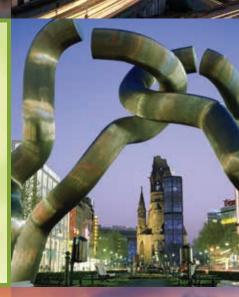


Institutional Real Estate, Inc. Global Investment Managers 2016



Special Report

Institutional Real Estate, Inc.

Global Investment Managers 2016

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

© 2016 Institutional Real Estate, Inc. All Rights Reserved

TABLE OF CONTENTS:



| Survey highlights | 1 |
|---|----|
| Largest investment managers by region | 4 |
| Total assets rankings | 5 |
| Discretionary separate accounts | 13 |
| Advisory separate accounts | 17 |
| Indirect real estate vehicles | 21 |
| About Institutional Real Estate, Inc. and Property Funds Research | 28 |

Star power



Big-name firms attract lots of attention as real estate grabs the spotlight

by Larry Gray

I f they made a movie about the global financial markets in 2015, real estate would not only receive top billing, the role likely would be played by Leonardo DiCaprio or Bradley Cooper or another of Hollywood's current A-list actors. There is no denying the real estate asset class has grabbed the spotlight in recent years and continues to wow investors with its inspiring performances.

In today's low-yield environment, real estate is in high demand, delivering steady income and solid returns, while attracting lots of capital to the asset class. Investors have benefitted and so have real estate investment managers, who have seen assets under management increase significantly, fueled by expanding capital flows and healthy asset appreciation.

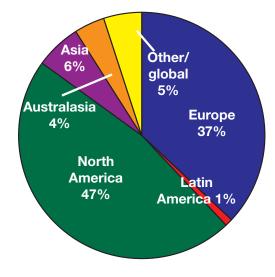
In fact, a number of managers enjoyed double-digit growth in AUM during the past year, according to *Global Investment Managers 2016*, an annual survey and report produced by Property Funds Research and Institutional Real Estate, Inc. The industry's top two largest investment managers, Brookfield Asset Management, with \$149.8 billion in AUM as of year-end 2015, and The Blackstone Group, with \$147.6 billion in AUM, recorded growth of 19 percent and 22 percent, respectively, based on figures reported in the prior year's survey.

The two behemoths continue to outpace others in the industry, as there is a growing and sizable gap between them and the other largest investment management firms. Blackstone has become a fundraising machine. In early 2015, the firm closed its Blackstone Real Estate Partners VIII, raising a record \$15.8 billion of equity. Brookfield also made

a large haul recently, closing its Brookfield Strategic Real Estate Partners II in April 2016 with \$9 billion of equity.

TH Real Estate claimed the number three spot in the rankings with total AUM of \$91.7 billion, followed by CBRE Global Investors (\$89.8 billion) and Hines (\$89.1 billion). Rounding out the top 10 were MetLife Investment Management (\$82.6 billion), UBS Asset Management, Global Real Estate (\$73.3 billion), AXA Investment Managers – Real Assets (\$68.4 billion), Swiss Life Asset Managers (\$67.6 billion) and J.P. Morgan Asset Management – Global Real Assets (\$65.3 billion).

Assets under management by geographic distribution



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

INSTITUTIONAL REAL ESTATE, INC.

This year's report captures data on 194 real estate investment managers around the globe. As a group, they control nearly \$2.8 trillion of real estate assets. Also indicative of the jump in AUM, the top 10 largest managers, as a group, experienced a 12 percent increase from the previous year; the top 100 managers recorded a 14 percent increase.

Similar to years past, the data shows a strong concentration of assets held by the industry's largest firms. The Big Two — Brookfield and Blackstone — account for 10.6 percent of the collective AUM reported by the 194 firms in the survey. The top 10 firms represent 33 percent of aggregate AUM, while the top 20 investment managers account for 53 percent.

Another perspective that reflects the growth of the industry and its players: In 2010, only five short years ago, a total of six real estate investment managers topped \$50 billion in AUM; at year-end 2015, that total had ballooned to 17.

Top 100 firms in aggregate (AUM, US\$ trillion)

Around the world

Assets based in North America represent 47 percent of the \$2.8 trillion total, and Europe accounts for 37 percent of the asset base. Asia claims roughly 6 percent.

Brookfield Asset Management oversees the most assets in North America, with AUM of approximately \$111.5 billion. Swiss Life Asset Managers ranks as the largest manager of Europe real estate assets, with a total of \$67.6 billion. In Asia, LaSalle Investment Management ranks No. 1 with regional AUM of roughly \$16.0 billion. The top-ranked asset managers in Australasia and Latin America were Dexus Property Group (\$15.4 billion) and Paladin Realty Partners (\$3.8 billion), respectively. (See the Top 10 lists on page 4.)

The PFR-IREI annual survey 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

\$3.00 \$2.50 \$2.48 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.61 \$2.00 \$1.94 \$1.67 \$1.94 \$1.50

2013

2014

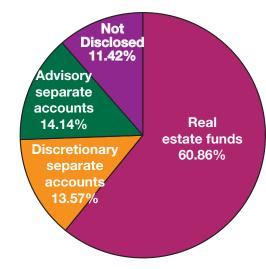
2015

2012

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

2011

Assets under management by investment structure



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

M

vehicles. Aviva Investors topped the rankings based on discretionary separate accounts, with \$32.3 billion of AUM (see page 13). With regard to advisory separate accounts, Cornerstone Real Estate Advisers led the pack, with \$39.1 billion (see page 17). And based on indirect real estate investment vehicles, Blackstone claimed the top spot, with an asset base of \$147.6 billion (see page 21).

Good times

As mentioned, the expanding AUM figures can be attributed to the real estate asset class's strong performance and growing popularity.

Institutional investors around the globe have been flocking to real estate as they search for yield — and diversification — in today's uncertain and volatile global financial markets. Existing investors have upped their ante in recent years, and new investors, including wealthy sovereign wealth funds and some of Asia's largest insurance companies, have joined the fray. In 2015, investment managers raised approximately \$103 billion through private equity closed-end funds, according to Institutional Real Estate, Inc.'s FundTracker database. In 2014, they raised approximately \$93 billion. And investors around the world have been busy putting capital to work. In 2015, Real Capital Analytics reported global transaction volume of nearly \$900 billion, the highest mark since 2007. Strong performance by the asset class has been a boon to investors and investment managers. On a global basis, MSCI's IPD Global Quarterly Property Fund Index posted a 12-month total return for 2015 of 13.5 percent at NAV level and 12.5 percent at asset level. The NCREIF Property Index annual total return in 2015 was 13.33 percent and consisted of a 5.01 percent income return and 8.03 percent appreciation return (the strongest appreciation return since 2007). Looking at leveraged NPI, the total return for 2015 was a robust 21.34 percent. By comparison, the S&P 500 Index returned 1.38 percent in 2015. For the past five years, the NPI recorded an average total return of 12.18 percent. ◆

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.

Largest investment managers by region

| TOP 10 | MANAGERS BASED ON NORTH AMERI | CA ASSETS (US | \$M) |
|---------------|----------------------------------|---------------|------------|
| Rank | Investment manager | North America | Total |
| 1 | Brookfield Asset Management | 111,500.00 | 149,759.00 |
| 2 | MetLife Investment Management | 74,234.00 | 82,579.00 |
| 3 | Hines | 66,868.00 | 88,246.00 |
| 4 | TH Real Estate | 62,085.00 | 91,714.00 |
| 5 | Principal Real Estate Investors | 59,827.38 | 63,300.83 |
| 6 | J.P. Morgan Asset Management | 58,668.00 | 65,277.00 |
| 7 | Cornerstone Real Estate Advisers | 45,910.00 | 49,608.00 |
| 8 | PGIM Real Estate | 43,794.00 | 63,735.00 |
| 9 | Starwood Capital Group | 40,209.00 | 50,097.00 |
| 10 | Clarion Partners | 40,000.00 | 40,300.00 |

| TOP 10 | MANAGERS BASED ON EUROPE ASSET | rs (US\$M) | |
|---------------|---|------------|------------|
| Rank | Investment manager | Europe | Total |
| 1 | Swiss Life Asset Managers | 67,589.79 | 67,589.79 |
| 2 | AXA Investment Managers – Real Assets | 64,277.67 | 68,354.79 |
| 3 | Aviva Investors | 47,944.05 | 49,681.70 |
| 4 | Credit Suisse Real Estate Investment Management | 45,716.00 | 49,742.00 |
| 5 | CBRE Global Investors | 45,400.00 | 89,800.00 |
| 6 | Deka Immobilien Investment/WestInvest | 33,643.85 | 36,047.74 |
| 7 | The Blackstone Group | 31,553.00 | 147,562.00 |
| 8 | M&G Real Estate | 31,224.53 | 36,843.47 |
| 9 | Aberdeen Asset Management | 30,154.19 | 31,076.90 |
| 10 | TH Real Estate | 27,654.00 | 91,714.00 |

| TOP 10 | MANAGERS BASED ON ASIA ASSETS (| (US\$M) | |
|---------------|--|-----------|------------|
| Rank | Investment manager | Asia | Total |
| 1 | LaSalle Investment Management | 16,024.00 | 53,660.21 |
| 2 | Kenedix | 13,667.91 | 12,578.00 |
| 3 | UBS Asset Management, Global Real Estate | 12,835.84 | 67,259.28 |
| 4 | Global Logistic Properties | 8,087.00 | 20,755.49 |
| 5 | CBRE Global Investors | 7,400.00 | 82,639.11 |
| 6 | Gaw Capital Partners | 7,342.60 | 11,043.09 |
| 7 | Alpha Investment Partners Private | 7,044.00 | 7,895.81 |
| 8 | The Blackstone Group | 6,403.00 | 147,562.00 |
| 9 | Prologis | 5,861.80 | 34,288.61 |
| 10 | BlackRock Fund Managers | 5,414.60 | 19,620.44 |

| TOP 10 | MANAGERS BASED ON AUSTRALASIA | ASSETS (US | \$M) |
|---------------|-------------------------------|-------------|------------|
| Rank | Investment manager | Australasia | Total |
| 1 | Dexus Property Group | 15,356.17 | 15,356.17 |
| 2 | AMP Capital | 13,663.95 | 19,927.35 |
| 3 | The GPT Group | 13,639.88 | 13,639.88 |
| 4 | Charter Hall Group | 11,923.59 | 11,923.59 |
| 5 | Lend Lease | 11,670.48 | 16,046.92 |
| 6 | QIC | 9,117.57 | 12,399.89 |
| 7 | Brookfield Asset Management | 8,800.00 | 149,759.00 |
| 8 | ISPT Pty | 8,330.54 | 8,330.54 |
| 9 | Investa Property Group | 5,292.05 | 5,292.05 |
| 10 | LaSalle Investment Management | 1,890.00 | 58,310.00 |

