

Special Report

Institutional Real Estate, Inc Global Investment Managers 2018

Prepared by:

Property funds research

6 St Giles Court Southampton Street Reading RG1 2QL United Kingdom Phone: +44 (0)118-958 5848 Fax: +44 (0)118-958 5849 www.propertyfundsresearch.com

Institutional Real Estate, Inc.

2274 Camino Ramon San Ramon, CA 94583 USA Phone: +1 925-244-0500 Fax: +1 925-244-0520 www.irei.com

© 2018 Institutional Real Estate, Inc All Rights Reserved

Table of Contents:

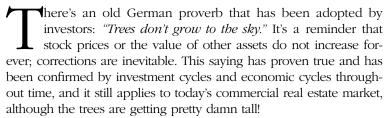


Survey highlights	1
Largest investment managers by region	3
Total assets rankings	 4
Discretionary separate accounts	12
Advisory separate accounts	10
Indirect real estate vehicles	20
About Institutional Real Estate, Inc. and Property Funds Research	27

Very tall trees

Investment managers prosper as commercial real estate pushes higher

by Larry Gray



For example, the current economic expansion in the United States is the second-longest on record, reaching the nine-year mark in mid-2018. And, across the globe, nearly every major region is enjoying solid economic growth and prosperity. In other words, it's a good time to be an investment manager.

In today's low-yield environment, real estate remains in high demand, delivering steady income and solid returns. The asset class's popularity is reflected in the AUM figures of real estate investment managers around the globe, who have seen their coffers grow significantly due to expanding capital flows and asset appreciation.

The aggregate AUM of the top 100 largest investment managers totaled more than €2.71 trillion, according to *Global Investment Managers 2018*, the annual survey and report produced by Property Funds Research and Institutional Real Estate, Inc. For some perspective, at year-end 2008, the aggregate AUM of the top 100 investment managers totaled €1.44 trillion.

A total of 197 real estate investment managers across the globe responded to the survey, representing an aggregate AUM of nearly €2.90 trillion.

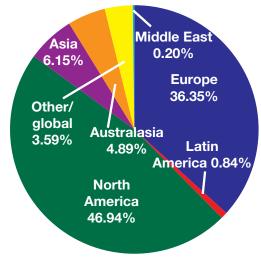
The top 10 largest investment managers accounted for €961.5 billion of AUM, which represents 33.2 percent of the total. This group of managers saw their AUM increase 11.2 percent from year-end 2016. The 2017 report, based on 2016 AUM figures, showed only three investment managers with assets of more than €100 billion. Similarly, in this year's rankings, three firms eclipsed the €100 billion mark.

Holding on to the No. 1 spot from last year's rankings, Black-stone topped the list with nearly €161.5 billion of AUM, followed by Brookfield Asset Management and PGIM, with €137.5 billion and €108.0 billion, respectively.

Rounding out the top 10 were Hines, Nuveen/TH Real Estate, CBRE Global Investors, UBS Global Asset Management, AXA Investment Managers – Real Assets, Swiss Life Asset Managers and J.P. Morgan Asset Management – Global Real Assets. (The complete list of investment managers, which includes total AUM and AUM by geographic region, starts on page 4.)

Indicative of the top-heavy nature of the industry, the top 20 firms in the survey represent total AUM of approximately €1.49 trillion, more than the aggregate AUM of the other 177 firms in the

Assets under management by geographic distribution



Sources: Property Funds Research; Institutional Real Estate, Inc.

field (€1.41 trillion). Even more remarkable, the top 20 firms in this year's survey manage nearly as much AUM today as the top 100 firms did five years ago.

Looking at total market AUM on a geographic basis, North America-based assets account for approximately 47 percent, while Europe represents 36 percent. Asia claims 6 percent of the assets and Australasia accounts for 5 percent, while Latin America tallies roughly 1 percent.

Brookfield Asset Management ranks as the largest investment manager based on AUM just in North America. The firm manages \notin 97.8 billion in the region. In Europe, the top-ranking manager is Swiss Life Asset Managers, with AUM of \notin 69.2 billion, and in Asia, GLP claims the most assets with AUM of \notin 21.0 billion. In the Australasia region, AMP Capital ranks No. 1 with AUM of \notin 18.5 billion. Logistics specialist GLP also oversees the most assets in Latin America, with AUM of \notin 2.92 billion. (For rankings of the top 10 largest investment managers in each region, see page 3.)

The report also ranks real estate managers based on their total AUM in the categories of discretionary separate accounts under man-

Top 100 firms in aggregate (AUM, € trillion)



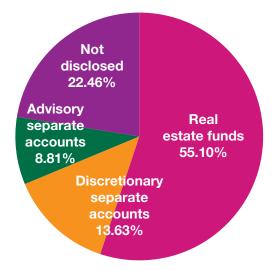
Sources: Property Funds Research; Institutional Real Estate, Inc.

agement, advisory separate accounts and assets, and indirect real estate investment vehicles. PGIM manages the most capital based solely on discretionary separate accounts, with AUM of €57.3 billion (see page 12). In the category of advisory separate accounts, Principal Real Estate Investors tops the list, with AUM of approximately €36.0 billion (see page 16). And based on indirect real estate investment vehicles, Blackstone ranks highest, with an asset base of more than €153.4 billion (see page 20). ❖

Larry Gray is editorial director of Institutional Real Estate, Inc.

The survey was conducted by U.K.-based Property Funds Research (PFR). PFR is an independent management-owned business that provides confidential research and strategic consulting for investors in European real estate. PFR's foundations are an expert team, a suite of products for underwriting investments in the European market, and access to a unique dataset describing the major investors, vehicles, and managers in the European and global institutional property markets. For more information, please visit www.propertyfundsresearch.com. For additional information on the global fund manager survey, contact Jane Fear at +44 (0)118-958 5848 or jf@ propertyfundsresearch.com.

Assets under management by investment structure



Sources: Property Funds Research; Institutional Real Estate, Inc.

Largest investment managers by region

TOP 1	O MANAGERS BASED ON EUROPE ASSE	TS (€M)	
Rank	Investment manager	Europe	Total
1	Swiss Life Asset Managers	69,172.57	69,258.08
2	AXA Investment Managers – Real Assets	66,371.00	71,115.00
3	Blackstone	45,932.83	161,542.07
4	Aberdeen Standard Investments	45,862.33	49,070.76
5	Credit Suisse Real Estate Investment Management	44,633.51	48,797.33
6	CBRE Global Investors	44,505.16	86,009.98
7	Aviva Investors	39,089.04	39,828.29
8	Patrizia Immobilien AG	37,720.00	39,707.00
9	Deka Immobilien Investment/WestInvest	35,656.00	38,863.00
10	M&G Real Estate	32,345.47	37,802.40

TOP 1	O MANAGERS BASED ON NORTH AMERI	CA ASSETS (€	M)
Rank	Investment manager	North America	Total
1	Brookfield Asset Management	97,819.68	137,452.61
2	PGIM	84,956.52	108,008.36
3	Hines	69,401.38	91,728.14
4	Nuveen/TH Real Estate	62,307.23	90,940.55
5	JP Morgan Asset Management-Global Real Assets	62,015.53	69,042.17
6	MetLife Investment Management	60,672.04	68,936.00
7	Principal Real Estate Investors	59,237.15	63,322.81
8	Clarion Partners	37,124.31	37,275.99
9	Starwood Capital Group	36,317.55	43,334.19
10	Barings Real Estate Advisors	36,124.19	40,792.23

TOP 10	MANAGERS BASED ON ASIA ASSETS	(€M)	
Rank	Investment manager	Asia	Total
1	GLP	21,002.44	40,421.36
2	UBS Asset Management Global Real Estate	13,248.81	76,411.33
3	Ascendas-Singbridge	11,898.85	13,612.04
4	IGIS Asset Management	11,584.66	15,480.34
5	LaSalle Investment Management	11,368.82	49,194.04
6	Blackstone	9,196.90	161,542.07
7	CBRE Global Investors	8,500.99	86,009.98
8	Gaw Capital Partners	8,212.20	11,612.18
9	Prologis	7,384.94	38,519.80
10	Brookfield Asset Management	7,085.82	137,452.61

