



EPRA

EUROPEAN PUBLIC
REAL ESTATE ASSOCIATION

MONTHLY MARKET REVIEW

Monthly Market Review and Developers' Research Benchmark

September
2022

Overview

The FTSE EPRA Nareit (FEN) Global Developed Real Estate Index lost 10.0% in September and now stands at YTD -18.1%. Global equities and bonds also lost 5.9% and 2.4% respectively. In terms of regional performance, all regions returned negative : Europe (-16.6%), North America (-9.8%) and Asia (-6.9%). In addition, emerging markets slipped 6.5% for the month. Focusing on sector performance, all sectors showed negative returns, specialty (-7.2%) and residential (-7.8%) were top performers with still negative but relatively limited returns while industrial (-14.1%), industrial/office (-13.9%) and data centres (-13.2%) were bottom performers in September.

At the end of September, **the FEN Developed Index** totalled **381** constituents, representing a free float market capitalisation of around **EUR 1.47 trillion** and **the FEN Emerging Index** totalled **126** constituents, representing a free float market capitalisation of around **EUR 120 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. It has 28 constituents from 10 different countries in Developed Europe and represents **EUR 35,230 million** in total market capitalization (30/09/2022). A high-level computation can be found in the relevant section (page 5).

2022-Q3 Quarterly Review

During the Q3-2022 quarterly review, there were ten additions and two deletions in the Developed index, whereby four companies were added, and three companies were deleted from the Emerging index. The changes were effective on September 19 and represented a net value of EUR 12,395 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 November, and the results will be published on December 2.

Highlights of the Month

The FEN Developed Europe Index returned -10.8% during September and brought the YTD return to -39.4%. The index lost 34.1% since the beginning of the war in Ukraine (cumulative return since 23/02/2022). Focusing on sector performances, all sectors posted negative returns in September, and also the YTD returns stands negative. Even resilient sectors during Covid19, started to lose momentum since the beginning of the year - and now all sectors are trading below their pre-Covid19 level which is relatively limited for self-storage (-5.8%) as top performer, and is higher for retail (-48.5%) as bottom performer (Table 1).

The rise in interest rates and its potential impacts on the markets remained as the crucial topic since the central banks in Europe continued to raise key interest rates during monetary policy meetings in September. The ECB raised key interest rates by 75 bps. The Bank of England base rate increased to 2.25% from 1.75%, and the Riksbank decided to raise the policy rate by 1 percentage point to 1.75 % (Fig.1).

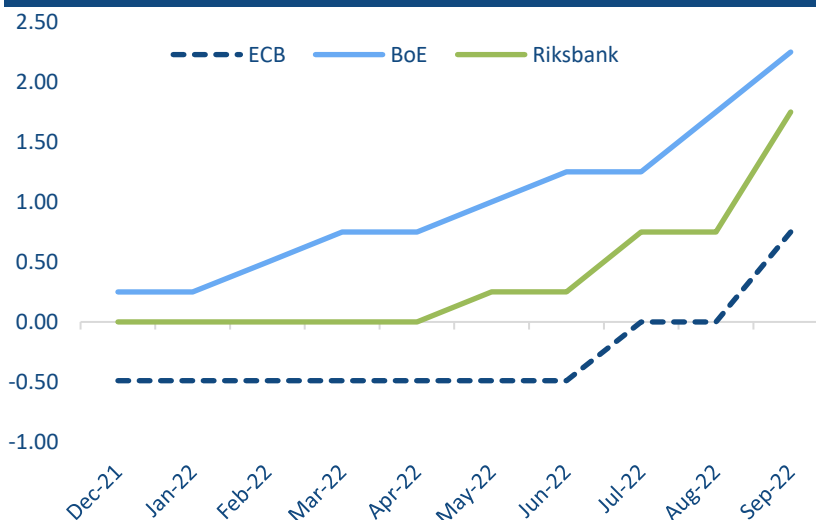
The current inflationary pressures and heightened geopolitical tensions have increased uncertainty and volatility in the markets and have impacted listed real estate sector as well. In addition, the anticipation of higher interest rates by the sector is increasing concerns regarding the outlook for the cost of debt, earnings, leverage, etc. On the other hand, listed real estate might be still attractive even though certain sectors are suffering relatively more due to structural shifts, the impact could be limited thanks to lower leverage levels and inflation-adjusted rents providing sustainable income. You can read our blog on market performance comparison during challenging times '[Listed Real Estate in context: A sector comparison](#)' and the latest report [Interest rates and inflation : What are the challenges for listed real estate](#).