Total Assets Rankings

| | Total gross value | e of real estate a | ssets under manag | jement (US\$ milli | on, as of December | 31, 2015) | | |
|------|---|--------------------|-------------------|--------------------|--------------------|-----------|-------------|--------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australasia | Global/Other |
| 1 | Brookfield Asset Management | 149,759.00 | 111,500.00 | 23,000.00 | — | | 8,800.00 | |
| 2 | The Blackstone Group | 147,562.00 | 15,240.00 | 31,553.00 | — | 6,403.00 | | 94,365.00 |
| 3 | TH Real Estate | 91,714.00 | 62,085.00 | 27,654.00 | 128.00 | 871.00 | 976.00 | |
| 4 | CBRE Global Investors | 89,800.00 | 37,000.00 | 45,400.00 | — | 7,400.00 | | |
| 5 | Hines | 88,246.00 | 66,868.00 | 16,254.00 | 2,418.00 | 2,359.00 | 347.00 | |
| 6 | MetLife Investment Management | 82,579.00 | 74,234.00 | 4,525.00 | 972.00 | 2,583.00 | 265.00 | |
| 7 | UBS Asset Management, Global Real Estate | 73,271.61 | 32,908.90 | 26,361.61 | | 12,835.84 | 445.24 | 720.01 |
| 8 | AXA Investment Managers – Real Assets | 68,354.79 | 3,390.36 | 64,277.67 | | 541.15 | 145.61 | |
| 9 | Swiss Life Asset Managers | 67,589.79 | | 67,589.79 | | | | |
| 10 | J.P. Morgan Asset Management – Global Real Assets | 65,277.00 | 58,668.00 | 5,402.00 | | 974.00 | 233.00 | |
| 11 | Invesco Real Estate | 64,431.00 | 25,892.00 | 7,404.00 | | 5,331.00 | | 25,804.00 |
| 12 | PGIM Real Estate | 63,735.00 | 43,794.00 | 7,075.00 | 2,977.00 | 5,031.00 | | 4,858.00 |
| 13 | Principal Real Estate Investors | 63,300.83 | 59,827.38 | 1,558.57 | _ | 1,423.31 | 491.57 | _ |
| 14 | LaSalle Investment Management | 58,310.00 | 17,315.00 | 23,044.00 | 19.00 | 16,024.00 | 1,890.00 | |
| 15 | AEW Global | 53,782.00 | 31,686.00 | 20,495.00 | — | 1,601.00 | | _ |
| 16 | Deutsche Asset Management | 51,677.93 | 25,789.52 | 22,086.21 | — | 2,192.86 | 1,608.25 | |
| 17 | Starwood Capital Group | 50,097.00 | 40,209.00 | 9,623.00 | 91.00 | 173.20 | | |
| 18 | Credit Suisse Real Estate Investment Management | 49,742.00 | 1,987.00 | 45,716.00 | 1,203.00 | 335.00 | 501.00 | |
| 19 | Aviva Investors | 49,681.70 | 928.62 | 47,944.05 | — | 809.03 | | |
| 20 | Cornerstone Real Estate Advisers | 49,608.00 | 45,910.00 | 3,581.00 | — | 90.00 | 27.00 | _ |
| 21 | Tishman Speyer Properties | 41,964.90 | 31,841.90 | 5,966.40 | 1,342.10 | 2,814.50 | — | |
| 22 | Clarion Partners | 40,300.00 | 40,000.00 | | 300.00 | | | |
| 23 | Prologis | 37,259.80 | 17,975.70 | 13,259.10 | 163.20 | 5,861.80 | | |
| 24 | Cohen & Steers Capital Management | 37,236.00 | 32,207.00 | 2,514.00 | 11.00 | 1,847.00 | 657.00 | |
| 25 | M&G Real Estate | 36,843.47 | 3,171.17 | 31,224.53 | | 1,725.84 | 720.45 | |
| 26 | Deka Immobilien Investment/WestInvest | 36,047.74 | 944.19 | 33,643.85 | 436.94 | 735.12 | 287.64 | — |
| 27 | Heitman | 35,187.00 | 29,572.00 | 4,244.00 | | 768.00 | 603.00 | |

INSTITUTIONAL REAL ESTATE, INC.

| | Total gross valu | e of real estate a | ssets under manag | jement (US\$ milli | on, as of December 3 | 31, 2015) | | |
|------|---|--------------------|-------------------|--------------------|----------------------|-----------|-------------|--------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australasia | Global/Other |
| 28 | Morgan Stanley Real Estate Investing | 31,352.00 | 21,091.00 | 6,106.00 | 26.00 | 3,638.00 | 492.00 | |
| 29 | Union Investment Real Estate GmbH | 30,131.79 | 3,223.77 | 25,594.80 | 352.73 | 807.71 | 152.78 | |
| 30 | Aberdeen Asset Management | 31,076.90 | 246.55 | 30,154.19 | | 676.16 | _ | |
| 31 | Standard Life Investments | 26,867.86 | 248.02 | 26,295.04 | | 324.79 | _ | |
| 32 | Legal & General Property | 26,246.32 | | 26,246.32 | | | | |
| 33 | BNP Paribas Real Estate Investment Management | 23,882.45 | | 23,755.31 | | 128.22 | _ | _ |
| 34 | Global Logistic Properties | 22,554.00 | 12,812.00 | | 1,655.00 | 8,087.00 | | |
| 35 | Angelo Gordon & Co. | 22,002.00 | 19,256.00 | 1,079.00 | — | 1,667.00 | | |
| 36 | Bentall Kennedy | 21,688.00 | 21,680.00 | 8.00 | | | | |
| 37 | BlackRock Fund Managers | 21,320.60 | 8,756.00 | 5,993.00 | — | 5,414.60 | | 1,156.60 |
| 38 | AMP Capital | 19,927.35 | 3,528.86 | 1,327.52 | | 1,407.02 | 13,663.95 | |
| 39 | Schroder Real Estate Investment Management | 19,373.97 | 1,228.31 | 17,406.02 | — | 524.10 | 215.55 | |
| 40 | Savills Investment Management | 18,455.71 | 616.13 | 15,810.79 | — | 2,028.78 | _ | |
| 41 | Colony Capital Investment Advisors | 18,200.00 | 12,300.00 | 5,400.00 | | | 400.00 | |
| 42 | Patrizia Immobilien AG | 18,038.43 | 1,086.65 | 16,843.11 | 108.67 | | | |
| 43 | Lend Lease | 16,046.92 | — | 1,239.99 | — | 3,865.85 | 11,670.48 | |
| 44 | Dexus Property Group | 15,356.17 | | _ | | _ | 15,356.17 | |
| 45 | USAA Real Estate Co. | 14,932.00 | 14,753.00 | 179.00 | — | | | |
| 46 | La Française Real Estate Managers | 14,301.43 | — | 14,301.43 | | _ | | |
| 47 | Kenedix | 13,667.91 | | | | 13,667.91 | | |
| 48 | The GPT Group | 13,639.88 | — | | — | | 13,639.88 | |
| 49 | Columbia Threadneedle Investments | 13,287.04 | | 13,287.04 | | | | |
| 50 | Greystar | 13,142.00 | 9,011.00 | 4,032.00 | 99.00 | | | |
| 51 | Patron Capital | 12,802.94 | | 12,802.94 | — | | | |
| 52 | QIC | 12,399.89 | 2,698.80 | 583.52 | — | | 9,117.57 | |
| 53 | Gaw Capital Partners | 12,000.00 | 1,971.10 | 2,686.30 | — | 7,342.60 | | |
| 54 | Charter Hall Group | 11,923.59 | | | | | 11,923.59 | |
| 55 | Hermes Real Estate Investment Management | 11,317.60 | 819.37 | 10,003.66 | 44.29 | 188.97 | 276.08 | |
| 56 | Rockpoint Group | 11,275.70 | 10,466.30 | 809.40 | | | _ | |
| 57 | Apollo Global Management | 11,260.00 | | | | | _ | |
| 58 | DTZ Investors | 11,242.31 | | 11,242.31 | | | | |

