

ANREV / INREV / NCREIF Fund Manager Survey **2018**

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.

INREV
ITO Tower, 8th floor
Gustav Mahlerplein 62
1082 MA Amsterdam, The Netherlands
+ 31 (0)20 235 8600 | research@inrev.org | www.inrev.org

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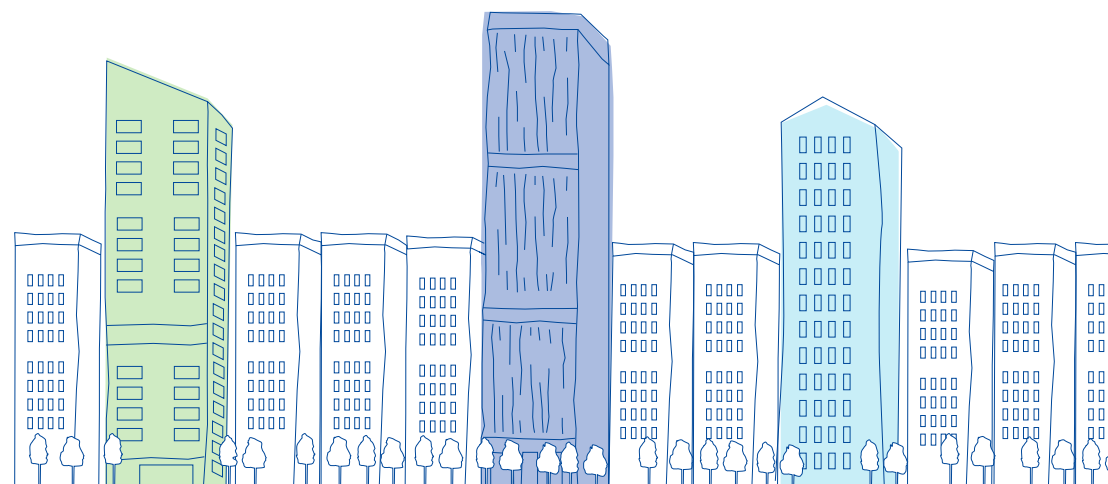
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Executive summary

- > Total real estate AUM grew by 11.6% over 2017, from €2.4 trillion to €2.7 trillion
- > Average AUM has increased again, by 22.8%, from €13.6 billion to €17.0 billion
- > The top five managers collectively account for more than €500 billion of AUM

Four consecutive years of solid growth

Total real estate assets under management (AUM) grew by 11.6% over the year, from €2.4 trillion at the end of 2016 to €2.7 trillion at the end of 2017, making 2017 the fourth consecutive year of growth for real estate assets under management.

Managers of all sizes have grown their assets

The average AUM across all managers continues to rise and has now reached €16.7 billion, compared to €13.6 billion previously. This represents growth of 22.8% over the year which is significantly higher than the 4.1% recorded in 2016 when the average AUM stood at €13.1 billion.

At the top of the rankings, five managers now represent total real estate AUM of more than €100 billion each. Previously only three managers exceeded the €100 billion threshold. At the end of 2017 the largest manager accounted for €184.3 billion, more than €40 billion higher than the €143.2 billion recorded previously.

With €184.3 billion of real estate AUM, The Blackstone Group tops the list of manager rankings. In second place is Brookfield Asset Management with €147.9 billion, followed by PGIM with €121.6 billion in third. Hines

and TH Real Estate conclude the quintet of managers with AUM in excess of €100 billion, with €104.7 billion and €103.8 billion respectively.

Regional variations in degrees of concentration

The degree of concentration among managers varies across the investment strategies. For global investment strategies, the top three largest players are much larger in terms of total AUM than the fourth-ranked player. However, this is not the case for all regional strategies. For Asia Pacific strategies the largest manager is much larger than the rest, while for European and North American strategies the leading players are bunched much more closely together.

The preference for product types also vary by regional strategy. Non-listed funds make up the majority of AUM among non-listed real estate vehicles generally. This is more pronounced for Asia Pacific strategies (58.8%) than for North American strategies (47.4%). JVs and clubs are next most prominent among Asia Pacific strategies, while separate accounts investing directly hold a larger share of AUM for European strategies. Debt products feature more strongly for North American strategies.

Pension funds are the most significant source of capital for real estate across all regions. Across the regional strategies the second most dominant source of capital varies. Sovereign wealth funds are the next most significant source of capital for Asia Pacific and North American strategies, while insurance companies take this spot for European strategies.

Increase in mergers and acquisitions

The trend towards consolidation in the real estate industry has led to an increase in merger and acquisition (M&A) activities. It is worth noting that almost one in four managers have been involved in M&A activities in the last ten years, a slight increase on the previous year when one in five were involved in M&As. The most often cited motivation for mergers and acquisitions was expansion of geographical footprint.

‘A quintet of managers with total real estate assets under management in excess of €100 billion’

Introduction

The ANREV / INREV / NCREIF Fund Manager Survey explores real estate assets under management, providing insights into regional compositions and vehicle types.

The survey was launched in 2011 and since 2015 was expanded to include global coverage. It is now published at the end of May each year.

This year's survey includes 162 managers and represents total real estate assets under management of €2.7 trillion as at end 2017.

The sample size and composition of the survey varies by year. Furthermore when figures were left unspecified aggregates include the not reported figures allowing for the sample to remain constant throughout the report. Therefore historical comparisons should be treated with caution.

All figures in the report are quoted as at 31 December 2017 unless stated otherwise.

The survey results are based on data provided directly to ANREV, INREV and NCREIF from managers. ANREV, INREV and NCREIF do not use publicly available information, and both members and non-members can provide data for the survey.

ANREV, INREV and NCREIF would like to thank all participants for contributing to the Fund Manager Survey.

Use

The results of the Fund Manager Survey may be used for research and information purposes only.

For time series of the Fund Manager Survey rankings download the supplementary Excel workbook.

