

Fund Manager Survey **2016**

Research

INREV is the European Association for Investors in Non-Listed Real Estate Vehicles. Our aim is to improve the accessibility of non-listed real estate vehicles for institutional investors by promoting greater transparency, accessibility, professionalism and standards of best practice.

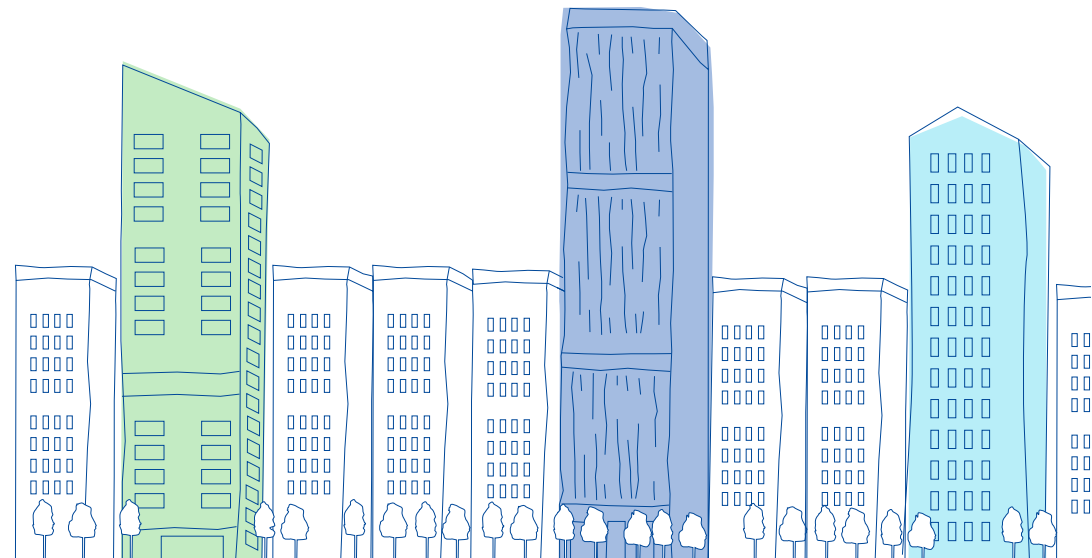
As a pan European body, INREV represents an excellent platform for the sharing and dissemination of knowledge on the non-listed real estate industry.

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Contents

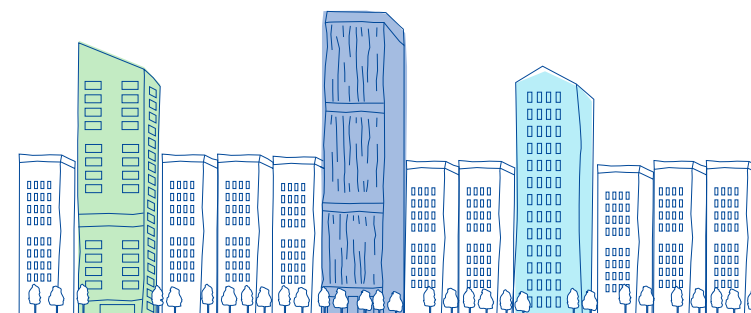
Executive summary	4
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Sections

1	Introduction	5
2	Total real estate assets under management globally	7
3	Non-listed real estate vehicles	18
4	Non-listed direct real estate vehicles	20
5	Non-listed funds / private REITs	28
6	Mergers and acquisitions	37

Appendices

1	Top 50 fund managers based on total real estate assets under management	39
2	Top 50 fund managers based on non-listed direct real estate vehicles	42
3	Top 50 fund managers based on non-listed / commingled real estate funds / private REITs	45
4	List of respondents	48
5	Definitions	55



Executive summary

- > Real estate assets under management grew to €2.0 trillion from €1.8 trillion last year
- > The big managers keep getting bigger
- > North American and global strategies much larger than other strategies

Total real estate assets under management grew strongly over the year, from €1.8 trillion in last year's survey to €2.0 trillion.

A key message from this year's Fund Manager Survey is that the big managers just keep getting bigger. The top three fund managers have total real estate assets under management exceeding €100 billion each. To be more precise, the biggest three have assets of €137.3 billion, €135.3 billion and €110.8 billion, whereas three years ago the big three had assets under management of €83.0 billion, €69.6 billion and €67.1 billion respectively.

Ongoing consolidation in the fund management industry is one of the drivers of this concentration. It is worthwhile noting that one

'The top three fund managers have real estate assets under management exceeding €100 billion each'

in five of the fund managers who responded to the 2016 survey have been involved in mergers and acquisitions in the last ten years. Whether the motivation is scale, an enhanced

product offering, diversification or some other reason, the urge to merge (or buy) is widespread.

The degree of concentration is not constant across all investment strategies. For global investment strategies, for example, the largest player is much larger in terms of assets under management than the second-ranked player. It is a top heavy category, but this is not the case for any of the regional strategies (Asia Pacific, European or North American) where the leading players are bunched much more closely together, particularly in Europe.

There is considerable breadth in the product offerings in the marketplace, and this varies by regional strategy. For European strategies, for example, non-listed funds and private REITs make up 51.9% of total value of assets under management, followed by separate accounts (direct) which make up 29.1% of total assets under management. For North American strategies the pattern is broadly similar: 50.8% for non-listed real estate funds and 24.8% for separate accounts (direct).

For Asia Pacific strategies, 61.0% of total assets under management is found in non-listed funds and private REITs and 21.5% in separate accounts (direct). For global strategies the corresponding figures are more

like Asia Pacific strategies.

There is a notable difference in the size of non-listed real estate funds in North America and in Europe.

In Europe non-listed real estate funds have total assets under management of €340.1 billion spread across approximately 1,000 vehicles. In North America, real estate funds have total assets under management of €272.1 billion spread across approximately 150 vehicles.

Pension funds and insurance companies are the most significant sources of capital for non-listed vehicles and for separate accounts (direct). Together, pension funds and insurance companies account for 65.7% of the assets under management in non-listed funds and private REITs, and for 70.5% of the value in separate accounts (direct). However, this is not the case for joint ventures and clubs, where other sources of capital, such as sovereign wealth funds, come into play.

'There is considerable breadth in the product offerings in the marketplace'

Section 1

Introduction

Introduction

The ANREV / INREV / NCREIF Fund Manager Survey 2016 explores total real estate assets under management (AUM) of all real estate fund management companies, providing greater insights into regional composition and vehicle types.

For the second time, the survey has a global outreach. It was conducted in conjunction with ANREV in Asia Pacific and NCREIF in the US with the aim of providing a greater appreciation of the real estate fund manager landscape globally.

In total, 154 fund managers globally completed the questionnaire. The majority of fund managers were from Europe (69 or 44.8%), followed by those domiciled in Asia Pacific (58 or 37.7%) then North America (27 or 17.5%). No fund manager domiciled in South America or Africa participated in this study.

Collectively, respondents represent €2.0 trillion (2015: €1.8 trillion) of real estate assets under management. The full list of participants can be found in Appendix 4.

The report is set out as follows:

- Section 2 examines total real estate assets under management.
- Section 3 assesses non-listed real estate vehicles under management.
- Section 4 explores the fund manager universe by their non-listed direct real estate vehicles AUM.
- Section 5 looks into their non-listed real estate funds / commingled funds / private REITs holdings.
- Section 6 gives insights into merger and acquisition activities in the real estate fund management industry over the past ten years.

It is important to note that the sample size and composition of the survey varies year by year. As such, historical comparison should be treated with caution.

All figures in the report are quoted as at 31 December 2015 unless otherwise stated.

ANREV, INREV and NCREIF would like to thank fund managers for their participation in this survey.

Section 2

Total real estate assets under management globally

Total real estate assets under management globally

The gross asset value (GAV) of total real estate assets under management increased by 11.3% from €1.8 trillion in 2014 to €2.0 trillion in 2015. Overall, the 10 largest fund managers represent 41.0% or €823.3 billion of the total AUM. With €137.3 billion of total real estate assets under management, Brookfield Asset Management tops the list in the 2016 survey.

The Blackstone Group ranks second overall with €135.3 billion of total real estate AUM,

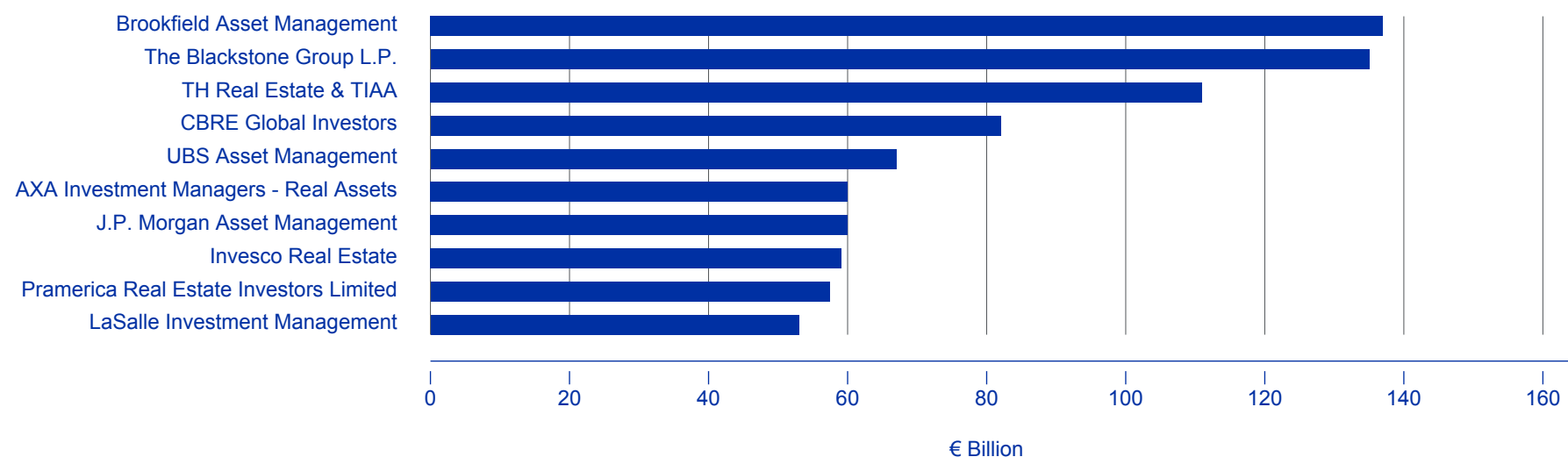
some €2 billion less than Brookfield Asset Management. TH Real Estate & TIAA occupies the third position with €110.8 billion of global real estate AUM, followed by CBRE Global Investors (€81.6 billion) in fourth place.

Next in line in this grouping is UBS Asset Management (€67.5 billion). AXA Investment Managers - Real Assets (€60.0 billion) is sixth. J.P. Morgan Asset Management (€59.8 billion) is seventh. Invesco Real Estate (€59.1 billion) is eighth. Pramerica Real Estate Investors

Limited (€58.4 billion) is ninth and finally LaSalle Investment Management (€53.5 billion) concludes the top 10.

Within the overall category of the top 10 fund managers, there are arguably two divisions: those with over €100 billion in global AUM (the top three players), and the others, many of which are clustered around the €60 billion mark. CBRE Global Investors, with €81.6 billion in AUM, sits between these two divisions.

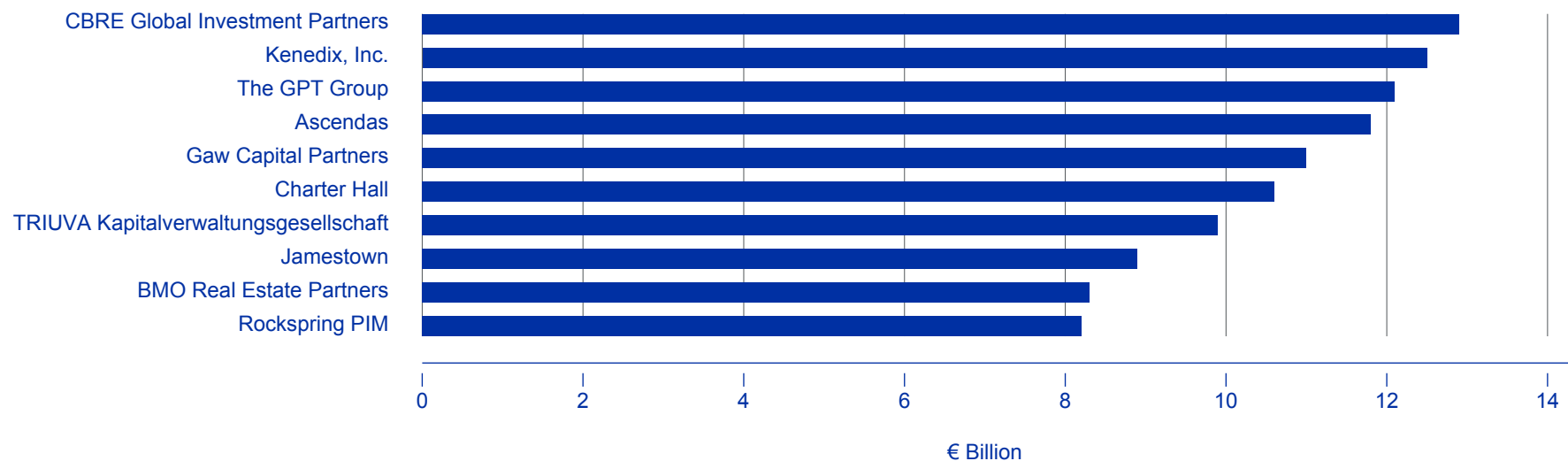
Figure 1: Top 10 fund managers by total AUM - upper quartile



In the interquartile range of managers ranked by total AUM, the top slot goes to CBRE Global Investment Partners (not to be confused with CBRE Global Investors). Next in line are Kenedix and the GPT Group. All three have over €12 billion in real estate AUM.

The relative size of the players falls away more smoothly than is the case of the top 10 in the top quartile, declining gradually from the fourth ranked player (Ascendas) with €11.8 billion in AUM to Rockspring PIM, ranked number 10 with €8.2 billion under management.

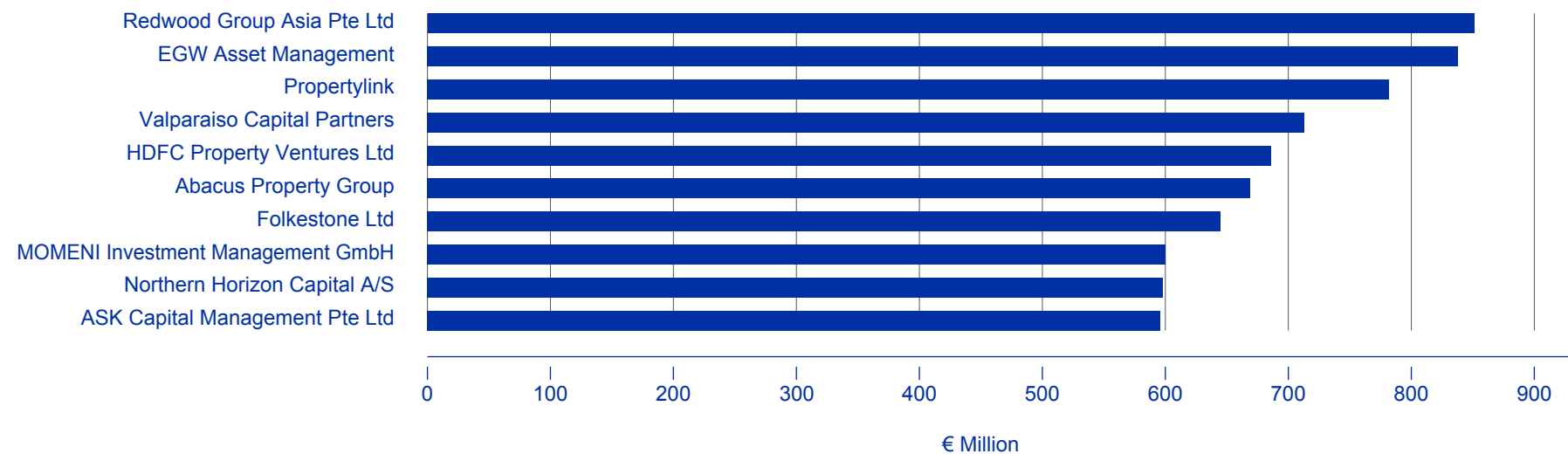
Figure 2: Top 10 fund managers by total AUM - interquartile



In the lower quartile Redwood Group leads the top 10, with €851.0 million in real estate assets under management, followed closely by EGW Asset Management with €837.9 million in assets. The remaining eight players

in this grouping are led by Propertylink with €781.8 million in assets under management. ASK Capital Management is number 10 in this grouping, holding €596.0 million in assets under management.

Figure 3: Top 10 fund managers by total AUM - lower quartile



Total real estate assets under management - Europe

The following section assesses total real estate AUM broken down by regional strategies and by quartiles.