| | Total gross value | e of real estate a | ssets under manag | gement (US\$ milli | on, as of December 3 | 31, 2015) | | |
|------|---|--------------------|-------------------|--------------------|----------------------|-----------|-------------|--------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australasia | Global/Other |
| 59 | Beacon Capital Partners | 10,812.40 | 8,915.10 | 1,897.30 | | | | |
| 60 | TRIUVA Kapitalverwaltungsgesellschaft mbH | 10,711.68 | 319.04 | 10,392.53 | — | | | |
| 61 | KBS | 10,454.00 | 10,454.00 | | — | | | |
| 62 | BMO Real Estate Partners | 10,329.93 | | 10,329.93 | | | | |
| 63 | Ares Management | 10,268.00 | 7,210.00 | 3,058.00 | — | | | |
| 64 | Walton Street Capital | 9,377.00 | 7,983.00 | 219.00 | 823.00 | 350.00 | | |
| 65 | Oaktree Capital Management | 9,091.00 | 8,195.00 | 674.00 | — | 222.00 | | |
| 66 | Rockspring Property Investment Managers | 8,910.55 | | 8,910.55 | | | | |
| 67 | Harrison Street Real Estate Capital | 8,910.00 | 8,857.00 | 52.00 | | | | |
| 68 | CenterSquare Investment Management | 8,909.00 | 7,302.00 | 669.00 | 0.60 | 696.00 | 242.00 | |
| 69 | Royal London Asset Management | 8,869.83 | | 8,869.83 | | | | |
| 70 | Partners Group | 8,719.00 | | | | | | |
| 71 | Alpha Investment Partners Private | 8,580.00 | 642.00 | 620.00 | 88.00 | 7,044.00 | 187.00 | |
| 72 | ISPT Pty | 8,330.54 | | | | | 8,330.54 | |
| 73 | Crow Holdings Capital Partners | 8,311.00 | 8,311.00 | _ | — | | | |
| 74 | KGAL GmbH & Co. KG | 8,224.87 | — | 8,173.47 | | 51.29 | | |
| 75 | Bouwinvest Real Estate Investment Management BV | 8,144.46 | 1,217.05 | 6,402.56 | — | 367.29 | 157.56 | — |
| 76 | Tristan Capital Partners | 7,815.20 | — | 7,815.20 | — | | — | — |
| 77 | InvestiRE SGR | 7,660.90 | | 7,660.90 | | | | |
| 78 | Orchard Street Investment Management | 7,654.81 | | 7,654.81 | | | | |
| 79 | National Real Estate Advisors | 7,594.50 | 7,594.50 | — | | | | |
| 80 | L&B Realty Advisors | 7,589.00 | 7,589.00 | | | | | |
| 81 | American Realty Advisors | 7,389.50 | 7,389.50 | _ | | | | |
| 82 | Westbrook Partners | 7,045.00 | | | | | | |
| 83 | DRA Advisors | 7,024.00 | 7,024.00 | | | | | |
| 84 | GreenOak Real Estate | 6,862.00 | 4,106.00 | 1,767.00 | | 989.00 | | |
| 85 | ASB Real Estate Investment | 6,564.00 | 6,564.00 | _ | | | | |
| 86 | Exeter Property Group | 6,518.00 | 6,013.00 | 505.00 | | | | |
| 87 | Blue Vista Capital Management | 6,500.00 | 6,500.00 | | _ | | _ | _ |
| 88 | Quadrant Real Estate Advisors | 6,430.00 | 6,228.00 | 191.00 | | | 11.00 | — |

| | Total gross value of real estate assets under management (US\$ million, as of December 31, 2015) | | | | | | | | | |
|------|--|----------|---------------|----------|---------------|----------|-------------|--------------|--|--|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australasia | Global/Other | | |
| 89 | РССР | 6,398.70 | 6,398.70 | | | | | _ | | |
| 90 | Berkshire Group | 6,233.00 | 6,233.00 | | — | | | | | |
| 91 | Warburg–HIH invest Real Estate GmbH | 6,059.17 | | 5,957.03 | — | | 102.15 | _ | | |
| 92 | GLL Real Estate Partners GmbH | 6,040.70 | 2,722.06 | 3,107.83 | 210.81 | | | _ | | |
| 93 | Bouwfonds Investment Management | 5,600.61 | 94.54 | 5,506.07 | — | | | _ | | |
| 94 | Brookfield Investment Management | 5,341.10 | 4,010.70 | 556.20 | 9.10 | 120.60 | 644.50 | | | |
| 95 | Sentinel Real Estate Corp. | 5,320.00 | 5,301.00 | 34.00 | | | 15.00 | | | |
| 96 | Investa Property Group | 5,292.05 | — | | | | 5,292.05 | _ | | |
| 97 | PAG Investment Management | 5,247.00 | — | | | 5,247.00 | | | | |
| 98 | Cromwell Property Group | 5,242.01 | — | 4,068.43 | — | | 1,172.50 | | | |
| 99 | Grosvenor Europe | 5,115.95 | 390.49 | 4,402.73 | | 322.73 | | | | |
| 100 | Meyer Bergman | 5,108.35 | | 5,108.35 | | | | | | |
| 101 | Bridge Investment Group Partners | 5,005.00 | 5,005.00 | | | | | | | |
| 102 | Forum Partners Investment Management | 4,880.00 | 1,900.00 | 2,380.00 | | 600.00 | | | | |
| 103 | Intercontinental Real Estate Corp. | 4,870.00 | 4,870.00 | | | | | | | |
| 104 | Kayne Anderson Real Estate Advisors | 4,630.00 | 4,630.00 | | | — | | _ | | |
| 105 | ICG–Longbow | 4,486.59 | — | 4,486.59 | | — | _ | _ | | |
| 106 | Waterton | 4,334.00 | 4,334.00 | | | | | — | | |
| 107 | Lionstone Investments | 4,222.00 | 4,222.00 | | | | | | | |
| 108 | Carmel Partners | 4,190.30 | 4,190.30 | | | | _ | _ | | |
| 109 | UNITE Group | 4,151.46 | — | 4,151.46 | | | _ | _ | | |
| 110 | Franklin Real Estate Advisors | 4,085.60 | 1,808.70 | 879.20 | 3.80 | 1,340.50 | 53.40 | | | |
| 111 | Landmark Partners | 4,062.10 | — | | — | | | | | |
| 112 | Internos Global Investors | 3,863.81 | — | 3,863.81 | | | _ | _ | | |
| 113 | Paladin Realty Partners | 3,791.00 | — | | 3,791.00 | | | | | |
| 114 | ECE Real Estate Partners | 3,662.02 | — | 3,662.02 | — | | — | — | | |
| 115 | Timbercreek Asset Management | 3,646.16 | 3,414.35 | 138.65 | | 63.55 | 29.61 | | | |
| 116 | Capri Investment Group | 3,571.10 | 3,527.10 | | | | | | | |
| 117 | M3 Capital Partners | 3,530.00 | 1,205.00 | 1,660.00 | 75.00 | 325.00 | 265.00 | | | |
| 118 | DIC Asset AG | 3,477.29 | | 3,477.29 | | | | | | |
| 119 | CITIC Capital | 3,443.00 | | 706.00 | | 2,737.00 | | _ | | |

| | Total gross val | ue of real estate a | ssets under manag | jement (US\$ milli | ion, as of December 3 | 31, 2015) | | |
|------|--|---------------------|-------------------|--------------------|-----------------------|-----------|-------------|--------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australasia | Global/Other |
| 120 | Equus Capital Partners | 3,400.00 | 3,400.00 | | | | _ | |
| 121 | Mesa West Capital | 3,221.10 | 3,221.10 | | | | _ | _ |
| 122 | GTIS Partners | 3,206.00 | | | | | _ | |
| 123 | NIAM | 3,146.95 | _ | 3,146.95 | | | _ | |
| 124 | Diamond Realty Management | 3,092.14 | | | | 3,092.14 | | |
| 125 | Cording Real Estate Group | 2,933.96 | _ | 2,933.96 | | | _ | |
| 126 | InfraRed Capital Partners | 2,926.70 | | 2,023.60 | | 903.10 | | |
| 127 | Pradera | 2,911.14 | _ | 2,911.14 | | | _ | _ |
| 128 | Sarofim Realty Advisors | 2,883.00 | 2,883.00 | | | | | |
| 129 | Lothbury Investment Management | 2,701.71 | | 2,701.71 | | | | |
| 130 | Lowe Enterprises Investment Management | 2,642.00 | 2,642.00 | | | | | |
| 131 | Europa Capital | 2,518.86 | | 2,518.86 | | | | |
| 132 | Davis Investment Ventures | 2,460.00 | 2,460.00 | | | | | |
| 133 | Madison International Realty | 2,385.00 | 1,557.00 | 827.70 | | | _ | _ |
| 134 | SachsenFonds Group | 2,280.88 | | 1,881.00 | | 155.39 | 244.50 | |
| 135 | Madison Realty Capital | 2,205.00 | 2,205.00 | | | | | _ |
| 136 | Altera Vastgoed NV | 2,077.68 | | 2,077.68 | | | | |
| 137 | DRC Capital | 2,076.47 | | 2,076.47 | | | | |
| 138 | CS Capital Management | 1,838.28 | 1,838.28 | | | | _ | |
| 139 | Bristol Group | 1,813.00 | 1,813.00 | | | | | |
| 140 | Canyon Partners Real Estate | 1,800.00 | 1,800.00 | | | | _ | _ |
| 141 | Knight Frank Investment Management | 1,727.67 | | 1,727.67 | | | _ | |
| 142 | OREIMA | 1,691.92 | | 1,691.92 | | | _ | |
| 143 | Broadstone Real Estate | 1,668.00 | 1,668.00 | | — | | _ | _ |
| 144 | American Real Estate Partners | 1,656.90 | 1,656.90 | | | | _ | |
| 145 | Catalyst Capital | 1,629.98 | — | 1,629.98 | _ | | _ | _ |
| 146 | Covenant Capital Group | 1,064.90 | 1,064.90 | | | | | |
| 147 | TGM Associates | 1,600.94 | 1,600.94 | | _ | | _ | |
| 148 | Clearbell Fund Management | 1,558.27 | | 1,558.27 | | | | |
| 149 | Hunt Investment Management | 1,438.50 | 1,406.00 | 32.50 | | | | |
| 150 | Sveafastigheter | 1,412.65 | | 1,412.65 | | | — | |