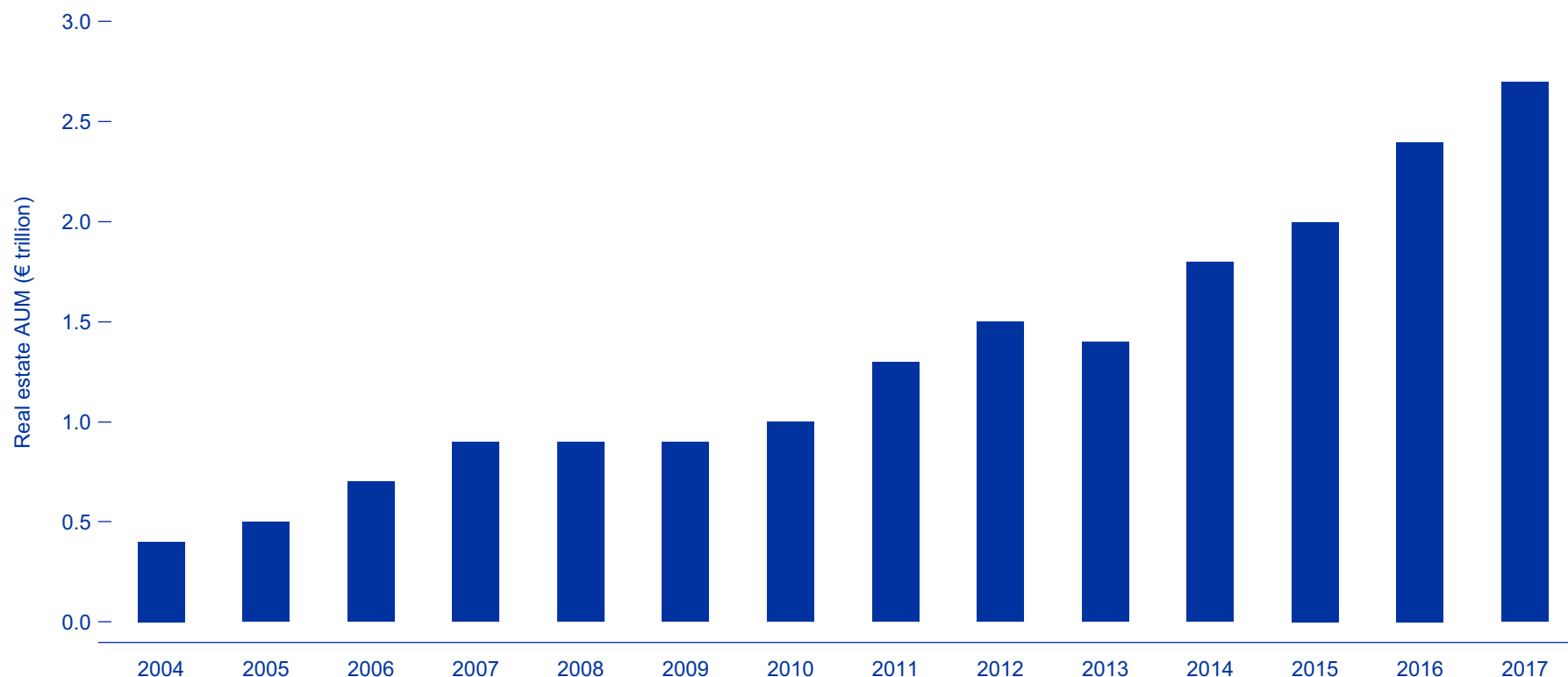
Total real estate assets under management

Total real estate assets under management grew by 11.6% from €2.4 trillion in 2016 to €2.7 trillion in 2017, making it the fourth consecutive year of growth. Over time the average AUM, that is the total AUM divided by the number of managers, has also recorded steady growth, and 2017 was no exception. In 2016 the average AUM was €13.6 billion and this rose by €3.1 billion (or 22.8%) to €16.7 billion for 2017.

The increase in the average was boosted by a notable increase in the larger managers. At the end of 2017 five managers recorded total real estate assets under management of more than €100 billion each. Contrast this with only three managers for the previous year when the largest manager was responsible for €143.2 billion. In 2017 the largest manager posted AUM of €184.3 billion, a 28.9% increase on the previous year.

The top 10 managers continue to represent a sizeable portion, 38.7%, of the overall AUM. This is a similar proportion to that observed in previous years.