TOP 10	MANAGERS BASED ON AUSTRALASIA	ASSETS (€M)	
Rank	Investment manager	Australasia	Total
1	AMP Capital	18,526.87	22,430.29
2	Dexus	17,258.23	17,258.23
3	Charter Hall Group	14,262.46	14,262.46
4	The GPT Group	14,001.96	14,001.96
5	LendLease Investment Management	13,546.08	18,169.99
6	QIC	9,776.63	12,606.32
7	ISPT	9,716.71	9,716.71
8	Brookfield Asset Management	6,809.96	137,452.61
9	Investa Property Group	6,544.78	6,544.78
10	MetLife Investment Management	3,958.04	68,936.00

Total assets rankings

	Total gross value of r	eal estate ass	ets under n	nanagement (gr	oss, € million, a	as at 31 Dec	cember 2017)		
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
1	Blackstone	161,542.07	45,932.83	24,467.84	_	9,196.90	_	_	81,944.50
2	Brookfield Asset Management	137,452.61	23,571.07	97,819.68	2,001.90	7,085.82	6,809.96	164.19	_
3	PGIM	108,008.36	9,603.61	84,956.52	2,769.49	6,733.28	467.55	_	3,477.90
4	Hines	91,728.14	17,247.00	69,401.38	2,611.14	2,102.74	365.88	_	_
5	Nuveen/TH Real Estate	90,940.55	26,343.89	62,307.23	135.85	1,417.66	735.92	_	_
6	CBRE Global Investors	86,009.98	44,505.16	33,003.83	_	8,500.99	_	_	_
7	UBS Asset Management Global Real Estate	76,411.33	30,137.52	31,552.61	188.96	13,248.81	1,283.41		_
8	AXA Investment Managers — Real Assets	71,115.00	66,371.00	996.00	_	588.00	3,160.00	_	_
9	Swiss Life Asset Managers	69,258.08	69,172.57	13.68	32.49	26.51	4.28	8.55	_
10	JP Morgan Asset Management – Global Real Assets	69,042.17	5,118.09	62,015.53		1,765.20	143.35		_
11	MetLife Investment Management	68,936.00	3,633.92	60,672.04	671.24	0.33	3,958.04	0.42	_
12	Principal Real Estate Investors	63,322.81	1,726.88	59,237.15	47.91	1,950.89	359.98	_	_
13	AEW	58,620.97	28,458.30	28,129.93	_	1,781.87	250.86	_	_
14	Invesco Real Estate	55,333.08	8,959.37	24,850.38	_	4,587.20	_	_	16,936.13
15	DWS	49,303.60	23,867.70	21,349.50	_	2,433.80	1,652.60	_	_
16	LaSalle Investment Management	49,194.04	20,351.53	16,223.55	20.00	11,368.82	1,206.81	23.34	_
17	Aberdeen Standard Investments	49,070.76	45,862.33	2,124.70	_	1,083.73	_		_
18	Credit Suisse Real Estate Investment Management	48,797.33	44,633.51	1,680.19	1,503.51	_	980.11		_
19	Starwood Capital Group	43,334.19	6,659.11	36,317.55	176.69	180.85	_	_	_
20	Barings Real Estate Advisors	40,792.23	4,549.69	36,124.19		94.18	24.17	_	_
21	GLP	40,421.36	3,500.41	13,001.51	2,917.01	21,002.44	_	_	_
22	Tishman Speyer	40,388.02	7,230.84	26,848.11	1,263.48	5,045.59	_	_	_
23	Aviva Investors	39,828.29	39,089.04	283.67		455.57	_	_	_
24	Patrizia Immobilien	39,707.00	37,720.00	1,416.00	210.00	361.00	_	_	_
25	Deka Immobilien Investment/WestInvest	38,863.00	35,656.00	1,433.00	607.00	782.00	385.00	_	_
26	Prologis	38,519.80	14,880.23	16,078.03	176.60	7,384.94	_	_	_
27	M&G Real Estate	37,802.40	32,345.47	2,115.70	_	_	3,341.23	_	_

	Total gross value of r	eal estate ass	ets under n	nanagement (gr	oss, € million, a	as at 31 Dec	cember 2017)		
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
28	Clarion Partners	37,275.99	_	37,124.31	151.68	_	_	_	_
29	Colony NorthStar	35,587.46	6,250.73	29,086.71	83.34	_	_	166.69	_
30	Union Investment Real Estate	35,012.50	29,263.80	4,579.90	359.20	565.30	244.30	_	_
31	Heitman	32,398.76	4,732.22	26,156.37		1,135.13	375.04	_	_
32	Cohen & Steers Capital Management	31,682.01	2,111.91	26,372.23	42.50	2,228.59	926.77	_	_
33	Bentall Kennedy	31,021.93	_	31,021.93		_	_	_	_
34	Morgan Stanley Real Estate Investing	28,891.68	6,064.04	20,778.24	2.00	1,713.53	315.87	_	_
35	BNP Paribas Real Estate Investment Management	27,403.00	27,282.70	_	_	120.30		_	_
36	LGIM Real Assets	24,892.13	24,892.13	_		_	_	_	_
37	AMP Capital	22,430.29	621.95	2,201.82	_	1,079.65	18,526.87	_	_
38	CIM Group	21,450.82	_	21,450.82			_	_	
39	Greystar	21,246.63	5,133.10	15,904.34	209.19		_	_	_
40	Angelo Gordon & Co	20,589.05	1,320.99	17,772.89	1,495.17			_	_
41	BlackRock	18,828.02	5,998.20	8,110.94		3,152.03	_	_	1,566.85
42	LendLease Investment Management	18,169.99	911.76	_		3,712.15	13,546.08	_	_
43	Dexus	17,258.23	_	_			17,258.23	_	_
44	USAA Real Estate Co	17,071.98	137.52	16,934.46		_		_	_
45	Savills Investment Management	16,452.00	15,128.00	325.00		999.00	_	_	_
46	La Francaise Real Estate Managers	16,149.00	16,149.00		_	_		_	_
47	IGIS Asset Management	15,480.34	1,498.51	2,397.17		11,584.66	_	_	_
48	Schroder Real Estate Investment Management	14,868.43	14,024.40	639.21	1.13	131.67	72.02	_	_
49	Charter Hall Group	14,262.46	_	_			14,262.46	_	_
50	The GPT Group	14,001.96	_	_	_	_	14,001.96	_	_
51	Ascendas-Singbridge	13,612.04	_	_	_	11,898.85	1,713.19	_	_
52	Fortress Investment Group	13,229.03	1,069.29	7,685.06	420.05	3,738.77	315.87	_	_
53	QIC	12,606.32	_	2,829.70	_	_	9,776.63	_	_
54	Patron Capital	12,316.00	12,316.00	_	_	_	_	_	_
55	Gaw Capital Partners	11,612.18	1,613.77	1,786.21	_	8,212.20	_	_	_
56	Harrison Street Real Estate Capital	11,396.57	563.73	10,832.84	_	_	_	_	_
57	Rockpoint Group	11,262.22	14.17	11,248.05		_	_	_	_

