

MONTHLY MARKET REVIEW

Monthly Market Review and Developers' Research Benchmark

July 2022

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Overview

The FTSE EPRA Nareit (FEN) Global Developed Real Estate Index posted a return of 10.7% in July and YTD now stands at -4.1%. Global equities and bonds also gained 9.9% and 4.5%, respectively. In terms of regional performance, all regions returned positive: Europe (12.5%), North America (11.7%) and Asia (6.9%). Meanwhile, emerging markets lost 3.0% for the month.

Focusing on sector performance, all sectors posted positive returns, with the outperformance of specialty (17.4%), lodging/resorts (15.9%) and industrial/office (15.5%) followed by retail (13.5%), industrial (13.2%) and self-storage (12.6%), while diversified (7.3%) and data centres (7.8%) were the bottom performers with positive but relatively lower monthly returns in July.

At the end of July, **the FEN Developed Index** totalled **376** constituents, representing a free float market capitalisation of around **EUR 1.73 trillion** and **the FEN Emerging Index** totalled **125** constituents, representing a free float market capitalisation of around **EUR 127 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 EPRA Developers' Benchmark has 28 constituents from 10 different countries in Developed Europe and represents **EUR 49,831 million** in total market capitalization (29/07/2022). A high-level computation can be found in the relevant section (page 5).

Highlights of the Month

The European Central Bank (ECB) raised key interest rates by 50 bps in July, slightly higher than expectations and for the first time in 11 years. To tackle inflation, the ECB already stated intends for a series of interest rate rises in the forthcoming period depending on inflation expectations.

Indeed, the inflation remained high and it is expected to be 8.9% in July. However, there are more concerns about economic slowdown depending on a weaker job market, slowing consumption and reducing savings which might indicate a global recession. But, the latest figures for the economic indicators such as GDP growth and unemployment rate look stable for the eurozone according to Eurostat's preliminary estimates. The unemployment rate was 6.6% on June-22 (down from 7.9% on June-21), and eurozone GDP is projected to grow 4.0% (y-o-y) in 2022-Q2 which was 5.4% in the previous quarter.

The FEN Developed Europe Index gained momentum with a monthly return of 12.5% during July. Based on the cumulative returns, the index lost 11.4% since the beginning of the war in Ukraine (since 23/02/2022) and is still below the pre-Covid19 level with -18.8% (since 19/02/2020).

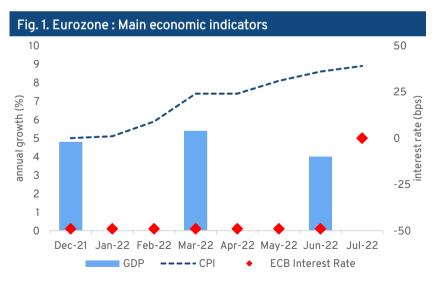
In terms of sector performance in Developed Europe, lodging/resorts (33.3%) and industrial/office (25.1%) were the top performers followed by industrial (13.8%), retail (13.4%) and self-storage (12.5%), the remaining sectors also posted positive returns which residential (9.4%) and healthcare (10.0%) as the bottom performers. Focusing on cumulative returns (since 19/02/2020), self-storage (28.9%) and industrial (26.0%) are still the only sectors trading above their pre-Covid19 level (Table 1).

You can also read our latest report Interest rates and inflation : What are the challenges for listed real estate.

European Public Real Estate Association Square de Meeus, 23 1000 Brussels, Belgium FTSE EPRA Nareit Global Index Total Return