FTSE EPRA Nareit Global Index Total Return

% Total Returns (EUR)	Sep-22	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
Global Real Estate	▼ -10.0	-18.1	-7.8	-2.2	3.9	6.6
Global Equities (FTSE)	▼ -5.9	-8.3	-0.3	9.6	6.8	9.8
Global Bonds (JP Morgan)	▼ -2.4	-7.5	-6.5	-3.3	2.6	2.7
Europe Real Estate	▼ -16.6	-39.4	-34.6	-11.0	-3.9	4.1
Europe Equities (FTSE)	▼ -6.2	-19.0	-15.2	1.1	2.4	6.8
Europe Bonds (JP Morgan)	▼ -2.0	-4.8	-3.1	-3.5	1.8	4.0
Asia Real Estate	▼ -6.9	-5.3	-5.1	-4.2	2.6	4.4
Asia Equities (FTSE)	▼ -6.0	-1.0	-0.1	7.8	7.0	10.9
Asia Bonds (JP Morgan)	▲ 1.3	10.2	11.8	1.0	3.5	3.9
North America Real Estate	▼ -9.8	-17.1	-2.0	0.5	6.2	8.2
NA Equities (FTSE)	▼ -6.6	-11.8	-1.4	11.9	13.2	14.5
NA Bonds (JP Morgan)	▼ -0.6	1.7	3.6	0.6	3.8	3.5
Emerging Real Estate	▼ -6.5	-9.4	-12.0	-9.7	-4.5	2.1
Emerging Equities (FTSE)	▼ -8.1	-11.0	-10.4	3.3	3.7	4.9
Emerging Bonds (JP Morgan)	▼ -3.5	-9.6	-8.1	-2.7	1.4	3.8

(*) Annualised.

Fig. 1. Europe : The policy rates



Source: EPRA Research. Data is compiled from the ECB, BoE and Riksbank.

