



Institutional Real Estate, Inc.

Global Investment Managers 2017



Special Report

Institutional Real Estate, Inc.

Global Investment Managers 2017

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Expanding Universe

Real estate's strong performance spawns new fans, heightened popularity

by Larry Gray

The real estate asset class continues to shine in an era of low interest rates, sluggish economic growth, volatile financial markets and political uncertainty. Strong or improving property fundamentals in many sectors and regions, along with a deep pool of capital, have pushed up property values in recent years. New and higher allocations to the asset class and property appreciation have bolstered investment managers' AUM.

The aggregate AUM of the top 100 largest investment managers increased 7.3 percent in 2016, totaling more than €2.7 trillion, according to *Global Investment Managers 2017*, an annual survey and report produced by Property Funds Research and Institutional Real Estate, Inc. A total of 199 real estate investment managers across the globe responded to the survey, representing an aggregate AUM of slightly more than €2.8 trillion. The top 10 largest investment managers accounted for €0.98 trillion of AUM, which represents 34.5 percent of the total. This group of managers saw their AUM increase an average of 12.2 percent from 2015.

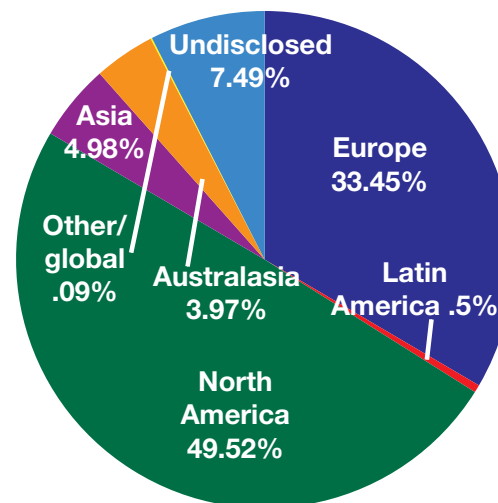
Blackstone topped the rankings with more than €158 billion of AUM, followed by Brookfield Asset Management and PGIM, with €140 billion and €119 billion of AUM, respectively. Blackstone's AUM jumped 12.6 percent from the year prior. The firm continued to add to its menu of products last year, raising €4.3 billion for its Blackstone Real Estate Debt Strategies III, €1.2 billion for Strategic Partners Real Estate Fund VI, as well as billions more for its relatively new core-plus open-end fund, Blackstone Property Partners.

Rounding out the top 10 were Nuveen/TH Real Estate

(€91.9 billion), Hines (€90.7 billion), MetLife Investment Management (€85.5 billion), CBRE Global Investors (€82.2 billion), J.P. Morgan Asset Management – Global Real Assets (€85.9 billion), UBS Global Asset Management (€74 billion) and Principal Real Estate Investors (€68.3 billion).

Looking at total market AUM on a geographic basis, North America-based assets account for approximately 50 percent, while Europe represents one-third. Asia claims 5 percent of the assets and Australasia accounts for 4 percent, while Latin America tallies only 0.6 percent. (For

Assets under management by geographic distribution



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



rankings of the top 10 largest investment managers in each region, see page 3.)

PGIM ranks as the largest investment manager based on AUM just in North America. The firm manages more than €100 billion in the region. In Europe, the top-ranking manager is Swiss Life Asset Managers, with AUM of €67.4 billion, and in Asia, LaSalle Investment Management claims the most assets with AUM of €15.6 billion. In the Australasia region, Dexus ranks No. 1 with AUM of €15.5 billion. PGIM also oversees the most assets in Latin America, with AUM of €2.7 billion.

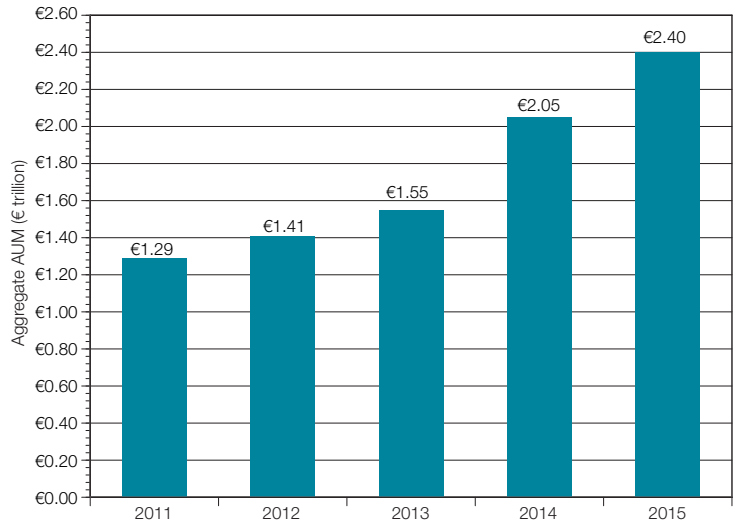
The report also ranks real estate managers based on their total AUM in the categories of discretionary separate accounts under management, advisory separate accounts and assets, and indirect real estate investment vehicles. PGIM manages the most assets based solely on discretionary separate accounts, with AUM of €64.1 billion (see page 12). In the category of advisory separate accounts, Principal Real Estate

Investors tops the list, with AUM of approximately €40.1 billion (see page 16). And based on indirect real estate investment vehicles, Blackstone rules the roost, with an asset base of more than €157.9 billion (see page 20). ♦

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

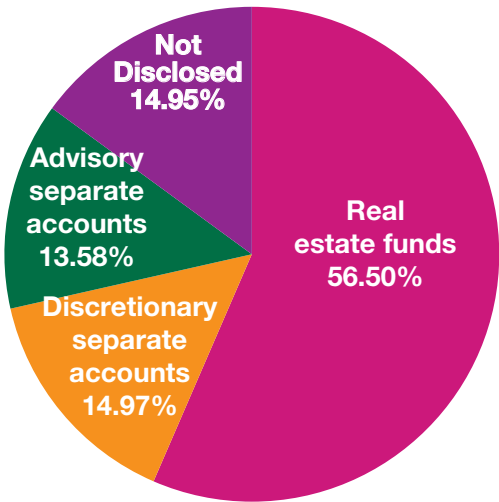
The survey was conducted by U.K.-based Property Funds Research (PFR). PFR is an independent management-owned business that provides confidential research and strategic consulting for investors in European real estate. PFR's foundations are an expert team, a suite of products for underwriting investments 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.

Top 100 firms in aggregate (AUM, € trillion)



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

Assets under management by investment structure



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

Largest investment managers by region

TOP 10 MANAGERS BASED ON EUROPE ASSETS (€ M)			
Rank	Investment manager	Europe	Total
1	Swiss Life Asset Managers	67,401.99	67,401.99
2	AXA Investment Managers – Real Assets	61,874.90	66,444.80
3	Credit Suisse Real Estate Investment Management	44,265.89	48,706.83
4	Aviva Investors	42,540.12	43,865.62
5	CBRE Global Investors	39,344.08	82,299.44
6	Deka Immobilien Investment/WestInvest	33,335.00	36,187.00
7	Blackstone	31,767.97	157,944.61
8	M&G	30,150.07	34,769.97
9	AEW Global	26,701.70	60,257.26
10	UBS Global Asset Management	26,568.32	74,037.77

TOP 10 MANAGERS BASED ON NORTH AMERICA ASSETS (€ M)			
Rank	Investment manager	North America	Total
1	PGIM	95,541.48	118,507.40
2	Brookfield Asset Management	89,017.10	140,480.00
3	MetLife Investment Management	77,231.28	85,572.41
4	Hines	69,536.38	90,715.66
5	J.P. Morgan Asset Management	68,836.93	75,969.23
6	Nuveen/TH Real Estate	65,865.21	91,952.05
7	Principal Real Estate Investors	64,881.12	68,318.51
8	Colony NorthStar	46,360.44	53,433.82
9	Barings	42,011.68	45,975.55
10	Clarion Partners	41,642.95	41,832.07

TOP 10 MANAGERS BASED ON ASIA ASSETS (€ M)			
Rank	Investment manager	Asia	Total
1	LaSalle Investment Management	15,655.90	55,132.07
2	UBS Global Asset Management	12,821.29	74,037.77
3	CBRE Global Investors	9,693.47	82,299.44
4	Gaw Capital Partners	8,256.84	12,034.54
5	Prologis	7,443.44	36,940.95
6	Blackstone	7,172.22	157,944.61
7	IGIS Asset Management	7,046.55	10,022.00
8	PGIM	6,122.09	118,507.40
9	PAG Investment Management	5,790.42	5,790.42
10	Invesco Real Estate	4,975.98	64,468.21

