

## ANREV / INREV / NCREIF Fund Manager Survey **2017**

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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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# Executive summary

- > Big managers grew their assets more than their smaller peers
- > Top 50 fund managers increase their average assets under management by €5bn
- > Funds with a European strategy amount to €405.7 billion

This year's sample of total real estate assets under management grew strongly over the year, from €2.0 trillion in last year's survey to €2.4 trillion, of which €1.2 trillion is invested in North American strategies. A key message from this year's Fund Manager Survey is that managers of all sizes have grown their assets under management. The average AUM across all respondents is €13.7 billion, compared to €13.1 billion in last year's survey, representing growth of 4.5%. There is significantly more growth within the top 50: their average AUM is €40.8 billion, compared to €35.6 billion last year, representing growth of 14.9%.

At the top of the rankings, the top three fund managers have total real estate assets under management of €133.0 billion on average. In last year's survey the equivalent number was €127.8 billion. At the other end of the top 50, managers ranked 48th, 49th and 50th also increased their assets under management, from an average of €8.1bn in last year's survey to an average of €11.3 billion in the current survey.

Mergers and acquisitions remain popular. It is noteworthy that one in five of the fund managers who responded to the 2017 survey have been involved in mergers and acquisitions in the last ten years. The most often cited motivation for mergers and acquisitions is scale.

The degree of concentration among managers varies across the 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.

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 53.4% of the total value of assets under management, followed by separate accounts (direct) which make up 27.3% of total assets under management. For North American strategies, the pattern is broadly similar: 49.5% for non-listed real estate funds and private REITs and 22.0% for separate accounts (direct). For Asia Pacific strategies, the pattern repeats itself: 50.6% of total assets under management is found in non-listed funds and private REITs and 18.5% in separate accounts (direct). However, for global strategies the corresponding figures are more skewed towards non-listed funds and private REITs, which make up 65.5%

of total assets. Separate accounts investing directly account for 16.0% of the total.

There is a notable difference in the size of non-listed real estate funds in North America and in Europe and Asia Pacific. In all three regions, non-listed funds make up approximately half of the total value of non-listed real estate vehicles assets under management; however, in North America and Asia Pacific such vehicles account for only one-fifth (20.0% in Asia Pacific and 21.5% in North America) by number, a clear contrast to Europe where they account for 46.2% by number.

Pension funds and insurance companies are the most significant sources of capital for non-listed real estate funds and for separate accounts (direct). Together, pension funds and insurance companies account for 63.7% of the assets under management in non-listed funds and private REITs, and for 64.0% 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 play an important role.

**'The top three fund managers together have real estate assets under management of almost €400 billion'**

# 1. Introduction

The ANREV / INREV / NCREIF Fund Manager Survey 2017 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 third time, the survey has global coverage. 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, 177 fund managers globally completed the questionnaire (2016: 154). Most fund managers were from Europe (90 or 50.8%), followed by those domiciled in Asia Pacific (52 or 29.4%) then North America (35 or 19.8%). No fund manager domiciled in South America or Africa participated in this study. Three fund managers indicated their preference to remain anonymous.

Collectively, respondents represent €2.4 trillion (2016: €2.0 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 managers' universe by their non-listed direct real estate vehicles AUM.
- Section 5 focuses on 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 by year. Furthermore, when figures were left unspecified, aggregates include the unreported figures allowing for the sample to remain constant through the report. As such, historical comparisons should be treated with caution.

All figures in the report are quoted as at 31 December 2016 unless otherwise stated.

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

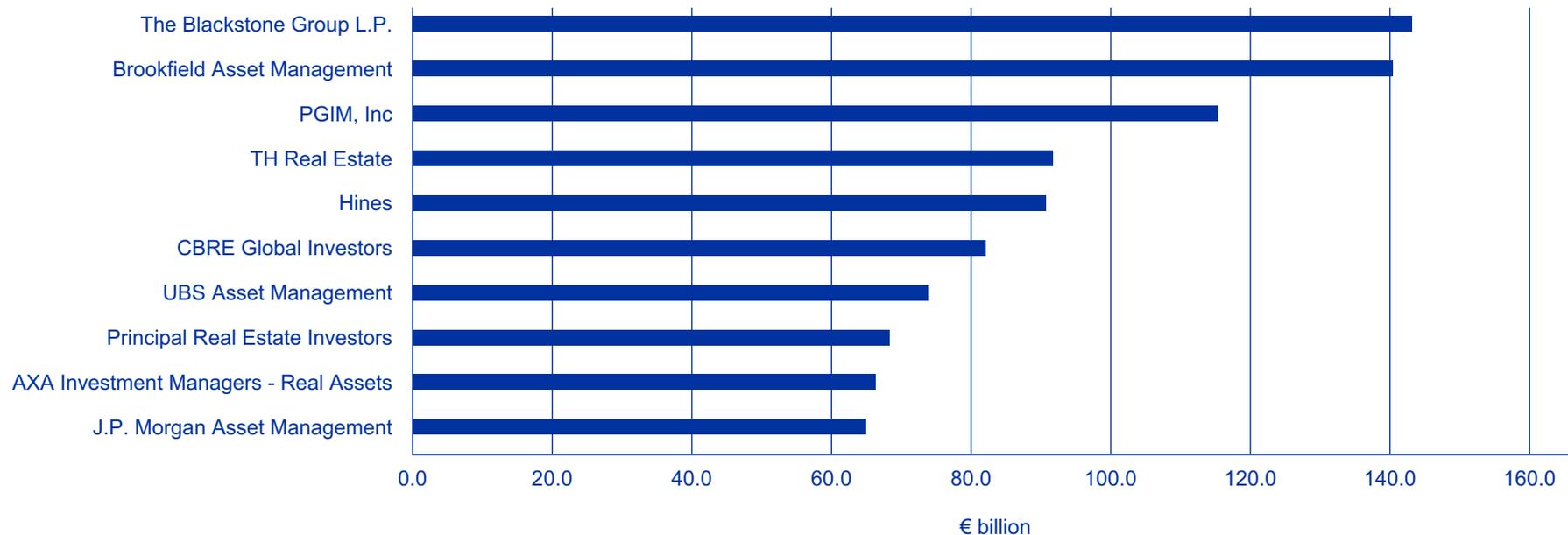
## 2. Total real estate assets under management globally

The gross asset value (GAV) of non-listed real estate assets under management increased by 20.1% from €2.0 trillion in 2015 to €2.4 trillion in 2016. Overall, the 10 largest fund managers represent 38.8% or €937.5 billion of the total AUM. With €143.2 billion of total real estate assets under management, The Blackstone Group tops the list in the 2017 survey.

Brookfield Asset Management ranks second overall with €140.5 billion of total real estate AUM, some €2.7 billion less than the Blackstone Group. PGIM, Inc. occupies the third position with €115.5 billion of global real estate AUM, followed by TH Real Estate (€91.8 billion) in fourth place.

Next in line in this grouping comes Hines, with €90.6 billion. CBRE Global Investors (€82.2 billion) is sixth and UBS Asset Management (€70.4 billion) is seventh. Principal Real Estate Investors (€68.2 billion) is eighth. AXA Investment Managers – Real Assets (€66.4 billion) is ninth and finally J.P. Morgan Asset Management (€65.0 billion) concludes the top 10.

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

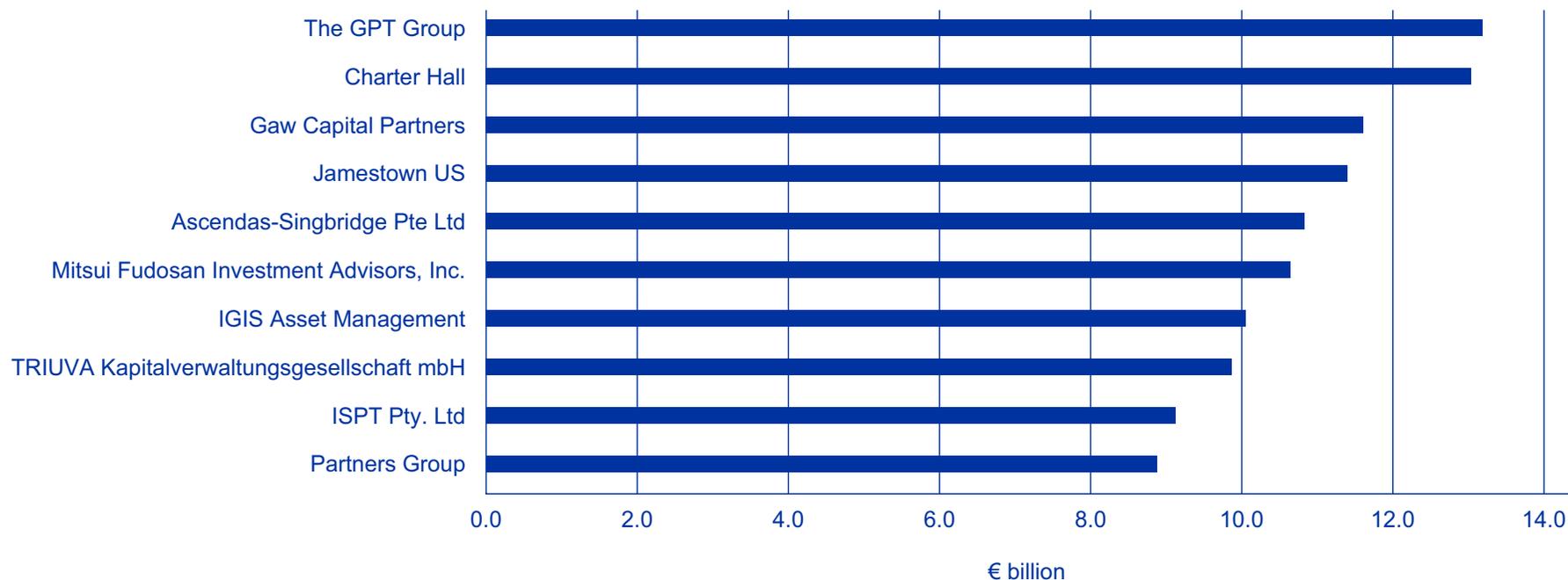


Within the overall category of the top 10 funds managers, there are arguably three divisions: those with over €100bn in global AUM (the top three players), those with between €80 billion and €100 billion (players ranked fourth and fifth) and the others, with somewhere between €60 billion and €80 billion in global AUM (those ranked from sixth to tenth). It is also interesting to note that all ten managers have a Global presence with real estate holdings in all three key regional strategies.

In the inter quartile range of managers ranked by total AUM, the top slot goes to the GPT Group, with €13.2 billion of assets. Next in line is Charter Hall, with €13.0 billion of assets. The next five are Gaw Capital Partners, Jamestown US, Ascendas-Singbridge, Mitsui Fudosan Investment Managers and IGIS Asset Management – all of those have assets under management of between €10 billion and €12 billion each. The last three managers in this group have between €8 billion and €10 billion each.

The relative size of the players falls away more evenly than is the case of the top 10 in the top quartile, declining smoothly from the third ranked manager (Gaw Capital Partners) with €11.6bn in AUM to Partners Group, ranked number 10 with €8.9 billion under management.

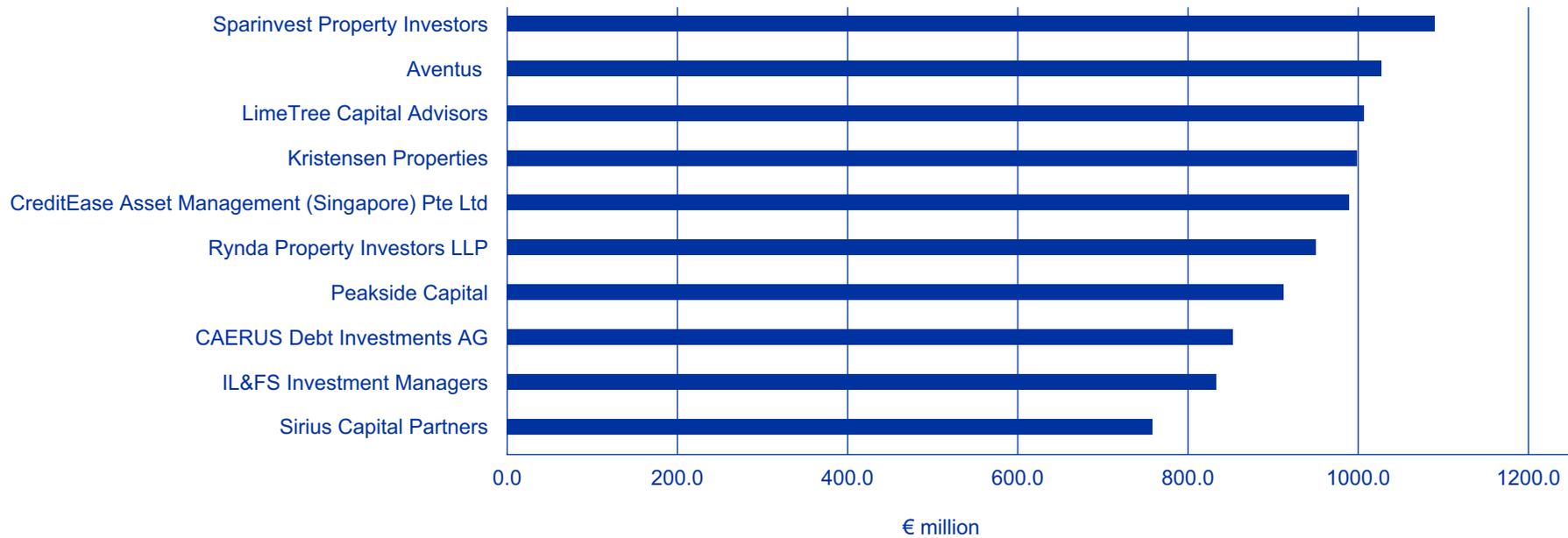
**Figure 2: Top 10 fund managers by total AUM - interquartile**



In the lower quartile Sparinvest Property Investors leads the top 10, with €1.1 billion in real estate assets under management. The next three players are Aventus, LimeTree Capital Advisors and Kristensen Properties

and they have approximately €1.0 billion each. The remaining six players in this grouping each hold somewhere between €990 and €760 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, AXA Investment Managers – Real Assets occupies the top position in the upper quartile with €58.0 billion of real estate assets under management in such strategies. The second and third slots are filled by CBRE Global Investors and Aviva Investors, with AUM of €45.3 billion and €43.3

billion respectively. Credit Suisse comes a close fourth, with €42.7 billion. The remaining six managers in the upper quartile have AUM varying from €24.1 billion to €30.4 billion.

In the interquartile range for European strategies, the top slot goes to Tishman Speyer with €7.1 billion AUM, followed by Redevco with €7.0 billion and Bouwinvest with €6.8 billion. Invesco (€6.6 billion) and COIMA (€6.5 billion) follow closely behind in fourth and fifth positions. The remaining five players in this group have between €4.8 billion

and €5.9 billion each in European real estate AUM.

With €750 million of AUM, Clearbell Capital ranks first in the lower quartile group. Second position is occupied by STAM Europe (€685 million), and Arminius Funds Management Limited (€670 million) takes the third position. Northern Horizon Capital (€667 million) is a close fourth. The remaining six players in this grouping have AUM of between €376 million and €607 million.