Fig. 2. Global Weights (EUR)*

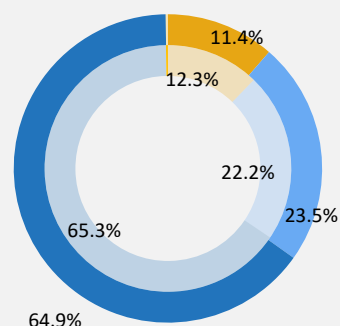


Fig. 3. REIT / Non-REITs

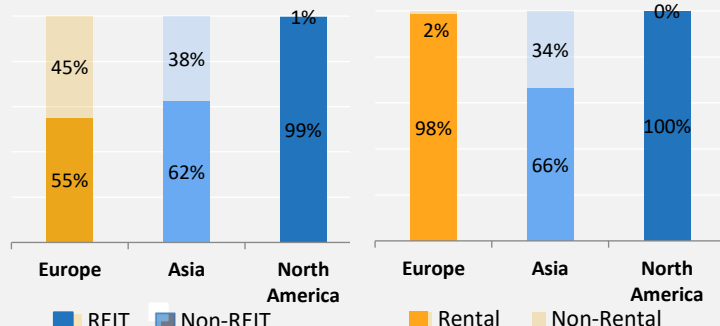


Fig. 4. Focus Split

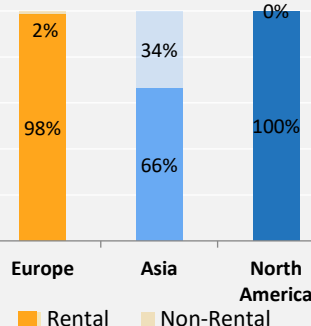


Fig. 5. Dividend Yields*

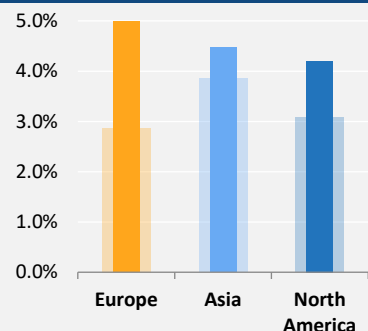


Fig. 6. Volatility (10 yr. & 3 yr.)**

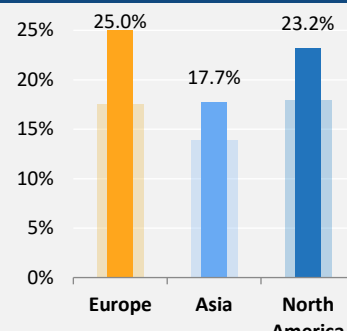
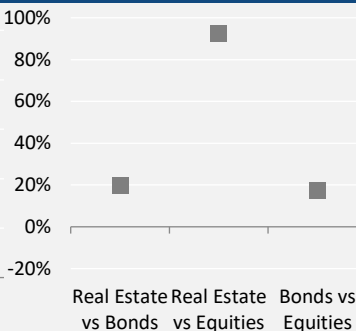


Fig. 7. Correlation (3 yr. rolling)



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

Dev. Europe:Total Return	Weekly Total Return by Sector						YTD	Ukraine war	Covid-19
	Sep-22	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep			
Developed Europe	-16.6%	-2.6%	-0.5%	-3.8%	-11.5%	-0.5%	-39.4%	-34.1%	-39.63%
Self-Storage	-21.2%	-4.9%	-3.4%	-5.2%	-10.5%	-1.1%	-38.0%	-26.7%	-5.8%
Industrial	-21.1%	-4.6%	-0.6%	-5.0%	-14.8%	-0.7%	-46.3%	-38.0%	-14.4%
Healthcare	-17.2%	-4.7%	0.5%	-3.4%	-10.5%	-3.7%	-25.8%	-15.6%	-28.5%
Diversified	-14.8%	-2.9%	-0.1%	-2.8%	-10.3%	-0.9%	-35.5%	-30.3%	-39.9%
Residential	-17.4%	-0.5%	-1.6%	-5.9%	-10.9%	0.7%	-47.0%	-43.5%	-44.4%
Office	-14.6%	-1.6%	0.3%	-2.4%	-11.0%	-2.1%	-34.8%	-29.0%	-44.9%
Lodging/Resorts	-11.8%	-1.2%	3.7%	0.2%	-14.6%	-0.1%	-23.2%	-17.9%	-47.3%
Retail	-12.8%	-2.0%	0.2%	-0.1%	-12.6%	0.8%	-18.6%	-26.8%	-48.5%

Source: EPRA Research. Data is compiled from the FEN Index series (as of September 30, 2022).

FTSE EPRA Nareit Developed Europe - Country Indices

% Total Returns	Sep-22	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
Europe (EUR)	-16.6	-39.4	-34.6	-11.0	-3.9	4.1
Europe ex UK (EUR)	-15.5	-40.0	-36.8	-12.6	-4.4	4.4
UK (GBP)	-17.5	-34.8	-27.6	-7.4	-2.8	4.2
France (EUR)	-11.1	-22.9	-21.1	-12.9	-6.0	2.3
Netherlands (EUR)	-14.2	-22.7	-23.8	-24.4	-20.1	-7.1
Germany (EUR)	-17.6	-51.1	-52.8	-17.5	-7.0	5.1

FTSE EPRA Nareit Developed Index - Top 10 Constituents

Company	Sector	Country	Total Return
ProLogis USA	Industrial	USA	▼ -17.8%
Equinix	Data Centers	USA	▼ -13.5%
Public Storage, Inc.	Self-Storage	USA	▼ -10.9%
Realty Income Corp.	Retail	USA	▼ -14.4%
Welltower Inc.	Healthcare	USA	▼ -16.1%
Simon Property Group, Inc.	Retail	USA	▼ -10.3%
Vici Properties Inc	Specialty	USA	▼ -9.5%
Digital Realty Trust	Data Centers	USA	▼ -18.8%
AvalonBay Communities, Inc.	Residential	USA	▼ -7.5%
Equity Residential Properties Trust	Residential	USA	▼ -7.3%

