EUREX Architects of trusted markets

Charting a new future for real estate: FTSE EPRA Nareit futures

Content

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Introduction

In March, Eurex launched futures on three European listed real estate indexes, marking a significant milestone in the development of listed real estate. The indexes are part of a wider family, created and managed by FTSE Russell, the European Public Real Estate Association (EPRA) and Nareit. The contracts add to a product suite that already includes ETFs, structured products and mutual funds. Investors interested in the asset class can now trade exposure on an unfunded basis and better risk-manage their real estate strategies.

More broadly, the futures represent the deepening maturity of a market that has demonstrated the ability to tap new sources of growth and innovate multiple times during its lifespan. Investors in the listed markets have fast access to regional real estate markets and can also access new economic sectors such as student housing and data centers. This can be achieved while having the advantages of listed markets, which include more transparency and greater transactional liquidity than private property markets. Now, with futures added to the real estate ecosystem, liquidity is set to improve as a more diverse range of market participants trade exposure to the asset class.

To examine the listed real estate market in greater depth, including its indexed offering and the growing derivatives offering, Eurex partnered with FTSE Russell, EPRA and Nareit to author this whitepaper. Through interviews with stakeholders and real estate market participants, we look at the appeal of listed real estate investments, the futures offering access, and the ground its indexes will cover in the coming years. This involves the new sectors to which investors can gain exposure to via the FTSE EPRA Nareit index series. In addition, we investigate how the real estate market is navigating the transition to a sustainable global economy and the challenges to achieving further growth.

The report's key findings are:

- Eurex's FTSE EPRA Nareit futures open a new liquidity and risk management source, with an active market already present for small and medium trades.
- The FTSE EPRA Nareit index series has become the leading benchmark for investor performance in the real estate markets. It also constitutes the underlying for a growing range of investment products.
- The appeal of listed real estate as an asset class has grown substantially across investor types. Pension funds, insurance companies, sovereign wealth funds, defined contribution plans and individual investors all now participate in the market.
- Listed real estate is a dynamic asset class that regularly adds new sectors. In Europe, self-storage, student and social housing are set to contribute to further growth.
- The transition to sustainability is a major part of real estate's future, with climate change emerging as a key challenge for the market to overcome. This will also create opportunity, as REITs and listed real estate offer access to best-in-class sustainability performers.

The growing appeal of real estate

Asset allocators are increasingly looking to a range of markets to use as an alternative income source to complement their bond and stock holdings and enhance returns. As a long-established asset class with a track record of yield generation, real estate is among the first choices for many investors looking to diversify their portfolios. The recent launch of the FTSE EPRA Nareit index futures on Eurex brought access to this market to a new level.

The asset class offers a vast range of exposure. The value of commercial real estate in the global markets covered by the FTSE EPRA Nareit Real Estate Index is estimated at USD 36.7 trillion, with the total listed real estate sector valued at USD 3.2 trillion, representing 8.6% of CRE.

While the private property markets represent the majority of commercial real estate activity, it is not a straightforward investment model for many potential participants. Its opacity and illiquidity create obstacles for many firms that want to deploy capital in the market. This is especially so for multi-asset managers who want to execute quickly on the decision to commit to the asset class. Additionally, more firms seek more sophisticated and dynamic strategies that maximize flexibility through different investment channels and products.

These needs draw more investment firms to listed real estate markets, which provide better access and other benefits, such as greater transparency and liquidity.

A key building block of any listed market is a robust index offering. Real estate is no exception. However, methodologies vary, and the real estate sector can carry a broad range of activities that vary in their correlation to property market returns.

FTSE Russell, EPRA, and Nareit joined forces in 2005 to provide market participants with an accurate indexation of the real estate market. Their aim was to provide the listed real estate markets with a grouping of indexes that investors can rely on

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> Equity and Index Institutional Sales, Eurex

to accurately reflect the price and income movements of Real Estate Investment Trusts (REITs) and listed real estate firms globally and benchmark their performance in the asset class.

With the March launch of Eurex's futures on these indexes, the market now has new risk management tools that will encourage further participation and build liquidity.