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

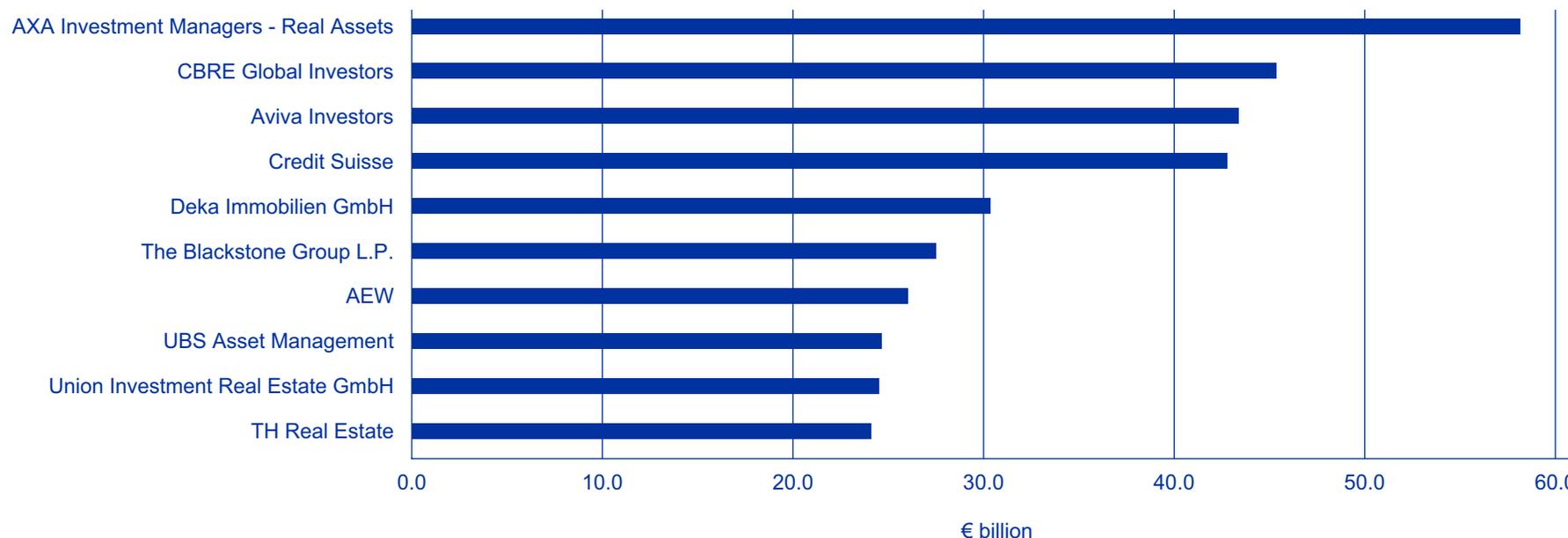


Figure 5: Top 10 fund managers by European AUM - interquartile

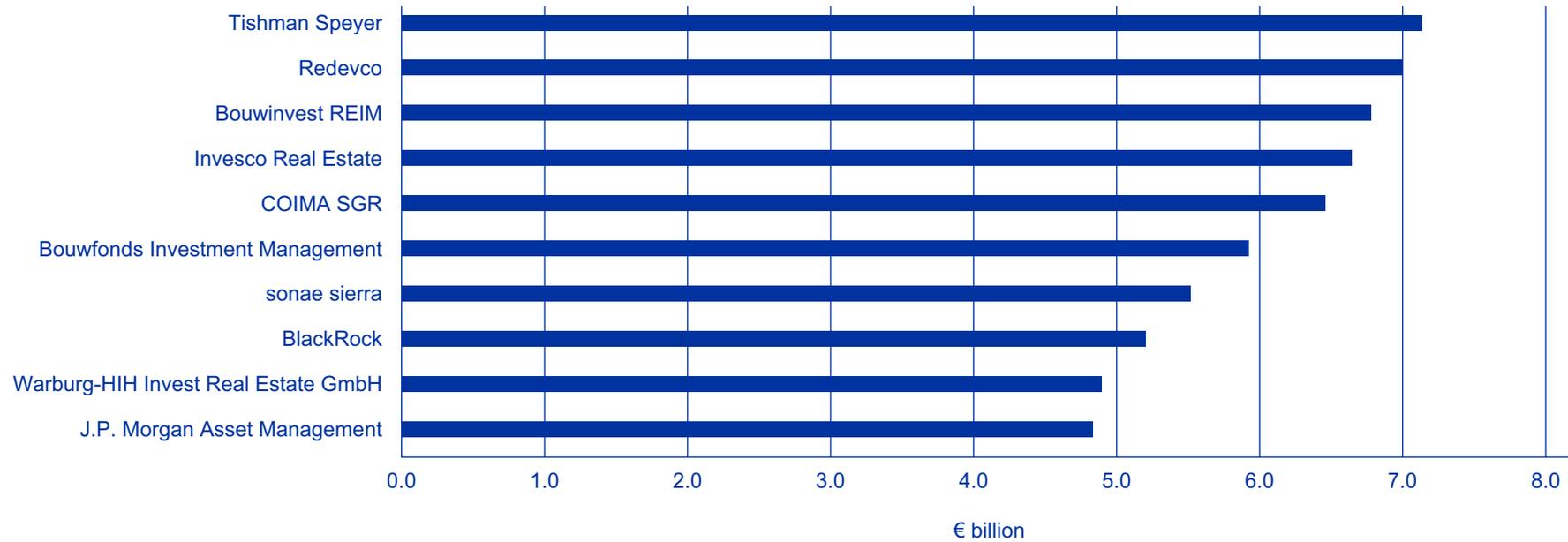
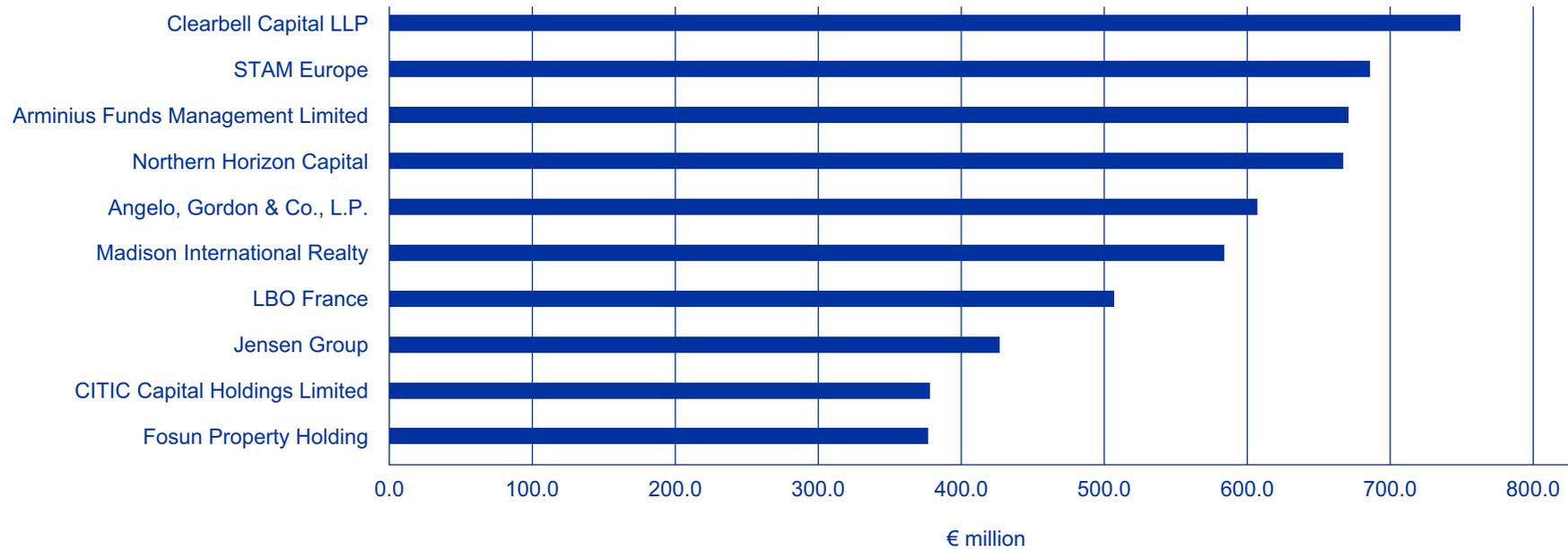


Figure 6: Top 10 fund managers by European AUM - lower quartile



## Total real estate assets under management - Asia Pacific

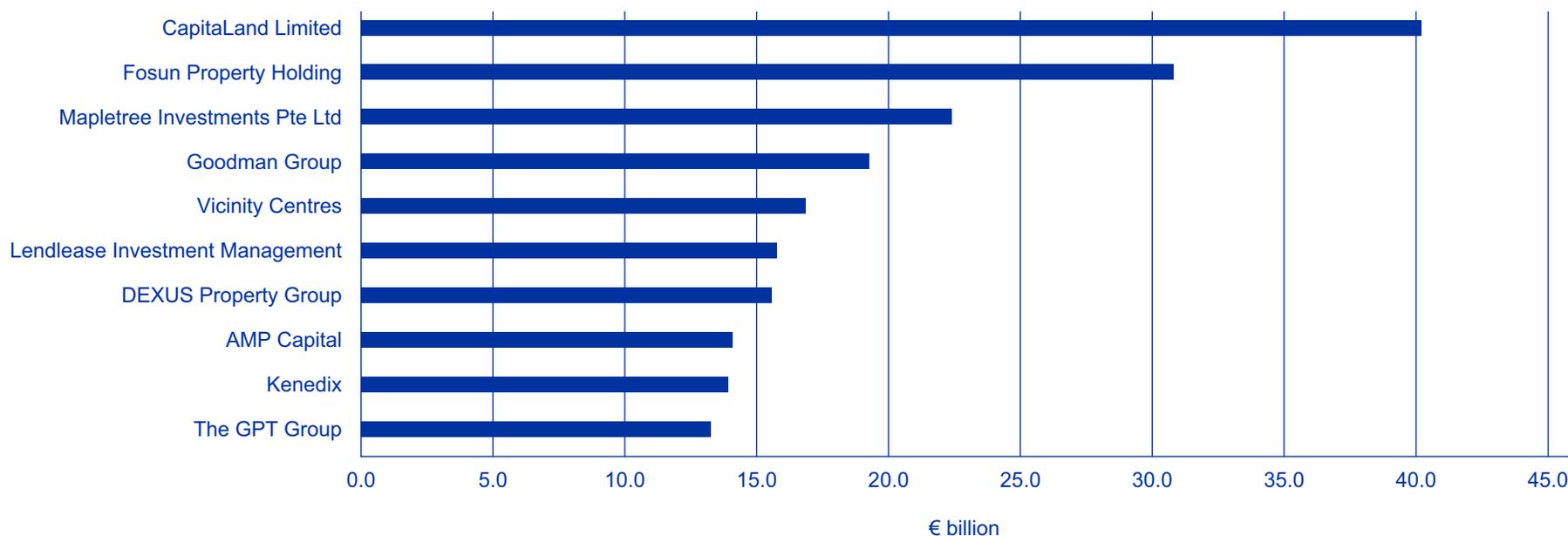
In terms of Asia Pacific strategies, CapitaLand is the largest fund manager in the upper quartile group, with total real estate AUM of €40.2 billion in those strategies. The second place goes to Fosun Property Holdings with €30.8 billion in AUM, and next is Mapletree Investments with €22.4 billion of real estate AUM. The remaining seven managers in this group have AUM in the range of €13.2 billion to €19.2 billion.

The interquartile range is led by Tokyo Tatemono Investment Advisors with €5.3 billion invested in Asia Pacific. CBRE Global Investors follows with €5.2 billion, beating Global Logistics Properties which takes the third position with €4.9 billion of real estate AUM in this region, very closely followed by BlackRock, also with €4.9 billion<sup>1</sup>. The remaining six managers in this group have AUM in the range of €3.4 billion to €4.7 billion.

The top spot in the lower quartile group goes to Principal Real Estate Investors with

€458.1 million. BNP Paribas Investment Partners is just behind in second position with €458.0 million. Pamfleet, in third position, have €449.6 million. The top three slots are very closely bunched. The remaining seven managers in this group have AUM in the range of €260.1 million to €431.9 million.

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



<sup>1</sup> AUM in billions is 4,913.9 for Global Logistics Properties, and 4,876.8 for BlackRock

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

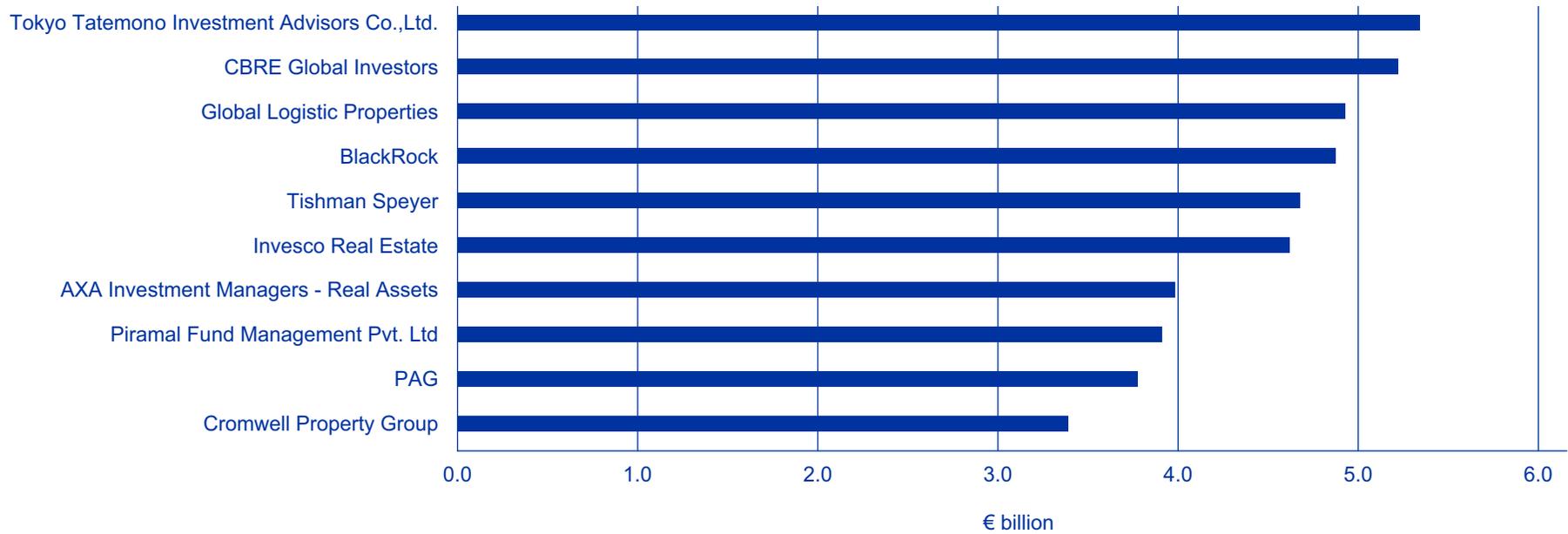
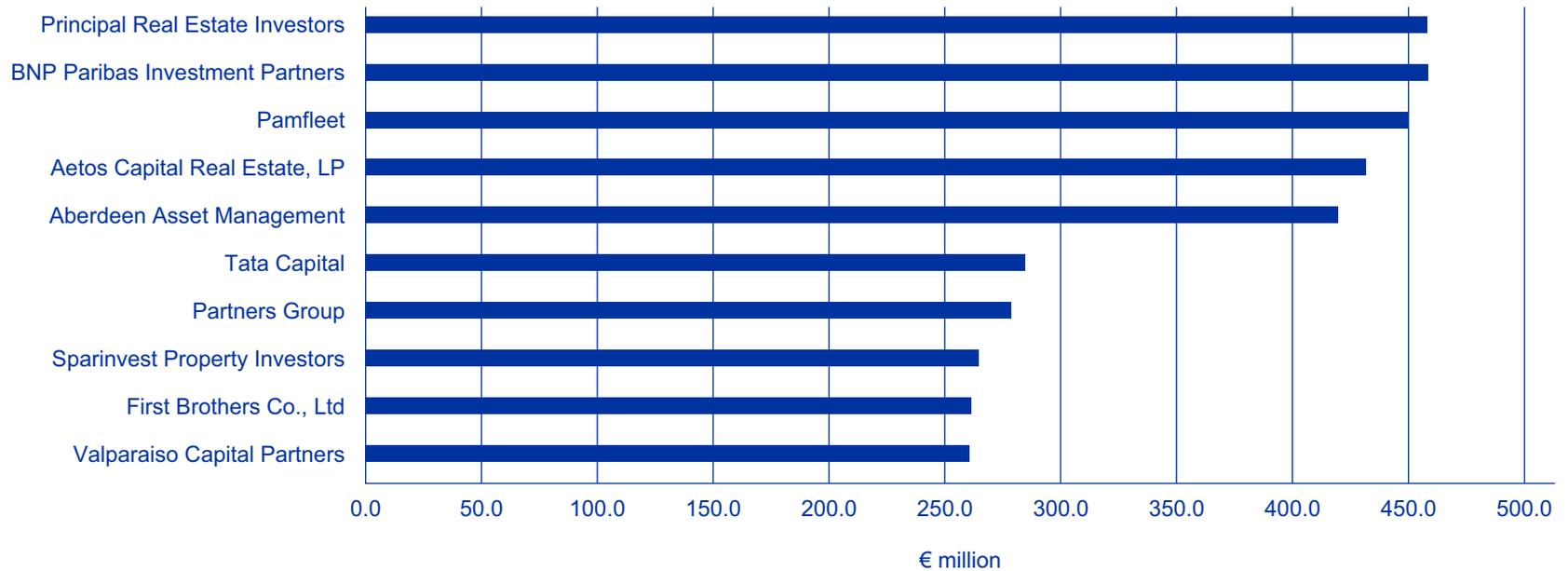


Figure 9: Top 10 fund managers by Asia Pacific AUM - lower quartile



### Total real estate assets under management - North America

In terms of North America strategies, PGIM is the largest fund manager in the upper quartile, with total real estate AUM of €92.6 billion. Second place in the upper quartile group for North American strategies goes to Brookfield Asset Management with €89.0 billion in AUM, and next is Hines with €67.0 billion of real estate AUM. The remaining seven managers

in this group have AUM in the range of €30.3 billion to €65.8 billion.