FTSE EPRA Nareit Developed Index - Top 10 Performers

Company	Sector	Country	Total Return
Store Capital REIT	Retail	USA	▲ 17.6%
Invincible Investment Corporation	Lod./Resorts	JA	▲ 6.3%
Japan Hotel REIT Investment	Lod./Resorts	JA	▲ 4.8%
Hoshino Resorts REIT	Lod./Resorts	JA	▲ 3.4%
Sankei Real Estate	Office	JA	▲ 2.7%
Heiwa Real Estate Co. Ltd	Diversified	JA	▲ 2.1%
Hulic REIT Inc.	Diversified	JA	▲ 1.9%
Mitsubishi Estate Company, Limited	Diversified	JA	▲ 1.9%
Japan Excellent Asset Mng ("JEI")	Office	JA	▲ 1.5%
Deutsche EuroShop AG	Retail	GER	▲ 1.2%

FTSE EPRA Nareit Developed Europe Index

The FEN Developed Europe Index posted a negative return of 16.6% in September. European bonds and equities also lost 2.0% and 6.2%, respectively.

France (-11.1%), the Netherlands (-14.2%), Germany (-17.6%), and the UK (-17.5%) indexes posted negative returns.

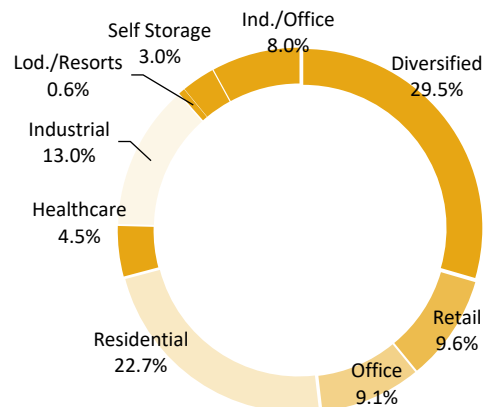
During the Q3-2022 index review, *Home Invest* (Belgium, REIT, Residential), *Residential Secure Income plc* (UK, Rental, REIT, Residential), *Warehouse REIT plc* (UK, REIT, Industrial) and *Stendorren Fastigheter Ord Shs Class B* (Sweden, Non-REIT, Industrial) were added in the index and there was no deletion in Europe index. In addition, *Schroder Real Estate Investment Trust* (UK) was reclassified from 'Diversified' sector to 'Industrial/Office.'

Sector Performance: All sectors returned negative, lodging/resorts (-11.8%) was top performer and self-storage (-21.2%) was bottom performer.

Performance of top 3 constituents: Deutsche EuroShop AG (1.2%, Germany, Retail), Warehouse REIT (0.0%, UK, Industrial), Home Invest Belgium REIT (0.0%, Belgium, Residential).

Developed Europe representing a free float MCap of around **EUR 168 billion** with **111 constituents**

Developed Europe Sector Split



FTSE EPRA Nareit Developed Asia Index

The FEN Developed Asia Index slipped 6.9%, and Asian bonds gained 1.3% compared to loss of 6.0% from Asian equities. Australia (-11.0%), Hong Kong (-8.2%) and Singapore (-7.0%) indexes returned negative, while Japan (-3.0%) posted a negative but relatively limited return for the month in Asia (in local currencies).

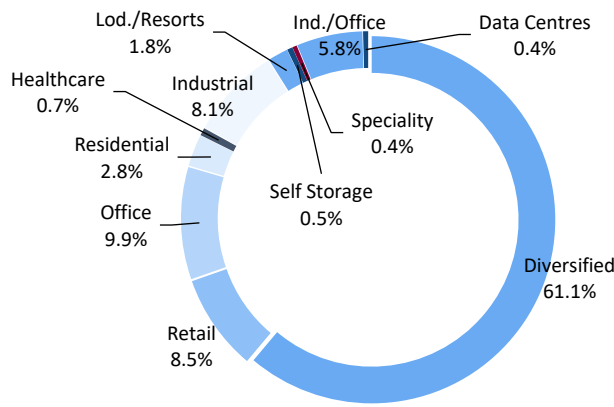
Healthcare & Medical Investment (Japan, REIT, Healthcare), *Sekisui House* (Japan, Non-REIT, Diversified) and *JR Global REIT* (South Korea, REIT, Office) were added in the index and there was no deletion. There were four sector reclassifications in Asia index: *China Overseas Land & Inv (Red Chip)* (Hong Kong) from 'Residential' to 'Diversified,' *Dexus Industria REIT* (Australia) from 'Industrial/Office' to 'Industrial,' *Dexus Property Group* (Australia) from 'Office' to 'Industrial/Office' and *Tokyo Tatemono* (Japan) from 'Office' to 'Diversified,' during Q3-2022 index review.

