



EPRA

EUROPEAN PUBLIC
REAL ESTATE ASSOCIATION

MONTHLY MARKET REVIEW

Monthly Market Review and Developers' Research Benchmark

November
2023

Overview

The FTSE EPRA Nareit (FEN) Global Developed Real Estate Index gained 7.2% and now YTD return stands at -1.1% as of November. Both global equities (4.9%) and bonds (1.4%) returned positive for the month.

In terms of regional performance, all regions posted positive returns for the month: Europe (13.9%), Asia (3.9%), North America (7.0%). Emerging markets (4.4%) also returned positive during November.

Focusing on sector performance, all sectors returned positive which industrial/office (13.8%) and self-storage (11.5%) were outperformers followed by industrial (9.2%), data centres (8.6%) and lodging/resorts (8.3%). Meanwhile, healthcare (4.0%) and diversified (5.5%) were the bottom performers with relatively lower but still positive monthly returns.

At the end of November, the **FEN Developed Index** totalled **369** constituents, representing a free float market capitalisation of around **EUR 1.4 trillion** and the **FEN Emerging Index** totalled **127** constituents, representing a free float market capitalisation of around **EUR 118 billion**.

EPRA Developers Research Benchmark

The EPRA Developers Research Benchmark is a non-commercial benchmark designed to allow its constituents to assess themselves against each other. The benchmark gained 16.8% (m-o-m) and brought the YTD return to 24.1% in November. The benchmark now has 29 constituents from 12 different countries in Developed Europe (18 out of the UK) representing an aggregated full market cap of **EUR 42,370 million** (30/11/2023) – *Details on page 5*.

Highlights of the Month

The eurozone's inflation rate is expected to be 2.4% in November, lower than anticipated which created an expectation of interest rate cut soon (now the main refinancing operations stands at 4.50%). The experts believe that 'ECB cuts could be justified as early as the first quarter of next year' due to declining inflation and a stagnating economy. On the other hand, ECB made a statement that 'it is too early to declared ending fight to lower inflation to the bank's 2% target' since wage pressures 'remain strong' as a key factor driving domestic inflation.

The ECB warned that the signs of stress in CRE sector which represents 10% of bank loans in the eurozone, could play a significant amplifying role in the event of broader market stress (*Financial Stability Review, November 2023*). Eurozone real estate companies might have difficulties to pay off their debts due to their losses (the average debt of larger European property companies had increased to 10x their earnings, 'close to or above pre-global financial crisis levels'), as a result of significantly rising financing costs, declining CRE values and rental income, and growing worries about cost for the energy efficiency of buildings. *You can read the latest EPRA paper for detailed analysis on LRE companies : 'Reshaping debt profiles : Comprehensive analysis of European LRE'*

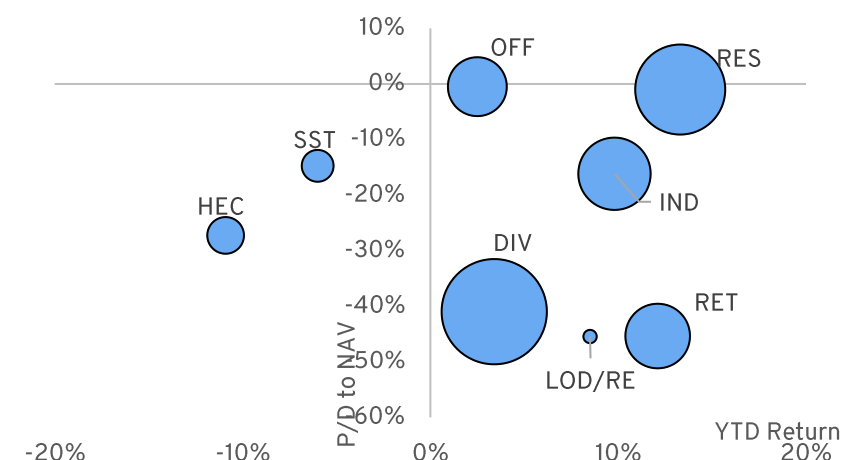
The European average LTV stands at 38.9% now, with the lowest in the UK and quite above the EU average in Germany, Italy and the Nordics. The average P/D to NAV in Europe stood at -38.6% (down from -42.3%), the lowest for self-storage (-14.7%) and the highest for lodging/resorts (-45.4%).

