Research

Investing in Listed Real Estate

Practical considerations

October 2019 | ftserussell.com

Introduction

- Real estate is probably the most familiar asset class. The seeming simplicity of the “bricks and mortar” draws strong attraction from a variety of investors. According to Ibbotson and Siegel [1] half of all global wealth is in real estate.
- Real estate returns come from two components: rent and capital appreciation. The rental cash flow is the major attraction of investors and typically the largest part of the returns. Real estate goes through up-and-down cycles and has its own ‘hot’ and ‘cold’ spots, in terms of location, and use of real estate: office space, retail, industrial or residential.
- The FTSE EPRA Nareit Global Real Estate Index Series[1] is a benchmarking tool that can be used to construct portfolios of different segments of the globally listed real estate market. The index constituents include both listed real estate investment trusts (REITs) and non-REIT companies, which derive at least 75% of their EBITDA from relevant real estate activities.
- Investors can also integrate climate risk into their listed real estate portfolio by targeting constituents of the FTSE EPRA Nareit Global Real Estate Index Series, which exhibit improvements in the amount of floor space with green certification and energy efficiencies.

Investment theses for listed real estate

In layman’s terms, the investment concept for real estate is relatively simple. Investors buy a property and collect a rent for it. They may also gain some capital appreciation and leverage the property to achieve a higher return on equity.

While simple in concept, the practical realization may not be always so straightforward, as anyone who has tried renting out a property, even something basic, such as a spare bedroom or a vacation property, would vouch for. The Global Financial Crisis (GFC) may also put in doubt the phrase “as safe as houses”.

Direct property investors face all the challenges of selecting a location, due diligence, legal documents, operational costs, taxation and unexpected structural issues or expenditures.

However, investors can circumvent most of these issues by hiring professionals, lawyers, surveyors, market analysts etc, through unlisted funds or listed real estate companies. In this paper, we seek to inform investors of the practical aspects of investing in listed real estate.

[1] FTSE Russell. Ground Rules. FTSE EPRA Nareit Global Real Estate Index Series. V9.1 April 2019. https://www.ftse.com/products/downloads/FTSE_EPRA_Nareit_Global_Real_Estate_Index_Series.pdf.

Real estate indexes snapshot

The FTSE EPRA Nareit Global Real Estate Index Series provides investors with a comprehensive and complementary set of indexes, which range from regional and country indexes, investment focus indexes and a REITs and Non-REITs series. The index series is designed to reflect the stock performance of companies engaged in specific aspects of the major real estate markets and regions of the world – Americas, EMEA (Europe, Middle East and Africa) and Asia.

The FTSE EPRA Nareit Global Real Estate Indexes comprises companies, which are listed on global eligible stock exchanges and derive at least 75% of their EBITDA from ownership, trading and development of income-generating real estate. The companies also need to satisfy a minimum liquidity level and free float constraints.

The indexes were launched in March 2006, with their history calculated from December 31, 1999. Since December 2018, sustainability conscious investors can also use the FTSE EPRA Nareit Green Real Estate Indexes.

Tables 1 and 2 show recent key statistics of the FTSE EPRA Nareit Global Real Estate Indexes:

Table 1. FTSE EPRA Nareit Global Real Estate Indexes snapshot

Parameter	Global	Developed	Emerging
Market capitalization (bn, USD)	1775	1602	173
Number of stocks	476	334	142
Countries represented	34	21	13
Largest stock MCap (bn, USD)	47.6	47.6	11.0
Median MCap (bn, USD)	1.6	2.2	0.5
Minimum stock MCap (mln USD)	4	174	4

Source: FTSE Russell. Data as of August 30, 2019. Free-float adjusted.

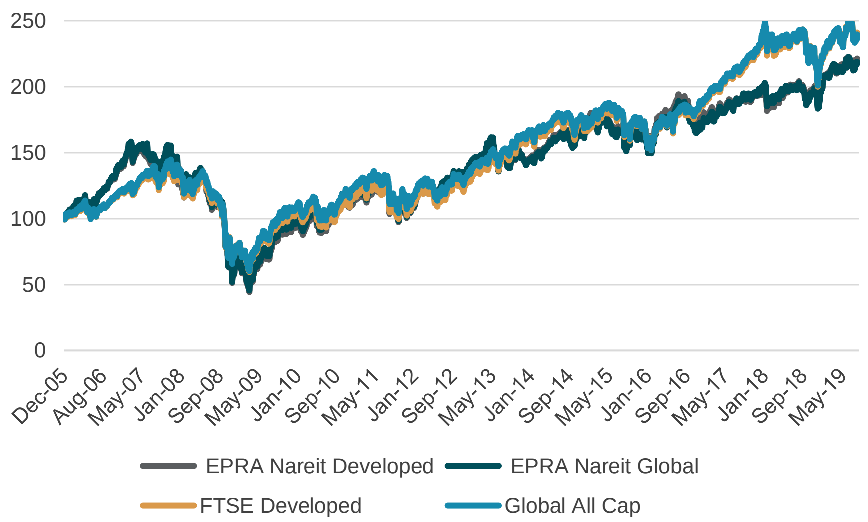
Table 2. Sector breakdown of FTSE EPRA Nareit Global Real Estate Index

EPRA Nareit sector	No. of Constituents	Weight (%)
Diversified	177	31.3
Residential	67	18.8
Retail	83	16.1
Office	53	10.1
Industrial	35	9.0
Healthcare	22	6.9
Self-storage	8	3.7
Lodging / Resorts	19	2.8
Industrial / Office	12	1.3
Total	**476**	**100**

Source: FTSE Russell. FTSE Core Infrastructure Indexes data as of August 30, 2019.