Sector Performance: Lodging/Resorts (1.4%) was the top performer and the remaining sectors returned negative that retail (-11.6%) was bottom performer.

Performance of top 3 constituents: Invinible Investment Corporation (6.3%, Japan, Lodging/Resorts), Japan Hotel REIT Investment (4.8%, Japan, Lodging/Resorts), Hoshino Resorts REIT (3.4%, Japan, Lodging/Resorts).

Developed Asia representing a free float MCap of around **EUR 345 billion** with **136 constituents**

Developed Asia Sector Split



FTSE EPRA Nareit North America Index

The FEN North America Index lost 9.8% in September. North America equities and bonds also posted negative returns of 6.6% and 56 bps, respectively. The US index (-6.1%) and Canada (-4.8%) returned negative for the month (in local currencies).

NETSTREIT Corp (USA, REIT, Retail) was added while *Dream Office Real Estate Investment Trust* (Canada) and *Industrial Logistics Properties Trust* (USA) were deleted from the index. In addition, North America index saw two sector reclassifications, *Alexander & Baldwin Inc.* (USA) from 'Diversified' to 'Retail' and *Veris Residential Inc.* (USA) from 'Diversified' to 'Residential,' in the quarterly review.

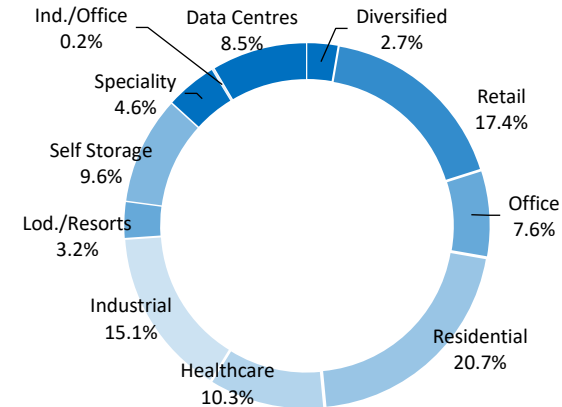
Following the completion of the merger, *Prologis* (USA, constituent) remained in the index with increased shares of 922,883,185 from 740,267,000 to and a decreased investability weighting from 99.67% to 99.65%, while *Duke Realty Corp* (USA, constituent) was deleted from the index.

Sector Performance: All sectors returned negative, residential (-5.7%) was top performer and industrial/office (-19.0%) was bottom performer.

Performance of top 3 constituents: Store Capital REIT (17.6%, USA, Retail), First Capital Realty REIT (24 bps%, Canada, Retail), NETSTREIT Corp. (0.0%, USA, Retail).

Developed North America representing a free float MCap of around **EUR 956 billion** with **132 constituents**

North America Sector Split



EPRA Developers Research Benchmark

Friday, 30 September 2022



Historical Performance	Last Month	1 Year	3 Years	5 Years
Total Return	-16.1%	-42.8%	-31.7%	-29.2%
Total Return (Annualized)		-42.8%	-10.6%	-5.8%

Return	3 Months	6 Months	Year to Date	5 Years
Total Return	-22.6%	-32.3%	-47.1%	-29.2%
Maximum Return	5.3%	5.3%	5.3%	11.6%
Minimum Return	-5.6%	-5.6%	-6.1%	-13.2%
Mean Return (Annualized)	-73.6%	-63.7%	-67.6%	-3.0%
Maximum Drawdown	-33.9%	-37.3%	-50.7%	-55.2%
Maximum Drawdown Length	43	115	192	23

Risk	3 Months	6 Months	Year to Date	5 Years
Standard Deviation (Annualized)	35.3%	30.4%	30.6%	30.7%
Downside Risk (Annualized)	25.6%	22.6%	22.6%	21.8%
Kurtosis	-0.15	0.26	0.32	7.31
Skewness	-0.13	-0.29	-0.30	0.05
Semivariance (Annualized)	37.7%	33.9%	32.8%	31.2%
VaR (ex-post)	-4.25	-3.78	-3.74	-2.93