	Total gross value of r	eal estate ass	ets under n	nanagement (gr	oss, € million, a	is at 31 Dec	ember 2017)		
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
58	Northwood Investors	11,037.95	3,777.10	7,260.84	_	_		_	
59	Partners Group	10,766.25	_	_	_	_	_	_	_
60	Columbia Threadneedle Investments	10,465.97	10,465.97	_	_	_		_	
61	Mirae Asset Global Investments	10,107.84	694.25	3,826.28	424.22	4,651.37	511.73	_	_
62	ISPT	9,716.71	_	_	_	_	9,716.71	_	_
63	DTZ Investors	9,632.07	9,632.07	_	_	_		_	_
64	Bridge Investment Group Partners	9,631.95	_	9,631.95	_	_	_	_	_
65	KBS Realty Advisors	9,618.62	_	9,618.62	_	_	_	_	
66	Stockbridge Capital Group	9,611.95	_	9,611.95	_	_	_	_	_
67	Bouwinvest Real Estate Investment Management	9,424.00	7,771.00	1,024.00	_	629.00	_	_	
68	Tristan Capital Partners	9,149.00	9,149.00	_	_	_		_	
69	Ares Management	9,084.39	2,833.66	6,250.73	_	_		_	_
70	Hermes Real Estate Investment Management	9,078.38	7,850.60	984.70	_	_	243.08	_	
71	Kayne Anderson Real Estate Advisors	8,702.68	_	8,702.68	_	_		_	_
72	Crow Holdings Capital Partners	8,348.13	_	8,348.13	_	_		_	
73	CenterSquare Investment Management	8,276.79	482.56	7,087.49	_	535.90	170.85	_	_
74	Rockwood Capital	8,246.04	_	8,246.04	_	_		_	
75	Quadrant Real Estate Advisors	8,084.27	_	_	_	_		_	_
76	DRA Advisors	8,000.93	_	8,000.93	_	_	_	_	_
77	Royal London Asset Management	7,711.06	7,711.06	_	_	_		_	_
78	Westbrook Partners	7,709.23	_	_	_	_		_	
79	Walton Street Capital	7,686.72	139.18	6,414.08	474.22	659.24	_	_	
80	GreenOak Real Estate	7,415.03	2,728.65	4,012.13	_	674.24		_	
81	L&B Realty Advisors	7,333.35	_	7,333.35	_	_	_	_	_
82	Cromwell Property Group	7,294.04	3,972.65		_	_	3,321.40	_	_
83	GLL Real Estate Partners	6,999.00	3,450.00	3,200.00	300.00	_	49.00	_	_
84	Exeter Property Group	6,971.14	607.82	6,363.32	_		_	_	_
85	American Realty Advisors	6,873.16		6,873.16			_	_	_
86	Investa Property Group	6,544.78	_		_	_	6,544.78	_	_
87	ASB Capital Management	6,524.11	_	6,524.11	_	_	_	_	_

	Total gross value of r	eal estate ass	ets under n	nanagement (gr	oss, € million, a	is at 31 Dec	ember 2017)		
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
88	BMO Real Estate Partners	6,338.10	6,338.10	_	_		_	_	_
89	Berkshire Group	6,063.20	_	6,063.20	_	_	_	_	_
90	Sentinel Real Estate Corp	5,834.84	29.17	5,799.84	_	_	5.83	_	_
91	Mesa West Capital	5,823.01	_	5,823.01	_	_	_	_	_
92	Landmark Partners	5,818.84	_	_	_	_	_	_	_
93	Intercontinental Real Estate Corp	5,735.67	5,735.67	_	_	_	_	_	_
94	Meyer Bergman	5,611.00	5,316.00	295.00	_	_	_	_	_
95	PAG Investment Management	5,586.48	_	_	_	5,586.48	_	_	_
96	PCCP	5,436.53	_	5,436.53	_	_		_	_
97	Beacon Capital Partners	5,313.62	_	5,313.62	_	_		_	_
98	Lionstone Investments	5,252.28	_	5,252.28	_	_		_	_
99	Vesteda Investment Management	5,084.00	5,084.00	_	_	_		_	_
100	M7 Real Estate	4,983.50	4,983.50	_	_	_		_	
101	Orchard Street Investment Management	4,774.96	4,774.96	_	_	_	_	_	
102	Timbercreek Asset Management	4,530.67	308.89	4,054.07		118.65	49.05		
103	Divco West Real Estate Services	4,505.27	_	4,505.27	_	_	_	_	—
104	National Real Estate Advisors	4,482.19	_	4,482.19	_	_			
105	Amvest REIM	4,432.00	4,432.00	_	_	_	_	_	
106	Carmel Partners	4,170.40	_	4,170.40	_	_	_		
107	NREP	4,000.00	4,000.00	_	_	_			
108	GTIS Partners	3,968.79	_	1,830.21	2,138.58	_	_		
109	Related Fund Management	3,923.79	_	3,923.79	_	_	_	_	
110	M3 Capital Partners	3,917.12	1,708.53	1,333.49	291.70	208.36	375.04		
111	GEM Realty Capital	3,833.78	_	3,833.78	_	_	_	_	_
112	Unite Integrated Solutions	3,770.00	3,770.00	_	_	_		_	_
113	ICG-Longbow	3,751.99	3,751.99	_	_	_	_	_	_
114	Diamond Realty Management	3,606.53	_	207.14	_	_	3,399.38	_	_
115	NIAM	3,570.00	3,570.00	_	_		_	_	_
116	Pradera	3,444.00	2,541.00	_		903.00	_	_	_
117	Madison Realty Capital	3,348.72	_	3,348.72	_	_	_	_	_

	Total gross value of real estate assets under management (gross, € million, as at 31 December 2017)											
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other			
118	Torchlight Investors	3,278.71	_	3,278.71	_	_	_	_	_			
119	Canyon Partners Real Estate	3,271.21	_	6,523.08	_	_	_	_	_			
120	Blue Vista Capital Management	3,168.70	_	3,168.70	_		_	_	_			
121	Artemis Real Estate Partners	3,096.19	_	3,096.19	_	_	_	_	_			
122	FPA Multifamily	3,049.52	_	3,049.52	_	_	_	_	_			
123	Europa Capital	3,038.00	3,038.00	_	_	_	_	_	_			
124	Carroll Organization	2,878.67	_	2,878.67	_	_		_	_			
125	Oak Street Real Estate Capital	2,720.57	_	2,720.57	_	_	_	_	_			
126	Hahn Group	2,700.00	2,700.00	_	_	_	_	_	_			
127	Principal Real Estate Europe	2,679.00	2,679.00	_	_	_	_	_	_			
128	Equus Capital Partners	2,666.98	_	2,666.98	_	_	_	_	_			
129	Realterm	2,662.98	_	1,933.56	_	729.42	_	_	_			
130	Lowe Enterprises Investment Management	2,644.47	_	2,644.47	_	_	_	_	_			
131	Luber-Adler Partners	2,628.64	_	2,628.64	—	_	_	_				
132	Knight Frank Investment Management	2,461.87	2,461.87	_	_	_	_	_	_			
133	Greenfield Partners	2,420.22	_	2,415.56	4.66	_	_	_	_			
134	Franklin Resources	2,416.61	482.72	1,113.96	2.17	790.26	27.50	_				
135	DRC Capital	2,362.27	2,362.27	_	_	_	_	_	_			
136	LMC	2,322.77	_	2,322.77	_	_		_				
137	Lothbury Investment Management	2,312.30	2,312.30		_	_	_	_	_			
138	Cording Real Estate Group	2,300.00	2,300.00	_	_	_	_	_	_			
139	CS Capital Management	2,075.24	_	2,075.24	_	_	_	_	_			
140	Altera Vastgoed	2,049.00	2,049.00	_	_	_		_	_			
141	InfraRed Capital Partners	2,041.90	1,646.02			395.88		_	_			
142	CITIC Capital	1,853.55	62.51	_		1,791.04	_	_	_			
143	American Real Estate Partners	1,828.06		1,828.06			_	_	_			
144	Bristol Group	1,784.37	_	1,784.37			_	_	_			
145	EURAMCO Group	1,693.00	1,453.00	_	_	143.00	97.00	_	_			
146	Vanbarton Group	1,669.36	_	1,669.36		_		_	_			
147	Fidelity International	1,623.52	1,365.16			_	_	258.36	_			