Eurex now offers contracts referencing the FTSE EPRA Nareit Developed Europe, FTSE EPRA Nareit Eurozone and FTSE EPRA Nareit UK indexes. Trading is already seamless in small to medium tickets, and Eurex is receiving inquiries when futures on other FTSE EPRA Nareit indexes will be launched.

"The FTSE EPRA index series creates the potential for exposure to price trends in real estate without having to access the real estate market directly, as you are doing so by the proxy of the underlyings that form the index," says Matthew Riley, Equity and Index Institutional Sales at Eurex.

"Previously, some exchanges have tried to offer direct property indexes, but especially in the zero-interest rate environment, it was a complicated and difficult exercise."

"For a lit exchange like ours, which seeks to generate liquidity on and off screen, the ability to replicate your index is the most important thing if you want people trading on screen. They need some way of hedging and offsetting that risk. These indexes give you that access to an expression of the real estate market that is easier for market-makers to hedge and participate in."

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> **Equity and Index Institutional Sales, Eurex**

The pull of listed investing

Over the years, a wide variety of investors have been attracted to real estate, drawn by the diversification benefits that the asset class can bring to a portfolio. The market's buy side now comprises pension funds, insurance companies, sovereign wealth funds, defined contribution plans and individual investors.

"Real estate investments represent a core foundation of many wealth-building portfolios," says Jason Radzik, founder at Bridge Four Capital. "With providing retirement security for an aging population becoming a central focus for many societies, the case for real estate as a reliable and income-producing asset class for pension funds and insurance companies to invest in has grown."

Direct real estate investment is one model to gain exposure. However, this requires specialized knowledge and connections that can take years to build. For many investment firms, particularly those with large multi-asset strategies, listed markets offer a more efficient entry point. They also mitigate some of the complications of direct investing, such as uneven transparency, high transaction costs, buy/sell delays and illiquid markets.

"The real estate asset class is unique," says David Moreno, Indexes Manager, Research and Indexes Team at EPRA. "Several investor categories use it to diversify their portfolios as it has very specific characteristics as a tangible and immovable asset completely different from traditional asset classes like equity, bonds and currencies that are available for most investors."

"The main drivers for the property markets that we also call *direct real estate* are pretty much the same as for listed real estate. However, listed real estate has all the elements of a publicly listed security, like liquidity, public information, and strict compliance with all the relevant regulations."

The transparency factor is a major advantage of listed markets from a compliance perspective. This is the driving force behind the FTSE EPRA Nareit indexes – to provide as accurate and clear a picture of the world's listed real estate markets as possible. The methodology has been crucial to achieving this aim.

The unique offering of the FTSE EPRA Nareit indexes is a methodology that eschews a top-down approach, which would potentially classify companies in the real estate sector, such as mortgage servicers or brokerage firms, as qualifying for inclusion in the index.

Instead, the index providers use prospective constituents' annual reports and financial statements to determine whether at least 75% of their EBITDA comes from core real estate activities before adding them to the index. This filters out companies whose involvement with real estate is more indirect.

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David Moreno
Indexes Manager, Research and Indexes Team, EPRA

The end result is an index replicating the return profile of real estate investment while providing superior transparency and greater liquidity.

"The unique selling point of the listed market is its transparency," says Dominique Moerenhout, CEO of EPRA. "A listed entity is obliged to be entirely transparent about its financial performance, its sustainability performance and the way it operates. It has to provide clear transparency on fees, transactions, yields and the state of the market. This is something that you would never see in the private property market."

"With futures now tracking the index, investors know they can have full clarity and transparency about the financials and sustainability of the real estate sector."

Equipped with these tools, market participants can also amplify the scope of their investment. With an investment that would only buy a small slice of a prime property market like London in private property markets, investors can gain access to multi-regional real estate exposure through listed real estate indexes. Through futures, they can increase this advantage via leverage.

Indexed offerings also allow for greater sectoral diversification, with REITs' holdings varying significantly by geography. In the US, for example, data centers constitute a significant part of total market capitalization, allowing for additional exposure to themes like AI.

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Dominique Moerenhout
CEO, EPRA

Comparing returns

One criticism often leveled at listed real estate is its greater volatility compared to property markets. However, the greater reactivity of public markets can also be a strength, allowing investors to adapt faster to changing market conditions. In 2022, when many central banks began to hike interest rates, forward-looking listed real estate markets quickly responded – a move that only started in private property markets in 2023 and continues today.

