EPRA
EUROPEAN PUBLIC
REAL ESTATE ASSOCIATION

Monthly Market Review and Developers' Research Benchmark

April
2023

Overview

The FTSE EPRA Nareit (FEN) Global Developed Real Estate Index posted lower but still positive 32 bps return compared to losses from global equities (-1 bps) and bonds (-1.4%) in April. In terms of regional performance, Europe (5.8%) and Asia (70 bps) returned positive, while North America (82 bps) posted relatively limited but negative return. Emerging markets also slipped 25 bps for the month.

Focusing on sector performance, healthcare (3.9%) and residential (3.6%) were top performers followed by speciality (1.4%), industrial/office (1.1%) and diversified (91 bps). The remaining sectors returned negative which self-storage (-3.8%) and lodging/resort (-2.9%) were bottom performers in April.

*At the end of April, **the FEN Developed Index** totalled **376** constituents, representing a free float market capitalisation of around **EUR 1.41 trillion** and **the FEN Emerging Index** totalled **129** constituents, representing a free float market capitalisation of around **EUR 122 billion.***

EPRA Developers Research Benchmark : 2023-H1 Semi Annual Review

The EPRA Developers Research Benchmark is a non-commercial benchmark designed to allow its constituents to assess themselves against each other. During H1-2023 review took place in April, there were one deletion (*Countryside Properties* -UK, due to merger with Vistry Group-UK) and one addition (*CHAM Group*-Switzerland). As a result, 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 44,133 million (28/04/2023). During April, the benchmark gained 7.1% (m-o-m) and brought the YTD return to 20.9%. A high-level computation can be found in the relevant section (page 5).

Highlights of the Month

The FEN Developed Europe index gained momentum and posted 5.8% return in April, following sharp decline in March due to banking sector stress which increased concerns on higher debt costs, inadequate risk premium and refinancing distress. The recent **IMF report** highlights potential implications of recent turmoil and the importance of having contingency plans in place for monetary policy to support financial stability in Europe that already faces challenges in simultaneously bringing down inflation and sustaining economic growth. It is also pointed out increasing real estate risks including commercial real estate, and real estate market corrections. Even if broader financial distress is avoided, disorderly corrections in real estate markets could occur, which requires to be monitored closely. A housing market correction is already underway in some European countries, but if markets reprice inflations risks and financial conditions will be tightened more than expected, house price declines would have adverse effects on household and bank balance sheets.

There are concerns on Europe's outlook related to potential slow growth and sticky inflation. The euro area inflation is expected to be 7.0% in April up from 6.9% in the previous month and GDP growth is forecasted as 1.3% (y-o-y) in Q1-2023, according to Eurostat's estimate. Oxford Economics expects that above-target inflation level is not enough to stop current tightening cycle before H2-2023 and no interest rate cut to be considered before in the beginning of 2024.

Oxford Economics still expects a recovery in LRE prices to emerge this year, albeit significantly dampened by recent bank funding turmoil which will lead to additional credit conditions tightening. The deteriorated credit market conditions prompting to downgrade outlook, but European listed real estate still looks well positioned due to a combination of low leverage, limited near-term debt maturities. Europe could see mid-single-digit rates of growth, even though lower than at the end of 2021. Looking 5-yr ahead, LRE is expected to perform better (7.5% pa over 2023-2027) than equities and DRE owing to a stronger bounce back in 2023 (Fig. 1).

