



EPRA

EUROPEAN PUBLIC
REAL ESTATE ASSOCIATION

MONTHLY MARKET REVIEW

Monthly Market Review and Developers' Research Benchmark

March
2023

Overview

The FTSE EPRA Nareit (FEN) Global Developed Real Estate Index lost 5.4% in March and now YTD return stands at -75 bps. Global equities lost 5 bps compared to a gain of 1.1% from global bonds.

In terms of regional performance, all regions returned negative: Europe (-11.4%), North America (-5.0%) and Asia (-3.4%). Emerging markets also lost 3.2% for the month.

Focusing on sector performance, all sectors posted negative monthly returns that office (-12.4%), residential (-8.1%) and healthcare (-7.6%) as bottom performers while data centres (-24 bps) and self-storage (-79 bps) with relatively limited but still negative return in March.

At the end of March, the **FEN Developed Index** totalled **375** constituents, representing a free float market capitalisation of around **EUR 1.41 trillion** and the **FEN Emerging Index** totalled **128** constituents, representing a free float market capitalisation of around **EUR 123 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. As of 31/03/2023, the benchmark lost 4.2% (m-o-m) and brought the YTD return to 12.9%. The benchmark now has a total of 28 constituents from 11 different countries in Developed Europe (17 out of the UK) and an aggregated full market cap of **EUR 41.33 million** (31/03/2023). A high-level computation can be found in the relevant section (page 6).

2023-Q1 Quarterly Review

During the Q1-2023 quarterly review, there were two additions and three deletions in the Developed index, whereby one company was added in, and three companies were deleted from the Emerging index. The changes were effective on March 20 and represented a net value of EUR -1,009 million in free float market cap to the global index. The details are given in the related sections. The next index review will take place at the end of May, and the results will be published on June 2.

Highlights of the Month

At the latest meeting in March, the ECB raised the three key ECB interest rates by 50 basis points (the main refinancing operations stands at 3.50%) and stated that future decisions will depend on how inflation will develop and how well past rate hikes tame inflation. Although energy prices dropped sharply, pressures keeping prices high are coming from food. Indeed, inflation in the Euro area is expected to be 6.9% in March (down from 9.2% in December), with the highest annual rate of food, alcohol&tobacco at 15.4% vs -0.9% by energy.

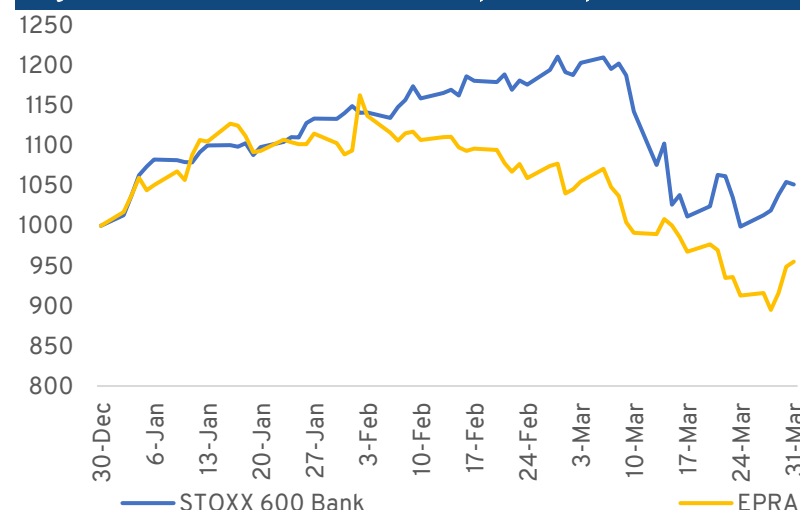
The recent emergence of financial market tensions implies additional uncertainty for the outlook for inflation and economic growth. The ECB iterated its confidence in the euro area banking sector, which shows stronger capital and liquidity positions than in 2008 and emphasised the ECB's policy toolkit is fully equipped to provide liquidity support to the euro area financial system if needed. On the other hand, there are some risks relating to a further worsening of broader credit conditions and to a deterioration of confidence, which requires caution.