Figure 1: Total real estate assets under management



Top 10 managers by total real estate AUM

Figure 2: Top 10 fund managers by total real estate AUM - Upper quartile

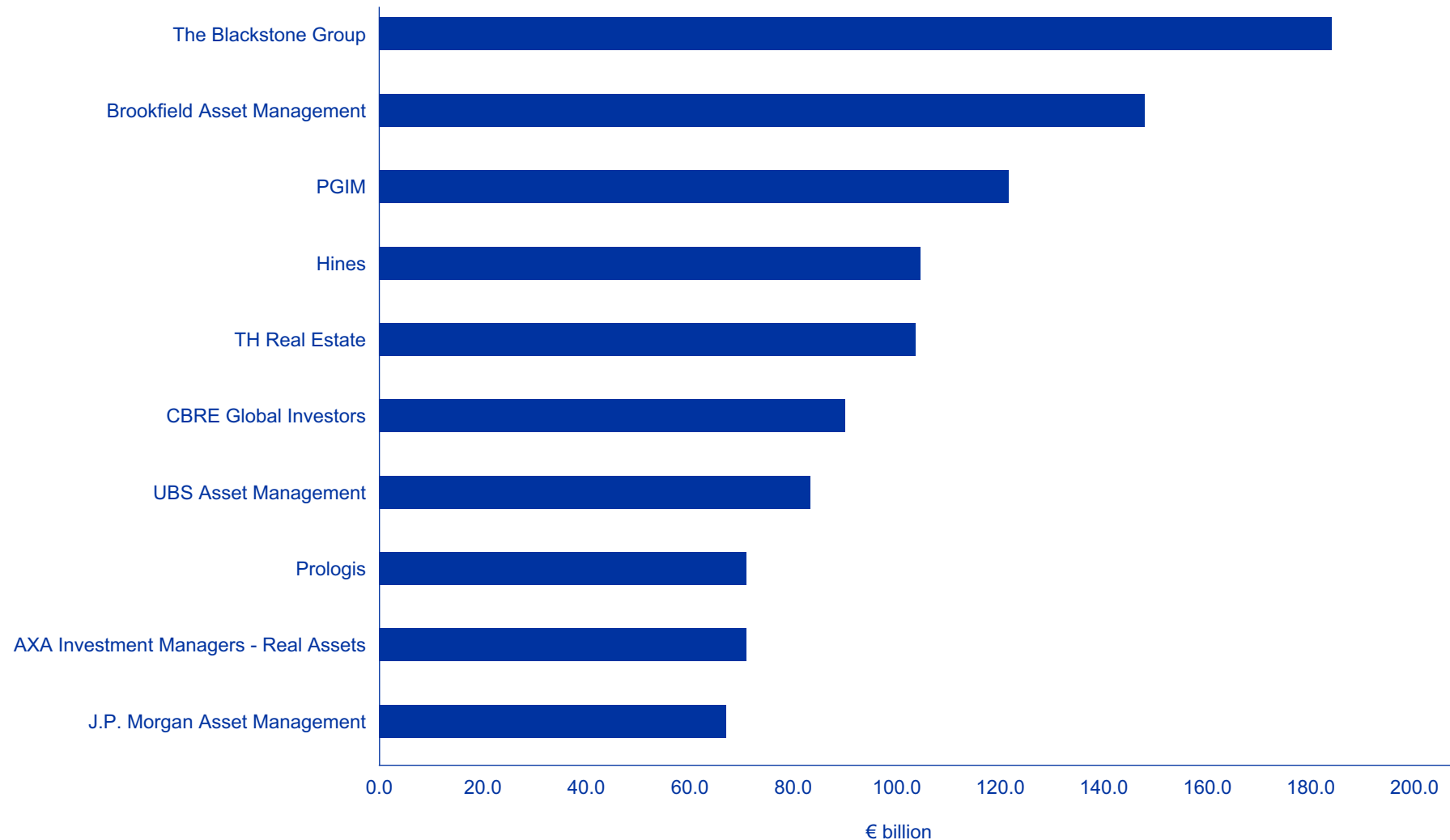