FTSE EPRA Nareit Global Index Total Return

% Total Returns (EUR)		Apr -23	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
Global Real Estate	▲	0.3	-0.4	-18.2	5.5	3.6	4.7
Global Equities (FTSE)	▼	0.0	5.4	-1.6	12.8	6.4	8.7
Global Bonds (JP Morgan)	▼	-1.4	-0.1	-7.8	-5.8	1.6	1.9
Europe Real Estate	▲	5.8	1.1	-28.5	-3.9	-4.2	3.3
Europe Equities (FTSE)	▲	2.5	11.2	8.7	13.8	6.3	7.6
Europe Bonds (JP Morgan)	▼	-1.9	-1.0	-13.5	-6.8	-0.3	2.6
Asia Real Estate	▲	0.7	-2.5	-9.4	2.6	0.9	1.9
Asia Equities (FTSE)	▼	-1.1	2.4	-2.6	9.6	5.9	8.6
Asia Bonds (JP Morgan)	▼	-1.2	0.0	-5.0	-2.0	1.8	2.9
North America Real Estate	▼	-0.8	0.1	-18.9	9.0	7.0	6.5
North America Equities (FTSE)	▼	0.0	6.0	-2.2	13.9	13.2	13.9
North America Bonds (JP Morgan)	▼	-1.0	0.6	-5.0	-4.5	3.1	2.8
Emerging Real Estate	▼	-0.2	-4.4	-16.8	-6.5	-5.8	0.4
Emerging Equities (FTSE)	▼	-2.4	-1.0	-9.8	5.4	2.3	4.4
Emerging Bonds (JP Morgan)	▼	-1.0	-0.2	-4.3	-0.5	2.1	3.4

(*) Annualised.

Fig. 1. Forecast for European real estate returns, Baseline scenario (y-o-y, %)
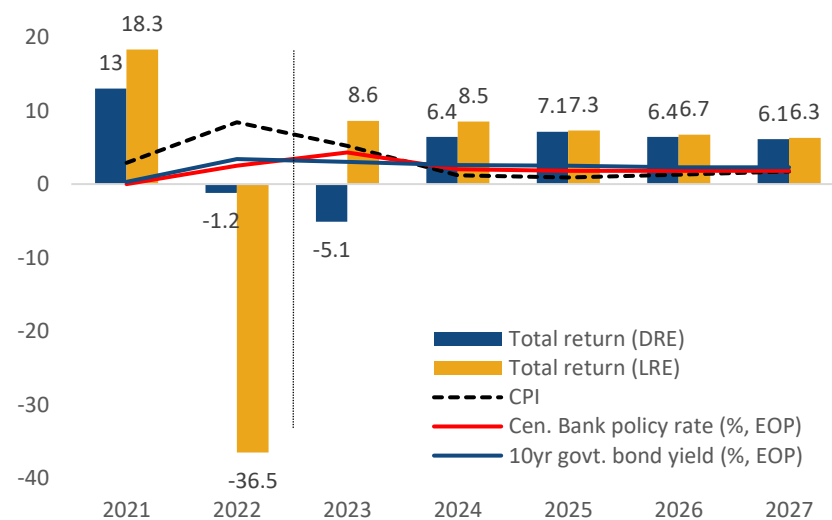
Source: Oxford Economics (March-23). Oxford Economics, Haver Analytics, MSCI, EPRA.
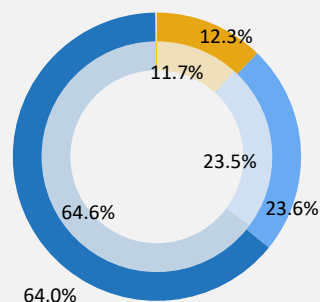
Fig. 2. Global Weights (EUR)*

12.3%
11.7%
23.5%
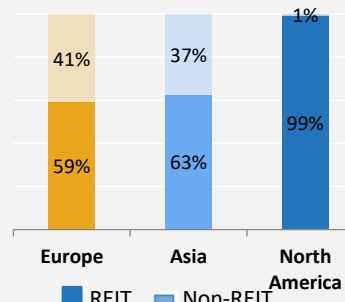64.6%
23.6%
64.0%

Fig. 3. REIT / Non-REITs

	Europe	Asia	North America
Non-REIT	41%	37%	1%
REIT	59%	63%	99%

■ REIT ■ Non-REIT

Fig. 4. Focus Split

	Europe	Asia	North America
Non-Rental	5%	34%	0%
Rental	95%	66%	100%

■ Rental ■ Non-Rental
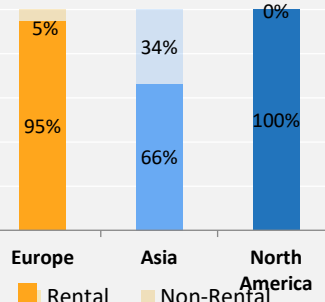
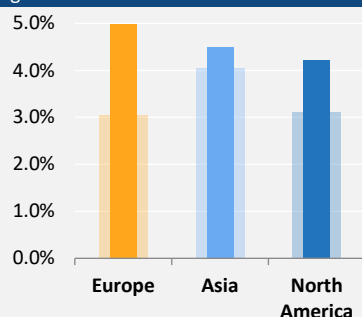## Fig. 5. Dividend Yields*

