

ANNUAL MARKET REVIEW

Annual Market Review and Developers' Research Benchmark

December 2021



December Overview

During December 2021, the FTSE EPRA Nareit (FEN) Global Developed Real Estate Index gained 5.4% compared to a loss of 1.7% from global bonds and a gain of 3.2% from global equities. Meanwhile, the FEN Emerging Index lost 7 bps, while emerging equities and bonds gained 1.0% and 76 bps, respectively.

Focusing on regional performance, developed markets performed relatively better during the last month of the year and posted positive returns. North America kept its momentum and posted a 7.5% monthly return, while Europe and Asia gained 1.9% and 1.5.%, respectively.

The top performing sectors in December were self-storage (12.2%), specialty (9.6%), industrial (8.7%) and lodging/resorts (8.3%), while industrial/office (-1.5%) was the bottom performer and the only sector to post negative return. The remaining sectors posted positive but lower returns for the month. The annual performance overview is given in the '2021 Performance: Global Overview' section.

EPRA Developers Research Benchmark

EPRA is proud to launch the **EPRA Developers Research Benchmark**, a non-commercial benchmark designed to allow its constituents to assess themselves against each other. A high-level computation can be found in the *'EPRA Developers Research Benchmark'* section, on a monthly basis. Further information regarding the launch of the Benchmark can be accessed **here**.

2021-Q4 Index Review

During the quarterly review in December, there were eight additions and no deletion in the Developed index, whereby three companies were added in, and seven companies were deleted from the Emerging index. The changes were effective on the 20th of December 2021 and represented a net added value of EUR 6,053 million in free float market cap to the global index. Detailed information is given in the related sections.

2021 Highlights

Optimism with vaccine roll-out vs concerns with new variants

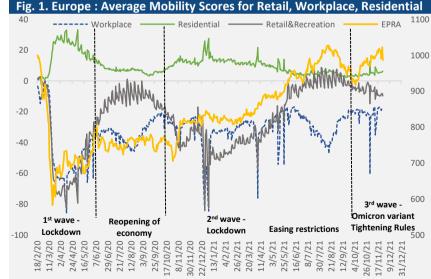
The FEN Developed Europe index performed better during 2021 and compensated its loss, driven by optimism towards successful vaccine rollouts and the easing of restrictions. Although the recovery was delayed following the reintroduction of lockdown restrictions in late 2020 and early 2021 due to new variants concerns, the index returned to pre-Covid19 levels in August. It later lost some momentum due to the surge of the Omicron variant and the implementation of strict measures (including several full lockdowns) by most of the European countries, in line with the increasing number of cases around the Christmas period.

As seen in Fig.1, with markets impacted by the two major variants (Delta and Omicron), work and retail-related mobility were adversely impacted by restrictions during the waves, and improvements have been observed with deconfinement policies during the summer period. Although the lockdown measures and social restrictions put pressures on markets, the FEN Developed Europe index posted 18.3% annual return and was very close to its precrisis peak by the end of the year (-45 bps cumulative return since 19/02/2020).

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FTSE EPRA Nareit Global Index Total Return

% Total Returns (EUR)		Dec-21	1 yr	3 yrs*	5 yrs*	10 yrs*
Global Real Estate		5.4	36.9	13.1	7.2	11.0
Global Equities (FTSE)		3.2	30.4	15.7	11.5	12.1
Global Bonds (JP Morgan)	•	-1.7	0.6	6.6	4.4	3.8
Europe Real Estate		1.9	18.3	11.4	7.6	11.4
Europe Equities (FTSE)		4.9	23.1	15.0	9.3	10.2
Europe Bonds (JP Morgan)	•	-2.4	3.2	3.0	0.5	5.3
Asia Real Estate		1.5	12.3	3.7	3.3	8.1
Asia Equities (FTSE)		1.6	13.2	13.3	8.0	12.2
Asia Bonds (JP Morgan)		-0.9	6.5	0.7	-0.7	3.2
North America Real Estate		7.5	53.4	17.2	8.4	12.0
NA Equities (FTSE)		3.3	36.3	26.2	16.5	17.7
NA Bonds (JP Morgan)	•	-1.2	4.6	4.3	1.6	3.6
Emerging Real Estate	•	-0.1	-6.8	-2.6	2.9	5.8
Emerging Equities (FTSE)		1.0	7.5	11.9	8.3	7.4
Emerging Bonds (JP Morgan)		0.8	5.9	6.3	2.9	6.3
(*) Annualised.						



Source: EPRA. Mobility data is compiled from Google Mobility Analytics (as of 31/12/2021) with an average of the countries with higher number of Covid-19 cases (Belgium, Germany, France. Italy, Netherlands, Spain and the UK). Index data is compiled from the FEN Index (19/02/2020=1000)..