	Total gross value of re	eal estate ass	ets under n	nanagement (gr	oss, € million, a	is at 31 Dec	ember 2017)		
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
148	Brunswick Real Estate	1,600.00	1,600.00	_	_	_	_	_	_
149	Wheelock Street Capital	1,583.52	_	1,583.52	_	_	_	_	_
150	TGM Associates	1,537.68	_	1,537.68	_	_	_	_	_
151	Sarofim Realty Advisors Co	1,533.51	_	1,533.51	_	_		_	_
152	Abacus Capital Group	1,488.51	_	1,488.51	_	_	_	_	_
153	Hunt Investment Management	1,483.17	14.67	1,468.50	_	_		_	_
154	MaxCap Investment Management	1,433.61	1,433.61	_	_	_	_	_	_
155	Primevest Capital Partners	1,400.00	1,400.00	_	_	_	_	_	_
156	LEM Capital	1,308.32	_	1,308.32	_	_	_	_	_
157	Presima	1,294.95	238.12	685.82	_	298.53	72.48	_	_
158	Guggenheim Real Estate	1,236.81	6.42	1,221.73	2.08	6.58	_	_	
159	Catalyst Capital	1,210.00	1,210.00	_	_	_	_	_	_
160	Avanath Capital Management	1,166.80	_	1,166.80	_	_	_	_	
161	The Praedium Group	1,163.55	_	1,163.55	_	_	_	_	_
162	Patria Investimentos	1,084.18	_		1,084.18	_		_	
163	Grubb Properties	1,072.48	_	_	_	_	_	_	_
164	Palmer Capital	1,037.59	_	_	_	_	_	_	_
165	Long Wharf Real Estate Partners	1,032.62	_	1,032.62	_	_	_	_	_
166	Alex Brown Realty	1,002.62	_	1,002.62	_	_	_	_	
167	Pearlmark	1,000.12	_	1,000.12	_	_	_	_	
168	Colliers Capital	998.21	998.21	_	_	_	_	_	
169	Degroof Petercam Asset Management	970.60	970.60	_	_	_	_	_	_
170	Clearbell Fund Management	932.26	932.26	_	_	_	_		
171	Pactia	916.77	_	183.35	733.42	_	_	_	_
172	Kairos Investment Management Co	900.94	_	900.94	_	_	_	_	_
173	VBI Real Estate	889.02	_		889.02	_	_	_	_
174	Trigate Capital	872.10	_	872.10	_	_	_	_	_
175	AviaRent Invest	859.34	859.34	_	_	_	_	_	_
176	Ascentris	816.51	_	816.51	_	_	_	_	_
177	Argosy Real Estate	789.26	_	789.26	_	_		_	_

	Total gross value of r	eal estate ass	ets under n	nanagement (gr	oss, € million, a	s at 31 Dec	ember 2017)		
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
178	Rynda Property Investors	760.00	760.00	_	_	_		_	_
179	Penwood Real Estate Investment Management	759.25	_	759.25	_	_	_	_	_
180	WHI Real Estate Partners	721.92	_	721.92	_	_		_	_
181	Northern Horizon Capital	703.00	703.00	_	_	_	_	_	_
182	Covenant Capital Group	676.00	_	676.00	_	_	_	_	_
183	Pamfleet	667.19	_	_	_	667.19	_	_	_
184	Propertylink	624.55	_	_	_	_	624.55	_	_
185	The Arden Group	613.40	_	613.40	_	_	_	_	_
186	Velocis	603.15	_	603.15	_	_		_	_
187	IAM Real Estate Group	536.26	_	536.26	_	_	_	_	_
188	Novare Fund Manager	412.55	_	_	_	_	_	_	_
189	BKM Capital Partners	396.43	_	396.43	_	_	_	_	_
190	Newport Capital Partners	388.38	_	388.38	_	_	_	_	_
191	Equity Estate	350.00	350.00	_	_	_	_	_	_
192	Western National Group	310.04	_	310.04	_	_	_	_	_
193	Hutensky Capital Partners	291.70	_	291.70	_	_	_	_	_
194	LendInvest Capital	172.18	172.18	_	_	_	_	_	_
195	Evolve Fund Services	165.43	_	_		_	_	_	_
196	Barwood Capital	144.86	144.86	_	_	_	_	_	_
197	Second Estates	4.50	4.50	_		_	_	_	_

Aberdeen Standard Investments

Standard Life Aberdeen was created in 2017 from the merger of Standard Life and Aberdeen Asset Management.

Ascendas-Singbridge

AUM includes fund and non-fund assets.

AMP Capital

AUM excludes Precinct REIT, valued at AUD\$674 million (€427 million).

Angelo Gordon & Co

A regional breakdown is not readily available for CMBS and RMBS investments, or for the private equity real estate investments in multi-strategy funds. Those investments are predominately focused in North America and have been 100 percent included in that category.

Ares Management

AUM is net.

BMO Real Estate Partners

As from March 2017, BMO REP is now 100 percent owned by BMO GAM.

BNP Paribas Real Estate Investment Management

AUM does not include €5,860 million invested with external real estate managers.

Brookfield Asset Management

Total AUM includes US\$6,112 million (€5,222 million) managed by Brookfield Public Securities Group.

CBRE Global Investors

In August 2017, CBRE Group completed the acquisition of a majority interest in Caledon Capital Management, a Toronto-based investment management business specialising in private infrastructure and private equity investments. Caledon now operates as CBRE Caledon Capital Management, a separate business unit within CBRE's independently-operated investment management subsidiary, CBRE Global Investors.

CenterSquare Investment Management

As at 31 December 2017, CenterSquare was a wholly-owned subsidiary of the Bank of New York Mellon Corp. In January 2018, CenterSquare completed a management-led separation from BNY Mellon.

CIM Group

Total AUM includes acquisition in February 2018 of Cole Capital valued at US\$7,700 million (€6.579 million).

Cording Real Estate Group

Cording entered into a strategic alliance with Edmond de Rothschild and its affiliate, OROX Europe, which completed toward the end of 2017.

Crow Holdings Capital Partners

AUM includes uncalled capital of US\$1,887 million (€1,612 million).

Diamond Realty Management

AUM does not include ¥17,400 million (€132 million) invested with external real estate managers.

Fidelity International

AUM as at 31 March 2018.

Franklin Resources

Operating worldwide as Franklin Templton Investments.

The GPT Group

AUM includes fund and non-fund assets.

Guggenheim Real Estate

AUM is net.

Heitman

Listed figures as at 30 May 2018, included in AUM.

Hine

AUM includes fund and non-fund assets.

IGIS Asset Management

AUM includes 61 joint ventures worth KRW14,268,374 million (€10,800 million).

Invesco Real Estate

AUM includes US\$20,321 million (€17,363 million) in non-geographic public securities

La Française Real Estate Managers

Total AUM includes €819 million held prorata in affiliates through shareholdings.

LEM Capital

AUM as at 31 March 2018.

LGIM Real Assets

AUM includes real estate debt, which was not supplied in previous years.

M7 Real Estate

AUM includes joint ventures worth €3,174 million.

MaxCap Investment Management

AUM includes fund and non-fund assets.

MetLife Investment Management

AUM includes fund and non-fund assets.

Mesa West Capital

On 16 March 2018, Mesa West Capital was acquired by MSREI Holding, a wholly-owned subsidiary of Morgan Stanley.

Morgan Stanley Real Estate Investing

Gross value represents real estate assets under management, which represents gross fair market value of the real estate assets managed by Morgan Stanley on behalf of the firm and its clients, presented as direct ownership interest. Real estate AUM for certain minority interests represents Morgan Stanley's equity investment in the entity. Real estate AUM for MSREF co-investor interests is reported with the main fund.

Northwood Investors

AUM includes uncalled capital of US\$2.426 million (€2.072 million).

Oak Street Real Estate Capital

Total AUM includes US\$1,314 million (€1,122 million) representing properties from Oak Street Real Estate Capital Fund II and the majority of the properties from Oak Street Real Estate Fund III of which a 96 percent stake was sold in August 2017. Oak Street continues to manage these assets.

Palmer Capital

AUM as at 31 March 2018.

Patrizia Immobilien AG

The firm conducted a series of corporate acquisitions in Q4 2017: Sparinvest Property Investors (closed Q4 2017), Triuva (closed Q1 2018) and Rockspring Property Investors (closed Q1 2018). Total AUM includes joint ventures (€465 million), funds in liquidation (€293 million), balance sheet assets (€159 million) and others (€2.219 million).

PGIM (PGIM is a business of Prudential Financial)

Total real estate AUM as presented are the combined assets of PGIM Real Estate and PGIM Real Estate Finance, two business units within PGIM that provide real estate investment management and commercial mortgage loan services respectively through PGIM and some of its global subsidiaries. Until May 2016, PGIM Real Estate and PGIM Real Estate Finance were known as Prudential Real Estate Investors and Prudential Mortgage Capital Co respectively, and Pramerica Real Estate Investors and Pricoa Mortgage Capital, respectively, outside of the Americas, South Korea and Japan.