TOP 10 MANAGERS BASED ON AUSTRALASIA ASSETS (€ M)			
Rank	Investment manager	Australasia	Total
1	Dexus	15,535.58	15,535.58
2	AMP Capital	15,255.67	20,217.48
3	GPT Group	13,153.23	13,153.23
4	Charter Hall	13,003.35	13,003.35
5	QIC	9,640.55	12,600.25
6	Lendlease Investment Management	9,444.54	16,630.60
7	ISPT	9,102.35	9,102.35
8	Investa Property Group	6,332.70	6,332.70
9	AXA Investment Managers – Real Assets	3,472.40	66,444.80
10	Cromwell Property Group	3,421.94	6,706.99

Total assets rankings

Total gross value of real estate assets under management (gross, € million, as at 31 December 2016)									
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
1	Blackstone	157,944.61	31,767.97	18,401.43	—	7,172.22	—	—	100,602.99
2	Brookfield Asset Management	140,480.00	—	89,017.10	—	—	—	—	25,053.90
3	PGIM	118,507.40	9,530.96	95,541.48	2,712.27	6,122.09	375.38	—	4,226.15
4	Nuveen/TH Real Estate	91,952.05	24,081.62	65,865.21	144.45	1,179.37	682.34	—	—
5	Hines	90,715.66	16,142.48	69,536.38	2,632.44	2,021.37	383.94	—	—
6	MetLife Investment Management	85,572.41	3,504.85	77,231.28	1,282.01	2,886.18	668.09	—	—
7	CBRE Global Investors	82,299.44	39,344.08	33,261.90	—	9,693.47	—	—	—
8	J.P. Morgan Asset Management – Global Real Assets	75,969.23	5,175.55	68,836.93	—	1,768.58	188.17	—	—
9	UBS Global Asset Management	74,037.77	26,568.32	33,666.50	59.66	12,821.29	922.00	—	—
10	Principal Real Estate Investors	68,318.51	1,177.12	64,881.12	48.64	1,735.87	475.77	—	—
11	Swiss Life Asset Managers	67,401.99	67,401.99	—	—	—	—	—	—
12	AXA Investment Managers – Real Assets	66,444.80	61,874.90	597.90	—	499.60	3,472.40	—	—
13	Invesco Real Estate	64,468.21	7,327.12	27,135.06	—	4,975.98	—	—	25,031.01
14	AEW Global	60,257.26	26,701.70	31,691.94	—	1,863.62	—	—	—
15	LaSalle Investment Management	55,132.07	19,968.54	18,103.98	20.91	15,655.90	1,366.59	16.16	—
16	Colony NorthStar	53,433.82	6,713.20	46,360.44	—	—	232.83	127.35	—
17	Deutsche Asset Management	49,954.60	21,793.20	24,270.40	—	2,195.10	1,696.00	—	—
18	Credit Suisse Real Estate Investment Management	48,706.83	44,265.89	1,937.74	1,149.91	—	1,352.33	—	—
19	Barings	45,975.55	3,824.17	42,011.68	—	98.84	40.86	—	—
20	Starwood Capital Group	45,227.63	6,683.74	38,337.67	170.11	36.11	—	—	—
21	Aviva Investors	43,865.62	42,540.12	815.69	—	509.81	—	—	—
22	Tishman Speyer Properties	43,541.73	7,172.22	30,332.00	1,356.14	4,681.37	—	—	—
23	Clarion Partners	41,832.07	—	41,642.95	189.12	—	—	—	—
24	Prologis	36,940.95	12,107.71	17,254.18	135.61	7,443.44	—	—	—
25	Deka Immobilien Investment/WestInvest	36,187.00	33,335.00	1,337.00	559.00	709.00	247.00	—	—
26	Cohen & Steers Capital Management	35,795.51	1,911.13	31,087.52	—	1,836.06	960.79	—	—
27	M&G	34,769.97	30,150.07	2,086.10	—	2,533.80	—	—	—

Total gross value of real estate assets under management (gross, € million, as at 31 December 2016)									
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
28	Heitman	34,578.12	4,229.96	29,010.08	—	898.07	440.01	—	—
29	Bentall Kennedy	32,420.85	—	32,420.85	—	—	—	—	—
30	Union Investment Real Estate	31,146.10	25,153.10	4,666.20	412.40	680.20	234.20	—	—
31	Morgan Stanley Real Estate Investing	30,055.45	5,270.59	21,283.81	26.61	3,253.96	221.43	—	—
32	Standard Life Investments	26,049.78	22,087.28	2,934.47	—	1,028.04	—	—	—
33	BNP Paribas Real Estate Investment Management	24,064.00	24,064.00	—	—	—	—	—	—
34	Angelo Gordon	22,664.28	1,276.69	20,165.74	—	1,426.75	—	—	—
35	LGIM Real Assets	21,758.54	21,758.54	—	—	—	—	—	—
36	Aberdeen Asset Management	21,015.74	21,015.74	—	—	—	—	—	—
37	AMP Capital	20,217.48	821.26	3,042.10	—	1,098.44	15,255.67	—	—
38	BlackRock	19,473.42	5,204.06	9,386.51	—	4,882.85	—	—	1,099.16
39	Patrizia Immobilien	18,600.00	17,300.00	1,200.00	100.00	—	—	—	—
40	USAA Real Estate Co	16,766.85	189.12	16,577.73	—	—	—	—	—
41	Lendlease Investment Management	16,630.60	2,463.79	1,368.77	—	1,163.46	9,444.54	2,190.04	—
42	Savills Investment Management	16,187.00	14,256.00	567.00	—	1,364.00	—	—	—
43	Dexus	15,535.58	—	—	—	—	15,535.58	—	—
44	Greystar	15,155.07	3,501.05	11,509.57	144.45	—	—	—	—
45	Fortress Investment Group	14,528.80	1,279.16	8,169.12	461.87	4,399.12	219.53	—	—
46	La Française Real Estate Managers	14,509.00	14,509.00	—	—	—	—	—	—
47	Schroder Real Estate Investment Management	14,171.45	13,131.91	638.72	4.69	285.96	110.17	—	—
48	GPT Group	13,153.23	—	—	—	—	13,153.23	—	—
49	Charter Hall	13,003.35	—	—	—	—	13,003.35	—	—
50	QIC	12,600.25	—	2,959.77	—	—	9,640.55	—	—
51	Gaw Capital Partners	12,034.54	1,851.64	1,926.05	—	8,256.84	—	—	—
52	Rockpoint Group	12,016.10	32.60	11,983.50	—	—	—	—	—
53	Patron Capital	11,643.00	11,643.00	—	—	—	—	—	—
54	Harrison Street Real Estate Capital	11,569.44	305.25	11,264.19	—	—	—	—	—
55	Walton Street Capital	10,915.61	432.21	9575.63	—	—	—	—	—
56	KBS	10,865.24	—	10,865.24	—	—	—	—	—
57	Columbia Threadneedle Investments	10,547.72	10,547.72	—	—	—	—	—	—

Total gross value of real estate assets under management (gross, € million, as at 31 December 2016)									
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
58	Walton Street Capital	10,391.68	432.21	9,052.18	—	907.29	—	—	—
59	IGIS Asset Management	10,022.00	1,220.74	1,754.71	—	7,046.55	—	—	—
60	Hermes Real Estate Investment Management	9,781.12	8,621.66	868.78	—	53.22	237.46	—	—
61	DTZ Investors	9,576.16	9,576.16	—	—	—	—	—	—
62	Ares Management	9,267.91	2,945.29	6,322.61	—	—	—	—	—
63	ISPT	9,102.35	—	—	—	—	9,102.35	—	—
64	DRA Advisors	9,028.23	—	9,028.23	—	—	—	—	—
65	Rockwood Capital	9,026.42	—	9,026.42	—	—	—	—	—
66	CenterSquare Investment Management	8,987.37	499.88	7,641.68	—	623.42	222.38	—	—
67	Partners Group	8,881.88	—	—	—	—	—	—	—
68	Bouwinvest Real Estate Investment Management	8,500.00	6,817.00	1,156.00	—	155.00	—	—	—
69	Westbrook Partners	8,067.44	—	—	—	—	—	—	—
70	Crow Holdings Capital Partners	8,019.44	—	8,019.44	—	—	—	—	—
71	Rockspring Property Investment Managers	7,978.00	7,978.00	—	—	—	—	—	—
72	Tristan Capital Partners	7,871.00	7,871.00	—	—	—	—	—	—
73	American Realty Advisors	7,613.36	—	7,613.36	—	—	—	—	—
74	Quadrant Real Estate Advisors	7,612.63	219.21	7,375.43	—	—	17.99	—	—
75	Royal London Asset Management	7,515.84	7,515.84	—	—	—	—	—	—
76	BMO Real Estate Partners	7,460.75	7,460.75	—	—	—	—	—	—
77	InvestiRE SGR	7,300.00	7,300.00	—	—	—	—	—	—
78	KGAL	7,223.50	7,176.30	—	—	47.20	—	—	—
79	ASB Capital Management	7,099.04	—	7,099.04	—	—	—	—	—
80	Kayne Anderson Real Estate Advisors	6,970.74	—	6,970.74	—	—	—	—	—
81	Exeter Property Group	6,861.36	377.00	6,484.36	—	—	—	—	—
82	Berkshire Group	6,759.39	—	6,759.39	—	—	—	—	—
83	GreenOak Real Estate	6,713.20	2,077.44	3,864.08	—	771.68	—	—	—
84	Cromwell Property Group	6,706.99	3,285.06	—	—	—	3,421.94	—	—
85	PCCP	6,653.43	—	6,653.43	—	—	—	—	—
86	Orchard Street Investment Management	6,589.98	6,589.98	—	—	—	—	—	—
87	Sentinel Real Estate Corp.	6,440.45	33.26	6,401.49	—	—	5.70	—	—