While comparing short-term data shows much more disparate returns due to the illiquidity and high transaction costs of private property markets, assessing long-term returns shows a high correlation between FTSE EPRA Nareit indexes and property market indexes – at around 70% over the last 15 years. Some have identified an even closer relationship – adjusting for reporting lags at the fund level, CEM Benchmarking found a 90% correlation.

"Real estate is bulky and illiquid; you can't buy a property multiple times a week, let alone several times a day," says Ali Zaidi, Head of Real Assets Research, Research & Analysis at FTSE Russell. "That is the unique side of listed real estate; you get liquidity and flexibility that are not traditionally associated with real estate."

"Some investors believe these features make the market more like equity than real estate. However, that is comparing daily pricing data to the much lower frequency of transactions that happen in the private markets."

"Research shows that net of fees, there is no evidence that private real estate outperforms public."

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Head of Real Assets Research, Research & Analysis, FTSE Russell

The rise of REITs

A fundamental component of the listed real estate markets is the REIT model. These investment vehicles, which own portfolios of income-producing properties, make up over half of the global listed real estate market (and in the US, which accounts for half of global market capitalization, it makes up the entire market). Their structure is a large part of what makes the asset class an attractive investment. Globally, REITs have a USD 2.2 trillion market cap across 503 constituents in over 40 countries.

The European REIT market was fairly small at the turn of the millennium. Investors who wanted exposure to real estate participated directly in the private markets.

That began to change when an increasing number of countries introduced REIT regimes into their legislation. The REIT regime was first introduced in the 1960s in the US and embarked on a rapid growth trajectory between 1990 and 2000. However, it really began to build global momentum in the early 2000s as several European authorities introduced their own frameworks.

The European REIT legal structure recognizes real estate's economic importance through tax benefits for companies that develop and invest in the market. It is also designed to restrict speculative activity. REIT regimes mandate local governance requirements, dividend distributions, meaningful capital requirements and minimal levels of direct investment in properties.

For investors, REITs offer an attractive income generation tool. By law, their earnings must be paid out as dividends to maintain their tax advantages.

Belgium, the UK, France, Italy and Germany rolled out REIT regimes between 2004 and 2008, providing a significant fillip to the industry. What had been a relatively niche market, made up of a few small property companies, ballooned in size. IPOs, capital raisings and M&A took off, with REITs becoming a significant part of the listed European markets.

At the same time, the financial industry began increasing product creation around real estate, especially in the US. A rise in mutual funds and derivatives opened new investment channels to the asset class.

Together, these two drivers created a near decade of growth in the 2000s – until the 2008 global financial crisis interrupted activity.

After the market readjusted, real estate embarked on a period of specialization in the 2010s. New subsectors emerged, such as German residential.

As with any market, an essential ingredient for success has been investors' need to benchmark their investments. The first index for listed real estate was launched in 1999. However, offerings in the market were refined when the first FTSE EPRA Nareit indexes came in 2005. Demand for listed European real estate indexes first came from Dutch pension funds, early allocators with listed real estate who needed a clear investment benchmark.

This trajectory drives the need for sophisticated products that keep pace with market developments. Indexes have been a key part of market growth, first as a benchmark for institutional investors and then as the underlying for other products.

The foundations of a derivatives market

The positive reception that the FTSE EPRA Nareit futures received so far is already raising questions about when new products will launch. Alongside the underlying stocks and an ETF market that is building momentum, the three products are already creating a functioning ecosystem where liquidity in one product begets liquidity in the other.

As ETF managers enter the market, they guarantee liquidity by constantly buying and selling stocks to match index weightings, functioning as surrogate market-makers. This helps create sufficient activity for other liquidity providers to enter the market, from which point offering futures becomes a simple next step.

The FTSE EPRA Nareit Developed Europe, FTSE EPRA Nareit Eurozone and FTSE EPRA Nareit UK futures have contract values of EUR 10 per index point on the developed Europe and Eurozone futures and GBP 10 per index point on the UK futures. All contracts have quarterly maturities and trade between 07:50 and 22:00. The contract's pre-trading period is 07:30 – 07:50, and post-trading closes at 22:10.