Figure 3: Top 10 fund managers by total real estate AUM - Third quartile

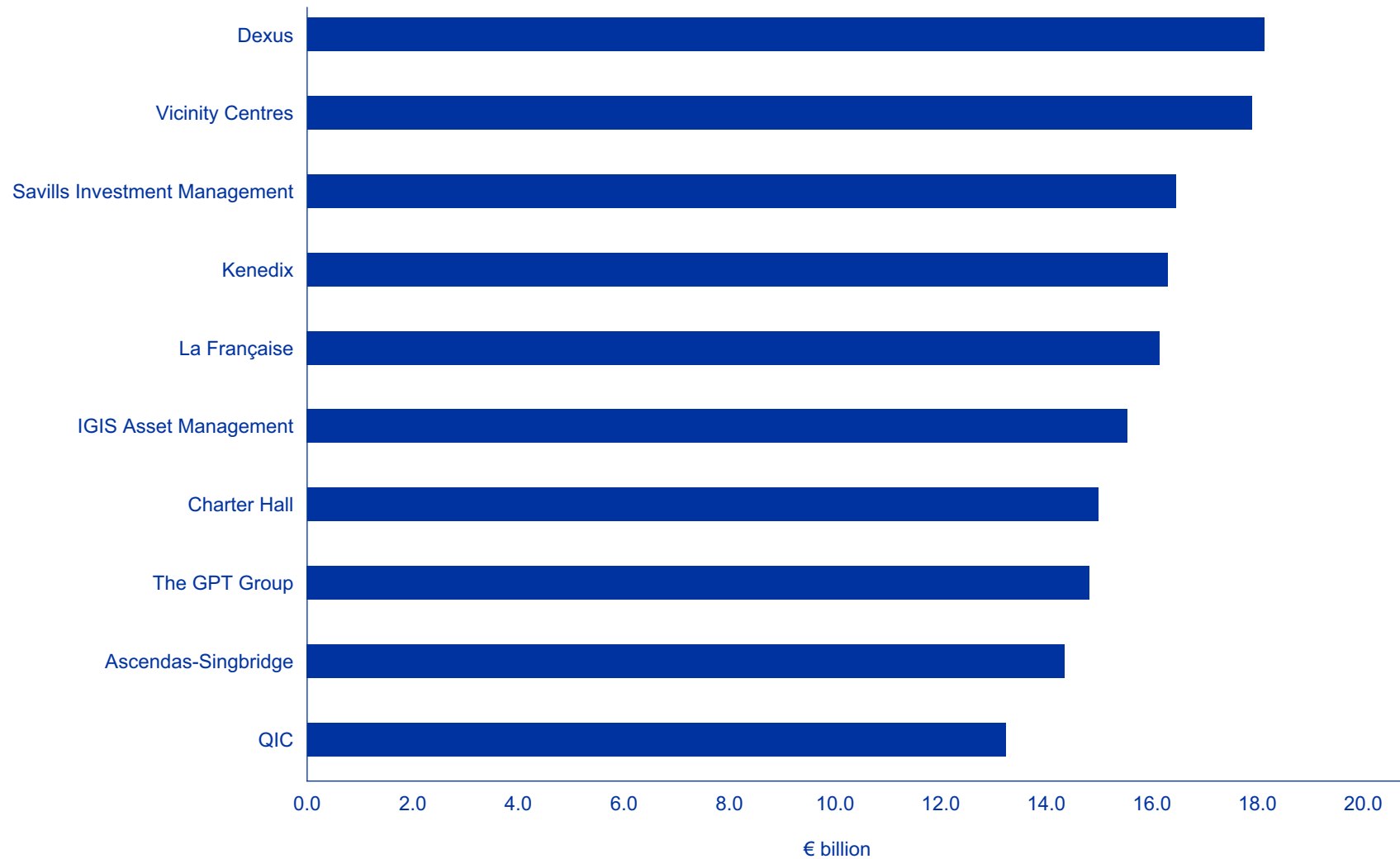


Figure 4: Top 10 fund managers by total real estate AUM - Second quartile

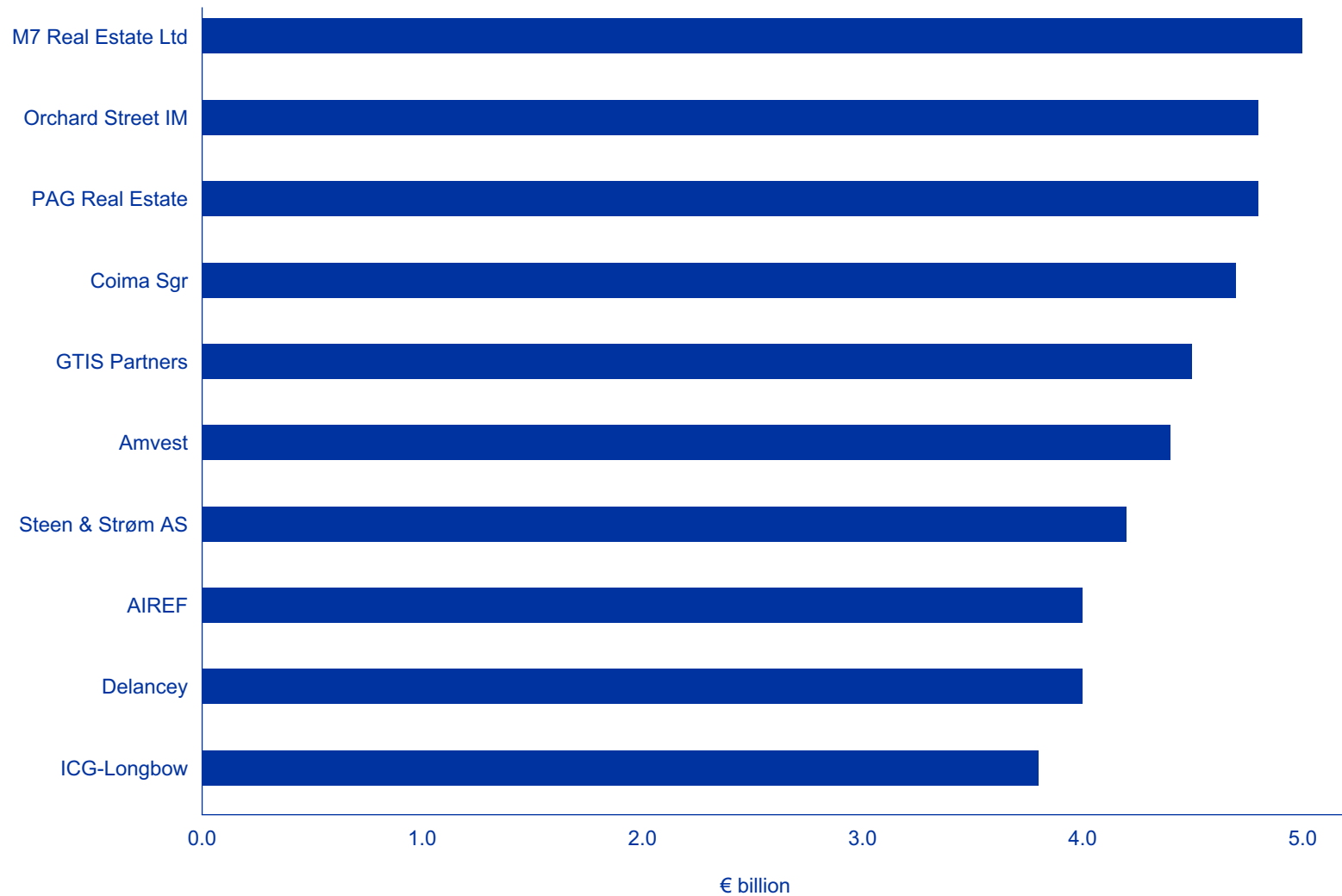
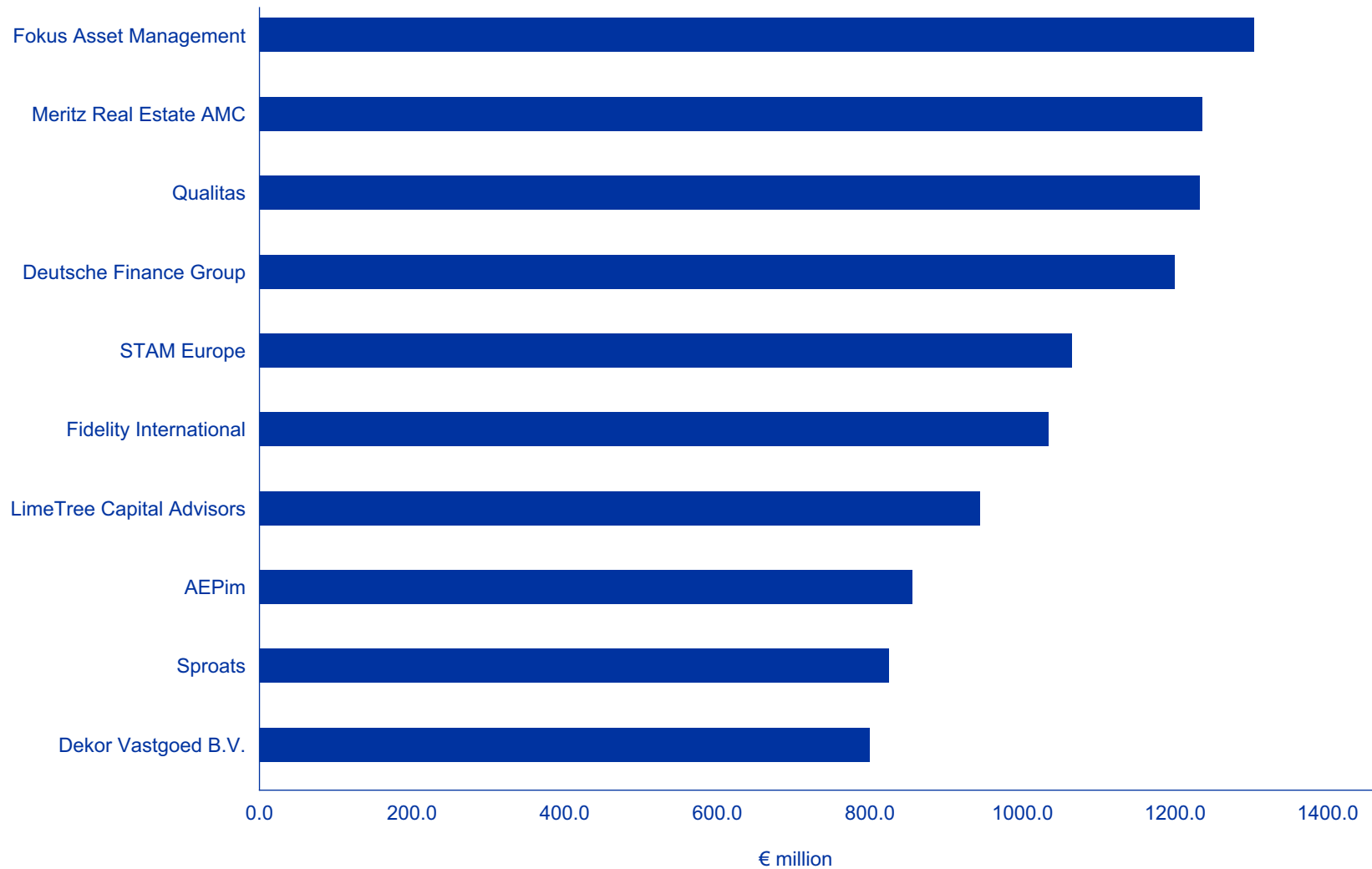