Chart 1 demonstrates that since December 2005, the broad Real Estate Indexes have been moving largely in line with global equities, with the largest deviations seen in 2005 (in the run-up to the 2008 crisis) and mid-2016 (at the end of the quantitative easing program). The picture is much more diverse as we look at segments of the real estate market in the next section.

Chart 1. Cumulative total return of FTSE EPRA Nareit Global Real Estate Indexes and selected benchmarks, rebased



Source: FTSE Russell. FTSE daily data from December 29, 2005 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

REITs and non-REITs

The real estate index constituents are listed on global exchanges just like other companies, but the majority (over 70% as per Table 2) have a special legal structure: Real Estate Investment Trusts (REITs).

In most countries where REIT legislation exists, REITs are given special tax advantages, where the income of the Trusts is taxed at the investor level, typically through withholding tax, rather than at the legal entity level. At the same time, REITs are required to distribute most of their revenue or taxable income (usually 90%) to their investors. Legislation for REITs in most countries also puts a limit on leverage and require direct ownership of real estate (rather than vehicles).

The special tax treatment and income distribution requirement reduce the differences between an investment in the shares of other listed property companies and a direct ownership of physical real estate.

Not all REITs are simple real estate companies, however. Some infrastructure companies chose (and were allowed) to obtain REIT status, such as companies that own mobile telecommunication masts. They are included in a special REIT index infrastructure category.

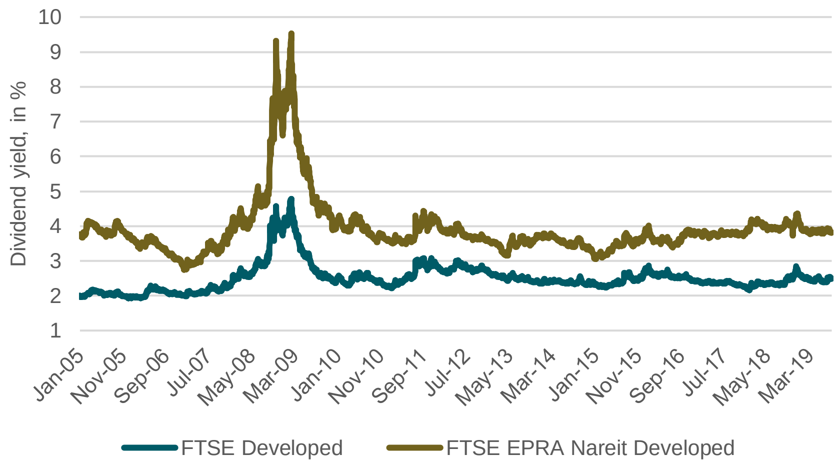
Characteristics of listed real estate

Yield enhancement

The cash flow component of real estate returns is one of its key attractions. For listed real estate, it is in the form of dividends, and subsequently, higher dividend yields.

As Chart 2 shows, the dividend yield of real estate stocks has consistently been above the dividend yield of global equities.

Chart 2. Dividend yield history of FTSE EPRA Nareit Developed Real Estate and FTSE Developed Indexes



Source: FTSE Russell. FTSE EPRA Nareit Developed Real Estate and FTSE Developed Indexes from January 28,2005 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Despite similar total returns, dividends in real estate indexes represent a higher portion of the total return than in global equity indexes.

Table 3 shows that almost two thirds of the return of the real estate index comes from dividends, whereas for equity markets, two thirds of the returns comes from price appreciation.

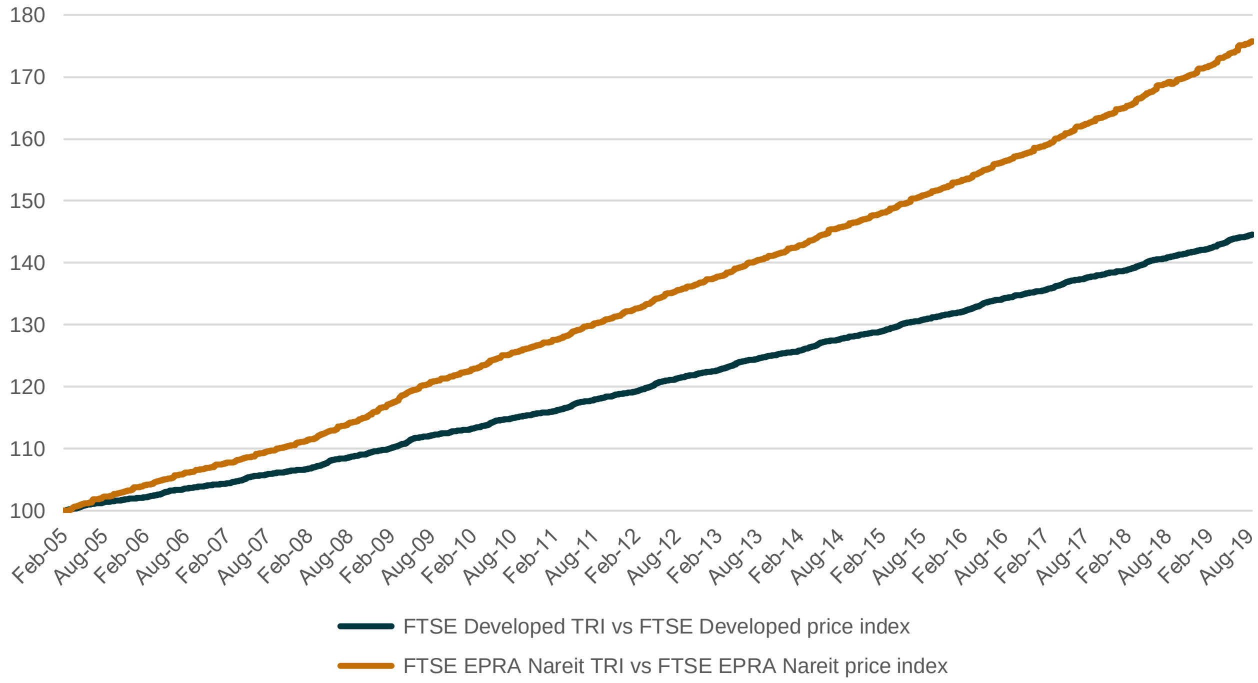
Table 3. Annualized returns of FTSE Developed and FTSE EPRA Nareit Developed Indexes