For European strategies, Aviva Investors occupies the top position in the upper quartile with €45.1 billion of real estate assets under management. The second and third slots are filled by CBRE Global Investors and Credit

Suisse, with AUM of €41.3 billion and €37.2 billion respectively. The remaining seven managers in the upper quartile have AUM varying from €34.6 to €22.6 billion.

In the interquartile range for European strategies, the top slot goes to Rockspring PIM with €8.2 billion AUM, followed by Tristan Capital Partners with €7.2 billion. Orchard Street Investment Management (€7.0 billion) and Tishman Speyer (€6.6 billion) takes the next two positions. The remaining six players in this group have between €6.2 billion and €5.1 billion each in European real estate AUM.

With €1.1 billion of AUM, Lendlease Investment Management ranks first in the lower quartile group. Very close behind in this grouping is Clearbell Capital (€1.1 billion), with Rynda Property Investors (€1.0 billion) taking the third position. The remaining seven players in this grouping have AUM of between €0.9 billion and €0.6 billion.

Figure 4: Top 10 fund managers by European AUM - upper quartile

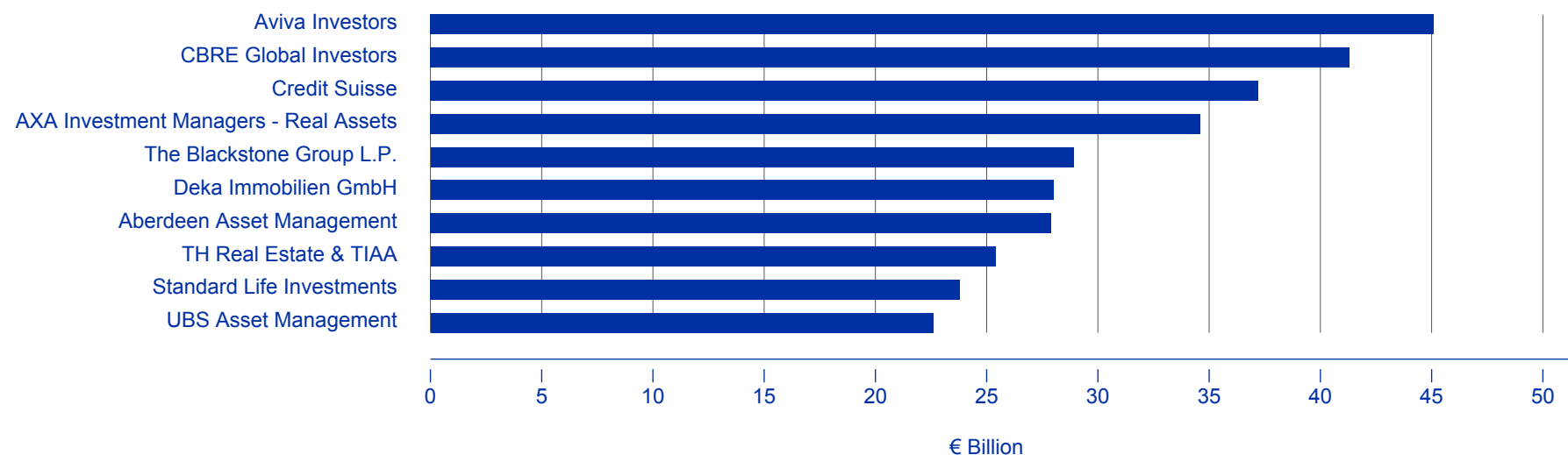


Figure 5: Top 10 fund managers by European AUM - interquartile

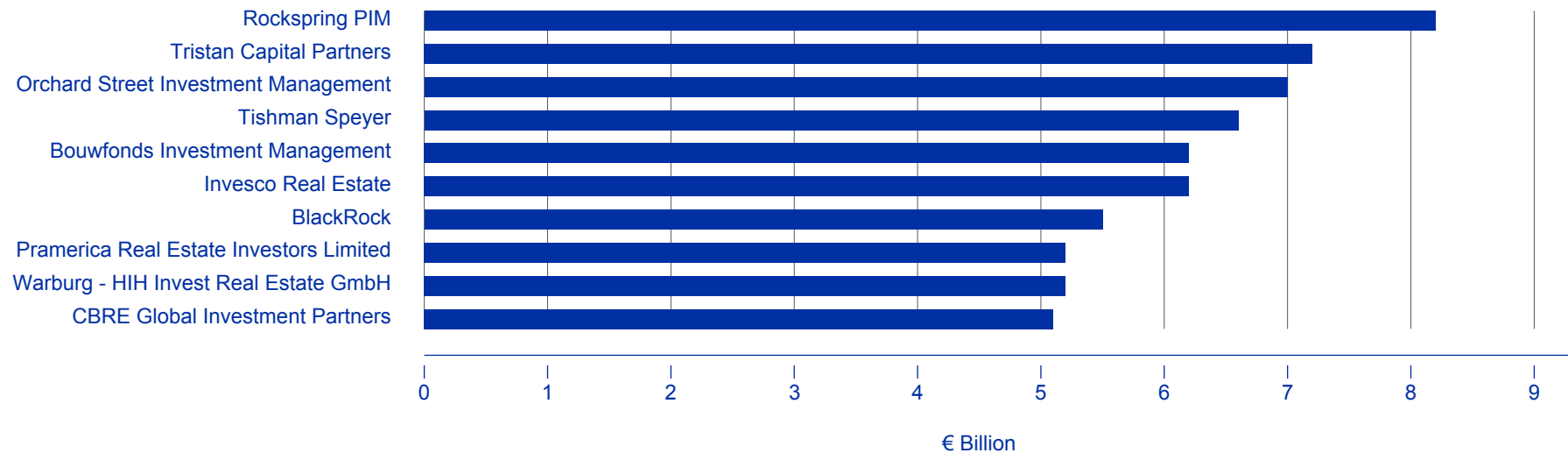
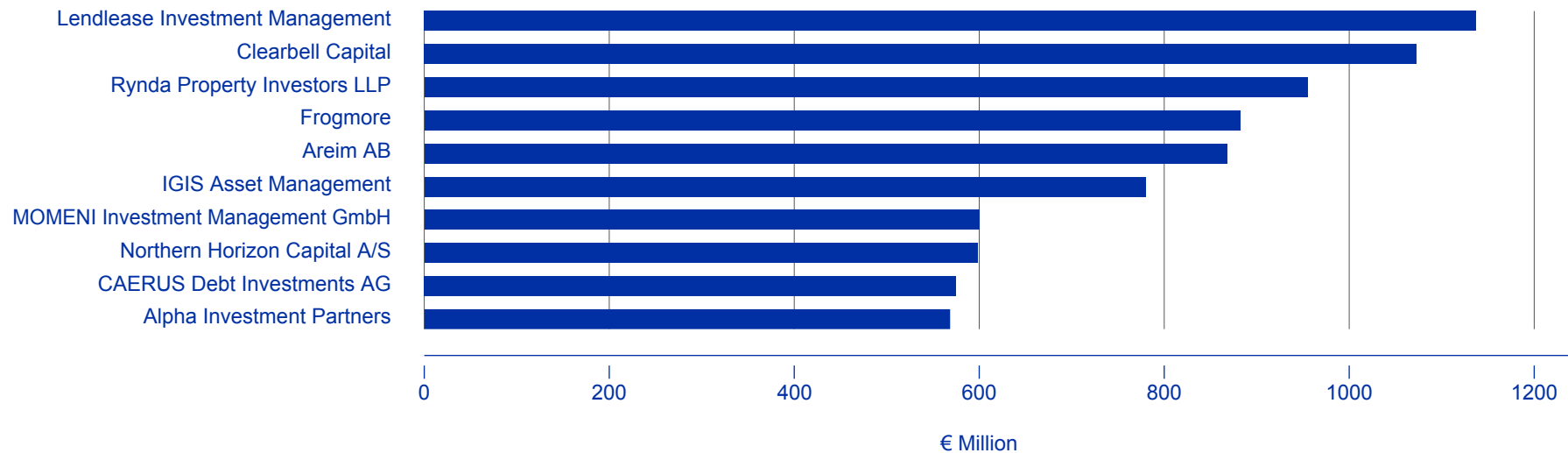


Figure 6: Top 10 fund managers by European AUM - lower quartile



Total real estate assets under management - Asia Pacific

In terms of Asia Pacific strategies, CapitaLand is the largest fund manager in the upper quartile, with total real estate AUM of €40.3 billion. The second place goes to Fosun Property Holdings with €31.4 billion in AUM, and next is Mapletree Investments with €20.9 billion of real estate AUM. The remaining

seven managers in this group have AUM in the range of €19.3 billion to €11.8 billion.

The interquartile range is led by Tokyo Tatemono Investment Advisors with €4.9 billion invested in Asia Pacific. Invesco Real Estate follows next with €4.6 billion, beating Pramerica Real Estate Investors which takes the third position with €4.5 billion of real estate AUM in this region. The remaining seven managers in this group have AUM in the range of €4.1 billion to €1.9 billion.

The top spot in the lower quartile group goes to Qualitas with €421.0 million. CBRE Global Investment Partners follows closely behind with €419.9 million, and Forum Partners is the third largest fund manager in this group with €415.4 million. The remaining seven managers in this group have AUM in the range of €407.1 million to €265.9 million.

Figure 7: Top 10 fund managers by Asia Pacific AUM - upper quartile

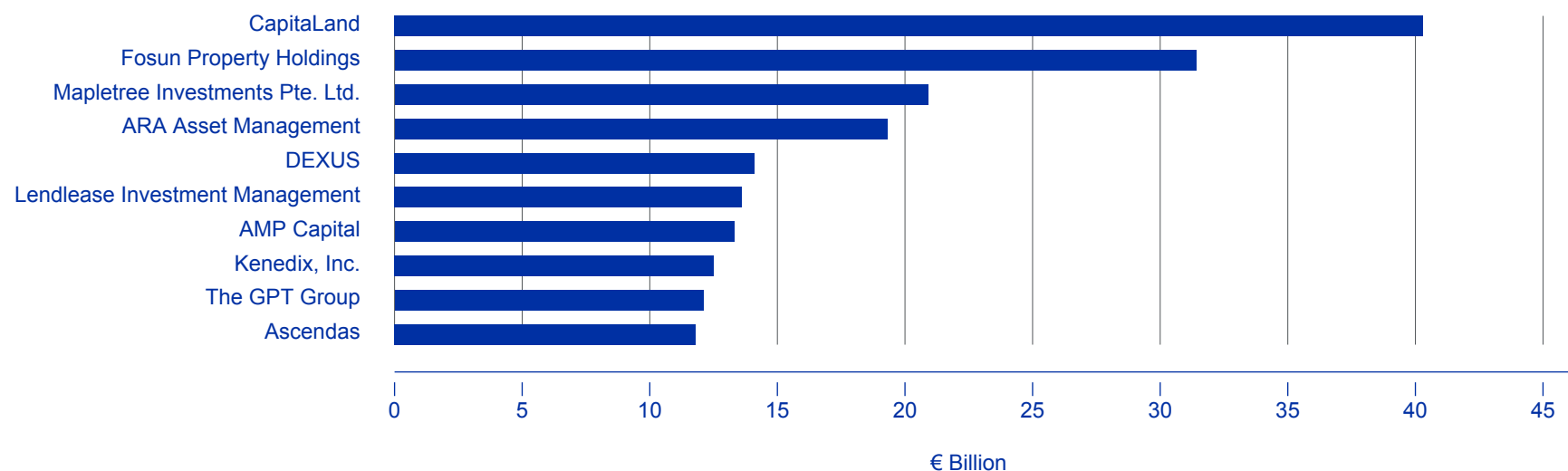


Figure 8: Top 10 fund managers by Asia Pacific AUM - interquartile

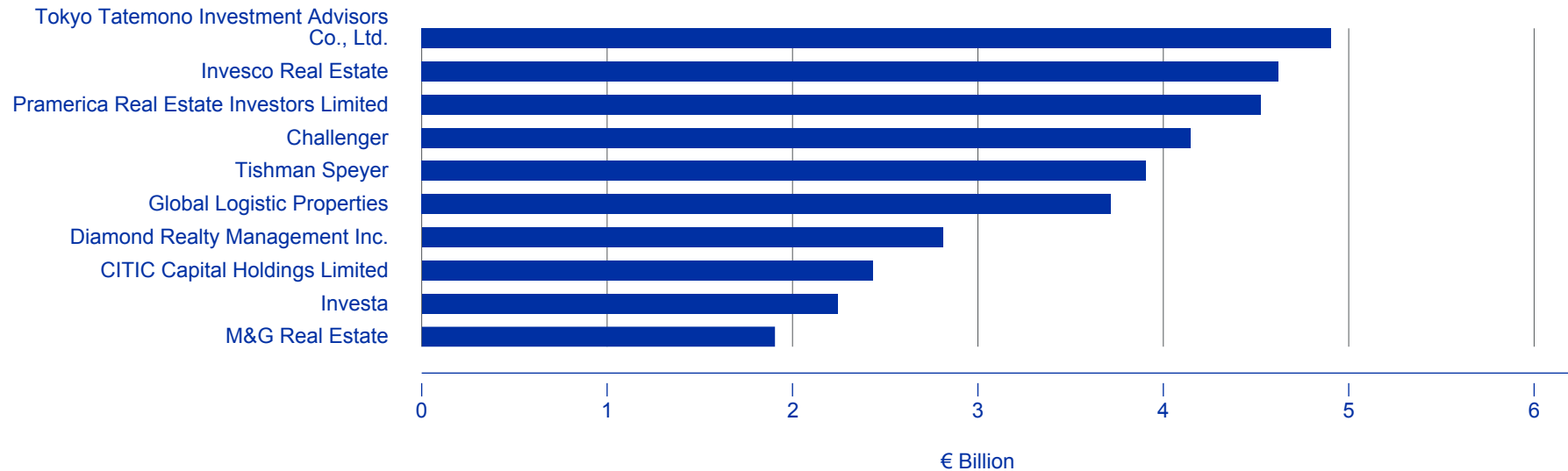
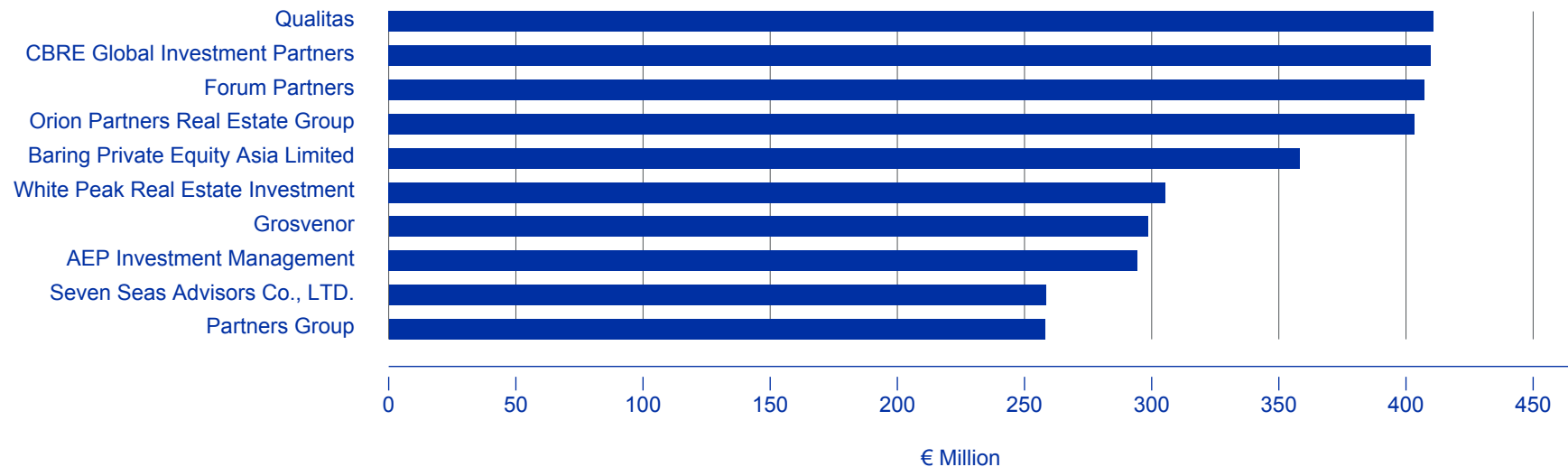


Figure 9: Top 10 fund managers by Asia Pacific AUM - lower quartile



Total real estate assets under management - North America

In terms of North America strategies, Brookfield Asset Management is the largest fund manager in the upper quartile, with total real estate AUM of €89.4 billion. Second place in the upper quartile group for North American strategies goes to TH Real Estate & TIAA with €57.3 billion in AUM, and next is J.P. Morgan Asset Management with €53.8 billion of real

estate AUM. The remaining seven managers in this group have AUM in the range of €41.7 billion to €27.1 billion.