Risk-Adjusted Performance	3 Months	6 Months	Year to Date	5 Years
Sharpe Ratio	-1.73	-1.68	-1.79	-0.06

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

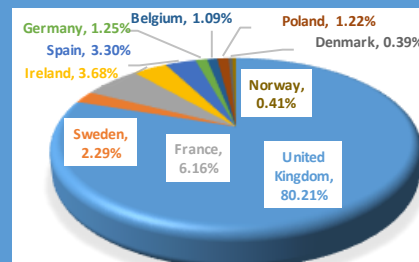
Review Dates: April, October

EPRA Developers Research Benchmark

Friday, 30 September 2022

Constituent	ISIN	Weight	Country	Currency
PERSIMMON	GB0006825383	15.48%	UK	GBp
BARRATT DEV	GB0000811801	14.06%	UK	GBp
BERKELEY GROUP	GB00BLJNL82	13.13%	UK	GBp
TAYLOR WIMPEY PL	GB0008782301	11.50%	UK	GBp
BELLWAY PLC	GB0000904986	7.99%	UK	GBp
REDROW PLC	GB00BG11K365	5.14%	UK	GBp
VISTRY GROUP PLC	GB0001859296	4.78%	UK	GBp
COUNTRYSIDE PART	GB00BYPHNG03	3.57%	UK	GBp
CREST NICHOLS	GB00B8VZXT93	1.74%	UK	GBp
WATKIN JONES PLC	GB00BD6RF223	1.20%	UK	GBp
HARWORTH GROUP P	GB00BYZJ7G42	0.86%	UK	GBp
MJ GLEESON PLC	GB00BRKD9Z53	0.76%	UK	GBp
GLENVEAGH PROPER	IE00BD6JX574	1.96%	Ireland	EUR
CAIRN HOMES	IE00BWY4ZF18	1.72%	Ireland	GBp
NEXITY	FR0010112524	3.19%	France	EUR
ALTAREA	FR0000033219	1.87%	France	EUR
KAUFMAN & BROAD	FR0004007813	1.10%	France	EUR
METROVACESA SA	ES0105122024	1.51%	Spain	EUR
NEINOR HOMES SA	ES0105251005	1.24%	Spain	EUR
AEDAS HOMES SA	ES0105287009	0.56%	Spain	EUR
JM AB	SE0000806994	2.29%	Sweden	SEK
INSTONE REAL EST	DE000A2NBX80	1.25%	Germany	EUR
DEVELIA SA	PLCCRP00017	0.67%	Poland	PLN
DOM DEVELOPMENT	PLDMDVL00012	0.55%	Poland	PLN
IMMOBEL	BE0003599108	0.60%	Belgium	EUR
ATENOR	BE0003837540	0.49%	Belgium	EUR
SELVAAG BOLIG AS	NO0010612450	0.41%	Norway	NOK
HUSCIET A/S	DK0061412855	0.39%	Denmark	DKK

Developers Sub-Indexes: Risk and Return	3 Months	6 Months	Year to Date	5 Years
Residential Developers: Total Return	-22.82%	-32.35%	-47.88%	-30.04%
Residential Developers: Standard Deviation (Annualized)	37.12%	32.01%	32.06%	31.74%
Liquid Developers: Total Return	-22.96%	-32.49%	-47.73%	-28.80%
Liquid Developers: Standard Deviation (Annualized)	36.21%	31.21%	31.30%	31.32%



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)