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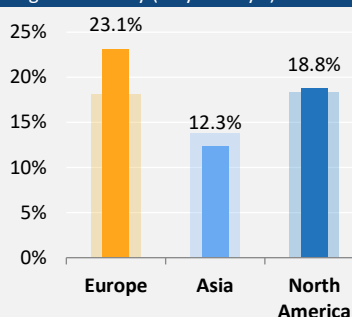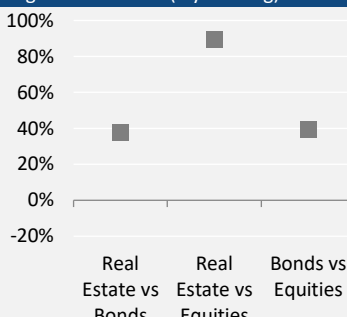

23.1%
12.3%
18.8%

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	Apr-23	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
UK (GBP)	6.4	4.9	-25.1	0.7	-2.7	3.3
France (EUR)	5.1	6.8	-3.1	3.4	-3.4	2.2
Netherlands (EUR)	0.2	1.4	-22.6	1.9	-18.1	-7.3
Germany (EUR)	11.5	-10.4	-46.6	-19.3	-11.5	3.2
Sweden (SEK)	4.0	-1.9	-25.9	-0.3	5.1	11.8

FTSE EPRA Nareit Asia - Country Indices

Hong Kong (HKD)	-0.1	-0.6	0.8	1.7	-2.5	1.2
Japan (JPY)	5.7	3.6	-0.5	9.4	3.1	1.3
Australia (AUD)	6.3	4.5	-4.3	9.3	3.1	6.4
Singapore (SGD)	1.11	4.3	-6.8	5.3	3.1	3.9
South Korea (KRW)	-1.6	-5.6	-50.7	na	na	na

FTSE EPRA Nareit Developed North America - Country Indices

United States (USD)	0.8	3.5	-15.1	9.3	5.1	4.8
Canada (CAD)	0.7	4.7	-11.1	8.8	4.4	4.7

FTSE EPRA Nareit Developed Index – Top 10 Constituents

Company	Sector	Country		Total Return
ProLogis USA	Industrial	USA	▲	0.4%
Equinix Inc	Data Centers	USA	▲	0.4%
Public Storage, Inc.	Self-Storage	USA	▼	-98.8%
Realty Income Corp.	Retail	USA	▼	-0.3%
Welltower	Healthcare	USA	▲	10.5%
Simon Property Group, Inc.	Retail	USA	▲	1.2%
Vici Properties Inc	Specialty	USA	▲	4.1%
Digital Realty Trust	Data Centers	USA	▲	0.9%
AvalonBay Communities, Inc.	Residential	USA	▲	8.4%
Equity Residential Properties Trust	Residential	USA	▲	5.4%

FTSE EPRA Nareit Developed Index – Top 10 Performers

Company	Sector	Country		Total Return
TAG Immobilien-AG	Residential	GER	▲	21.6%
Nomura Real Estate Holdings	Diversified	JA	▲	17.3%
Stendörren Fastigheter AB	Industrial	SWED	▲	16.1%
Mirvac Group	Diversified	AU	▲	15.9%
Grand City Properties	Residential	GER	▲	15.7%
VGP NV	Industrial	BELG	▲	15.6%
Klepierre SA	Retail	FRA	▲	14.5%
Peach Property Group AG	Residential	SWIT	▲	13.9%
COREM PROPERTY GROUP AB	Ind./Office	SWED	▲	13.8%
Deutsche Wohnen SE	Residential	GER	▲	13.3%