FTSE EPRA Nareit Global Index Total Return

	Mar-23	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
% Total Returns (EUR)						
Global Real Estate	▼ -5.4	-0.7	-18.7	7.9	4.3	5.1
Global Equities (FTSE)	▼ 0.0	5.4	-3.1	16.7	6.8	8.9
Global Bonds (JP Morgan)	▲ 1.1	1.4	-6.8	-5.0	1.8	2.2
Europe Real Estate	▼ -11.4	-4.5	-36.2	-4.5	-4.4	3.3
Europe Equities (FTSE)	▼ 0.0	8.5	5.2	15.0	6.8	7.5
Europe Bonds (JP Morgan)	▼ 0.0	0.9	-10.7	-5.8	0.3	2.7
Asia Real Estate	▼ -3.4	-3.1	-9.3	4.8	1.7	2.3
Asia Equities (FTSE)	▼ -0.5	3.5	0.5	12.6	7.0	9.1
Asia Bonds (JP Morgan)	▼ -0.6	1.2	0.4	-1.4	2.4	2.7
North America Real Estate	▼ -5.0	0.9	-17.7	12.4	7.8	6.9
NA Equities (FTSE)	▲ 0.9	6.0	-6.3	18.7	13.8	13.8
NA Bonds (JP Morgan)	▲ 0.3	1.6	-2.4	-3.9	3.5	2.7
Emerging Real Estate	▼ -3.2	-4.2	-14.4	-4.5	-5.4	0.6
Emerging Equities (FTSE)	▲ 0.1	1.5	-8.0	9.6	3.0	4.5
Emerging Bonds (JP Morgan)	▼ -1.1	0.8	-4.0	0.6	2.3	3.5

(*) Annualised.

Fig. 1. STOXX 600 Bank vs FEN Developed Europe Total Return



Source: EPRA Research, Bloomberg (as of 31/03/2023).
Base: 30/12/2022=1000

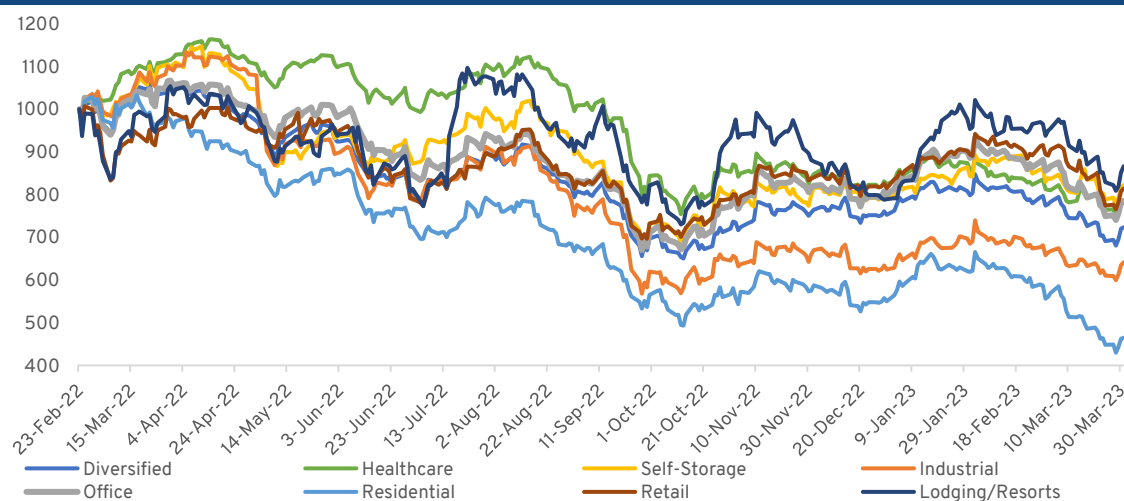
There is also a consensus on no major specific instances that pose large risks to European banks favouring with their solid balance sheets and profitability. After the GFC, regulations have been strengthened to ensure that the regulatory framework addresses any outstanding challenges to financial stability. However, it is crucial to monitor liquidity and volatility in the market, and also to be more cautious on risky assets due to the recent interest rate hikes and tightening credit conditions over the forthcoming period.

The ECB highlighted the growing role of real estate investment funds (REIFs) since the outlook for commercial real estate (CRE) markets has deteriorated sharply, in terms of stability and liquidity risks. Coupling with overvaluation of the CRE markets since the pandemic, investors' concerns increased which requires price correction in the market. It is emphasis that REIFs might be subject to a common and comprehensive policy framework to reduce the liquidity mismatch and risks to financial stability, including increasing the share of liquid assets, longer minimum holding periods, lower redemption frequencies, longer notice and settlement periods, more frequent valuations.