Primevest Capital Partne

Founded in 2018 following a management buyout of parts of Bouwfonds IM, including parking, residential and communication infrastructure.

Principal Real Estate Europe

Internos Global Investors was acquired by Principal Global Investors in April 2018. It is now known as Principal Real Estate Europe. This has not affected any of the results as it happened after year-end 2017.

Royal London Asset Management

Total AUM excludes £135 million (€152 million) of cash held in vehicles.

Tishman Speyer

Non-fund investments of US\$28,062 million (€23,977 million) include 37 joint ventures that indirectly own either operating property or development property.

Torchlight Investors

Total AUM is net. Total AUM includes unfunded commitments, small managed separate accounts, and CDOs.

USAA Real Estate Co

AUM includes fund and non-fund assets.

Walton Street Capital

Total AUM excludes US\$1,790 million (€1,529 million) of co-investments, sidecars and targeted geographic funds .

WHI Real Estate Partners

AUM includes uncalled capital.

Discretionary separate accounts

	Discretionary separate ac	count mandat	es by investor	domicile (gra	oss, € million	ı, as at 31 De	cember 2017		
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Number of Mandates
1	PGIM	57,344.98	5,175.60	48,340.61	_	2,216.92	467.55	_	43
2	CBRE Global Investors	31,670.34	18,918.86	9,667.79	_	1,333.49	1,750.20	_	245
3	AXA Investment Managers – Real Assets	28,329.00	28,163.00	166.00	_	_	_	_	12
4	Aviva Investors	26,860.68	26,165.05	10.49	_	455.57	_	229.58	53
5	M&G Real Estate	21,507.00	18,681.19	_	_	2,825.81	_	_	21
6	Cohen & Steers Capital Management	18,195.44	1,732.70	5,673.99		10,724.58	64.17		61
7	Bentall Kennedy	17,151.99	_	17,151.99	_	_	_	_	5
8	LaSalle Investment Management	16,500.25	12,112.24	4,043.80	_	304.20	20.00		74
9	Invesco Real Estate	16,010.19	591.74	5,917.35	_	9,501.10	_	_	24
10	Aberdeen Standard Investments	15,188.03	14,933.70	_	_	_	14.63	239.70	44
11	Prologis	14,450.01	5,108.76	6,207.22	176.60	2,957.43	_	_	4
12	DWS	10,461.60	1,806.40	8,522.30	_	132.90	_	_	134
13	AEW	8,749.35	1,135.13	6,924.14	_	495.89	194.19	_	31
14	LGIM Real Assets	7,985.65	7,985.65	_	_	_	_	_	5
15	UBS Asset Management Global Real Estate	7,402.92	4,380.36	3,022.56	_	_	_	_	14
16	Principal Real Estate Investors	7,271.45	1,132.34	3,546.18	_	1,687.00	766.21	139.72	59
17	BlackRock	5,873.18	130.02	4,601.37	_	_	_	_	27
18	Heitman	5,867.35	100.01	2,799.49	_	1,886.89	1,069.29	11.67	37
19	DTZ Investors	5,501.95	5,501.95	_	_	_	_	_	8
20	CenterSquare Investment Management	5,318.12	538.40	4,509.69	_	270.03	_	_	60
21	BNP Paribas Real Estate Investment Management	5,280.00	5,280.00	_	_	_	_	_	28
22	Schroder Real Estate Investment Management	5,132.83	5,091.19	_	_	41.64	_	_	31
23	Clarion Partners	5,048.92	_	4,413.85	_	635.07	_	_	8
24	Orchard Street Investment Management	4,769.33	4,555.51	_	_	_	_	213.82	5
25	Hermes Real Estate Investment Management	4,334.94	4,334.94	_	_	_	_	_	2
26	Royal London Asset Management	4,144.75	4,144.75	_	_	_	_	_	5
27	USAA Real Estate Co	4,138.81	_	4,138.81	_	_	_	_	15

	Discretionary separate ac	count mandate	es by investor	domicile (gro	ss, € millior	ı, as at 31 De	cember 2017)	
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Number of Mandates
28	Columbia Threadneedle Investments	3,390.75	3,390.75	_	_	_	_	_	3
29	LendLease Investment Management	3,060.89		_	_	1,107.13	1,953.76	_	5
30	Rockwood Capital	2,901.92	_	2,901.92	_	_	_	_	7
31	Brookfield Asset Management	2,710.31	174.19	2,381.94	_	_	154.18	_	41
32	Bouwinvest Real Estate Investment Management BV	2,662.00	1,009.00	1,024.00	_	629.00	_	_	3
33	AMP Capital	2,616.09	56.01	_	_	1,025.07	1,430.81	104.20	25
34	Related Fund Management	2,317.77		2,115.25	_	_	_	202.52	16
35	Canyon Partners Real Estate	2,301.10		2,301.10	_	_	_	_	7
36	CIM Group	2,266.10	_	2,266.10		_		_	3
37	Barings Real Estate Advisors	2,084.41	107.51	1,508.51	_	468.39	_	0.00	17
38	KBS Realty Advisors	1,941.06		1,941.06			_	0.00	6
39	Credit Suisse Real Estate Investment Management	1,899.39	1,899.39	_	_	_	_	0.00	2
40	Lionstone Investments	1,841.05		1,841.05	_			0.00	4
41	Stockbridge Capital Group	1,783.54	_	1,783.54	_	_	_	0.00	3
42	ICG-Longbow	1,771.34	1,268.30		_		_	503.04	11
43	Patrizia Immobilien AG	1,760.00	1,760.00	_	_	_	_		5
44	Vanbarton Group	1,669.36		1,669.36	_	_	_	_	6
45	Hines	1,622.69	_	1,205.97	_	391.71	_	25.00	12
46	Angelo Gordon & Co	1,598.52		1,464.34	_	134.18	_	_	4
47	Amvest REIM	1,545.00	1,545.00	_	_	_	_	_	2
48	Tishman Speyer	1,489.76	_	_	_	1,489.76	_	_	3
49	JP Morgan Asset Management – Global Real Assets	1,388.49	_	1,388.49	_	_	_	_	3
50	Artemis Real Estate Partners	1,322.65	_	1,322.65	_	_	_	_	3
51	Sentinel Real Estate Corp	1,235.98	_	1,235.98	_	_	_	_	2
52	Ares Management	1,166.80	_	658.41	_	_	_	508.39	9
53	QIC	1,157.28	_	_	_	_	1,157.28	_	1
54	Realterm	1,087.43		533.20	_	554.23	_	_	3
55	Knight Frank Investment Management	1,012.39	1,012.39	_	_	_	_	_	2
56	National Real Estate Advisors	997.62		997.62		_			1

	Discretionary separate ac	count mandate	es by investor	domicile (gro	oss, € millior	ı, as at 31 Dec	cember 2017)		
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Number of Mandates
57	Nuveen/TH Real Estate	896.77	418.38	478.39	_		_	_	4
58	Ascentris	816.51		816.51	_	_	_	_	2
59	Franklin Resources	753.67	201.77	286.62	_	_	265.28	_	12
60	Hahn Group	750.00	750.00		_	_	_	_	2
61	Savills Investment Management	747.00	747.00	_	_		_		2
62	American Realty Advisors	725.51		725.51		_	_	_	17
63	Sarofim Realty Advisors Co	718.42		718.42	_		_	_	3
64	Presima	694.41		463.26	_	_	231.14	_	5
65	FPA Multifamily	681.75		681.75	_		_	_	36
66	Starwood Capital Group	640.07		370.88			_	269.20	3
67	L&B Realty Advisors	610.07		610.07	_		_		4
68	Bristol Group	545.90		545.90			_	_	1
69	Timbercreek Asset Management	488.25	229.40	258.85	_		_	_	8
70	Colliers Capital	482.79	482.79			_	_	_	3
71	PAG Investment Management	413.38	_	_	_	413.38	_	_	6
72	Lothbury Investment Management	377.81	377.81		_		_	_	1
73	Diamond Realty Management	319.59		29.59	_	290.00	_	_	4
74	Meyer Bergman	288.00		288.00			_	_	2
75	ASB Capital Management	286.87		286.87	_		_	_	1
76	Oak Street Real Estate Capital	255.20		255.20		_	_	_	5
77	IAM Real Estate Group	107.38	_	107.38	_	_	_	_	1
78	Divco West Real Estate Services	83.34	_	83.34	_	_	_	_	1
79	VBI Real Estate	31.50	_	_	31.50	_	_	_	1
80	Lowe Enterprises Investment Management	26.67	_	26.67	_	_	_	_	1
81	Hunt Investment Management	6.08	_	6.08	_	_	_	_	1

Aberdeen Asset Management Standard Life Aberdeen was created in 2017 from the merger of Standard Life and Aberdeen Asset Management.