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Sector Performance

In terms of the FEN Developed Europe's sector indices, industrial (59.5%), self-storage (51.9%) and residential (5%) are the only sectors to stay above pre-crisis levels (based on cumulative return since 19/02/2020). Especially self-storage outperformed during 2021 with 79.6% annual return benefiting from the short-term demand, which supported higher occupancies and rental collections. Industrial, and in particular logistics, performed well since the beginning of the pandemic and kept its resilience during 2021 posting 59.5% annual return. On the other hand, the other resilient sector – residential – lost its momentum in 2021 and slipped 77 bps during the year, which can be explained by uncertainties around the German elections and the rental cap discussion. Certain sectors experienced the most immediate negative impact from restrictions and lockdown measures (travel restrictions, closure of shops, social distancing, WFH etc.). Lodging/resorts, retail and office gained some ground with the lifting/easing of restrictions, but they are still be traded below their pre-Covid19 levels (Table 1).

Focusing on premium/discount to NAV figures, self-storage (99.0%), industrial (41.1%) and healthcare (32.0%) are trading at premiums to NAV and above the 5-year average level (Fig. 4). The hardest-hit sectors, retail (-23.0%), office (-20.0%) and lodging/resorts (-15.0%) are still trading at discounts to NAV, but with better figures than in 2020. Meanwhile, the European average is standing at -1.0%, as at the end of the year.

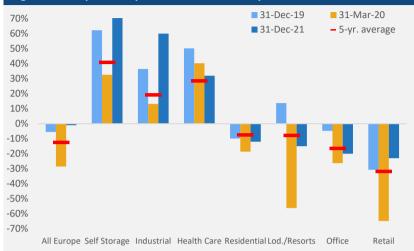
Capital raising in Europe

The listed real estate companies in Europe raised EUR 32 billion in new fresh capital during 2021 (Fig. 3). Compared to the previous years, it indicates a strong position of companies' capital structure, although the sector has been experiencing turbulences due to Covid-19. It should be noted that green bond issuance in the listed real estate sector has also grown rapidly in recent years and a total of EUR 10.7 billion of green bonds have been issued by EPRA constituents in 2021 which represented 44% of total green bonds issuance since 2013.

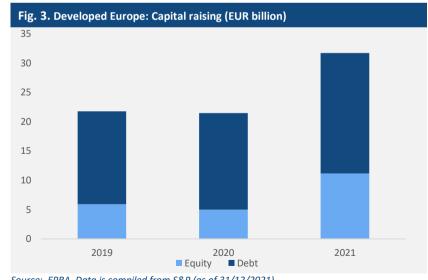


European Public Real Estate Association

Square de Meeus, 23 1000 Brussels, Belgium Fig. 2. Developed Europe: Discount to NAV by Sector



Source: EPRA. (*) Starting from March 2021, the aggregated PD is computed using the simple average of the new 3 EPRA NAV metrics (NRV, NTA, NRV), the average has been retrospectively applied since 2020, depending on the companies information availability.



Source: EPRA. Data is compiled from S&P (as of 31/12/2021).

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2021 Performance: Global overview

The FEN Global Developed Real Estate index posted an annual return of 36.9% compared to gains of 30.4% and 60 bps from global equities and global bonds, respectively. Annualised ten-year rolling returns for real estate investments stand at 11.0%, while general equities posted an 12.1% return and bonds gained 3.8% during the same period.

The FEN Developed Global index gained some ground during 2021 providing 36.9% annual return and returned to pre-Covid19 level with 7.4% cumulative return (since 19/02/2020).

In terms of regional performance, all regions performed well during 2021 and posted positive annual returns. North America posted 53.4% annual return and is now traded above its pre-pandemic level (17% based on the cumulative return since 19/02/2020). Europe also performed relatively better posting 18.3% annual return and compensating its loss to pre-Covid19 level with a -45 bps cumulative return (since 19/02/2020). Meanwhile Asia gained 12.3% over a one-year period and is still performing quite below its pre-Covid19 levels (-10.5% cumulative return since 19/02/2020).

The top performing countries in Developed markets were Sweden (41.6%), the UK (37.4%) and Belgium (31.1%) in Europe. Australia (20.1%) in Asia and USA (53.7%) in North America were top performers in their region, while the remaining countries in all regions posted positive returns, except for Germany (-4.4%).

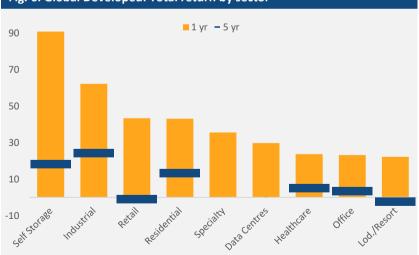
Focusing on annual performance by sector, self-storage continued to see exceedingly robust performance through 2021, consequently providing the highest annual return (91.0%) and kept its resilience by trading above pre-Covid19 level (83.1%, cumulative return since 19/02/2020). Industrial (62.3%), retail (43.4%) and residential (43.2%) also outperformed in 2021. The remaining sectors also posted positive returns, with diversified (16.8%) and lodging/resorts (22.2%) bottom performers, posting positive but relatively lower annual returns (Fig.6).