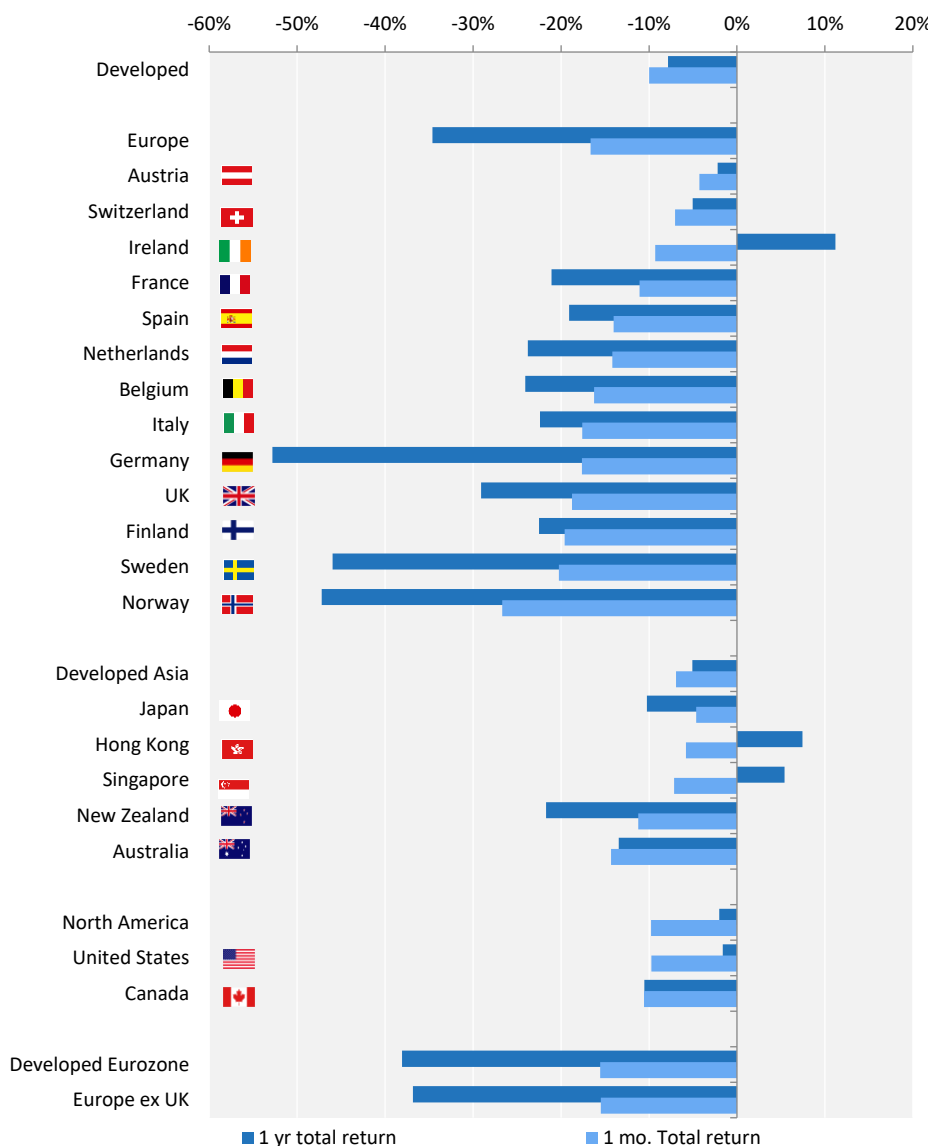
Geography: ≥ 75% EBITDA from Developed
 countries

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

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

Data 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)



Link to Reports & Contacts

Monthly Statistical Bulletin

Monthly Published NAV Bulletin

Monthly LTV Report

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[Index Ground Rules Version 11.3](#)

[Emerging Markets 2021](#)

(special edition)

[Sector Analysis: Residential](#)

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

[Total Markets Table 2022-Q2](#)

(quarterly)



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EPRA Call for Research Proposal 2023

The annual CFP 2023 is open, the deadline for submissions is 23:59 CET on Friday, **November 4, 2022**. EPRA welcomes submissions from both academic researchers and market practitioners. For more information research@epra.com



EPRA Bayes Business School Online Programme, 2022 October Edition: Understanding the REIT price

An online programme dedicated to understanding the listed real estate market, starting the week of 17th October 2022. You can [register](#) now and for more [contact education@epra.com](mailto:contact.education@epra.com).

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. For more, you can contact education@epra.com.

EPRA's latest research report

Read the latest EPRA's special report (June 2022) [Interest rates and inflation : What are the challenges for listed real estate?](#)

Download EPRA's special report (February 2022) [Inflation and short-term impact on listed property companies](#)

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Source: FTSE EPRA Nareit as of September 30, 2022