Index	Total return, % p.a.	Price return, % p.a.	Dividend income, % p.a.
FTSE Developed	7.00	4.32	2.68
FTSE EPRA Nareit Developed	6.77	2.70	4.07

Source: FTSE Russell. Annualized returns are calculated for the period from February 18, 2005 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

As Chart 3 demonstrates, this differential in dividend component in the total index return has been consistent over time. It compares the relative performance of total return indexes, which includes dividends, against the price return indexes for both the FTSE EPRA Nareit Developed and the FTSE Developed Indexes. The chart shows that the FTSE EPRA Nareit Developed Total Return Index has consistently outperformed the corresponding price index faster than the FTSE Developed Total Return Index has outperformed the FTSE Developed Price Index.

Chart 3. Income return of listed real estate and equity indexes

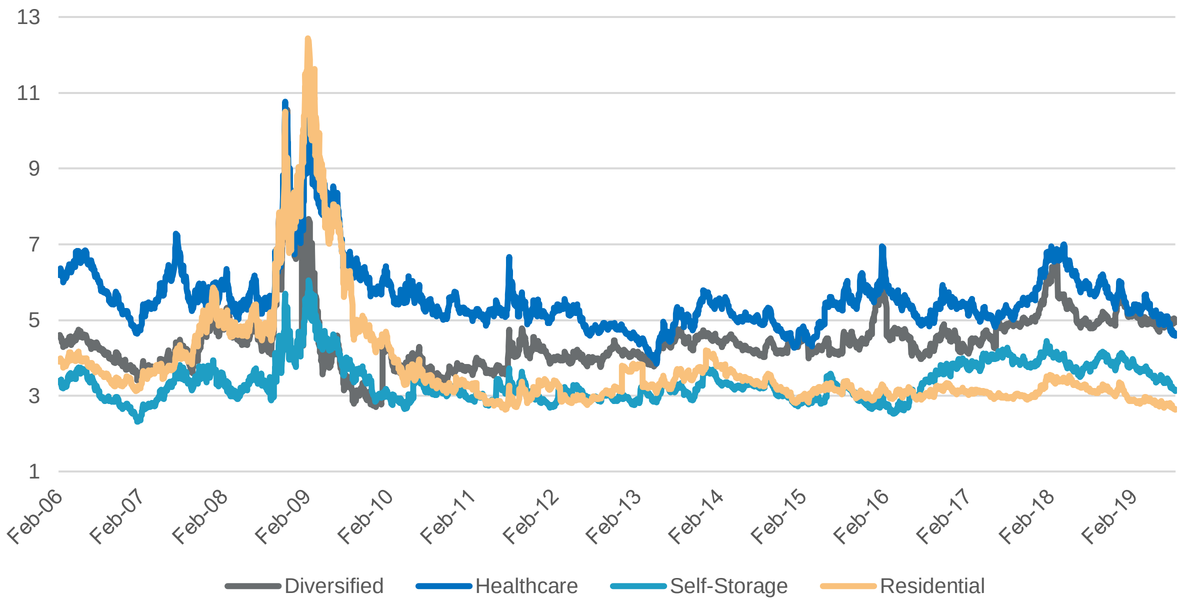


Source: FTSE Russell. FTSE EPRA Nareit Developed Real Estate and FTSE Developed Indexes from February 18, 2005 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Real estate is quite heterogenous, however. The location and the designated use of the real estate will influence investment outcomes. This variety is further amalgamated at the country and regional level.

In Chart 4, we demonstrate the dispersion of yields across segments. As can be seen, yields range from over 5% in Healthcare to around 3% in Residential and Self-storage – these levels are still higher than the dividend yield of the wider market.