Based on cumulative returns (since 19/02/2020), industrial (52.8%), residential (17.8%) and industrial/office (10.8%) are traded above their pre-Covid19 levels. The most hit sectors, office (-12.2%), lodging/resorts (-11.3%) and retail (-78 bps) are still below pre-pandemic levels, although retail gained some ground in 2021.

At the end of December 2021, the <u>FEN Developed Index</u> counted a total of **382** constituents, representing a free float market capitalisation of around **EUR 1,8 trillion**.

Fig. 5. Total return by region: (31/12/2019=1000)





Source: EPRA (as of 31/12/2021). (*) Annualised 5-year return.

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Fig. 6. Global Developed: Total return by sector



Major Corporate Actions in the FEN Developed Index in 2021

- Klovern (B) (Sweden, constituent) has been deleted from the index after a take-over by Corem Property Group B (Sweden, constituent) – 21st June
- Brookfield Property (USA, constituent) has been deleted from the index after an acquisition by Brookfield Asset Management (USA, non-constituent) – 29th July
- QTS Realty Trust (USA, constituent) has been deleted from the index after an acquisition by Blackstone • 31st August
- Weingarten Realty Investors (USA, constituent) has been deleted from the index after a merger with Kimco Realty Co (USA, constituent) – 4th August
- WPT Industrial Real Estate Investment Trust (Canada, constituent) has been deleted from the index after • being acquired by Blackstone Real Estate Investment Trust – 21st October
- Retail Properties of America (USA, constituent) has been deleted from the index after a merger with Kite Realty Group Trust (USA, constituent) – 22nd October
- Invesco Office J-Reit (Japan, constituent) has been deleted from the index after being acquired by IRE IOJ • GK (unlisted) and MAR IOJ GK (unlisted) – 9th November
- TLG Immobilien GmbH (Germany, constituent) has been deleted from the index after being acquired by • Aroundtown (Germany, constituent) – 10th November
- Kungsleden AB (Sweden, constituent) has been deleted from the index after being acquired by Castellum • AB (Sweden, constituent) – 15th November
- VEREIT (USA, constituent) has been deleted from the index after a merger with Realty Income (USA, • constituent) – 1st November
- Orion Office REIT Inc (USA, non-constituent) has been added to the index after demerging from Realty • Income (USA, constituent) – 15th November
- Columbia Property Trust Inc (USA, constituents) was deleted from the index after being acquired by Pacific • Investment Management Company LLC – 8th December
- GCP Student Living (UK, constituent) has been deleted from the index subject to court sanctioning the ٠ scheme of arrangement in relation to the cash offer for by Gemini Jersey JV L.P. (non-constituent) – 20th December
- CoreSite Realty (USA, constituent) has been deleted from the index after the completion of the acquisition • for by American Towers – 31st December.

Major Corporate Actions in the Emerging markets in 2021

- *Central China Management (P Chip)* (China, constituent) has been deleted from the index after demerging • from Central China Real Estate (P Chip) (China, constituent) – 3rd June
- Siam Future Development PCL (Thailand) was deleted after being acquired by Central World Company Limited (unlisted) – 28th October
- *Emaar Malls Group* (UAE, constituent) has been deleted from the index after merging with Emaar Properties (non-constituents) - 16th November

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- Iquaremi Empresa Sho (Brazil, constituent) has been deleted from the index after the merger with Jereissati Participacoes S/A Ord (Brazil, non-constituent) – 23rd November
- Sinic Holdings (Group) (P Chip) (China, non-REIT) has been deleted from the index due to 20 business days suspensions in accordance with the Suspension of Dealing rule – 23rd November.

Company	Sector	Country	Total Return
ProLogis USA	Industrial	USA	71.5%
Equinix	Data Centers	USA	NA
Public Storage, Inc.	Self-Storage	USA	65.7%
Simon Property Group, Inc.	Retail	USA	92.3%
Digital Realty Trust	Data Centers	USA	30.1%
Vonovia SE	Residential	GER	-7.8%
Realty Income Corp.	Retail	USA	28.5%
Welltower Inc.	Healthcare	USA	36.5%
AvalonBay Communities, Inc.	Residential	USA	61.4%
Alexandria Real Estate Equities, Inc.	Office	USA	27.6%

FTSE EPRA Nareit Developed Index – Top 10 Performers*

FTSE EPRA Nareit Developed Index – Top 10 Constituents*

Company Samhällsbyggnadsbolaget i Norden AB	Sector Diversified	Country SWED	Total Return 134.9%
Nexpoint Residential Trust	Residential	USA	101.5%
Tanger Factory Outlet Centers, Inc.	Retail	USA	100.8%
Extra Space Storage	Self-Storage	USA	99.6%
Life Storage	Self-Storage	USA	98.6%
National Storage Affiliates Trust	Self-Storage	USA	96.5%
Nyfosa AB	Ind./Office	SWED	95.9%
Independence Realty Trust	Residential	USA	95.9%
Simon Property Group, Inc.	Retail	USA	92.3%
Mid-America Apartment Communities, Inc.	Residential	USA	84.3%
* Annual returns			