The interquartile range is led by CIM Group with €17.5 billion invested in North America strategies. Prologis follows with €17.0 billion, ahead of USAA Real Estate Company which takes the third spot with €16.7 billion of real estate AUM in this region. The remaining seven managers in this group have AUM in the range of €7.3 billion to €16.3 billion.

The top spot in the lower quartile group goes to Madison International Realty with €306.9 million. EGW Asset Management follows in second place with €284.5 million, and Optimum Asset Management is the third largest fund manager in this group with €237.0 million. The remaining seven managers in this category have AUM in the range of €108.0 million to €200.0 million. Managers ranked sixth, seventh and eighth in this category are grouped closely together.

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

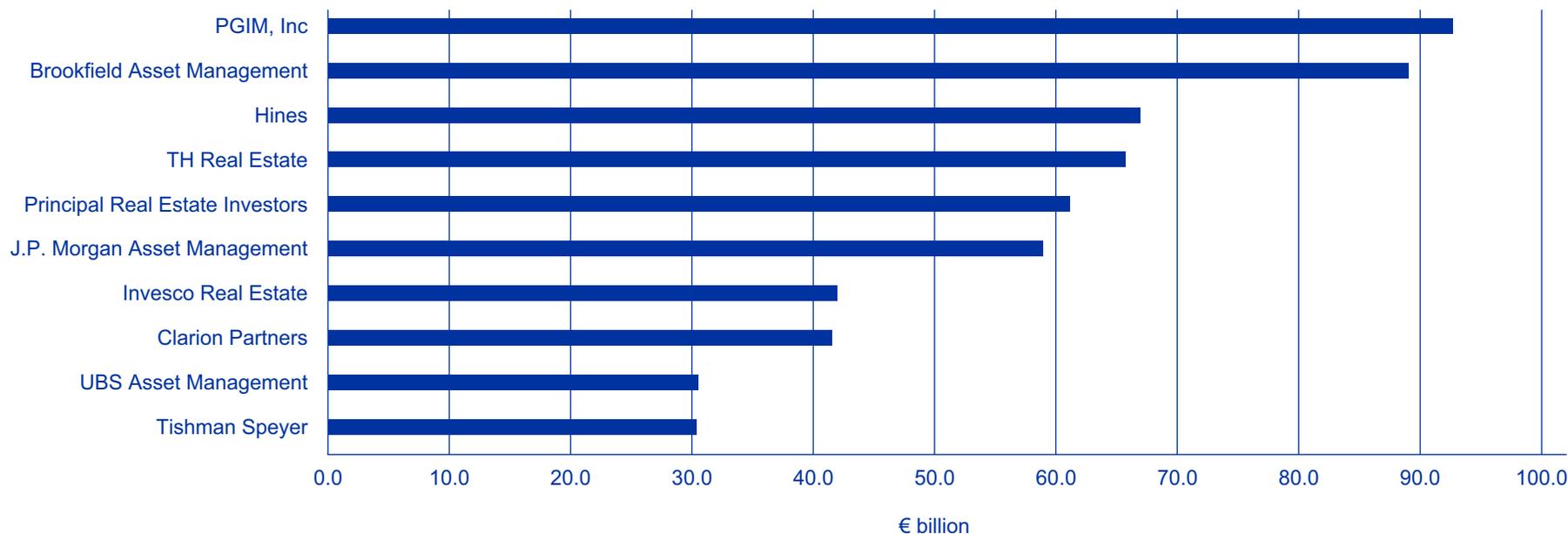


Figure 11: Top 10 fund managers by North American AUM - interquartile

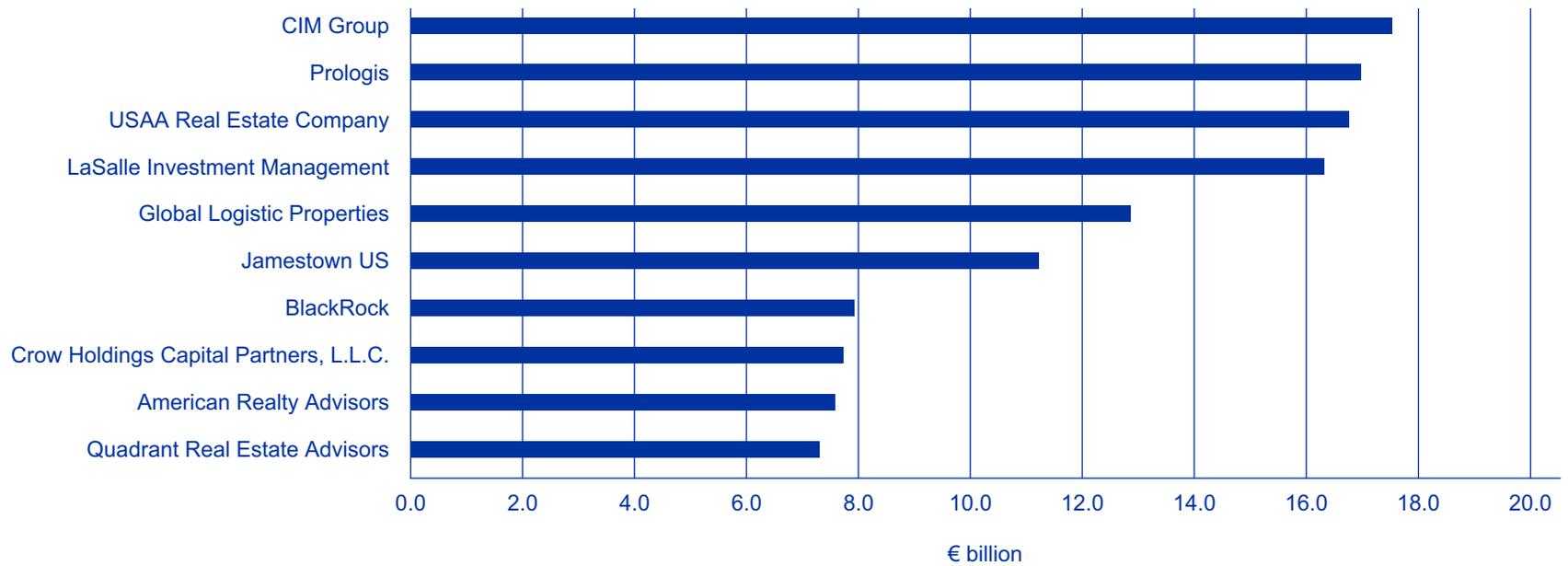
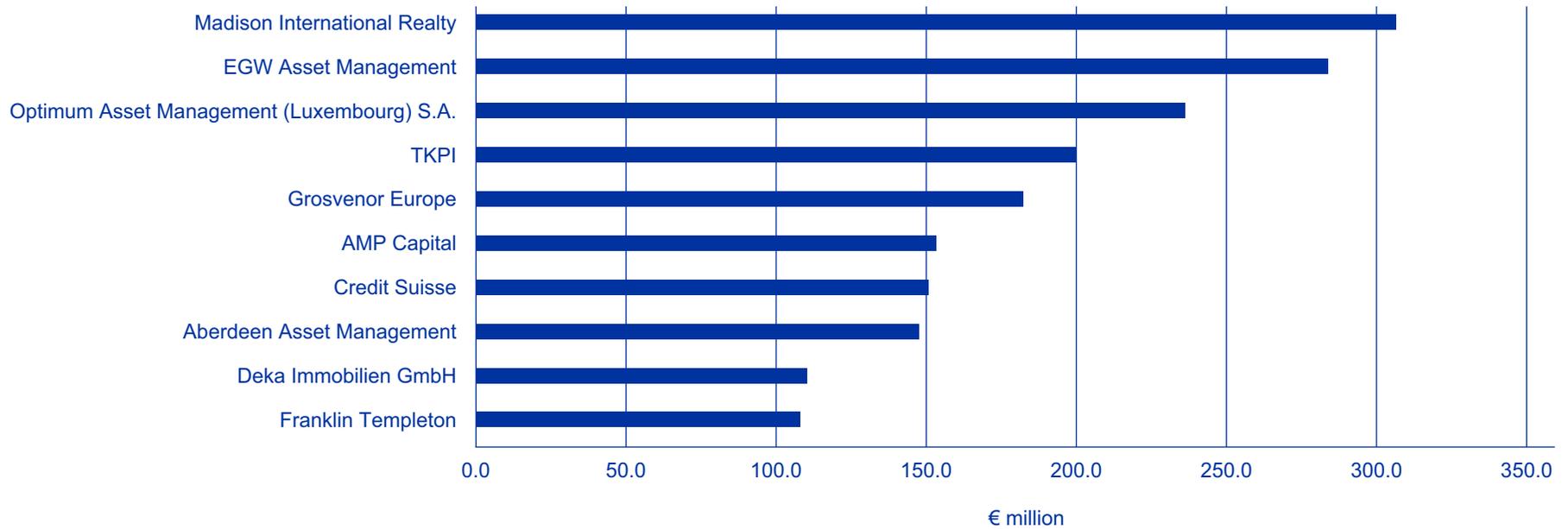


Figure 12: Top 10 fund managers by North American AUM - lower quartile

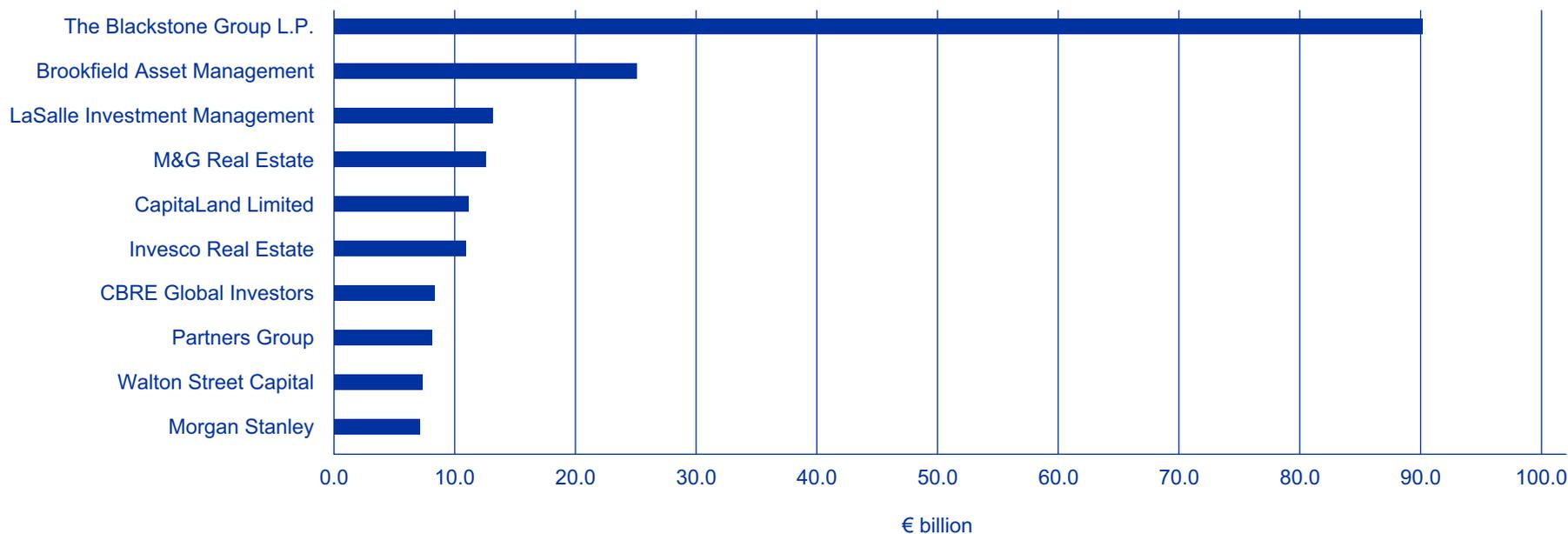


## Total real estate assets under management – Global

For global strategies, the sample is insufficiently large to give a meaningful quartiles-based analysis. The clear leader in global strategies is The Blackstone Group, with €90.1 billion in real estate AUM. Next

in line, and a considerable distance behind, comes Brookfield Asset Management, with €25.0 billion in AUM, ahead of third-placed LaSalle Investment Management with €13.2 billion in AUM. The remaining seven players in this league table have a wide range of assets under management, from €12.6 billion for the fourth ranked player to €7.1 billion for the last.

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



# 3. 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 €1.9 trillion across all strategies and vehicle types. This equals to 80.4% of all real estate AUM globally. There are 4,963 vehicles in total, including 1,629 funds.

Within the various regional strategies the breakdown by vehicle type contrasts. Joint ventures and club deals make up a material part of the value in Asia Pacific (28.0%), North American (16.0%) and European strategies (10.1%), but barely feature in global strategies (0.1%). In terms of number of JVs and club deals, Asia Pacific leads the pack (55.8% of its total is in JVs and clubs), suggesting that the average size of such deals is smaller in that region.

It is worthwhile noting that separate accounts investing in indirect vehicles play an important role in global strategies, with 24.9% of the total by number.