The interquartile range is led by Tishman Speyer with €26.6 billion invested in North America strategies. Morgan Stanley Real Estate Investing follows next with €17.6 billion, ahead of Prologis which takes the third spot with €16.5 billion of real estate AUM in this region. The remaining seven managers in this group have AUM in the range of €15.7 billion to €6.8 billion.

The top spot in the lower quartile group goes to Alpha Investment Partners with €588.7 million. Grosvenor follows behind with €359.0 million, and Syntrus Achmea Real Estate & Finance is the third largest fund manager in this group with €331 million. The remaining seven managers in this category have AUM in the range of €293.6 million to €81.0 million. The last four managers in this category are grouped closely together.

Figure 10: Top 10 fund managers by North American AUM - upper quartile

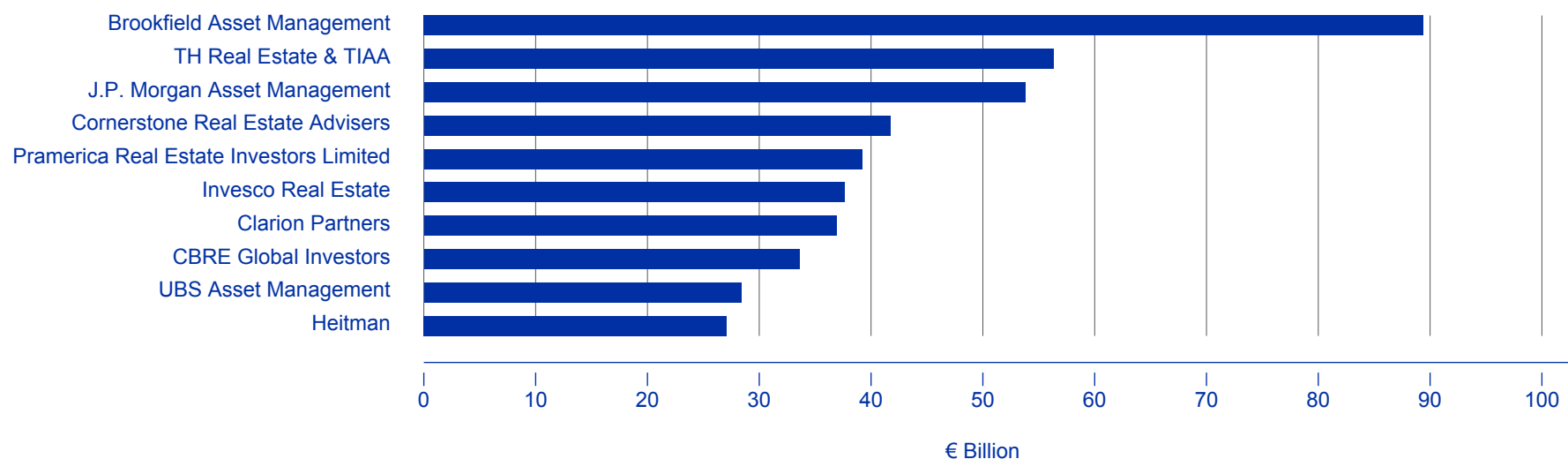


Figure 11: Top 10 fund managers by North American AUM - interquartile

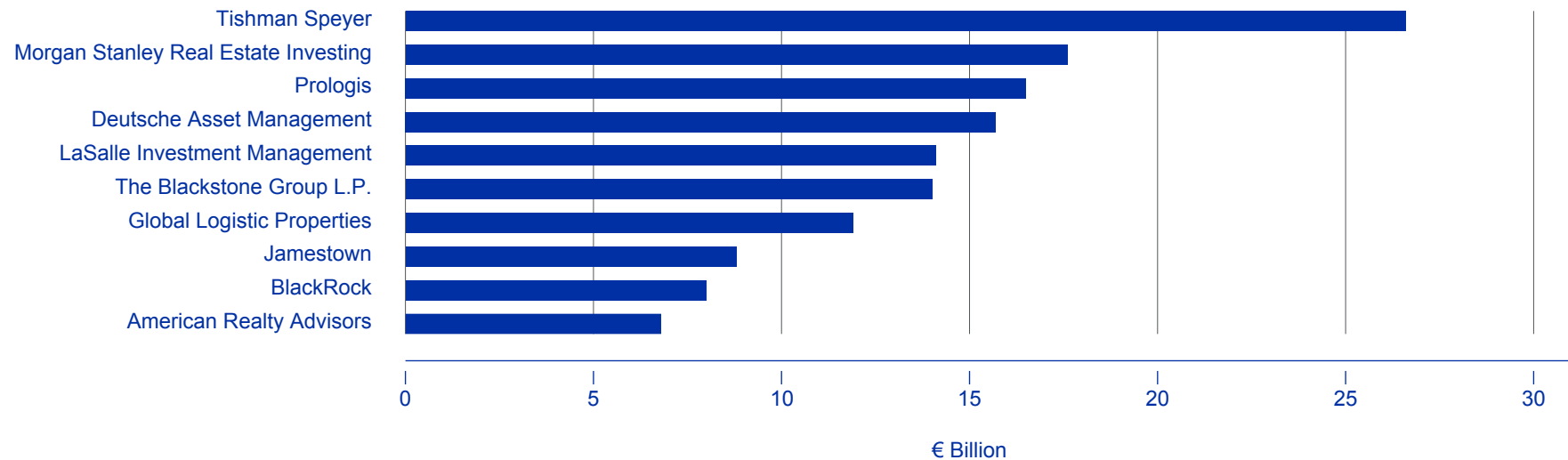
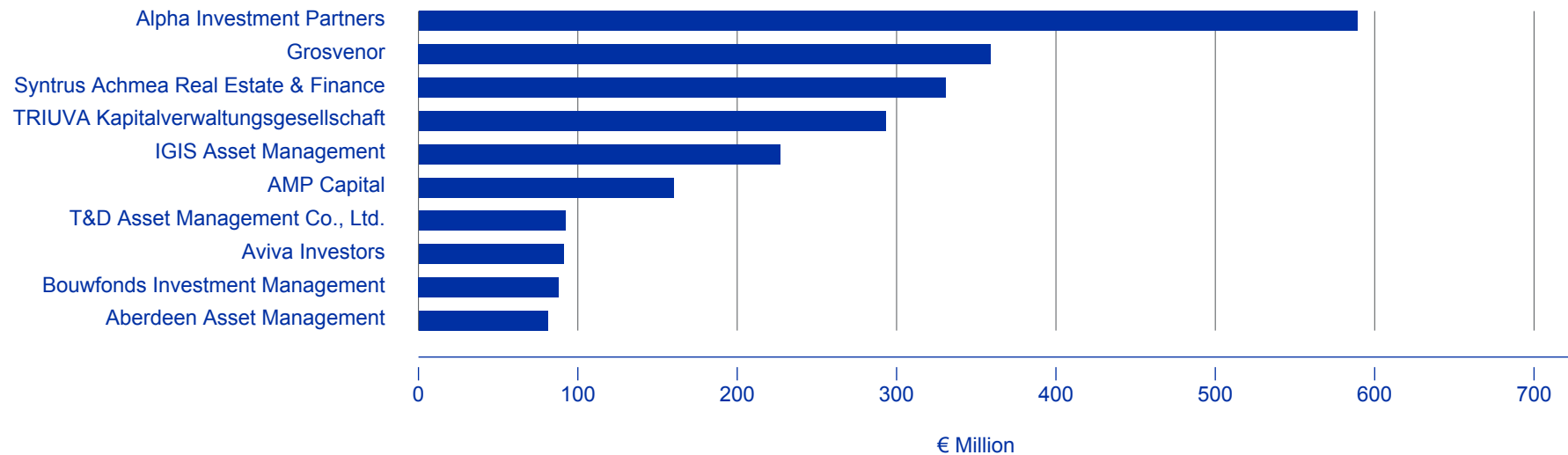


Figure 12: Top 10 fund managers by North American AUM - lower quartile

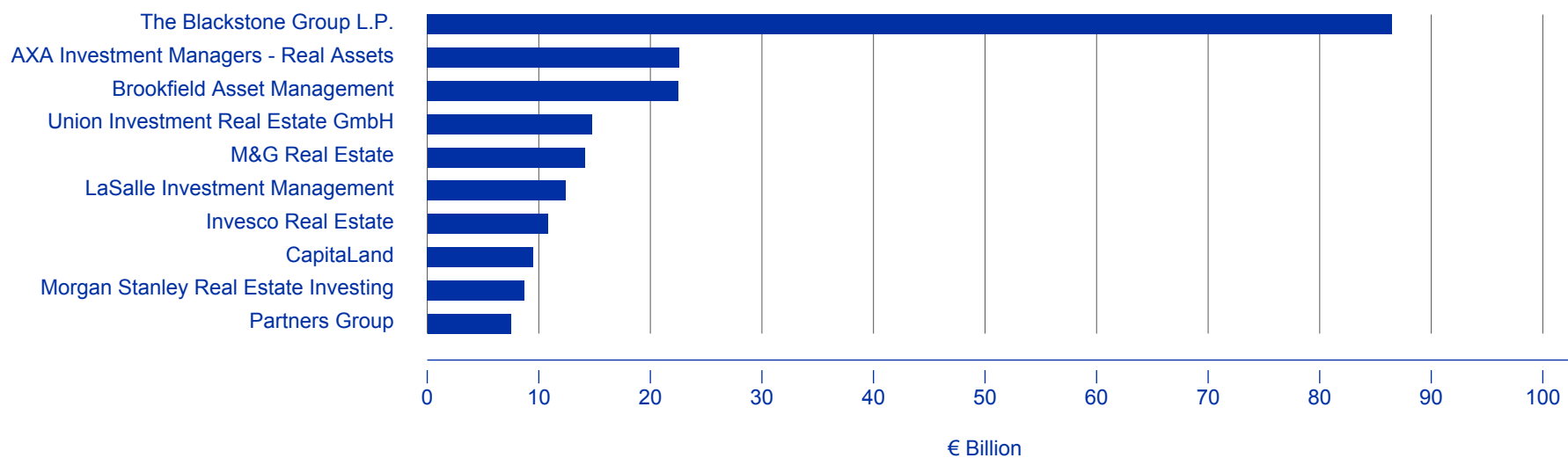


Total real estate assets under management - Global

For global strategies the sample is insufficiently large to give a meaningful quartile-based analysis. The clear leader in global strategies is The Blackstone Group, with €86.5 billion in real estate AUM. Next in

line, and a considerable distance behind, comes AXA Investment Managers - Real Assets, with €22.6 billion in AUM, which is just slightly ahead of third-placed Brookfield Asset Management with €22.5 billion in AUM. The remaining seven players in this league table have a wide range of assets under management, from €14.8 billion for the fourth ranked player to €7.5 billion for the last.

Figure 13: Top 10 fund managers by AUM of global strategies



Section 3

Non-listed real estate vehicles

Non-listed real estate vehicles

Non-listed real estate vehicles under management

This section focuses on all non-listed real estate vehicles including funds and private REITs, separate accounts (both investing directly and indirectly), JVs and club deals, fund of funds and non-listed debt products. The total value is €1.6 trillion across all strategies and vehicle types. This equals to 81.2% of all real estate AUM globally. There are 3510 vehicles in total, including 1522 funds. (The next section of this survey will focus on non-listed real estate funds in particular).

Within the various regional strategies there are different vehicle type preferences. Joint ventures and club deals make up a material part of the value in Asia Pacific (15.5%), North American (16.4%) and European strategies (8.6%), but barely feature in global strategies (0.5%). In terms of the number of JVs and club deals, Asia Pacific leads the pack (30.4% of its total is in JVs and clubs).

It is worthwhile noting that South America strategies are dominated (85.5%) by non-listed funds, indicating that this vehicle is the preferred structure for gaining access to the region.

Figure 14: Value of non-listed real estate vehicles by regional strategy and by vehicle type

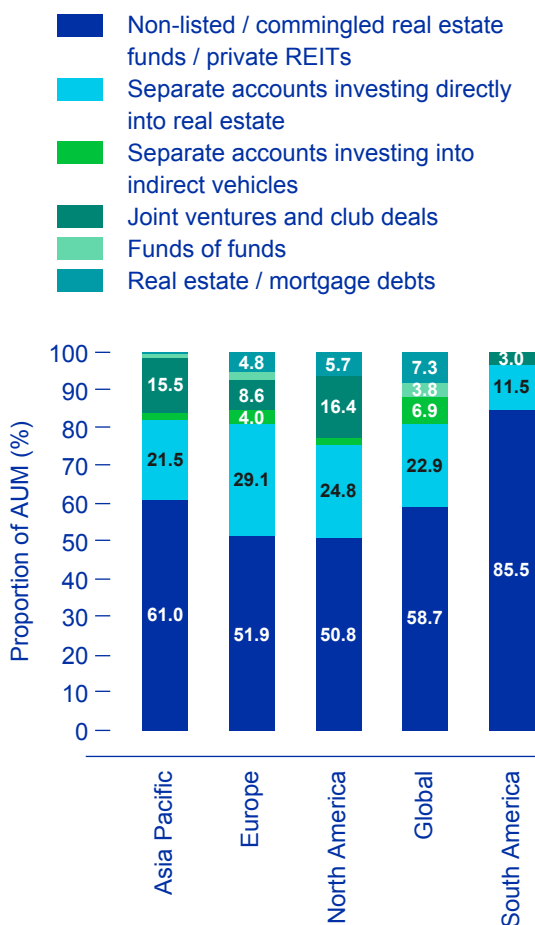
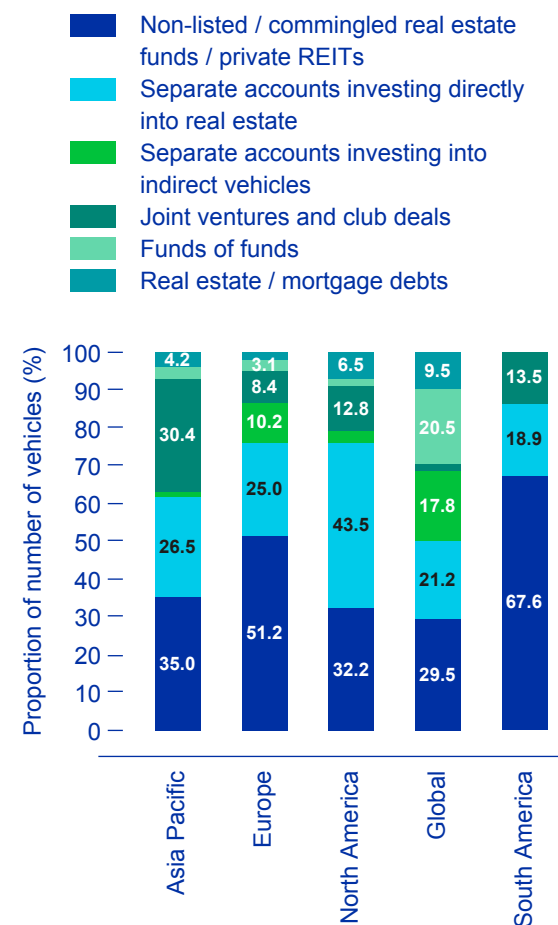


Figure 15: Number of non-listed real estate vehicles by regional strategy and by vehicle type



Section 4

Non-listed direct real estate vehicles

Non-listed direct real estate vehicles

Non-listed direct real estate vehicles under management

This section examines non-listed direct real estate vehicles data only. The category of non-listed direct real estate vehicles refer to vehicles investing directly into real estate, these being: non-listed real estate funds and private REITs, JVs and club deals and separate accounts investing directly into real estate. The category excludes funds of funds, separate accounts investing indirectly and debt products.