					- 3	5	10
% Total Returns (EUR)		Jul-22	YTD	1 yr	yrs*	yrs*	yrs*
Global Real Estate		10.7	-4.1	5.5	5.3	7.2	8.1
Global Equities (FTSE)		9.9	-1.2	9.1	9.3	8.9	11.1
Global Bonds (JP Morgan)		4.5	-2.4	-1.8	3.8	3.8	3.3
Europe Real Estate		12.5	-18.4	-17.4	0.8	2.3	7.1
Europe Equities (FTSE)		6.2	-10.2	-5.3	5.1	5.1	8.3
Europe Bonds (JP Morgan)		6.6	1.3	3.3	0.0	3.1	4.4
Asia Real Estate		6.9	4.6	4.3	-0.2	4.4	5.6
Asia Equities (FTSE)		4.2	2.8	8.4	10.0	8.3	11.2
Asia Bonds (JP Morgan)		4.1	8.2	11.6	1.2	3.2	3.2
North America Real Estate		11.7	-3.4	12.1	8.5	9.4	9.3
NA Equities (FTSE)		12.0	-3.2	8.8	16.3	15.9	15.6
NA Bonds (JP Morgan)		4.6	3.5	6.7	2.8	4.2	3.1
Emerging Real Estate	▼	-3.0	-4.3	-2.8	-9.4	-2.4	3.0
Emerging Equities (FTSE)		2.0	-5.6	-2.7	4.9	5.3	5.6
Emerging Bonds (JP Morgan)		6.1	-6.5	-3.6	-0.8	2.5	3.9
(*) Appublicad							

(*) Annualised.



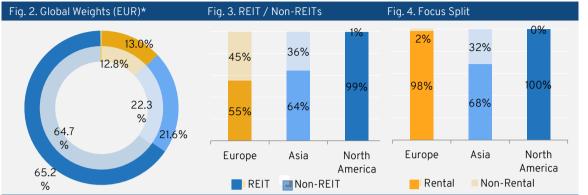
Source: EPRA Research. Data is compiled from Eurostat, ECB (as of July 29, 2022).

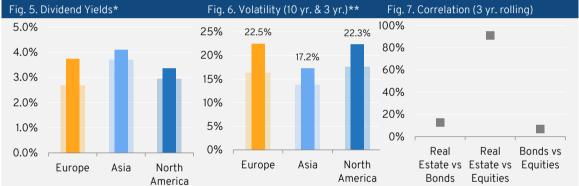
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(*) Shaded bars are last month's (**) Shaded bars are 10 yr.

Dev. Europe:Total R	leturn	Weekly To	Weekly Total Return by Sector			YTD	Ukraine wa	Covid-19	
	Jul-22	1-Jul	8-Jul	15-Jul	22-Jul	29-Jul	Dec-21	23-Feb-22	19-Feb-20
Developed Europe	12.5%	-4.9%	2.9%	0.4%	7.3%	1.7%	-18.4%	-11.4%	-18.8%
Self-Storage	12.5%	-4.3%	6.5%	0.8%	5.7%	1.3%	-15.2%	0.3%	28.9%
Industrial	13.8%	-6.5%	5.8%	0.0%	6.6%	2.6%	-21.0%	-8.8%	26.0%
Healthcare	10.0%	-1.8%	4.3%	-1.0%	4.9%	1.8%	-2.9%	10.5%	-6.4%
Residential	9.4%	-5.5%	-1.3%	-0.3%	9.7%	1.3%	-25.7%	-20.7%	-22.0%
Diversified	11.8%	-4.0%	3.4%	0.0%	6.6%	1.2%	-16.9%	-10.2%	-22.6%
Office	11.2%	-4.9%	2.9%	0.6%	6.5%	1.0%	-13.4%	-5.7%	-26.9%
Lodging/Resorts	33.3%	-5.6%	1.1%	14.1%	16.9%	-1.8%	0.7%	7.7%	-30.9%
Retail	13.4%	-6.4%	5.2%	-0.1%	4.1%	3.6%	-0.2%	-10.3%	-36.9%

Source: EPRA Research. Data is compiled from the FEN Index series (as of July 29, 2022).