The FEN Developed Europe Index saw a sharp decline and lost 11.4% during March, bringing the YTD return to -4.5%. Focusing on sector performances, all sectors posted negative monthly returns, self-storage (-4.3%) and Industrial (-5.9%) were top performers while office (-11.0%), retail (-11.1%) and residential (-20.8%) were bottom performers with higher losses for the month. Self-storage (4.0%) and industrial (2.7%) are only sectors providing positive YTD returns. Based on cumulative returns (since 19/02/2020), self-storage (5.7%) is still the only sector trading above its pre-Covid19 level, while residential (-54.3%) continued to loss momentum.

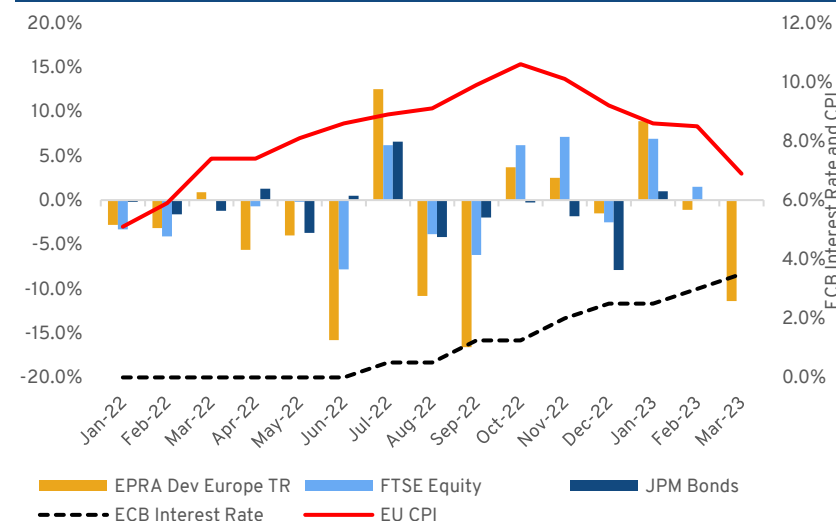
In terms of P/D to NAV figures, self-storage is trading with 7.3% premium to NAV and EU average stands at -44.7% in March. Focusing on 5-yr average, self-storage (36.7%), healthcare (22.3%) and industrial (13.1%) are trading with premiums and EU average stands at -18.5%.

Fig. 2. Developed Europe : Total return by sector (23/02/2022=1000)



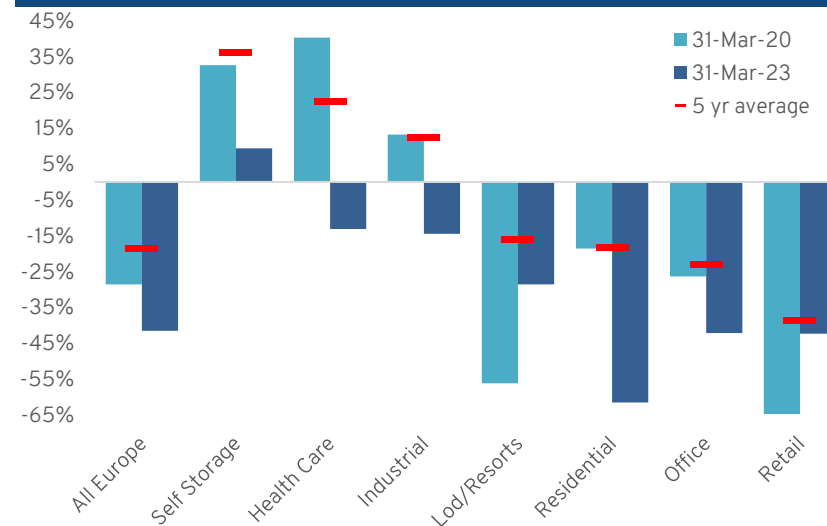
Source: EPRA Research (as of 31/03/2023).

Fig. 3 Economic indicators vs LRE, Equity and Bonds



Source: EPRA Research (as of 31/03/2023).

Fig. 4. Europe : P/D to NAV (%)



Source: EPRA Research (as of 31/03/2023).