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

- Non-listed / commingled real estate funds / private REITs
- Separate accounts investing directly into real estate
- Separate accounts investing into indirect vehicles
- Joint ventures and club deals
- Funds of Funds
- Real estate / mortgage debts

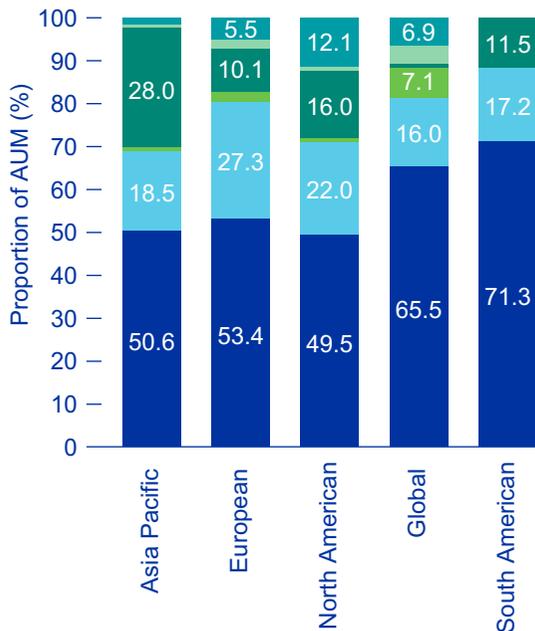
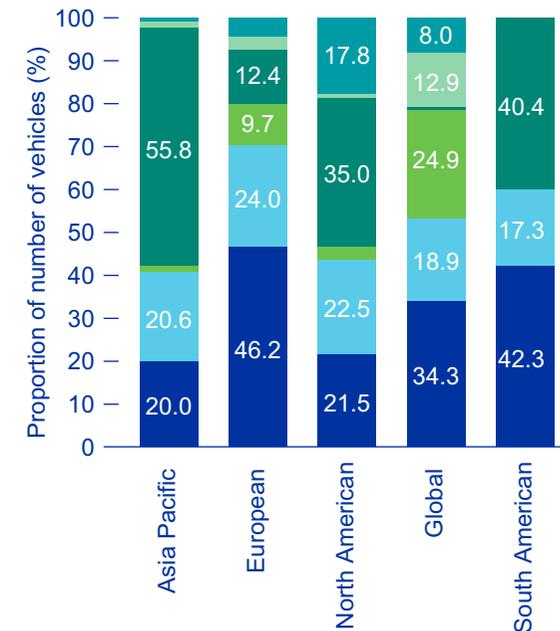


Figure 15: Number of non-listed real estate vehicles by regional strategy and by vehicle type

- Non-listed / commingled real estate funds / private REITs
- Separate accounts investing directly into real estate
- Separate accounts investing into indirect vehicles
- Joint ventures and club deals
- Funds of Funds
- Real estate / mortgage debts



# 4. 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 refers 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 4,213 non-listed direct real estate vehicles

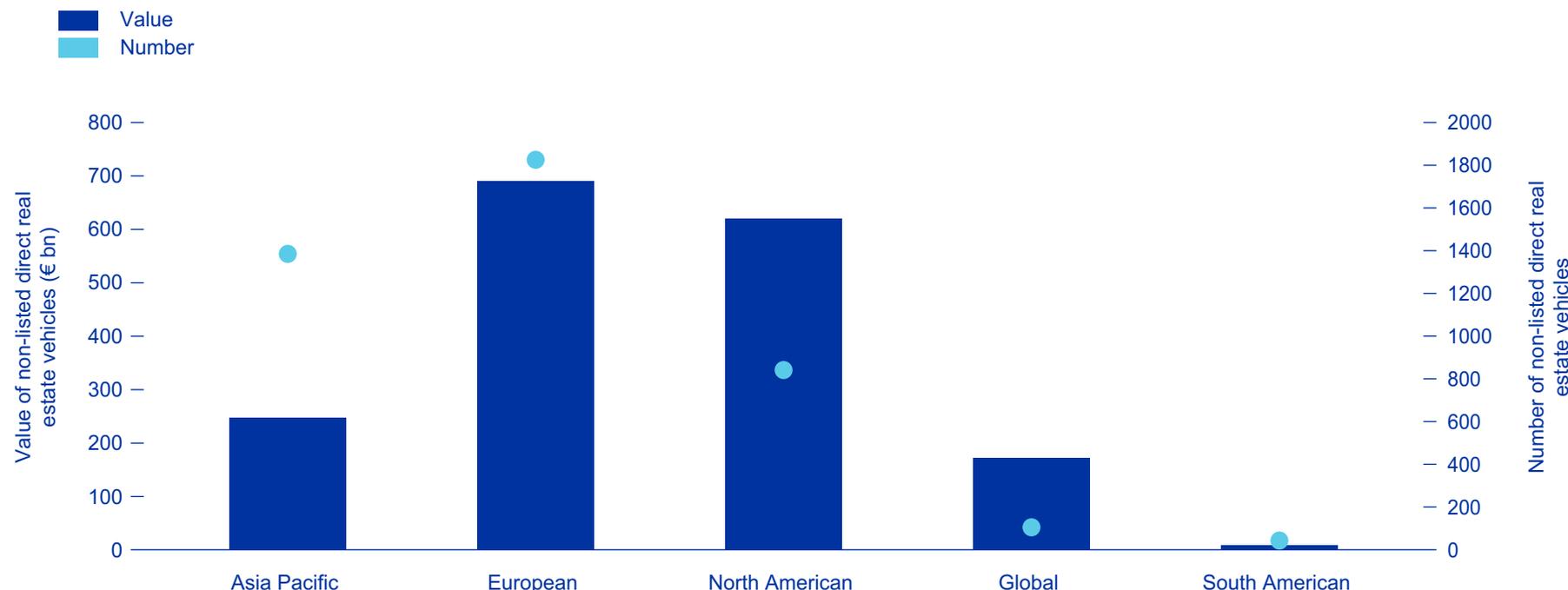
with a combined value of €1.7 trillion. In terms of value, vehicles with a European strategy amount to €689.7 billion (or 39.7%) in total. North American vehicles, worth a total of €621 billion, constitute 35.7% of this universe and Asia Pacific strategies, with a total value of €246.2 billion, account for a further 14.2%. The remainder is split between vehicles invested globally (€170.1 billion or 9.8%) and South America (€10.2 billion or 0.6%).

By number, the largest proportion consists of vehicles with European mandates (43.3%) followed by those targeting the Asia Pacific region (32.9%). Vehicles with a North American strategy are the third largest

group (20.0%). Those with Global and South American strategies make up 2.6% 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. Global strategies have an average size (measured as the gross asset value of their real estate assets) of €1.6 billion and North American strategies have an average size of €0.7 billion. In contrast, European strategies weigh in at under half a billion euros on average, and Asia Pacific strategies are smaller again (at under €0.2 billion on average).

Figure 16: Non-listed direct real estate vehicles



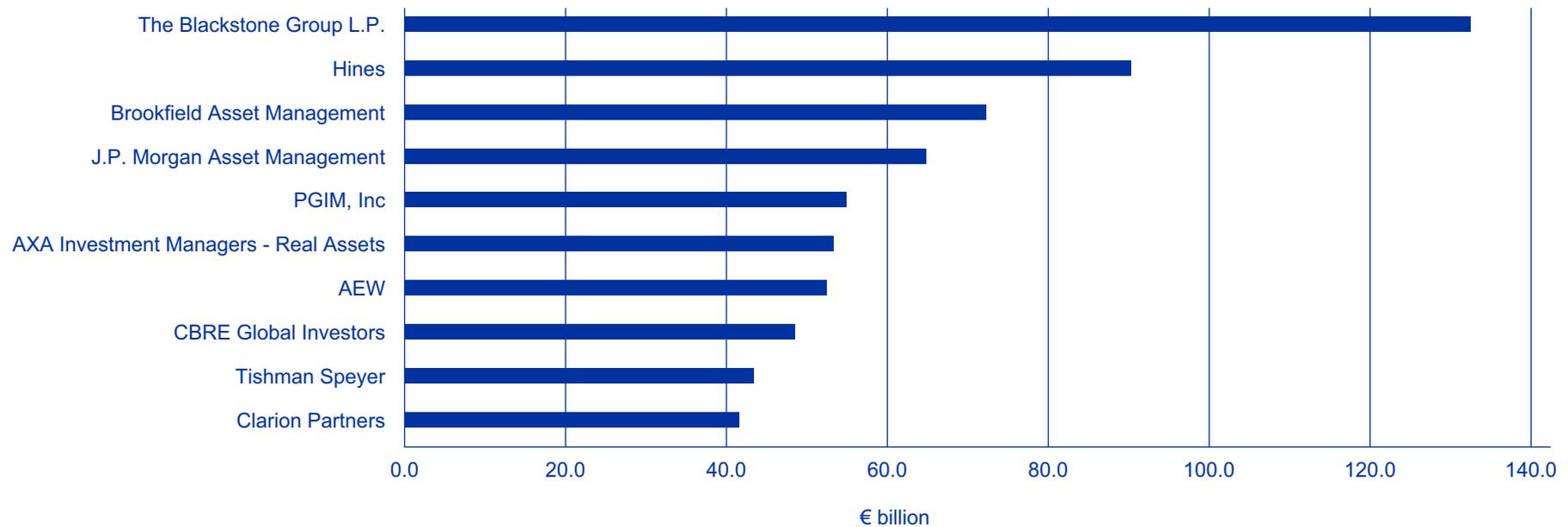
Taken together, the top 10 largest fund managers by non-listed direct real estate vehicles assets under management control €655.5 billion, a notable uplift of 9.1% compared to its 2015 level (€601.1 billion). With an AUM of €132.4 billion, the Blackstone Group maintains its lead position. Hines is ranked second, with €90.6 billion. Brookfield Asset Management is third with €72.5 billion of non-listed direct real estate vehicles AUM, followed by J.P. Morgan Asset Management (€64.9 billion) which occupies the fourth spot.

The ranking offers three interesting observations. First, it is worthwhile noting that the top manager is significantly larger than its nearest peers. This is not the pattern that can be observed in the overall ranking (that is, the rankings by all real assets under management), where the first and second ranked players are very close to each other in size. The second observation is that the list is dominated by managers domiciled in North America, with only one European company, AXA Investment Managers – Real Assets,

making it into the chart. Third, nine out of ten companies in the list have a global presence except Clarion Partners who are mostly Americas focused manager.

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

For European strategies, AXA Investment Managers – Real Assets is ranked number one, topping the list with an AUM of €49.1 billion. Credit Suisse is next, with AUM of €37.0 billion. Deka Immobilien is third with its €30.0 billion of AUM in this category.

For Asia Pacific strategies, CapitalLand comes in as the largest fund manager with €20.2 billion AUM in non-listed real estate vehicles. The Goodman Group (€17.7 billion) and Lendlease (€15.7 billion) occupy second and third positions respectively.

For North American strategies, Hines ranks first with €67.0 billion of non-listed direct real estate vehicles AUM. J.P. Morgan Asset Management is second (€58.8 billion) and PGIM is third (€43.1 billion).

When it comes to vehicles with global strategies, The Blackstone Group comes first. Its €81.4 billion AUM that sets it apart from all others in the field. Brookfield Asset Management and M&G Real Estate follow next with €25.0 billion and €11.3 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 over three times larger than its nearest peer.

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

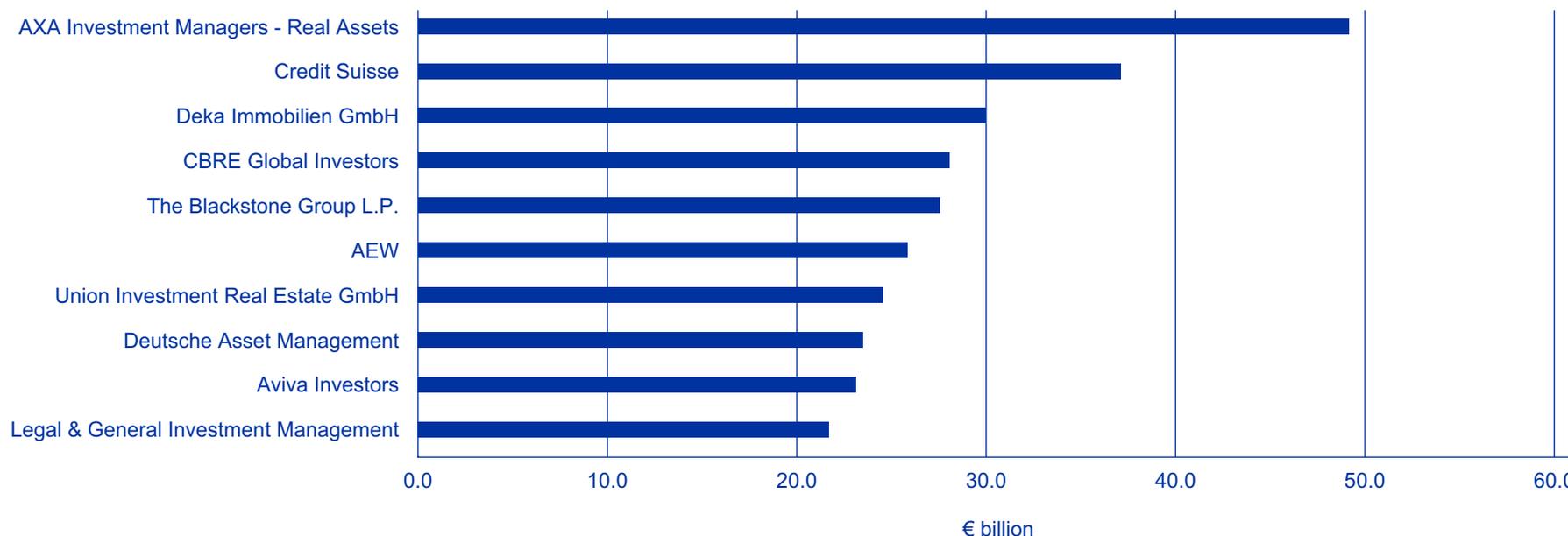


Figure 19: Top 10 fund managers by Asia Pacific non-listed direct real estate vehicles AUM

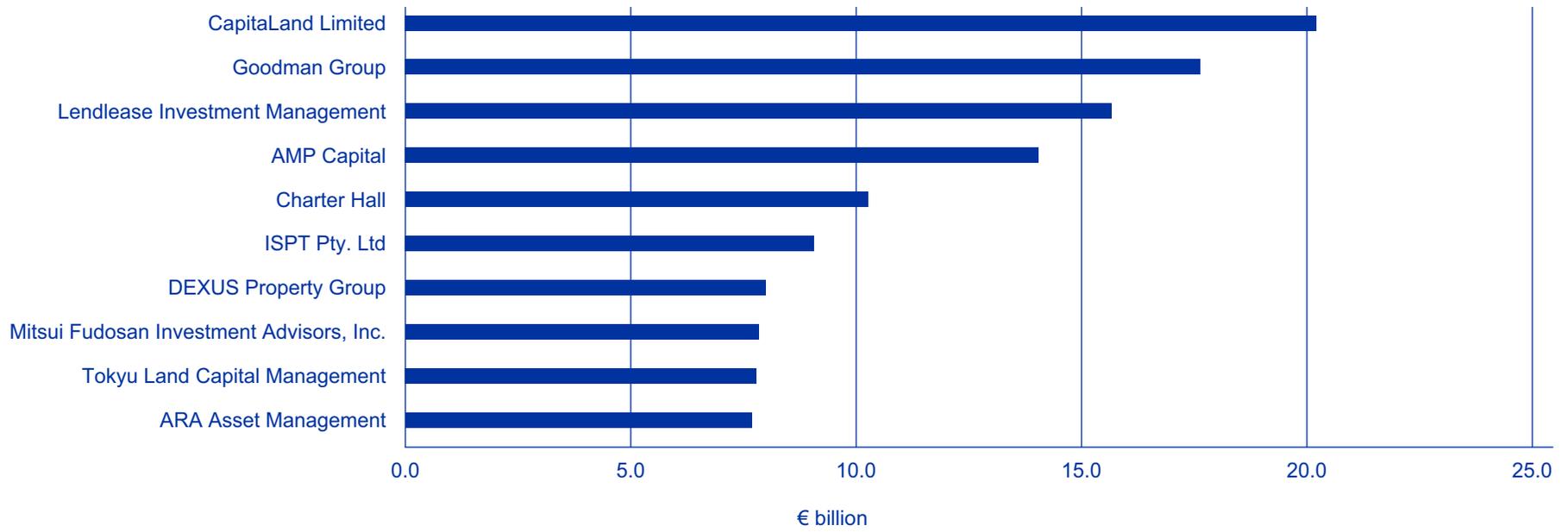
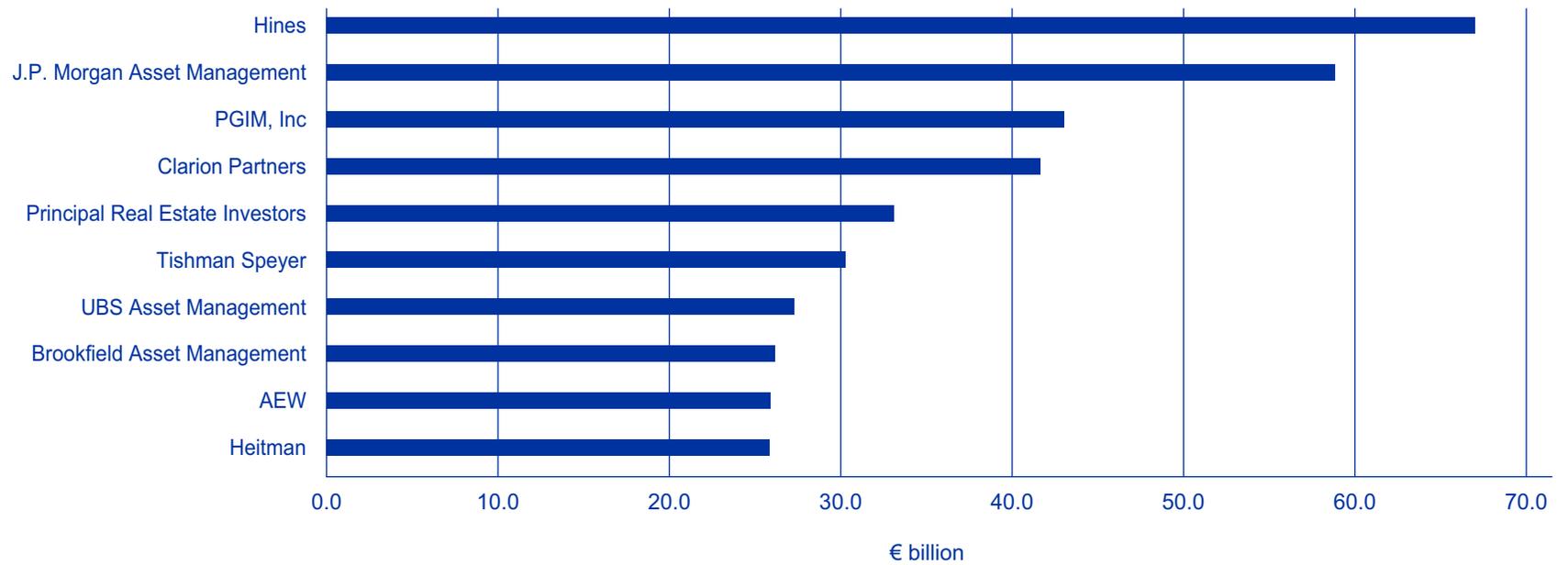
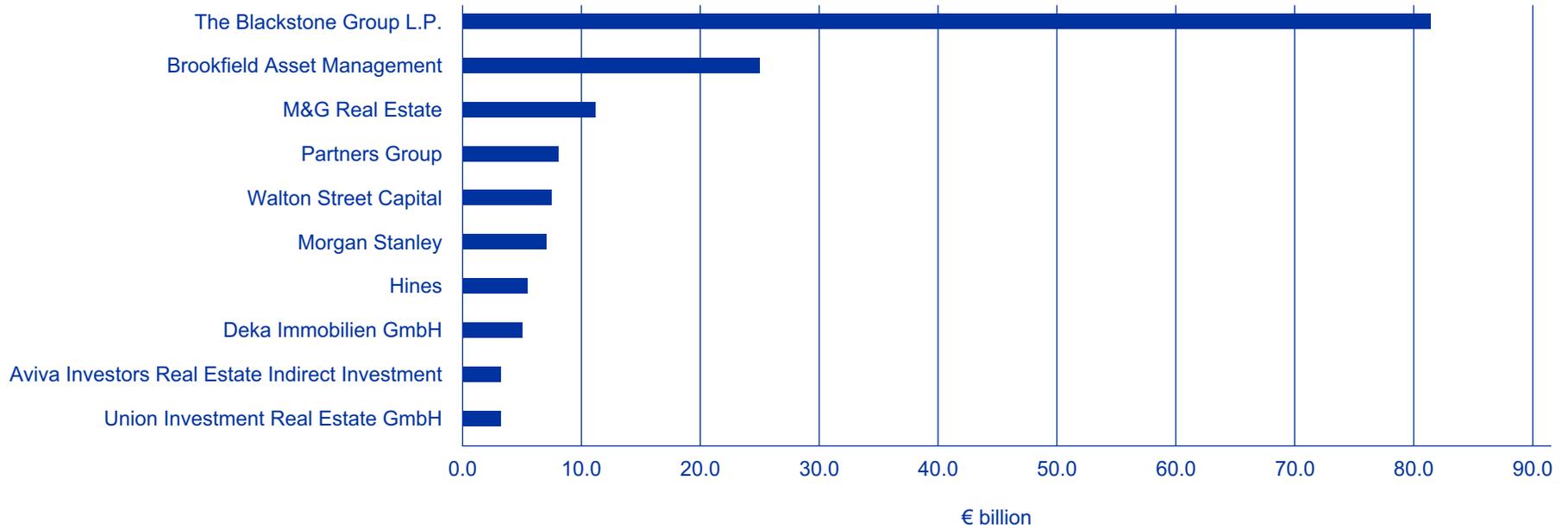