European Public Real Estate Association Square de Meeus, 23 1000 Brussels, Belgium

FTSE EPRA Nareit Developed Europe - Country Indices

% Total Returns	Jul-22	YTD	1 yr	3 yrs*	5 yrs*	10 yrs*
Europe (EUR)	12.5	-18.4	-17.4	0.8	2.3	7.1
Europe ex UK (EUR)	12.9	-21.5	-23.1	-2.4	1.3	7.1
UK (GBP)	8.8	-12.0	-5.0	5.5	2.9	7.3
France (EUR)	15.6	-5.5	-12.4	-4.7	-1.6	4.4
Netherlands (EUR)	10.7	-3.6	-14.1	-15.9	-16.8	-5.2
Germany (EUR)	9.2	-30.4	-37.4	-6.3	0.8	8.8

FTSE EPRA Nareit Developed Index – Top 10 Constituents

Company ProLogis USA	Sector Industrial	Country USA	To	tal Return 12.7%
Equinix	Data Centers	USA		7.1%
Public Storage, Inc.	Self-Storage	USA		4.4%
Realty Income Corp.	Retail	USA		8.8%
Welltower Inc.	Healthcare	USA		4.9%
Digital Realty Trust	Data Centers	USA		2.0%
Simon Property Group, Inc.	Retail	USA		14.5%
Vici Properties Inc	Specialty	USA		14.8%
AvalonBay Communities, Inc.	Residential	USA		11.0%
Equity Residential Properties Trust	Residential	USA		8.5%

FTSE EPRA Nareit Developed Index – Top 10 Performers

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Company	Sector	Country	То	tal Return
Sagax Ord Shs Class B	Office	SWED		38.1%
Fastighets AB Balder	Industrial	SWED		31.8%
Hammerson Plc	Diversified	UK		31.7%
Platzer Fastigheter Holding AB	Office	SWED		31.1%
Apartment Inv Management	Retail	USA		30.0%
Pandox AB	Ind./Office	SWED		29.4%
NP3 Fastigheter Ord Shs	Diversified	SWED		25.3%
Service Properties Trust	Retail	USA		25.2%
Catena AB	Industrial	SWED		25.2%
Castellum AB	Healthcare	SWED		24.9%

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FTSE EPRA Nareit Developed Europe Index

The FEN Developed Europe Index increased 12.5% in July. European bonds and equities also gained 6.6% and 6.2%, respectively. The France (15.6%), the Netherlands (10.7%), Germany (9.2%), and the UK (8.8%) indexes returned positive.

LXI REIT (UK, constituent) remained in the index with an increased shares in issue total 1,718,417,255 and a decreased investability weighting from 99.85% to 87.79%, following the completion of the cash and stock offer by Secure Income REIT (non-constituent). Subject to the result of a tender offer by Hercules BidCo (non-constituent), *Deutsche EuroShop, (Germany, constituent)* remained in the index with an unchanged shares in issue total of 61,783,594 and a decreased investability weighting from 82.62% to 28.97%. Subject to the result of a tender offer by Alexandrite Monnet Belgian Bidco (non-constituent), *Befimmo, (Belgium, constituent)* remained in the index with an unchanged shares in issue total of 28,445,971 and a decreased investability weighting from 75.45% to 15.06%.

Performance of top 3 sectors: Lodging/resorts (33.3%), industrial/office (25.1%), industrial (13.8%).

Performance of top 3 constituents: Sagax Ord. Shs Class B (38.1%, Sweden, Ind/Office), Fastighets AB Balder(31.8%, Sweden, Diversified), Hammerson plc (31.7%, UK, Retail).

FTSE EPRA Nareit Developed Asia Index

The FEN Developed Asia Index posted a positive return of 6.9%, Asian equities and bonds gained 4.2% and 4.1%, respectively%. The Australia (10.1%), Japan (2.5%) and Singapore (2.5%) indexes posted positive returns, while Hong Kong index (-2 bps) showed limited but negative return in Asia (in local currencies).

Following the company announcement of the cash tender offer by Cuscaden Peak Pte Ltd (Unlisted), *SPH REIT* (Singapore, constituent) remained in the index with an unchanged shares in issue total of 2,805,154,004 and a decreased investability weighting from 52.78% to 38.32%.