Figure 5: Top 10 fund managers by total real estate AUM - Lower quartile



Total real estate AUM by regional strategy

Total real estate AUM varies across regional strategies and there are some notable differences worth mentioning. European and North American strategies represent larger proportions of the overall real estate AUM, 36.9% and 33.8% respectively. Meanwhile Asia Pacific strategies represent a smaller portion of real estate assets under management, 16.9%. Meanwhile global strategies comprise 11.9% and South American strategies just 0.6% of the total real estate AUM.

The largest manager for Asia Pacific strategies accounts for €45.9 billion of total real estate AUM, and is far ahead of its peers. The next two largest are around €20 billion behind, with €25.4 billion and €24.1 billion for the second and third largest managers respectively.

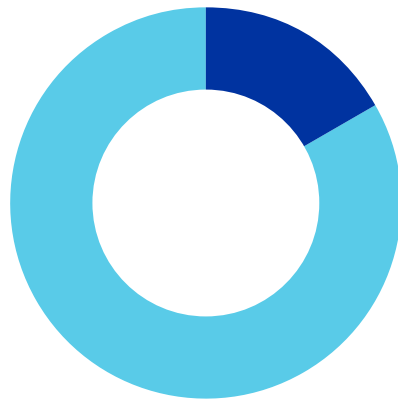
Moving over to Europe, the top five managers each recorded a real estate AUM in excess of that of the largest manager in Asia Pacific.

The largest manager for European strategies represents AUM of €63.0 billion, €17.1 billion higher than that of its Asia Pacific peer.

North American strategies show an even larger increase. Here, the AUM of the top four managers exceeds that of the largest for European strategies. The largest AUM for North American strategies was €95.3 billion, €32.4 billion higher than the equivalent for Europe.

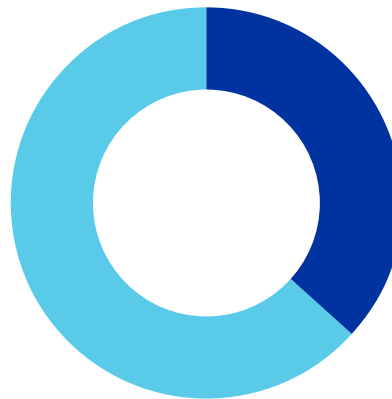
Figure 6: Total real estate assets under management by regional strategy