FTSE EPRA Nareit Global Index Total Return

% Total Returns (EUR)	Nov-23	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
Global Real Estate	▲ 7.2	-1.1	-7.1	3.4	1.5	5.9
Global Equities (FTSE)	▲ 4.9	15.4	6.1	11.2	8.4	8.4
Global Bonds (JP Morgan)	▲ 1.4	-2.4	-5.8	-5.0	1.2	1.8
Europe Real Estate	▲ 13.9	6.2	4.6	-6.1	-2.4	3.3
Europe Equities (FTSE)	▲ 5.9	11.8	9.0	8.3	7.7	6.6
Europe Bonds (JP Morgan)	▼ 0.0	0.7	-7.3	-4.3	-1.1	3.2
Asia Real Estate	▲ 3.9	-9.3	-10.9	-1.0	-1.1	2.5
Asia Equities (FTSE)	▲ 2.4	10.5	3.9	7.3	7.7	9.0
Asia Bonds (JP Morgan)	▼ -0.4	-1.0	-5.9	0.8	0.1	3.0
North America Real Estate	▲ 7.0	0.5	-7.9	7.6	3.4	8.2
North America Equities (FTSE)	▲ 6.1	18.9	7.9	12.5	13.2	14.0
North America Bonds (JP Morgan)	▲ 0.4	-0.7	-5.1	-1.8	1.3	3.3
Emerging Real Estate	▲ 4.4	-7.8	-11.5	-7.9	-4.7	2.2
Emerging Equities (FTSE)	▲ 3.9	3.6	-1.1	0.7	4.3	5.4
Emerging Bonds (JP Morgan)	▲ 2.7	3.7	0.2	-1.0	2.1	4.9

(*) Annualised.

Fig. 1. Developed Europe: Sector performance indicators (MCap, P/D to NAV, YTD return)



Source: EPRA Research. Data is compiled from FEN Developed Europe sector index. The size of the bubbles represents MCap.