Ares Management Figures are net.

Franklin ResourcesOperating worldwide as Franklin Templeton Investments.

PGIM is a business of Prudential Financial.

Advisory separate accounts

	Advisory separate ac	counts by inve	stor domicile	e (gross, € mil	lion, as at 31	December 20	17)		
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Number of mandates
1	Principal Real Estate Investors	35,983.91	215.15	33,941.77	_	802.98	1,024.00	_	38
2	Barings Real Estate Advisors	31,910.37	20.84	30,386.86	_	36.67	_		17
3	AEW	19,690.62	10,045.33	7,028.32	_	1,255.98	525.89	835.10	31
4	CBRE Global Investors	19,668.95	8,584.33	5,167.27	_	3,583.75	_	2,333.60	57
5	MetLife Investment Management	16,576.09	1,160.97	15,020.91	_	255.03	_	139.18	19
6	Heitman	15,742.66	1,322.65	13,780.77	_	639.24	_	_	19
7	Nuveen/TH Real Estate	14,520.02	7,172.50	4,017.97	_	1,285.98	2,043.57	_	30
8	Greystar	14,084.13	515.89	11,082.95	66.67	125.85	776.76	1,395.16	84
9	Patrizia Immobilien	13,385.90	13,385.90	_	_	_	_	_	48
10	Credit Suisse Real Estate Investment Management	12,998.17	12,903.16	95.01	_	_	_	_	8
11	LaSalle Investment Management	12,349.77	4,577.20	4,106.31	_	2,920.34	745.92	_	54
12	Clarion Partners	10,559.56	_	9,091.89	_	_	_	1,467.67	13
13	Invesco Real Estate	10,511.22	2,983.68	4,772.22	_	2,755.32	_	_	29
14	JP Morgan Asset Management – Global Real Assets	10,271.19	2,807.83	7,461.70	_	_	1.67	_	18
15	Savills Investment Management	7,394.00	4,587.00	532.00	_	2,275.00	_	_	31
16	Hines	7,191.67	2,422.78	1,650.19	_	2,121.08	_	997.62	15
17	DWS	6,858.30	5,412.70	_	_	1,445.60	_	_	13
18	Aberdeen Standard Investments	6,244.69	5,453.56	138.42	_		_	652.72	29
19	L&B Realty Advisors	6,085.71	_	6,085.71	_	_	_		8
20	AMP Capital	5,945.23	209.64	1,339.69	_	_	3,537.42	858.48	9
21	AXA Investment Managers – Real Assets	5,771.00	1,710.00	320.00	_	581.00	2,412.00	748.00	21
22	La Francaise Real Estate Managers	5,763.00	4,512.00	_	_	1,251.00	_	_	23
23	GLL Real Estate Partners	5,459.00	4,674.00	_	_	785.00	_		12
24	BNP Paribas Real Estate Investment Management	4,551.00	4,551.00	_	_	_	_	_	47
25	DTZ Investors	4,125.62	4,125.62	_	_	_	_	_	11
26	M3 Capital Partners	3,917.12	_	3,917.12	_	_	_		2

	Advisory separate ac	counts by inve	stor domicile	gross, € mil	lion, as at 31	December 20	17)		
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Number of mandates
27	Union Investment Real Estate	3,896.00	3,896.00	_	_	_	_		8
28	Gaw Capital Partners	3,491.24	1,613.77	1,028.45	_	849.02	_	_	11
29	Exeter Property Group	3,467.99	607.82	2,860.17	_	_	_	_	4
30	UBS Asset Management Global Real Estate	3,411.60	2,108.52	112.01	7.70	1,183.37	_	_	14
31	Rockwood Capital	3,120.95	_	3,046.35	_	74.59	_	_	3
32	Sentinel Real Estate Corp	2,904.50	343.37	2,495.29	_	_	19.17	46.67	10
33	BlackRock	2,725.32	_	364.21	_	2,329.44	31.67	_	5
34	Lowe Enterprises Investment Management	2,617.80	272.53	1,775.21	_		_	570.07	15
35	Lionstone Investments	2,584.47	274.20	2,310.27	_	_	_	_	6
36	PGIM	2,533.63	1,071.79	358.37	_	1,103.46	_	_	11
37	PCCP	2,491.12	_	2,491.12	_	_	_	_	21
38	Timbercreek Asset Management	2,399.80	_	2,399.80			_		7
39	CS Capital Management	2,075.24	_	2,075.24	_	_	_	_	5
40	GreenOak Real Estate	2,054.40	891.77	1,085.13		77.51	_		8
41	BMO Real Estate Partners	2,045.93	2,045.93	_	_	_	_	_	14
42	Bentall Kennedy	2,043.57	189.19	1,618.52	_		_	235.86	12
43	M&G Real Estate	1,654.30	1,654.30	_	_	_	_	_	5
44	Pradera	1,571.00	220.00	_		903.00	_	448.00	3
45	Berkshire Group	1,552.76	_	_	_	_	327.37	1,225.39	3
46	TGM Associates	1,537.68	_	1,537.68	_	_	_		5
47	Stockbridge Capital Group	1,440.17	_	1,440.17	_	_	_	_	3
48	Divco West Real Estate Services	1,366.83	_	1,366.83	_	_	_		6
49	Beacon Capital Partners	1,311.24	_	1,311.24	_	_	_		2
50	Dexus	1,279.71	_	_	_	_	1,279.71		1
51	Cording Real Estate Group	1,252.00	1,252.00	_	_	_	_		12
52	Morgan Stanley Real Estate Investing	1,215.97	1,215.97	_	_	_	_		1
53	Tishman Speyer	1,212.31	1,212.31	_	_	_	_	_	2
54	Hunt Investment Management	1,105.13	_	1,105.13	_	_	_		5
55	Knight Frank Investment Management	1,017.45	601.40	_	_	352.24	_	63.81	7
56	Hahn Group	950.00	950.00	_		_	_		4

17

	Advisory separate acc	counts by inve	stor domicile	(gross, € mil	lion, as at 31	December 20 ⁻	17)		
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Number of mandates
57	Ascendas-Singbridge	909.26	_	_	_	909.26	_	_	3
58	Principal Real Estate Europe	882.00	882.00	_	_	_	_	_	11
59	CIM Group	850.10	_	850.10	_	_	_	_	3
60	American Real Estate Partners	765.03	_	765.03	_		_	_	14
61	Rynda Property Investors	760.00	760.00		_		_	_	4
62	Blue Vista Capital Management	670.08		670.08	_				5
63	Bristol Group	637.57	_	637.57	_	_	_	_	2
64	Sarofim Realty Advisors Co	590.07		590.07	_		_		4
65	CenterSquare Investment Management	523.39	_	364.21	_	_	159.19	_	2
66	Pearlmark	500.06	166.69	250.03	_	83.34			6
66	Primevest Capital Partners	500.06	500.06	_	_	_	_	_	2
68	Mesa West Capital	495.72	_	212.61	_	283.12	_	_	8
69	Colliers Capital	429.89	429.89	_	_	_	_	_	1
70	Catalyst Capital	418.30	418.30		_		_	_	4
71	Charter Hall Group	386.19	_	_	_	_	386.19	_	1
72	M7 Real Estate	379.60	379.60	_	_	_	_	_	5
73	Northwood Investors	360.04	360.04	_	_	_	_	_	1
74	Investa Property Group	346.79	_	<u> </u>	_	346.79	_		3
75	Diamond Realty Management	346.23	_	_	_	346.23	_	_	6
76	KBS Realty Advisors	328.37	_	328.37	_	_	_		4
77	Fidelity International	258.36	_	_	_	_	_	258.36	1
78	ISPT	228.92	_	_	_	_	228.92		2
79	Franklin Resources	189.36	_	_	_	_	189.36	_	6
80	Northern Horizon Capital A/S	179.00	179.00		_		_		2
81	MaxCap Investment Management	173.88	_		_		173.88	_	4
82	VBI Real Estate	172.77	_		172.77		_	_	1
83	Walton Street Capital	170.85	_	170.85	_	_	_	_	1
84	GTIS Partners	170.10	_	170.10	_		_	_	3
85	Orchard Street Investment Management	168.81	_	_	_	_	_	168.81	1