Dev. Europe:Total Return	Weekly Total Return by Sector				YTD	Ukraine war	Covid-19
Apr-23	7-Apr	14-Apr	21-Apr	28-Apr	Apr-23	23-Feb-22	19-Feb-20
Developed Europe	5.8%	1.2%	3.6%	-1.2%	2.2%	1.1%	-30.3%	-36.2%
Self-Storage	4.89%	2.3%	3.7%	-3.5%	2.4%	9.1%	-13.8%	10.8%
Industrial	7.71%	2.0%	1.3%	0.4%	3.9%	10.7%	-30.9%	-4.6%
Healthcare	4.13%	2.4%	1.0%	-1.7%	2.4%	-1.3%	-18.6%	-31.1%
Diversified	4.79%	1.1%	3.0%	-1.2%	1.8%	0.8%	-24.2%	-34.7%
Office	3.94%	0.0%	3.2%	-1.3%	2.0%	1.8%	-18.4%	-36.8%
Retail	3.92%	0.9%	2.7%	-2.1%	2.3%	3.9%	-15.4%	-40.5%
Lodging/Resorts	-4.51%	-2.0%	7.3%	1.3%	-10.3%	4.8%	-17.3%	-46.9%
Residential	9.89%	1.8%	6.1%	-1.2%	2.9%	-7.2%	-48.9%	-49.8%

Source: EPRA Research. Data is compiled from the FEN Index series (as of April 28, 2023).

FTSE EPRA Nareit Developed Europe Index

The FEN Developed Europe Index gained 5.8% during April. European equities returned 2.5% compared to a loss of 1.9% from European bonds.

Germany (11.5%), the UK (6.4%), France (5.1%) and Sweden (4.0%) indexes returned positive and also Netherlands (19 bps) index posted positive but relatively lower monthly return.
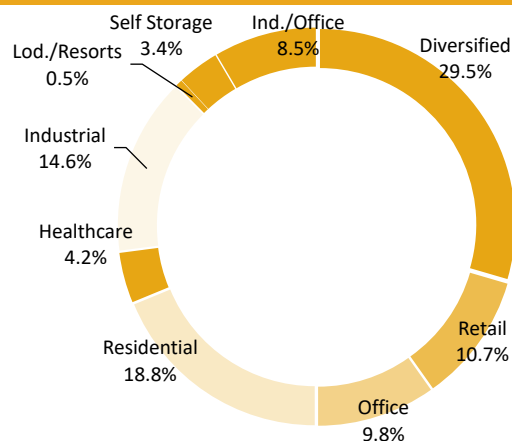
Due to the voluntary delisting from Euronext Amsterdam and the concurrent reassignment of a FTSE nationality of France, *Unibail Rodamco Westfield* remained in the index with an updated nationality of France, and unchanged shares in issue total of 138,755,659 and an unchanged investability weighting of 74.08%.

Sector Performance: Residential (9.9%) was outperformer followed by industrial (7.7%) and self-storage (4.9%). The remaining sectors also returned positive, except lodging/resort (-4.5%) as the bottom performer.

Performance of top 3 constituents: TAG Immobilien AG (21.6%, Germany, Residential), Stendörren Fastigheter AB (16.1%, Sweden, Industrial), Grand City Properties (15.7%, Germany, Residential).

*Developed Europe representing a free float MCap of around **EUR 173 billion** with **109** constituents*

FTSE EPRA Nareit Developed Asia Index

The FEN Developed Asia Index posted a 70-bps monthly return compared to losses of 1.1% from Asian equities and 1.2% from Asian bonds.