Irongate Group (Australia, constituent) was deleted from the index, following the approval of the cash acquisition by Charter Hall PGGM Industrial Partnership No.2 (Unlisted).

Performance of top 3 sectors: Retail (12.8%), industrial (9.3%), residential (8.9%).

Performance of top 3 constituents: Lifestyle Communities (24.1%, Australia, Residential), Home Consortium (18.6%, Australia, Retail), National Storage REIT (17.9%, Australia, Self-storage).

FTSE EPRA Nareit North America Index

The FEN North America Index gained 11.7% in July. North America equities and bonds also returned 12.0% and 4.6%, respectively.

The US index (9.0%) and Canada (5.9%) posted positive returns for the month (in local currencies).

Following the completion of the merger, *Healthcare Realty Trust* (USA, constituent) was deleted from the index, while *Healthcare Trust of America Inc* (USA, constituent) remained in the index with an increased shares in issue total 380,632,312 and a decreased investability weighting from 99.60% to 99.39%.

Subject to the completion of the acquisition by Blackstone Inc. (non-constituents), *PS Business Parks* (USA, constituent) was deleted from the index.

Performance of top 3 sectors: Specialty (17.5%), lodging/resorts (17.1%), industrial (13.7%).

Performance of top 3 constituents: Apartment Investment&Management (30.0%, USA, Residential), Service Properties Trust (25.2%, USA, Diversified), Macerich Company (21.8%, USA, Retail).

<u>Developed Europe</u> representing a free float MCap of around EUR 225 billion with 107 constituents

 Developed Asia
 representing a free float MCap of around EUR 374
 Developed North America
 representing a free float MCap of around EUR

 billion
 with 133 constituents
 1,128 billion with 134 constituents





EPRA Developers Research Benchmark Friday, 29 July 2022



Historical Performance	Last Month	1 Year	3 Years	5 Years
Total Return	10.6%	-22.4%	2.2%	6.2%
Total Return (Annualized)		-22.4%	0.7%	1.2%

Return	3 Months	6 Months	Year to Date	5 Years
Total Return	-0.3%	-11.6%	-24.4%	6.2%
Maximum Return	2.5%	3.6%	3.6%	11.6%
Minimum Return	-4.8%	-4.8%	-6.1%	-13.2%
Mean Return (Annualized)	2.6%	-25.7%	-46.6%	8.3%
Maximum Drawdown	-12.9%	-24.0%	-34.1%	-55.2%
Maximum Drawdown Length	26	109	130	23

Risk	3 Months	6 Months	Year to Date	5 Years
Standard Deviation (Annualized)	25.0%	26.8%	27.3%	29.9%
Downside Risk (Annualized)	19.4%	19.9%	20.5%	21.3%
Kurtosis	0.29	0.03	0.59	8.16
Skewness	-0.72	-0.34	-0.51	0.06
Semivariance (Annualized)	28.9%	28.7%	29.5%	30.3%
VaR (ex-post)	-2.56	-2.68	-2.76	-2.74
Risk-Adjusted Performance	3 Months	6 Months	Year to Date	5 Years
Sharpe Ratio	0.09	-0.69	-1.31	0.21

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 subindexes 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 5