	Advisory separate accounts by investor domicile (gross, € million, as at 31 December 2017)								
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Number of mandates
86	InfraRed Capital Partners	155.10	_	_	_	_	_	155.10	1
87	Newport Capital Partners	120.01	_	120.01	_	_	_	_	1
88	Trigate Capital	87.34	_	87.34	_	_	_		1
89	DRC Capital	57.39	_	57.39	_	_	_	_	1
90	Penwood Real Estate Investment Management	50.84		50.84		_	_		2
91	Equity Estate	50.00	_	_		_	_	_	5
92	The Praedium Group	18.67	_	18.67	_	_	_	_	1
93	Harrison Street Real Estate Capital	14.67	14.67	_	_	_	_	_	1
94	American Realty Advisors	6.31	_	6.31	_		_	_	1

Aberdeen Standard Investments

Standard Life Aberdeen was created in 2017 from the merger of Standard Life and Aberdeen Asset Management.

Cording Real Estate Group

Cording entered into a strategic alliance with Edmond de Rothschild and its afilliate, OROX Europe, which completed toward the end of 2017.

Fidelity International AUM as at 31 March 2018.

Franklin Resources

Operating worldwide as Franklin Templeton Investments.

PGIM is a business of Prudential Financial.

Principal Real Estate Europe

Internos Global Investors was acquired by Principal Global Investors in April 2018. It is now known as Principal Real Estate Europe. This has not affected any of the results as it happened after year-end 2017.

Indirect real estate vehicles

	Value and number of vehicles under management (€ million, as at 31 December 2017)		
Rank	Fund manager	Total GAV	Total vehicles
1	Blackstone	153,353.62	24
2	Nuveen/TH Real Estate	74,482.81	49
3	UBS Asset Management Global Real Estate	65,296.09	48
4	JP Morgan Asset Management – Global Real Assets	57,382.49	24
5	PGIM	48,859.88	65
6	Starwood Capital Group	42,693.29	19
7	GLP	40,421.36	15
8	Deka Immobilien Investment/WestInvest	38,358.00	23
9	AXA Investment Managers – Real Assets	37,019.00	98
10	CBRE Global Investors	34,670.69	72
11	Credit Suisse Real Estate Investment Management	33,900.60	46
12	DWS	32,023.10	208
13	Union Investment Real Estate GmbH	31,116.50	14
14	AEW	30,181.00	89
15	Invesco Real Estate	28,810.84	40
16	Morgan Stanley Real Estate Investing	27,673.21	15
17	Aberdeen Standard Investments	27,638.94	73
18	Prologis	24,070.21	4
19	Clarion Partners	21,666.68	9
20	Patrizia Immobilien	21,426.00	50
21	LaSalle Investment Management	20,062.33	19
22	Principal Real Estate Investors	20,029.90	21
23	Angelo Gordon & Co	17,688.72	21
24	LGIM Real Assets	16,906.48	10
25	Dexus	15,970.05	7
26	LendLease Investment Management	15,109.09	11
27	M&G Real Estate	14,678.24	12
28	AMP Capital	14,307.86	17

	Value and number of vehicles under management (€ million, as at 31 December 2017)		
Rank	Fund manager	Total GAV	Total vehicles
29	Tishman Speyer	14,298.33	14
30	Charter Hall Group	13,877.57	28
31	Cohen & Steers Capital Management	13,579.07	12
32	Fortress Investment Group	13,229.03	12
33	Aviva Investors	12,924.01	49
34	Patron Capital	12,316.00	5
35	CIM Group	12,040.56	8
36	Bentall Kennedy	11,826.37	4
37	BNP Paribas Real Estate Investment Management	11,710.90	34
38	QIC	11,449.05	7
39	Harrison Street Real Estate Capital	11,439.41	7
40	Rockpoint Group	11,262.14	8
41	Heitman	11,148.79	12
42	BlackRock	10,229.52	19
43	Schroder Real Estate Investment Management	9,734.48	21
44	La Francaise Real Estate Managers	9,567.00	59
45	ISPT	9,480.83	5
46	Ascendas-Singbridge	9,250.23	9
47	Bridge Investment Group Partners	9,215.24	11
48	Tristan Capital Partners	9,149.00	6
49	Kayne Anderson Real Estate Advisors	9,109.89	13
50	Northwood Investors	9,016.88	58
51	Walton Street Capital	9,008.54	10
52	USAA Real Estate Co	8,502.65	9
53	Savills Investment Management	7,990.00	25
54	DRA Advisors	7,987.18	7
55	Gaw Capital Partners	7,977.68	9
56	Ares Management	7,914.92	34
57	The GPT Group	7,815.05	2
58	Westbrook Partners	7,709.23	6
59	KBS Realty Advisors	7,334.18	7

	Value and number of vehicles under management (€ million, as at 31 December 2017)		
Rank	Fund manager	Total GAV	Total vehicles
60	Columbia Threadneedle Investments	7,094.35	5
61	Greystar	7,013.31	3
62	Barings Real Estate Advisors	6,797.46	22
63	Bouwinvest Real Estate Investment Management	6,778.00	7
64	Crow Holdings Capital Partners	6,775.87	10
65	Hines	6,617.43	10
66	Stockbridge Capital Group	6,385.74	8
67	ASB Capital Management	6,237.25	2
68	Investa Property Group	6,197.98	2
69	American Realty Advisors	6,141.34	3
70	Intercontinental Real Estate Corp	5,735.67	3
71	GreenOak Real Estate	5,335.62	11
72	Mesa West Capital	5,327.28	3
73	Meyer Bergman	5,323.00	4
74	PAG Investment Management	5,173.10	4
75	Vesteda Investment Management	5,084.00	1
76	Berkshire Group	4,510.69	9
77	IGIS Asset Management	4,272.41	57
78	Hermes Real Estate Investment Management	4,213.85	8
79	Carmel Partners	4,170.40	6
80	Beacon Capital Partners	4,002.46	3
81	MetLife Investment Management	3,919.62	2
82	GTIS Partners	3,798.77	21
83	Unite Integrated Solutions	3,770.00	3
84	Royal London Asset Management	3,718.23	2
85	NIAM	3,570.00	5
86	Exeter Property Group	3,503.24	5
87	National Real Estate Advisors	3,484.57	1
88	Madison Realty Capital	3,347.89	7
89	NREP AB	3,102.79	13

	Value and number of vehicles under management (€ million, as at 31 December 2017)		
Rank	Fund manager	Total GAV	Total vehicles
90	Divco West Real Estate Services	3,055.19	5
91	Europa Capital	3,038.00	9
92	PCCP	2,946.27	10
93	Amvest REIM	2,888.00	3
94	Carroll Organization	2,878.67	3
95	Diamond Realty Management	2,811.98	10
96	Equus Capital Partners	2,678.81	7
97	Luber-Adler Partners	2,628.64	12
98	Blue Vista Capital Management	2,498.62	7
99	CenterSquare Investment Management	2,434.45	16
100	Greenfield Partners	2,420.20	8
101	Brookfield Asset Management	2,383.61	5
102	FPA Multifamily	2,368.61	5
103	LMC	2,323.02	2
104	DRC Capital	2,304.88	7
105	Rockwood Capital	2,223.17	4
106	Altera Vastgoed	2,049.00	3
107	InfraRed Capital Partners	2,041.90	8
108	ICG-Longbow	1,980.66	4
109	Lothbury Investment Management	1,934.49	2
110	CITIC Capital	1,853.55	7
111	Principal Real Estate Europe	1,802.00	10
112	Pradera	1,783.00	5
113	Artemis Real Estate Partners	1,773.54	4
114	Torchlight Investors	1,746.70	5
115	EURAMCO Group	1,693.00	29
116	Sentinel Real Estate Corp	1,658.53	3
117	Timbercreek Asset Management	1,642.63	13
118	Related Fund Management	1,605.19	5
119	Wheelock Street Capital	1,575.18	3