Australia (6.3%), Japan (5.7%) and Singapore (1.1%) indexes returned positive while South Korea (-1.6%) and Hong Kong (-6bps) indexes posted negative returns in Asia (in local currencies).
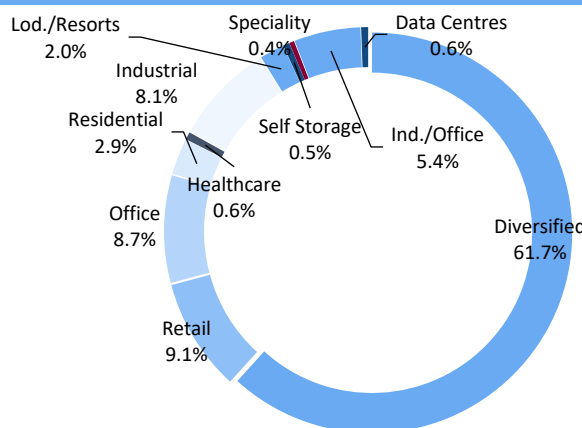
There was no major corporate action in Developed Asia region.

Sector Performance: Residential (4.5%), Industrial (3.4%) were top performers. The remaining sectors also posted lower but still positive returns, except office (-2.8%) and office/industrial (-48 bps) as bottom performers.

Performance of top 3 constituents: Nomura Real Estate Holdings (17.3%, Japan, Diversified), Mirvac Group (15.9%, Australia, Diversified), Ingenia Communities Group (13.3%, Australia, Diversified).

*Developed Asia representing a free float MCap of around **EUR 332 billion** with **137** constituents*

FTSE EPRA Nareit North America Index

The FEN North America Index posted a negative 82 bps for the month. North American equities and bonds also lost 1.0% and 4 bps, respectively.

Both the US index (79 bps) and Canada (74 bps) indexes returned limited but still positive for the month (in local currencies).
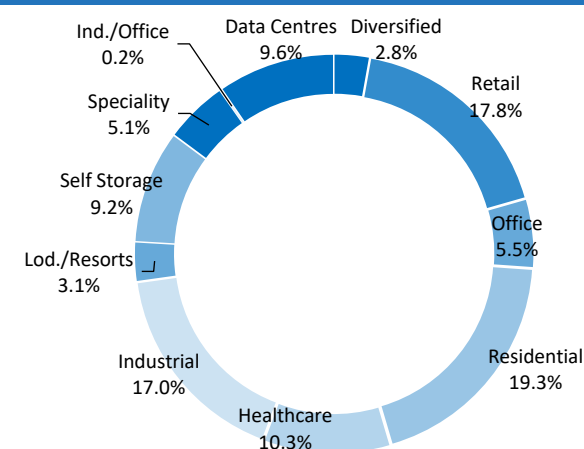
There was no major corporate action in Developed North America region.

Sector Performance: Healthcare (4.1%), residential (2.4%) and speciality (1.5%) were top performers. Meanwhile the remaining sectors returned negative which industrial/office (-10.3%) as the bottom performer.

Performance of top 3 constituents: Ventas Inc. (11.9%, USA, Healthcare), Veris Residential Inc. (11.7%, USA, Residential), EPR Properties (10.9%, USA, Specialty).

*Developed North America representing a free float MCap of around **EUR 901 billion** with **128** constituents*

Developed Europe Sector Split

Self Storage 3.4%
Ind./Office 8.5%
Lod./Resorts 0.5%
Diversified 29.5%
Industrial 14.6%
Healthcare 4.2%
Residential 18.8%
Office 9.8%
Retail 10.7%

Developed Asia Sector Split

Lod./Resorts 2.0%
Speciality 0.4%
Data Centres 0.6%
Industrial 8.1%
Residential 2.9%
Self Storage 0.5%
Ind./Office 5.4%
Healthcare 0.6%
Office 8.7%
Diversified 61.7%
Retail 9.1%

North America Sector Split

Ind./Office 0.2%
Data Centres 9.6%
Diversified 2.8%
Speciality 5.1%
Retail 17.8%
Self Storage 9.2%
Office 5.5%
Lod./Resorts 3.1%
Residential 19.3%
Industrial 17.0%
Healthcare 10.3%

EPRA Developers Research Benchmark
Friday, 28 April 2023

Source: EPRA

(30/Sep/16 = 1,000)