Total gross value of real estate assets under management (gross, € million, as at 31 December 2016)									
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
88	Bridge Investment Group Partners	6,367.28	—	6,367.28	—	—	—	—	—
89	GLL Real Estate Partners	6,366.00	3,370.00	2,958.00	—	38.00	—	—	—
90	Investa Property Group	6,332.70	—	—	—	—	6,332.70	—	—
91	Beacon Capital Partners	6,239.27	—	6,239.27	—	—	—	—	—
92	Intercontinental Real Estate Corp	6,173.22	—	6,173.22	—	—	—	—	—
93	Mesa West Capital	6,115.25	—	6,115.25	—	—	—	—	—
94	Amherst Capital Management	5,987.14	—	5,987.14	—	—	—	—	—
95	Bouwfonds Investment Management	5,890.00	5,890.00	—	—	—	—	—	—
96	Carmel Partners	5,886.50	—	5,886.50	—	—	—	—	—
97	Meyer Bergman	5,809.00	5,487.00	322.00	—	—	—	—	—
98	PAG Investment Management	5,790.42	—	—	—	5,790.42	—	—	—
99	Warburg-HIH invest Real Estate	5,189.00	5,189.00	—	—	—	—	—	—
100	National Real Estate Advisors	4,773.56	—	4,773.56	—	—	—	—	—
101	Lionstone Investments	4,672.82	—	4,672.82	—	—	—	—	—
102	M3 Capital Partners	4,495.11	2,000.47	1,473.03	95.03	451.41	475.17	—	—
103	Vesteda Investment Management	4,375.00	4,375.00	—	—	—	—	—	—
104	Timbercreek Asset Management	4,257.77	249.54	3,868.97	—	95.43	43.83	—	—
105	Landmark Partners	4,110.98	—	—	—	—	—	—	4,110.98
106	GEM Realty Capital	4,086.46	—	4,086.46	—	—	—	—	—
107	Forum Partners Investment Management	4,062.13	785.55	2,920.39	356.76	570.20	—	—	—
108	Arcus Infrastructure Partners	3,993.66	3,993.68	—	—	—	—	—	—
109	Torchlight Investors	3,892.59	—	3,892.59	—	—	—	—	—
110	Amvest REIM	3,867.00	3,867.00	—	—	—	—	—	—
111	Unite Integrated Solutions	3,863.98	3,863.98	—	—	—	—	—	—
112	Prelios	3,800.00	3,800.00	—	—	—	—	—	—
113	Canyon Partners Real Estate	3,611.29	—	3,611.29	—	—	—	—	—
114	ECE Real Estate Partners	3,560.00	3,560.00	—	—	—	—	—	—
115	ICG-Longbow	3,508.87	3,508.87	—	—	—	—	—	—
116	Diamond Realty Management	3,446.49	—	—	—	3,446.49	—	—	—
117	GTIS Partners	3,441.18	—	1,439.77	2,001.42	—	—	—	—

Total gross value of real estate assets under management (gross, € million, as at 31 December 2016)									
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
118	Waterton	3,435.76	—	3,435.76	—	—	—	—	—
119	Grosvenor Europe	3,432.70	3,432.70	—	—	—	—	—	—
120	Equus Capital Partners	3,326.19	—	3,326.19	—	—	—	—	—
121	InfraRed Capital Partners	3,325.24	2,410.82	—	—	914.42	—	—	—
122	Related Fund Management	3,314.79	—	3,314.79	—	—	—	—	—
123	Blue Vista Capital Management	3,293.31	—	3,293.31	—	—	—	—	—
124	Capri Capital Partners	3,266.70	—	3,266.70	—	—	—	—	—
125	Franklin Real Estate Advisors	3,217.38	636.44	1,724.87	2.00	816.63	37.35	—	—
126	Madison International Realty	3,009.73	1,272.51	1,736.27	—	—	—	—	—
127	Madison Realty Capital	2,970.76	—	2,970.76	—	—	—	—	—
128	NIAM	2,905.70	2,905.70	—	—	—	—	—	—
129	LBA Realty	2,851.02	—	2,851.02	—	—	—	—	—
130	Realterm	2,803.50	47.52	1,900.68	—	855.31	—	—	—
131	Hahn Group	2,750.00	2,750.00	—	—	—	—	—	—
132	Artemis Real Estate Partners	2,710.37	—	2,710.37	—	—	—	—	—
133	Europa Capital	2,710.00	2,710.00	—	—	—	—	—	—
134	Internos Global Investors	2,707.00	2,707.00	—	—	—	—	—	—
135	Pradera	2,540.00	1,910.00	—	—	630.00	—	—	—
136	M7 Real Estate	2,450.00	2,450.00	—	—	—	—	—	—
137	Lowe Enterprises	2,421.47	—	2,421.47	—	—	—	—	—
138	Cording Real Estate Group	2,400.00	2,400.00	—	—	—	—	—	—
139	CS Capital Management	2,394.20	—	2,394.20	—	—	—	—	—
140	Lothbury Investment Management	2,159.94	2,159.94	—	—	—	—	—	—
141	New Forests Asset Management	2,077.05	—	22.86	—	101.63	1,952.56	—	—
142	Sarofim Realty Advisors	1,924.44	—	1,924.44	—	—	—	—	—
143	EURAMCO Group	1,924.00	1,684.00	—	—	143.00	97.00	—	—
144	DRC Capital	1,847.84	1,847.84	—	—	—	—	—	—
145	Altera Vastgoed	1,834.00	1,834.00	—	—	—	—	—	—
146	Bristol Group	1,823.70	—	1,823.70	—	—	—	—	—
147	Vanbarton Group	1,811.35	—	1,811.35	—	—	—	—	—

Total gross value of real estate assets under management (gross, € million, as at 31 December 2016)									
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
148	Cheyne Capital Management	1,772.38	1,772.38	—	—	—	—	—	—
149	Knight Frank Investment Management	1,755.37	1,755.37	—	—	—	—	—	—
150	LEM Capital	1,635.35	—	1,635.35	—	—	—	—	—
151	Alex. Brown Realty	1,580.42	—	1,580.42	—	—	—	—	—
152	Westport Capital Partners	1,511.90	34.78	1,165.02	—	4.09	—	—	308.10
153	American Real Estate Partners	1,474.93	—	1,474.93	—	—	—	—	—
154	TGM Associates	1,472.43	—	1,472.43	—	—	—	—	—
155	Guggenheim Real Estate	1,445.09	9.22	1,424.08	2.66	9.12	—	—	—
156	Hunt Investment Management	1,441.00	17.49	1,423.51	—	—	—	—	—
157	Fidelity International	1,411.25	1,116.65	—	—	—	—	294.61	—
158	CityView	1,313.37	—	1,313.37	—	—	—	—	—
159	Brunswick Real Estate	1,300.00	1,300.00	—	—	—	—	—	—
160	Oak Street Real Estate Capital	1,273.89	—	1,273.89	—	—	—	—	—
161	Presima	1,253.85	186.88	707.00	—	286.24	73.72	—	—
162	Long Wharf Real Estate Partners	1,244.95	—	1,244.95	—	—	—	—	—
163	Patria Investimentos	1,211.57	—	—	1,211.57	—	—	—	—
164	Pearlmark	1,195.81	—	1,195.81	—	—	—	—	—
165	Altis Property Partners	1,152.10	—	—	—	—	1,152.10	—	—
166	Mayfair Capital Investment Management	1,149.23	1,149.23	—	—	—	—	—	—
167	Sparinvest Property Investors	1,091.00	231.00	565.00	31.00	264.00	—	—	—
168	Conundrum Capital Corp	1,066.03	—	1,066.03	—	—	—	—	—
169	Degroof Petercam Asset Management	1,050.69	1,050.69	—	—	—	—	—	—
170	VBI Real Estate	1,013.73	—	—	1,013.73	—	—	—	—
171	Colliers Capital	962.19	962.19	—	—	—	—	—	—
172	Kairos Investment Management Co	944.73	—	944.73	—	—	—	—	—
173	Rynda Property Investors	925.00	925.00	—	—	—	—	—	—
174	Argosy Real Estate	898.07	—	898.07	—	—	—	—	—
175	Trigate Capital	891.55	—	891.55	—	—	—	—	—
176	Covenant Capital Group	876.97	—	876.97	—	—	—	—	—
177	Clearbell Fund Management	781.59	781.59	—	—	—	—	—	—