| | Total gross valu | e of real estate a | ssets under manag | ement (US\$ milli | on, as of December 3 | 31, 2015) | | |
|------|---------------------------------------|--------------------|-------------------|-------------------|----------------------|-----------|-------------|--------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australasia | Global/Other |
| 151 | Mayfair Capital Investment Management | 1,378.90 | | 1,378.90 | | | | |
| 152 | Guggenheim Real Estate | 1,349.40 | 1,319.60 | 12.20 | 5.90 | 11.70 | | |
| 153 | LEM Capital | 1,328.20 | 1,328.20 | | | | | _ |
| 154 | Altis Property Partners | 1,282.41 | | | | | 1,282.41 | |
| 155 | Trigate Capital | 1,243.00 | 1,243.00 | | | | | |
| 156 | Long Wharf Real Estate Partners | 1,211.00 | 1,211.00 | | | | | |
| 157 | Sparinvest Property Investors | 1,174.67 | 650.90 | 235.80 | 22.82 | 265.14 | | |
| 158 | Pearlmark | 1,128.40 | 1,128.40 | | | | | _ |
| 159 | Colliers Capital | 1,083.63 | — | 1,083.63 | | | | |
| 160 | Propertylink | 1,074.12 | — | | | | 1,074.12 | |
| 161 | Rynda Property Investors | 1,037.75 | | 1,037.75 | | | | |
| 162 | Fidelity Worldwide Investment | 1,004.70 | | 1,004.70 | | | | |
| 163 | Presima | 1,001.67 | 592.70 | 142.80 | 1.39 | 209.42 | 55.35 | |
| 164 | Pembrook Capital Management | 1,000.00 | 1,000.00 | | | | | |
| 165 | Frogmore | 930.09 | | 930.09 | | | | |
| 166 | Patria Investimentos | 880.00 | | | 880.00 | | _ | _ |
| 167 | Redwood – Kairos Real Estate Partners | 838.60 | 838.60 | | | | | |
| 168 | Cluttons | 738.17 | — | 738.17 | — | — | — | — |
| 169 | Argosy Real Estate | 725.00 | 725.00 | | | | | |
| 170 | Northern Horizon Capital A/S | 649.82 | | 649.82 | — | — | _ | _ |
| 171 | Western National Group | 594.90 | 594.90 | | | | | _ |
| 172 | IAM Real Estate Group | 591.45 | 591.45 | | | | | |
| 173 | First Property Asset Management | 521.15 | — | 521.15 | — | | | |
| 174 | LendInvest Capital | 516.72 | | 516.72 | | | | _ |
| 175 | AviaRent Capital Management SARL | 513.99 | | 513.99 | | | | |
| 176 | WHI Real Estate Partners | 499.70 | 499.70 | | | | | |
| 177 | Velocis | 495.00 | 495.00 | _ | | | | |
| 178 | Bridges Ventures | 485.71 | — | 485.71 | | | | |
| 179 | Hamilton Point Investments | 460.00 | 460.00 | _ | | | | _ |
| 180 | Pamfleet | 452.60 | | | | 452.60 | | _ |

| | Total gross value of real estate assets under management (US\$ million, as of December 31, 2015) | | | | | | | | | |
|------|--|--------|---------------|--------|---------------|------|-------------|--------------|--|--|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australasia | Global/Other | | |
| 181 | Newport Capital Partners | 450.00 | 450.00 | — | — | — | | — | | |
| 182 | Genesis Capital Advisors | 394.35 | 394.35 | | — | _ | | | | |
| 183 | Hutensky Capital Partners | 308.00 | 308.00 | — | — | — | | — | | |
| 184 | Fundbox | 252.76 | — | 252.76 | — | — | | | | |
| 185 | CapRidge Partners | 251.00 | 251.00 | | — | _ | | | | |
| 186 | Avenida Capital | 250.00 | — | | 250.00 | | | | | |
| 187 | Evolve Fund Services | 245.07 | — | 245.07 | — | — | — | — | | |
| 188 | Gresham Property Funds Management | 218.82 | — | | | — | 218.82 | | | |
| 189 | IO Asset Management | 191.92 | — | 191.92 | — | | | | | |
| 191 | Equity Estate BV | 189.40 | — | 189.40 | — | _ | | | | |
| 192 | Novare Fund Manager | 152.00 | — | | | | | | | |
| 193 | Arrow Funds Management | 121.08 | — | | — | | 121.08 | | | |
| 194 | BKM Capital Partners | 112.00 | 112.00 | | | | | | | |
| 195 | Barwood Capital | 100.39 | | 100.39 | | | | | | |

End notes

AEW Global

AEW Europe finalized a transaction with Ciloger, a French asset manager that specializes in real estate and markets primarily to retail investors. Ciloger will merge with AEW Europe's existing retail investor product business, NAMI.

Angelo Gordon & Co.

AUM includes approximately \$1.3 billion of assets managed in multi-strategy commingled funds and separate accounts that invested in real estate and real estate debt (incl CMBS and RMBS).

Ares Management

Net figures supplied

BMO Real Estate Partners Previously known as F&C REIT

Developed Investment Meneral

Bouwfonds Investment Management AUM includes fund and non-fund assets

Brookfield Asset Management

Brookfield Asset Management AUM figures were obtained from public documents and sources

Canyon Partners Real Estate

Net figures supplied

Charter Hall Group

AUM includes fund and non-fund assets.

Colony Capital Investment Advisors, an indirect subsidiary of Colony Capital

Colony Capital AUM refers to the assets for which the company provides investment management services and includes assets for which it may or may not charge management fees and/or performance allocations. AUM equals the sum of: a) the gross fair value of investments held directly by the company or managed by the company on behalf of its private funds, co-investments, or other investment vehicles; b) leverage, inclusive of debt held by investments and deferred purchases prices; c) uncalled limited partner capital commitment period at its discretion pursuant to the terms of their respective funds; and d) with respect to majority-owned and substantially controlled investments, the company is calculations of AUM may differ from the calculations of other asset managers, and as a result this measure may not be comparable to similar measures presented by other asset managers.

Cromwell Property Group

Incorporates Valad Europe

Crow Holdings Capital Partners

Regulatory AUM includes total assets from the balance sheet, property-level debt and uncalled commitments.

Davis Investment Ventures AUM includes \$1.05 billion of legacy real estate.

Diamond Realty Management AUM includes a JPY 7,800 million subadvisory mandate.

DIC Asset AG AUM includes fund and non-fund assets.

Forum Partners Investment Management

In June 2015, Forum Partners acquired a 50 percent interest in NYC multifamily owner/operator/developer The Dermot Company.

The GPT Group

AUM includes fund and non-fund assets

Grosvenor Europe

Grosvenor Fund Management changed its name to Grosvenor Europe from July 1, 2016.

Guggenheim Real Estate

Net figures supplied

InvestiRE SGR

InvestiRE is the result of the successful merger of three companies: Investire Immobiliare SGR, Polaris Real Estate SGR and Beni Stabili Gestioni SGR.

LendInvest Capital

Montello Capital Management was rebranded as LendInvest Capital

MetLife Investment Managemen

The mortgages include both commercial and agricultural mortgages at book value and exclude underlying leverage (except for underlying leverage for the commingled fund). This year the business chose to include agricultural mortgages. The equity investments are at a gross market value and are inclusive of leverage.

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 at direct ownership interest. Real estate AUM for certain minority interests represents Morgan Stanley's equity investment in the entity.

Patrizia Immobilien AG

AUM includes fund and non-fund assets.

PGIM Real Estate

PGIM is a business of Prudential Financial.

QIC

February 2016 data

Redwood-Kairos Real Estate Partners AUM includes fund and non-fund assets.

SachsenFonds Group AUM includes fund and non-fund assets

Savills Investment Management

Savills Investment Management completed the acquisition of SEB Asset Management AG, a German-based investment manager, on August 31, 2015. The acquisition increased both head count and assets under management significantly.

Standard Life Investments

In September 2014, Standard Life announced the sale of its Canadian businesses, Standard Life Financial and Standard Life Investments, to Manulife, as well as a global collaboration agreement with Manulife that will deepen its access to global markets significantly. The transaction was successfully completed January 30, 2015.

Swiss Life Asset Managers

AUM includes fund and non-fund assets.

Tishman Speyer Properties

AUM includes fund and non-fund assets.

Union Investment Real Estate GmbH AUM includes fund and non-fund assets.

Warburg-HIH invest Real Estate GmbH

Warburg-Henderson Kapitalanlagegeselslchaft fur immobilien mbH merged into Warburg-HIH Invest Real Estate KVG GmbH after HIH Real Estate acquired a 50 percent stake of the shares formerly held by TIAA Henderson Real Estate (TH Real Estate).