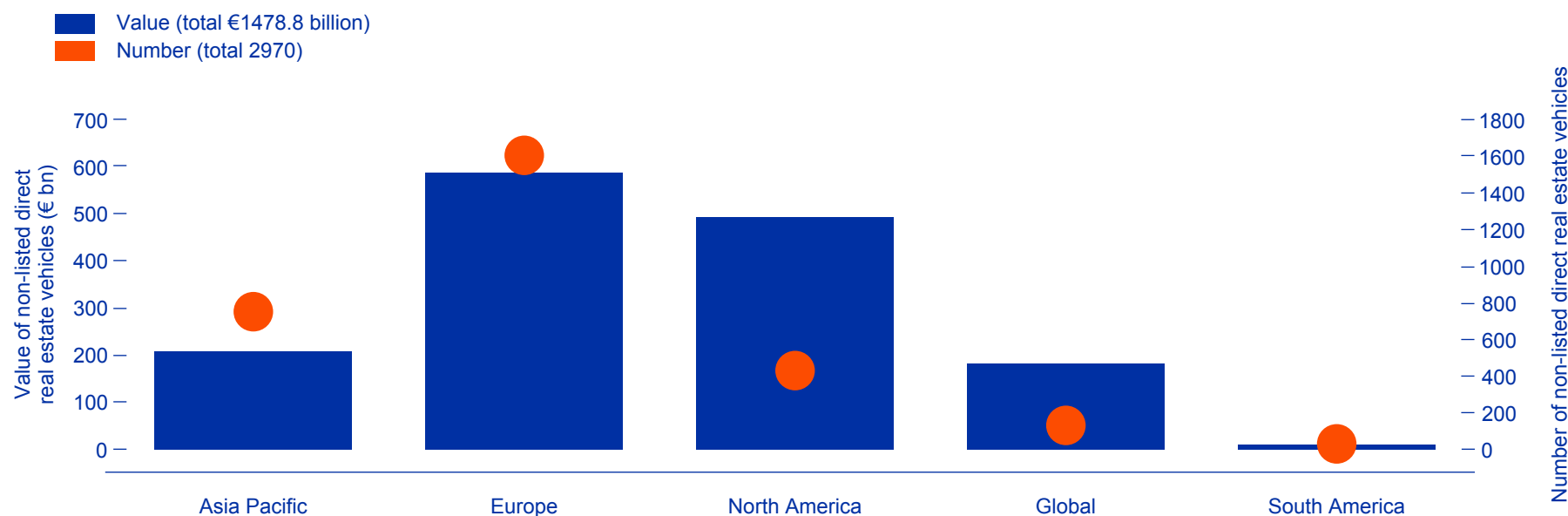
Overall, fund managers manage a total of 2,970 non-listed direct real estate vehicles with a combined value of €1.5 trillion. In terms of value, vehicles with a European strategy amount to €587.2 billion in total. This is equivalent to 39.7% of the €1.5 trillion invested in non-listed direct real estate vehicles worldwide. North American vehicles constitute 33.3% of this universe and Asia Pacific strategies account for a further 14.1%. The remainder is split between vehicles invested globally (12.2%) and South America (0.6%), with a small residual of 0.1% being unspecified.

By number, the largest proportion consists of vehicles with European mandates (54.3%)

followed by those targeting the Asia Pacific region (25.6%). Vehicles with a North American strategy are the third largest group (14.2%). Those with Global and South American strategies make up 4.6% and 1.2% respectively.

The combination of value and number indicates that on average non-listed direct vehicles with global or North American strategies tend to be larger than Asia Pacific and Europe.

Figure 16: Total number and value of non-listed direct real estate vehicles by regional strategy



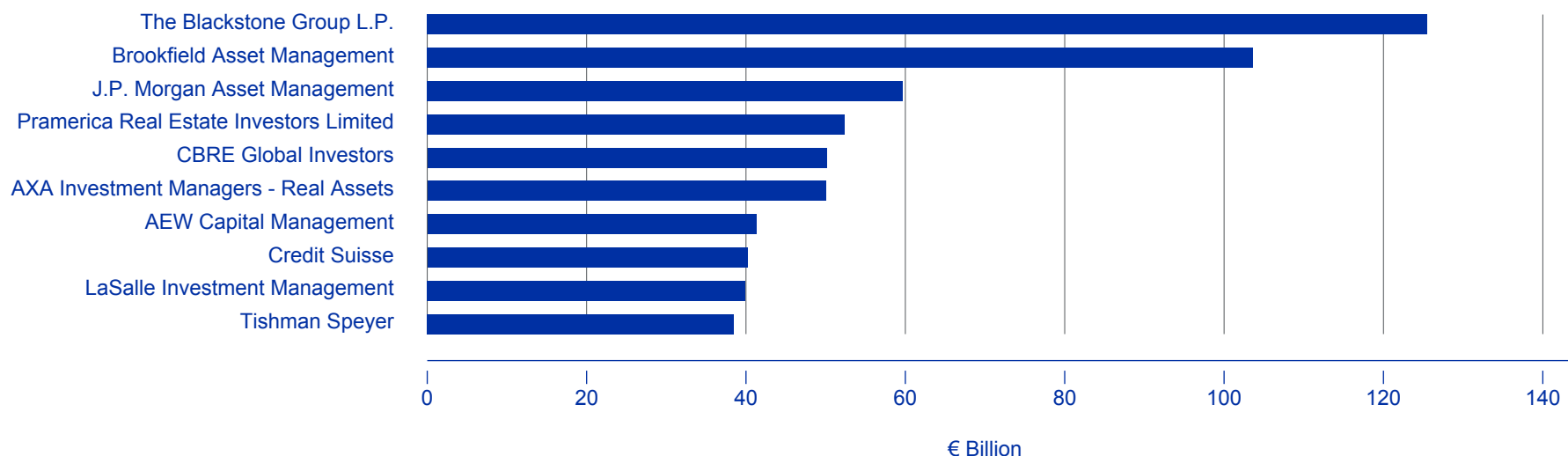
Taken together, the top 10 largest fund managers by non-listed direct real estate vehicles assets under management control €601.1 billion, a notable uplift of 32.7% compared to its 2014 level (€453.1 billion). With an AUM of €125.5 billion, The Blackstone Group maintains its lead position. Brookfield Asset Management is next with €103.6 billion of non-listed direct real estate vehicles AUM, following J.P. Morgan Asset Management (€59.7 billion) which occupies the third spot.

The ranking offers two interesting observations. First, it is worthwhile noting that the top two asset managers are almost twice the size of their nearest peers. This is the same pattern that can be observed in the overall rankings (that is, the rankings by all real assets under management and for all vehicle types taken together). The second similarity with the overall ranking is that the list is dominated by managers domiciled in North America, with only two European companies, Credit Suisse

and AXA Investment Managers, making into the chart.

Appendix 2 contains greater detail on the top 50 fund managers by their non-listed direct real estate vehicles AUM.

Figure 17: Top 10 fund managers by non-listed direct real estate vehicles AUM



Non-listed direct real estate vehicles by regional strategy

The following analyses non-listed direct real estate vehicles broken down by regional strategies and by quartiles, with the focus on assets under management.

For European strategies, Credit Suisse ranks as number one. The Swiss asset manager tops the list with an AUM of €37.2 billion. AXA Investment Managers - Real Assets is next, with AUM of €34.6 billion. The Blackstone

Group is third with its €28.8 billion of AUM of non-listed real estate assets.

For Asia Pacific strategies, CapitaLand comes as the largest fund manager with €21.8 billion AUM in non-listed real estate vehicles. Lendlease Investment Management (€13.6 billion) and AMP Capital (€13.3 billion) occupy second and third positions respectively, with only €0.3 billion in the difference between them.

In North American strategies, Brookfield Asset Management ranks first with €69.3 billion of non-listed direct real estate vehicles AUM. J.P. Morgan Asset Management is second (€53.7

billion) and Pramerica Real Estate Investors is third (€38.7 billion).

When it comes to vehicles with global strategies, The Blackstone Group is a clear winner. Its €78.5 billion AUM sets it apart from all others in the field. Brookfield Asset Management and Union Investment Real Estate follow next with €17.1 billion and €14.6 billion of AUM respectively.

It is striking that for regional strategies the top players are relatively tightly bunched, but for global strategies the top ranked fund manager is 4.5 times larger than its nearest peer.

Figure 18: Top 10 fund managers by European non-listed direct real estate vehicles AUM

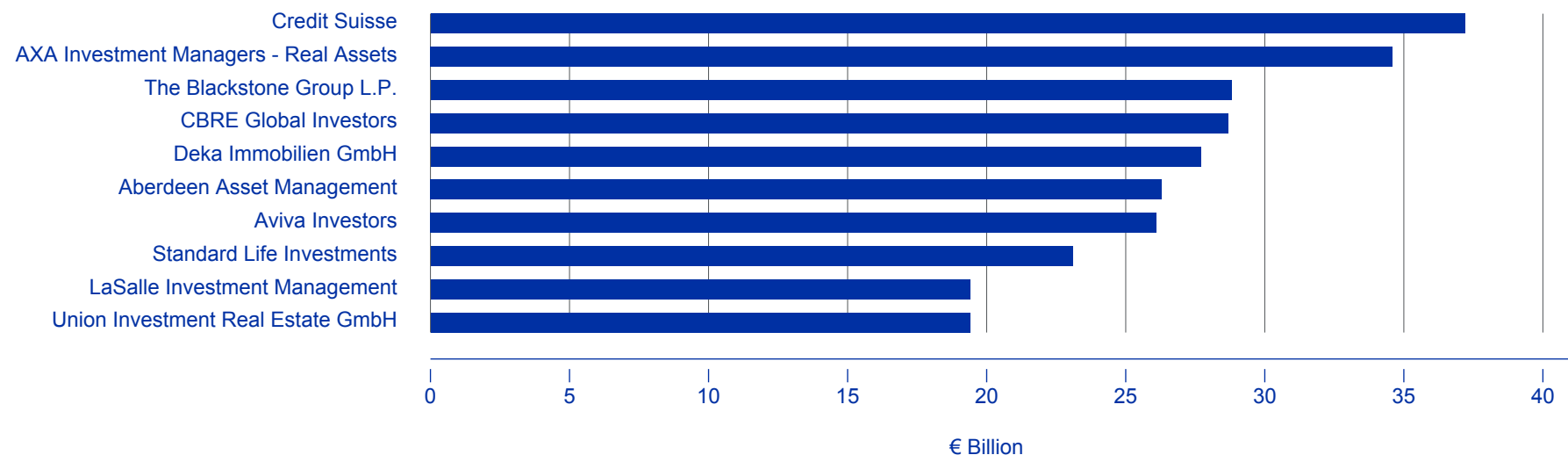


Figure 19: Top 10 fund managers by Asia Pacific non-listed direct real estate vehicles AUM

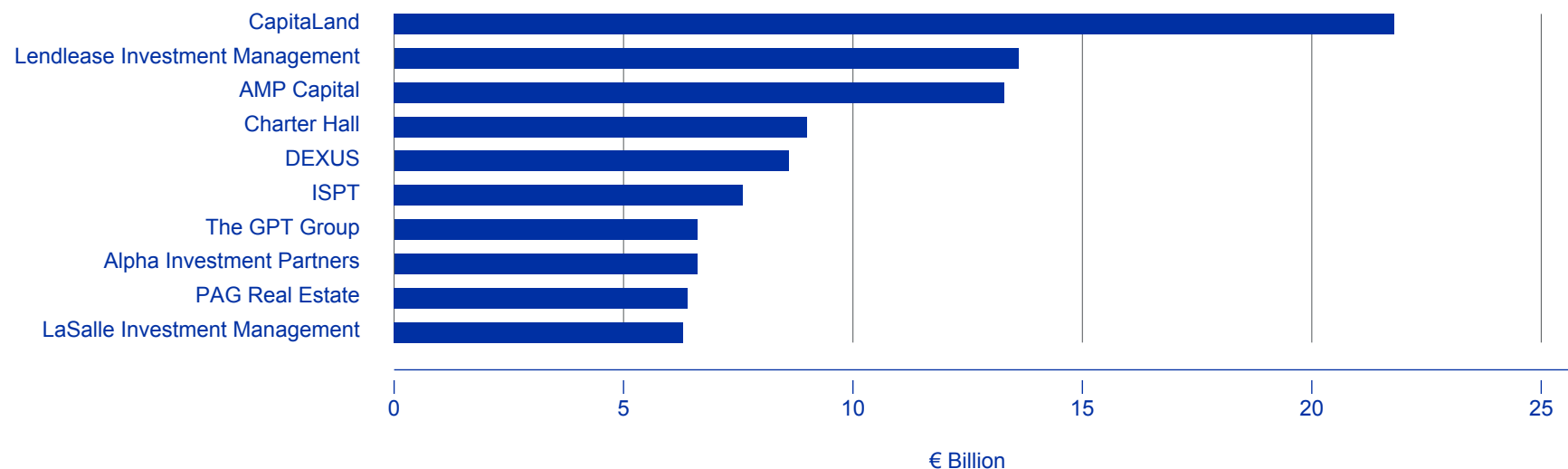


Figure 20: Top 10 fund managers by North American non-listed direct real estate vehicles AUM

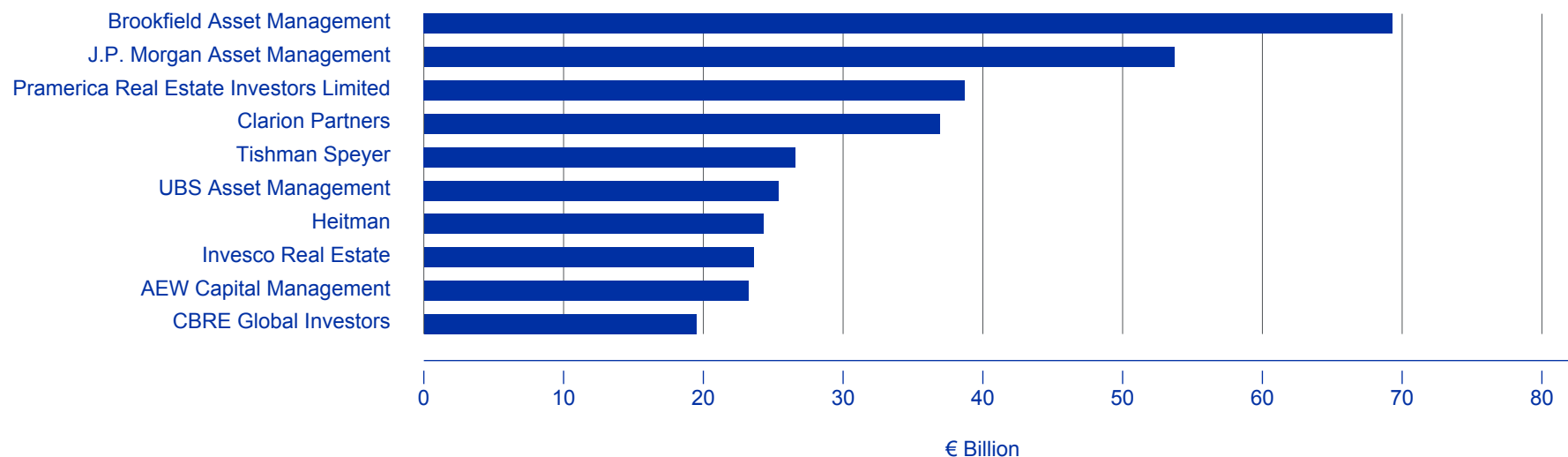
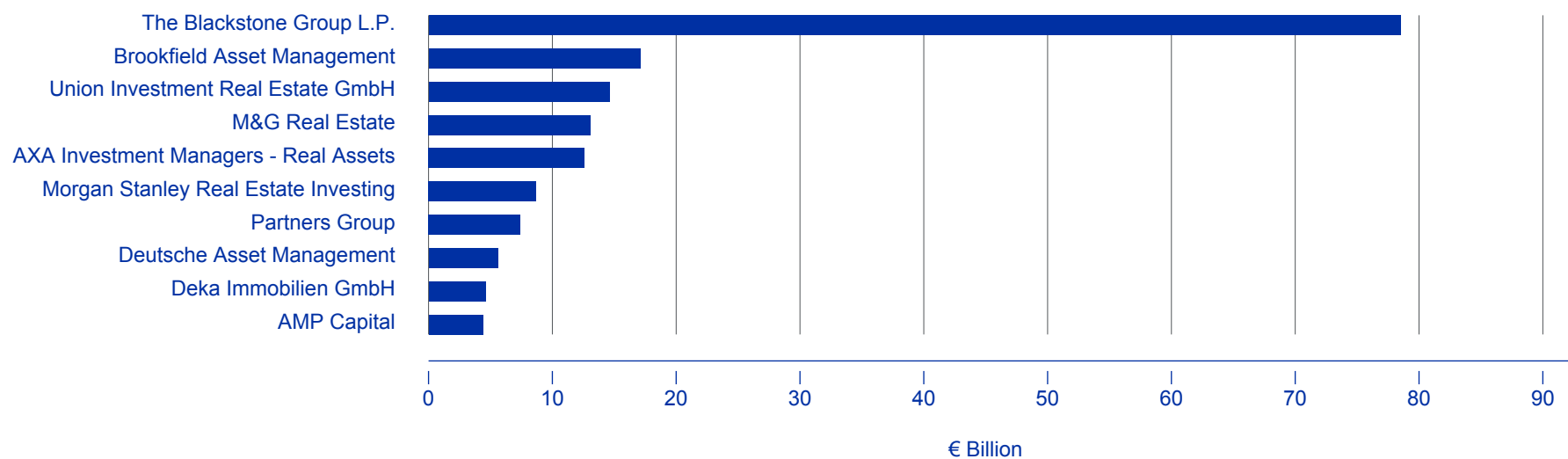


Figure 21: Top 10 fund managers by non-listed direct real estate vehicles AUM of global strategies

Non-listed direct real estate vehicles by investor type

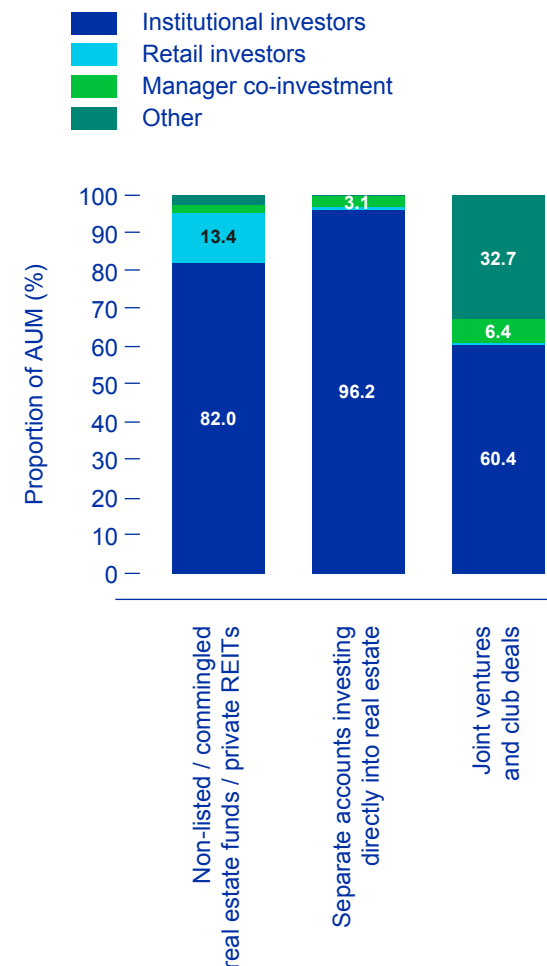
Institutional investors continue to be the main investor type for non-listed direct real estate vehicles. For non-listed real estate funds, institutional investors make up 82.0% of the total assets under management. For separate accounts the corresponding percentage is 96.2%.