Total gross value of real estate assets under management (gross, € million, as at 31 December 2016)									
Rank	Investment manager	Total	Europe	North America	Latin America	Asia	Australasia	Middle East	Global/Other
178	MaxCap Investment Management	766.51	—	—	—	—	766.51	—	—
179	Frogmore	752.40	752.40	—	—	—	—	—	—
180	Propertylink	713.13	—	—	—	—	713.13	—	—
181	Northern Horizon Capital	678.00	678.00	—	—	—	—	—	—
182	LendInvest Capital	585.98	585.98	—	—	—	—	—	—
183	Ascentris	580.94	—	580.94	—	—	—	—	—
184	IAM Real Estate Group	576.14	—	576.14	—	—	—	—	—
185	Western National Group	562.22	—	562.22	—	—	—	—	—
186	First Property Asset Management	559.03	559.03	—	—	—	—	—	—
187	Velocis	545.78	—	545.78	—	—	—	—	—
188	WHI Real Estate Partners	529.53	—	529.53	—	—	—	—	—
189	Pamfleet	450.20	—	—	—	450.20	—	—	—
190	Omni Partners	444.76	444.76	—	—	—	—	—	—
191	Newport Capital Partners	427.65	—	427.65	—	—	—	—	—
192	Novare Fund Manager	401.04	—	—	—	—	—	—	—
193	BKM Capital Partners	295.27	—	295.27	—	—	—	—	—
194	Hutensky Capital Partners	278.16	—	278.16	—	—	—	—	—
195	Avenida Capital	247.09	—	—	247.09	—	—	—	—
196	Evolve Fund Services	208.61	208.61	—	—	—	—	—	—
197	IO Asset Management	175.80	175.80	—	—	—	—	—	—
198	Newcore Capital Management	117.20	117.20	—	—	—	—	—	—
199	Barwood Capital	90.24	90.24	—	—	—	—	—	—
200	Belay Investment Group	17.49	—	17.49	—	—	—	—	—

End notes

Aberdeen Asset Management

Figures supplied are net of approximately £2.35 billion (€2.60 billion) in additional direct property assets managed on behalf of internal funds as part of a multi-asset investment solution. As with previous years' submissions, the above figures just cover Direct Property business. We do have a funds of funds business that has approximately £1.62 billion (€1.79 million) under management.

AEW Global

In February 2016 NGAM, La banque Postale and AEW Europe announced an agreement relating to the contribution of LBP owned retail real estate fund manager Ciloger to AEW Europe. As part of the transaction, NGAM purchased CDC's 40 percent interest in AEW Europe on 15 June 2016. On 21 July 2016 NGAM, LBP and AEW Europe signed an agreement to secure the acquisition of Ciloger. The transaction was completed on 27 October 2016.

American Real Estate Partners

AUM includes \$619 million (€527 million) in nine joint ventures.

Angelo Gordon & Co.

AUM excludes \$2.7 billion (€2.3 billion) in commingled funds. North America allocation includes 100 percent of CMBS and RMBS assets, and private equity real estate.

Argosy Real Estate

AUM includes \$110 million (€93.6 million) of uncalled equity.

ASB Capital Management

All numbers are at 31 March 2017.

Aviva Investors

There has been the acquisition of a friends Life Real Estate portfolio, some of which has been incorporated into Aviva Investors real estate during 2016.

AXA Investment Managers – Real Assets

AXA IM – Real Assets acquired Sydney-based real estate investment manager Eureka Funds Management in September 2016

Barings

In March 2016, Barings Asset Management, Babson Capital Management, Wood Creek Capital Management and Cornerstone Real Estate Advisers announced their intention to combine under the Barings brand. In July 2016, BAML became an indirect, wholly-owned subsidiary of Babson. In September 2016, Babson changed its name to Barings and Cornerstone was renamed Barings Real Estate Advisers; in addition, Wood Creek merged with Barings. On 30 December 2016, Barings Real Estate Advisers merged with and into Barings.

Blue Vista Capital Management

AUM provided for the 2016 survey reported total capitalisation rather than gross AUM

BMO Real Estate Partners

BMO Global Asset Management bought the remaining 30 percent stake in BMO Real Estate Partners on 8 March 2017. As part of this transaction the value-add portion of the BMO REP business will be demerged.

BNP Paribas Real Estate Investment Management

AuM figure includes €5 billion of funds under administration

Bouwfonds Investment Management

AUM includes fund and non-fund assets

Brunswick Real Estate

Brunswick Real Estate is a new name for Sveafastigheter.

Colony NorthStar

Colony NorthStar was formed in 2017 through a tri-party merger between Colony Capital, NorthStar Asset Management Group and NorthStar Realty Finance.

Cording Real Estate Group

AUM includes €1.4 billion of non-fund activity.

Davis Investment Ventures

AUM includes \$1.05 billion (€0.9 billion) of legacy real estate.

Diamond Realty Management

AUM includes a JPY 7,800 million (€0.6 million) subadvisory mandate.

DIC Asset AG

AUM includes fund and non-fund assets.

EURAMCO Group

EURAMCO Invest GmbH is the new name for SF Invest GmbH.

Fidelity International

AUM as at 30 June 2017.

The GPT Group

AUM includes fund and non-fund assets.

Guggenheim Real Estate

Net figures supplied.

Hermes Real Estate Investment Management

AUM includes £790 million (€873 million) of assets held in four joint venture vehicles.

Hines

AUM includes fund and non-fund assets.

ICG-Longbow

AUM includes £21 million (€23.2 million) of warehoused assets.

IGIS Asset Management

AuM includes KRW 10,884,099 (€8.1 million) in 47 joint venture vehicles.

Kairos Investment Management Company

Previously known as Redwood-Kairos Real Estate Partners.

KGAL

AUM includes fund and non-fund assets.

La Française Real Estate Managers

AUM includes €646 million of joint shareholdings with affiliates.

LEM Capital

Figures as at 31 March 2017.

LGIM Real Assets

AUM includes four joint ventures vehicles with a value of £1.42 million (€1.05 million).

M7 Real Estate

AUM also includes €1.1 million in joint ventures.

Mayfair Capital Investment Management

100 percent of the shares of Mayfair Capital were sold to Swiss Life at the end of 2016.

MetLife Investment Management

AUM includes fund and non-fund assets.

Meyer Bergman

AuM includes €322 million held in a co-investment structures.

Morgan Stanley Real Estate Investing

Gross value represents real estate assets under management (real estate AUM), which represents gross fair market value of the real estate assets managed by Morgan Stanley on behalf of the firm and its clients, presented at direct ownership interest. RE AUM for certain minority interests represents Morgan Stanley's equity investment in the entity.

Omni Partners

Net figures supplied.

Patria Inverimentos

Gross asset value equals the sum of the estimated fair equity value and the outstanding debt values of the fund's investment.

PGIM

Total real estate AUM includes the combined assets of PGIM Real Estate and PGIM Real Estate Finance, two units within PGIM that provide real estate investment management and commercial mortgage loan services solely 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 and Pricoa Mortgage Capital, respectively, outside of the Americas, South Korea and Japan.

Prelios

AUM includes uncalled commitments.

Realterm

AUM includes \$260 million (€221 million) of partner owned assets.

Rockspring Property Investment Managers

AuM includes fund and non-fund assets.

Swiss Life Asset Managers

AuM includes €43.5 million of real estate assets under management as well as €28.8 million real estate under administration where we manage assets in general on behalf of third parties and our subsidiaries. Acquired Mayfair Capital Management in 2016.

Tishman Speyer Properties

Non-fund investments of \$26.3 million (€22.4 million) include 35 joint ventures.

Torchlight Investors

Net figures supplied. AUM includes unfunded commitments and CDO.

USAA Real Estate Company

AuM includes fund and non-fund assets.

Walton Street Capital

AUM includes the value of an asset that we manage but don't own.

Westport Capital Partners

Net figure supplied.