Discretionary separate accounts

| | Discretionary separate acc | ount mandates | s by investor d | omicile (gross | , US\$ million, | as of Decembe | er 31, 2015) | | |
|------|--|---------------|------------------|----------------|------------------|---------------|--------------|----------------|-----------------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australia | Middle East | Number of mandates |
| 1 | Aviva Investors | 32,277.16 | 19.19 | 32,002.56 | _ | 8.86 | _ | 246.55 | 52 |
| 2 | CBRE Global Investors | 29,700.00 | 3,200.00 | 22,700.00 | — | 1,600.00 | 2,200.00 | | 177 |
| 3 | AXA Investment Managers – Real Assets | 29,699.30 | 32.60 | 29,666.70 | — | _ | — | | 19 |
| 4 | Invesco Real Estate | 22,166.00 | 8,581.00 | 610.00 | | 12,640.00 | 335.00 | | 38 |
| 5 | Cohen & Steers Capital Management | 21,986.00 | 6,678.00 | 1,383.00 | — | 13,854.00 | 71.00 | — | 65 |
| 6 | M&G Real Estate | 20,193.34 | _ | 18,764.25 | | 1,429.09 | | | 14 |
| 7 | LaSalle Investment Management | 18,333.00 | 3,065.00 | 14,759.00 | 19.00 | 469.00 | 21.00 | | 58 |
| 8 | Prologis | 14,793.60 | 6,721.20 | 5,875.00 | 81.60 | — | — | 2,115.80 | 12 |
| 9 | Deutsche Asset Management | 11,829.30 | 10,320.59 | 570.49 | — | 823.90 | 114.32 | | 79 |
| 10 | AEW Global | 10,268.00 | 8,971.00 | 647.00 | | 280.00 | 370.00 | | 30 |
| 11 | Royal London Asset Management | 8,289.63 | — | 8,289.63 | — | — | — | — | 6 |
| 12 | Hermes Real Estate Investment Management | 8,007.65 | _ | 8,007.65 | | _ | | | 1 |
| 13 | USAA Real Estate Co. | 7,894.00 | 7,894.00 | — | | — | — | — | 14 |
| 14 | Aberdeen Asset Management | 7,778.82 | | 7,778.82 | | _ | | | 26 |
| 15 | PGIM Real Estate | 7,692.00 | 2,940.00 | 2,412.00 | 212.00 | 2,128.00 | | | 14 |
| 16 | Orchard Street Investment Management | 7,654.81 | _ | 7,654.81 | | | | | 7 |
| 17 | Heitman | 6,541.00 | 2,317.00 | 318.00 | | 3,135.00 | 756.00 | 15.00 | 35 |
| 18 | CenterSquare Investment Management | 6,521.00 | 4,803.00 | 561.00 | | 601.00 | 556.00 | | 59 |
| 19 | DTZ Investors | 6,205.05 | _ | 6,205.05 | | | | | 8 |
| 20 | BlackRock Fund Managers | 6,136.50 | 6,136.50 | | | | | | 24 |
| 21 | Schroder Real Estate Investment Management | 5,866.96 | 87.10 | 5,177.51 | | 602.35 | | | 30 |
| 22 | Legal & General Property | 5,771.00 | _ | 5,771.00 | | _ | | | 3 |
| 23 | Principal Real Estate Investors | 5,526.13 | 2,852.00 | 718.80 | | 1,350.86 | 604.47 | | 56 |
| 24 | Clarion Partners | 5,252.00 | 4,863.00 | | — | 389.00 | | | 8 |
| 25 | UBS Global Asset Management | 5,134.84 | 3,321.78 | 1,813.06 | — | — | | | 11 |
| 26 | Standard Life Investments | 4,516.12 | 186.02 | 4,330.10 | — | | | | 9 |
| 27 | Columbia Threadneedle Investments | 4,133.74 | — | 4,133.74 | — | — | | _ | 3 |

INSTITUTIONAL REAL ESTATE, INC.

| | Discretionary separate ac | count mandates | s by investor d | omicile (gross | , US\$ million, | as of Decembe | er 31, 2015) | | |
|------|---|----------------|------------------|----------------|------------------|---------------|--------------|----------------|-----------------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australia | Middle East | Number of mandates |
| 28 | AMP Capital | 3,975.26 | _ | _ | _ | 1,750.57 | 2,115.28 | 109.41 | 24 |
| 29 | Forum Partners Investment Management | 3,910.00 | 1,838.00 | 2,057.20 | _ | 14.80 | _ | | 14 |
| 30 | Brookfield Investment Management | 3,089.10 | 2,729.70 | 219.40 | _ | _ | 140.00 | | 42 |
| 31 | Bouwinvest Real Estate Investment Management BV | 2,844.86 | 1,217.05 | 1,102.95 | _ | 367.29 | 157.56 | | 4 |
| 32 | Capri Investment Group | 2,534.70 | 2,534.70 | _ | _ | _ | _ | | 2 |
| 33 | Rockspring Property Investment Managers | 2,287.24 | | 1,198.23 | _ | 1,089.01 | _ | | 4 |
| 34 | Credit Suisse Real Estate Investment Management | 2,273.00 | _ | 2,273.00 | _ | _ | _ | | 27 |
| 35 | KBS | 1,909.00 | 1,909.00 | _ | _ | _ | _ | | 6 |
| 36 | Hines | 1,869.00 | 1,632.00 | _ | _ | 209.00 | _ | 28.00 | 10 |
| 37 | Cornerstone Real Estate Advisers | 1,772.00 | 1,128.00 | 113.00 | _ | 531.00 | _ | | 14 |
| 38 | ICG-Longbow | 1,740.60 | _ | 1,111.68 | _ | _ | _ | 628.92 | 7 |
| 39 | J.P. Morgan Asset Management – Global Real Assets | 1,726.00 | 1,726.00 | _ | _ | _ | _ | | 3 |
| 40 | Ares Management | 1,699.30 | 1,347.80 | 198.70 | _ | 152.80 | _ | | 6 |
| 41 | Lionstone Investments | 1,692.00 | 1,692.00 | _ | _ | _ | _ | | 4 |
| 42 | National Real Estate Advisors | 1,609.70 | 1,609.70 | — | — | — | _ | _ | 1 |
| 43 | Waterton | 1,512.00 | 1,512.00 | _ | _ | _ | _ | | 2 |
| 44 | Sarofim Realty Advisors | 1,428.00 | 1,428.00 | — | — | — | _ | | 2 |
| 45 | American Realty Advisors | 1,311.42 | 1,311.42 | _ | _ | _ | _ | | 20 |
| 46 | PAG Investment Management | 1,297.00 | _ | _ | _ | 1,297.00 | _ | | 5 |
| 47 | Angelo Gordon & Co. | 1,274.00 | 985.00 | 78.00 | — | 211.00 | _ | | 5 |
| 48 | Franklin Real Estate Advisors | 1,271.10 | 487.30 | 153.80 | _ | _ | 630.00 | | 1 |
| 49 | DIC Asset AG | 1,249.65 | _ | 1,249.65 | — | — | — | | 4 |
| 50 | BMO Real Estate Partners | 1,198.79 | — | 1,198.79 | — | — | _ | | 2 |
| 51 | Bentall Kennedy | 1,189.00 | 1,189.00 | — | — | — | _ | | 4 |
| 52 | Unite Integrated Solutions | 1,089.54 | _ | 1,089.54 | — | — | _ | | 1 |
| 53 | Knight Frank Investment Management | 988.72 | _ | 988.72 | _ | _ | | | 2 |
| 54 | Savills Investment Management | 900.83 | _ | 900.83 | | | | | 2 |
| 55 | L&B Realty Advisors | 780.00 | 780.00 | _ | | _ | | | 6 |
| 56 | Quadrant Real Estate Advisors | 757.00 | 413.00 | _ | — | _ | 344.00 | | 4 |
| 57 | Canyon Partners Real Estate | 756.70 | 737.00 | — | | | 19.70 | | 18 |

| | Discretionary separate acco | ount mandates | by investor d | omicile (gross | , US\$ million, a | as of Decembe | er 31, 2015) | | |
|------|--|---------------|------------------|----------------|-------------------|---------------|--------------|----------------|-----------------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australia | Middle East | Number of mandates |
| 58 | InfraRed Capital Partners | 723.80 | _ | 655.90 | _ | | _ | 67.90 | 2 |
| 59 | TH Real Estate | 722.00 | 626.00 | 96.00 | _ | | — | | 3 |
| 60 | Colliers Capital | 600.87 | _ | 600.87 | _ | | — | — | 2 |
| 61 | Tishman Speyer Properties | 552.50 | 552.50 | — | — | — | — | | 2 |
| 62 | Exeter Property Group | 505.00 | | 505.00 | | | — | | 1 |
| 63 | Presima | 488.46 | 307.89 | — | — | — | 180.57 | — | 3 |
| 64 | OREIMA | 452.05 | | 452.05 | | | — | — | 2 |
| 65 | Oaktree Capital Management | 409.00 | 79.00 | 163.00 | — | 167.00 | — | — | 4 |
| 66 | Lothbury Investment Management | 393.98 | | 393.98 | | | — | | 1 |
| 67 | First Property Asset Management | 380.90 | — | 380.90 | — | — | — | — | 8 |
| 68 | Cromwell Property Group | 371.64 | | | | | 371.64 | | 5 |
| 69 | Sentinel Real Estate Corp. | 371.00 | 371.00 | — | | — | — | | 4 |
| 70 | ASB Allegiance Real Estate Investment | 351.00 | 351.00 | — | | | _ | | 1 |
| 71 | Timbercreek Asset Management | 339.41 | 167.54 | 171.87 | | — | — | | 4 |
| 72 | Diamond Realty Management | 318.00 | — | — | | 3.18 | — | | 2 |
| 73 | Redwood–Kairos Real Estate Partners | 217.00 | 217.00 | — | — | — | — | — | 5 |
| 74 | ISPT Pty | 198.40 | | | | | 198.40 | | 2 |
| 75 | Lowe Enterprises Investment Management | 159.00 | 159.00 | | | | _ | | 3 |
| 76 | Newport Capital Partners | 100.00 | 100.00 | | | — | | | 1 |
| 77 | CS Capital Management | 97.92 | 97.92 | | | | | | 2 |
| 78 | IAM Real Estate Group | 97.49 | 97.49 | | | | | | 1 |
| 79 | Rynda Property Investors | 76.07 | — | 76.07 | | | — | | 1 |
| 80 | Warburg-HIH invest Real Estate GmbH | 30.15 | _ | 30.15 | | — | — | — | 1 |
| 81 | Davis Investment Ventures | 26.00 | 26.00 | — | | | | | 3 |
| 82 | Hunt Investment Management | 24.80 | 24.80 | | | | | | 1 |
| 83 | GTIS Partners | 1.00 | 1.00 | — | | — | | | 1 |

End notes

BMO Real Estate Partners

Previously known as F&C REIT

Cromwell Property Group Incorporates Valad Europe

Forum Partners Investment Management

In June 2015, Forum Partners acquired a 50 percent interest in NYC multifamily owner/operator/developer The Dermot Company.

Grosvenor Europe

Grosvenor Fund Management changed its name to Grosvenor Europe from July 1, 2016.

PGIM Real Estate

PGIM is a business of Prudential Financial.

Standard Life Investments

In September 2014, Standard Life announced the sale of its Canadian businesses, Standard Life Financial and Standard Life Investments, to Manulife, as well as a global collaboration agreement with Manulife that will deepen its access to global markets significantly. The transaction was successfully completed on January 30, 2015.

Warburg-HIH invest Real Estate GmbH

Warburg-Henderson Kapitalanlagegeselslchaft fur immobilien mbH merged into Warburg-HIH Invest Real Estate KVG GmbH after HIH Real Estate acquired a 50 percent stake of the shares formerly held by TIAA Henderson Real Estate (TH Real Estate).