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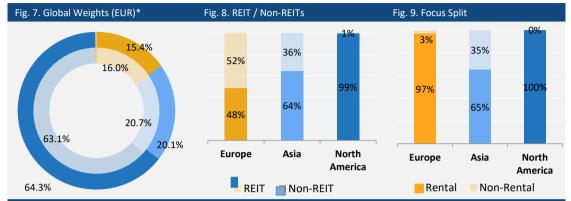


Fig. 10. Dividend Yields* Fig. 11. Volatility (10 yr. & 3 yr.)** Fig. 12. Correlation (3 yr. rolling) 5.0% 25% 80% 20.7% 19.4% 4.0% 17.8% 20% 60% 3.0% 40% 15% 20% 2.0% 10% 0% 1.0% 5% -20% 0.0% 0% Real Real Bonds vs Europe Asia North Asia North Estate vs Estate vs Equities Europe America America Bonds

Table 1. Developed Europe Return by Sector (%)***

Dev. Europe: Month	ly Total R	eturn											1 yr	Since
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	31-Dec-21	19-Feb-20
Developed Europe	-2.7%	-1.2%	3.6%	5.1%	4.1%	0.5%	6.6%	2.6%	-8.5%	5.5%	0.3%	1.9%	18.3%	-0.5%
Industrial	4.2%	-2.9%	3.7%	5.3%	5.1%	3.9%	11.4%	7.1%	-8.5%	10.1%	6.0%	3.7%	59.5%	59.5%
Self-Storage	3.2%	3.7%	0.9%	3.9%	10.8%	-0.1%	12.8%	7.5%	-8.4%	12.1%	8.5%	7.0%	79.6%	51.9%
Residential	-6.4%	-3.9%	4.0%	4.9%	2.3%	2.2%	4.4%	1.5%	-8.0%	0.6%	-2.2%	0.9%	-0.8%	5.0%
Healthcare	-1.0%	4.1%	-1.8%	2.0%	3.0%	2.8%	7.9%	1.6%	-10.8%	5.7%	-1.8%	1.0%	12.2%	-3.7%
Diversified	-3.5%	1.7%	3.3%	5.1%	4.5%	-1.6%	7.2%	2.3%	-7.4%	7.1%	0.4%	2.0%	21.9%	-6.9%
Office	-1.5%	-0.9%	3.1%	3.4%	5.3%	-1.4%	7.8%	-0.1%	-8.8%	4.1%	-0.1%	2.0%	12.6%	-15.6%
Lodging/Resorts	-13.7%	18.0%	-1.8%	0.8%	0.5%	-1.3%	-2.3%	-0.8%	-2.3%	11.3%	-16.3%	11.2%	-1.9%	-31.4%
Retail	5.0%	-3.6%	8.2%	5.7%	4 1%	-4.0%	0.6%	2.3%	-10.4%	1.5%	-7.0%	7 9%	8.7%	-36.7%

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

Real Estate Association

European Public

(***) Data is compiled from the FEN Index series (as of 31 December 2021).

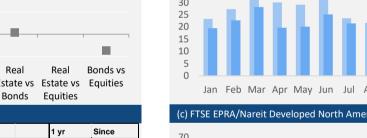


Fig. 13 (a) TSE EPRA/Nareit Developed Europe Turnover*



(b) FTSE EPRA/Nareit Developed Asia Turnover



(c) FTSE EPRA/Nareit Developed North America Turnover



All in EUR billion (Shaded bars 2020).

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FTSE EPRA Nareit Developed Europe Index

During December 2021, the FEN Developed Europe Index increased by 1.9%, while Europe equities gained 4.9% and bonds lost 2.4%. Over a one-year period, Europe real estate index gained 18.3% compared to gains of 23.1% from European equities and 3.2% from European bonds.

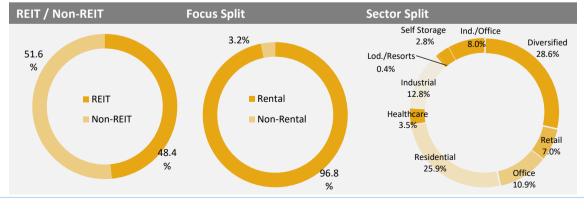
Focusing on country performances in 2021, Sweden (41.6%), the UK (37.4%) and Belgium (31.1%) were outperformers, followed by Ireland (17.2%) and Spain (17.0%). On the other hand, Germany (-4.4%) was the bottom performer, and the remaining countries posted positive but relatively lower returns.

During the quarterly review, *Home REIT* (UK, Rental, Non-REIT, Residential) has been added to the index and there was no deletion. *BMO Real Estate Investments* (UK) was reclassified from the "Diversified" sector to "Industrial/Office Mixed."