Figure 20: Top 10 fund managers by North American non-listed direct real estate vehicles AUM



**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 68.7% of the total assets under management. For separate accounts the corresponding percentage is 92.4%.

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 (13.3%), with another 3.5% split between manager co-investments (3.1%) and other investor types (0.4%).

JVs and club deals are also reliant on institutional investment. In total, 79.8% of the asset base is made up of institutional investors while manager co-investments (10.7%) also make a significant contribution to JVs and club deals.

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

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



## Non-listed direct real estate vehicles by institutional investor type

This year's figures indicate that pension funds continue to be the dominant investor type for non-listed direct real estate. For funds, 55.9% of the asset base comes from pension funds. For separate accounts (direct), pension funds amounted to 43.3% of the gross asset value. The second biggest source for separate accounts, accounting for 20.7% 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 third (29.2%) came from sovereign wealth funds (14.3%) and corporations (14.9%).

Regarding the domicile of investors, North American and European based investors contributed the largest proportion of capital to non-listed direct estate vehicles. These two together accounted for 75.1% of the AUM in funds, 78.3% of the AUM in separate accounts and 60.7% of the AUM in joint ventures and clubs. Asia Pacific investors make up less than 20% of the AUM in funds and separate accounts, but 26.6% of the AUM in joint ventures and clubs.

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

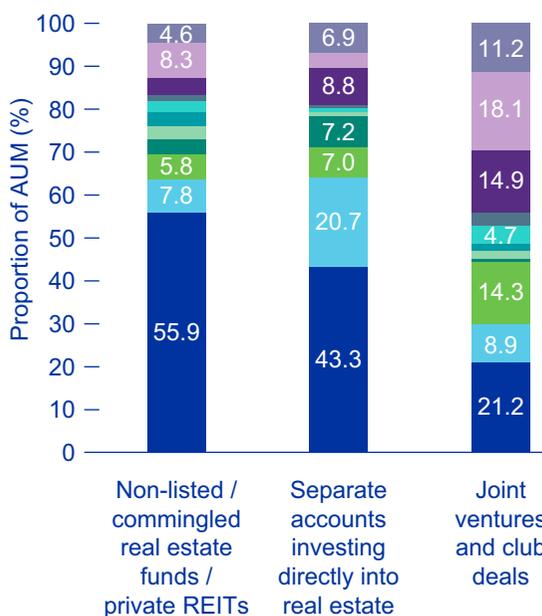
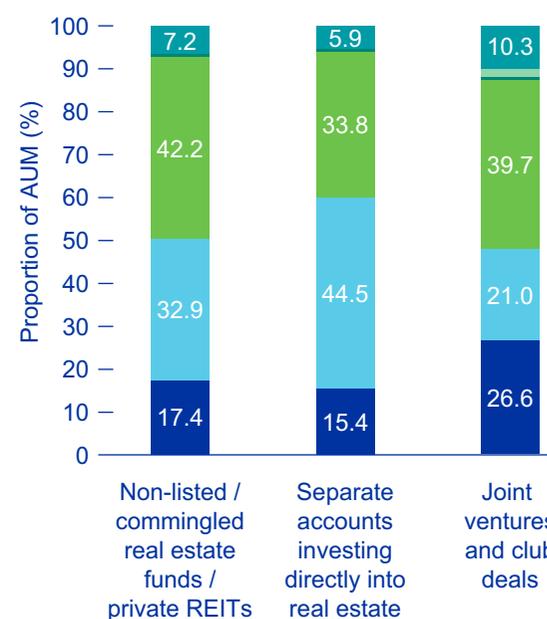


Figure 24: Non-listed direct real estate vehicles by type and institutional investor domicile



## 5. 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 this analysis. The top 50 fund managers by fund's GAV are listed in Appendix 3.

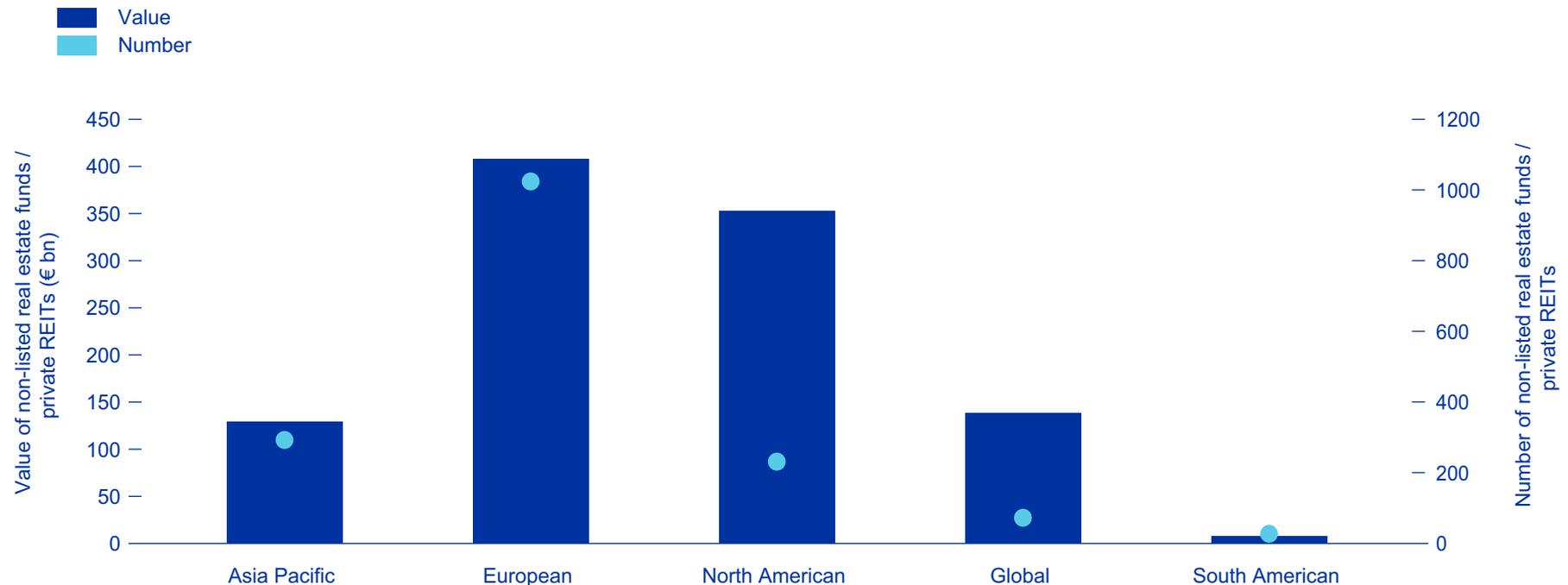
Overall, 1,629 non-listed real estate funds were reported as being managed by fund managers. This translates into €1.0 trillion of equity invested in funds worldwide. By value,

vehicles with a European strategy amount to €405.7 billion (39.4%) in total. North American funds constitute €351.5 billion (34.1%). Asia Pacific and Global funds hold €128.3 billion (12.5%) and €137.1 billion (13.3%) respectively followed by South American strategy funds (€7.3 billion or 0.7%).

By number, European funds constitute the largest group: 62.6% of all reported vehicles had a European mandate. Funds targeting Asia Pacific were the second largest group (17.7%), followed by funds with North American (14.1%) and South American (1.4%) 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 GAVs of North American and Global funds fall in the €1.5 to €2.0 billion range. The average size of European and Asia Pacific funds, in contrast, is less than €0.5 billion.

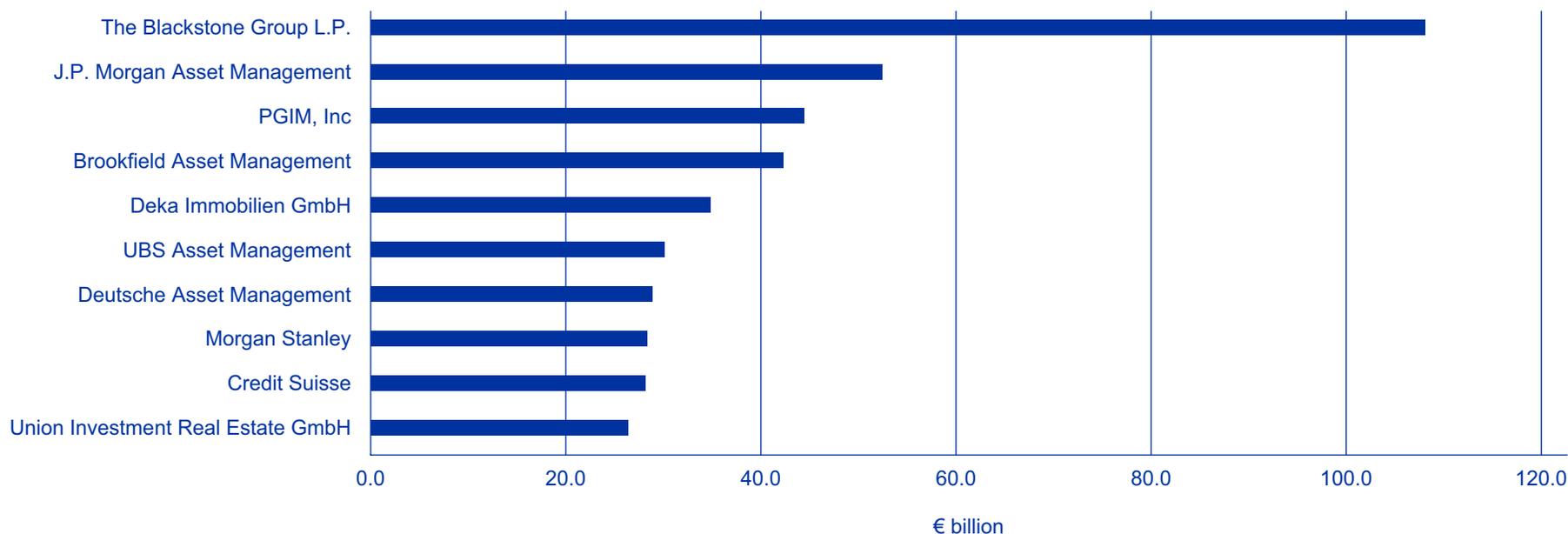
**Figure 25: Non-listed direct real estate funds**



The top 10 fund managers according to the size of their non-listed real estate funds, manage €423.5 billion in total, a 6.0% increase compared to last year. Within the top 10, the Blackstone Group ranks first, with €108.0 billion of non-listed real estate funds. JP Morgan Asset Management is in the second place with €52.4 billion, followed by PGIM with €44.5 billion.

This group contains a greater proportion of European domiciled fund managers such as Deka Immobilien, UBS Asset Management, Deutsche Asset Management, Credit Suisse and Union Investment Real Estate. The remaining positions are 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 GAV of €29.6 billion. The Blackstone Group is second with its €25.7 billion of AUM of non-listed real estate funds. Credit Suisse is ranked third, with funds’ AUM of €25.1 billion

In Asia Pacific, AMP Capital is the largest

manager of non-listed real estate funds, with a total value of €9.8 billion of AUM. ISPT lies in second place with €9.1 billion of AUM. Lendlease occupies the third position with €9.0 billion.

For North American strategies, J.P. Morgan Asset Management ranks first with €49.3 billion of non-listed direct real estate funds AUM. PGIM Investors is second (€38.7 billion) and UBS Asset Management is third (€23.9 billion).

When it comes to funds with global strategies, The Blackstone Group is again at the top. Its €67.2 billion AUM sets it apart from its peers. Brookfield Asset Management follows suit with €25.0 billion of funds AUM. Walton Street Capital is third in ranking (€7.4 billion) closely followed by Morgan Stanley (€7.1 billion).