1,286.2
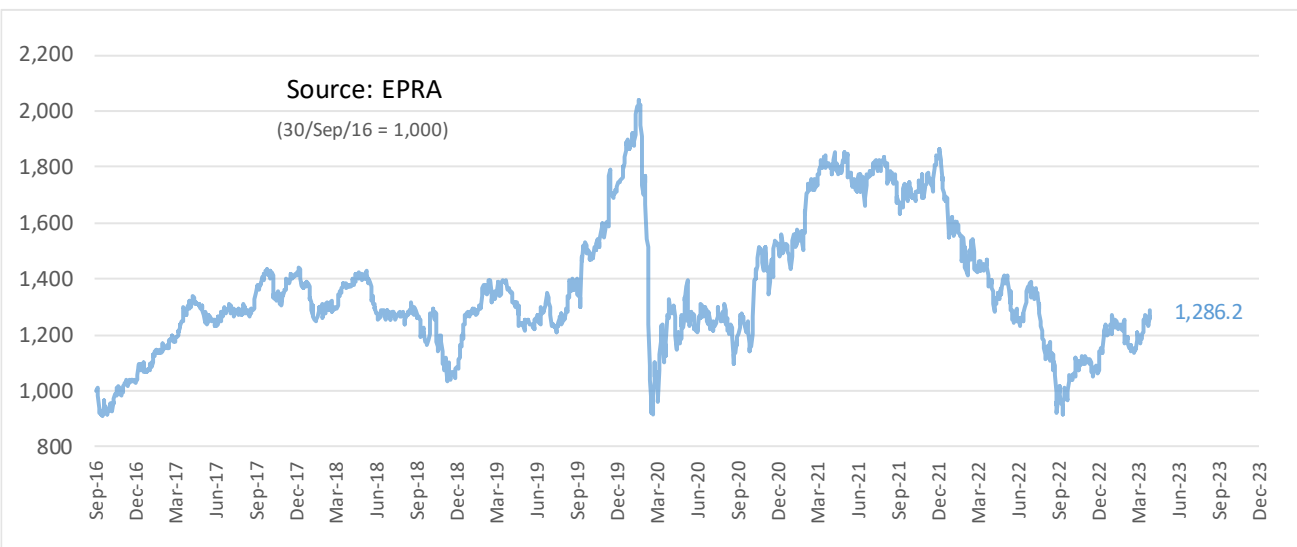
Historical Performance	Last Month	1 Year	3 Years	5 Years
Total Return	7.1%	-6.6%	-1.5%	-8.0%
Total Return (Annualized)		-6.6%	-0.5%	-1.6%

Return	3 Months	6 Months	Year to Date	5 Years
Total Return	4.0%	22.2%	20.9%	-8.0%
Maximum Return	4.7%	6.3%	4.7%	11.6%
Minimum Return	-5.4%	-5.4%	-5.4%	-13.2%
Mean Return (Annualized)	30.1%	83.6%	136.2%	4.8%
Maximum Drawdown	-10.8%	-10.8%	-10.8%	-55.3%
Maximum Drawdown Length	36	36	36	690

Risk	3 Months	6 Months	Year to Date	5 Years
Standard Deviation (Annualized)	24.5%	25.5%	25.4%	31.6%
Downside Risk (Annualized)	17.4%	16.9%	17.8%	22.3%
Kurtosis	2.00	2.17	1.68	6.52
Skewness	-0.20	0.43	-0.05	0.08
Semivariance (Annualized)	23.5%	22.3%	24.0%	31.3%
VaR (ex-post)	-2.24	-2.23	-2.24	-2.98

Risk-Adjusted Performance	3 Months	6 Months	Year to Date	5 Years
Sharpe Ratio	0.73	2.05	3.24	0.11