Annual performance of sectors: Self-storage (79.6%), industrial (59.5%) and industrial/office (43.5%) outperformed during 2021 and posted the highest annual returns, followed by diversified (21.9%), office (12.6%), healthcare (12.2%) and retail (8.7%). On the other hand, residential (-77 bps) and lodging/resorts (-1.9%) were underperformers and the only sectors posting negative annual returns.

Industrial and residential sectors were resilient since the beginning of the pandemic and already returned to pre-Covid19 levels at the end of 2020. Industrial kept its momentum during 2021 while residential lost some ground which can be seen in the bottom performers' list. On the other hand, self-storage performance was remarkable this year and it is trading above the pre-Covid19 level.

Developed Europe representing a free float MCap of around **EUR 280 billion** with **106** constituents, as of 31/12/2021



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FTSE EPRA Nareit Developed Europe - Country Indices

% Total Returns	Dec-21	1 yr	3 yrs*	5 yrs*	10 yrs*
Europe (EUR)	1.9	18.3	11.4	7.6	11.4
Europe ex UK (EUR)	0.4	11.5	9.9	7.8	11.5
UK (GBP)	3.8	28.9	12.3	6.8	10.7
France (EUR)	3.9	6.8	2.6	-0.1	6.9
Netherlands (EUR)	5.9	0.5	-16.3	-16.4	-4.3
Germany (EUR)	-0.4	-4.4	7.8	10.9	15.8
(*) Annualised					

(*) Annualised.

FTSE EPRA Nareit Developed Europe – Top 5 Performers*

Company	Sector	Country	Total Return
Samhällsbyggnadsbolaget i	Diversified	SWED	134.9%
Norden AB			
Nyfosa AB	Industrial/Office	SWED	95.9%
Safestore Holdings	Self-Storage	UK	83.2%
Shurgard Self Storage SA	Self-Storage	BELG	65.1%
Big Yellow Group Plc	Self-Storage	UK	59.0%

FTSE EPRA Nareit Developed Europe – Bottom 5 Performers*

Company	Sector	Country	Total Return
Adler Group SA	Residential	GER	-60.8%
Deutsche EuroShop AG	Retail	GER	-20.4%
Deutsche Wohnen SE	Residential	GER	-11.3%
HIAG Immobilien Holding AG	Diversified	SWIT	-11.1%
Triple Point Social Housing REIT PLC	Residential	UK	-8.5%
* Annual returns			

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FTSE EPRA Nareit Developed Asia Index

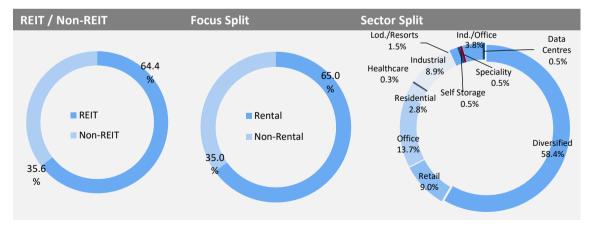
The FEN Developed Asia Index gained 1.5%, compared to a gain of 1.6% from equities and a loss of 88 bps from bonds, during December. Asia real estate index posted an annual return of 12.3%, while Asia equities and bonds gained 13.2% and 6.5%, respectively, during the same period.

Focusing on country performance, Australia (18.5%) and Japan (14.5%) posted the highest annual returns, followed by Singapore (5.9%) and Hong Kong (3.6%), with positive but lower returns – *in local currencies*.

During the quarterly review, five Japanese companies namely *CRE Logistics REIT* (Industrial, REIT), *Itochu Advance Logistics Investment* (Industrial, REIT), *Mirai* (Diversified, REIT), *Star Asia Investment* (Diversified, REIT), *Sankei Real Estate* (Office, REIT), and Australian *Irongate Group* (REIT, Industrial/Office) have been added to the index. Two companies were reclassified: *Charter Hall Long WALE REIT* (Australia) from "Diversified" to "Industrial/Office Mixed" and *Nippon REIT Investment Corporation* (Japan) from "Office" to "Diversified". Besides, three companies changed its REIT status from Non-REIT to REIT: *Abacus Property Group* (Australia), *Aventus Group* (Australia) and *Argosy Property* (New Zealand).

Annual performance of sectors: Industrial (20.0%), residential (19.4%) and office (18.0%) were outperformers posting higher positive annual returns, followed by retail (12.7%), diversified (10.2%) and industrial/office (9.8%). Meanwhile, lodging/resorts (5.8%) was the bottom performer with relatively lower annual return.

Developed Asia representing a free float MCap of over EUR 367 billion with 131 constituents, as of 31/12/2021.