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

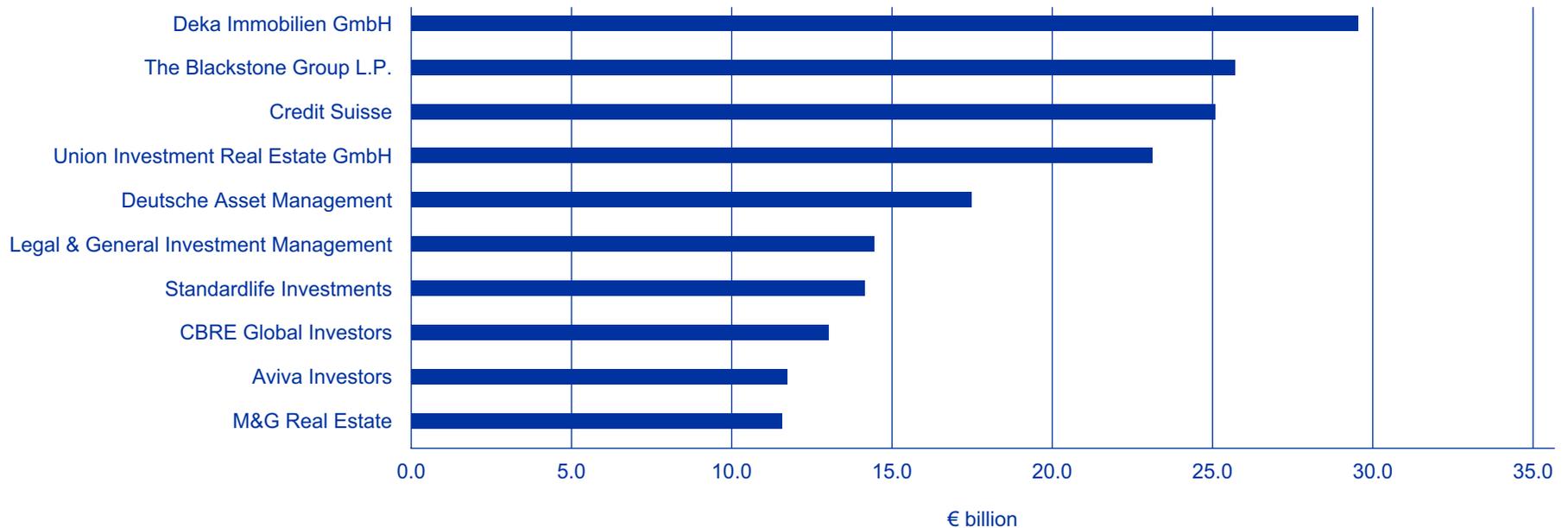


Figure 28: Top 10 fund managers by Asia Pacific non-listed real estate funds

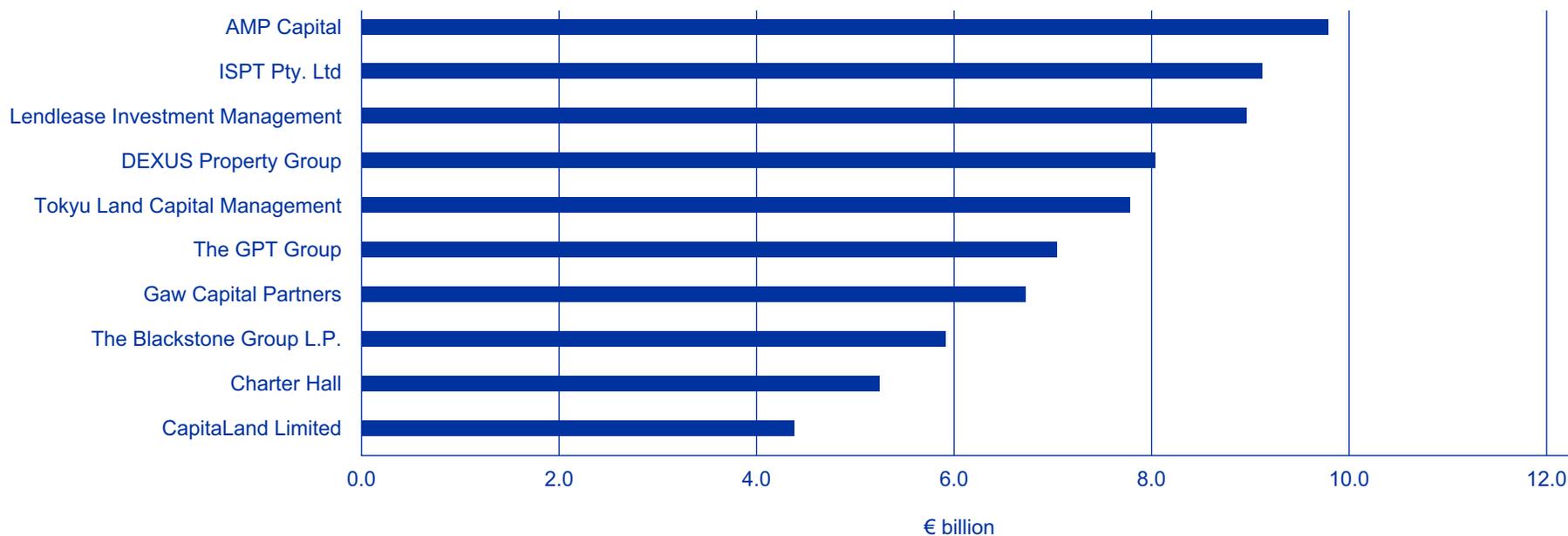


Figure 29: Top 10 fund managers by North American non-listed real estate funds

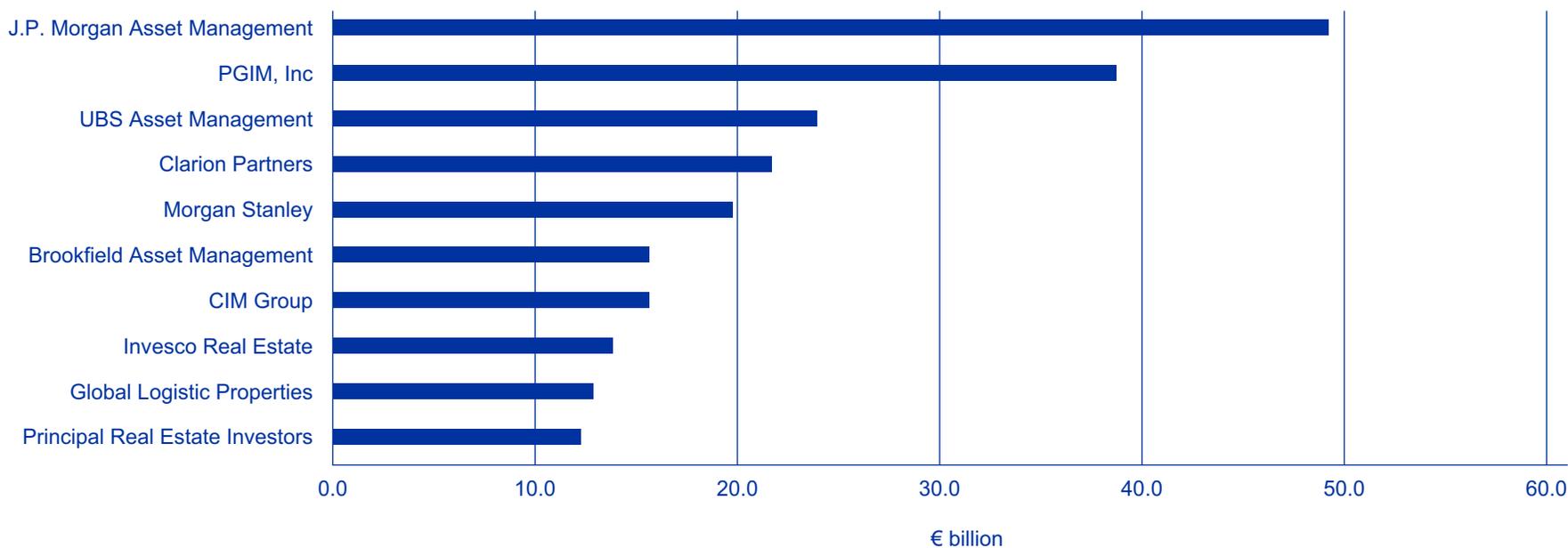
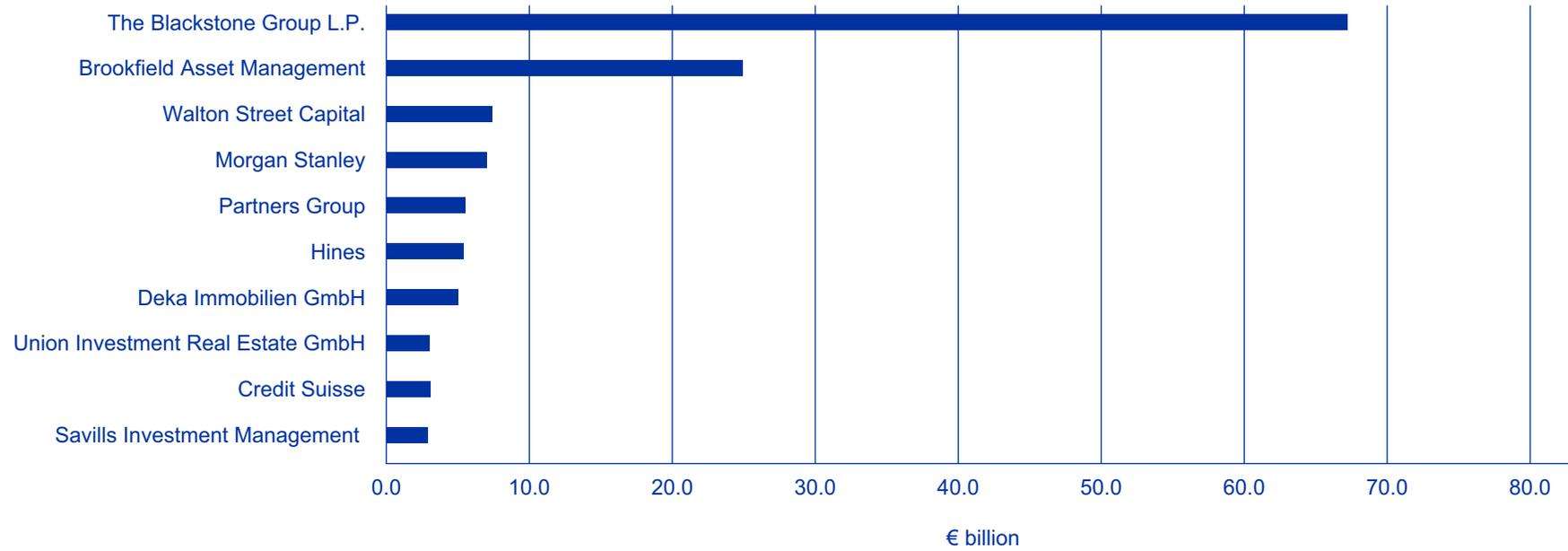


Figure 30: Top 10 fund managers by non-listed real estate funds of global strategies

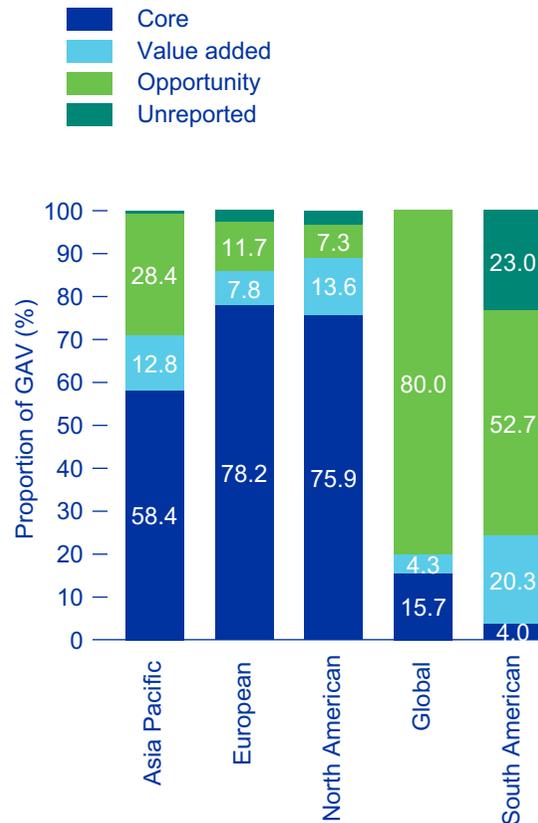


## Non-listed real estate funds by investment strategies

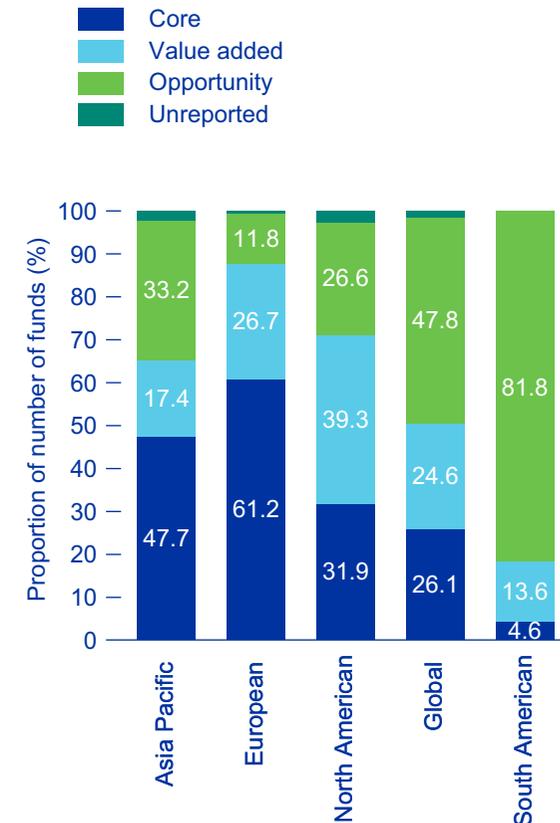
Considering investment style and regional strategies, funds fall into two broad camps (measured by value): the Global and South American strategies, where the higher risk value added and opportunity styles are most common, and Asia Pacific, European and North American strategies, where core is dominant. It is striking that 80.0% of the assets in global strategies have an opportunity style.

When the same style analysis within regional strategies is done by number of funds rather than asset value, a slightly different picture emerges. The prevalence of core in North American mandates is less marked, reflecting the large size of a relatively small number of core funds with 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**



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

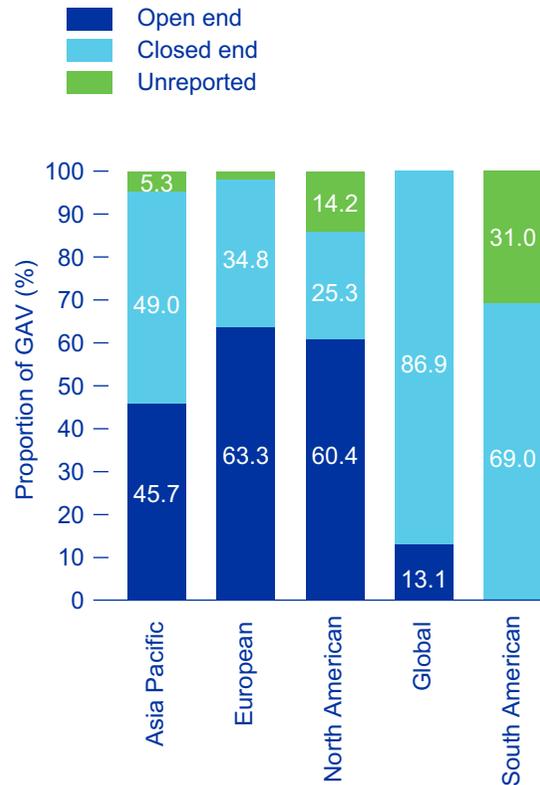


Turning to the structure within each regional strategy measured by asset values, open end structures are preferred for the European and North American strategies while closed end structures are the preference for global and South American strategies. For Asia Pacific strategies there is a more even split between open end and closed end.

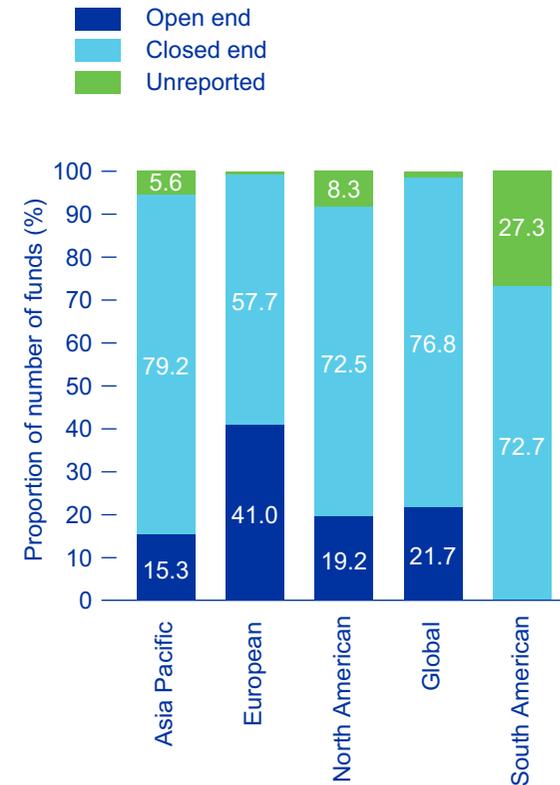
When the same structure analysis within regional strategies is done by number of funds rather than asset value, a different picture emerges. The preference for open end structures in European and North American mandates is less marked, reflecting the large size of a relatively small number of open end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

Asia Pacific strategies as measured by number rather than value show a strong preference (79.2%) for closed end structures.

