Perspectives

CBRE Investment Management

Active REITs in a Real Estate Allocation: A guide for investors

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Increasingly, investors are turning to REITs to optimize and enhance exposures in real estate, one of the cornerstones of a real asset allocation. At CBRE IM, we see listed real estate as complementary to private real estate; we further see actively-managed listed as essential for investors. In this guide, we review:

— The potential benefits of listed for private investors and the characteristics of listed in relation to private.

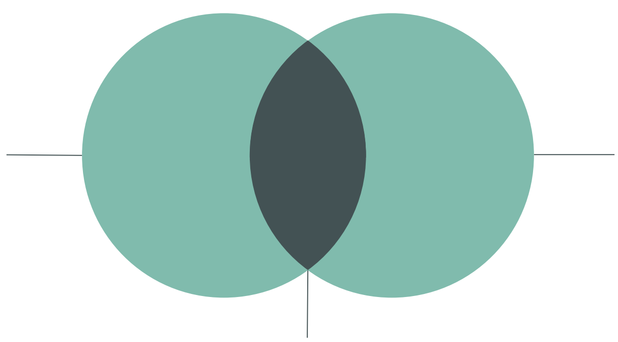
— Our views on optimal strategic blends for listed and private and our considerations for tactical allocations to listed.

— Active management in REITs and the source of durable alpha for active managers.

The benefits of a blended real estate allocation

Today, over 64% of the world's largest real estate investors are choosing to invest in REITs within their real estate allocations.[1] REITs can introduce valuable liquidity, the ability to capitalize on mispricing, a history of higher returns and outsized exposure to next generation properties. Listed real estate can complement the income, downside protection and diversification benefits of private exposures. Just as an alloy is stronger than its base metals, a mix of listed and private can lead to superior characteristics in a portfolio.

Figure 1: The potential benefits of a combined listed and private real estate allocation



Listed real estate
— The benefit of liquidity
— Superior total returns and capital appreciation
— Ability to capitalize on mispricing
— Next generation property exposures

Private real estate
— Strong current income
— Diversification benefits
— Downside protection

A superior mix
— Improved risk adjusted returns
— Balanced liquidity
— Balanced volatility
— Enhanced property exposure

1 Source: NAREIT as of December 2022. Considers the top 25 global largest defined benefit and sovereign plans. Taken together these plans have an average of $430bln in assets with an average real estate allocation of over $30bln.

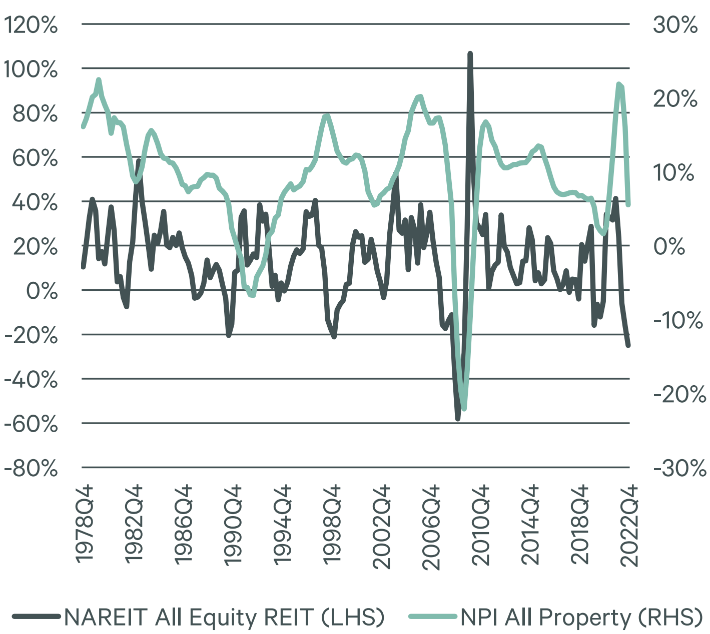
Listed real estate is real estate

Listed and private are two sides of the same market representing approximately ~$38 trillion in value. With access to similar or complementary assets, income-based cash flows and common factor exposures, it's unsurprising that listed and private markets trend together over time. Below, we show the rolling returns of listed and private. While listed can deviate from private markets in the short-term, correlations quickly strengthen; we've found that listed can lead private by ~3 quarters. Further, the correlations between listed and private have remained strong over time, independent of the trailing period analyzed and have been unaffected by the rising weights of next generation sectors such as communications, storage and healthcare (in listed) compared to the traditional sectors of office, retail, apartments and industrial in private equity.

Figure 2: A lead-lag between listed and private; consistent correlations over time

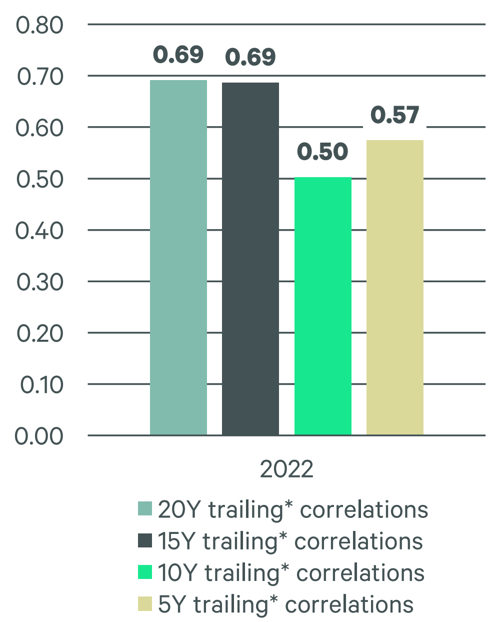
Listed real estate returns tend to lead private real estate returns by ~3 quarters.