16.9% Asia Pacific
83.1% Rest of regions



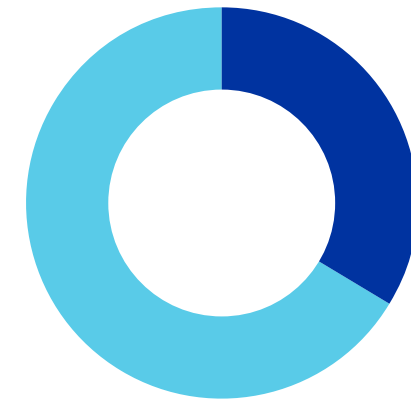
Asia Pacific

36.9% Europe
63.1% Rest of regions



Europe

33.8% North America
66.2% Rest of regions



North America

Top 10 managers by total real estate AUM Asia Pacific

Figure 7: Top 10 fund managers by Asia Pacific real estate AUM - Upper quartile

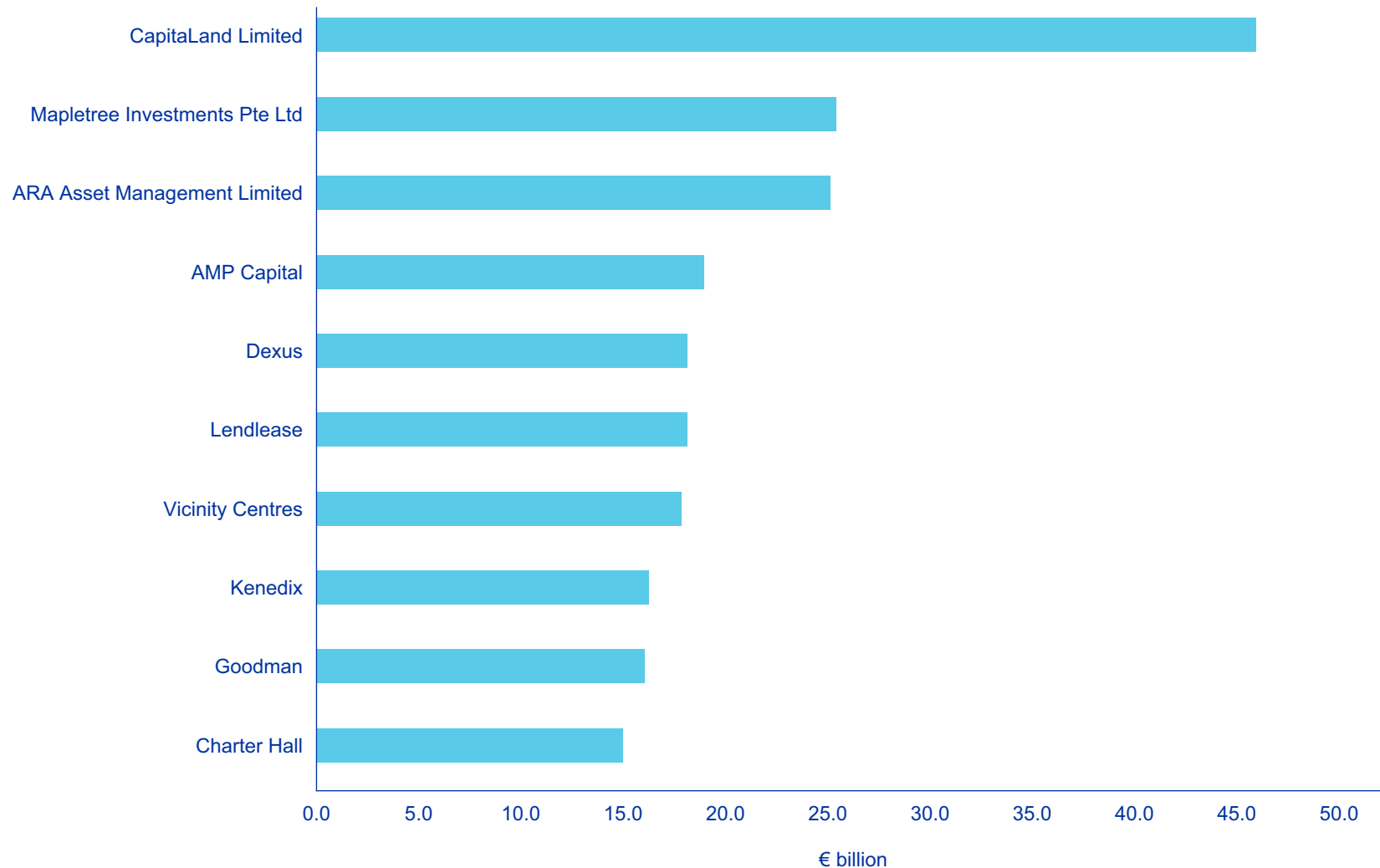


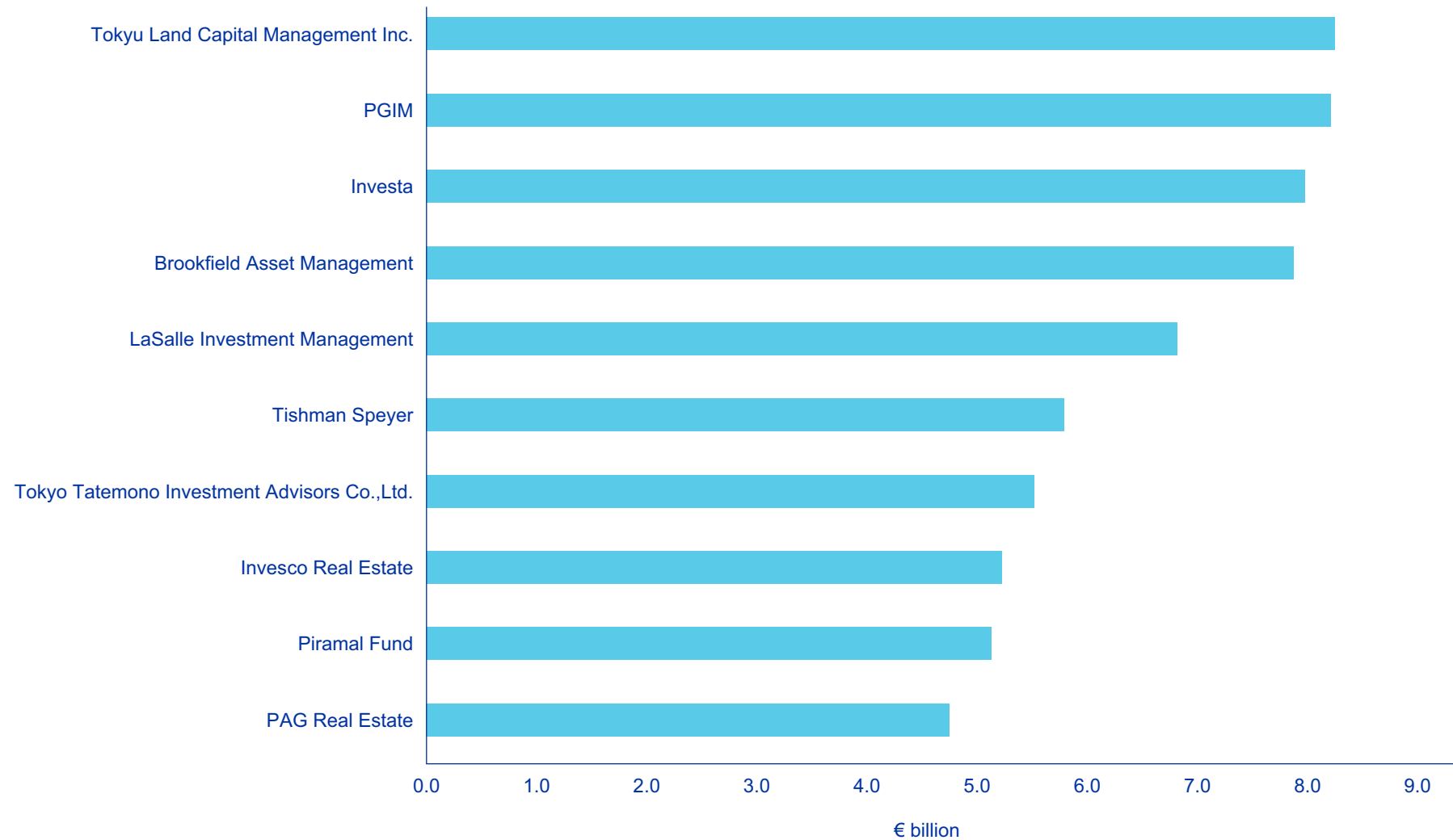
Figure 8: Top 10 fund managers by Asia Pacific real estate AUM - Third quartile