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



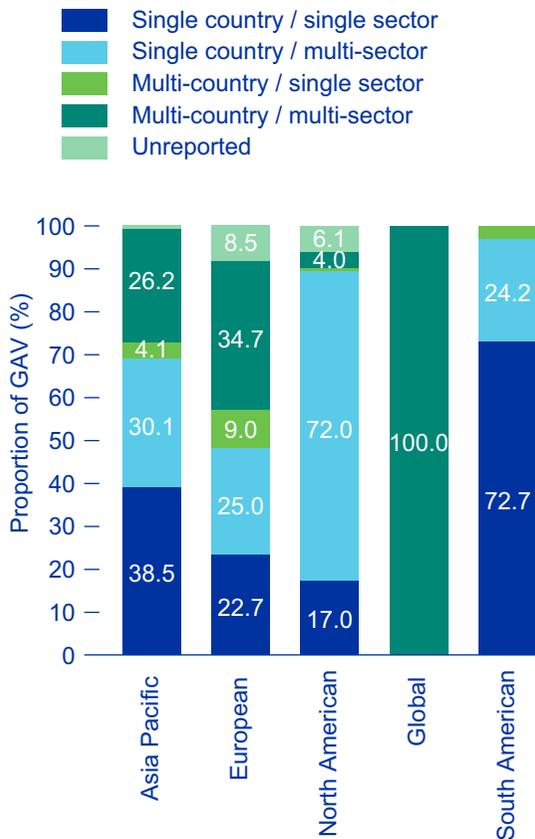
**Figure 34: Number of non-listed real estate funds by structure and regional strategy**



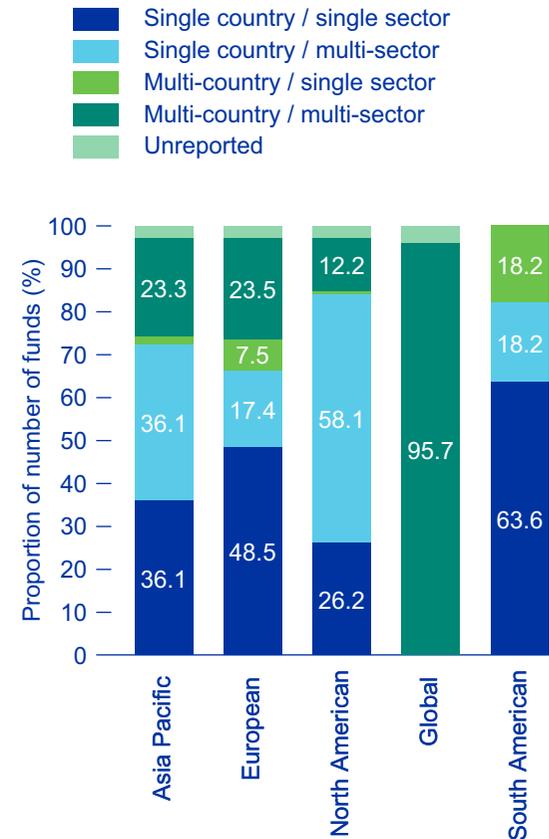
Turning now to the details of country and sector selection within each regional strategy, and starting with value-based analysis, the data indicate the clearest preference for single country and single sector approaches in Asia Pacific strategies. At the opposite end of the diversification spectrum, global strategies take a 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. North American strategies are dominated by the single country, multi-sector approach, reflecting the size of open end core diversified US funds.

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



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



# 6. Mergers and Acquisitions

This section provides an overview of the merger and acquisitions (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, 17.8% indicated yes with the remaining 82.2% opting for no. For acquisition activities, 20.6% indicated yes, with the remaining

79.4% opting for no. In broad terms, therefore, 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).

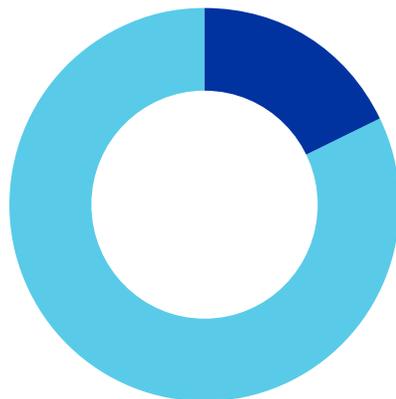
These responses were grouped under headings such as scale, enhanced product offering, expanding geographic

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 (36.2%), followed by geographic (17%) and product (10.6%). The acknowledged importance of achieving scale is consistent with the trend towards consolidation and concentration that is noted in the Executive Summary.

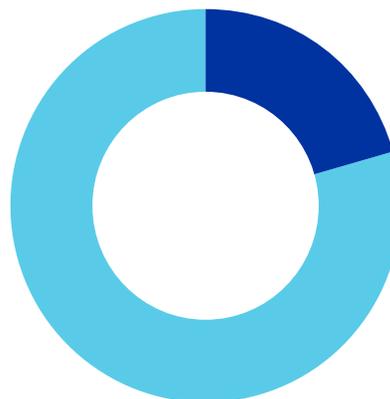
**Figure 37: Merger activities in the past 10 years**

17.8% Yes  
82.2% No



**Figure 38: Acquisition activities in the past 10 years**

20.6% Yes  
79.4% No



**Figure 39: Motivations for merger and acquisition activity**

36.2% Scale  
10.6% Product  
4.3% Opportunistic  
17.0% Geographic  
4.3% Diversification  
6.4% Multi-rationale  
21.2% Other





# Appendix 1: Top 50 fund managers based on total real estate assets under management

Position	Fund manager	Total AUM (€ million)	Percentage breakdown by regional vehicle strategy							Other
			Non-listed / commingled real estate funds / private REITs *	Separate accounts investing directly into real estate	Separate accounts investing into indirect vehicles	Joint ventures and club deals	Fundsof funds	Non-listed debt products	Listed real estate companies / public REITs	
1	The Blackstone Group L.P.	143185.0	75.4%	17.1%				7.5%		
2	Brookfield Asset Management	140502.7	30.0%	0.2%		21.4%		2.7%		45.7%
3	PGIM, Inc	115536.9	38.5%	9.0%		0.1%		47.1%	5.3%	
4	TH Real Estate	91838.1	20.2%	43.0%	0.1%	13.4%		23.3%		
5	Hines	90603.3	9.0%	8.4%		82.6%				
6	CBRE Global Investors	82197.5	30.1%	28.2%	14.0%	0.9%	6.4%	0.2%	20.2%	
7	UBS Asset Management	73970.8	40.7%	7.0%	4.7%		9.7%	3.9%	33.9%	
8	Principal Real Estate Investors	68233.9	18.0%	30.5%				22.1%	17.5%	11.9%
9	AXA Investment Managers - Real Assets	66444.8	15.8%	49.7%		14.9%		15.4%	4.2%	
10	J.P. Morgan Asset Management	65002.5	80.5%	18.4%		0.8%		0.2%		
11	Invesco Real Estate	64388.4	29.3%	29.5%					41.2%	
12	AEW	60108.0	35.7%	40.8%		11.3%		0.9%	11.3%	
13	LaSalle Investment Management	55062.8	14.7%	50.3%	2.3%			2.3%	30.4%	
14	CapitaLand Limited	51441.7	8.5%	0.2%		30.8%			34.5%	26.0%
15	Deutsche Asset Management	49954.0	57.6%	25.0%					17.4%	
16	Credit Suisse	47826.8	58.9%	25.1%	3.8%	0.1%	0.7%		11.3%	
17	Aviva Investors	43706.6	27.0%	22.2%	15.4%	3.6%	1.0%	30.8%		
18	Tishman Speyer	43471.7	28.8%			71.2%				
19	Clarion Partners	41780.3	51.9%	48.1%						
20	Deka Immobilien GmbH	36187.0	96.0%			1.0%	1.2%	1.7%		
21	Heitman	34535.3	28.9%	59.1%				1.5%	10.4%	
22	Prologis	34441.6	44.8%			36.5%			18.7%	
23	Fosun Property Holding	34169.9		0.6%					16.7%	82.8%
24	M&G Real Estate	30697.2	45.8%	48.0%	4.5%	1.8%				
25	Morgan Stanley	30018.2	94.5%	5.5%						

Position	Fund manager	Total AUM (€ million)	Non-listed / commingled real estate funds / private REITs *	Separate accounts investing directly into real estate	Separate accounts investing into indirect vehicles	Joint ventures and club deals	Fundsof funds	Non-listed debt products	Listed real estate companies / public REITs	Other
26	Union Investment Real Estate GmbH	27741.0	94.8%	5.2%						
27	Mapletree Investments Pte Ltd	25285.7	11.4%						55.3%	33.2%
28	BNP Paribas REIM	24064.0	42.0%	31.8%		2.7%		0.7%		22.7%
29	Goodman Group	23871.0				93.6%			6.4%	
30	Aberdeen Asset Management	22826.2	36.6%	55.1%			8.3%			
31	Legal & General Investment Management	21679.9	66.7%	25.0%		8.3%				
32	Amundi Real Estate	20853.9	51.2%	27.0%	0.7%	21.2%				
33	Standardlife Investments	20784.4	70.0%	19.1%		7.9%		3.0%		
34	Global Logistic Properties	19827.1	90.3%			9.7%				
35	BlackRock	19449.3	50.9%	40.8%				1.0%	1.2%	6.1%
36	Syntrus Achmea Real Estate & Finance	17817.0	13.2%	32.3%		2.2%	3.8%	48.1%		0.4%
37	CIM Group	17505.4	89.0%	9.5%				1.5%		
38	Vicinity Centres	16825.0		2.6%	6.2%	0.0%			61.8%	29.4%
39	USAA Real Estate Company	16746.1	36.2%	24.3%				12.6%		27.0%
40	Lendlease Investment Management	16669.3	59.6%	9.2%		31.1%				
41	Savills Investment Management	16187.0	50.6%	34.5%	14.9%					
42	DEXUS Property Group	15570.5	51.5%						48.5%	
43	AMP Capital	14785.5	67.2%	29.2%	3.6%					
44	Catella	14300.0	66.4%	31.5%			2.1%			
45	Kenedix	13845.9	3.9%		26.2%				69.9%	
46	The GPT Group	13182.8	53.4%						46.6%	
47	Charter Hall	13033.0	40.3%	7.1%		31.3%			21.3%	
48	Gaw Capital Partners	11592.0	67.5%	32.5%						
49	Jamestown US	11390.0	91.7%			8.3%				
50	Ascendas-Singbridge Pte Ltd	10829.2	19.8%	1.1%		6.4%			72.6%	

# Appendix 2: Top 50 fund managers based on non-listed direct real estate vehicles

Position	Name	Total GAV (€ million)	Asia Pacific	European	North American	Global	South American	African
1	The Blackstone Group L.P.	132407.3	4.8%	20.8%	13.0%	61.5%		
2	Hines	90603.3	2.3%	15.8%	73.9%	6.0%	2.0%	
3	Brookfield Asset Management	72529.3	5.4%	21.7%	36.0%	34.5%	2.4%	
4	J.P. Morgan Asset Management	64877.9	1.9%	7.5%	90.6%			
5	PGIM, Inc	55000.2	10.0%	10.3%	78.4%		1.4%	
6	AXA Investment Managers - Real Assets	53430.3	7.2%	92.0%	0.8%			
7	AEW	52727.0	1.9%	48.9%	49.2%			
8	CBRE Global Investors	48692.1	3.9%	57.7%	38.4%			
9	Tishman Speyer	43471.7	10.7%	16.6%	69.7%		3.1%	
10	Clarion Partners	41780.3			99.7%		0.3%	
11	Deutsche Asset Management	41276.0	2.0%	56.9%	41.0%	0.2%		
12	Credit Suisse	40236.0	0.1%	92.1%	0.1%	7.7%		
13	Invesco Real Estate	37863.8	8.2%	17.6%	68.2%	6.1%		
14	LaSalle Investment Management	35817.6	14.0%	46.8%	39.0%		0.2%	
15	UBS Asset Management	35320.0	0.9%	20.6%	77.2%	1.3%		
16	Deka Immobilien GmbH	35127.0		85.3%	0.3%	14.4%		
17	Principal Real Estate Investors	33100.0			100.0%			
18	Heitman	30415.0	2.4%	12.4%	85.2%			
19	Morgan Stanley	30018.2	4.8%	5.5%	66.0%	23.7%		
20	M&G Real Estate	29221.4	8.3%	53.2%		38.5%		
21	Prologis	28011.3	4.3%	42.0%	53.2%		0.5%	
22	Union Investment Real Estate GmbH	27741.0		88.6%		11.4%		
23	Aviva Investors	23112.5		99.8%	0.2%			
24	Goodman Group	22352.6	79.1%	18.5%	2.3%			
25	Legal & General Investment Management	21679.9		100.0%				

Position	Name	Total GAV (€ million)	Asia Pacific	European	North American	Global	South American	African
26	Aberdeen Asset Management	20939.9		100.0%				
27	Amundi Real Estate	20716.7		99.8%				0.2%
28	CapitaLand Limited	20334.5	99.4%			0.6%		
29	Standardlife Investments	20160.7		98.2%		1.8%		
30	Global Logistic Properties	19827.1	24.9%		64.8%		10.3%	
31	BNP Paribas REIM	18432.0	0.7%	99.3%				
32	BlackRock	17834.8	27.3%	29.1%	43.5%			
33	CIM Group	17246.3			100.0%			
34	Lendlease Investment Management	16669.3	94.2%	5.8%				
35	AMP Capital	14247.0	98.9%		1.1%			
36	Catella	14000.0		100.0%				
37	Savills Investment Management	13773.0	6.9%	71.5%		21.6%		
38	Gaw Capital Partners	11592.0	65.7%	17.7%	16.6%			
39	Jamestown US	11390.0			98.3%		1.7%	
40	Charter Hall	10259.6	100.0%					
41	USAA Real Estate Company	10116.2			100.0%			
42	TRIUVA Kapitalverwaltungsgesellschaft mbH	9869.2		99.4%	0.6%			
43	Ares Management	9206.9		32.0%	68.0%			
44	ISPT Pty. Ltd	9114.5	100.0%					
45	Walton Street Capital	8815.4			16.0%	84.0%		
46	Partners Group	8662.7	3.2%	2.6%		94.2%		
47	Syntrus Achmea Real Estate & Finance	8508.0	0.6%	98.7%	0.7%			
48	DEXUS Property Group	8025.3	100.0%					
49	IGIS Asset Management	8000.4	87.0%	8.6%	4.4%			
50	Rockspring PIM	7939.4		100.0%				

# Appendix 3: Top 50 fund managers based on non-listed / commingled real estate funds / private REITs

Position	Name	Total GAV (€ million)	Asia Pacific	European	North American	Global	South American	African
1	The Blackstone Group L.P.	107959.7	5.5%	23.8%	8.4%	62.3%		
2	J.P. Morgan Asset Management	52355.3	2.3%	3.6%	94.1%			
3	PGIM, Inc	44538.5	6.6%	5.1%	86.9%		1.3%	
4	Brookfield Asset Management	42177.0	0.2%		37.1%	59.3%	3.4%	
5	Deka Immobilien GmbH	34748.0		85.1%	0.3%	14.6%		
6	UBS Asset Management	30108.8	0.7%	19.8%	79.5%			
7	Deutsche Asset Management	28767.0		60.8%	39.0%	0.2%		
8	Morgan Stanley	28355.3	1.3%	3.8%	69.9%	25.1%		
9	Credit Suisse	28177.8		89.0%		11.0%		
10	Union Investment Real Estate GmbH	26306.0		88.0%		12.0%		
11	CBRE Global Investors	24773.2	4.2%	52.5%	43.3%			
12	Clarion Partners	21672.2			100.0%			
13	AEW	21467.0	4.5%	40.1%	55.4%			
14	Invesco Real Estate	18853.8	6.2%	17.9%	73.5%	2.4%		
15	Global Logistic Properties	17913.6	16.8%		71.7%		11.4%	
16	CIM Group	15580.5			100.0%			
17	Prologis	15441.9		47.0%	53.0%			
18	Standardlife Investments	14540.7		97.5%		2.5%		
19	Legal & General Investment Management	14468.1		100.0%				
20	M&G Real Estate	14057.3	17.3%	82.7%				
21	Tishman Speyer	12529.0	18.2%	41.7%	30.3%		9.8%	
22	Principal Real Estate Investors	12275.9			100.0%			