4-quarter rolling returns, % p.a., 1978Q4-2022Q4[1]



Listed correlations to private have remained consistent

Trailing Correlations to Private RE[2]



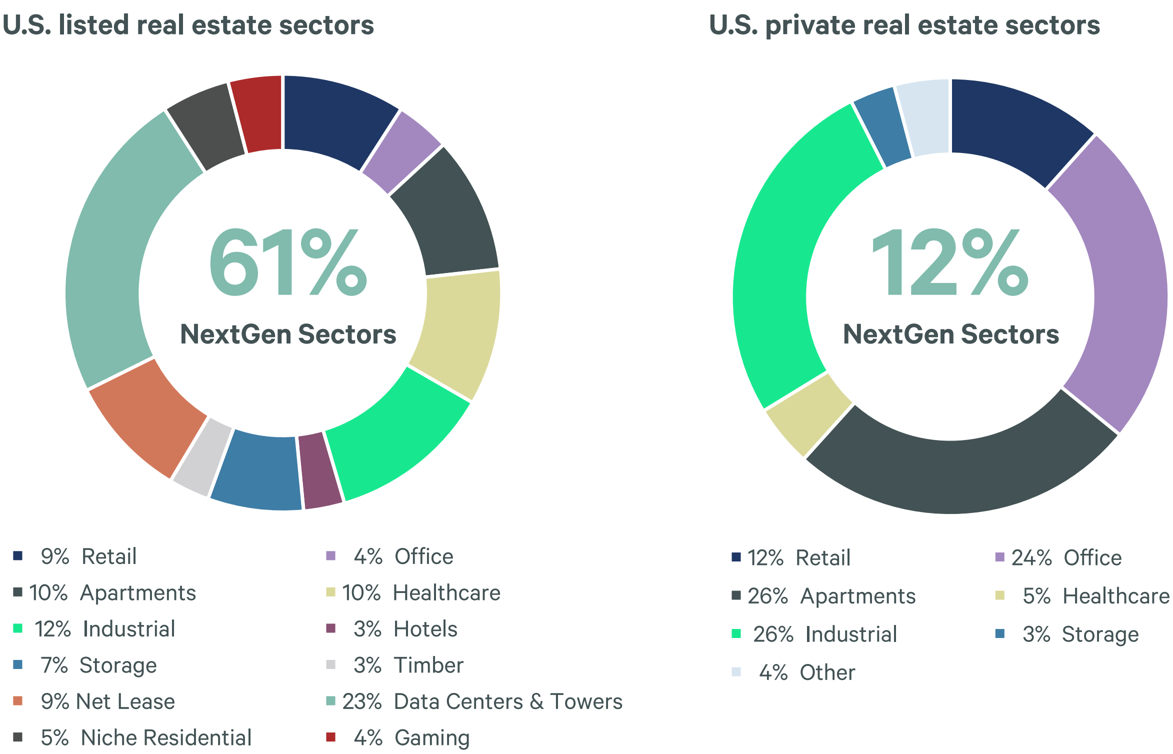
1 Source: NCREIF NPI, FTSE NAREIT All Equity as of 2022Q4.

2 Source: Source: NCREIF NPI, FTSE NAREIT All Equity as of 2022Q4. *Trailing correlations refer to the time period starting in Q4 of the year shown in the chart up to the number of years the trailing correlation refers to. Therefore, a trailing 20Y correlation in 2022 would refer to the time period: 2003Q1-2022Q4 Correlation analysis lags private equity returns compared to public by three quarters.

Complementary exposures in listed and private real estate

Oft-remarked, listed property types can complement private. Traditional private real estate is dominated by the office, retail, apartment and industrial sectors. Over time, listed has seen growing exposures to next generation properties, inclusive of the technology/communications, niche residential, storage and healthcare assets. Such sectors comprise over 60% of U.S. listed real estate, but only 12% of the private market.

Figure 3: A long-term completion solution with REITs



Source: CBRE Investment Management. FTSE Nareit All Equity REIT Index as of 12/31/2022, NCREIF NFI ODCE as of Q3 2022. Information is the opinion of CBRE Investment Management which is subject to change and is not intended to be a forecast of future events, a guarantee of future results, or investment advice. Enterprise Value and Equity Value determined by CBRE Investment Management based on publicly available information. Forecasts and any factors discussed are not indicative of future investment performance. Next generation sectors include healthcare, hotels, storage, timber, certain net lease holdings, technology real estate, niche residential, and gaming assets.