While institutions continue to account for the lion's share of the asset base in non-listed

direct real estate vehicles, some interesting differences emerge among vehicle types. For funds, more than one-tenth of the asset base is retail in nature (13.4%), with another 4.6% split between manager co-investments (2.0%) and other investor types (2.6%).

Joint ventures and club deals are least reliant on institutional investment - just 60.4% of the asset base is made up of institutional investors while 32.7% is classified as Other, followed by manager co-investments (6.4%) and retail investors (0.5%).

Figure 22: Non-listed direct real estate vehicles by type and investor type



Note: Percentages are based on the reported total value of €1,444.6 billion

‘Institutional investors continue to be the dominant source of capital for non-listed direct real estate vehicles’

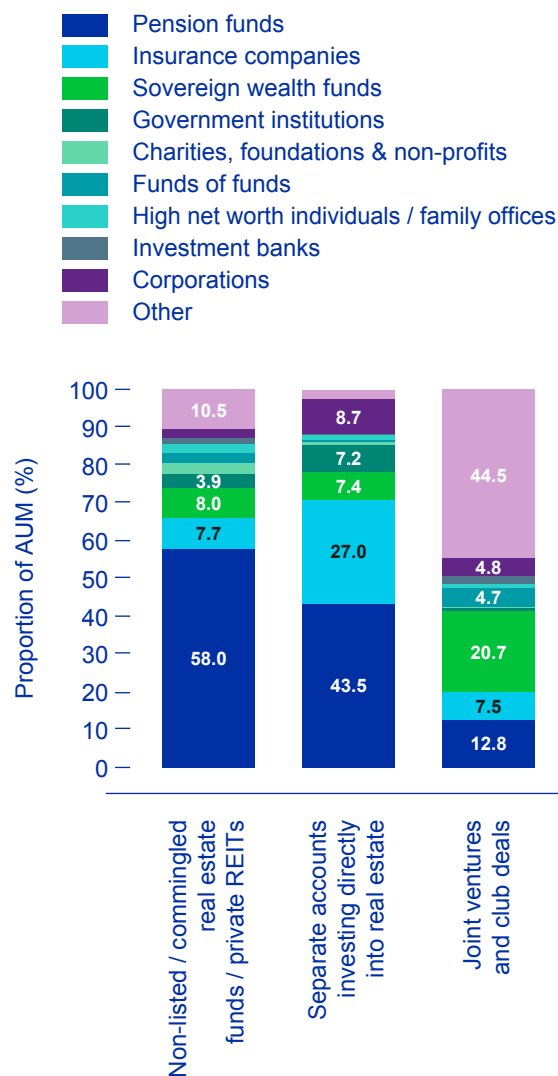
Non-listed direct real estate vehicles by institutional investor type

This year's figures further support the notion that pension funds continue to be the dominant investor type for non-listed direct real estate. For funds, 58.0% of the asset base comprises pension funds. For separate accounts (direct), pension funds amounted to 43.5% of the gross asset value. The second biggest source for separate accounts, accounting for 27.0% of the total, was the insurance sector.

It is interesting to note that pension funds are less significant for joint ventures and club deals where the proportions of capital coming from other investor types is much greater. Almost a half (44.5%) of equity invested in joint ventures and club deals originated from other sources of capital. One-fifth (20.7%) came from sovereign wealth funds.

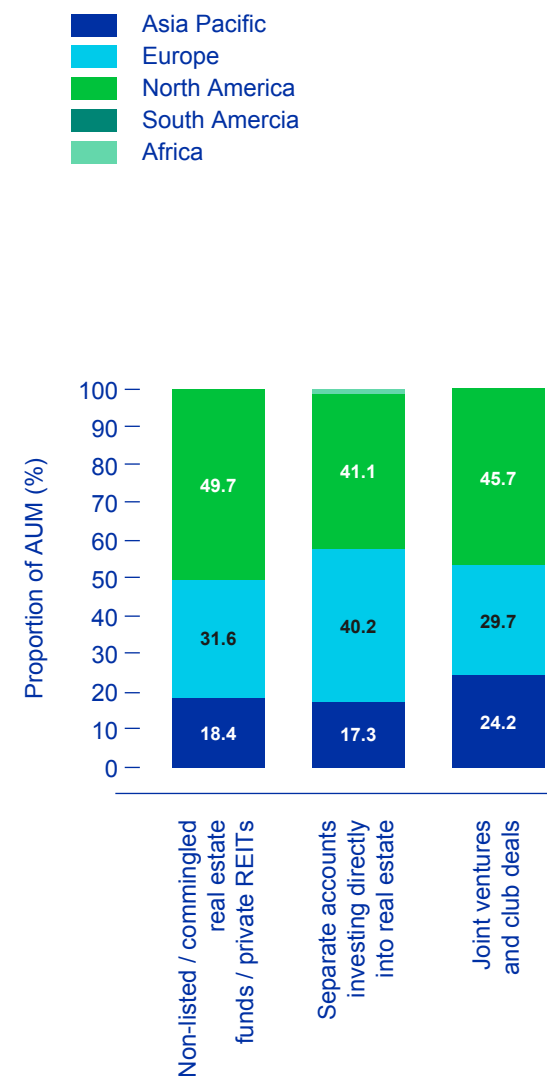
With regard to institutional investor domicile, North America based investors contributed the largest proportion of capital to non-listed direct real estate vehicles last year. Across the three vehicle groups (funds, separate accounts, JVs and club deals), more than 40% came from North American institutions. European investors are ranked second. Their contribution ranged from 29.7% to joint ventures and club deals and 40.2% to separate accounts (direct). Asia Pacific-based investors contributed around 20% of the equity invested in non-listed direct real estate vehicles.

Figure 23: Non-listed direct real estate vehicles by type and institutional investor type



Note: Percentages are based on the reported total value of €1,224.6 billion

Figure 24: Non-listed direct real estate vehicles by type and institutional investor domicile



Note: Percentages are based on the reported total value of €1,172.3 billion

Section 5

Non-listed funds / private REITs

Non-listed funds / private REITs

This section focuses only on non-listed real estate funds and private REITs. A non-listed fund is defined as a structure where capital from at least three investors is pooled to undertake a pre-defined strategy of investing into real estate assets. Neither separate accounts nor JVs and club deals are included in the analysis. The top 50 fund managers by fund's GAV are listed in Appendix 3.

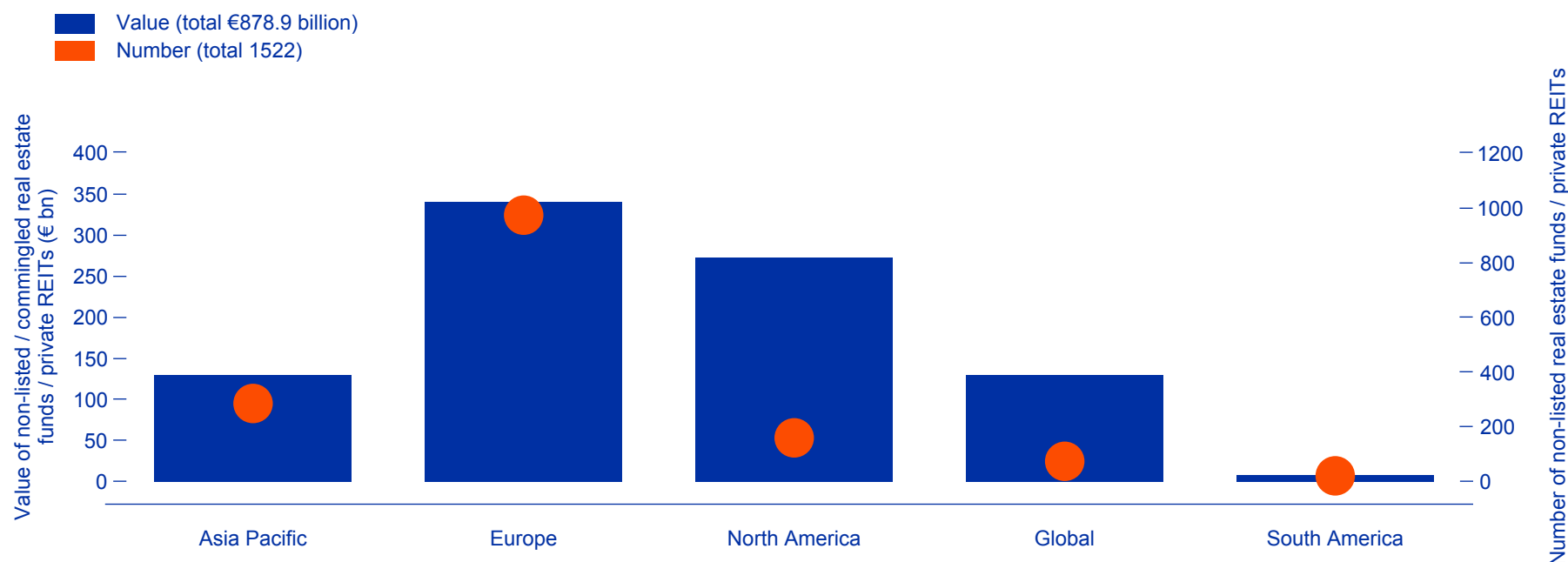
On the whole, 1,522 non-listed real estate funds were reported as being managed by fund managers. This translates into €0.9 trillion of equity invested in funds worldwide.

By value, vehicles with a European strategy amount to €340.1 billion (38.7%) in total. North American funds constitute €272.1 billion (31.0%). Asia Pacific and Global funds hold an equal weight of €129.5 billion (14.7%). Funds with a South American regional strategy amount to €7.8 billion (0.9%) only.

In terms of numbers, European funds constitute the largest group: 64.1% of all reported vehicles had a European mandate. Funds targeting Asia Pacific were the second largest group (19.0%), followed by funds with North American (10.1%) and South American (1.6%) mandates.

These figures confirm the dichotomy in vehicle sizes. While quantitatively there are more European and Asia Pacific funds, their average value is modest compared to funds targeting North America and funds with global strategies. On average, the GAV of North American and Global funds approximates to €1.8 billion and €1.7 billion respectively. The average size of European and Asia Pacific funds, in contrast, is of the order of €350 million and €450 million respectively.

Figure 25: Total number and value of non-listed / commingled real estate funds / private REITs



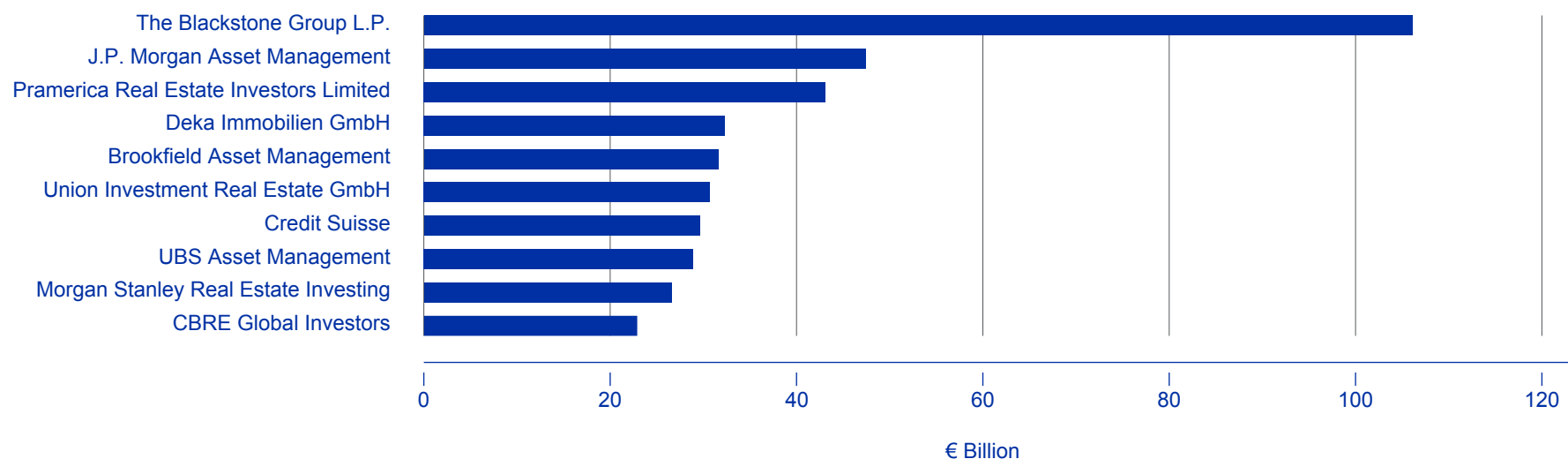
The top 10 fund managers according to the size of their non-listed real estate funds manage €399.4 billion in total, a 12.0% increase compared to last year. Within the top 10, The Blackstone Group is the largest, with €106.1 billion of non-listed real estate funds. JP Morgan Asset Management is in the

second place with €47.4 billion, followed by Pramerica Real Estate Investors with €43.1 billion.

This group contains a greater proportion of European fund managers. Companies, including Deka Immobilien, Union Investment

Real Estate, UBS Asset Management, as well as Credit Suisse made into the top 10 largest fund managers by funds' AUM with the remaining positions being occupied by North American managers.

Figure 26: Top 10 fund managers by non-listed real estate funds



Non-listed real estate funds by regional strategy

For European funds, Deka Immobilien ranks as number one - the German asset manager tops the list with an AUM of €27.7 billion. Its Swiss peer Credit Suisse is next, with funds' AUM of €26.7 billion. The Blackstone Group is third with its €26.5 billion of AUM of non-listed real estate funds.

In Asia Pacific, CapitaLand is the largest manager of non-listed real estate funds, with a total value of €12.7 billion of AUM. Lendlease Investment Management moves down to the second place with €11.4 billion of AUM. AMP Capital occupies the third position with €8.4 billion.

In North American strategies, J.P. Morgan Asset Management ranks first with €44.7 billion of non-listed direct real estate funds

AUM. Pramerica Real Estate Investors is second (€35.4 billion) and UBS Asset Management is third (€22.2 billion).

When it comes to funds with global strategies, The Blackstone Group is again a clear winner. Its €68.4 billion AUM sets it apart from its peers. Brookfield Asset Management and Union Investment Real Estate follow next with €17.1 billion and €14.6 billion of funds AUM respectively.