Chart 4. Dividend yield history of selected FTSE US Nareit sector indexes

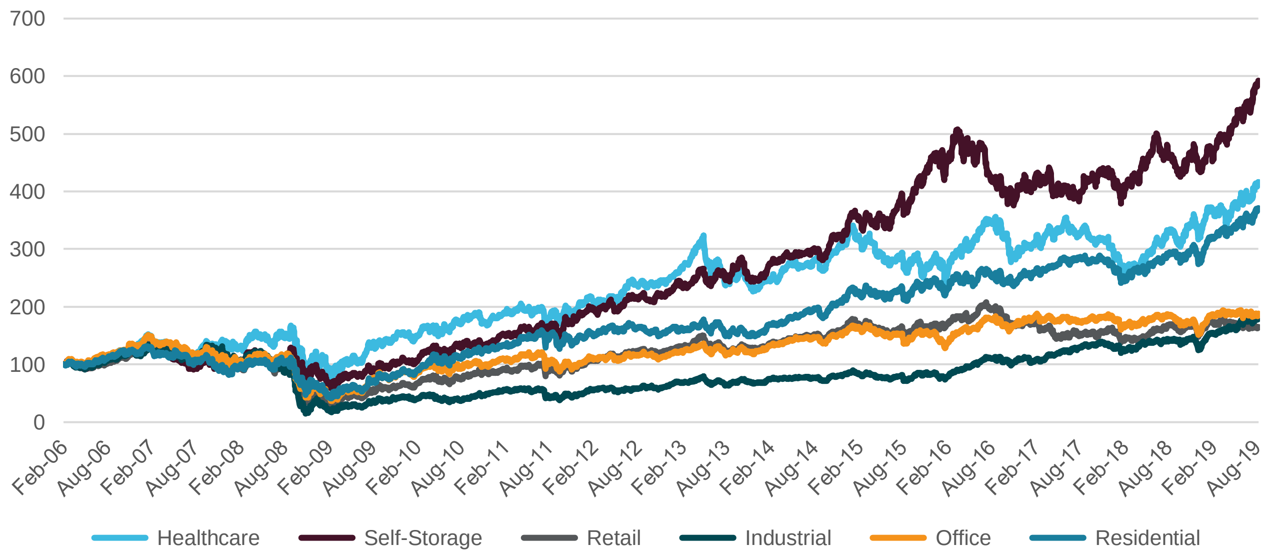


Source: FTSE Russell. FTSE EPRA Nareit Indexes from February 24, 2005 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Diverse return outcomes: analysis of real estate segments

As Chart 5 shows, the total returns of the segments are similarly widely dispersed.

Chart 5. Cumulative total return of selected FTSE US Nareit Real Estate sector indexes, rebased



Source: FTSE Russell. Data from February 24, 2005 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

As Table 4 shows, the segments also behave very differently during periods of market distress. Drawdowns can vary from well above the market (23% for healthcare real estate) to well below the market average (86% for industrial real estate).

Table 4. Drawdowns and performance since the GFC of selected FTSE EPRA Nareit indexes (%)

Index	Drawdown	Bounce back	
		total	p.a.
Diversified	63.8	413	17.2
Healthcare	23.0	440	16.9
Self-storage	41.7	816	24.7
Retail	73.2	674	31.8
Industrial	85.8	1178	26.8
Office	63.1	427	17.5
Residential	59.1	808	23.4
FTSE EPRA Nareit Global	71.2	388	16.6
FTSE Global All Cap	58.4	314	17.3

Source: FTSE Russell. Data from December 29, 2005 to August 30, 2019. Drawdown is calculated as the largest drop. Bounce back is calculated from the lowest point at the time of the GFC to the highest point after that. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

As Table 5 illustrates, best and worst performing real estate sectors alternate over time. This is partly due to the underlying financial performance of the companies in each sector, as well as the deeper fundamental changes that the role of each specific sector has in the economy. The industrial segment is a case in point. Prior to the GFC, industrial real estate was predominantly associated with factories, while today, it is mostly warehousing facilities for business-to-business and online retailers.

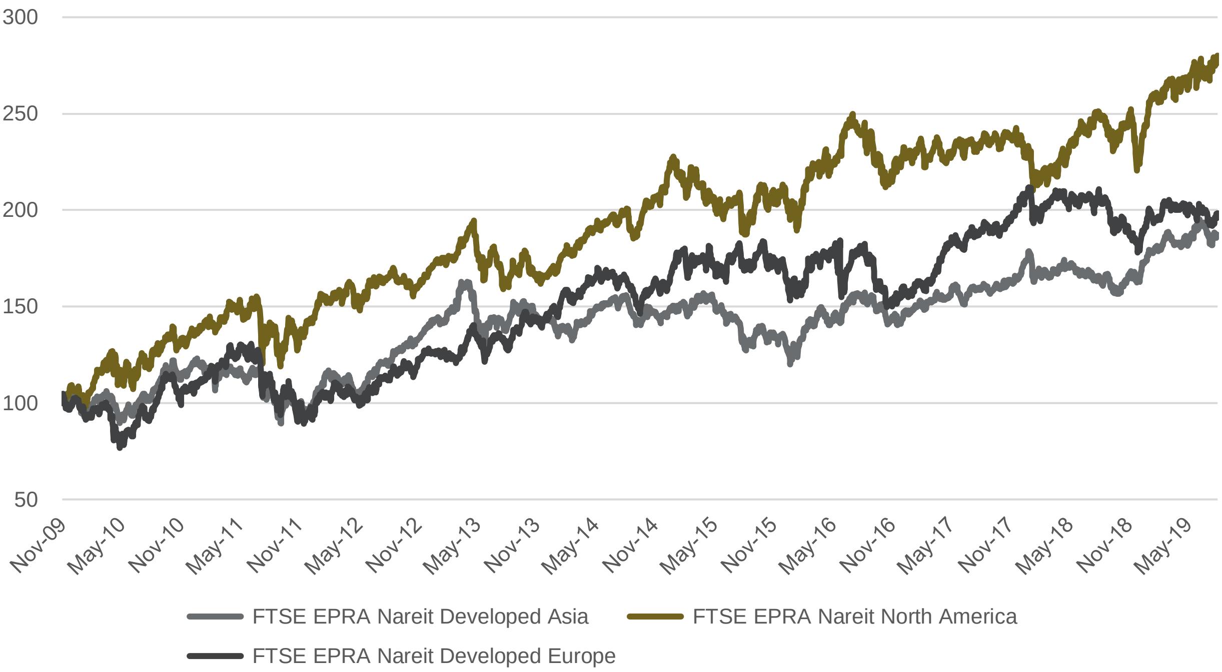
Table 5. Total return of selected FTSE EPRA Nareit indexes over different time frames, in % p.a.