Considering the optimal mix of listed and private real estate

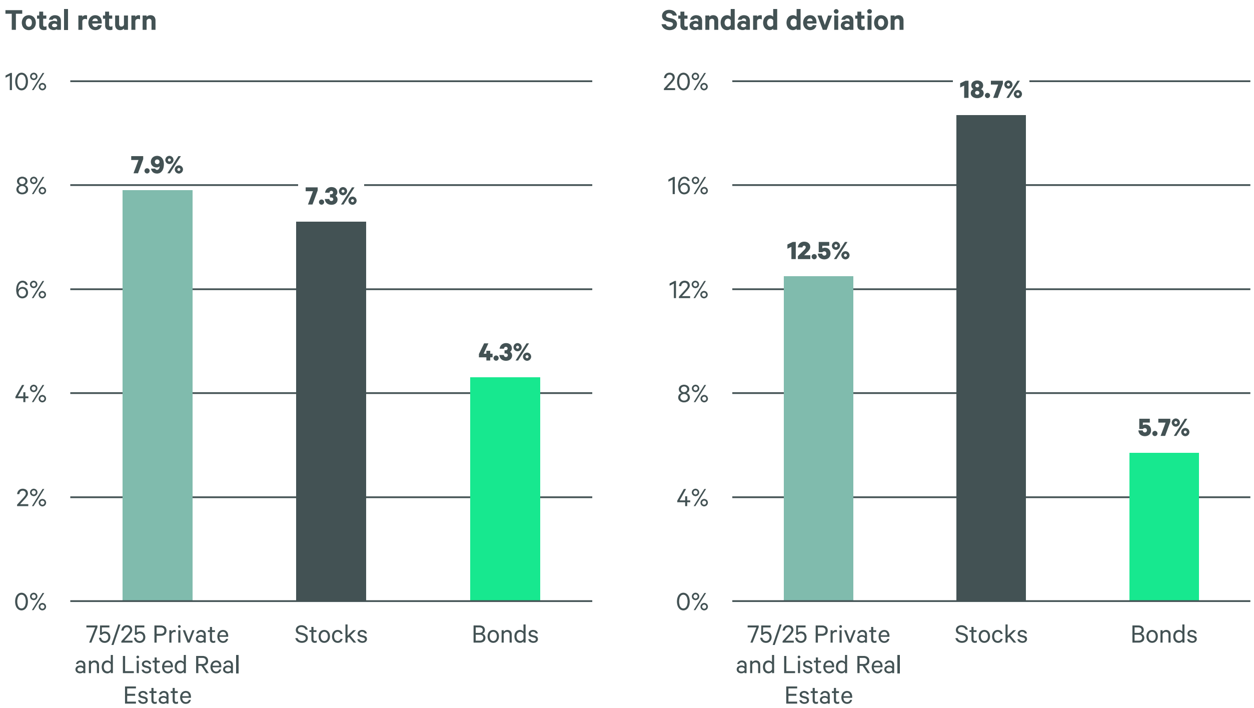
Next, we consider the optimal mix between listed and private. Investors often acknowledge that private valuations come with a lag, understating volatility. When we adjust private returns for the appraisal method and lever them for comparability, we find that blending REITs with private improves risk-adjusted returns over every extended time frame since 2001. (Specifically, our analysis considers rolling periods beginning in 2001, 2002 and onward through the course of the sample period.) The average optimal mix, which maximizes an investor's Sharpe ratio over time, is a 75%/25% blend between private and listed historically. The improvement in risk-adjusted return comes alongside the benefits of improved liquidity, diversified properties and the ability to capitalize on market mis-pricings while managing a real estate allocation within a broader portfolio.

Figure 4: Listed enhances portfolio balance and risk-adjusted returns

— A listed/private real estate blend **outperforms** stocks and bonds, with **lower volatility** than equities.

— A 75%/25% private/listed allocation **best improves risk adjusted returns over time.**

— Listed exposures enhance portfolio **liquidity**, access to **next generation property** and the ability to **capitalize on market mispricing.**



Source: CBRE Investment Management. Based on annual total return data in USD for 2001-2021. Sources: FTSE EPRA/NAREIT Global Developed Index (listed real estate), MSCI Real Estate (non-listed real estate modified). Assumptions for non-listed real estate: NAREIT T-TRACKER (debt cost), MSCI Global Property Fund Index (LTV and history pre 2008 backfilled using relationship to ODCE LTV; average of 21.8%), fee assumption 1.00% on NAV, as of September 2022. Stocks represented by the MSCI World Index and Bonds by the Bloomberg Global Aggregate. Subject to further refinement based on additional research, CBRE evaluation and assessment, and specific investor objectives. Forecasts are inherently uncertain and subject to change.

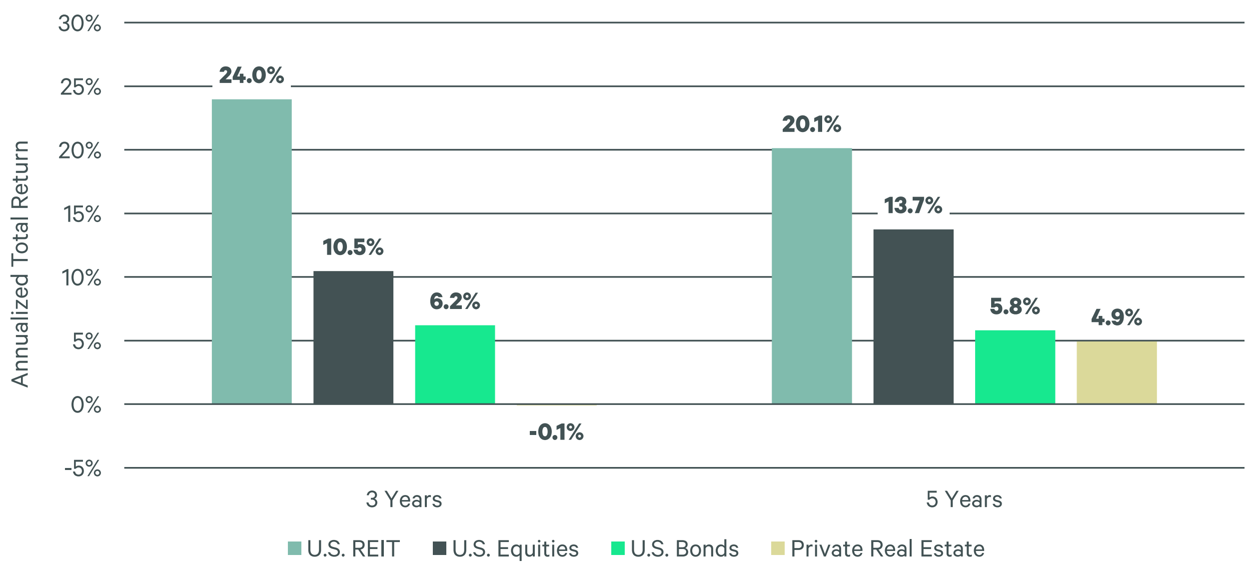
Tactical considerations for listed real estate