Advisory separate accounts

| | Advisory separate | accounts by im | vestor domicile | (gross, US\$ mi | illion, as of Dec | ember 31, 201 | 5) | | |
|------|---|----------------|------------------|-----------------|-------------------|---------------|-----------|----------------|-----------------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australia | Middle East | Number of mandates |
| 1 | Cornerstone Real Estate Advisers | 39,100.00 | 38,149.00 | 951.00 | | | _ | | 5 |
| 2 | Principal Real Estate Investors | 37,045.02 | 35,006.11 | 64.71 | | 1,026.57 | 947.63 | _ | 3 |
| 3 | AEW Global | 21,760.00 | 9,014.00 | 10,668.00 | — | 1,512.00 | 566.00 | _ | 46 |
| 4 | Heitman | 18,791.00 | 16,264.00 | 1,337.00 | — | 1,190.00 | — | — | 18 |
| 5 | CBRE Global Investors | 16,600.00 | 7,200.00 | 4,900.00 | — | 2,200.00 | — | 2,300.00 | 30 |
| 6 | TH Real Estate | 15,630.00 | 5,271.00 | 8,163.00 | 68.00 | 1,145.00 | 983.00 | _ | 28 |
| 7 | LaSalle Investment Management | 14,927.00 | 5,359.00 | 5,088.00 | — | 4,026.00 | 454.00 | — | 43 |
| 8 | Clarion Partners | 14,605.00 | 12,415.00 | 3.00 | | — | — | 2,187.00 | 13 |
| 9 | AXA Investment Managers – Real Assets | 11,929.27 | 2,317.83 | 8,943.15 | — | 360.77 | 145.61 | 161.91 | 25 |
| 10 | J.P. Morgan Asset Management – Global Real Assets | 11,196.00 | 7,547.00 | 3,416.00 | | — | 233.00 | — | 16 |
| 11 | Credit Suisse Real Estate Investment Management | 11,010.00 | _ | 10,912.00 | — | 98.00 | — | — | 4 |
| 12 | Invesco Real Estate | 10,731.00 | 6,037.00 | 2,406.00 | _ | 2,288.00 | — | — | 35 |
| 13 | Aberdeen Asset Management | 9,256.63 | | 9,256.63 | | — | — | | 42 |
| 14 | Bentall Kennedy | 8,528.00 | 8,221.00 | 231.00 | | _ | — | 76.00 | 13 |
| 15 | Deutsche Asset Management | 7,771.52 | — | 4,908.95 | — | 2,862.57 | — | — | 14 |
| 16 | Greystar | 7,648.00 | 3,517.00 | 4,032.00 | 99.00 | — | _ | | 14 |
| 17 | Patrizia Immobilien AG | 7,497.90 | 434.66 | 7,063.24 | — | — | — | | 25 |
| 18 | BNP Paribas Real Estate Investment Management | 7,471.82 | | 7,136.05 | | | — | 335.78 | 49 |
| 19 | Savills Investment Management | 7,334.90 | 1,676.70 | 4,010.83 | — | 1,348.54 | — | 298.83 | 18 |
| 20 | MetLife Investment Management | 6,968.00 | 6,968.00 | — | | | | | 13 |
| 21 | TRIUVA Kapitalverwaltungsgesellschaft mbH | 6,305.95 | | 5,981.91 | — | 324.04 | — | — | 23 |
| 22 | L&B Realty Advisors | 6,053.00 | 6,053.00 | | | _ | _ | | 10 |
| 23 | Quadrant Real Estate Advisors | 5,632.00 | 5,632.00 | — | | | — | | 1 |
| 24 | Hines | 5,366.00 | 2,040.00 | 895.00 | | 1,895.00 | — | 536.00 | 9 |
| 25 | Charter Hall Group | 5,088.33 | — | — | | — | 5,088.33 | | 9 |
| 26 | DTZ Investors | 5,022.50 | — | 5,022.50 | | | — | — | 15 |
| 27 | BMO Real Estate Partners | 4,846.82 | | 4,846.82 | | | — | | 48 |

INSTITUTIONAL REAL ESTATE, INC.

| | Advisory separate | accounts by inv | vestor domicile | (gross, US\$ mi | llion, as of <mark>Dec</mark> | ember 31, 201 | 5) | | |
|------|---|-----------------|------------------|-----------------|-------------------------------|---------------|-----------|----------------|-----------------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australia | Middle East | Number of mandates |
| 28 | Gaw Capital Partners | 4,423.20 | 796.50 | 2,688.70 | — | 938.00 | — | | 10 |
| 29 | AMP Capital | 4,073.00 | 1,205.71 | _ | | _ | 2,266.26 | 601.03 | 8 |
| 30 | La Francaise Real Estate Managers | 3,875.00 | _ | 3,173.03 | | 646.56 | _ | 55.42 | 14 |
| 31 | M3 Capital Partners | 3,530.00 | 3,530.00 | _ | | | _ | _ | 2 |
| 32 | GLL Real Estate Partners GmbH | 3,321.90 | _ | 3,321.90 | | | _ | _ | 7 |
| 33 | PCCP | 3,214.60 | 3,214.60 | | | _ | _ | _ | 17 |
| 34 | PGIM Real Estate | 3,051.00 | 1,701.00 | 1,100.00 | | 250.00 | _ | _ | 9 |
| 35 | Lowe Enterprises Investment Management | 2,484.00 | 2,484.00 | | | _ | _ | _ | 8 |
| 36 | Lend Lease | 2,407.04 | _ | | | 948.23 | 1,458.81 | _ | 5 |
| 37 | UBS Global Asset Management | 2,399.90 | 182.01 | 1,094.66 | | 1,123.24 | _ | _ | 7 |
| 38 | GreenOak Real Estate | 2,143.00 | 1,302.00 | 841.00 | | | _ | _ | 10 |
| 39 | Alpha Investment Partners Private | 2,135.00 | _ | 599.00 | | 1,536.00 | _ | _ | 6 |
| 40 | Lionstone Investments | 2,105.00 | 1,930.00 | 175.00 | | | _ | _ | 6 |
| 41 | CS Capital Management | 1,740.36 | 1,740.36 | | | | _ | _ | 4 |
| 42 | Pradera | 1,683.22 | _ | 1,683.22 | | | _ | _ | 7 |
| 43 | Sentinel Real Estate Corp. | 1,510.00 | 1,510.00 | | | _ | _ | _ | 4 |
| 44 | Berkshire Group | 1,472.50 | _ | _ | | | 256.00 | 1,216.50 | 2 |
| 45 | Dexus Property Group | 1,409.94 | _ | _ | | | 1,409.94 | _ | 2 |
| 46 | Cromwell Property Group | 1,403.96 | _ | 1,403.96 | | | _ | _ | 20 |
| 47 | Bristol Group | 1,344.00 | 1,344.00 | _ | | _ | _ | _ | 3 |
| 48 | Timbercreek Asset Management | 1,338.44 | 1,338.44 | _ | | | _ | _ | 4 |
| 49 | TGM Associates | 1,252.64 | 1,252.64 | _ | | | _ | _ | 3 |
| 50 | Internos Global Investors | 1,225.96 | _ | 1,225.96 | | | _ | _ | 13 |
| 51 | Sarofim Realty Advisors | 1,196.00 | 1,196.00 | _ | | | _ | _ | 4 |
| 52 | Rynda Property Investors | 961.69 | _ | 961.69 | | | _ | — | 6 |
| 53 | Cording Real Estate Group | 943.21 | — | 943.21 | | | | | 5 |
| 54 | Rockspring Property Investment Managers | 824.95 | _ | | | 824.95 | _ | _ | 1 |
| 55 | Diamond Realty Management | 807.95 | — | _ | | 807.95 | _ | — | 7 |
| 56 | Bridge Investment Group Partners | 786.00 | 786.00 | _ | | | _ | | 6 |
| 57 | Blue Vista Capital Management | 766.50 | 766.50 | _ | | | | | 4 |

| | Advisory separate | accounts by inv | vestor domicile | (gross, US\$ m | illion, as of Dec | ember 31, 201 | 5) | | |
|------|---------------------------------------|-----------------|------------------|----------------|-------------------|---------------|-----------|----------------|-----------------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australia | Middle East | Number of mandates |
| 58 | Altis Property Partners | 750.52 | — | — | — | — | 750.52 | | 3 |
| 59 | Knight Frank Investment Management | 738.94 | _ | 738.94 | _ | | | | 4 |
| 60 | Cluttons | 738.17 | _ | 738.17 | _ | | _ | | 4 |
| 61 | OREIMA | 713.60 | _ | 713.60 | _ | | | | 5 |
| 62 | BlackRock Fund Managers | 688.10 | 688.10 | _ | | _ | _ | | 3 |
| 63 | Hunt Investment Management | 677.60 | 668.90 | 8.70 | | | | | 51 |
| 64 | Mayfair Capital Investment Management | 645.16 | _ | 645.16 | | | | | 2 |
| 65 | Standard Life Investments | 633.35 | _ | 633.35 | _ | | | | 1 |
| 66 | Ares Management | 600.80 | 600.80 | _ | _ | | | | 2 |
| 67 | Catalyst Capital | 543.33 | _ | 543.33 | _ | | | | 3 |
| 68 | Grosvenor Europe | 514.06 | 2.95 | 53.44 | _ | | | 457.66 | 3 |
| 69 | Colliers Capital | 482.76 | _ | 482.76 | _ | | | | 1 |
| 70 | Tishman Speyer Properties | 383.00 | _ | 383.00 | _ | | | | 1 |
| 71 | Investa Property Group | 372.00 | _ | _ | | | 372.00 | | 2 |
| 72 | Bouwfonds Investment Management | 305.35 | _ | 305.35 | _ | | | | 1 |
| 73 | InvestiRE SGR | 304.26 | _ | 304.26 | | | | | 1 |
| 74 | Franklin Real Estate Advisors | 291.80 | _ | _ | | | 291.80 | | 6 |
| 75 | KBS | 280.00 | 280.00 | _ | | | | | 3 |
| 76 | Capri Investment Group | 255.70 | 255.70 | _ | | | | | 3 |
| 77 | Pearlmark | 254.30 | 254.30 | _ | | | | | 4 |
| 78 | ECE Real Estate Partners | 249.93 | — | 249.93 | | | | | 1 |
| 79 | Northern Horizon Capital A/S | 177.12 | _ | 177.12 | _ | | | | 1 |
| 80 | Walton Street Capital | 172.00 | — | — | | 172.00 | — | | 1 |
| 81 | Redwood—Kairos Real Estate Partners | 125.00 | 125.00 | _ | | | _ | | 1 |
| 82 | Mesa West Capital | 116.00 | 50.00 | _ | _ | 66.00 | | | 2 |
| 83 | CenterSquare Investment Management | 101.00 | _ | _ | _ | | 101.00 | | 1 |
| 84 | Newport Capital Partners | 100.00 | 100.00 | _ | _ | | _ | | 1 |
| 85 | Evolve Fund Services | 79.57 | _ | 79.57 | | | | | 7 |
| 86 | DRC Capital | 75.29 | 75.29 | | — | | | | 1 |
| 87 | Europa Capital | 64.11 | _ | | _ | 64.11 | | | 1 |