Index	1 year	3 years	5 years	10 years
Diversified	8.0	0.9	4.3	10.1
Healthcare	24.8	6.0	7.9	11.5
Self-storage	29.1	12.3	14.8	20.3
Retail	-1.8	-5.6	1.8	11.1
Industrial	26.8	17.9	18.7	17.0
Office	1.6	1.7	5.1	9.4
Residential	26.7	13.8	13.8	10.6
FTSE EPRA Nareit Global	8.3	5.8	5.8	9.2
FTSE Global All Cap	-0.9	9.3	5.9	9.2

Source: FTSE Russell. Data from December 29, 2005 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

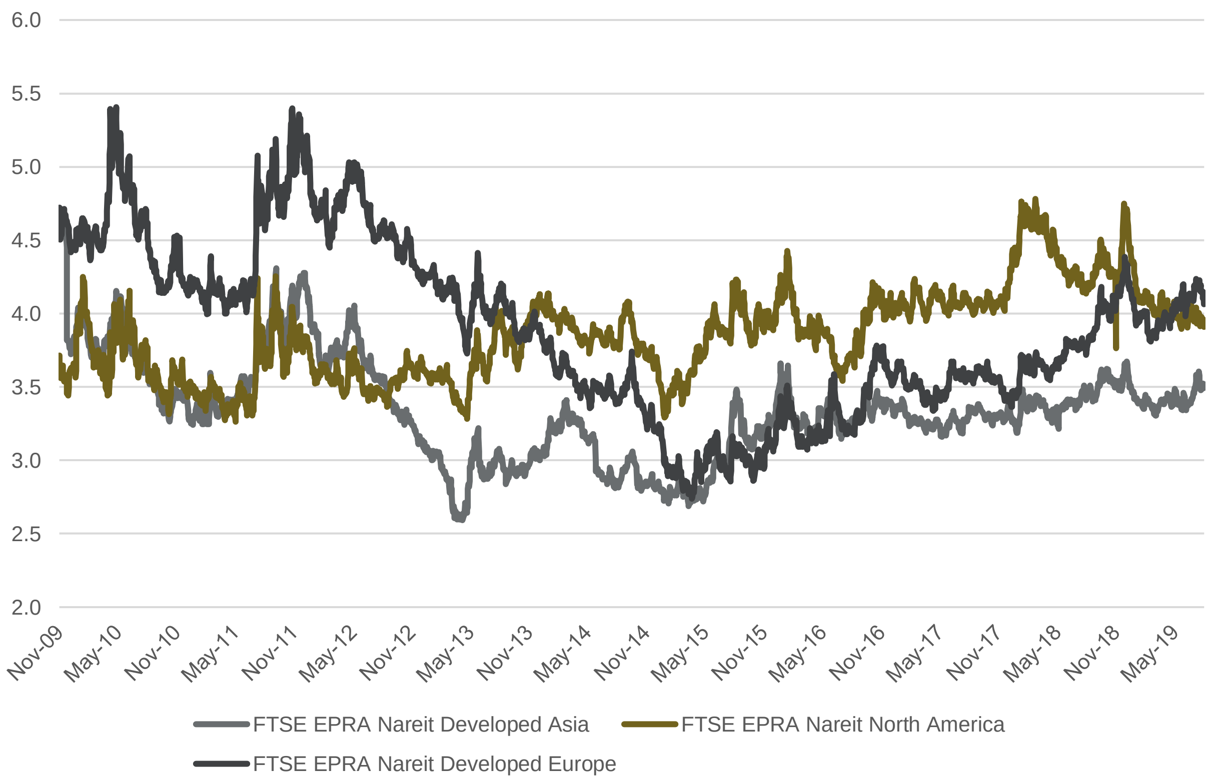
The dispersion of returns and dividend yields is also notable in geographical segmentation of the real estate sector. In Chart 6, we plot the performance of the FTSE EPRA Nareit regional indexes and in Chart 7, the dividend yields.