Discretionary separate accounts

Discretionary separate account mandates by investor domicile (gross, € million, as at 31 December 2016)									
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of Mandates
1	PGIM	64,173.61	5,473.96	55,652.86	—	1,458.77	375.38	1,212.63	56
2	Aviva Investors	30,564.95	30,245.00	15.24	—	79.69	—	225.02	57
3	AXA Investment Managers – Real Assets	27,280.00	27,160.70	119.30	—	—	—	—	11
4	CBRE Global Investors	24,803.87	19,006.80	1,995.71	—	1,805.65	1,995.71	—	186
5	Invesco Real Estate	23,334.84	753.14	7,225.15	—	15,356.54	—	—	29
6	Cohen & Steers Capital Management	21,677.26	1,703.01	6,085.98	—	13,837.90	50.37	—	66
7	M&G	20,261.00	18,143.25	—	—	2,117.75	—	—	19
8	Bentall Kennedy	17,873.04	—	17,873.04	—	—	—	—	4
9	LaSalle Investment Management	15,966.66	11,759.51	3,901.15	20.91	265.14	19.96	—	69
10	Prologis	14,461.04	5,437.47	6,335.92	67.85	—	—	2,619.80	12
11	Deutsche Asset Management	11,465.40	989.80	9,567.40	—	798.60	109.60	—	96
12	AEW Global	10,566.83	1,207.88	8,614.83	—	432.40	311.71	—	35
13	Standard Life Investments	8,248.04	8,248.04	—	—	—	—	—	12
14	Royal London Asset Management	7,062.28	7,062.28	—	—	—	—	—	6
15	Principal Real Estate Investors	6,947.54	1,148.92	3,497.01	51.26	1,564.14	559.67	126.53	55
16	Aberdeen Asset Management	6,660.30	6,593.26	67.04	—	—	—	—	19
17	Hermes Real Estate Investment Management	6,642.95	6,642.95	—	—	—	—	—	1
18	Orchard Street Investment Management	6,589.98	6,457.55	—	—	—	—	132.43	8
19	Heitman	6,351.12	172.96	2,673.31	—	2,571.62	921.83	11.40	33
20	LGIM Real Assets	6,305.07	6,132.44	—	—	172.63	—	—	5
21	BlackRock	5,887.36	260.39	4,442.84	—	—	—	—	26
22	CenterSquare Investment Management	5,741.95	580.66	4,515.07	—	265.14	381.09	—	52
23	Clarion Partners	5,588.95	—	5,014.94	—	574.01	—	—	8
24	UBS Global Asset Management	5,533.86	2,375.38	3,158.48	—	—	—	—	15
25	DTZ Investors	5,159.01	5,159.01	—	—	—	—	—	8

Discretionary separate account mandates by investor domicile (gross, € million, as at 31 December 2016)									
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of Mandates
26	Schroder Real Estate Investment Management	4,614.04	4,543.72	—	—	70.32	—	—	32
27	BNP Paribas Real Estate Investment Management	4,338.40	4,338.40	—	—	—	—	—	20
28	USAA Real Estate Co	4,065.55	—	4,065.55	—	—	—	—	12
29	Forum Partners Investment Management	3,490.69	583.41	2,887.70	—	19.58	—	—	10
30	Columbia Threadneedle Investments	3,281.51	3,281.51	—	—	—	—	—	3
31	AMP Capital	3,054.42	—	—	—	1,385.88	1,563.14	105.40	25
32	Rockwood Capital	3,049.64	—	3,049.64	—	—	—	—	6
33	Lendlease Investment Management	2,669.11	—	—	—	958.14	1,710.97	—	4
34	Bouwinvest Real Estate Investment Management	2,618.00	1,015.00	1,120.00	—	338.00	145.00	—	4
35	Credit Suisse Real Estate Investment Management	2,131.61	2,131.61	—	—	—	—	—	2
36	KBS	2,064.14	—	2,064.14	—	—	—	—	6
37	Rockspring Property Investment Managers	2,009.15	992.95	—	—	1,016.20	—	—	4
38	Lionstone Investments	1,838.91	—	1,838.91	—	—	—	—	4
39	Vanbarten Group	1,811.35	—	1,811.35	—	—	—	—	6
40	Barings	1,788.54	115.94	1,059.63	—	612.97	—	—	17
41	J.P. Morgan Asset Management – Global Real Assets	1,781.89	—	1,781.89	—	—	—	—	3
42	Related Fund Management	1,734.37	—	1,515.79	—	—	—	218.58	12
43	Hines	1,694.46	—	1,365.64	—	302.21	—	26.61	11
44	Tishman Speyer Properties	1,562.26	—	—	—	1,562.26	—	—	3
45	Sentinel Real Estate Corp	1,480.63	—	1,480.63	—	—	—	—	2
46	Amvest REIM	1,409.00	1,409.00	—	—	—	—	—	3
47	ICG-Longbow	1,381.75	882.49	—	—	—	—	499.26	7
48	Angelo Gordon	1,188.59	73.65	935.61	—	179.33	—	—	6
49	National Real Estate Advisors	1,090.04	—	1,090.04	—	—	—	—	1
50	Ares Management	1,072.36	111.76	834.02	—	126.59	—	—	5
51	American Realty Advisors	1,053.83	—	1,053.83	—	—	—	—	20
52	Warburg-HIH invest Real Estate	1,035.00	1,035.00	—	—	—	—	—	13
53	Franklin Real Estate Advisors	1,023.90	284.15	295.84	—	—	443.90	—	12
54	Waterton	943.40	—	943.40	—	—	—	—	1

Discretionary separate account mandates by investor domicile (gross, € million, as at 31 December 2016)									
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of Mandates
55	Nuveen/TH Real Estate	937.04	395.34	541.69	—	—	—	—	5
56	Knight Frank Investment Management	891.75	891.75	—	—	—	—	—	2
57	Savills Investment Management	776.00	776.00	—	—	—	—	—	2
58	Quadrant Real Estate Advisors	715.58	14.91	381.36	—	—	319.30	—	5
59	Presima	686.10	—	475.18	—	—	210.92	—	5
60	Sarofim Realty Advisors	680.44	—	680.44	—	—	—	—	2
61	Bristol Group	614.87	—	614.87	—	—	—	—	1
62	Madison International Realty	583.51	583.51	—	—	—	—	—	1
63	Ascentris	580.94	—	580.94	—	—	—	—	2
64	LBA Realty	475.17	—	475.17	—	—	—	—	1
65	Colliers Capital	464.10	464.10	—	—	—	—	—	3
66	Timbercreek Asset Management	429.10	231.16	197.94	—	—	—	—	5
67	Amherst Capital Management	382.99	—	—	—	—	—	382.99	1
68	ASB Capital Management	333.57	—	333.57	—	—	—	—	1
69	Lothbury Investment Management	305.88	305.88	—	—	—	—	—	1
70	CityView	282.25	—	282.25	—	—	—	—	1
71	Walton Street Capital	249.46	—	106.72	—	142.74	—	—	5
72	Degroof Petercam Asset Management	246.59	246.59	—	—	—	—	—	—
73	Diamond Realty Management	244.55	—	—	—	244.55	—	—	2
74	LendInvest Capital	210.95	210.95	—	—	—	—	—	5
75	First Property Asset Management	199.23	199.23	—	—	—	—	—	1
76	Omni Partners	197.67	197.67	—	—	—	—	—	2
77	ISPT	169.73	—	—	—	—	169.73	—	3
78	Cheyne Capital Management	139.70	—	—	—	—	—	139.70	1
79	CS Capital Management	99.94	—	99.94	—	—	—	—	1
80	Newport Capital Partners	95.03	—	95.03	—	—	—	—	1
81	InfraRed Capital Partners	94.27	—	—	—	—	—	94.27	1
82	Arcus Infrastructure Partners	91.48	91.48	—	—	—	—	—	1
83	Westport Capital Partners	89.74	—	89.74	—	—	—	—	3
84	Kairos Investment Management Co	53.98	—	53.98	—	—	—	—	2

Discretionary separate account mandates by investor domicile (gross, € million, as at 31 December 2016)									
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of Mandates
85	Oak Street Real Estate Capital	52.30	—	52.30	—	—	—	—	2
86	Lowe Enterprises	48.47	—	48.47	—	—	—	—	1
87	VBI Real Estate	35.92	—	—	35.92	—	—	—	1
88	Hunt Investment Management	19.48	—	19.48	—	—	—	—	1
88	GTIS Partners	0.95	—	0.95	—	—	—	—	1

End notes

Aberdeen Asset Management

Figures supplied are net of approximately £2.35 billion (€2.6 million) in additional direct property assets managed on behalf of internal funds as part of a multi-asset investment solution. As with previous years' submissions, the above figures just cover Direct Property business. We do have a funds of funds business that has approximately £1.62 billion (€1.8 billion) under management.

AEW Global

In February 2016 NGAM, La banque Postale and AEW Europe announced an agreement relating to the contribution of LBP owned retail real estate fund manager Ciloger to AEW Europe. As part of the transaction, NGAM purchased CDC's 40 percent interest in AEW Europe on 15 June 2016. On 21 July 2016, NGAM, LBP and AEW Europe signed an agreement to secure the acquisition of Ciloger. The transaction was completed on 27 October 2016.

ASB Capital Management

All numbers are at 31 March 2017.