While still in the early days of the product's life, liquidity in smaller and medium-sized trades is healthy, as described above. However, traders wanting to execute larger tickets would be advised to consult a liquidity provider at this stage in the market's development. Breaking up the trade into multiple tickets is a surer method of execution as liquidity continues to build.

Traders at Eurex can also benefit from efficiencies such as cross-margining against other positions, which help lower the overall cost of trading.

While the futures serve as an extension of Eurex's equity index offering, trading in listed real estate futures does have distinct features, especially around hedging. This is partly due to the lower liquidity of some stocks in the indexes and the lower correlation of property stocks to other assets.

"REITS historically have comparatively low correlation with other asset classes," says Bruce Gunn, ETF Sales at Susquehanna International Group.

"While this provides a compelling investment case, it also presents some challenges to market-makers. For instance, Delta One index arbitrage-type strategies will not make sense here like they may when market making large-cap equity futures. As such, a healthy risk appetite is required when market making REIT futures, as hedging instruments will be imperfect proxies and unwinding our hedges is likely to take a little longer. This is where Susquehanna can lend its expertise to provide liquidity in these instruments."

Derivatives are also gaining relevance in current market conditions. Uncertainty about the future trajectory of interest rates is still widespread across asset classes, creating a divergence in views and positioning.

The effect of rising rates since 2022 has been negative for most REITs' share price performance, and views differ on whether central banks will maintain or cut in the coming months. In the US though, real estate has typically revived strongly after Fed rate hikes, making a case to position for the upside. Market conditions like these create a range of views on the future direction of price movements – making for an active market where futures serve as vital instruments for expressing those views and risk-managing positions.

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ETF Sales, Susquehanna International Group

The advantages of the futures product also apply to the broader case for investing in the asset class, not just the future trajectory of interest rates.

"If you are in a multi-asset fund, adding any kind of differentiated exposure to that fund can contribute positively to the ultimate goal of achieving a nice high Sharpe Ratio where you've got returns with a minimum of volatility," says Eurex's Riley.

"Futures allow investors who may have been put off by the perceived specialty or level of differentiated knowledge required to invest in real estate directly to do so through the proxy of the index, increasing your exposure in both small and large amounts in a very efficient manner."

Should Eurex's futures continue their promising start, demand can be expected for options, as well as new futures.

"If the futures were to reach the level that we are aiming for, then obviously we would start considering adding an options market on top of that," says Riley. "The ability to trade options for yield enhancement and risk management around these indexes can be desirable for buy-side firms with these investments."

"However, in order to have credible pricing, you first need to have liquidity in the futures to make sure that the complex stands on its own."

There is evidence that the need for options is already building as investment firms seek to develop nimbler real estate strategies. For example, a pension fund could use REIT indexes to access the market swiftly when it sees a valuation gap between public and private real estate markets.

As these strategies gain momentum, demand for a wider range of futures and options will increase, allowing for faster execution and inherent leverage.

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> Equity and Index Institutional Sales, Eurex

New sectors

Geographical difference is one aspect of diversification within the real estate asset class. However, investors can also increasingly gain sectoral and thematic exposures through market investments.

"As the REIT market grew, it also became diverse," says John Worth, Executive Vice President, Research & Investor Outreach at Nareit. "Back in 2000, the new and emerging property sectors like healthcare, data centers, cellphone towers and storage accounted for about 15% of US market capitalization. Today, they account for over half of the market capitalization."

"We have seen this dramatic growth in the emerging property sectors. The listed market has been very important in institutionalizing these property sectors. Today, one important way institutional investors use REITs is for portfolio completion, to get access to these sectors."

In the future, this specialization trend will also deepen in Europe and Asia, although not in a manner that simply tracks the US. UK social housing, for example, has created a new business model whereby companies acquire and develop specific properties according to local government requirements. This model, where the income stream is based on government, not tenant payments, is growing in countries like Belgium and Spain. Self-storage is a sector that boomed in popularity during the pandemic, while student housing has also grown on the back of increasing international student immigration to European university cities.

"One of the changes that we have seen and expect to gain momentum in the next five to ten years is the rise of alternative sectors," says Moreno. "Before, indexes were mainly made up of industrial, office, retail, and a bit of residential. Then, ten years ago, residential grew a lot and became a more important part of the weighting. Now, we are seeing new growth in areas such as self-storage, student and social housing."