Chart 6. Cumulative total return of selected FTSE EPRA Nareit Real Estate regional indexes, rebased



Source: FTSE Russell. Data from November 30, 2009 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

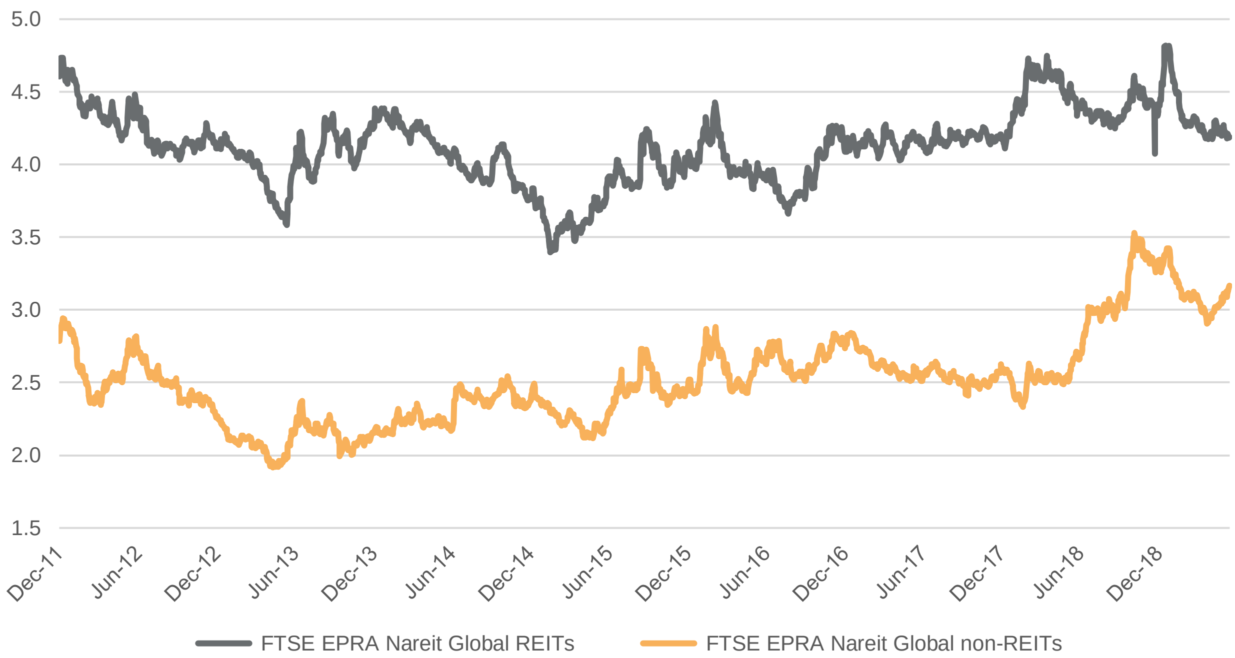
Chart 7. Dividend yield of selected FTSE EPRA Nareit Real Estate regional indexes.



Source: FTSE Russell. Data from November 30, 2009 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

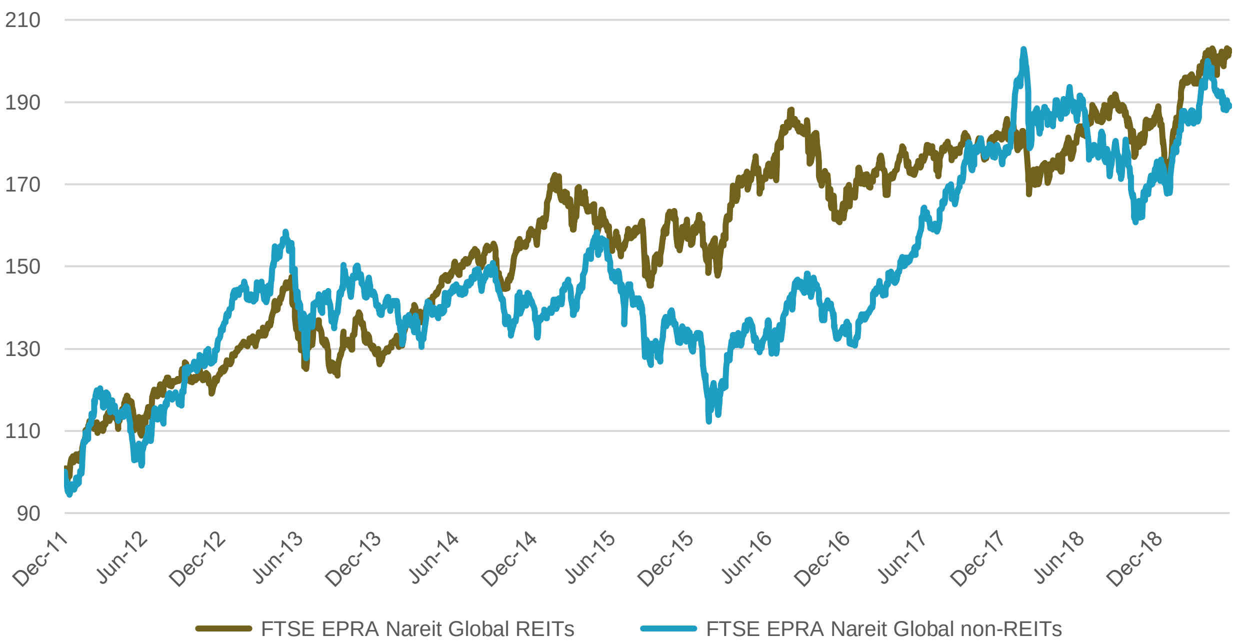
Real estate companies without REIT status are not obliged to pay out most of their income as dividends. As Chart 8 shows, this has a strong impact on the dividend yield, while long-term total performance is similar (Chart 9).

Chart 8. Dividend yield of FTSE EPRA Nareit Global REIT and non-REIT indexes, rebased



Source: FTSE Russell. Data from December 8, 2011 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Chart 9. Cumulative total return of FTSE EPRA Nareit Global REIT and non-REIT indexes, rebased



Source: FTSE Russell. Data from December 8, 2011 to August 30, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

The wide dispersion of return outcomes and dividend yields across sectors and geographies creates a notable risk and an opportunity for investors, whose portfolios deviate from the main FTSE EPRA Nareit benchmarks.