| | Advisory separate accounts by investor domicile (gross, US\$ million, as of December 31, 2015) | | | | | | | | |
|------|--|-------|------------------|--------|------------------|------|-----------|----------------|-----------------------|
| Rank | Fund manager | Total | North America | Europe | Latin America | Asia | Australia | Middle East | Number of mandates |
| 88 | CapRidge Partners | 59.00 | 59.00 | _ | — | _ | — | _ | 3 |
| 89 | LendInvest Capital | 54.62 | | 45.77 | — | 5.91 | — | 2.95 | 23 |
| 90 | Covenant Capital Group | 42.00 | 42.00 | _ | — | | — | | 1 |
| 91 | Velocis | 16.00 | 16.00 | _ | — | _ | — | — | 1 |
| 92 | American Realty Advisors | 15.05 | 15.05 | | | | | | 1 |
| 93 | Royal London Asset Management | 5.91 | | 5.91 | | | | | 2 |

End notes

BMO Real Estate Partners

Previously known as F&C REIT

Cromwell Property Group Incorporates Valad Europe

Grosvenor Europe

Grosvenor Fund Management changed its name to Grosvenor Europe from July 1, 2016.

InvestiRE SGR

InvestiRE is the result of the successful merger of three companies: Investire Immobiliare SGR, Polaris Real Estate SGR and Beni Stabili Gestioni SGR.

LendInvest Capital

Montello Capital Management was rebranded as LendInvest Capital

PGIM Real Estate

PGIM is a business of Prudential Financial.

Standard Life Investments

In September 2014, Standard Life announced the sale of its Canadian businesses, Standard Life Financial and Standard Life Investments, to Manulife, as well as a global collaboration agreement with Manulife that will deepen its access to global markets significantly. The transaction was successfully completed on January 30, 2015.

Warburg-HIH invest Real Estate GmbH

Warburg-Henderson Kapitalanlagegeselslchaft fur immobilien mbHerged into Warburg-HIH Invest Real Estate KVG GmbH after HIH Real Estate acquired a 50 percent stake of the shares formerly held by TIAA Henderson Real Estate (TH Real Estate).

Indirect real estate vehicles

| | Number and value of vehicles under managemen | nt (gross, US\$ million, as of December 31, 201 | 15) |
|------|---|---|----------------|
| Rank | Fund manager | Total GAV | Total vehicles |
| 1 | The Blackstone Group | 147,563.00 | 26 |
| 2 | Brookfield Asset Management | 113,000.00 | 15 |
| 3 | TH Real Estate | 74,662.00 | 47 |
| 4 | UBS Global Asset Management | 65,737.77 | 43 |
| 5 | PGIM Real Estate | 52,992.00 | 56 |
| 6 | J.P. Morgan Asset Management – Global Real Assets | 52,321.00 | 11 |
| 7 | Starwood Capital Group | 50,097.00 | 22 |
| 8 | CBRE Global Investors | 43,500.00 | 86 |
| 9 | Tishman Speyer Properties | 38,157.55 | 14 |
| 10 | Credit Suisse Real Estate Investment Management | 36,459.00 | 44 |
| 11 | Deka Immobilien Investment/WestInvest | 36,047.85 | 21 |
| 12 | Deutsche Asset Management | 32,485.04 | 39 |
| 13 | Invesco Real Estate | 30,935.00 | 41 |
| 14 | Morgan Stanley Real Estate Investing | 29,584.00 | 17 |
| 15 | Union Investment Real Estate GmbH | 26,982.34 | 15 |
| 16 | AXA Investment Managers – Real Assets | 26,727.31 | 58 |
| 17 | LaSalle Investment Management | 24,785.00 | 22 |
| 18 | Global Logistic Properties | 22,554.00 | 10 |
| 19 | Prologis | 22,466.20 | 13 |
| 20 | Standard Life Investments | 21,721.35 | 23 |
| 21 | AEW Global | 21,367.00 | 31 |
| 22 | Principal Real Estate Investors | 20,729.03 | 7 |
| 23 | Clarion Partners | 20,474.00 | 10 |
| 24 | Legal & General Property | 20,469.42 | 16 |
| 25 | Angelo Gordon & Co. | 19,360.00 | 21 |
| 26 | Colony Capital Investment Advisors | 19,250.00 | 1 |
| 27 | Aviva Investors | 17,403.06 | 45 |

INSTITUTIONAL REAL ESTATE, INC.

| | Number and value of vehicles under management (gross, US\$ | million, as of December 31, | 2015) |
|------|--|-----------------------------|----------------|
| Rank | Fund manager | Total GAV | Total vehicles |
| 28 | M&G Real Estate | 16,650.13 | 9 |
| 29 | BNP Paribas Real Estate Investment Management | 16,410.63 | — |
| 30 | Cohen & Steers Capital Management | 14,531.00 | 12 |
| 31 | BlackRock Fund Managers | 14,489.00 | 20 |
| 32 | Aberdeen Asset Management | 14,041.44 | 37 |
| 33 | Kenedix | 13,665.25 | — |
| 34 | Lend Lease | 13,639.88 | 11 |
| 35 | Schroder Real Estate Investment Management | 13,508.49 | 26 |
| 36 | Patron Capital | 12,802.94 | 4 |
| 37 | Hines | 12,510.00 | 7 |
| 38 | Dexus Property Group | 12,508.57 | 2 |
| 39 | Bentall Kennedy | 11,971.00 | 4 |
| 40 | AMP Capital | 11,879.09 | 18 |
| 41 | Rockpoint Group | 11,275.50 | 8 |
| 42 | Beacon Capital Partners | 10,812.40 | 4 |
| 43 | Patrizia Immobilien AG | 10,540.53 | 47 |
| 44 | La Francaise Real Estate Managers | 10,426.43 | 62 |
| 45 | Savills Investment Management | 10,219.97 | 23 |
| 46 | Heitman | 9,855.00 | 10 |
| 47 | Walton Street Capital | 9,204.00 | 12 |
| 48 | Harrison Street Real Estate Capital | 8,909.00 | 7 |
| 49 | Cornerstone Real Estate Advisers | 8,736.00 | 21 |
| 50 | Ares Management | 8,569.10 | 26 |
| 51 | Columbia Threadneedle Investments | 8,562.76 | — |
| 52 | Oaktree Capital Management | 8,531.00 | 12 |
| 53 | KBS | 8,265.00 | 7 |
| 54 | ISPT Pty | 8,213.10 | 5 |
| 55 | Tristan Capital Partners | 7,815.42 | 7 |
| 56 | Gaw Capital Partners | 7,579.20 | 6 |
| 57 | InvestiRE SGR | 7,356.64 | 33 |

| | Number and value of vehicles under management (gross, US\$ | million, as of December 31, | 2015) |
|------|--|-----------------------------|----------------|
| Rank | Fund manager | Total GAV | Total vehicles |
| 58 | The GPT Group | 7,315.21 | 3 |
| 59 | Westbrook Partners | 7,045.00 | 6 |
| 60 | USAA Real Estate Co. | 7,038.00 | 9 |
| 61 | DRA Advisors | 7,013.00 | 4 |
| 62 | Charter Hall Group | 6,835.99 | 5 |
| 63 | ASB Allegiance Real Estate Investment | 6,478.00 | 2 |
| 64 | Alpha Investment Partners Private | 6,445.00 | 4 |
| 65 | American Realty Advisors | 6,063.00 | 4 |
| 66 | Warburg-HIH invest Real Estate GmbH | 6,015.71 | 44 |
| 67 | Exeter Property Group | 6,013.00 | 4 |
| 68 | National Real Estate Advisors | 5,984.90 | 1 |
| 69 | Bouwfonds Investment Management | 5,877.70 | 31 |
| 70 | Crow Holdings Capital Partners | 5,824.30 | 5 |
| 71 | Blue Vista Capital Management | 5,733.00 | 6 |
| 72 | Greystar | 5,491.00 | 9 |
| 73 | Bouwinvest Real Estate Investment Management BV | 5,299.60 | 6 |
| 74 | Apollo Global Management | 5,283.00 | 8 |
| 75 | Rockspring Property Investment Managers | 5,191.24 | 11 |
| 76 | Meyer Bergman | 5,107.27 | 3 |
| 77 | Investa Property Group | 4,920.06 | 2 |
| 78 | Intercontinental Real Estate Corp. | 4,870.00 | 6 |
| 79 | Berkshire Group | 4,760.50 | 5 |
| 80 | Grosvenor Europe | 4,675.41 | 11 |
| 81 | Kayne Anderson Real Estate Advisors | 4,652.00 | 3 |
| 82 | GreenOak Real Estate | 4,626.00 | 9 |
| 83 | TRIUVA Kapitalverwaltungsgesellschaft mbH | 4,405.62 | 18 |
| 84 | BMO Real Estate Partners | 4,284.33 | 8 |
| 85 | Bridge Investment Group Partners | 4,216.00 | 4 |
| 86 | Carmel Partners | 4,190.30 | 5 |
| 87 | PAG Investment Management | 3,951.00 | 5 |
| 88 | Paladin Realty Partners | 3,827.00 | 5 |