Fig. 5 Global Weights (EUR)*

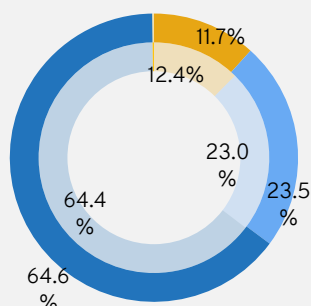


Fig. 6 REIT / Non-REITs

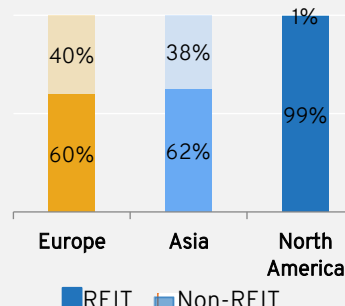


Fig. 7. Focus Split

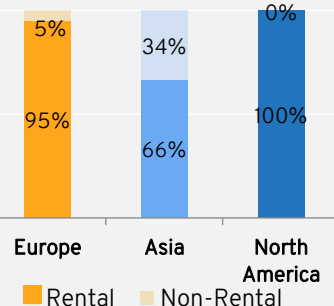


Fig. 8. Dividend Yields*

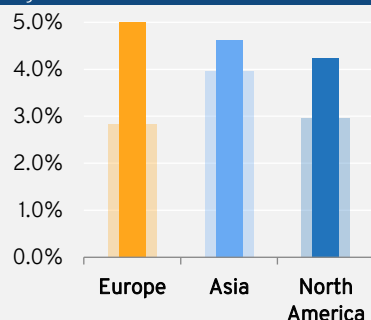


Fig. 9. Volatility (10 yr. & 3 yr.)**

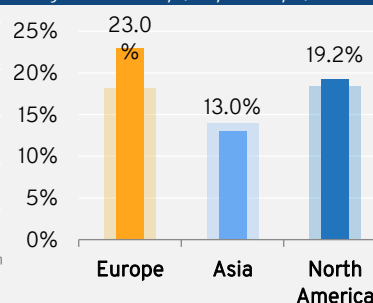
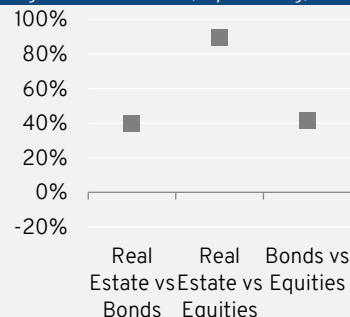


Fig. 10. Correlation (3 yr. rolling)



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

FTSE EPRA Nareit Developed Europe - Country Indices

% Total Returns	Mar-23	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
UK (GBP)	-8.0	-1.4	-31.0	0.1	-3.0	3.4
France (EUR)	-9.6	1.5	-11.2	2.9	-3.4	2.6
Netherlands (EUR)	-14.4	1.2	-24.3	3.7	-17.0	-6.7
Germany (EUR)	-26.8	-19.7	-56.6	-21.2	-12.8	2.1
Sweden (SEK)	-11.1	-5.7	-40.0	-1.5	5.8	12.0

FTSE EPRA Nareit Asia - Country Indices

Hong Kong (HKD)	0.6	-0.6	-0.6	4.3	-1.7	1.6
Japan (JPY)	-2.8	-2.0	-5.7	8.1	3.2	2.1
Australia (AUD)	-6.4	-1.8	-10.6	12.5	2.8	6.6
Singapore (SGD)	-0.2	3.2	-7.0	7.3	3.4	4.4
South Korea (KRW)	-3.8	-4.0	0.0	0.0	0.0	0.0

FTSE EPRA Nareit Developed North America - Country Indices

United States (USD)	-2.5	2.6	-19.5	11.9	5.2	5.4
Canada (CAD)	-5.1	3.9	-16.2	10.7	4.1	5.0

FTSE EPRA Nareit Developed Index – Top 10 Constituents

Company	Sector	Country	Total Return
ProLogis USA	Industrial	USA	▲ 1.8%
Equinix	Data Centers	USA	▲ 5.3%
Public Storage, Inc.	Self-Storage	USA	▲ 2.1%
Realty Income Corp.	Retail	USA	▼ -0.6%
Simon Property Group, Inc.	Retail	USA	▼ -6.8%
Welltower	Healthcare	USA	▼ -3.3%
Vici Properties Inc	Specialty	USA	▼ -1.6%
Digital Realty Trust	Data Centers	USA	▼ -4.5%
AvalonBay Communities, Inc.	Residential	USA	▼ -1.6%
Equity Residential Properties Trust	Residential	USA	▼ -3.0%