Figure 9: Top 10 fund managers by Asia Pacific real estate AUM - Second quartile

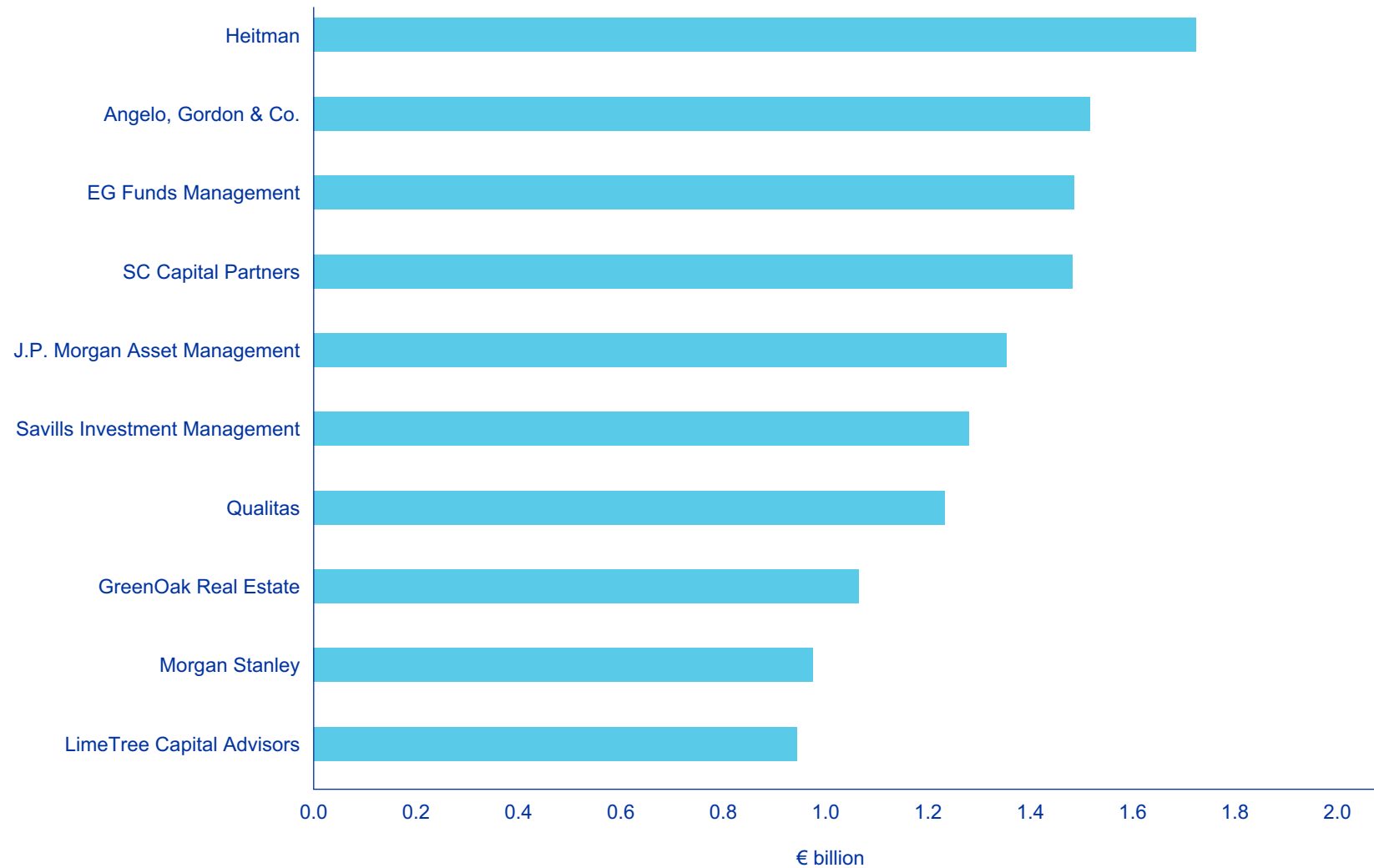
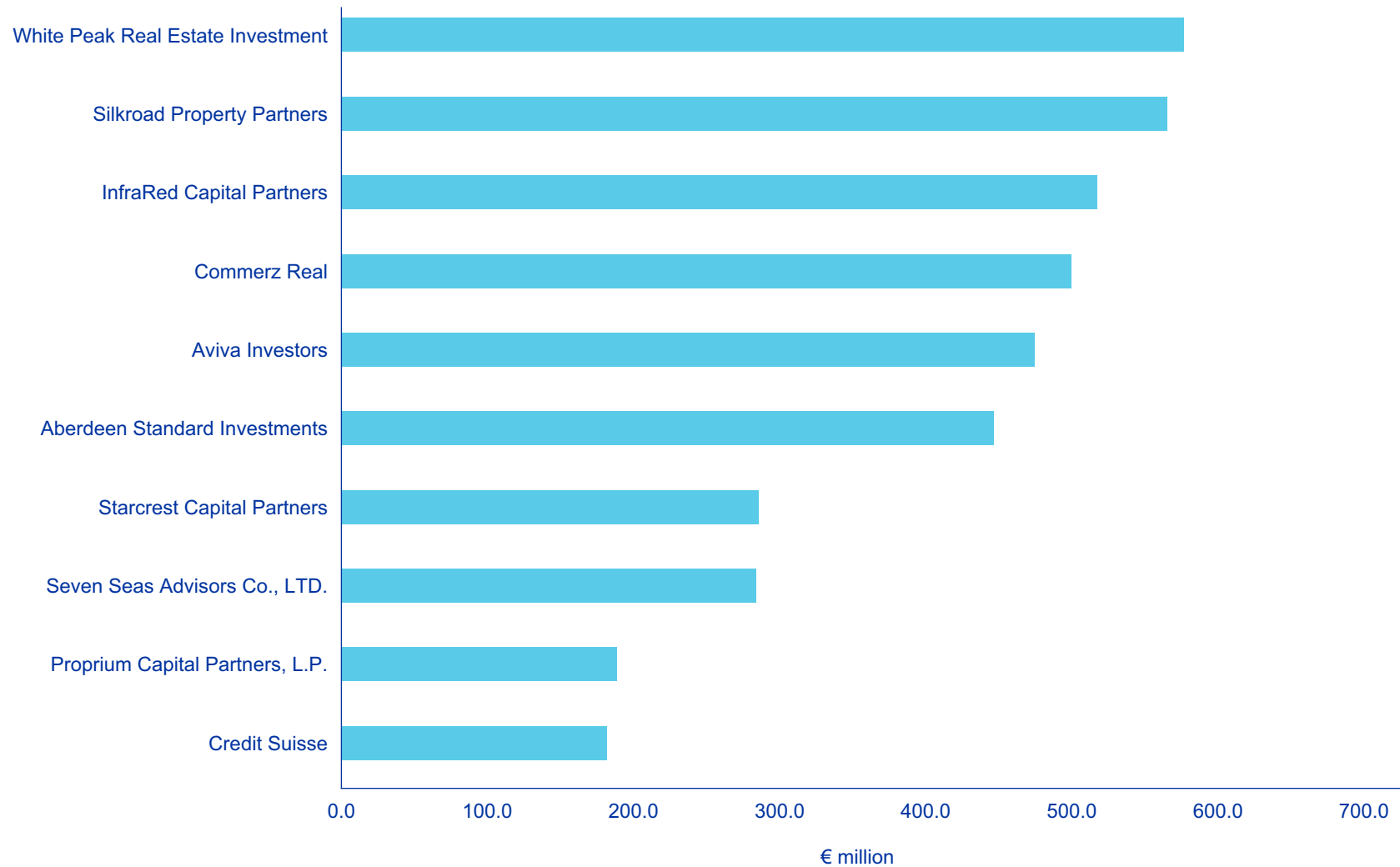