When listed disconnects from private, investors can benefit from allocating beyond the 25% level to REITs. Historically, following disconnects, listed real estate has outperformed private over an extended period. Following 2022, a year in which listed underperformed private by ~30%, CBRE Investment sees listed at a double-digit discount to net asset value. Further, we consider these valuations conservative, having reduced them by ~15% since January 2022. Today, we see the set-up as analogous to the period following the GFC, when blending listed with private would have doubled ensuing Sharpe ratios for investors. Below, we show the returns garnered from an allocation to listed following periods of valuation disconnect compared to private real estate and other asset classes.

The set-up for listed is similar to the period following the GFC, when blending listed and private would have doubled ensuing Sharpe ratios for investors.

Figure 5: REITs outperform equities, bonds and private equity after dislocation

Performance following greater than 20% discounts to NAV



Source: FTSE Nareit All Equity REIT Index , S&P 500 Index, NFI-ODCE Value Weighted Index and CBRE Investment management as of 12/31/2022. All returns are cumulative. Returns over 1 year are annualized. Information is the opinion of CBRE Investment Management, which is subject to change and is not intended to be a forecast of future events, a guarantee of future results, or investment advice. Past performance is no guarantee of future results, which will vary. An index is unmanaged and not available for direct investment. Forecasts and any factors discussed are not a guarantee of future results. Average cumulative returns are for the periods shown after periods of greater 20% discounts to NAV from 01/31/1997-12/31/2020.

Active management in listed real estate

As REITs benefit a real estate allocation, so too can active management benefit investors in REITs. For investors, active REIT managers can deliver enhanced returns from a niche asset class that provides keys to durable alpha, and which comprises a large and diverse opportunity set. Best-in-class managers can further offer the opportunity for excellence.

Figure 6: For investors, active managers can deliver:

Enhanced returns from active management...

- REIT managers **have outperformed** benchmarks over time
- Manager **alpha compounds** for investors

From a niche asset class...

- REITs are linked to a vast private market; managers can have an **information edge**
- REITs are **underfollowed** by equity managers; specialized managers can find **opportunities across the market cap spectrum**

With diverse businesses...

- REIT managers can **choose** between distinct business profiles, geographic exposures, contract duration and pricing power in a large opportunity set

And the opportunity for excellence

- **Best in class** managers can offer **superior return opportunities** compared to benchmarks and peers
- **Integrated public-private managers** can advise clients across the real asset spectrum

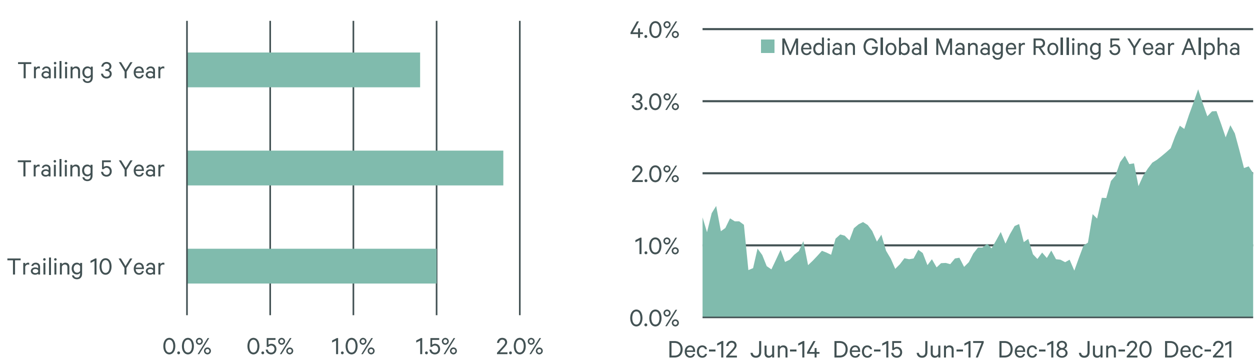
Potential for enhanced returns from active management

When we review the data, REIT managers are who the scoreboard says they are. Over extended 3, 5 and 10 year time frames (periods against which active managers are most often judged), REIT managers (reporting to eVestment) have largely outperformed their benchmarks. Further, this alpha has been strong over time; in the bottom right, we show rolling 5-year alpha over the last decade, which has ranged between ~65-315bps. Notably, REIT manager outperformance strengthened during the Covid-19 pandemic, which is reasonable considering that active managers often find opportunity in stock dispersion during distressed markets.

Figure 7: The historical scoreboard for active REIT managers

Managers have outperformed[1]...