Figure 27: Top 10 fund managers by European non-listed real estate funds

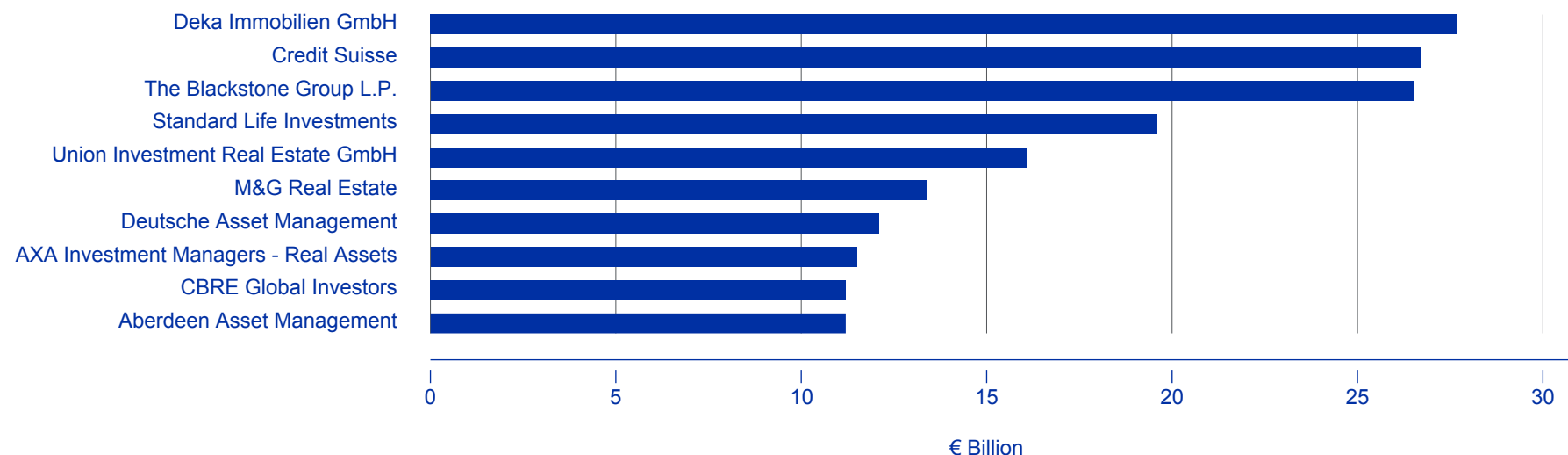


Figure 28: Top 10 fund managers by Asia Pacific non-listed real estate funds

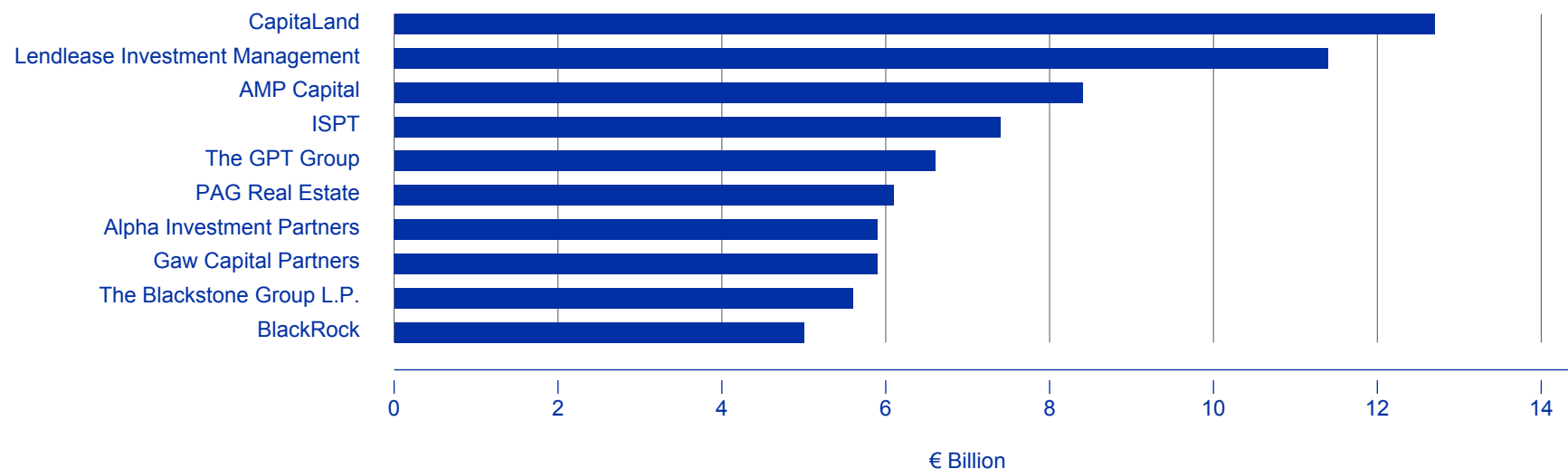


Figure 29: Top 10 fund managers by North American non-listed real estate funds

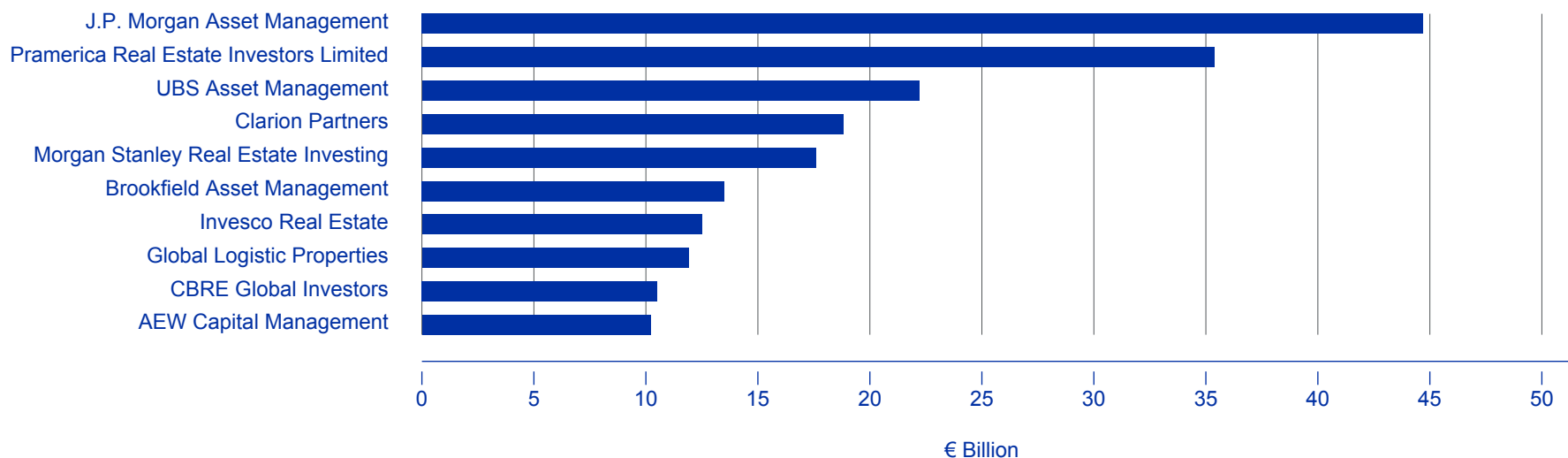
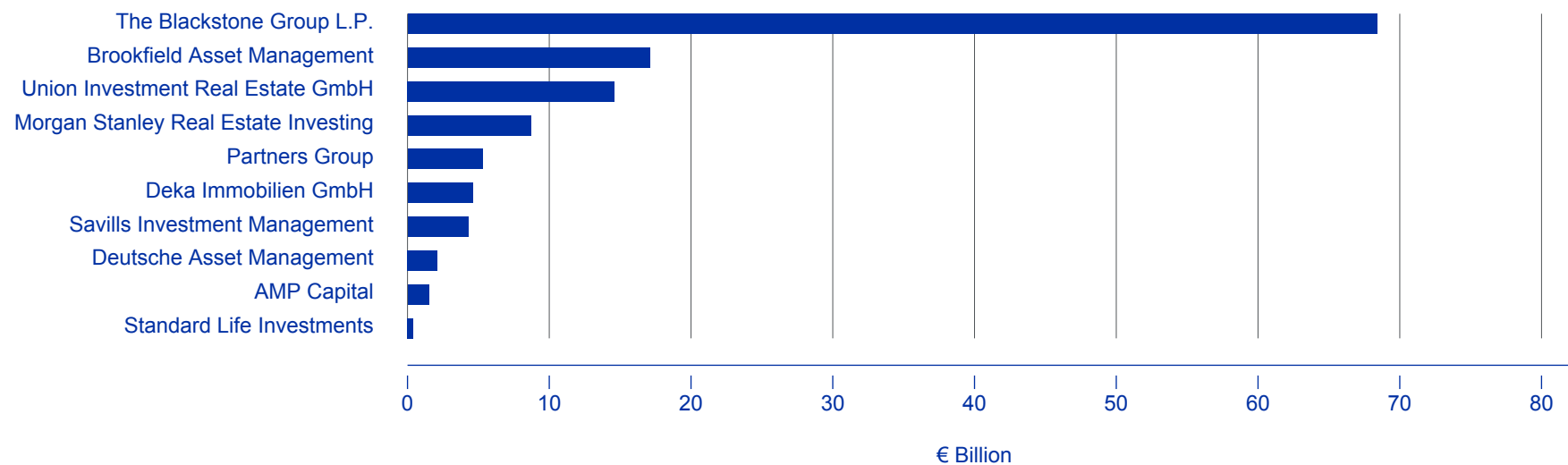


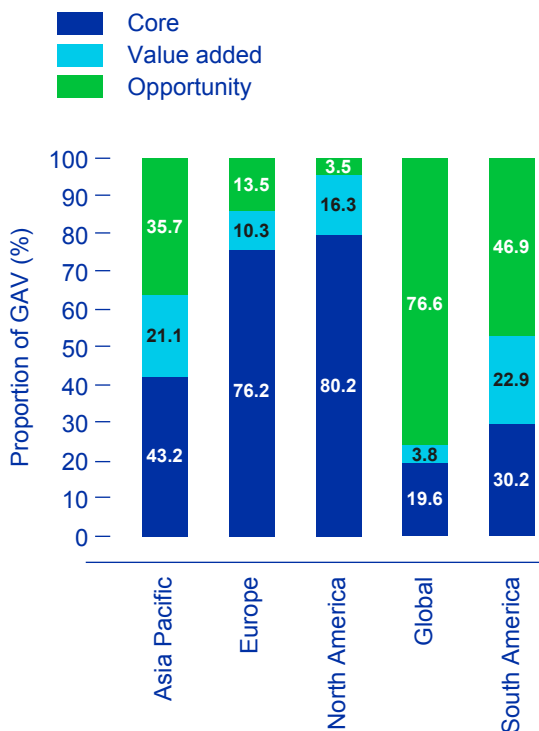
Figure 30: Top 10 fund managers by non-listed real estate funds of global strategies

Non-listed real estate funds by investment strategies

In terms of the most common investment style for the various regional strategies, funds fall into two broad camps (measured by value): the European and North American strategies, where core is preferred, and the other strategies, where the higher risk value added and opportunity styles are preferred. It is striking that over three-quarters (76.6%) of the assets in global strategies have an opportunity approach.

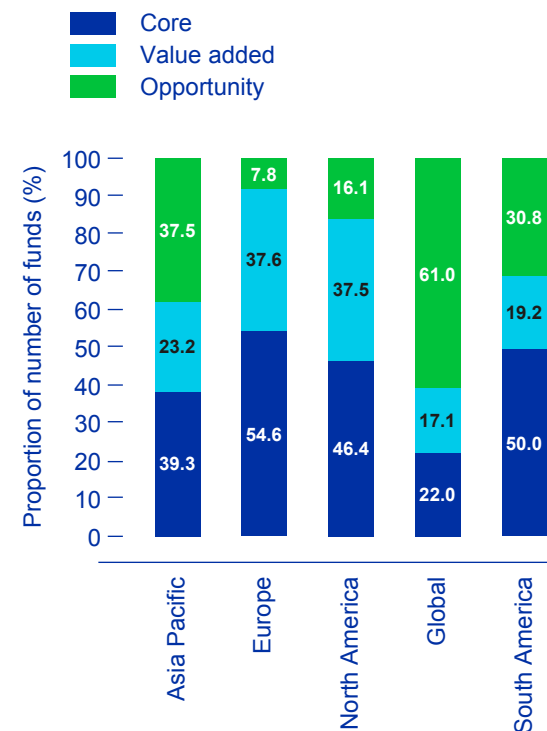
When the same style analysis within regional strategies is done by number of funds rather than asset value, a slightly different picture emerges. The preference for core in European and North American mandates is less marked, reflecting the large size of a relatively small number of core funds with European and North American strategies. For global strategies the bias towards opportunity is also less marked, again reflecting the large size of a relatively small number of funds with a global mandate.

Figure 31: Value of non-listed real estate funds by style and regional strategy



Note: Percentages are based on the reported total value of €875.6 billion

Figure 32: Number of non-listed real estate funds by style and regional strategy

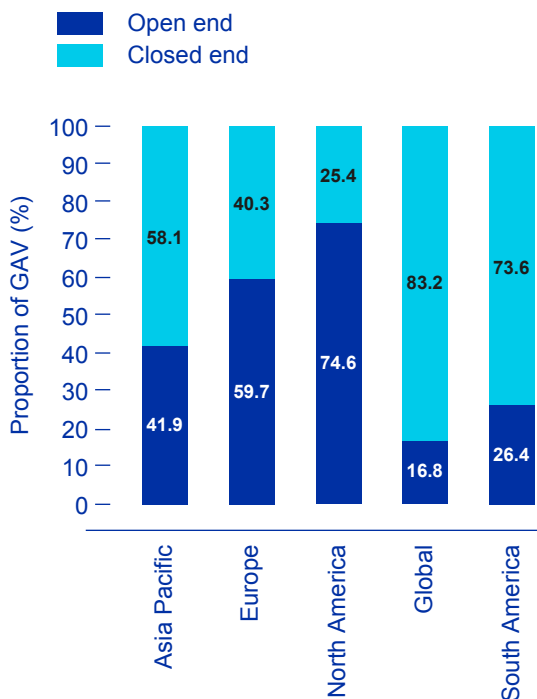


Note: Percentages are based on the reported total number of 1432 funds

Turning to the structure within each regional strategy, the picture is once again of two broad camps (measured by value): the European and North American strategies, where open ended is preferred, and the other strategies, where closed end structures are preferred. It is striking that over three-quarters (74.6%) of the assets in North American strategies are open end in structure.

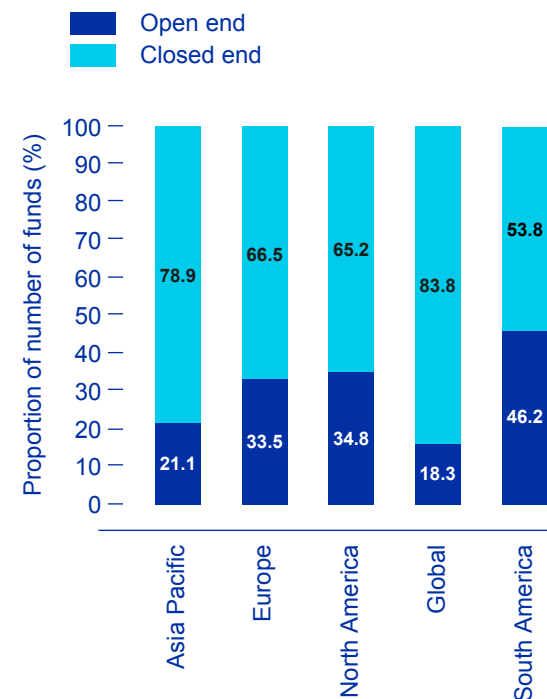
When the same structure analysis within regional strategies is done by number of funds rather than asset value, a different picture emerges. The preference for open end structures in European and North American mandates is less marked, reflecting the large size of a relatively small number of open end funds with European and North American strategies. For global strategies there is little difference between the value-based and number-based analysis: closed end funds dominate.

Figure 33: Value of non-listed real estate funds by structure and regional strategy



Note: Percentages are based on the reported total value of €819.7 billion

Figure 34: Number of non-listed real estate funds by structure and regional strategy

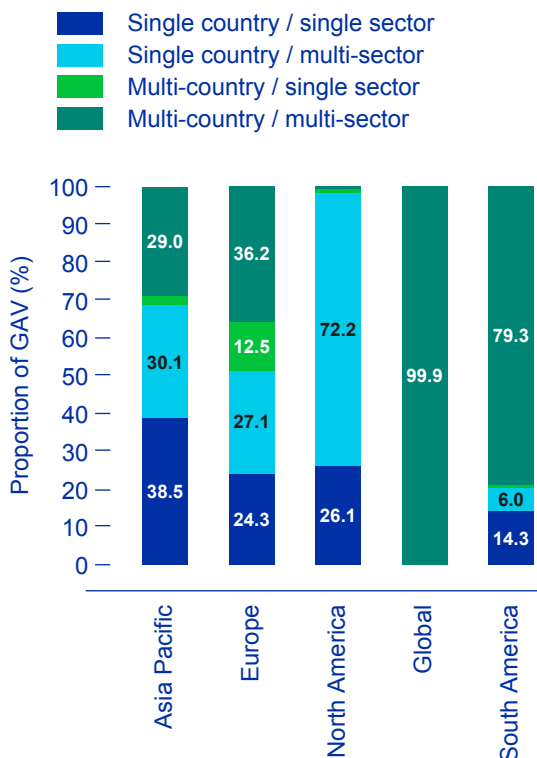


Note: Percentages are based on the reported total number of 1370 funds

Turning now to the details of country and sector selection within each regional strategy, and starting with value-based analysis, the data indicate the clearest preference for single country and single sector approaches in Asia Pacific strategies. At the opposite end of the diversification spectrum, global strategies tend to go for multi-country and multi-sector approaches.