Fig. 2. Global Weights (EUR)*

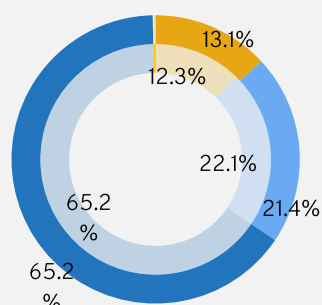


Fig. 3. REIT / Non-REITs

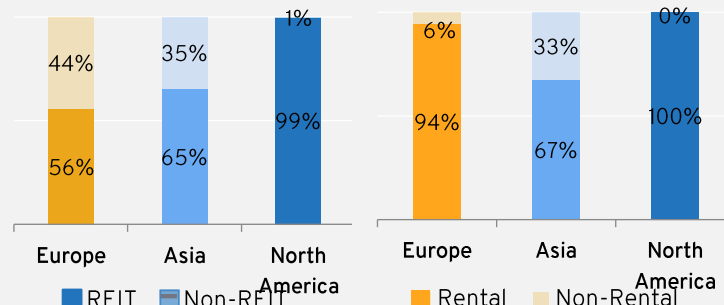


Fig. 4. Focus Split

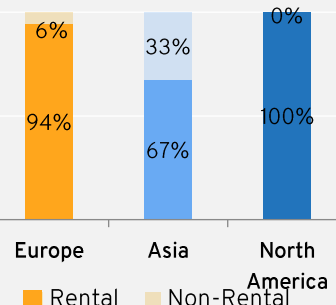


Fig. 5. Dividend Yields*

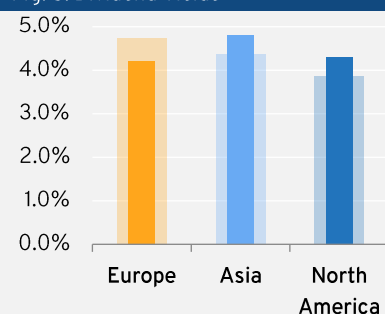


Fig. 6. Volatility (10 yr. & 3 yr.)**

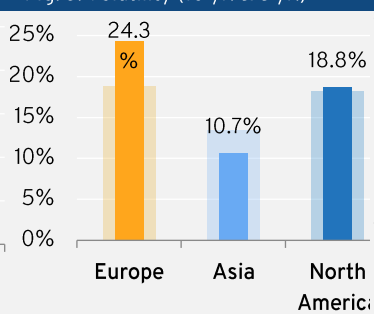
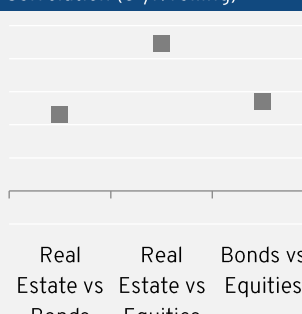


Fig. 7. Correlation (3 yr. rolling)



(*) Shaded bars are last month's (**) Shaded bars are 10 yr.

FTSE EPRA Nareit Developed Europe - Country Indices

% Total Returns	Nov-23	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
UK (GBP)	12.6	0.8	0.4	-2.8	-1.3	1.9
France (EUR)	11.8	11.9	12.4	2.7	0.0	2.8
Netherlands (EUR)	5.3	2.7	-0.8	-1.8	-14.2	-7.2
Germany (EUR)	16.0	18.4	13.1	-17.2	-8.0	5.8
Sweden (SEK)	19.5	2.7	4.6	-6.1	4.4	11.9

FTSE EPRA Nareit Asia - Country Indices

Hong Kong (HKD)	0.4	-26.2	-17.4	-8.6	-6.7	-0.8
Japan (JPY)	3.7	12.5	4.7	9.0	4.6	2.4
Australia (AUD)	10.7	-3.5	-5.0	0.1	0.4	6.1
Singapore (SGD)	6.2	-4.6	-5.2	-0.8	3.2	4.2
South Korea (KRW)	7.5	-16.3	-30.0	na	na	na

FTSE EPRA Nareit Developed North America - Country Indices

United States (USD)	10.4	3.1	-2.2	4.6	2.7	6.1
Canada (CAD)	8.7	-4.3	-6.8	0.8	1.1	4.8

FTSE EPRA Nareit Developed Index - Top 10 Constituents

Company	Sector	Country	Total Return
ProLogis USA	Industrial	USA	▲ 14.1%
Equinix Inc	Data Centers	USA	▲ 12.3%
Welltower	Healthcare	USA	▲ 7.3%
Digital Realty Trust	Data Centers	USA	▲ 11.6%
Simon Property Group, Inc.	Retail	USA	▲ 13.7%
Realty Income Corp.	Retail	USA	▲ 14.4%
Vici Properties Inc	Specialty	USA	▲ 7.1%
Extra Space Storage	Self-Storage	USA	▲ 25.7%
AvalonBay Communities, Inc.	Residential	USA	▲ 4.3%
Equity Residential Properties Trust	Residential	USA	▲ 2.7%

FTSE EPRA Nareit Developed Index - Top 10 Performers

Company	Sector	Country	Total Return
Keppel Pacific Oak US REIT	Office	SI	▲ 38.6%
Cromwell Property Group	Diversified	AU	▲ 37.5%
Hudson Pacific Properties	Office	USA	▲ 31.6%
Fastighets AB Balder	Diversified	SWED	▲ 31.1%
Nyfos AB	Ind./Office	SWED	▲ 29.4%
Park Hotels & Resorts	Lod./Resorts	USA	▲ 28.6%
NP3 Fastigheter Ord Shs	Diversified	SWED	▲ 27.4%
Kojamo plc	Residential	FIN	▲ 26.7%
abrdn European Logistics Income plc	Industrial	UK	▲ 25.9%
SL Green Realty Corp.	Office	USA	▲ 25.8%