Aviva Investors

There has been the acquisition of a friends Life Real Estate portfolio, some of which has been incorporated into Aviva Investors real estate during 2017.

AXA Investment Managers – Real Assets

AXA IM – Real Assets acquired Sydney-based real estate investment manager Eureka Funds Management in September 2017.

Barings

In March 2016, Barings Asset Management, Babson Capital Management, Wood Creek Capital Management and Cornerstone Real Estate Advisers announced their intention to combine under the Barings brand. In July 2016, BAML became an indirect, wholly-owned subsidiary of Babson. In September 2016, Babson changed its name to Barings and Cornerstone was renamed Barings Real Estate Advisers; in addition, Wood Creek merged with Barings. On 30 December 2016, Barings Real Estate Advisers merged with and into Barings.

BMO Real Estate Partners

BMO Global Asset Management bought the remaining 30 percent stake in BMO Real Estate Partners on 8 March 2017. As part of this transaction the value-add portion of the BMO REP business will be demerged.

Knight Frank Investment Management

Both discretionary mandates are semi-discretionary.

Mayfair Capital Investment Management

100 percent of the shares of Mayfair Capital were sold to Swiss Life at the end of 2017.

Omni Partners

Net figures supplied.

PGIM

Total real estate AUM includes the combined assets of PGIM Real Estate and PGIM Real Estate Finance, two units within PGIM that provide real estate investment management and commercial mortgage loan services solely 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 and Pricoa Mortgage Capital, respectively, outside of the Americas, South Korea and Japan.

Walton Street Capital

AUM includes the value of an asset that we manage but don't own.

Advisory separate accounts

Advisory separate accounts by investor domicile (gross, € million, as at 31 December 2016)									
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of mandates
1	Principal Real Estate Investors	40,171.31	59.07	38,050.43	—	1,073.43	988.38	—	37
2	Barings	36,380.92	1,031.12	35,298.48	—	51.32	—	—	17
3	AEW Global	24,525.42	15,341.34	8,171.02	—	189.12	823.94	—	57
4	Heitman	17,957.62	1,212.63	15,596.03	—	1,148.96	—	—	20
5	CBRE Global Investors	15,585.58	5,511.97	5,702.04	—	2,185.78	—	2,185.78	36
6	Clarion Partners	14,544.00	—	12,515.98	—	—	—	2,028.03	12
7	Nuveen/TH Real Estate	14,169.57	7,936.29	3,151.33	—	1,326.67	1,755.28	—	29
8	LaSalle Investment Management	14,046.98	5,010.19	5,746.71	—	2,782.60	507.48	—	51
9	Greystar	12,264.14	3,501.05	8,618.63	144.45	—	—	—	21
10	Credit Suisse Real Estate Investment Management	12,029.40	11,926.77	—	—	102.64	—	—	5
11	Invesco Real Estate	11,507.76	2,262.38	5,567.47	—	3,677.91	—	—	29
12	J.P. Morgan Asset Management – Global Real Assets	10,329.25	2,948.91	7,374.64	—	—	5.70	—	16
13	Patrizia Immobilien	8,300.00	7,500.00	—	—	800.00	—	—	41
14	MetLife Investment Management	8,125.41	2,362.55	5,461.60	—	220.48	—	80.78	17
15	Savills Investment Management	7,188.00	4,404.00	734.00	—	2,050.00	—	—	22
16	Quadrant Real Estate Advisors	6,780.44	—	6,780.44	—	—	—	—	1
17	Deutsche Asset Management	6,190.10	3,794.90	—	—	2,395.20	—	—	11
18	Aberdeen Asset Management	5,961.22	5,220.30	—	—	—	—	740.92	32
19	AXA Investment Managers – Real Assets	5,752.60	1,481.10	68.80	—	393.50	3,085.60	723.60	19
20	Hines	5,609.86	1,328.58	1,639.34	—	2,216.19	—	425.75	12
21	La Française Real Estate Managers	5,395.00	4,315.00	—	—	1,080.00	—	—	19
22	GLL Real Estate Partners	4,565.00	3,865.00	—	—	700.00	—	—	11
23	M3 Capital Partners	4,495.11	—	4,495.11	—	—	—	—	2
24	Amherst Capital Management	4,456.14	—	4,456.14	—	—	—	—	1
25	DTZ Investors	4,407.77	4,407.77	—	—	—	—	—	10
26	AMP Capital	3,886.63	—	1,355.09	—	—	1,755.45	776.09	9

Advisory separate accounts by investor domicile (gross, € million, as at 31 December 2016)

Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of mandates
27	BMO Real Estate Partners	3,815.93	3,815.93	—	—	—	—	—	37
28	Exeter Property Group	3,677.25	377.00	3,300.25	—	—	—	—	4
29	Gaw Capital Partners	3,622.03	1,851.64	826.80	—	943.59	—	—	10
30	BNP Paribas Real Estate Investment Management	3,367.80	3,367.80	—	—	—	—	—	37
31	BlackRock	3,221.65	—	783.08	—	2,438.57	—	—	4
32	UBS Global Asset Management	3,184.58	1,886.88	174.33	—	1,123.37	—	—	12
33	PGIM	3,104.76	418.15	1,552.86	—	1,054.88	—	78.88	8
34	PCCP	3,034.53	—	3,034.53	—	—	—	—	18
35	Union Investment Real Estate	2,906.80	2,906.80	—	—	—	—	—	6
36	Sentinel Real Estate Corp	2,856.72	314.56	2,542.16	—	—	—	—	9
37	Rockwood Capital	2,853.68	—	2,782.41	—	71.28	—	—	2
38	Lowe Enterprises	2,348.29	—	2,348.29	—	—	—	—	9
39	Lionstone Investments	2,333.08	249.94	2,083.15	—	—	—	—	6
40	GreenOak Real Estate	2,324.53	1,001.66	1,237.34	—	85.53	—	—	9
41	Timbercreek Asset Management	2,308.80	—	2,308.80	—	—	—	—	7
42	CS Capital Management	2,294.26	—	2,294.26	—	—	—	—	5
43	Bentall Kennedy	2,008.07	218.58	1,712.51	—	—	—	76.98	11
44	Berkshire Group	1,776.19	—	—	—	—	415.77	1,360.41	—
45	TGM Associates	1,472.43	—	1,472.43	—	—	—	—	4
46	Arcus Infrastructure Partners	1,471.82	796.92	674.90	—	—	—	—	2
47	M&G	1,429.80	1,429.80	—	—	—	—	—	3
48	Pradera	1,405.60	775.60	—	—	630.00	—	—	5
49	QIC	1,299.65	—	—	—	—	1,299.65	—	1
50	Internos Global Investors	1,222.00	1,222.00	—	—	—	—	—	14
51	Rockspring Property Investment Managers	1,184.65	463.37	—	—	721.28	—	—	3
52	Hunt Investment Management	1,137.08	—	1,137.08	—	—	—	—	6
53	Sarofim Realty Advisors	1,044.42	—	1,044.42	—	—	—	—	4
54	Cording Real Estate Group	1,000.00	1,000.00	—	—	—	—	—	6
55	Rynda Property Investors	925.00	925.00	—	—	—	—	—	7
56	CenterSquare Investment Management	917.08	—	786.88	—	—	130.20	—	2

Advisory separate accounts by investor domicile (gross, € million, as at 31 December 2016)									
Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of mandates
57	CityView	823.94	—	823.94	—	—	—	—	5
58	Bristol Group	761.22	—	761.22	—	—	—	—	2
59	Hahn Group	750.00	750.00	—	—	—	—	—	4
60	MaxCap Investment Management	728.87	—	—	—	—	728.87	—	4
61	Altis Property Partners	714.87	—	—	—	—	714.87	—	3
62	Blue Vista Capital Management	691.09	—	691.09	—	—	—	—	6
63	Standard Life Investments	654.08	497.27	156.81	—	—	—	—	2
64	Knight Frank Investment Management	651.50	585.28	—	—	—	—	66.22	4
65	Mesa West Capital	635.87	—	356.38	—	279.49	—	—	7
66	Diamond Realty Management	598.79	—	—	—	598.79	—	—	9
66	American Real Estate Partners	588.26	—	588.26	—	—	—	—	9
67	Mayfair Capital Investment Management	574.26	574.26	—	—	—	—	—	4
68	Investa Property Group	520.70	—	—	—	—	520.70	—	3
69	Grosvenor Europe	516.25	49.11	—	—	—	—	467.15	2
70	Prelios	465.00	465.00	—	—	—	—	—	3
71	Walton Street Capital	451.03	—	—	—	403.51	—	47.52	8
72	PAG Investment Management	421.00	—	—	—	421.00	—	—	5
73	Colliers Capital	413.70	413.70	—	—	—	—	—	1
74	Bouwfonds Investment Management	390.00	390.00	—	—	—	—	—	1
75	KBS	376.33	—	376.33	—	—	—	—	4
76	Charter Hall	375.73	—	—	—	—	375.73	—	1
77	Tishman Speyer Properties	363.98	363.98	—	—	—	—	—	1
78	Ares Management	323.21	—	323.21	—	—	—	—	1
79	M7 Real Estate	307.00	307.00	—	—	—	—	—	4
80	InvestiRE SGR	300.00	300.00	—	—	—	—	—	1
81	Fidelity International	294.61	—	—	—	—	—	294.61	1
82	Beacon Capital Partners	258.49	—	258.49	—	—	—	—	1
83	Northern Horizon Capital	255.00	255.00	—	—	—	—	—	2
84	Franklin Real Estate Advisors	246.99	—	—	—	—	246.99	—	6