FTSE EPRA Nareit Developed Index – Top 10 Performers

Company	Sector	Country	Total Return
Ichigo Office REIT Investment Corp.	Office	JA	▲ 9.3%
Intershop Holding	Diversified	SWIT	▲ 8.8%
Life Storage	Self-Storage	USA	▲ 8.8%
Sino Land	Diversified	HK	▲ 7.1%
Getty Realty Corp.	Retail	USA	▲ 6.2%
ESP Empiric Student Property	Residential	UK	▲ 5.4%
Equinix	Data Centers	USA	▲ 5.3%
Wharf Real Estate Investment	Diversified	HK	▲ 4.9%
Sekisui House	Diversified	JA	▲ 4.8%
Mapletree Commercial Trust	Diversified	SI	▲ 4.7%

Dev. Europe:Total Return	Weekly Total Return by Sector						YTD	Ukraine war	Covid-19
	Mar-23	3-Mar	10-Mar	17-Mar	24-Mar	31-Mar	Mar-23	23-Feb-22	19-Feb-20
Developed Europe	-11.4%	-0.4%	-6.1%	-2.4%	-5.6%	4.6%	-4.5%	-34.2%	-39.7%
Self-Storage	-4.3%	-1.5%	-3.4%	3.3%	-5.5%	4.3%	4.0%	-17.8%	5.7%
Industrial	-5.9%	-0.9%	-5.3%	0.0%	-3.5%	5.2%	2.7%	-35.8%	-11.4%
Healthcare	-6.5%	-1.5%	-3.5%	1.6%	-3.7%	2.2%	-5.2%	-21.9%	-33.9%
Diversified	-9.2%	0.5%	-4.9%	-2.5%	-4.9%	4.7%	-3.8%	-27.7%	-37.7%
Office	-11.0%	0.2%	-5.8%	-2.9%	-5.4%	4.7%	-2.0%	-21.5%	-39.2%
Retail	-11.1%	1.5%	-4.3%	-3.5%	-7.4%	5.2%	-0.1%	-18.6%	-42.7%
Lodging/Resorts	-10.3%	-1.1%	-4.2%	-4.9%	-4.7%	4.5%	9.7%	-13.4%	-44.4%
Residential	-20.8%	-2.5%	-9.9%	-5.4%	-7.6%	3.6%	-15.5%	-53.5%	-54.3%

Source: EPRA Research. Data is compiled from the FEN Index series (as of March 31, 2023).

FTSE EPRA Nareit Developed Europe Index

The FEN Developed Europe Index lost 11.4% during March. European bonds (-2 bps) and equities (-1 bps) also returned negative. All country indexes returned negative and Germany (-26.8%) was bottom performer for the month.

During the quarterly review, *Argan* (France, REIT, Industrial), and *DIC Asset AG* (Germany, Non-REIT, Industrial/Office) were added in, and Nextensa (Belgium) was deleted from the index. Besides, *Shurgard Self-Storage* (Belgium) was reclassified as REIT.

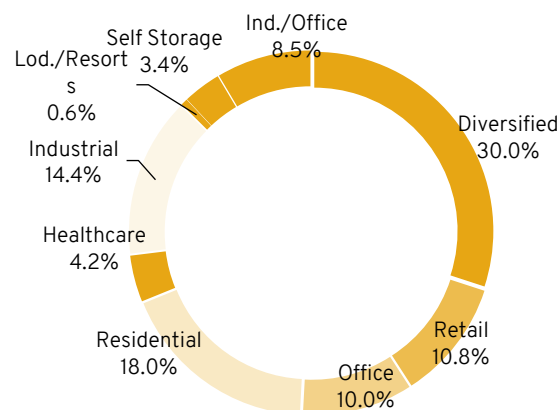
Home REIT (UK) was deleted from the index, following prolonged share suspension. *Shaftesbury* (UK) was deleted from the index, after a merger with *Capital&Countries Properties* (UK, renamed as *Shaftesbury Capital*) which remained in the index with an increased shares in issue total from 851,274,235 to 1,815,264,619 and a decreased investability weighting from 86.29% to 74.72%.