...With alpha over the course of time[2]

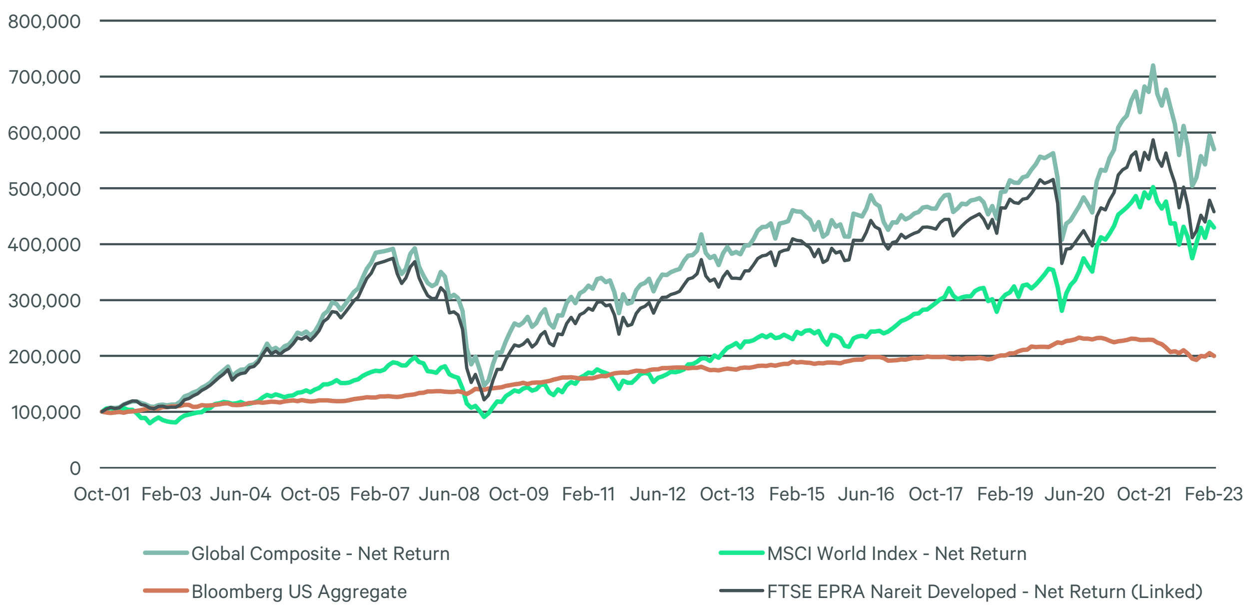


Gross-of-fees returns. Please refer to sources at the end of this piece.

Manager outperformance is cumulative

When considering manager outperformance and fees at a single point in time, investors may overlook the compounding effect of manager alpha on returns. CBRE Investment Management has a history of managing listed real asset strategies since 1984 and boasts one of the longest running track records in the industry. Below, we show the impact of an investor's return in our Global Listed Real Estate Strategy compared to its benchmark and to global equities since inception. Over the course of time, an investor would have outperformed real estate benchmarks, global equities, and bonds by investing in CBRE IM's active management of global REITs.

Figure 8: CBRE's Listed Global Real Estate Strategy has outperformed its benchmark, global stocks and bonds over time



CBRE Investment Management, MSCI World Index - Net, S&P 500 Index, Bloomberg US Aggregate Index, FTSE EPRA Nareit Developed Index – Gross performance from inception of the composite to 02/28/2005, FTSE EPRA Nareit Developed Index – Net performance thereafter as of 02/28/2023.

A niche asset class

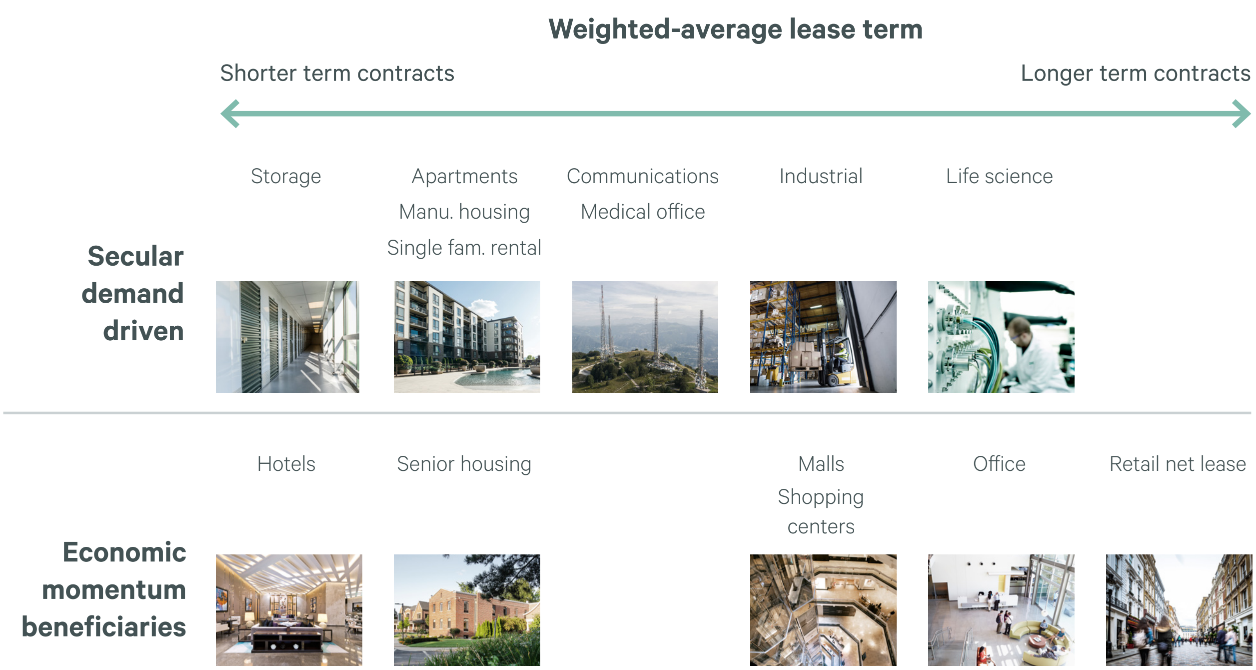
REITs are a niche asset class influenced by a larger private market, where information can be opaque and managers can possess an information edge. The global market cap of the CBRE IM listed real estate universe is ~$3 trillion, compared to a ~$38 trillion total global commercial market value for real estate. Across its strategies, CBRE IM has found value in an information edge enhanced by an understanding of direct capital markets activity, business trends and valuations.