Dev. Europe:Total Return	Weekly Total Return by Sector					YTD	Ukraine war	Covid-19
	Nov-23	3-Nov	10-Nov	17-Nov	24-Nov	Nov-23	23-Feb-22	19-Feb-20
Developed Europe	13.9%	12.6%	-2.7%	5.7%	0.1%	6.2%	-26.8%	-32.9%
Self-Storage	13.7%	13.4%	-3.7%	4.0%	1.8%	-6.0%	-25.7%	-4.5%
Industrial	15.1%	13.8%	-3.0%	5.2%	0.4%	9.8%	-31.5%	-5.3%
Diversified	12.4%	8.7%	-2.1%	6.2%	0.1%	3.4%	-22.2%	-33.0%
Retail	12.4%	11.7%	-3.9%	4.6%	-0.7%	12.1%	-8.7%	-35.8%
Office	11.2%	12.8%	-2.7%	4.3%	-1.0%	2.5%	-17.9%	-36.3%
Healthcare	10.7%	16.1%	-3.1%	3.4%	-0.6%	-10.9%	-26.5%	-37.8%
Residential	16.4%	17.1%	-3.3%	6.6%	-0.1%	13.3%	-37.7%	-38.7%
Lodging/Resorts	20.2%	7.3%	3.5%	8.2%	2.4%	8.5%	-14.3%	-45.0%

Source: EPRA Research. Data is compiled from the FEN Index series (as of November 30, 2023)

FTSE EPRA Nareit Developed Europe Index

The FEN Developed Europe Index posted a return of 13.9% during November. European equities gained 5.9% compared to no change in European bonds (0.0%).

All country indexes posted positive monthly returns : Germany (16.0%), Netherlands (5.3%), the UK (12.6%), Sweden (19.5%) and France (11.8%) (in local currencies).

No major corporate actions in Developed Europe region.

Sector Performance: All sectors returned positive which lodging/resorts (20.2%), residential (16.4%) and industrial (15.1%) were top performers, while healthcare (10.7%) was bottom performer with relatively lower month return.

Performance of top 3 constituents: *Fastighets AB Balder* (31.1%, Sweden, Diversified), *Nyfosa AB* (29.4%, Sweden, Industrial/office), *NP3 Fastigheter* (27.4%, Sweden, Diversified).

Developed Europe representing a free float MCap of around **EUR 180 billion** with **107** constituents

FTSE EPRA Nareit Developed Asia Index

The FEN Developed Asia Index posted 3.9% for a month. Asian equities gained (2.4%) compared to a loss from bonds (-39 bps). All country indexes returned positive in Asia : Japan (3.7%), Hong Kong (40 bps), Singapore (6.2%), Australia (10.7%) and South Korea (7.5%) (in local currencies).

No major corporate actions in Developed Asia region.

Sector Performance: Industrial/office (8.9%) was outperformer followed by retail (7.8%), and industrial (4.8%), while residential (-24 bps) was the only sector returned negative as the bottom performer.

Performance of top 3 constituents: *Keppel Pasific Oak US REIT* (38.6%, Singapore, Office), *Cromwell Property Group* (37.5%, Australia, Diversified), *Digital Core REIT Management* (21.8%, Singapore, Data Centres).

Developed Asia representing a free float MCap of around **EUR 294 billion** with **134** constituents

FTSE EPRA Nareit North America Index

The FEN North America Index returned 7.0% for the month. North American equities (6.1%) and bonds (44 bps) also posted positive returns. Both the US (10.4%) and Canada (8.7%) indexes returned positive for the month (in local currencies).

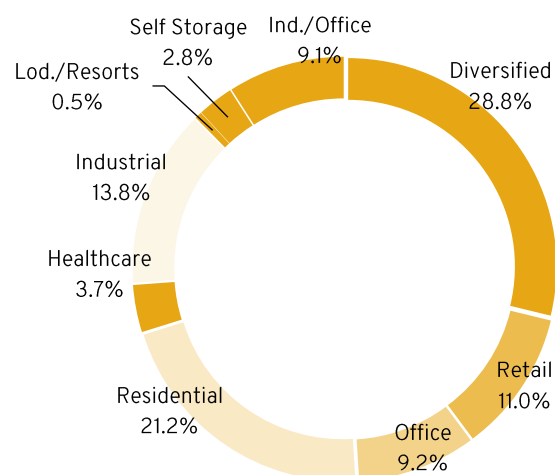
Subject to the completion of the demerger from *W. P. Carey Inc.* (USA, constituent) which remained in the index, *Net Lease Office Properties* (USA) was added to the index with a shares in issue total of 14,259,762 and an investability weighting of 98.90%.