	Value and number of vehicles under management (€ million, as at 31 December 2017)		
Rank	Fund manager	Total GAV	Total vehicles
120	Realterm	1,571.31	7
121	GLL Real Estate Partners	1,535.40	9
122	Franklin Resources	1,473.75	13
123	Abacus Capital Group	1,453.92	4
124	M7 Real Estate	1,428.50	10
125	Primevest Capital Partners	1,400.00	8
126	Oak Street Real Estate Capital	1,370.58	4
127	Fidelity International	1,365.16	2
128	LEM Capital	1,308.32	3
129	Guggenheim Real Estate	1,236.73	5
130	The Praedium Group	1,144.88	4
131	Patria Investimentos	1,085.19	4
132	American Real Estate Partners	1,063.03	2
133	Long Wharf Real Estate Partners	1,032.87	2
134	Avanath Capital Management	1,023.95	5
135	Alex Brown Realty	1,002.62	7
136	Hahn Group	1,000.00	6
137	Degroof Petercam Asset Management	978.10	4
138	Canyon Partners Real Estate	970.11	1
139	Clearbell Fund Management	932.26	3
140	Pactia	916.77	1
141	Pearlmark	905.52	5
142	Kairos Investment Management Co	901.27	6
143	AviaRent Invest	859.34	7
144	Lionstone Investments	826.76	6
145	Catalyst Capital	795.70	2
146	Trigate Capital	784.88	3
147	WHI Real Estate Partners	721.92	8
148	Penwood Real Estate Investment Management	707.83	4
149	VBI Real Estate	684.66	4

Value and number of vehicles under management (€ million, as at 31 December 2017)			
Rank	Fund manager	Total GAV	Total vehicles
150	Covenant Capital Group	676.00	2
151	Pamfleet	667.19	3
152	Argosy Real Estate	665.91	5
153	L&B Realty Advisors	637.57	1
154	Propertylink	624.55	6
155	The Arden Group	613.40	2
156	Velocis	603.15	2
157	Bristol Group	600.90	3
158	Presima	600.54	8
159	Northern Horizon Capital	524.00	5
160	IAM Real Estate Group	449.42	4
161	Knight Frank Investment Management	432.03	1
162	Novare Fund Manager	412.55	2
163	BKM Capital Partners	396.46	7
164	Western National Group	310.04	2
165	Hutensky Capital Partners	291.70	3
166	Newport Capital Partners	268.36	4
167	Equity Estate	255.00	4
168	Sarofim Realty Advisors Co	225.03	3
169	Barwood Capital	188.61	3
170	LendInvest Capital	172.18	1
171	Cording Real Estate Group	168.00	2
172	MaxCap Investment Management	97.04	1
173	Hunt Investment Management	91.26	6
174	Colliers Capital	85.53	1
175	DTZ Investors	4.50	1
175	Second Estates	4.50	1

Aberdeen Standard Investments

Standard Life Aberdeen was created in 2017 from the merger of Standard Life and Aberdeen Asset Management.

AMP Capital

AUM excludes Precinct REIT valued at AUD\$674 million (€426.29 million).

Ares Management

Figures are net.

Brookfield Investment Management

Included in AUM managed by Brookfield Asset Management.

Cording Real Estate Group

Cording entered into a strategic alliance with Edmond de Rothschild and its afilliate, OROX Europe, which completed toward the end of 2017.

Fidelity International

AUM as at 31 March 2018.

Franklin Resources

Operating worldwide as Franklin Templeton Investments.

GLP

GLP J-REIT AUM based on latest appraised value.

Guggenheim Real Estate

Figures are net.

Heitman

Figures as of 30 May 2018.

LGIM Real Assets

AUM includes real estate debt, which was not supplied in previous years.

PGIM

PGIM is a business of Prudential Financial.

Principal Real Estate Europe

Internos Global Investors was acquired by Principal Global Investors in April 2018. It is now known as Principal Real Estate Europe. This has not affected any of the results as it happened after year-end 2017.

Prologis

In 2017, the Targeted US Logistics Fund acquired the North American Industrial Fund. Furthermore, Prologis European Properties Fund II acquired the Prologis Targeted European Logistics Fund and changed its name to Prologis European Logistics Fund, effective 1 October 2017.

Torchlight Investors

Figures are net.

Walton Street Capital

Values include US\$1,790 million (€1,526.59 million) of co-investments, sidecars and targeted geographic funds.

About Institutional Real Estate, Inc

ounded in 1987, Institutional Real Estate, Inc. (IREI) is an H information company focused on providing institutional real estate investors with decision-making tools through its publications, conferences and consulting. IREI publishes a diversified portfolio of news publications, special reports and investment guides for the benefit of the global institutional real estate investment community. Each publication provides subscribers with news, insights and perspective on the trends and events shaping the real estate investment landscape across the globe. The firm publishes a number of special reports, as well as seven regular news publications. The firm's flagship publication, Institutional Real Estate Americas, has covered the industry for nearly 30 years. Other IREI titles include Institutional Real Estate Europe, Institutional Real Estate Asia Pacific, Real Assets Adviser, Institutional Real Estate Newsline, Institutional Investing in Infrastructure and Institutional Real Estate FundTracker.

In 2006, the firm launched a conference and seminar division. IREI's events have gained a stellar reputation and solid following within the industry. The firm's menu of events includes Visions, Insights & Perspectives (VIP) conferences in North America and Europe, as well as IREI Springboard, an event launched in 2014 for young industry executives, and VIP Infrastructure.

On the consulting side, IREI has nearly three decades of experience providing research and advice to the investment-management, brokerage, development and technology communities. In 2017, IREI launched the Institute for Real Estate Operating Companies (iREOC). iREOC is a for-profit, exclusive membership organization designed to benefit the interests of institutional investors, their investment managers, and those real estate operating companies who seek to access and serve institutional capital via structures that are deemed most suitable to investor needs.

For more information about IREI's products and services, please visit www.irei.com.

About Property Funds Research

Property Funds Research is an independent management-owned business that provides confidential research, strategic consulting and investment advice for investors in European real estate. PFR's foundations are an expert team, a suite of products for underwriting investments in the European market, and access to a unique dataset describing the major investors, vehicles, and managers in the European and global institutional property markets. Founded in 2001, under its previous name, Oxford Property Consultants (OPC), the firm established the first European and global dataset of unlisted property vehicles, the major sources of capital and investment managers. OPC was sold to CBRE in 2006 and the research and information

business (renamed Property Funds Research) was re-acquired by its management. PFR is now chaired by Andrew Baum, who is also visiting Professor of Management Practice at the Säid Business School, Oxford, and managed by Jane Fear.

PFR's global database includes nearly 3,000 unlisted funds, 1,500 fund managers and 3,000 investors. With this resource, PFR provides high-quality confidential research and strategic consulting for institutional real estate investment managers, investors and industry bodies around the world.

For more information about PFR, please contact Jane Fear at jf@propertyfundsresearch.com.

Personnel



Institutional Real Estate, Inc.

Denise DeChaine, Special Projects Editor

Project management, editing

Larry Gray, Editorial DirectorEditing and proofreading

Susan Sharpe, Art Director

Design, layout and production

Linda Ward, Sponsor Benefits Manager
Data collection

Karen Palma, Data Services Manager
Data collection

Property Funds Research

Jane Fear, Managing Director

Project management, data collection

Matthew Pollock, Reserach Analyst

Data collection

Copyright © 2018 by Institutional Real Estate, Inc Material may not be reproduced in whole or in part without the express written permission of the publisher.

The publisher of this special report, Institutional Real Estate, Inc, is not engaged in rendering tax, accounting or other professional advice through this publication. No statement in this report is to be construed as a recommendation to buy or sell any security or other investment.