From an equity perspective, REITs remained underfollowed amongst generalist managers. This adds to the information advantage for specialized REIT management. Across broad equity indices, REITs comprise only a ~3% weight. Generalists are often underweight and often handle REIT coverage through a broad-based financial-sector analyst. Comparatively, CBRE IM draws upon its in-house research, property visits and views on the direct market to inform its views. CBRE IM's processes have helped enable the discovery of overlooked opportunities, inclusive of those within small and middle cap companies that generalist managers may ignore.

Powered by diverse businesses

Real estate is an essential, physical embodiment of the economy, touching nearly every facet of modern life. For managers, from a business perspective, the majority of REITs often focus on distinct properties, with different drivers affecting rent collection and different durations to their contracts. With different business drivers and models, REITs can offer an attractive combination of resiliency (with assets that benefit from either secular tailwinds or long-term contracts) and economic momentum (those that benefit more directly from economic growth or have shorter term contracts to reprice in robust markets). In their portfolios, managers have the ability to weight between these features to potentially optimize returns for investors.

Figure 9: Diversified business drivers with diversified contract duration

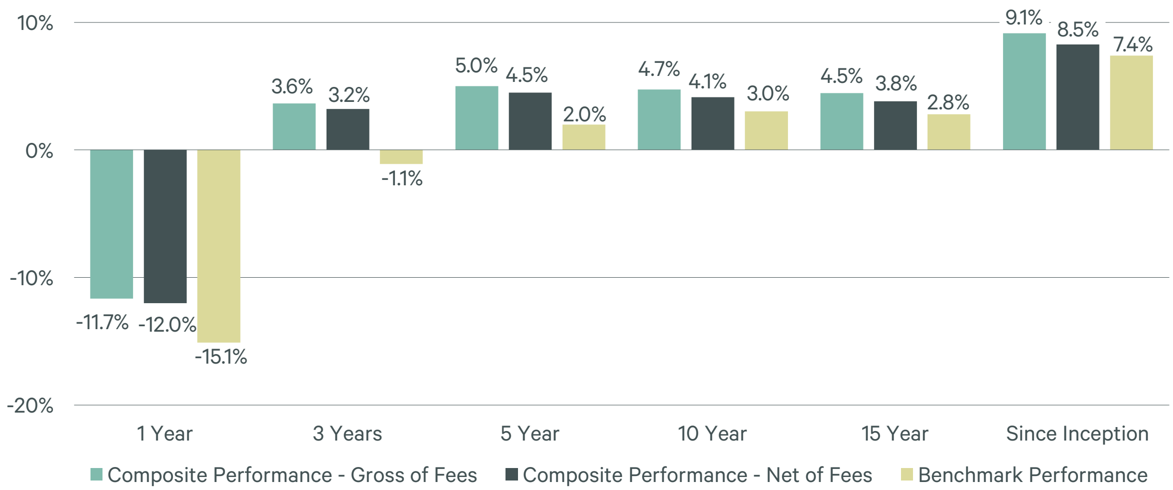


The opportunity for excellence: Active management of REITs in a real estate allocation

CBRE IM believes that its information advantage and its proprietary tools, enabled by its integrated research platform, offer the opportunity for excellence in the active management of REITs. Since inception, as we show below, CBRE IM's Listed Global Real Estate strategy has outperformed its benchmark for investors.

Figure 10: CBRE Listed Global Real Estate Composite performance

Relative performance	1 Year	3 Year	5 Year	10 Year	15 Year	Since inception*
(Gross of fees)	**+346 bps**	**+474 bps**	**+301 bps**	**+171 bps**	**+166 bps**	**+175 bps**
(Net of fees)	**+310 bps**	**+432 bps**	**+251 bps**	**+110 bps**	**+102 bps**	**+111 bps**



Performance as of 02/28/2023.

*Inception November 1, 2001. Benchmark performance is FTSE EPRA NAREIT Developed Index - Net is an unmanaged market-weighted index consisting of real estate companies from developed markets, where greater than 75% of their EBITDA (earnings before interest, taxes, depreciation, and amortization) is derived from relevant real estate activities, and is calculated net of withholding taxes. This is supplemental information. Composite returns are net of execution costs, include the effect of withholding taxes, and reflect the reinvestment of dividends, interest and capital gains. Gross returns do not reflect the deduction of advisory fees, but are net of transaction costs and include the reinvestment of dividends, capital gains, and other earnings. Actual returns will be reduced by the advisory fee, as described in Part 2A of CBRE Investment Management' Form ADV, plus any other costs a client may incur directly. Please refer to the Appendix A1 of this presentation for the GIPS compliant presentation, which includes important information related to composite description, fees, and index information. An index is unmanaged and not available for direct investment. Past performance is no guarantee of future results.