Sector Performance: Self-storage (11.4%) and office (10.9%) were outperformers followed by lodging/resorts (9.4%) and industrial (9.1%), while specialty (2.8%) and healthcare (3.6%) were the bottom performers with positive but relatively lower returns.

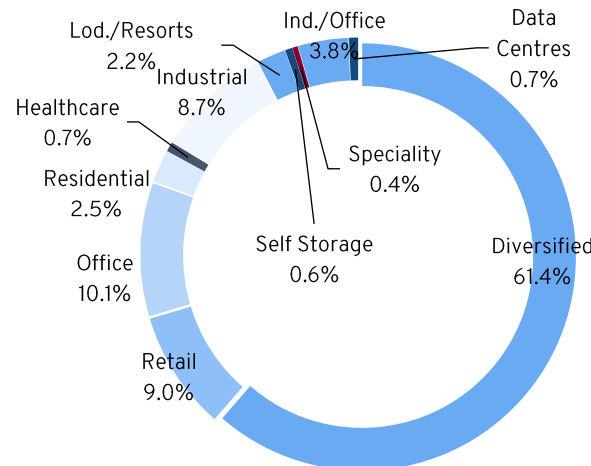
Performance of top 3 constituents: *Hudson Pacific Properties* (31.6%, USA, Office), *Park Hotels&Resorts* (28.6%, USA, Lodging/Resorts), *SL Green Realty Corp.* (25.8%, USA, Office).

Developed North America representing a free float MCap of around **EUR 896 billion** with **125** constituents