FTSE EPRA Nareit Asia - Country Indices

% Total Returns	Dec-21	1 yr	3 yrs*	5 yrs*	10 yrs*
Asia (EUR)	1.5	12.3	3.7	3.3	8.1
Hong Kong (HKD)	2.1	3.6	-1.9	4.4	5.3
Japan (JPY)	2.40	14.5	5.9	3.2	11.3
Australia (AUD)	3.67	18.5	5.3	5.3	11.7
Singapore (SGD)	1.2	5.9	9.5	9.7	9.5
(*) Appualized					

(*) Annualised.

FTSE EPRA Nareit Developed Asia – Top 5 Performers*

Company	Sector	Country	Total Return
National Storage REIT	Self-Storage	AU	43.9%
Daiwa House REIT Investment	Residential	JA	41.0%
Parkway Life REIT	Healthcare	SI	36.2%
Hongkong Land Holdings	Office	НК	31.2%
Nippon Prologis REIT	Industrial	JA	29.5%

FTSE EPRA Nareit Developed Asia – Bottom 5 Performers*

Company	Sector	Country	Total Return
Hang Lung Properties Ltd.	Diversified	НК	-17.8%
City Developments	Diversified	SI	-12.7%
Hysan Development Company Ltd.	Diversified	НК	-10.2%
Swire Properties	Diversified	НК	-9.3%
New World Development Company Limited	Diversified	НК	-8.8%
* Annual returns			

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FTSE EPRA Nareit North America Index

The FEN North America Index returned 7.5%, compared to a gain of 3.3% from equities and a loss of 1.2% from bonds in December. North America real estate index increased by 53.4% on annual basis, while North America equities and bonds posted 36.3% and 4.6% annual returns, respectively.

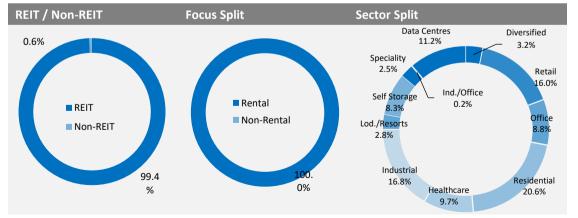
Over a one-year period, the U.S. Index and the Canada Index posted annual returns of 42.8% and 36.5%, respectively - *in local currencies*.

During the quarterly review, *Inventrust Properties* (USA, Rental, REIT, Retail) has been added to the index and there was no deletion in the North American index.

Annual performance of sectors: Self-storage (93.1%) and industrial (73.1%) were top performers followed by residential (68.3%), retail (62.8%), diversified (39.9%), specialty (34.6%), data centres (31.2%) and office (29.9%). Meanwhile, industrial/office (18.1%) and healthcare (24.7%) were bottom performers with still positive but relatively lower returns in the North America region. The remaining sectors posted also positive annual returns during 2021.

Similar to the other regions, self-storage and industrial sectors provided the highest returns in the North America region. Retail and office sectors gained some momentum during 2021 benefitting from the easing of restrictions.

Developed North America representing a free float MCap of around **EUR 1.2 trillion** with **143** constituents as of 31/12/2021.



FTSE EPRA Nareit Developed North America - Country Indices

% Total Return	Dec-21	1 yr	3 yrs*	5 yrs*	10 yrs*
North America (USD)	8.6	42.6	17.0	10.0	10.5
United States (USD)	8.63	42.8	17.1	9.9	10.9
Canada (CAD)	7.3	36.5	12.4	10.2	8.8

(*) Annualised.

FTSE EPRA Nareit Developed North America – Top 5 Performers*

Company Nexpoint Residential Trust	Sector Residential	Country USA	Total Return 101.5%
Tanger Factory Outlet Centers, Inc.	Retail	USA	100.8%
Extra Space Storage	Self-Storage	USA	99.6%
Life Storage	Self-Storage	USA	98.6%
National Storage Affiliates Trust	Self-Storage	USA	96.5%

FTSE EPRA Nareit Developed North America – Bottom 5 Performers*

Compan Diversifie	y ed Healthcare Trust	Sector Healthcare	Country USA	Total Return -24.0%
Service F	Properties Trust	Diversified	USA	-23.2%
Sabra He	alth Care REIT	Healthcare	USA	-15.1%
National	Health Investors, Inc.	Healthcare	USA	-11.4%
Omega H	lealthcare Investors, Inc.	Healthcare	USA	-11.2%
* Appual ra	turne			

* Annual returns

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FTSE EPRA Nareit Emerging Index

During December 2021, the FEN Emerging Index lost 7bps, resulting in a negative 6.8% annual return. Meanwhile, emerging equities and bonds gained 1.0% and 76 bps for the month, respectively. As a result, annual return stands at 7.5% for equities and 5.9% for bonds.

Based on cumulative returns (since 19/02/2020), the FEN Emerging index is still performing quite below its pre-Covid19 level with -28.2% cumulative return. Indeed, emerging markets has been fragile since the beginning of the pandemic, with financing conditions, inflation and volatility in exchange rates putting additional pressure. Moreover, property market developments in China and the Evergrande case created some concerns (more in the EPRA report: *Emerging Markets Reports – Special Edition*).