Inflation hedge

Many investors perceive that real estate has inflation-hedging properties. Prices for real assets should rise with inflation. Moreover, anecdotal evidence suggests that many long-term leases contain an inflation-adjustment clause. Some leases are also difficult or impossible to break as the European Medicine Agency court case demonstrates[2].

The most recent investment history, however, is marked by a period of historically low inflation that spans beyond the history of our real estate indexes. Therefore, we consulted the academic literature to verify this real estate investment thesis.

The opinions of academics on the inflation protection characteristics of real estate are as diverse as real estate itself. The answer depends on location, designated use and time-frame. Most agree [2-4] that residential real estate is typically a good hedge for inflation over the long term. While office space and industrial buildings typically offer poor inflation protection, retail tends to generate lower returns than residential real estate, but generally with good inflation protection.

Listed versus unlisted real estate

Theoretically, the form of ownership of a piece of real estate, listed or unlisted, should not impact its valuation in the long term.

If any, there might be an argument for a valuation premium for listed real estate, as it provides higher liquidity and lower costs when investing. This premium may fluctuate depending on the complexity, timing and cost of transaction in the physical real estate.

However, testing the equivalence of listed and unlisted real estate in practice is not a minor task, for several reasons:

1. In practice, it may be difficult to create two equivalent portfolios; one from unlisted properties and another one from listed real estate. Different composition of portfolios may invalidate the comparison test.
2. Valuation approaches for listed and unlisted real estate are different. Stock market forces determine the valuation of listed real estate companies, whereas unlisted real estate funds use calculated estimates or proxies, which are typically produced with a time lag.
3. Financing and leverage create another layer of distortion in the comparison between listed and unlisted real estate.

[2] The European Medicines Agency has headquarters in the Canary wharf, London. After the Brexit vote, the agency applied to break the lease on its London office arguing that as an EU agency it needs to be headquartered in the EU. The court rejected the claim, stating that the Brexit was not a “frustrating event”, which can break the lease and “renders frustration of the lease self-induced”. Details of the case at High Court of Justice: Canary Wharf (BP4) T1 Limited and others v European Medicines Agency https://www.judiciary.uk/wp-content/uploads/2019/02/2019-02-20_Canary-Wharf-v-EMA_Approved-Judgment.pdf

Despite the challenges, there were several academic studies that compared the returns of listed and unlisted real estate. They looked at different countries over different timeframes.

Sebastien and Schatz [5] demonstrated that in the UK and US, listed real estate indexes are predominantly driven by the underlying property market rather than the general stock market. In the case of the US, they also found that CPI, GDP and interest rates have a strong impact on real estate returns. They were not able to establish causal links to macroeconomic drivers in the UK market, however.

Hoesli and Oikarinen [6], noting the challenges of comparison between the listed and unlisted real estate – including leverage, dispersion of returns, smoothing and lagging of performance data for unlisted real estate – looked at the US, UK and Australian markets overall, as well as the US and UK sector level data. They concluded that, except for the Australian market and the US office sector, the long-term dynamics (three years) of listed real estate is driven by unlisted real estate, so their long-term returns are similar. They also found that REIT returns are independent of shocks in other asset classes, and confirmed that in the short term, REIT returns correlate with the general stock market.

Beath and Flynn [7] looked at actual performance of institutional real estate portfolios, analyzing realized returns of different asset classes in 200 defined benefit pension schemes in the US, with total assets under management of nearly USD 3.5 trillion. When comparing returns, they took into account and adjusted for reporting lags of illiquid investments, such as private equity and unlisted real estate. After the adjustment was made, the correlation between listed and unlisted real estate was a remarkable 92%.

A similar study for the European market, by Beath and Flynn [8], reviewed European defined benefit pension plans with over EUR 2 trillion of assets under management. They separately analyzed the UK, the Netherlands and the rest of Europe. As in the US study, they made adjustments for lagged reporting of unlisted investments and compared the returns of unlisted real estate to the listed real estate investments and listed real estate indexes. The de-lagged unlisted real estate showed a strong correlation with listed real estate benchmarks: the Netherlands (85%), UK (92%) and the other European funds (84%). Correlation of returns between the actual listed real estate and de-lagged real estate holdings was more mixed: the Netherlands (88%), UK (-9%) and the other European funds (58%). Beath and Flynn explain the differences by the lower level of diversification of listed real estate holdings and lagged reporting, in the case of the UK listed real estate.

Beth and Flynn also found that the all-in costs of investing in listed real estate are typically lower than investing in unlisted real estate. The costs of investing in unlisted real estate did not justify the achieved returns vis-a-vis listed real estate as per Table 6.

Table 6. Average returns and costs of investing in real estate by region, 2010-2016, in % p.a.

Statistic	Netherlands		UK		The other European	
	listed	unlisted	listed	unlisted	listed	unlisted
Average gross return	11.17	3.80	11.71	6.47	10.17	7.66
Average cost	0.28	1.14	0.78	0.69	0.24	0.46

Source: CEM Benchmarking. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

The common important conclusion of the studies is that long-term performance of listed and unlisted real estate is similar, and as a corollary listed real estate offers diversification benefits to equity investors over the long term, although the listed real estate does tend to move like general equities in the short term.

The similar long-term performance between listed and unlisted real estate is particularly important in the context of the growing proportion of real estate investments and the need of investing in real estate abroad.