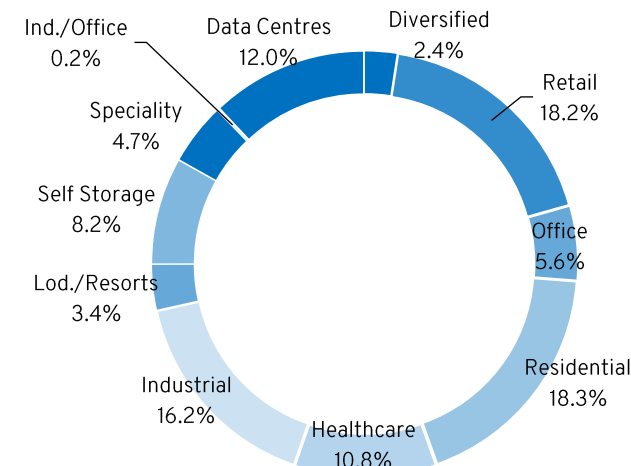
Developed Europe Sector Split



Developed Asia Sector Split

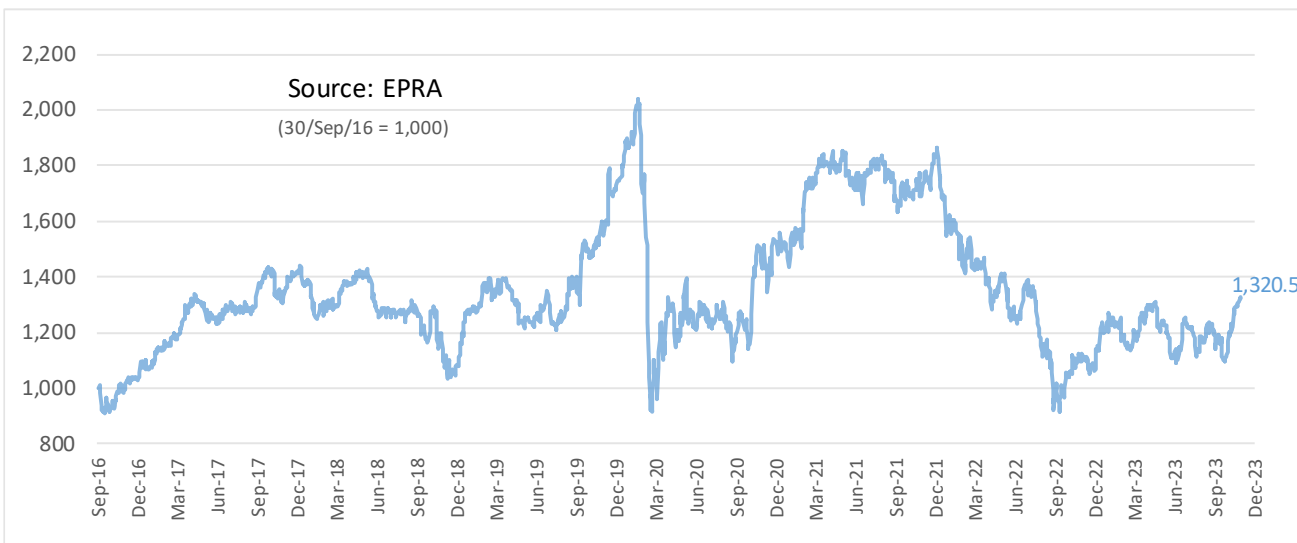


North America Sector Split



EPRA Developers Research Benchmark

Thursday, 30 November 2023



Historical Performance	Last Month	1 Year	3 Years	5 Years
Total Return	16.8%	20.3%	-7.8%	19.0%
Total Return (Annualized)	16.8%	20.3%	-2.6%	3.8%

Return	3 Months	6 Months	Year to Date	5 Years
Total Return	11.5%	8.9%	24.1%	19.0%
Maximum Return	4.9%	4.9%	4.9%	11.6%
Minimum Return	-3.7%	-3.7%	-5.4%	-13.1%
Mean Return (Annualized)	91.1%	31.6%	44.8%	12.6%
Maximum Drawdown	-11.5%	-12.6%	-16.7%	-55.2%
Maximum Drawdown Length	25	65	35	690

Risk	3 Months	6 Months	Year to Date	5 Years
Standard Deviation (Annualized)	25.3%	24.0%	24.2%	31.7%
Downside Risk (Annualized)	17.4%	16.1%	16.7%	22.2%
Kurtosis	0.31	0.74	1.34	6.25
Skewness	0.20	0.33	0.13	0.13
Semivariance (Annualized)	24.9%	22.1%	22.7%	31.2%
VaR (ex-post)	-2.28	-2.32	-2.34	-2.99

Risk-Adjusted Performance	3 Months	6 Months	Year to Date	5 Years
Sharpe Ratio	2.17	0.75	1.12	0.27

The **EPRA Developers Research Benchmark** is an equity index aiming to represent the aggregated performance of the most significant and liquid real estate developers in Europe, including both residential and commercial developers.

This is a benchmark developed for research purposes only, using free float market cap as the main input for computing index weights. The final list of constituents has been filtered applying a comprehensive methodology that combines both market and real estate criteria to determine the best companies to represent the sector. **Two sub-indexes are also computed:** 1) Liquid Developers (FFMC > EUR 500M) and 2) Residential Developers