Advisory separate accounts by investor domicile (gross, € million, as at 31 December 2016)

Rank	Fund manager	Total	Europe	North America	Latin America	Asia	Australia	Middle East	Number of mandates
85	ECE Real Estate Partners	230.00	230.00	—	—	—	—	—	1
86	Pearlmark	208.22	—	208.22	—	—	—	—	4
87	VBI Real Estate	197.01	—	—	197.01	—	—	—	1
88	Omni Partners	111.19	111.19	—	—	—	—	—	1
89	InfraRed Capital Partners	99.22	—	—	—	—	—	99.22	1
90	Trigate Capital	70.33	—	70.33	—	—	—	—	1
91	DRC Capital	59.77	—	59.77	—	—	—	—	1
92	Newcore Capital Management	52.74	52.74	—	—	—	—	—	2
93	Europa Capital	51.00	—	—	—	51.00	—	—	1
94	Evolve Fund Services	35.16	35.16	—	—	—	—	—	5
95	Alex. Brown Realty	23.76	—	23.76	—	—	—	—	1
96	New Forests Asset Management	22.85	—	22.85	—	—	—	—	1
97	American Realty Advisors	13.21	—	13.21	—	—	—	—	1
98	First Property Asset Management	11.72	11.72	—	—	—	—	—	1
99	Royal London Asset Management	3.52	3.52	—	—	—	—	—	2

End notes

Aberdeen Asset Management

Figures supplied are net of approximately £2.35 billion (€2.6 billion) in additional direct property assets managed on behalf of internal funds as part of a multi-asset investment solution. As with previous years' submissions, the above figures just cover Direct Property business. We do have a funds of funds business that has approximately £1.62 billion (€1.8 billion) under management.

AEW Global

In February 2016 NGAM, La banque Postale and AEW Europe announced an agreement relating to the contribution of LBP owned retail real estate fund manager Ciloger to AEW Europe. As part of the transaction, NGAM purchased CDC's 40 percent interest in AEW Europe on 15 June 2016. On 21 July 2016, NGAM, LBP and AEW Europe signed an agreement to secure the acquisition of Ciloger. The transaction was completed on 27 October 2016.

AXA Investment Managers – Real Assets

AXA IM – Real Assets acquired Sydney-based real estate investment manager Eureka Funds Management in September 2017.

Barings

In March 2016, Barings Asset Management, Babson Capital Management, Wood Creek Capital Management and Cornerstone Real Estate Advisers announced their intention to combine under the Barings brand. In July 2016, BAML became an indirect, wholly-owned subsidiary of Babson. In September 2016, Babson changed its name to Barings and Cornerstone was renamed Barings Real Estate Advisers; in addition, Wood Creek merged with Barings. On 30 December 2016, Barings Real Estate Advisers merged with and into Barings.

BMO Real Estate Partners

BMO Global Asset Management bought the remaining 30 percent stake in BMO Real Estate Partners on 8 March 2017. As part of this transaction the value-add portion of the BMO REP business will be demerged.

Knight Frank Investment Management

Both discretionary mandates are semi-discretionary.

Mayfair Capital Investment Management

100 percent of the shares of Mayfair Capital were sold to Swiss Life at the end of 2017.

Omni Partners

Net figures supplied.

PGIM

Total real estate AUM includes the combined assets of PGIM Real Estate and PGIM Real Estate Finance, two units within PGIM that provide real estate investment management and commercial mortgage loan services solely 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 and Pricoa Mortgage Capital, respectively, outside of the Americas, South Korea and Japan.

Walton Street Capital

AUM includes the value of an asset that we manage but don't own.

Indirect real estate vehicles

Number and value of vehicles under management (€ million, as at 31 December 2016)			
Rank	Fund manager	Total GAV	Total vehicles
1	Blackstone	157,944.61	33
2	Nuveen/TH Real Estate	76,841.64	54
3	Brookfield Asset Management	72,504.30	—
4	UBS Global Asset Management	65,315.60	42
5	J.P. Morgan Asset Management – Global Real Assets	63,858.10	26
6	PGIM	51,228.15	44
7	Starwood Capital Group	45,228.58	24
8	CBRE Global Investors	41,909.99	81
9	Deka Immobilien Investment/WestInvest	35,771.00	20
10	Credit Suisse Real Estate Investment Management	35,173.98	45
11	AXA Investment Managers – Real Assets	33,412.00	92
12	Deutsche Asset Management	32,297.80	38
13	Invesco Real Estate	29,625.51	39
14	Morgan Stanley Real Estate Investing	28,956.86	17
15	Union Investment Real Estate	28,242.34	12
16	AEW Global	25,165.95	54
17	LaSalle Investment Management	24,431.34	17
18	Prologis	22,479.91	6
19	Clarion Partners	21,726.67	9
20	Principal Real Estate Investors	21,199.67	7
21	Angelo Gordon	20,103.49	21
22	Standard Life Investments	17,223.84	23
23	Tishman Speyer Properties	15,811.76	13
24	Dexus	15,535.58	6
25	Fortress Investment Group	14,528.80	8
26	Cohen & Steers Capital Management	14,118.25	12
27	Lendlease Investment Management	13,961.49	11

Number and value of vehicles under management (€ million, as at 31 December 2016)			
Rank	Fund manager	Total GAV	Total vehicles
28	LGIM Real Assets	13,794.78	11
29	Aviva Investors	13,301.85	46
30	AMP Capital	13,277.11	18
31	M&G	13,076.83	12
32	Charter Hall	12,620.10	30
33	Bentall Kennedy	12,540.69	6
34	Rockpoint Group	12,016.10	9
35	Patron Capital	11,643.00	5
36	Harrison Street Real Estate Capital	11,569.34	8
37	BNP Paribas Real Estate Investment Management	11,337.30	41
38	QIC	11,300.60	6
39	BlackRock	10,364.41	16
40	Patrizia Immobilien	10,300.00	35
41	Heitman	10,269.37	12
42	Walton Street Capital	9,572.77	11
43	Schroder Real Estate Investment Management	9,559.75	23
44	DRA Advisors	9,059.12	6
45	ISPT	8,918.93	5
46	La Française Real Estate Managers	8,468.00	56
47	KBS	8,424.76	7
48	Gaw Capital Partners	8,412.50	8
49	Aberdeen Asset Management	8,395.98	25
50	Savills Investment Management	8,222.00	25
51	USAA Real Estate Co	8,176.73	10
52	Hines	8,128.26	7
53	Westbrook Partners	8,067.44	6
54	Walton Street Capital	8,059.11	10
55	Ares Management	7,872.62	24
56	Tristan Capital Partners	7,871.00	6
57	Barings	7,806.09	22

Number and value of vehicles under management (€ million, as at 31 December 2016)			
Rank	Fund manager	Total GAV	Total vehicles
58	Columbia Threadneedle Investments	7,266.21	5
59	GPT Group	7,088.88	2
60	InvestiRE SGR	7,000.80	35
61	Kayne Anderson Real Estate Advisors	6,970.74	10
62	KGAL	6,923.10	135
63	Crow Holdings Capital Partners	6,797.78	8
64	ASB Capital Management	6,764.52	2
65	American Realty Advisors	6,546.04	3
66	Bridge Investment Group Partners	6,327.36	9
67	Intercontinental Real Estate Corp	6,163.72	6
68	Beacon Capital Partners	5,980.77	4
69	Carmel Partners	5,886.50	6
70	Investa Property Group	5,812.05	2
71	Meyer Bergman	5,487.00	3
72	Mesa West Capital	5,479.38	3
73	Bouwfonds Investment Management	5,386.00	18
74	PAG Investment Management	5,369.42	4
75	Berkshire Group	4,983.20	5
76	Bouwinvest Real Estate Investment Management	4,877.00	6
77	Rockspring Property Investment Managers	4,512.64	12
78	GreenOak Real Estate	4,388.67	11
79	Vesteda Investment Management	4,375.00	1
80	Warburg-HIH invest Real Estate	4,154.00	20
81	Unite Integrated Solutions	3,863.98	2
82	National Real Estate Advisors	3,682.57	1
83	Prelios	3,649.40	32
84	BMO Real Estate Partners	3,644.82	8
85	PCCP	3,618.80	9
86	Canyon Partners Real Estate	3,604.64	10
87	GTIS Partners	3,440.23	16