Broadly, across its platform, CBRE IM believes it offers a differentiated understanding of real asset markets and can act as an information resource for clients. CBRE IM harnesses extensive data and market insights to drive better portfolio solutions, investment outcomes and performance. As we consider the nature of REITs within a real estate allocation, we are excited to offer and customize these solutions to investors in the years ahead.

About CBRE Investment Management

CBRE Investment Management is a leading global real assets investment management firm with $149.3 billion in assets under management* as of December 31, 2022, operating in more than 30 offices and 20 countries around the world. Through its investor-operator culture, the firm seeks to deliver sustainable investment solutions across real assets categories, geographies, risk profiles and execution formats so that its clients, people and communities thrive.

CBRE Investment Management is an independently operated affiliate of CBRE Group, Inc. (NYSE:CBRE), the world's largest commercial real estate services and investment firm (based on 2022 revenue). CBRE has approximately 115,000 employees (excluding Turner & Townsend employees) serving clients in more than 100 countries. CBRE Investment Management harnesses CBRE's data and market insights, investment sourcing and other resources for the benefit of its clients. For more information, please visit www.cbreim.com.

If you would like to discuss the contents of this paper with our team, or would like more information about investing in real assets, please contact:

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*Assets under management (AUM) refers to the fair market value of real assets-related investments with respect to which CBRE Investment Management provides, on a global basis, oversight, investment management services and other advice and which generally consist of investments in real assets; equity in funds and joint ventures; securities portfolios; operating companies and real assets-related loans. This AUM is intended principally to reflect the extent of CBRE Investment Management's presence in the global real assets market, and its calculation of AUM may differ from the calculations of other asset managers and from its calculation of regulatory assets under management for purposes of certain regulatory filings.

Figure 7 sources: 1 Source: CBRE Investment Management, eVestment. Median annualized alpha represents the median reported alpha (gross-of-fees) in the eVestment Global REIT database for managers of separate accounts that have reported data over the trailing 1, 3, 5, and 10 year periods. Alpha is respective to each REIT manager's preferred benchmark. As of December 2022.
2 Source: CBRE Investment Management, eVestment. Median annualized alpha represents the median reported rolling 5 year alpha (gross-of-fees) in the eVestment Global REIT database for managers of separate accounts. Alpha is respective to each REIT manager's preferred benchmark. The sample for this analysis is broader than the sample for analysis of trailing 3, 5, and 10 year outperformance, as managers are captured as rolling 5 year data comes into the sample set. As of December 2022.

Schedule of investment performance

CBRE Listed Global Real Estate Composite

Annual Returns

	Composite (Gross)	Composite (Net)[1]	FTSE EPRA Nareit Developed Index[2]	FTSE EPRA Nareit Developed Net Index[2]
2012	26.16%	25.25%	28.65%	27.73%
2013	5.04%	4.21%	4.39%	3.67%
2014	15.10%	14.32%	15.89%	15.02%
2015	-0.62%	-1.27%	0.05%	-0.79%
2016	1.51%	0.83%	4.99%	4.06%
2017	11.69%	10.94%	11.42%	10.36%
2018	-7.88%	-8.49%	-4.74%	-5.63%
2019	25.85%	25.19%	23.06%	21.91%
2020	-4.01%	-4.42%	-8.18%	-9.04%
2021	35.48%	34.93%	27.21%	26.09%

3 Year Annualized Standard Deviation

	Composite (Gross)	FTSE EPRA Nareit Developed Index[2]	FTSE EPRA Nareit Developed Net Index[2]	Number of Accounts	Dispersion	Composite Assets (millions)	% of Firm Assets	Firm Assets (millions)[3]
2012	17.81%	18.13%	18.14%	50	0.27%	$11,217.9	47%	$23,646.7
2013	16.11%	16.43%	16.45%	46	0.31%	$11,189.1	49%	$22,754.1
2014	12.41%	12.48%	12.49%	42	0.19%	$11,749.5	47%	$24,776.3
2015	12.30%	12.27%	12.29%	34	0.38%	$8,771.5	42%	$20,754.9
2016	12.63%	12.22%	12.21%	32	0.14%	$6,976.4	40%	$17,473.9
2017	11.36%	10.91%	10.90%	19	0.25%	$5,262.2	36%	$14,666.2
2018	11.01%	10.85%	10.82%	14	0.16%	$3,430.4	33%	$10,279.4
2019	9.46%	9.75%	9.75%	8	0.06%	$2,468.0	31%	$7,923.8
2020	18.56%	19.44%	19.46%	5	0.16%	$1,741.6	23%	$7,615.9
2021	19.08%	19.72%	19.75%	<5	N/A	$1,750.1	15%	$11,700.4

1. Net of fee returns are not subject to examination; only gross of fee returns are examined in the verification engagement.
2. The FTSE EPRA Nareit Developed Index (Gross & Net) has been taken from a published source and have not been verified by the independent accountants. The FTSE EPRA Nareit Developed Index (Gross & Net) is gross of investment advisory fees, if any.
3. Firm assets are defined as assets of all investment advisory accounts of CBRE Investment Management Listed Real Assets LLC.

Please see additional disclosures on the following page.