Key Features

Benchmark Type: Equity Index

Industry: Real Estate Developers

Launch Date: 31/Dec/2021

Geography: Developed Europe

Weights Input: FF Market cap

Base Currency: EUR

Base Date: 30/Sep/2016

Base Value: 1,000

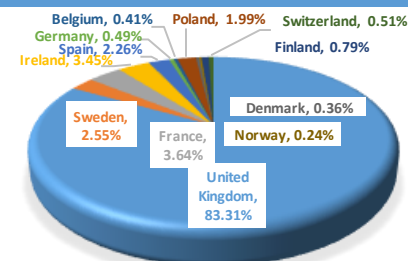
Review Dates: April, October

EPRA Developers Research Benchmark

Thursday, 30 November 2023

Constituent	ISIN	Weight	Country	Currency
BARRATT DEV	GB0000811801	15.69%	UK	GBP
BERKELEY GROUP	GB00BLJNL82	14.94%	UK	GBP
TAYLOR WIMPEY PL	GB0008782301	14.09%	UK	GBP
PERSIMMON	GB0006825383	12.43%	UK	GBP
BELLWAY PLC	GB0000904986	9.23%	UK	GBP
VISTRY GROUP PLC	GB0001859296	8.64%	UK	GBP
REDROW PLC	GB00BG11K365	5.19%	UK	GBP
CREST NICHOLS	GB00B8VZXT93	1.49%	UK	GBP
HARWORTH GROUP P	GB00BYZJ7G42	0.65%	UK	GBP
MJ GLEESON PLC	GB00BRKD9Z53	0.64%	UK	GBP
WATKIN JONES PLC	GB00BD6RF223	0.32%	UK	GBP
NEXITY	FR0010112524	1.56%	France	EUR
ALTAREA	FR0000033219	0.93%	France	EUR
KAUFMAN & BROAD	FR0004007813	1.15%	France	EUR
NEINOR HOMES SA	ES0105251005	0.88%	Spain	EUR
METROVACESA SA	ES0105122024	0.91%	Spain	EUR
AEDAS HOMES SA	ES0105287009	0.47%	Spain	EUR
IMMOBEL	BE0003599108	0.33%	Belgium	EUR
ATENOR	BE0003837540	0.08%	Belgium	EUR
GLENVEAGH PROPER	IE00BD6JX574	1.66%	Ireland	EUR
CAIRN HOMES	IE00BWY4ZF18	1.79%	Ireland	GBP
DEVELIA SA	PLLCRP00017	1.25%	Poland	PLN
DOMDEV	PLDMVL00012	0.74%	Poland	PLN
HUSCIET A/S	DK0061412855	0.36%	Denmark	DKK
YIT OYJ	FI0009800643	0.79%	Finland	EUR
CHAM GROUP AG	CH0001931853	0.51%	Switzerland	CHF
SELVAAG BOLIG AS	NO0010612450	0.24%	Norway	NOK
JM AB	SE0000806994	2.55%	Sweden	SEK
INSTONE REAL EST	DE000A2NBX80	0.49%	Germany	EUR

Developers Sub-Indexes: Risk and Return	3 Months	6 Months	Year to Date	5 Years
Liquid Developers: Total Return	12.78%	9.26%	24.61%	17.90%
Liquid Developers: Standard Deviation (Annualized)	27.29%	26.05%	25.68%	32.83%
Residential Developers: Total Return	12.35%	9.55%	24.95%	18.52%
Residential Developers: Standard Deviation (Annualized)	26.05%	24.77%	24.55%	32.24%



Eligibility Criteria

EBITDA: ≥ 50% from Property Development
EBITDA: ≥ 75% from Real Estate Activities

Size: > 0.30% of the Benchmark size and
Minimum of EUR 150 Million in FFM

Liquidity: ≥ 0.05% of their (FF) shares in
issue based on their median daily trading
volume per month

Reporting: public AR in English (Full set of
audited FS, notes and Mgt Report)