During the quarterly review, there was a total of ten changes, with six companies deleted in the APAC region due to the implementation of the size threshold change within the Emerging APAC region. As from the Q4 2021 Index review, the basis points threshold for adding a non-constituent Emerging Markets Asian security changed from 0.20% to 0.30% and the basis points threshold for deleting an existing Emerging Markets Asian constituent has changed from 0.10% to 0.15%. Five Chinese companies, namely *Central China Real Estate (P Chip), China Merchants Land (Red Chip), Greenland Hong Kong Holdings (Red Chip), Shanghai Industrial Urban Development Group (Red Chip)* and Shinsun Holdings (Group) (P Chip), one Malaysian company *UEM Sunrise* in emerging APAC region and *Akmerkez Gayrimenkul Yatirim Ortakligi AS (Turkey)* in emerging EMEA have been deleted from the index. In addition, *Derayah REIT Fund Units (Saudi Arabia, Rental, REIT, "Diversified"), Moura Dubeux Engenharia SA (Brazil, Rental Non-REIT, Residential)* and *Trisul SA (Brazil, Rental Non-REIT, Residential)* have been added to the emerging index.

Annual performance of top/bottom countries: Czechia (77.8%), India (49.9%), UAE (42.7%) and South Africa (42.7%) were top performers and the remaining countries posted also positive annual returns, except for Turkey (-40.5%), Brazil (-27.9%), Chile (-24.5%), Russia (-21.7%) China (-19.4%) and Philippines (-9.7%), which were bottom performers in the emerging index.

Annual performance of sectors: Healthcare (65.6%) was the outperformer followed by industrial (30.2%), office (11.7%) and retail (6.1%%) while diversified (-10.8%) and residential (-10.7%) were bottom performers and the only sectors which posted negative returns in the emerging index.

At the end of December 2021, the <u>FEN Emerging Index</u> counted a total of **145** constituents, representing a free float market capitalisation of around **EUR 135 billion**.

FTSE EPRA Nareit Emerging - Country Indices

% Total Returns	Dec-21	1 yr	3 yrs*	5 yrs*	10 yrs*
Emerging (EUR)	-0.1	-6.8	-2.6	2.9	5.8
Emerging EMEA (EUR)	2.8	32.2	-5.1	-7.2	3.1
Emerging Europe (EUR)	2.8	25.8	32.3	2.4	3.3
Emerging MEA (EUR)	2.9	33.8	-8.4	-8.2	3.6
Emerging APAC (EUR)	-2.1	-11.8	-3.1	5.1	9.7
Emerging Americas (EUR)	11.7	-10.3	-3.6	-2.8	-8.1
(*) Annualised.					

FTSE EPRA Nareit Emerging – Top 10 Constituents

Company	Sector	Country	Total Return
China Resources Land Ltd	Diversified	CHN	7.3%
China Overseas Land & Investment Ltd.	Residential	CHN	16.5%
Longfor Group Holdings (P Chip)	Diversified	CHN	-15.9%
Country Garden Holdings	Residential	CHN	-31.2%
SM Prime Holdings	Diversified	PHIL	-11.7%
Ayala Land	Diversified	PHIL	-9.6%
Central Pattana Public Company Limited	Retail	THAI	19.8%
China Vanke Co., Ltd (H)	Residential	CHN	-26.6%
Sunac China Holdings (P Chip)	Diversified	CHN	-51.9%
Aldar Properties PJSC	Diversified	UAE	N.A
ETSE EDRA Nareit Emerging - Ton 10 Perf	ormore		

FTSE EPRA Nareit Emerging – Top 10 Performers

Company	Sector	Country	Total Return
VGP NV	Industrial	CZE	111.79
Brigade Enterprises	Diversified	IDA	97.31
Prestige Estates	Diversified	IDA	78.97
Vukile Property Fund	Retail	SAF	72.33
DLF	Diversified	IDA	68.54
Attacq Limited	Diversified	SAF	60.76
Emira Property Fund	Diversified	SAF	60.46
Emaar Development PJSC	Residential	UAE	58.91
First Real Estate Investment Trust	Healthcare	INDO	58.83
Sansiri	Residential	THAI	56.79

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EPRA Developers Research Benchmark 31 December 2021



Historical Performance	Last Month	1 Year	3 Years	5 Years
Total Return	8.4%	20.3%	66.0%	74.2%
Total Return (Annualized)		20.3%	22.0%	14.8%

Return	3 Months	6 Months	Year to Date	5 Years
Total Return	8.1%	7.0%	20.3%	74.2%
Maximum Return	3.1%	3.1%	5.1%	11.6%
Minimum Return	-4.9%	-4.9%	-4.9%	-13.2%
Mean Return (Annualized)	58.4%	24.4%	34.0%	23.9%
Maximum Drawdown	-4.9%	-11.3%	-11.9%	-55.2%
Maximum Drawdown Length	1	26	90	23