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

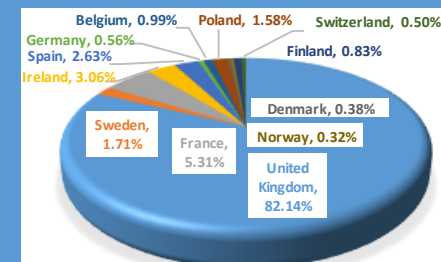**Base Currency:** EUR

Base Date: 30/Sep/2016

Base Value: 1,000

Review Dates: April, October

EPRA Developers Research Benchmark
Friday, 28 April 2023

Constituent	ISIN	Weight	Country	Currency
BARRATT DEV	GB0000811801	15.01%	UK	GBp
BERKELEY GROUP	GB00BLJNXL82	14.30%	UK	GBp
TAYLOR WIMPEY PL	GB0008782301	13.56%	UK	GBp
PERSIMMON	GB0006825383	12.96%	UK	GBp
BELLWAY PLC	GB0000904986	9.08%	UK	GBp
VISTRY GROUP PLC	GB0001859296	8.37%	UK	GBp
REDROW PLC	GB00BG11K365	4.92%	UK	GBp
CREST NICHOLS	GB00B8VZXT93	1.97%	UK	GBp
WATKIN JONES PLC	GB00BD6RF223	0.67%	UK	GBp
HARWORTH GROUP P	GB00BYZJ7G42	0.66%	UK	GBp
MJ GLEESON PLC	GB00BRKD9Z53	0.65%	UK	GBp
NEXITY	FR0010112524	2.72%	France	EUR
KAUFMAN & BROAD	FR0004007813	1.23%	France	EUR
ALTAREA	FR0000033219	1.36%	France	EUR
NEINOR HOMES SA	ES0105251005	0.85%	Spain	EUR
AEDAS HOMES SA	ES0105287009	0.42%	Spain	EUR
METROVACESA SA	ES0105122024	1.36%	Spain	EUR
IMMOBEL	BE0003599108	0.50%	Belgium	EUR
ATENOR	BE0003837540	0.48%	Belgium	EUR
GLENVEAGH PROPER	IE00BD6JX574	1.45%	Ireland	EUR
CAIRN HOMES	IE00BWY4ZF18	1.61%	Ireland	GBp
DEVELIA SA	PLLCCRP00017	0.95%	Poland	PLN
DOMDEV	PLDMDVL00012	0.63%	Poland	PLN
HUSCIET A/S	DK0061412855	0.38%	Denmark	DKK
YIT OYJ	FI0009800643	0.83%	Finland	EUR
INSTONE REAL EST	DE000A2NBX80	0.56%	Germany	EUR
SELVAAG BOLIG AS	NO0010612450	0.32%	Norway	NOK
JM AB	SE0000806994	1.71%	Sweden	SEK
CHAM GROUP AG	CH0001931853	0.50%	Switzerland	CHF