Schedule of investment performance (continued)

Compliance Statement

CBRE Investment Management Listed Real Assets LLC (CBREIM Listed Real Assets), formerly CBRE Clarion Securities LLC, claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. CBREIM Listed Real Assets has been independently verified for the periods November 1, 2001 through December 31, 2021.

A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The CBRE Listed Global Real Estate Composite (the Composite) has been examined for the periods from November 1, 2001 through December 31, 2021. The verification and performance examination reports as well as a complete list and description of CBREIM Listed Real Assets composites are available upon request.

GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

Definition of the Firm

CBREIM Listed Real Assets is an investment adviser registered with the U.S. Securities and Exchange Commission and specializes in the management of real estate and infrastructure securities. CBREIM Listed Real Assets includes four wholly owned subsidiaries and has offices located in Radnor, PA, USA; London, England; Tokyo, Japan; and Sydney, Australia. Total firm assets as of December 31, 2021 were U.S. $11.7 billion.

Composite Definition

The CBRE Listed Global Real Estate Composite (the Composite) seeks a high total return through investment in global real estate equity securities with a combination of above-average income and long-term growth of capital. CBREIM Listed Real Assets uses systemic, top-down research to evaluate property market conditions and trends to judge which market sectors offer potential attractive returns. Then, CBREIM Listed Real Assets uses proprietary bottom-up analytical techniques to identify the securities which it believes will provide above-average cash flow yield and growth. Performance presented is based on returns in U.S. dollars. The Composite's inception date is November 1, 2001 and the creation date is May 1, 2003. The Listed Global Real Estate Composite's performance represents the performance for clients where CBREIM Listed Real Assets has sole investment authority. The Composite includes all non-restricted, discretionary, fee-paying accounts with market value greater than $1 million, managed according to the Composite's investment objective including those no longer under management.

Performance Results

The monthly rate of return for an eligible account uses a time-weighted, daily linked rate of return formula to calculate each account's monthly return. Monthly composite returns are calculated by asset weighting each account's monthly return based on the beginning-of-month market values. The annual returns are computed by compounding the monthly rates of return. Performance results are net of execution costs and dividend withholding taxes and assume the reinvestment of all interest, dividends, and capital gains. Dividend income is recorded on the ex-dividend date. Gross performance results do not reflect the deduction of management and custody fees, which will reduce the rates of return.

Significant Cash Flow Policy

An account will be temporarily removed from the Composite if it experiences a "significant cash flow" that is a cumulative cash flow more than 30% of the portfolio's market value during the month.

Treatment of New or Terminated Accounts

New accounts included have been under management for at least one full month. Terminated accounts are included in the composite through the last full month they are invested.

3 Year Standard Deviation, Internal Composite Dispersion

The three-year annualized standard deviation measures the variability of the monthly composite returns over the preceding 36-month period. The internal composite dispersion of annual returns is measured by the standard deviation across equal-weighted monthly portfolio returns represented within the composite for a full year. Portfolios are only included in the internal composite dispersion calculation if they were in the composite for a full year. Internal composite dispersion is not reported if a composite has less than 5 accounts at any point during the year as this is not considered statistically meaningful.

Schedule of investment performance (continuted)

Policies and Reports

CBREIM Listed Real Assets' policies for investment valuation, calculation of returns, significant cash flows, and preparing compliant presentations are available upon request. Additionally, a complete list of and description of CBREIM Listed Real Assets' composites, a copy of the verification report, and a list of affiliated entities is also available upon request. Please direct requests to the CBREIM Listed Real Assets Compliance Department at +1 (610) 995-2500.

Composite Benchmark

The composite returns are benchmarked to the FTSE EPRA Nareit Developed Index (USD), both gross and net of dividend withholding tax. The FTSE EPRA Nareit Developed Index is an unmanaged market-weighted index which consists of real estate companies from developed markets, where greater than 75% of their total EBITDA (earnings before interest, taxes, depreciation, and amortization) is derived from relevant real estate activities.

The benchmark is used for comparative purposes only and generally reflects the risk or investment style of the investments underlying the returns presented on the Schedule of Investment Performance. The composition of an index may not reflect the manner in which an account is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, volatility or tracking error targets, all of which may change over time. Accordingly, investment results and volatility of individual accounts will differ from those of the benchmark. Investors cannot invest directly in an index.

Fees

Fees are described in the client's investment management agreement or Part 2A of the CBREIM Listed Real Assets Form ADV. The management fee for the strategy is generally tiered with an average rate of .50% per annum, billed quarterly in arrears, for an initial investment of US $50 million. Fees are negotiable depending on the size of the account, and may include a performance component. Management fees do not include custody fees. Net of fees returns are calculated by deducting the annualized equivalent of the annual management fee for each constituent account from the gross of fees return for the constituent on a monthly basis. Net performance additionally reflects the reduction of performance fees if applicable. Net of fee returns are not subject to examination; only gross of fee returns are examined in the verification engagement.

Additional Disclosures

The information presented should not be considered as investment advice or a recommendation for investment in any strategy, fund, or security. There are no assurances that individual account performance will match or outperform any composite or particular benchmark. Investing in securities involves risks including the potential loss of principal. While listed equities may offer the potential for greater long-term growth and liquidity than some debt securities and private securities, listed equities generally have higher volatility. Past performance is no guarantee of future results.

Real estate equities are subject to risks similar to those associated with the direct ownership of real estate. Portfolios concentrated in real estate securities may experience price volatility and other risks associated with non-diversification. International investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles, or from economic or political instability in other nations.