Number and value of vehicles under management (€ million, as at 31 December 2016)			
Rank	Fund manager	Total GAV	Total vehicles
88	ECE Real Estate Partners	3,330.00	2
89	Equus Capital Partners	3,326.19	7
90	MetLife Investment Management	3,323.91	2
91	Exeter Property Group	3,184.11	5
92	InfraRed Capital Partners	3,131.75	2
93	Rockwood Capital	3,123.10	6
94	Madison Realty Capital	2,970.76	6
95	Grosvenor Europe	2,917.03	9
96	NIAM	2,905.70	5
97	Madison International Realty	2,894.83	6
98	Greystar	2,890.93	2
99	Artemis Real Estate Partners	2,710.37	6
100	Europa Capital	2,659.00	6
101	Diamond Realty Management	2,603.15	8
102	Blue Vista Capital Management	2,602.32	7
103	Realterm	2,556.41	6
104	Amvest REIM	2,488.00	4
105	Arcus Infrastructure Partners	2,430.36	1
106	Westport Capital Partners	2,391.34	8
107	Hermes Real Estate Investment Management	2,211.74	4
108	CenterSquare Investment Management	2,172.48	19
109	Sentinel Real Estate Corp	2,103.10	4
110	ICG-Longbow	2,102.51	4
111	Waterton	2,063.09	3
112	New Forests Asset Management	2,054.19	6
113	Hahn Group	2,000.00	6
114	Franklin Real Estate Advisors	1,946.39	12
115	EURAMCO Group	1,924.00	29
116	Lothbury Investment Management	1,854.05	2
117	Altera Vastgoed	1,834.00	3

Number and value of vehicles under management (€ million, as at 31 December 2016)			
Rank	Fund manager	Total GAV	Total vehicles
118	Torchlight Investors	1,819.81	5
119	GLL Real Estate Partners	1,796.00	7
120	DRC Capital	1,788.07	6
121	LEM Capital	1,635.35	3
122	Cheyne Capital Management	1,630.78	4
123	Related Fund Management	1,581.37	4
124	Alex. Brown Realty	1,556.66	7
125	Timbercreek Asset Management	1,520.02	12
126	Internos Global Investors	1,483.00	9
127	IGIS Asset Management	1,454.18	20
128	Guggenheim Real Estate	1,445.18	5
129	Long Wharf Real Estate Partners	1,244.95	3
130	Oak Street Real Estate Capital	1,221.60	4
131	Patria Investimentos	1,213.62	4
132	Pradera	1,134.80	4
133	Fidelity International	1,116.65	2
134	Sparinvest Property Investors	1,091.00	4
135	Conundrum Capital Corp.	1,066.03	3
136	M7 Real Estate	1,060.86	11
137	Pearlmark	987.59	7
138	Kairos Investment Management Co	890.75	4
139	American Real Estate Partners	886.67	2
140	Covenant Capital Group	876.97	3
141	Amherst Capital Management	843.90	3
142	Degroof Petercam Asset Management	841.91	3
143	Trigate Capital	821.23	3
144	Argosy Real Estate	793.53	4
145	Clearbell Fund Management	781.59	3
146	VBI Real Estate	780.70	4
147	Frogmore	752.40	3

Number and value of vehicles under management (€ million, as at 31 December 2016)			
Rank	Fund manager	Total GAV	Total vehicles
148	Propertylink	713.13	10
149	Mayfair Capital Investment Management	574.77	4
150	Forum Partners Investment Management	571.91	7
151	Presima	567.73	8
152	Velocis	545.78	2
153	WHI Real Estate Partners	529.53	6
154	Western National Group	512.80	2
155	Lionstone Investments	500.83	6
156	Pamfleet	450.20	3
157	Bristol Group	447.61	4
158	Royal London Asset Management	445.35	1
159	IAM Real Estate Group	440.41	4
160	Northern Horizon Capital	423.00	5
161	Novare Fund Manager	401.04	2
162	Altis Property Partners	397.26	2
163	LendInvest Capital	375.03	4
164	Newport Capital Partners	332.62	3
165	BKM Capital Partners	295.27	1
166	Hunt Investment Management	284.53	6
167	Hutensky Capital Partners	278.16	3
168	First Property Asset Management	268.85	9
169	Avenida Capital	247.09	2
170	Knight Frank Investment Management	212.71	1
171	CityView	207.17	2
172	Sarofim Realty Advisors	199.57	3
173	IO Asset Management	175.80	3
174	Evolve Fund Services	171.65	5
175	Omni Partners	135.90	2
176	Barwood Capital	90.24	2
177	Colliers Capital	84.38	1

Number and value of vehicles under management (€ million, as at 31 December 2016)			
Rank	Fund manager	Total GAV	Total vehicles
178	Newcore Capital Management	64.46	3
179	MaxCap Investment Management	37.30	1
180	Quadrant Real Estate Advisors	37.06	3
181	Belay Investment Group	17.49	1
182	DTZ Investors	9.38	1

End notes

Aberdeen Asset Management

Figures supplied are net of approximately £2.35 billion (€2.6 billion) in additional direct property assets managed on behalf of internal funds as part of a multi-asset investment solution. As with previous years' submissions, the above figures just cover Direct Property business. We do have a funds of funds business that has approximately £1.62 billion (€1.8 billion) under management.

AEW Global

In February 2016 NGAM, La banque Postale and AEW Europe announced an agreement relating to the contribution of LBP owned retail real estate fund manager Ciloger to AEW Europe. As part of the transaction, NGAM purchased CDC's 40 percent interest in AEW Europe on 15 June 2016. On 21 July 2016 NGAM, LBP and AEW Europe signed an agreement to secure the acquisition of Ciloger. The transaction was completed on 27 October 2016.

ASB Capital Management

All numbers are at 31 March 2017.

Aviva Investors

There has been the acquisition of a friends Life Real Estate portfolio, some of which has been incorporated into Aviva Investors Real Estate during 2017.

AXA Investment Managers – Real Assets

AXA IM – Real Assets acquired Sydney-based real estate investment manager Eureka Funds Management in September 2018.

Barings

In March 2016, Barings Asset Management, Babson Capital Management, Wood Creek Capital Management and Cornerstone Real Estate Advisers announced their intention to combine under the Barings brand. In July 2016, BAML became an indirect, wholly-owned subsidiary of Babson. In September 2016, Babson changed its name to Barings and Cornerstone was renamed Barings Real Estate Advisers; in addition, Wood Creek merged with Barings. On 30 December 2016, Barings Real Estate Advisers merged with and into Barings.

BMO Real Estate Partners

BMO Global Asset Management bought the remaining 30 percent stake in BMO Real Estate Partners on 8 March 2017. As part of this transaction the value-add portion of the BMO REP business will be demerged.

Brunswick Real Estate

Brunswick Real Estate is a new name for Sveafastigheter.

Colony NorthStar

Colony NorthStar was formed in 2017 through a tri-party merger between Colony Capital, NorthStar Asset Management Group and NorthStar Realty Finance.

EURAMCO Group

EURAMCO Invest GmbH is the new name for SF Invest GmbH.

Guggenheim Real Estate

Net figures supplied.

Kairos Investment Management Company

Previously known as Redwood-Kairos Real Estate Partners.

LEM Capital

Figures as at 31 March 2017.

Mayfair Capital Investment Management

100 percent of the shares of Mayfair Capital were sold to Swiss Life at the end of 2018.

Omni Partners

Net figures supplied.

Patria Investimentos

Gross asset value equals the sum of the estimated fair equity value and the outstanding debt values of the fund's investment.

PGIM

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Torchlight Investors

Net figures supplied.

Walton Street Capital

AUM includes the value of an asset that we manage but don't own.



About Institutional Real Estate, Inc.

Founded in 1987, Institutional Real Estate, Inc. (IREI) is an information company focused on providing institutional real estate investors with decision-making tools through its publications, conferences and consulting. IREI provides real estate investment fiduciaries with information and insights on the people, issues, ideas and events driving the global real estate investment marketplace. The firm publishes a number of special reports and directories, as well as seven regular news publications. The firm's flagship publication, *Institutional Real Estate Americas*, has covered the industry for more than 25 years. Other IREI titles include *Institutional Real Estate Europe*, *Institutional Real Estate Asia Pacific*, *Real Assets Adviser*, *Institutional Real Estate Newswire*, *Institutional Investing in Infrastructure* and *Institutional Real Estate FundTracker*.

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

On the consulting side, IREI has two decades of experience providing research and advice to the investment-management, brokerage, development and technology communities. Services include strategic information and advice on presentations, organisational structures, product development, proposal responses, and design and implementation of market research projects.

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 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. 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.



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