Risk	3 Months	6 Months	Year to Date	5 Years
Standard Deviation (Annualized)	20.5%	21.2%	22.2%	29.0%
Downside Risk (Annualized)	15.0%	15.9%	15.6%	20.4%
Kurtosis	2.60	1.40	1.50	9.32
Skewness	-0.54	-0.57	0.10	0.10
Semivariance (Annualized)	21.0%	23.3%	22.2%	28.9%
VaR (ex-post)	-1.70	-2.19	-2.20	-2.57

Risk-Adjusted Performance	3 Months	6 Months	Year to Date	5 Years
Sharpe Ratio	1.93	0.82	1.07	0.58

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

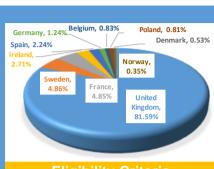
Key Features

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 11



	EPRA Developers 31 De	s Researd		mark
Constituent	ISIN	Weight	Country	Currency
PERSIMMON	GB0006825383	17.7%	UK	GBp
BARRATT DEV	GB0000811801	14.9%	UK	GBp
TAYLOR WIMPEY	GB0008782301	12.5%	UK	GBp
BERKELEY GROUP	GB00BLJNXL82	10.0%	UK	GBp
BELLWAY	GB0000904986	8.2%	UK	GBp
VISTRY GROUP	GB0001859296	5.1%	UK	GBp
REDROW	GB00BG11K365	4.7%	UK	GBp
COUNTRYSIDE	GB00BYPHNG03	4.3%	UK	GBp
CREST NICHOLS	GB00B8VZXT93	1.8%	UK	GBp
WATKIN JONES	GB00BD6RF223	0.9%	UK	GBp
MJ GLEESON	GB00BRKD9Z53	0.7%	UK	GBp
HARWORTH GROUP	GB00BYZJ7G42	0.7%	UK	GBp
JM	SE0000806994	4.5%	Sweden	SEK
BONAVA	SE0008091573	0.3%	Sweden	SEK
NEXITY	FR0010112524	2.9%	France	EUR
ALTAREA	FR0000033219	1.0%	France	EUR
KAUFMAN & BROAD	FR0004007813	1.0%	France	EUR
GLENVEAGH PROPER	IE00BD6JX574	1.6%	Ireland	EUR
CAIRN HOMES	IE00BWY4ZF18	1.2%	Ireland	GBp
NEINOR HOMES	ES0105251005	1.0%	Spain	EUR
METROVACESA	ES0105122024	0.8%	Spain	EUR
AEDAS HOMES	ES0105287009	0.4%	Spain	EUR
INSTONE REAL EST	DE000A2NBX80	1.2%	Germany	EUR
IMMOBEL	BE0003599108	0.5%	Belgium	EUR
ATENOR	BE0003837540	0.3%	Belgium	EUR
DEVELIA	PLLCCRP00017	0.5%	Poland	PLN
DOMDEV	PLDMDVL00012	0.3%	Poland	PLN
HUSCIET	DK0061412855	0.5%	Denmark	DKK
SELVAAG BOLIG	NO0010612450	0.4%	Norway	NOK

Developers Sub-Indexes: Risk and Return	3 Months	6 Months	Year to Date	5 Years
Residential Developers: Total Return	8.72%	7.26%	19.63%	74.32%
Residential Developers: Standard Deviation (Annualized)	21.27%	22.11%	23.36%	29.91%
Liquid Developers: Total Return	8.64%	7.03%	19.71%	78.21%
Liquid Developers: Standard Deviation (Annualized)	21.02%	21.77%	22.91%	29.57%



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)

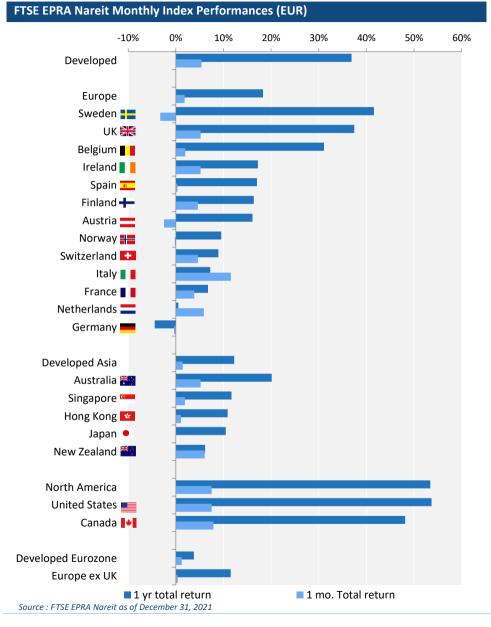
Geography: ≥ 75% EBITDA from Developed countries

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





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Index Ground Rules Version 10.5

Emerging Markets 2021

(special edition)

Sector Analysis: Residential

Sector Analysis: Office (Aug-21)

Total Markets Table 2021-Q3 (quarterly)

Explore our interactive infographic Global Real Estate Total Markets Table

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