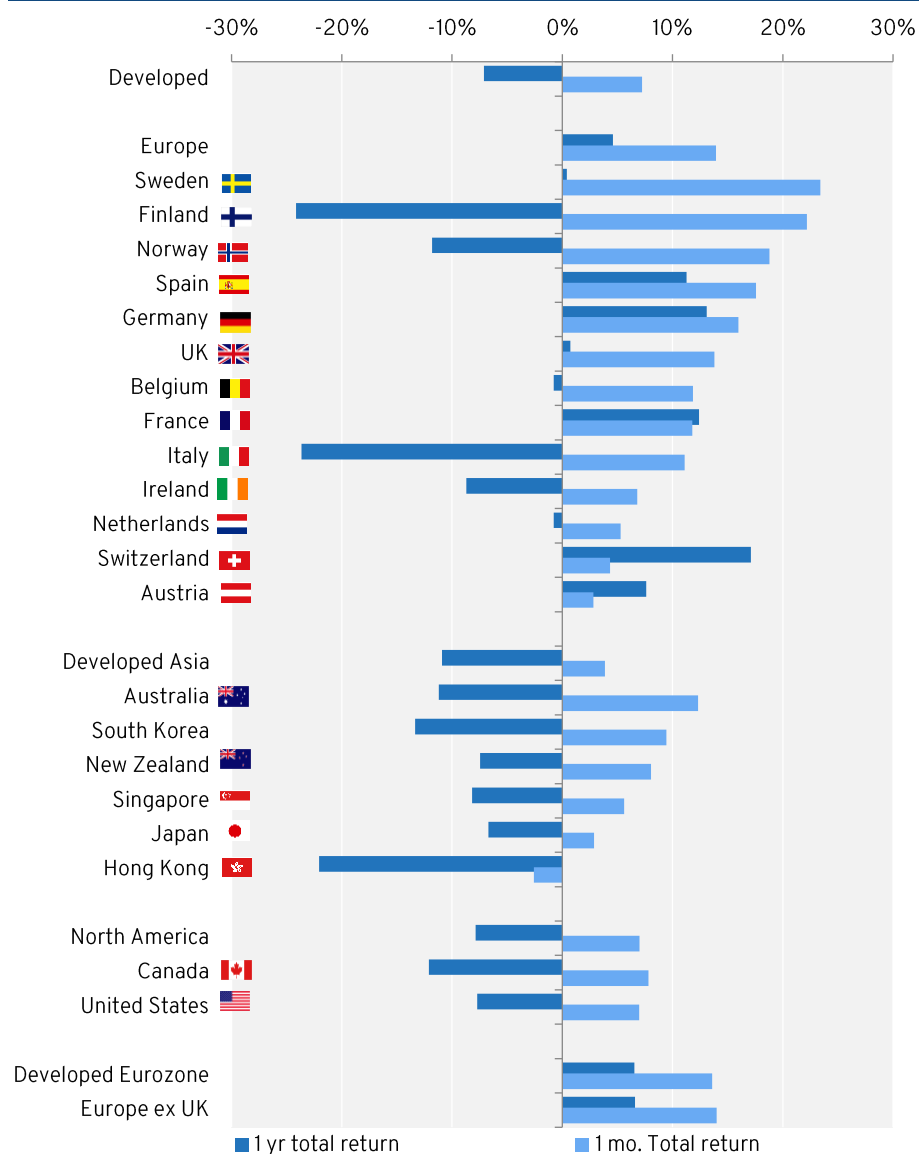
Geography: ≥ 75% EBITDA from Developed
countries

Assets: ≥ 50% of Total Tangible Assets
invested in RE. No Holding structures.

Eligible Markets: Premium and main trading
segments of official stock exchanges.

Data Availability: Monthly computations.
Performance figures available on this report.
Raw data accessible on demand at
research@epra.com

FTSE EPRA Nareit Monthly Index Performances (EUR)



Source: FTSE EPRA Nareit (as of November 30, 2023)

Link to Reports & Contacts

Monthly Statistical Bulletin

Monthly Published NAV Bulletin

Monthly LTV Report

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[Index Ground Rules Version 11.7](#)

[Property Portfolio Analysis \(end of 2022\)](#)

[Emerging Markets 2023](#)

[Sector Analysis: Office \(Aug-21\)](#)

[Total Markets Table 2023-Q3](#)

(quarterly)



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EPRA INSEAD Executive Education Programme

Held in partnership with INSEAD, the Executive Programme is a unique, intensive course that covers the latest trends shaping the listed real estate sector, such as e-commerce and logistics, digitalisation and data analytics. The fourth edition will be **June 18-20, 2024** at INSEAD Fontainebleau campus.

EPRA Bayes Business School Online Programme, 2023 Edition: Understanding the REIT price (16 Oct-24 Nov)

An online programme dedicated to understanding the listed real estate market, the fourth edition will start in Autumn 2024.

For more information about the Education programmes, contact: education@epra.com.



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