There is also a related trend around housing that includes operational services, not just in tenant-occupied buildings that require additional services from their owners but also in sectors like healthcare.

"Ten years ago, when talking about office and other sectors, the three words everyone repeated were location, location, location," says Moerenhout. "Today, they are location, transition and services."

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> CEO, EPRA

A greener future

Real estate, like all asset classes, grapples with the energy transition. The sector is responsible for 40% of global CO_2 emissions and energy consumption, so how it transitions to a more sustainable future will be key, not just to the sector but also to the overall movement for a greener global economy.

This is one area in which Europe is a precursor, both in terms of regulation and buy-side demand. Moerenhout says the item is now on the agenda in all investor meetings. However, demand is inexorably building in other regions, too.

"Today, the US is clearly active in the subject matter, which is becoming more prominent in Asia, although to a slightly lesser extent than Europe," adds Moerenhout.

Research has shown that listed real estate offers a more effective route for sustainable investment objectives, with listed REITs outperforming private real estate on sustainability measures. In the FTSE EPRA Nareit Green index series, investors can access a robust real estate benchmark against which to measure sustainability objectives. The indexes use green building certification and energy usage as measurements.

Indeed, the FTSE EPRA Nareit indexes can already be titled to a range of sustainability needs. These range from the specialized, such as a client's specific sustainability objectives, to the broad, such as an index tracking a published sustainability guideline.

Of course, the road to sustainability is a long one, and there are still issues for the market to overcome. One key challenge is standardization. There are a wide variety of competing and sometimes inconsistent metrics and measurement systems currently used to compare greenhouse gas emissions, water consumption and electricity usage. This is an issue for market participants trying to assess the impact of their investments. However, progress is being made as analysts, investors and companies reach greater consensus on how to measure sustainability.

Future challenges

In order to power further growth and support themes like the sustainability transition, real estate companies will need more supportive regulatory frameworks.

One such area is capital raising, where the compliance checklists vary greatly by geography. This can lead to a costly and time-consuming preparation pipeline in some regions.

In the US, the process can take one to two months, while in Luxembourg, it can be done in one or two weeks. Meanwhile, it can take three to six months in France, Italy and the UK. Not only is the process long, but it can also be highly costly. This bottleneck is creating a drag on future growth.

Conclusion

Listed real estate has proven to be one of the most dynamic asset classes and a key part of the investment portfolio. With the introduction of Eurex's FTSE EPRA Nareit futures, the market's ecosystem has gained a new level of sophistication that is already encouraging new interest.

Participation in listed real estate is set to diversify further and become more clinical. Derivatives are already enabling investors to execute new strategies and better manage hedging and risk.

For investors, the case for the market is clear: a source of reliable returns that provide valuable diversification benefits alongside bond and stock holdings in a portfolio. As trading in investment products deepens, the underlying indexes they are based on will also continue to evolve. Indexes already offer a diverse range of sectoral exposures, which will deepen in the coming years. Areas such as student and social housing are set to contribute more to weightings. This diversity also offers exposure to other investment themes, such as the AI exposure that data centers offer.

Of course, challenges lie ahead – not only on issues such as regulation but also on large shifts such as the transition to a sustainable global economy. How the real estate market approaches these themes will be a key focus in the coming years.

As investors strategize their asset allocation to maximize sustainability impact while preserving returns, indexation and the growing range of associated derivatives will play a central role. This will also apply to other real estate market areas, as transparency and growing liquidity help drive further diversity in the asset class.

About Eurex

Eurex stands for the leading European derivatives exchange and – with Eurex Clearing – one of the leading central counterparties globally. Being architects of trusted markets characterized by market liquidity, efficiency and integrity, we provide our customers with innovative solutions to seamlessly manage risk. On the trading side, we mastermind the most efficient derivatives landscape by pioneering ingenious products and infrastructures as well as by building 'smart' into technology – offering a global product range, operating the most liquid fixed income markets in Europe and featuring open and low-cost electronic access. As central counterparty, Eurex Clearing builds trusted relationships with and amongst market participants, enabling effective risk management and delivering high efficiencies to clients.

Architects of trusted markets

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