Sector Performance: All sectors returned negative: Self-storage (-4.3%), Industrial (-5.9%), Healthcare (-6.5%).

Performance of top 3 constituents: Intershop Holding (8.8%, Switzerland, Diversified), ESP Empiric Student Property (5.4%, UK, Residential), Mobimo Holding AG (63 bps, Switzerland, Diversified).

Developed Europe representing a free float MCap of around **EUR 165 billion** with **109 constituents**

Developed Europe Sector Split



FTSE EPRA Nareit Developed Asia Index

The FEN Developed Asia Index lost 3.4%. Asian bonds and equities also posted negative returns 64 bps and 49 bps, respectively.

Hong Kong (61 bps) index posted lower but positive return while Singapore (-16 bps), Japan (-2.8%), South Korea (-3.8%) and Australia (-6.4%) indexes posted negative returns in Asia (in local currencies).

During the Q1-2023 index review, there were no addition or deletion in Asia index.

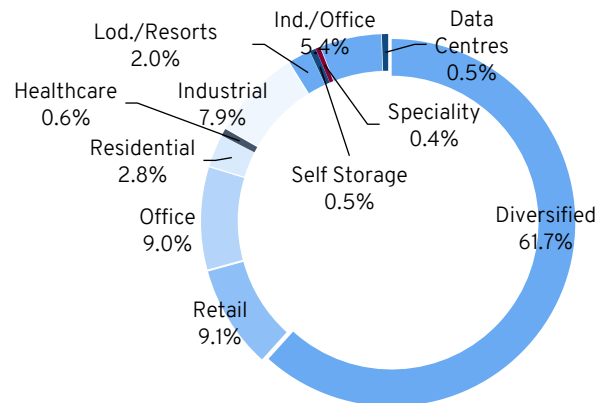
Start Proceed Investment (Japan) was reclassified from Diversified to Residential.

Sector Performance: All sectors returned negative: Industrial (-1.7%), Diversified (-2.9%) and Residential (-3.3%) were top performers.

Performance of top 3 constituents: Ichigo Office REIT Investment Corp. (9.3%, Japan, Office), Sino Land (7.1%, Hong Kong, Diversified), Wharf Real Estate Investment (4.9%, J Hong Kong, Diversified).

Developed Asia representing a free float MCap of around **EUR 331 billion** with **136 constituents**

Developed Asia Sector Split



FTSE EPRA Nareit North America Index

The FEN North America Index returned a negative 5.0%, compared to gains of 90 bps from equities and 35 bps from bonds.

Both the US index (-2.5%) and Canada (-5.1%) indexes returned negative for the month (in local currencies).

Equity Commonwealth (USA) and *Orion Office REIT* (USA) were deleted from the index, during quarterly review.

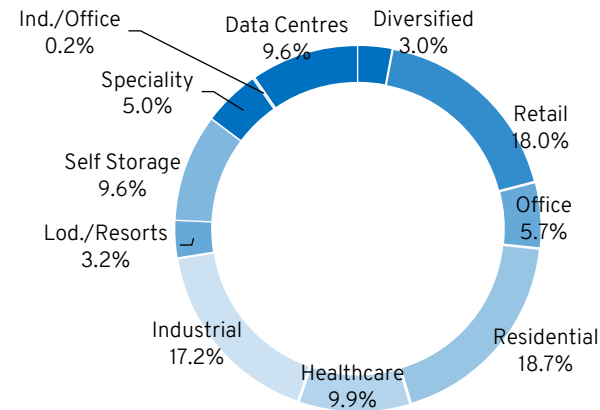
Following the completion of the merger with iStar Inc (USA, non-constituents), *Safehold Inc* (USA, constituent) which remained in the index with an increased shares in issue total from 61,941,758 to 75,206,452 and an increased investability weighting from 43.14% to 52.43%.

Sector Performance: All sectors returned negative: Data centres (-30 bps), Self-storage (-49 bps) and Industrial (-1.1%) were top performers.

Performance of top 3 constituents: Life Storage (8.8%, USA, Self-Storage), Getty Realty Corp. (6.2%, USA, Retail), Equinix (5.3%, USA, Data Centres).