	EPRA Developers Friday	s Researc , 29 July 202		mark	
Constituent	ISIN	Weight	Country	Currency	
PERSIMMON	GB0006825383	17.27%	UK	GBp	Germany, 1.09% Pole
BARRATT DEV	GB0000811801	13.97%	UK	GBp	Spain, 2.57% Ireland, 3.21%
BERKELEY GROUP	GB00BLJNXL82	12.31%	UK	GBp	Norway, 0.38%
TAYLOR WIMPEY PL	GB0008782301	12.13%	UK	GBp	Sweden, 2.03% France,
BELLWAY PLC	GB0000904986	8.41%	UK	GBp	5.09% United Kingdor
VISTRY GROUP PLC	GB0001859296	5.48%	UK	GBp	83.279
REDROW PLC	GB00BG11K365	5.20%	UK	GBp	
COUNTRYSIDE PART	GB00BYPHNG03	3.80%	UK	GBp	
CREST NICHOLS	GB00B8VZXT93	1.87%	UK	GBp	Eligibility Crite
WATKIN JONES PLC	GB00BD6RF223	1.28%	UK	GBp	EBITDA: ≥ 50% from Property
HARWORTH GROUP P	GB00BYZJ7G42	0.83%	UK	GBp	EBITDA: ≥ 75% from Real Est
MJ GLEESON PLC	GB00BRKD9Z53	0.72%	UK	GBp	
GLENVEAGH PROPER	IE00BD6JX574	1.67%	Ireland	EUR	Size: > 0.30% of the Benchm
CAIRN HOMES	IE00BWY4ZF18	1.54%	Ireland	GBp	Minimum of EUR 150 Millior
NEXITY	FR0010112524	2.56%	France	EUR	
ALTAREA	FR0000033219	1.49%	France	EUR	Liquidity: ≥ 0.05% of their (F
KAUFMAN & BROAD	FR0004007813	1.04%	France	EUR	issue based on their median of
METROVACESA SA	ES0105122024	1.15%	Spain	EUR	volume per month
NEINOR HOMES SA	ES0105251005	0.96%	Spain	EUR	
AEDAS HOMES SA	ES0105287009	0.45%	Spain	EUR	Reporting: public AR in Englis
JM AB	SE0000806994	2.03%	Sweden	SEK	audited FS, notes and Mg
INSTONE REAL EST	DE000A2NBX80	1.09%	Germany	EUR	
DEVELIA SA	PLLCCRP00017	0.60%	Poland	PLN	Geography: ≥ 75% EBITDA fro
DOM DEVELOPMENT	PLDMDVL00012	0.37%	Poland	PLN	countries
IMMOBEL	BE0003599108	0.55%	Belgium	EUR	
ATENOR	BE0003837540	0.42%	Belgium	EUR	Assets: ≥ 50% of Total Tangi
HUSCIET A/S	DK0061412855	0.42%	Denmark	DKK	invested in RE. No Holding
SELVAAG BOLIG AS	NO0010612450	0.38%	Norway	NOK	
					Elizible Merketer Dramium and

Developers Sub-Indexes: Risk and Return	3 Months	6 Months	Year to Date	5 Years
Residential Developers: Total Return	0.41%	-11.13%	-24.81%	5.67%
Residential Developers: Standard Deviation (Annualized)	26.33%	28.02%	28.52%	30.88%
Liquid Developers: Total Return	-0.05%	-11.64%	-24.83%	7.27%
Liquid Developers: Standard Deviation (Annualized)	25.64%	27.32%	27.85%	30.50%



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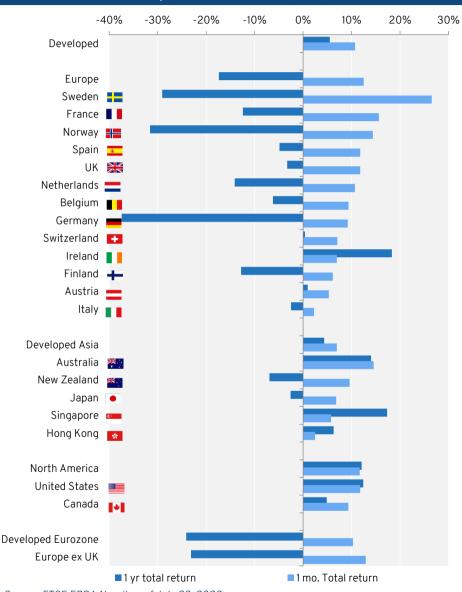
ngible Assets g structures.

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



FTSE EPRA Nareit Monthly Index Performances (EUR)



Source: FTSE EPRA Nareit as of July 29, 2022

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(special edition)

Sector Analysis: Office (Aug-21)

(quarterly)



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Index Ground Rules Version 10.9

Emerging Markets 2021

Sector Analysis: Residential

Total Markets Table 2022-Q2

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