| | Number and value of vehicles under management (gross, US\$ m | illion, as of December 31, | 2015) |
|------|--|----------------------------|----------------|
| Rank | Fund manager | Total GAV | Total vehicles |
| 89 | CITIC Capital | 3,443.00 | 5 |
| 90 | Equus Capital Partners | 3,418.50 | 7 |
| 91 | ECE Real Estate Partners | 3,412.09 | 2 |
| 92 | Cromwell Property Group | 3,292.56 | 9 |
| 93 | GTIS Partners | 3,205.00 | 15 |
| 94 | PCCP | 3,184.00 | 9 |
| 95 | NIAM | 3,146.73 | 5 |
| 96 | Mesa West Capital | 3,105.10 | 3 |
| 97 | Unite Integrated Solutions | 3,061.92 | 1 |
| 98 | Internos Global Investors | 2,637.74 | 15 |
| 99 | MetLife Investment Management | 2,549.00 | 2 |
| 100 | Franklin Real Estate Advisors | 2,522.80 | 13 |
| 101 | Hermes Real Estate Investment Management | 2,503.43 | 4 |
| 102 | Brookfield Investment Management | 2,462.30 | 5 |
| 103 | Europa Capital | 2,454.75 | 5 |
| 104 | Madison International Realty | 2,384.90 | 8 |
| 105 | Lothbury Investment Management | 2,307.74 | 2 |
| 106 | Waterton | 2,283.80 | 2 |
| 107 | Madison Realty Capital | 2,205.00 | 5 |
| 108 | InfraRed Capital Partners | 2,203.00 | 2 |
| 109 | ICG-Longbow | 2,130.35 | 4 |
| 110 | Altera Vastgoed NV | 2,077.68 | 4 |
| 111 | Sentinel Real Estate Corp. | 2,045.00 | 7 |
| 112 | DRC Capital | 2,001.18 | 6 |
| 113 | Timbercreek Asset Management | 1,968.31 | 14 |
| 114 | Diamond Realty Management | 1,965.83 | 6 |
| 115 | GLL Real Estate Partners GmbH | 1,951.63 | 7 |
| 116 | CenterSquare Investment Management | 1,673.00 | 9 |
| 117 | Broadstone Real Estate | 1,668.00 | 2 |
| 118 | American Real Estate Partners | 1,656.90 | 0 |
| 119 | Clearbell Fund Management | 1,558.27 | 2 |

| | Number and value of vehicles under management (gross, US\$ | million, as of December 31, | 2015) |
|------|--|-----------------------------|----------------|
| Rank | Fund manager | Total GAV | Total vehicles |
| 120 | Canyon Partners Real Estate | 1,553.33 | 8 |
| 121 | Sveafastigheter | 1,412.65 | 3 |
| 122 | Guggenheim Real Estate | 1,349.40 | 5 |
| 123 | LEM Capital | 1,328.20 | 4 |
| 124 | Pradera | 1,227.92 | 4 |
| 125 | Long Wharf Real Estate Partners | 1,211.00 | 3 |
| 126 | Sparinvest Property Investors | 1,174.67 | 4 |
| 127 | Trigate Capital | 1,157.60 | 3 |
| 128 | Davis Investment Ventures | 1,090.00 | 2 |
| 129 | Catalyst Capital | 1,086.65 | 2 |
| 130 | Propertylink | 1,074.12 | 2 |
| 131 | Covenant Capital Group | 1,022.50 | 3 |
| 132 | Fidelity Worldwide Investment | 1,004.69 | 2 |
| 133 | Pembrook Capital Management | 1,000.00 | 3 |
| 134 | Forum Partners Investment Management | 936.00 | 7 |
| 135 | Frogmore | 929.50 | 3 |
| 136 | Patria Investimentos | 880.00 | 4 |
| 137 | Pearlmark | 847.10 | 7 |
| 138 | L&B Realty Advisors | 756.00 | 2 |
| 139 | Capri Investment Group | 736.80 | 1 |
| 140 | Hunt Investment Management | 735.90 | 5 |
| 141 | Mayfair Capital Investment Management | 733.74 | 3 |
| 142 | Argosy Real Estate | 725.00 | 4 |
| 143 | Redwood-Kairos Real Estate Partners | 586.30 | 3 |
| 144 | Western National Group | 578.50 | 2 |
| 145 | Royal London Asset Management | 575.77 | 1 |
| 146 | Altis Property Partners | 531.89 | 5 |
| 147 | OREIMA | 526.70 | 2 |
| 148 | AviaRent Capital Management SARL | 513.99 | 5 |
| 149 | Presima | 513.20 | 7 |
| 150 | WHI Real Estate Partners | 499.70 | 5 |

| Number and value of vehicles under management (gross, US\$ million, as of December 31, 2015) | | | |
|--|-----------------------------------|-----------|----------------|
| Rank | Fund manager | Total GAV | Total vehicles |
| 151 | IAM Real Estate Group | 493.23 | 4 |
| 152 | Bridges Ventures | 485.71 | 3 |
| 153 | Velocis | 479.00 | 2 |
| 154 | Northern Horizon Capital A/S | 472.69 | 5 |
| 155 | Bristol Group | 469.00 | 2 |
| 156 | Hamilton Point Investments | 459.70 | 8 |
| 157 | Pamfleet | 452.61 | 2 |
| 158 | Lionstone Investments | 425.00 | 6 |
| 159 | Genesis Capital Advisors | 394.35 | 10 |
| 160 | Avenida Capital | 390.00 | 2 |
| 161 | SachsenFonds Group | 368.38 | 3 |
| 162 | TGM Associates | 314.37 | 1 |
| 163 | Hutensky Capital Partners | 308.00 | 3 |
| 164 | Sarofim Realty Advisors | 259.00 | 2 |
| 165 | Newport Capital Partners | 253.00 | 3 |
| 166 | Fundbox - SGFII, SA | 252.76 | 16 |
| 167 | CapRidge Partners | 251.00 | 2 |
| 168 | Gresham Property Funds Management | 218.82 | 3 |
| 169 | IO Asset Management | 191.92 | 2 |
| 170 | Equity Estate BV | 189.40 | 2 |
| 171 | Evolve Fund Services | 165.35 | 5 |
| 172 | Novare Fund Manager | 152.00 | 2 |
| 173 | LendInvest Capital | 125.49 | 2 |
| 174 | Arrow Funds Management | 121.08 | 1 |
| 175 | BKM Capital Partners | 112.00 | 6 |
| 176 | Colliers Capital | 106.30 | 1 |
| 177 | Barwood Capital | 100.39 | 2 |
| 178 | Rynda Property Investors | 76.07 | 1 |
| 179 | Quadrant Real Estate Advisors | 42.00 | 3 |
| 180 | DTZ Investors | 14.76 | 1 |

End notes

Aberdeen Asset Management

Includes direct property funds only

American Realty Advisors

Value of vehicles represents the gross fair value of all assets held by all accounts, including cash and cash equivalents, managed by American, excluding partners' share of debt on partnership investments.

Avenida Capital

Includes \$140 million of uncommitted capital

BMO Real Estate Partners

Previously known as F&C REIT

Brookfield Asset Management

Brookfield Asset Management AUM figures were obtained from public documents and sources

Cromwell Property Group

Incorporates Valad Europe

Forum Partners Investment Management

In June 2015, Forum Partners acquired a 50 percent interest in NYC multifamily owner/operator/developer The Dermot Company.

Grosvenor Europe

Grosvenor Fund Management changed its name to Grosvenor Europe from July 1, 2016.

Guggenheim Real Estate

Net figures supplied

InvestiRE SGR

InvestiRE is the result of the successful merger of three companies: Investire Immobiliare SGR, Polaris Real Estate SGR and Beni Stabili Gestioni SGR.

LendInvest Capital

Montello Capital Management was rebranded as LendInvest Capital.

Northern Horizon Capital A/S

Three unlisted investment vehicles were liquidated in 2015.

PGIM Real Estate

PGIM is a business of Prudential Financial.

Standard Life Investments

In September 2014, Standard Life announced the sale of its Canadian businesses, Standard Life Financial and Standard Life Investments, to Manulife, as well as a global collaboration agreement with Manulife that will deepen its access to global markets significantly. The transaction was successfully completed on anuary 30, 2015.

Warburg-HIH invest Real Estate GmbH

Warburg-Henderson Kapitalanlagegeselslchaft fur immobilien mbH merged into Warburg-HIH Invest Real Estate KVG GmbH after HIH Real Estate acquired a 50 percent stake of the shares formerly held by TIAA Henderson Real Estate (TH Real Estate).

About Institutional Real Estate, Inc.

Foundation 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 Newsline, 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, Asia and Europe, as well as Springboard, a new 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.

Personnel

Institutional Real Estate, Inc.

Denise DeChaine, Special Projects Editor Project management, editing

> Larry Gray, Editorial Director Editing and proofreading

Susan Sharpe, Art Director Design, layout and production

Loretta Clodfelter, Editor Proofreading

Linda Ward, Sponsor Benefits Manager Data collection

Karen Palma, Manager, Data Services Data collection

Justin Galicia, Data Services Specialist Data collection Derek Hellender, Data Entry Assistant Data collection **Property Funds Research**

Jane Fear, Managing Director Project management, data collection

Copyright © 2016 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 issue is to be construed as a recommendation to buy or sell any security or other investment.

INSTITUTIONAL REAL ESTATE, INC.