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 FFMC

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

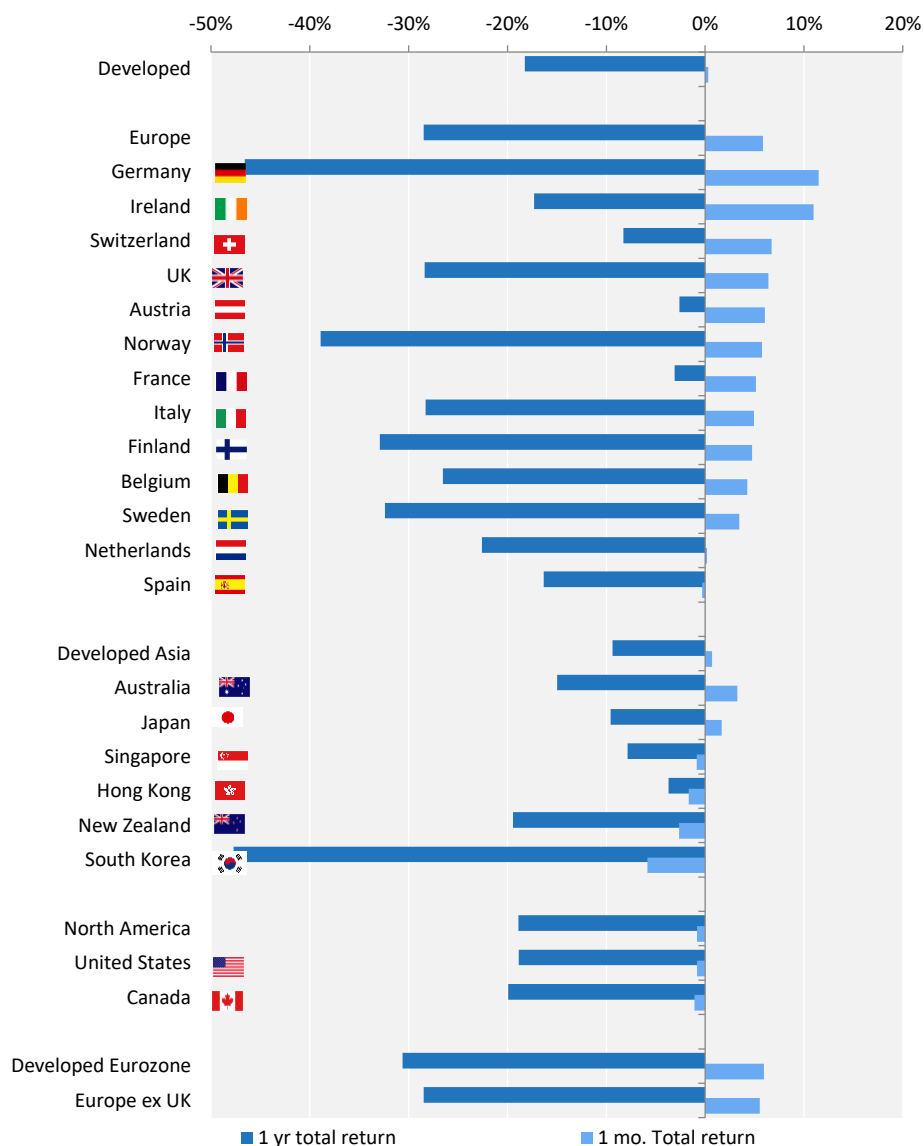**Reporting:** public AR in English (Full set of audited FS, notes and Mgt Report)

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 Availabilty: Monthly computations. Perfomance figures available on this report. Raw data accessible on demand at research@epra.com

Developers Sub-Indexes: Risk and Return	3 Months	6 Months	Year to Date	5 Years
Residential Developers: Total Return	3.46%	20.13%	20.88%	-10.11%
Residential Developers: Standard Deviation (Annualized)	25.02%	25.74%	25.97%	32.60%
Liquid Developers: Total Return	3.91%	19.87%	21.08%	-9.15%
Liquid Developers: Standard Deviation (Annualized)	24.12%	24.86%	25.01%	32.11%

FTSE EPRA Nareit Monthly Index Performances (EUR)

Developed
Europe
Germany
Ireland
Switzerland
UK
Austria
Norway
France
Italy
Finland
Belgium
Sweden
Netherlands
Spain

Developed Asia
Australia
Japan
Singapore
Hong Kong
New Zealand
South Korea

North America
United States
Canada

Developed Eurozone
Europe ex UK

■ 1 yr total return   ■ 1 mo. Total return

Source: FTSE EPRA Nareit (as of April 28, 2023)

Link to Reports & Contacts

Monthly Statistical Bulletin

Monthly Published NAV Bulletin

Monthly LTV Report

Visit our website to read our reports:
Monthly Reports

Index Ground Rules Version 11.5

Ground Rule Update (April-23)

Property Portfolio Analysis (end of 2021)

Emerging Markets 2022

Sector Analysis: Residential

Sector Analysis: Office (Aug-21)

Total Markets Table 2023-Q1
(quarterly)

Explore our interactive infographic

Global Real Estate Total Markets Table

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EPRA - INSEAD Executive Programme
Strategy for Listed Real Estate
20 - 22 June 2023

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.

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 third edition will start in October 2023.

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

EPRA's latest research report

Success factors required for further growth in the European LRE sector (January 2023)

LRE valuation : A close look at ratios, cash flows and portfolio allocation. (November 2022)

Interest rates and inflation : What are the challenges for listed real estate?

Inflation and short-term impact on listed property companies

EPRA Blog

Read articles on the latest trends on our **blog : Listed Real Estate as an Inflation Hedge across Regimes (March 2023)**

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