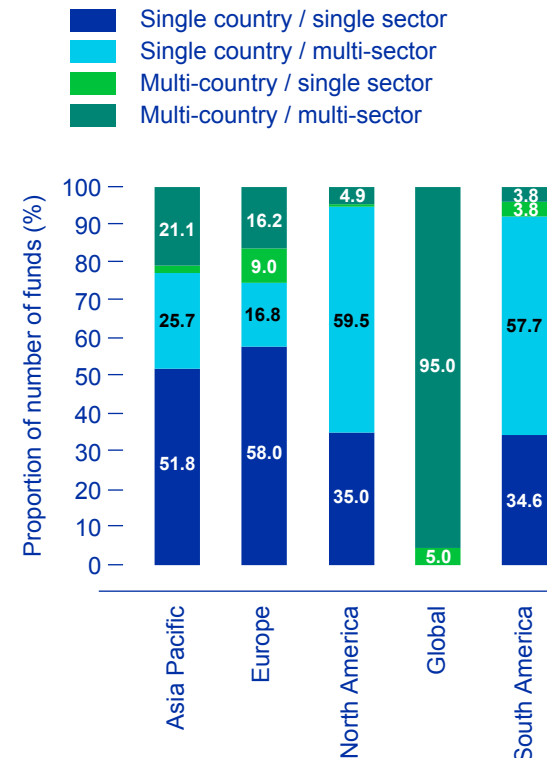
Looking at country and sector selection within each regional strategy but in terms of the number of funds, European strategies overtake Asia Pacific strategies in terms of preferring single country and single sector approaches. This reflects the relatively large number of small single country single sector funds in the European market. Within global strategies, multi-country single sector funds make up 5% of the total, by number.

Figure 35: Value of non-listed real estate funds by country / sector strategy and regional strategy



Note: Percentages are based on the reported total value of €836.4 billion

Figure 36: Number of non-listed real estate funds by country / sector strategy and regional strategy



Note: Percentages are based on the reported total number of 1398 funds

Section 6

Mergers and acquisitions

Mergers and acquisitions

This section provides an overview of the merger and acquisition (M&A) activities in the real estate fund management industry. Survey respondents were asked whether they have been involved in M&A activities in the last 10 years as well as their motivations for doing so.

Asked whether respondents have been involved in any merger activities in the past 10 years, 20.4% indicated yes with the remaining 79.6% opting for no. For acquisition activities 16.9% indicated yes, with the remaining

83.1% opting for no. So in broad terms one in five respondents has been involved in M&A over the last decade.

Regarding the motivations for merger and acquisition activity, participants in the survey provided a wide variety of unprompted responses (there were no drop down options to tick in this question).

These responses were grouped under headings such as scale, enhanced product offering, expanding geographic footprint, diversification, better returns and opportunism.

In some cases more than one motivation was mentioned, and this category is entitled multi-rationale.

The most often-mentioned motivation was scale (mentioned by nine respondents), followed by enhanced product offering (mentioned by six respondents) and opportunism (four mentions). The acknowledged importance of achieving scale is consistent with the trend towards consolidation and concentration that is noted in the Executive Summary.

Figure 37: Merger activities in the past 10 years

20.4% Yes
79.6% No

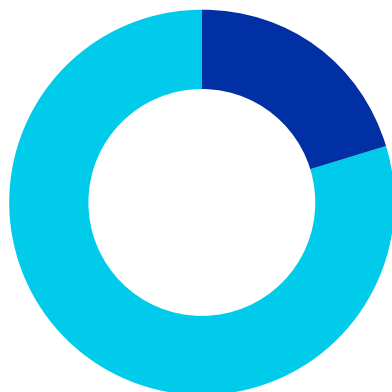


Figure 38: Acquisition activities in the past 10 years

16.9% Yes
83.1% No

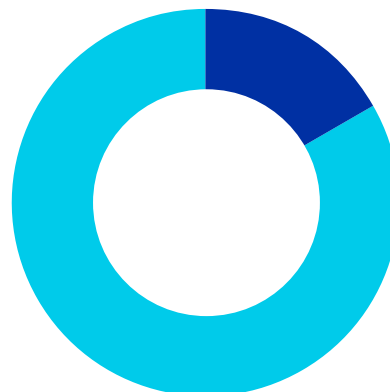
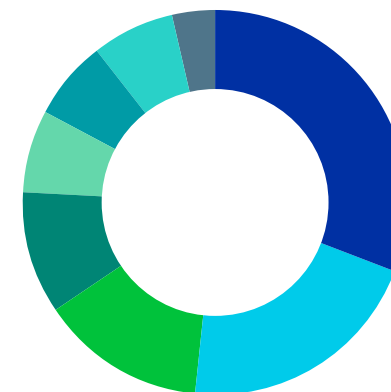


Figure 39: Motivations for merger and acquisition activity

31.0% Scale
20.7% Product
13.8% Opportunistic
10.3% Geographic
6.9% Diversification
6.9% Multi-rationale
6.9% Returns
3.4% Other



Appendix 1

Top 50 fund managers based on total real estate assets under management

Top 50 fund managers based on total real estate assets under management

		Percentage breakdown by vehicle type							
Fund manager		Total real estate assets under management (AUM € Million)	Non-listed / commingled real estate funds / private REITs	Separate accounts (direct)	Separate accounts (indirect)	Joint ventures and club deals	Funds of funds	Real estate / mortgage debts	Other
1	Brookfield Asset Management	137316.7	23.0%	0.2%	0.0%	52.3%	0.0%	2.6%	22.0%
2	The Blackstone Group L.P.	135302.3	78.4%	14.3%	0.0%	0.0%	0.0%	5.4%	1.8%
3	TH Real Estate & TIAA	110782.9	8.2%	8.6%	0.3%	1.3%	0.0%	0.7%	80.9%
4	CBRE Global Investors	81605.7	28.1%	31.9%	11.6%	1.3%	3.7%	0.0%	23.4%
5	UBS Asset Management	67498.0	42.9%	7.0%	3.3%	0.0%	9.0%	4.0%	33.8%
6	AXA Investment Managers - Real Assets	59988.9	19.6%	51.9%	0.0%	12.0%	0.0%	16.6%	0.0%
7	J.P. Morgan Asset Management	59843.6	79.2%	19.6%	0.0%	1.0%	0.0%	0.2%	0.0%
8	Invesco Real Estate	59078.0	29.1%	28.3%	23.7%	0.9%	0.0%	0.0%	18.0%
9	Pramerica Real Estate Investors Limited	58438.9	73.8%	15.9%	0.0%	0.0%	0.0%	2.7%	7.6%
10	LaSalle Investment Management	53465.7	16.9%	55.6%	1.0%	2.1%	0.0%	1.1%	23.2%
11	CapitaLand	49765.8	25.6%	0.1%	0.0%	18.2%	0.0%	0.0%	56.1%
12	AEW Capital Management	49313.7	31.0%	46.7%	0.0%	5.9%	0.0%	1.3%	15.1%
13	Aviva Investors	45680.5	24.1%	24.6%	11.6%	8.4%	1.3%	29.9%	0.0%
14	Cornerstone Real Estate Advisers	45487.4	13.9%	18.0%	0.0%	0.0%	0.0%	48.7%	19.3%
15	Credit Suisse	40163.0	73.6%	26.3%	0.0%	0.1%	0.0%	0.0%	0.0%
16	Tishman Speyer	38478.3	33.5%	5.0%	0.0%	61.5%	0.0%	0.0%	0.0%
17	Deutsche Asset Management	37400.0	59.9%	40.1%	0.0%	0.0%	0.0%	0.0%	0.0%
18	Clarion Partners	36979.3	50.8%	49.2%	0.0%	0.0%	0.0%	0.0%	0.0%
19	Fosun Property Holdings	34842.9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
20	Prologis	34164.3	45.8%	0.0%	0.0%	39.7%	0.0%	0.0%	14.5%
21	Union Investment Real Estate GmbH	34131.0	90.0%	9.6%	0.4%	0.0%	0.0%	0.0%	0.0%
22	M&G Real Estate	33914.6	45.0%	50.0%	0.0%	1.9%	3.1%	0.0%	0.0%
23	Deka Immobilien GmbH	33173.2	97.4%	0.0%	0.0%	0.0%	0.9%	1.7%	0.0%
24	Heitman	32263.6	27.6%	61.5%	0.0%	0.0%	0.0%	1.2%	9.6%
25	Morgan Stanley Real Estate Investing	28747.2	92.6%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%

Fund manager		Total real estate assets under management (AUM € Million)	Percentage breakdown by vehicle type					
			Non-listed / commingled real estate funds / private REITs	Separate accounts (direct)	Separate accounts (indirect)	Joint ventures and club deals	Funds of funds	Real estate / mortgage debts
26	Aberdeen Asset Management	28561.0	39.1%	52.8%	0.0%	0.0%	8.1%	0.0%
27	Standard Life Investments	24158.3	82.5%	8.8%	0.0%	6.0%	0.0%	2.6%
28	BNP Paribas REIM	21977.0	38.1%	17.9%	0.0%	2.7%	0.0%	0.7%
29	Mapletree Investments Pte. Ltd.	20941.5	10.5%	0.0%	0.0%	0.0%	0.0%	0.0%
30	BlackRock	19549.2	66.6%	26.9%	0.0%	0.0%	0.0%	1.1%
31	ARA Asset Management	19303.0	4.9%	10.6%	0.0%	5.6%	0.0%	0.0%
32	AMP Capital	18305.0	55.3%	42.0%	2.7%	0.0%	0.0%	0.0%
33	Schroder Real Estate Investment Management	17805.6	44.1%	3.0%	22.1%	2.3%	4.8%	0.0%
34	Global Logistic Properties	17100.5	91.0%	0.0%	0.0%	9.0%	0.0%	0.0%
35	Savills Investment Management	16984.0	55.0%	29.9%	15.0%	0.0%	0.0%	0.0%
36	PATRIZIA Immobilien AG	16600.0	30.7%	28.3%	0.0%	41.0%	0.0%	0.0%
37	Syntrus Achmea Real Estate & Finance	15775.0	13.1%	35.0%	0.0%	2.0%	5.1%	44.8%
38	Lendlease Investment Management	14724.8	85.0%	15.0%	0.0%	0.0%	0.0%	0.0%
39	DEXUS	14122.4	31.8%	7.6%	0.0%	21.8%	0.0%	0.0%
40	CBRE Global Investment Partners	12874.4	0.0%	0.0%	73.8%	0.0%	26.2%	0.0%
41	Kenedix, Inc.	12492.4	4.0%	26.6%	0.0%	0.0%	0.0%	0.0%
42	The GPT Group	12114.5	54.6%	0.0%	0.0%	0.0%	0.0%	0.0%
43	Ascendas	11767.9	19.8%	0.0%	0.0%	0.0%	0.0%	0.0%
44	Gaw Capital Partners	11003.0	63.2%	29.0%	7.8%	0.0%	0.0%	0.0%
45	Charter Hall	10631.3	40.6%	5.9%	0.0%	37.9%	0.0%	0.0%
46	TRIUVA Kapitalverwaltungsgesellschaft	9857.4	41.1%	58.9%	0.0%	0.0%	0.0%	0.0%
47	Jamestown	8894.1	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
48	BMO Real Estate Partners	8290.4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
49	Rockspring PIM	8210.0	59.5%	39.0%	0.0%	1.5%	0.0%	0.0%
50	Partners Group	8021.3	69.3%	28.1%	0.0%	0.0%	0.0%	2.6%

Appendix 2

Top 50 fund managers based on non-listed direct real estate vehicles

Top 50 fund managers based on non-listed direct real estate vehicles

Percentage GAV breakdown by regional vehicle strategy

Fund manager		Total GAV (€ Million)	Asia Pacific	Europe	North America	Global	South America	Africa
1	The Blackstone Group L.P.	125485.7	4.7%	23.0%	9.7%	62.6%	0.0%	0.0%
2	Brookfield Asset Management	103607.1	0.4%	15.0%	66.9%	16.5%	1.2%	0.0%
3	J.P. Morgan Asset Management	59720.7	1.8%	8.3%	89.9%	0.0%	0.0%	0.0%
4	Pramerica Real Estate Investors Limited	52379.9	8.5%	7.9%	73.8%	4.9%	4.8%	0.0%
5	CBRE Global Investors	50063.7	3.7%	57.3%	39.0%	0.0%	0.0%	0.0%
6	AXA Investment Managers - Real Assets	50037.2	1.1%	69.2%	4.5%	25.2%	0.0%	0.0%
7	AEW Capital Management	41254.0	1.4%	42.4%	56.2%	0.0%	0.0%	0.0%
8	Credit Suisse	40161.0	1.7%	92.7%	2.9%	0.0%	2.7%	0.0%
9	LaSalle Investment Management	39913.2	15.7%	48.6%	35.2%	0.0%	0.5%	0.0%
10	Tishman Speyer	38478.3	10.2%	17.2%	69.1%	0.0%	3.5%	0.0%
11	Deutsche Asset Management	37400.0	0.0%	43.0%	42.0%	15.0%	0.0%	0.0%
12	Clarion Partners	36980.2	0.0%	0.0%	99.8%	0.0%	0.2%	0.0%
13	Invesco Real Estate	34446.6	10.4%	17.9%	68.1%	3.6%	0.0%	0.0%
14	Union Investment Real Estate GmbH	34002.0	0.0%	57.0%	0.0%	43.0%	0.0%	0.0%
15	UBS Asset Management	33641.9	0.6%	21.3%	75.4%	2.6%	0.0%	0.0%
16	M&G Real Estate	32868.8	5.7%	54.4%	0.0%	39.8%	0.0%	0.0%
17	Deka Immobilien GmbH	32309.9	0.0%	85.8%	0.0%	14.2%	0.0%	0.0%
18	Prologis	29195.9	7.8%	41.6%	50.0%	0.0%	0.5%	0.0%
19	Heitman	28773.8	3.1%	12.5%	84.4%	0.0%	0.0%	0.0%
20	Morgan Stanley Real Estate Investing	28747.2	3.6%	4.9%	61.3%	30.2%	0.0%	0.0%
21	Aberdeen Asset Management	26255.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
22	Aviva Investors	26120.7	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
23	Standard Life Investments	23521.0	0.0%	98.4%	0.0%	1.6%	0.0%	0.0%
24	CapitaLand	21850.5	99.9%	0.0%	0.0%	0.1%	0.0%	0.0%
25	TH Real Estate & TIAA	20045.7	6.5%	93.0%	0.0%	0.0%	0.6%	0.0%

Percentage GAV breakdown by regional vehicle strategy

Fund manager		Total GAV (€ Million)	Asia Pacific	Europe	North America	Global	South America	Africa
26	BlackRock	18267.4	27.2%	30.1%	42.7%	0.0%	0.0%	0.0%
27	AMP Capital	17803.3	74.4%	0.1%	0.9%	24.6%	0.0%	0.0%
28	Global Logistic Properties	17100.5	21.4%	0.0%	69.5%	0.0%	9.1%	0.0%
29	PATRIZIA Immobilien AG	16600.0	0.0%	94.0%	0.0%	6.0%	0.0%	0.0%
30	Lendlease Investment Management	14724.8	92.3%	7.7%	0.0%	0.0%	0.0%	0.0%
31	Cornerstone Real Estate Advisers	14539.6	0.0%	17.0%	83.0%	0.0%	0.0%	0.0%
32	Savills Investment Management	14432.0	6.8%	63.6%	0.0%	29.6%	0.0%	0.0%
33	BNP Paribas REIM	12884.0	0.9%	99.1%	0.0%	0.0%	0.0%	0.0%
34	Gaw Capital Partners	10142.9	57.9%	24.3%	17.8%	0.0%	0.0%	0.0%
35	TRIUVA Kapitalverwaltungsgesellschaft	9857.5	0.0%	97.0%	3.0%	0.0%	0.0%	0.0%
36	Charter Hall	8968.4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
37	Jamestown	8894.1	0.0%	0.0%	99.0%	0.0%	1.0%	0.0%
38	Schroder Real Estate Investment Management	8786.8	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
39	DEXUS	8634.1	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
40	Rockspring PIM	8210.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
41	Syntus Achmea Real Estate & Finance	7906.0	0.6%	99.4%	0.0%	0.0%	0.0%	0.0%
42	Alpha Investment Partners	7833.2	84.2%	7.3%	7.5%	0.0%	1.0%	0.0%
43	Partners Group	7812.5	3.4%	1.6%	0.0%	95.0%	0.0%	0.0%
44	ISPT	7630.1	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
45	Tristan Capital Partners	7192.2	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
46	Orchard Street Investment Management	7038.2	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
47	IGIS Asset Management	6975.2	70.9%	11.2%	3.3%	14.6%	0.0%	0.0%
48	American Realty Advisors	6775.6	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
49	The GPT Group	6614.8	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50	PAG Real Estate	6418.4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Appendix 3