Hodes, Well & Associates monitor allocations to real estate in portfolios of institutional investors. In their 2018 report [9], they note growing allocations to real estate in pension fund portfolios. In smaller countries with large pension fund assets, such as Norway, the Netherlands and Singapore for example, investing in international real estate could be necessitated by a relatively small domestic real estate market.

“Green” real estate

In the last few years, there has been an increased interest in environmentally responsible investing [14,15]. Real estate is not an exception in this respect.

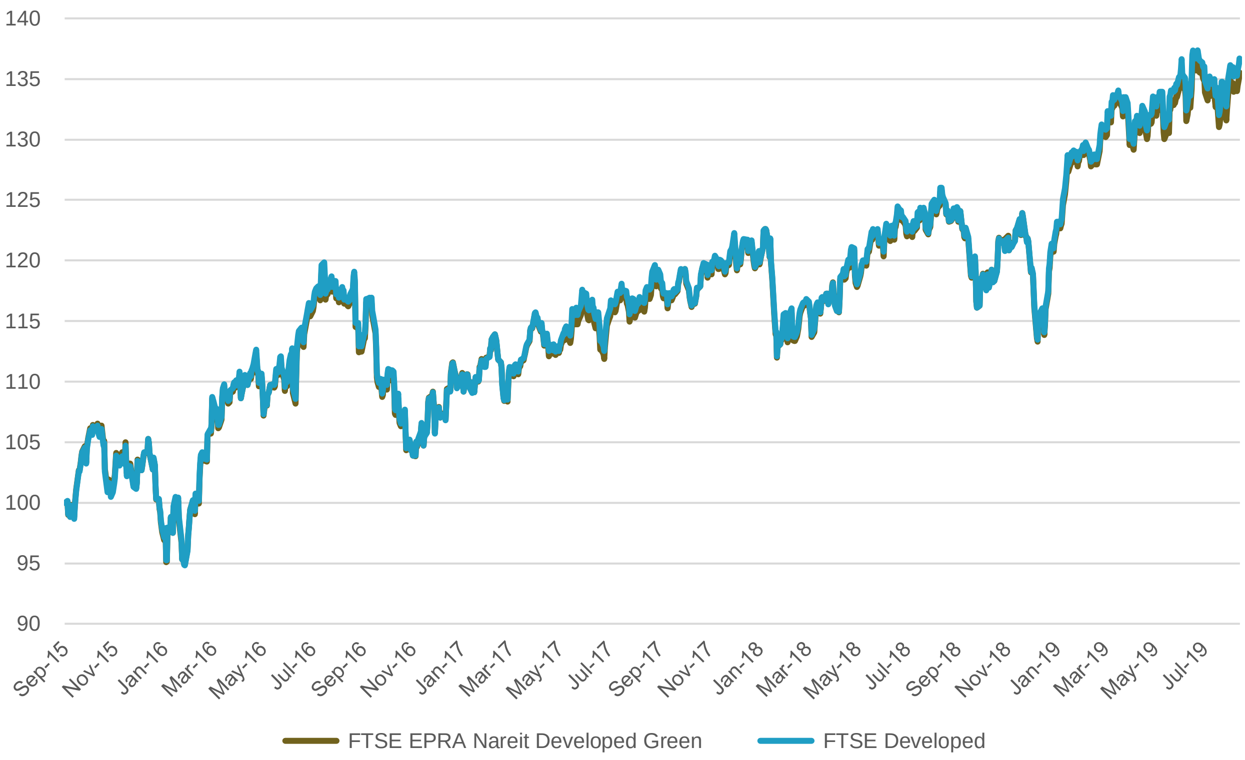
A typical approach of environmentally concerned real estate investors is to overweight properties with green building certification (there are several certification schemes) and/or which lower their use of energy per square metre.

Having said that, one of the concerns of investors when considering environmentally conscious investing is the potential performance sacrifice.

As Chart 9 shows, investors do not have to compromise on performance when going green. The variation in returns between Green[3] and regular versions of the FTSE EPRA Nareit Developed Real Estate Developed Indexes is very small.

[3] Green version of FTSE EPRA Nareit Real Estate Indexes is created using the FTSE Russell tilt methodology by increasing the weight of the companies which have more of the properties environmentally certified and having lower energy usage per square meter. More details on the methodology are in the FTSE EPRA Nareit Green Indexes Ground Rules. December 2018.https://www.ftse.com/products/downloads/FTSE_EPRA_Nareit_Green_Indexes_Ground_Rules.pdf

Chart 9. Cumulative total return of the FTSE EPRA Nareit Developed Real Estate and FTSE EPRA Nareit Developed Green Real Estate indexes, rebased



Source: FTSE Russell. Data from September 18, 2015 to August 90, 2019. Past performance is no guarantee of future results. Please see the end for important legal disclosures. Returns shown prior to index launch represent hypothetical, historical performance. Please see the end for important legal disclosures.

Summary

Real estate is a popular investment asset that can be accessed directly or via listed equity. Academic research suggests that despite equity-like short-term performance of listed real estate, the long-term returns of listed and unlisted real estate are similar.

This finding has an important corollary in that equity investors can use listed real estate to diversify their portfolio holdings.

Historically high dividend yield is another attraction of investing in real estate.

Despite their similar common features, there is a wide dispersion in real estate returns depending on its geography and sector.

The dispersion of returns offers opportunities for investors to create portfolios of listed real estate that reflect their specific investment beliefs.

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