Developed North America representing a free float MCap of around **EUR 910 billion** with **128 constituents**

North America Sector Split



EPRA Developers Research Benchmark

Friday, 31 March 2023



Historical Performance	Last Month	1 Year	3 Years	5 Years
Total Return	-4.1%	-15.6%	12.7%	-8.4%
Total Return (Annualized)		-15.6%	4.2%	-1.7%

Return	3 Months	6 Months	Year to Date	5 Years
Total Return	12.9%	24.0%	12.9%	-8.4%
Maximum Return	4.7%	6.3%	4.7%	11.6%
Minimum Return	-5.4%	-5.4%	-5.4%	-13.2%
Mean Return (Annualized)	108.0%	94.2%	108.0%	4.6%
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)	26.9%	29.2%	26.9%	31.5%
Downside Risk (Annualized)	18.7%	19.3%	18.7%	22.2%
Kurtosis	1.63	1.24	1.63	6.60
Skewness	-0.01	0.43	-0.01	0.08
Semivariance (Annualized)	25.7%	25.5%	25.7%	31.4%
VaR (ex-post)	-2.27	-2.50	-2.27	-2.98

Risk-Adjusted Performance	3 Months	6 Months	Year to Date	5 Years
Sharpe Ratio	2.47	2.01	2.47	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

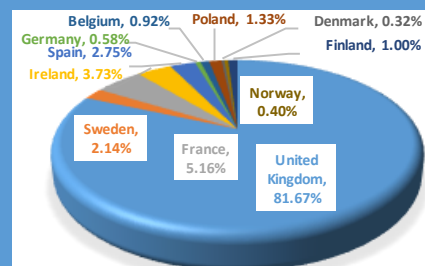
Base Value: 1,000

Review Dates: April, October

EPRA Developers Research Benchmark

Friday, 31 March 2023

Constituent	ISIN	Weight	Country	Currency
BARRATT DEV	GB0000811801	14.70%	UK	GBp
BERKELEY GROUP	GB00BLJNL82	13.75%	UK	GBp
PERSIMMON	GB0006825383	13.53%	UK	GBp
TAYLOR WIMPEY PL	GB0008782301	12.84%	UK	GBp
VISTRY GROUP PLC	GB0001859296	9.65%	UK	GBp
BELLWAY PLC	GB0000904986	8.77%	UK	GBp
REDROW PLC	GB00BG11K365	4.65%	UK	GBp
CREST NICHOLS	GB00B8VZXT93	1.66%	UK	GBp
MJ GLEESON PLC	GB00BRKD9Z53	0.74%	UK	GBp
WATKIN JONES PLC	GB00BD6RF223	0.69%	UK	GBp
HARWORTH GROUP P	GB00BYZJ7G42	0.69%	UK	GBp
YIT OYJ	FI0009800643	1.00%	Finland	EUR
GLENVEAGH PROPER	IE00BD6JX574	1.85%	Ireland	EUR
CAIRN HOMES	IE00BWY4ZF18	1.87%	Ireland	GBp
NEXITY	FR0010112524	2.56%	France	EUR
KAUFMAN & BROAD	FR0004007813	1.19%	France	EUR
ALTAREA	FR0000033219	1.41%	France	EUR
NEINOR HOMES SA	ES0105251005	0.83%	Spain	EUR
AEDAS HOMES SA	ES0105287009	0.39%	Spain	EUR
METROVACESA SA	ES0105122024	1.53%	Spain	EUR
JM AB	SE0000806994	2.14%	Sweden	SEK
DEVELIA SA	PLCCRP00017	0.76%	Poland	PLN
DOMDEV	PLDMDVL00012	0.57%	Poland	PLN
IMMOBEL	BE0003599108	0.48%	Belgium	EUR
ATENOR	BE0003837540	0.44%	Belgium	EUR
INSTONE REAL EST	DE000A2NBX80	0.58%	Germany	EUR
SELVAAG BOLIG AS	NO0010612450	0.40%	Norway	NOK
HUSCIET A/S	DK0061412855	0.32%	Denmark	DKK