Position	Name	Total GAV (€ million)	Asia Pacific	European	North American	Global	South American	African
23	Aviva Investors	11821.1		99.5%	0.5%			
24	Amundi Real Estate	10669.9		99.6%				0.4%
25	AXA Investment Managers - Real Assets	10491.3	0.3%	98.4%	1.3%			
26	Jamestown US	10440.8			98.2%		1.8%	
27	BNP Paribas REIM	10116.0		100.0%				
28	Heitman	9989.9		11.4%	88.6%			
29	Lendlease Investment Management	9938.3	90.3%	9.7%				
30	AMP Capital	9930.9	98.5%		1.5%			
31	BlackRock	9896.0	24.7%	49.9%	25.4%			
32	Catella	9500.0		100.0%				
33	Ares Management	9206.9		32.0%	68.0%			
34	ISPT Pty. Ltd	9114.5	100.0%					
35	Walton Street Capital	8815.4			16.0%	84.0%		
36	Aberdeen Asset Management	8364.3		100.0%				
37	Savills Investment Management	8192.0	5.8%	57.9%		36.3%		
38	Hines	8118.2	3.4%	24.8%	5.4%	66.4%		
39	DEXUS Property Group	8025.3	100.0%					
40	Gaw Capital Partners	7824.7	86.0%		14.0%			
41	Angelo, Gordon & Co., L.P.	7805.0	15.6%	7.4%	77.0%			
42	Tokyu Land Capital Management	7778.7	100.0%					
43	Crow Holdings Capital Partners, L.L.C.	7735.5			100.0%			
44	LaSalle Investment Management	7709.1	18.2%	22.8%	57.9%		1.1%	
45	Tristan Capital Partners	7283.2		100.0%				
46	The GPT Group	7038.6	100.0%					
47	KGAL Capital GmbH & Co. KG	6923.1		100.0%				
48	Redevco	6675.0		100.0%				
49	American Realty Advisors	6538.2			100.0%			
50	USAA Real Estate Company	6054.7			100.0%			

# Appendix 4: List of respondents

## List of participants

Company	Total AUM (€ million)	Non-listed direct real estate vehicles (€ million)	Non-listed real estate funds (€ million)
a.s.r. vastgoed vermogensbeheer	3066.0	3066.0	3066.0
Aberdeen Asset Management	22826.2	20939.9	8364.3
Aermont	3986.0	3986.0	3986.0
Aetos Capital Real Estate, LP	431.9	431.9	431.9
AEW	60108.0	52727.0	21467.0
AIREF	2900.0	1800.0	1600.0
AltaFund	354.0	354.0	
Altamar Real Estate	292.0	292.0	292.0
Altera Vastgoed NV	1834.0	1834.0	1834.0
Altis Property Partners	1155.1	1155.1	456.8
American Realty Advisors	7604.0	7604.0	6538.2
AMP Capital	14785.5	14247.0	9930.9
Amundi Real Estate	20853.9	20716.7	10669.9
Amvest	3867.0	3867.0	2348.0
Angelo, Gordon & Co., L.P.	8368.8	7936.0	7805.0
ARA Asset Management	7710.1	7710.1	698.6
ARDIAN	85.0	85.0	85.0
Areim	1462.7	1462.7	835.8
Ares Management	9.2	9206.9	9206.9
Arminius Funds Management Limited	670.0	670.0	
Ascendas-Singbridge Pte Ltd	10829.2	2967.1	2146.5
Aventus	1028.9	102.9	
Aviva Investors	43706.6	23112.5	11821.1
Aviva Investors Real Estate Indirect Investment	6208.8	5539.7	
AXA Investment Managers - Real Assets	66444.8	53430.3	10491.3

<b>Company</b>	<b>Total AUM (€ million)</b>	<b>Non-listed direct real estate vehicles (€ million)</b>	<b>Non-listed real estate funds (€ million)</b>
BlackRock	<b>19449.3</b>	17834.8	9896.0
BMO Real Estate Partners	<b>7716.3</b>	5761.5	3194.9
BNP Paribas Investment Partners	<b>2322.0</b>		
BNP Paribas REIM	<b>24064.0</b>	18432.0	10116.0
Bouwfonds Investment Management	<b>5927.0</b>	5927.0	4330.0
Bouwinvest REIM	<b>8457.0</b>	5828.0	5828.0
Brookfield Asset Management	<b>140502.7</b>	72529.3	42177.0
CAERUS Debt Investments AG	<b>854.0</b>		
CapitaLand Limited	<b>51441.7</b>	20334.5	4393.5
Castello SGR SPA	<b>2200.0</b>	2200.0	2200.0
Catalyst Capital	<b>1750.0</b>	1750.0	550.0
Catella	<b>14300.0</b>	14000.0	9500.0
CBRE Global Investors	<b>82197.5</b>	48692.1	24773.2
Charter Hall	<b>13033.0</b>	10259.6	5251.3
CIM Group	<b>17505.4</b>	17246.3	15580.5
CITIC Capital Holdings Limited	<b>2151.8</b>	2151.8	2151.8
City Square REI	<b>569.5</b>	569.5	
Clarion Partners	<b>41780.3</b>	41780.3	21672.2
Clearbell Capital LLP	<b>749.7</b>	749.7	749.7
COIMA SGR	<b>6468.0</b>	3829.0	3829.0
Cording Real Estate Group	<b>1397.0</b>	1397.0	309.0
Credit Suisse	<b>47826.8</b>	40236.0	28177.8
CreditEase Asset Management (Singapore) Pte Ltd	<b>990.2</b>		
Cromwell Property Group	<b>6721.0</b>	4317.0	2125.0
Crow Holdings Capital Partners, L.L.C.	<b>7735.5</b>	7735.5	7735.5
Deka Immobilien GmbH	<b>36187.0</b>	35127.0	34748.0

<b>Company</b>	<b>Total AUM (€ million)</b>	<b>Non-listed direct real estate vehicles (€ million)</b>	<b>Non-listed real estate funds (€ million)</b>
Deutsche Asset Management	<b>49954.0</b>	41276.0	28767.0
DEXUS Property Group	<b>15570.5</b>	8025.3	8025.3
DNB Life / DNB REIM	<b>2000.0</b>	2000.0	
DRC Capital	<b>1780.8</b>		
ECE Real Estate Partners S.à r.l.	<b>2979.9</b>	2979.9	2979.9
EG Funds Management	<b>1646.2</b>	1646.2	1646.2
Egw Asset Management	<b>1300.8</b>	1300.8	154.5
Equity Estate	<b>275.0</b>	275.0	275.0
ESR Singapore Pte Ltd	<b>2187.8</b>	2187.8	1270.3
Europa Capital	<b>2710.0</b>	2518.0	2467.0
EZLand	<b>66.4</b>	66.4	19.0
Fabrica Immobiliare SGR	<b>3200.0</b>	3050.0	3050.0
Fife Capital	<b>2107.2</b>	2107.2	513.8
First Brothers Co., Ltd	<b>261.6</b>	261.6	
Fortius Funds Management	<b>493.9</b>	493.9	493.9
Fosun Property Holding	<b>34169.9</b>	189.8	
Franklin Templeton	<b>3218.8</b>		
FREO Group	<b>2000.0</b>	2000.0	
Gaw Capital Partners	<b>11592.0</b>	11592.0	7824.7
GEG German Estate Group AG	<b>1700.0</b>	1700.0	
Genesta Nordic Property	<b>218.8</b>	218.8	218.8
Global Logistic Properties	<b>19827.1</b>	19827.1	17913.6
Goodman Group	<b>23871.0</b>	22352.6	
GreenOak Real Estate	<b>6705.8</b>	6327.1	4005.5
Grosvenor Europe	<b>3420.5</b>	3420.5	1820.7
GTIS Partners	<b>3436.9</b>	3436.9	2697.5

<b>Company</b>	<b>Total AUM (€ million)</b>	<b>Non-listed direct real estate vehicles (€ million)</b>	<b>Non-listed real estate funds (€ million)</b>
Guggenheim Real Estate LLC	<b>1443.4</b>	1422.3	1422.3
Hahn Group	<b>2750.0</b>	2750.0	2150.0
Hartelt Fund Management B.V.	<b>0.6</b>	0.6	0.6
HB Reavis Investment Management	<b>311.3</b>	311.3	191.4
Heitman	<b>34535.3</b>	30415.0	9989.9
Helaba Invest	<b>5260.0</b>		
Hines	<b>90603.3</b>	90603.3	8118.2
Hunter Real Estate Investment Managers	<b>331.6</b>	331.6	123.8
IGIS Asset Management	<b>10058.9</b>	8000.4	4.5
IL&FS Investment Managers	<b>835.3</b>	835.3	835.3
Intermediate Capital Group	<b>3548.7</b>		
IntReal International Real Estate KVG mbH	<b>13.5</b>		
Invesco Real Estate	<b>64388.4</b>	37863.8	18853.8
Investa	<b>3104.0</b>	3104.0	3104.0
IPUT plc	<b>2079.0</b>	2079.0	
ISPT Pty. Ltd	<b>9114.5</b>	9114.5	9114.5
J.P. Morgan Asset Management	<b>65002.5</b>	64877.9	52355.3
Jamestown US	<b>11390.0</b>	11390.0	10440.8
Jensen Group	<b>427.1</b>	427.1	427.1
KaiLong Investments	<b>1233.9</b>	1233.9	1233.9
Kenedix	<b>13845.9</b>		
KGAL Capital GmbH & Co. KG	<b>7223.4</b>	6923.1	6923.1
knight frank investment management	<b>1751.6</b>	1751.6	291.9
Kristensen Properties	<b>1000.0</b>	1000.0	1000.0
Landmark Partners	<b>4105.9</b>		
LaSalle Investment Management	<b>55062.8</b>	35817.6	7709.1

<b>Company</b>	<b>Total AUM (€ million)</b>	<b>Non-listed direct real estate vehicles (€ million)</b>	<b>Non-listed real estate funds (€ million)</b>
LBO France	<b>507.0</b>	507.0	507.0
Legal & General Investment Management	<b>21679.9</b>	21679.9	14468.1
Lendlease Investment Management	<b>16669.3</b>	16669.3	9938.3
LimeTree Capital Advisors	<b>1008.0</b>	1008.0	869.4
Lothbury Investment Management Limited	<b>2152.1</b>	2119.4	1814.6
M&G Real Estate	<b>30697.2</b>	29221.4	14057.3
M7 Real Estate	<b>2403.0</b>	2403.0	1061.0
MacFarlane Partners	<b>2647.2</b>	2647.2	2154.6
Madison International Realty	<b>3104.6</b>	3073.3	2490.5
Mapletree Investments Pte Ltd	<b>25285.7</b>	2893.0	2893.0
Mayfair Capital Investment Management Limited	<b>1162.4</b>	1132.7	1132.7
Mitsui Fudosan Investment Advisors, Inc.	<b>10634.8</b>	7868.1	2283.9
Morgan Stanley	<b>30018.2</b>	30018.2	28355.3
Niam AB	<b>2809.0</b>	2809.0	2809.0
Northern Horizon Capital	<b>667.0</b>	512.0	265.0
NREP	<b>3283.0</b>	3283.0	2103.0
Optimum Asset Management (Luxembourg) S.A.	<b>1302.0</b>	1302.0	1302.0
OREIMA	<b>1127.0</b>	1127.0	465.0
Orion Partners Real Estate Group	<b>560.0</b>	560.0	370.2
PAG	<b>3787.2</b>	3787.2	3787.2
Pamfleet	<b>449.6</b>	449.6	447.0
Partners Group	<b>8857.2</b>	8662.7	5890.5
Peakside Capital	<b>913.0</b>	913.0	533.0
PGIM, Inc	<b>115536.9</b>	55000.2	44538.5
Piramal Fund Management Pvt. Ltd	<b>3919.8</b>	1196.9	730.0
Pradera	<b>2540.0</b>	2540.0	1135.0
Principal Real Estate Investors	<b>68233.9</b>	33100.0	12275.9

<b>Company</b>	<b>Total AUM (€ million)</b>	<b>Non-listed direct real estate vehicles (€ million)</b>	<b>Non-listed real estate funds (€ million)</b>
PROJECT Real Estate Trust / PROJECT Investment AG	<b>1700.0</b>	1700.0	1700.0
Prologis	<b>34441.6</b>	28011.3	15441.9
Propertylink	<b>706.5</b>	706.5	116.6
Proprium Capital Partners, L.P.	<b>2020.6</b>	2020.6	1871.4
Quadrant Real Estate Advisors	<b>7602.8</b>	36.1	36.1
Quantum Immobilien Kapitalverwaltungsgesellschaft mbH	<b>4712.0</b>	4414.0	2330.0
Redevco	<b>7000.0</b>	7000.0	6675.0
Rockspring PIM	<b>7978.2</b>	7939.4	4512.6
Rynda Property Investors LLP	<b>950.0</b>	950.0	56.0
Sarofim Realty Advisors Co.	<b>1922.1</b>	1922.1	199.3
Savills Investment Management	<b>16187.0</b>	13773.0	8192.0
SC Capital Partners	<b>487.0</b>	487.0	487.0
Sentinel Real Estate Corporation	<b>6432.5</b>	6432.5	2100.5
Seven Seas Advisors Co. LTD.	<b>552.8</b>	552.8	
SilkRoad Property Partners	<b>148.1</b>	148.1	148.1
Sirius Capital Partners	<b>760.0</b>	760.0	760.0
Sniper Capital Limited	<b>474.6</b>	94.9	94.9
sonae sierra	<b>6955.0</b>	4116.0	4116.0
Sparinvest Property Investors	<b>1091.0</b>	1091.0	750.0
STAM Europe	<b>685.3</b>	685.3	104.3
Standardlife Investments	<b>20784.4</b>	20160.7	14540.7
Starlight	<b>4933.6</b>	2819.2	
Swiss Life Asset Managers	<b>67.3</b>		
Syntrus Achmea Real Estate & Finance	<b>17817.0</b>	8508.0	2347.0
Tata Capital	<b>284.7</b>	284.7	
TH Real Estate	<b>91838.1</b>		
The Blackstone Group L.P.	<b>143185.0</b>	132407.3	107959.7

<b>Company</b>	<b>Total AUM (€ million)</b>	<b>Non-listed direct real estate vehicles (€ million)</b>	<b>Non-listed real estate funds (€ million)</b>
The GPT Group	<b>13182.8</b>	7038.6	7038.6
Tishman Speyer	<b>43471.7</b>	43471.7	12529.0
TKPI	<b>1670.0</b>	1350.0	1350.0
Tokyo Tatemono Investment Advisors Co.,Ltd.	<b>5339.9</b>	5320.4	943.6
Tokyu Land Capital Management	<b>7778.7</b>	7778.7	7778.7
Tristan Capital Partners	<b>7283.2</b>	7283.2	7283.2
TRIUVA Kapitalverwaltungsgesellschaft mbH	<b>9869.2</b>	9869.2	3574.6
UBS Asset Management	<b>73970.8</b>	35320.0	30108.8
Union Investment Real Estate GmbH	<b>27741.0</b>	27741.0	26306.0
USAA Real Estate Company	<b>16746.1</b>	10116.2	6054.7
Valparaiso Capital Partners	<b>260.1</b>	260.1	
Vesteda	<b>4207.0</b>	4207.0	4207.0
Vicinity Centres	<b>16825.0</b>	1472.7	
Walton Street Capital	<b>8815.4</b>	8815.4	8815.4
Warburg-HIH Invest Real Estate GmbH	<b>4900.0</b>	4900.0	4900.0
White Peak Real Estate Investment	<b>499.9</b>	499.9	499.9
Xander Investment Management	<b>1950.5</b>	1950.5	1160.8

# Appendix 5: 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 from 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: a fund providing real estate borrowers with the layer of financing that sits between senior debt and the equity in the capital structure.

2) Senior debt fund: a fund providing borrowers with loans that 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.

