classes were hedge funds/tactical asset allocation (TAA) strategies and U.S. other bonds.

Real Estate Returns by Ownership Style

Unlisted or private real estate can be accessed through a number of different ownership styles each with different risk profiles and costs. CEM provides comparisons of returns, correlations, and volatilities for each of the four key private real estate ownership styles:

- Internally managed direct
- Core funds
- Value added / opportunistic funds
- Fund of funds

The figure below shows that irrespective of ownership style, REITs outperform private real estate.

REITs Outperformed All Other Real Estate Styles: 1998 to 2021



Correlations

The study computed correlations of annual returns among the 12 asset classes. The table below summarizes some key correlations between broad equities, REITs and unlisted real estate. As highlighted in green, REIT and unlisted real estate returns were highly correlated when illiquid returns are adjusted for reporting lags. The correlation is measured as 0.90.

The high correlation is not surprising given the similarities in underlying assets.

As highlighted in dark blue, REIT and unlisted real estate returns had relatively low correlations with bonds and listed equity returns. These relatively low correlations reflect the well-known diversification benefits associated with the real estate asset class, whether REITs or unlisted real estate.

REITs Highly Correlated with Private Real Estate: 1998 to 2021

	REITs	Private Real Estate	U.S. Long Bonds	U.S. Large Cap	U.S. Small Cap	Non-U.S. Equities	Private Equity	Hedge Funds
REITs	1.00	0.90	-0.02	0.55	0.62	0.55	0.56	0.50
Private Real Estate		1.00	-0.05	0.50	0.53	0.53	0.59	0.45
U.S. Long Bonds			1.00	-0.22	-0.28	-0.29	-0.20	-0.16
U.S. Large Cap				1.00	0.92	0.88	0.87	0.89
U.S. Small Cap					1.00	0.88	0.90	0.78
Non-U.S. Equities						1.00	0.86	0.85
Private Equity							1.00	0.79
Hedge Funds								1.00

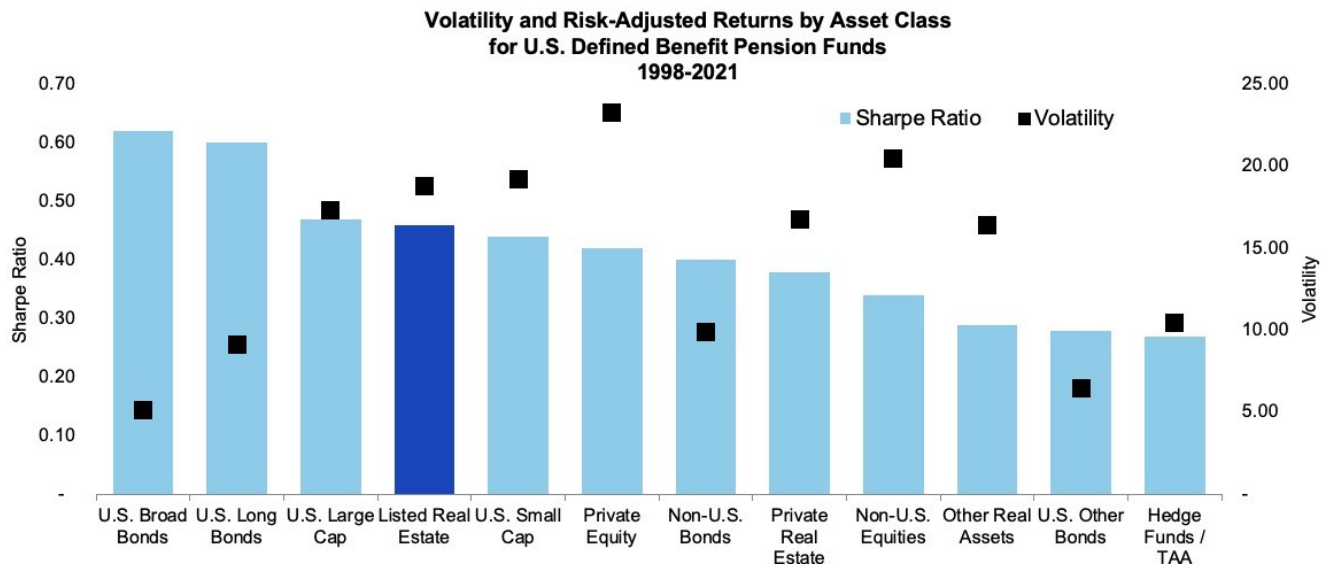
Volatilities and Risk-Adjusted Returns

The study also compared volatilities and risk-adjusted returns using the Sharpe ratio across asset classes.

The data are summarized in the figure below.

- Outside of fixed income, REITs had the second highest Sharpe ratio measuring 0.46, reflecting their high returns and just-above average volatility. Unlisted real estate had a much lower Sharpe ratio measuring 0.38, reflecting lower returns and comparable volatility to REITs.
- After adjusting for valuation lags, the study found that REITs and unlisted real estate had comparable volatilities. REITs and unlisted real estate had measured volatilities of 18.8% and 16.8%, respectively. As with correlations, the similarity in volatilities is not surprising given that REITs and unlisted real estate have the same underlying assets.
- After adjusting for valuation lags, private equity was by far the most volatile asset class.

REITs Deliver Superior Risk-Adjusted Returns: 1998 to 2021



Conclusion

The CEM analysis concluded that over the 24-year period of study from 1998 through 2021, REITs had the second highest average annual net return and relatively low correlations with other asset classes, implying good diversification benefits and strong risk-adjusted returns. The study also found that REITs outperform private real estate irrespective of ownership style.

CEM Benchmarking used its unique proprietary dataset, which comprises asset-level return data for hundreds of U.S. pension funds with nearly \$4.4 trillion in assets.