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

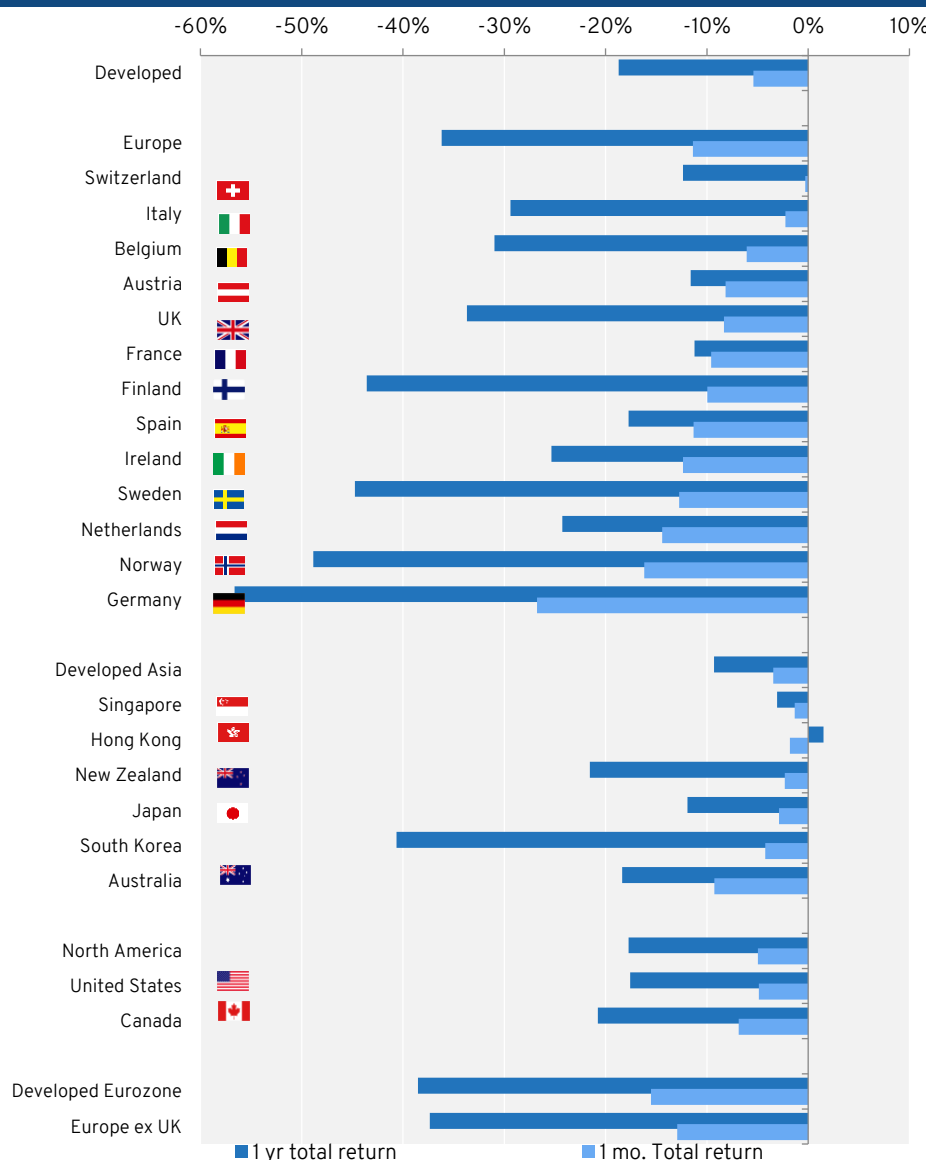
Assets: ≥ 50% of Total Tangible Assets
invested in RE. No Holding structures.

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

Developers Sub-Indexes: Risk and Return	3 Months	6 Months	Year to Date	5 Years
Residential Developers: Total Return	12.66%	22.59%	12.66%	-10.59%
Residential Developers: Standard Deviation (Annualized)	27.76%	30.04%	27.76%	32.54%
Liquid Developers: Total Return	13.01%	22.01%	13.01%	-9.56%
Liquid Developers: Standard Deviation (Annualized)	26.75%	29.15%	26.75%	32.06%

FTSE EPRA Nareit Monthly Index Performances (EUR)



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](#)

[Property Portfolio Analysis \(end of 2021\)](#)

[Emerging Markets 2022](#)

[Sector Analysis: Residential](#)

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

[Total Markets Table 2022-Q4 \(quarterly\)](#)



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EPRA INSEAD Education Programme, 2023 Edition (20-22 June, Fontainebleau)

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](#)

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