Top 50 fund managers based on non-listed / commingled
real estate funds / private REITs

Top 50 fund managers based on non-listed / commingled real estate funds / private REITs

Percentage GAV breakdown by regional vehicle strategy

Fund manager		Total GAV (€ Million)	Asia Pacific	Europe	North America	Global	South America	Africa
1	The Blackstone Group L.P.	106132.3	5.3%	24.9%	5.3%	64.4%	0.0%	0.0%
2	J.P. Morgan Asset Management	47425.7	1.9%	3.8%	94.3%	0.0%	0.0%	0.0%
3	Pramerica Real Estate Investors Limited	43115.3	7.3%	4.6%	82.2%	0.0%	5.9%	0.0%
4	Deka Immobilien GmbH	32309.9	0.0%	85.8%	0.0%	14.2%	0.0%	0.0%
5	Brookfield Asset Management	31614.4	0.0%	0.0%	42.6%	54.1%	3.4%	0.0%
6	Union Investment Real Estate GmbH	30718.0	0.0%	52.4%	0.0%	47.6%	0.0%	0.0%
7	Credit Suisse	29572.0	2.1%	90.4%	3.8%	0.0%	3.7%	0.0%
8	UBS Asset Management	28928.8	0.2%	23.2%	76.6%	0.0%	0.0%	0.0%
9	Morgan Stanley Real Estate Investing	26613.5	0.0%	1.2%	66.2%	32.6%	0.0%	0.0%
10	CBRE Global Investors	22923.0	5.2%	48.8%	46.0%	0.0%	0.0%	0.0%
11	Deutsche Asset Management	22400.0	0.0%	54.0%	36.6%	9.4%	0.0%	0.0%
12	Standard Life Investments	19939.3	0.0%	98.1%	0.0%	1.9%	0.0%	0.0%
13	Clarion Partners	18773.0	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
14	Invesco Real Estate	17195.1	7.5%	17.9%	72.6%	2.0%	0.0%	0.0%
15	Prologis	15631.3	0.0%	48.1%	51.9%	0.0%	0.0%	0.0%
16	Global Logistic Properties	15553.7	13.6%	0.0%	76.4%	0.0%	10.0%	0.0%
17	AEW Capital Management	15290.5	3.7%	29.8%	66.6%	0.0%	0.0%	0.0%
18	M&G Real Estate	15269.3	12.4%	87.6%	0.0%	0.0%	0.0%	0.0%
19	BlackRock	13010.2	38.2%	40.6%	21.3%	0.0%	0.0%	0.0%
20	Tishman Speyer	12892.1	20.0%	42.4%	28.0%	0.0%	9.5%	0.0%
21	CapitaLand	12747.4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
22	Lendlease Investment Management	12516.1	90.9%	9.1%	0.0%	0.0%	0.0%	0.0%
23	AXA Investment Managers - Real Assets	11728.3	0.8%	98.2%	1.1%	0.0%	0.0%	0.0%
24	Aberdeen Asset Management	11179.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
25	Aviva Investors	11010.8	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%

Percentage GAV breakdown by regional vehicle strategy

Fund manager		Total GAV (€ Million)	Asia Pacific	Europe	North America	Global	South America	Africa
26	AMP Capital	10115.2	83.2%	0.0%	1.4%	15.3%	0.0%	0.0%
27	Savills Investment Management	9348.0	3.5%	50.8%	0.0%	45.6%	0.0%	0.0%
28	TH Real Estate & TIAA	9093.1	8.0%	92.0%	0.0%	0.0%	0.0%	0.0%
29	LaSalle Investment Management	9036.3	19.2%	15.5%	63.2%	0.0%	2.2%	0.0%
30	Heitman	8918.9	0.0%	12.9%	87.1%	0.0%	0.0%	0.0%
31	Jamestown	8894.1	0.0%	0.0%	99.0%	0.0%	1.0%	0.0%
32	BNP Paribas REIM	8364.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
33	Schroder Real Estate Investment Management	7846.2	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
34	ISPT	7429.3	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
35	Tristan Capital Partners	7192.2	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
36	Gaw Capital Partners	6949.5	84.5%	0.0%	15.5%	0.0%	0.0%	0.0%
37	The GPT Group	6614.8	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
38	Cornerstone Real Estate Advisers	6340.5	0.0%	16.1%	83.9%	0.0%	0.0%	0.0%
39	PAG Real Estate	6143.4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
40	Alpha Investment Partners	5874.7	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
41	American Realty Advisors	5559.3	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
42	Partners Group	5556.3	4.8%	0.0%	0.0%	95.2%	0.0%	0.0%
43	PATRIZIA Immobilien AG	5100.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
44	Rockspring PIM	4885.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
45	Bouwfonds Investment Management	4583.0	0.0%	98.1%	1.9%	0.0%	0.0%	0.0%
46	DEXUS	4484.4	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
47	Intercontinental Real Estate Corp.	4474.5	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
48	Charter Hall	4311.6	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
49	TRIUVA Kapitalverwaltungsgesellschaft	4054.3	0.0%	92.8%	7.2%	0.0%	0.0%	0.0%
50	Vesteda	3700.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%

Appendix 4

List of respondents

List of respondents

The following list of fund managers participated in the ANREV/INREV/NCREIF Fund Manager Survey 2016 and gave permission for their company names to be published*:

Fund manager	Breakdown by line of business		
	Total AUM (€ million)	Non-listed direct real estate vehicles (€ million)	Non-listed real estate funds (€ million)
Abacus Property Group	669.3	669.3	
Aberdeen Asset Management	28561.0	26255.0	11179.0
AEP Investment Management	522.6	615.3	288.8
AEW Capital Management	49313.7	41254.0	15290.5
Alpha Investment Partners	7867.2	7833.2	5874.7
Altan Capital	272.0	272.0	272.0
Altera Vastgoed NV	1846.0	1846.0	1846.0
American Realty Advisors	6775.6	6775.6	5559.3
AMP Capital	18305.0	17803.3	10115.2
Amvest	3311.3	3311.3	2041.8
ARA Asset Management	19303.0	4074.8	954.5
Areim AB	865.2	865.2	865.2
Arminius Funds Management Limited	171.0	171.0	171.0
Ascendas	11767.9	2330.4	2330.4
ASK Capital Management Pte Ltd	596.0	596.0	596.0
Aviva Investors	45680.5	26120.7	11010.8
AXA Investment Managers - Real Assets	59988.9	50037.2	11728.3
Baring Private Equity Asia Limited	366.8	366.8	366.8
BlackRock	19549.2	18267.4	13010.2
BMO Real Estate Partners	8290.4	0.0	
BNP Paribas REIM	21977.0	12884.0	8364.0
Bouwfonds Investment Management	6296.5	6293.0	4583.0
Brookfield Asset Management	137316.7	103607.1	31614.4
CAERUS Debt Investments AG	575.0	0.0	
Canada Life Investments	3122.1	1448.8	1313.0
CapitaLand	49765.8	21850.5	12747.4

*Eleven of the respondents preferred to remain anonymous

Fund manager	Breakdown by line of business		
	Total AUM (€ million)	Non-listed direct real estate vehicles (€ million)	Non-listed real estate funds (€ million)
Catella	2200.0	2100.0	
CBRE Global Investment Partners	12874.4	0.0	
CBRE Global Investors	81605.7	50063.7	22923.0
Challenger	4283.6	4283.6	
Charter Hall	10631.3	8968.4	4311.6
CITIC Capital Holdings Limited	2384.9	2384.9	2384.9
City Square REI	458.5	458.5	
Clarion Partners	36979.3	36980.2	18773.0
Clearbell Capital	1073.6	1073.6	1073.6
Composition Capital Partners	279.8	279.8	236.7
Cornerstone Real Estate Advisers	45487.4	14539.6	6340.5
Credit Suisse	40163.0	40161.0	29572.0
Creditease Asset Management (Singapore) Pte. Ltd	110.0	0.0	
Cromwell Property Group	4823.0	4481.4	2345.3
Dasnac	152.5	18.0	1.4
Deka Immobilien GmbH	33173.2	32309.9	32309.9
Deutsche Asset Management	37400.0	37400.0	22400.0
DEXUS	14122.4	8634.1	4484.4
Diamond Realty Management.Inc	2774.2	1940.9	1557.7
DNB REIM	2000.0	2000.0	
Dynasty Investments / EZLand	91.7	91.7	18.3
EG Funds Management	548.8	548.8	397.6
EGW Asset Management	837.9	837.9	
Equity Estate	325.0	0.0	
Europa Capital LLP	1842.0	1655.0	1655.0
Folkestone Ltd	645.2	155.9	155.9

Fund manager	Breakdown by line of business		
	Total AUM (€ million)	Non-listed direct real estate vehicles (€ million)	Non-listed real estate funds (€ million)
Forum Partners	4474.6	4474.6	2501.4
Fosun Property Holdings	34842.9	0.0	
FREO Group	2500.0	2500.0	2500.0
Frogmore	882.3	882.3	882.3
Fukuoka Realty Co., Ltd.	1371.1	0.0	
Gaw Capital Partners	11003.0	10142.9	6949.5
Global Logistic Properties	17100.5	17100.5	15553.7
Grosvenor	4771.5	4771.3	2861.4
Guggenheim Real Estate LLC	1237.3	1210.0	1210.0
Hahn Group	2450.0	2450.0	2450.0
Hamburg Trust REIM	1300.0	1250.0	1250.0
HDFC Property Ventures Ltd	686.2	559.6	559.6
Heitman	32263.6	28773.8	8918.9
Helaba Invest	4500.0	0.0	
Hunter Real Estate Investment Managers	475.1	475.1	271.5
ICG-Longbow	3477.7	0.0	
IGIS Asset Management	6975.2	6975.2	
IL&FS Investment Managers Ltd	1112.8	1112.8	1112.8
InfraRed Capital Partners	2689.0	2689.0	2025.4
Intercontinental Real Estate Corp.	4474.5	4474.5	4474.5
Invesco Real Estate	59078.0	34446.6	17195.1
Investa	2179.3	2179.3	2179.3
IPUT plc	1766.0	1766.0	
ISPT	7630.1	7630.1	7429.3
J.P. Morgan Asset Management	59843.6	59720.7	47425.7
Jamestown	8894.1	8894.1	8894.1

Fund manager	Breakdown by line of business		
	Total AUM (€ million)	Non-listed direct real estate vehicles (€ million)	Non-listed real estate funds (€ million)
Kenedix, Inc.	12492.4	3831.5	502.7
KGAL GmbH & Co. KG	7.6	7.3	7.3
Kristensen Properties	2000.0	2000.0	2000.0
Landmark Partners	3724.6	0.0	
LaSalle Investment Management	53465.7	39913.2	9036.3
Lendlease Investment Management	14724.8	14724.8	12516.1
Lothbury Investment Management Limited	2484.5	2435.7	2073.5
Lowe Enterprises Investors	2442.7	2442.7	82.5
M&G Real Estate	33914.6	32868.8	15269.3
Mapletree Investments Pte. Ltd.	20941.5	2207.0	2207.0
Mayfair Capital Investment Management	1267.8	1257.0	662.4
MOMENI Investment Management GmbH	600.0	600.0	100.0
Morgan Stanley Real Estate Investing	28747.2	28747.2	26613.5
NEINVER S.A.	1868.7	1868.7	1272.1
Niam AB	2900.0	2900.0	2900.0
Northern Horizon Capital A/S	598.0	598.0	435.0
NREP	2400.0	2400.0	2400.0
Orchard Street Investment Management	7038.2	7038.2	
Orion Partners Real Estate Group	407.1	407.1	380.5
PAG Real Estate	6418.4	6418.4	6143.4
Pamfleet Asset Management (HK) Limited	558.4	435.5	408.9
Partners Group	8021.3	7812.5	5556.3
PATRIZIA Immobilien AG	16600.0	16600.0	5100.0
Pradera Limited	2679.0	2679.0	1130.0
Pramerica Real Estate Investors Limited	58438.9	52379.9	43115.3
PROJECT Investment AG	1200.0	1200.0	1200.0

Fund manager	Breakdown by line of business		
	Total AUM (€ million)	Non-listed direct real estate vehicles (€ million)	Non-listed real estate funds (€ million)
Prologis	34164.3	29195.9	15631.3
Propertylink	781.8	781.1	781.1
Qualitas	421.7	289.8	100.4
Quantum Immobilien Kapitalverwaltungsgesellschaft mbH	3944.0	3857.0	2056.0
Redwood Group Asia Pte Ltd	851.0	851.0	656.2
Rockspring PIM	8210.0	8210.0	4885.0
Rynda Property Investors LLP	955.0	955.0	120.0
Sarofim Realty Advisors	2643.5	2643.5	237.5
Savills Investment Management	16984.0	14432.0	9348.0
SC Capital Partners	1100.3	1100.3	1100.3
Schroder Real Estate Investment Management	17805.6	8786.8	7846.2
Sentinel Real Estate Corporation	4906.0	4906.0	1980.6
Seven Seas Advisors Co., LTD.	266.6	266.6	
SilkRoad Property Partners	36.7	36.7	36.7
Sirius Capital Partners	100.0	100.0	100.0
Sniper Capital (HK) Ltd	562.5	108.6	108.6
sonae sierra	5958.0	2494.0	2494.0
Sparinvest Property Investors	1179.1	0.0	
Standard Life Investments	24158.3	23521.0	19939.3
Syntrus Achmea Real Estate & Finance	15775.0	7906.0	2067.0
T&D Asset Management Co., Ltd.	128.7	0.0	
Tan-eu Capital	140.0	140.0	140.0
TH Real Estate & TIAA	110782.9	20045.7	9093.1
The Blackstone Group L.P.	135302.3	125485.7	106132.3
The Carlyle Group - Carlyle Europe Real Estate	1189.4	1189.4	983.8
The GPT Group	12114.5	6614.8	6614.8

Fund manager	Breakdown by line of business		
	Total AUM (€ million)	Non-listed direct real estate vehicles (€ million)	Non-listed real estate funds (€ million)
Tishman Speyer	38478.3	38478.3	12892.1
Tokyo Tatemono Investment Advisors Co., Ltd.	4870.0	4853.6	820.1
Trevian Asset Management Oy	205.0	205.0	205.0
Tristan Capital Partners	7192.2	7192.2	7192.2
TRIUVA Kapitalverwaltungsgesellschaft	9857.4	9857.5	4054.3
UBS Asset Management	67498.0	33641.9	28928.8
Union Investment Real Estate GmbH	34131.0	34002.0	30718.0
Unite Group	4028.8	4137.4	2815.3
Valparaiso Capital Partners	713.1	777.9	777.9
Vesteda	3700.0	3700.0	3700.0
Warburg-HIH Invest Real Estate GmbH	5303.0	5227.0	2499.0
White Peak Real Estate Investment	310.8	310.8	310.8
Xander Investment Management	1462.5	1462.5	1270.8

Appendix 5

Definitions

Definitions

Total real estate asset under management (AUM)

Refers to market value of real estate-related assets with respect to which a manager provides, on a global basis, oversight, investment management services and other advice (for third-party capital and internal client capital), and which generally consist of real estate funds and real estate-related loans; securities portfolios; and investments in operating companies, joint ventures, separate accounts and funds of funds.

Non-listed direct real estate vehicle

Refers to a vehicle investing directly into real estate.

Non-listed real estate fund/commingled fund/private REIT

A structure where capital of at least three investors is pooled to undertake a pre-defined strategy of investing into real estate assets.

Separate account investing directly into real estate

A vehicle with capital commitments from one investor allocated directly into assets rather than funds.

Separate account investing into indirect vehicles

A vehicle with capital commitments from one investor allocated to a series of property funds within a defined strategy.

Joint venture and club deal

Vehicles with capital commitments from two or a small number of investors (including co-investment) allocated to a redefined direct real estate strategy.

Fund of funds

A real estate fund of funds is a collective investment vehicle that uses a strategy of holding a portfolio of investments in other real estate funds rather than investing directly into real estate.

Listed real estate fund

A fund that invests directly into real estate and is listed on a stock exchange.

Real estate securities fund

A fund investing into listed securities.

Non-listed debt products

- 1) Mezzanine debt fund: fund which is supplying real estate borrowers with the layer of financing that sits between the senior debt and the equity in the capital structure.
- 2) Senior debt fund: fund which provides the borrowers with loans, which have first priority within the capital structure.

European vehicle

A vehicle investing $\geq 90\%$ in Europe (including UK). This includes single country and pan-European funds.

Asia Pacific vehicle

A vehicle investing $\geq 90\%$ in Asia Pacific (including Australia). This includes single country and pan-Asia Pacific funds.

North American vehicle

A vehicle investing $\geq 90\%$ in North America.

South American vehicle

A vehicle investing $\geq 90\%$ in South America.

African vehicle

A vehicle investing $\geq 90\%$ in Africa.

Global vehicle

A vehicle invested in more than one continent and not more than 90% allocated to one continent.

Manager co-investment

Own company investments and own fund management team investments.