Figure 10: Top 10 fund managers by Asia Pacific real estate AUM - Lower quartile

Top 10 managers by total real estate AUM Europe

Figure 11: Top 10 fund managers by European real estate AUM - Upper quartile

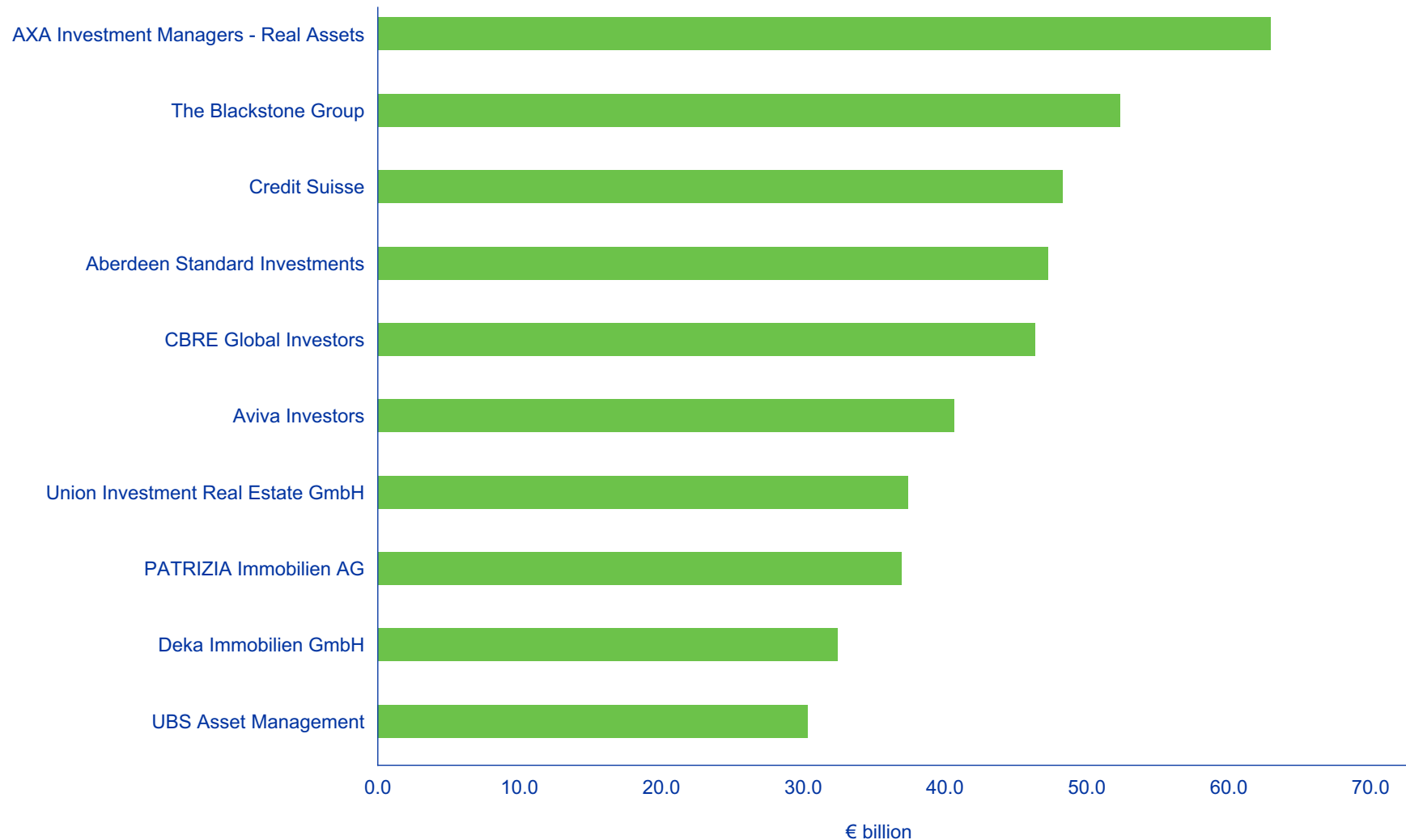


Figure 12: Top 10 fund managers by European real estate AUM - Third quartile

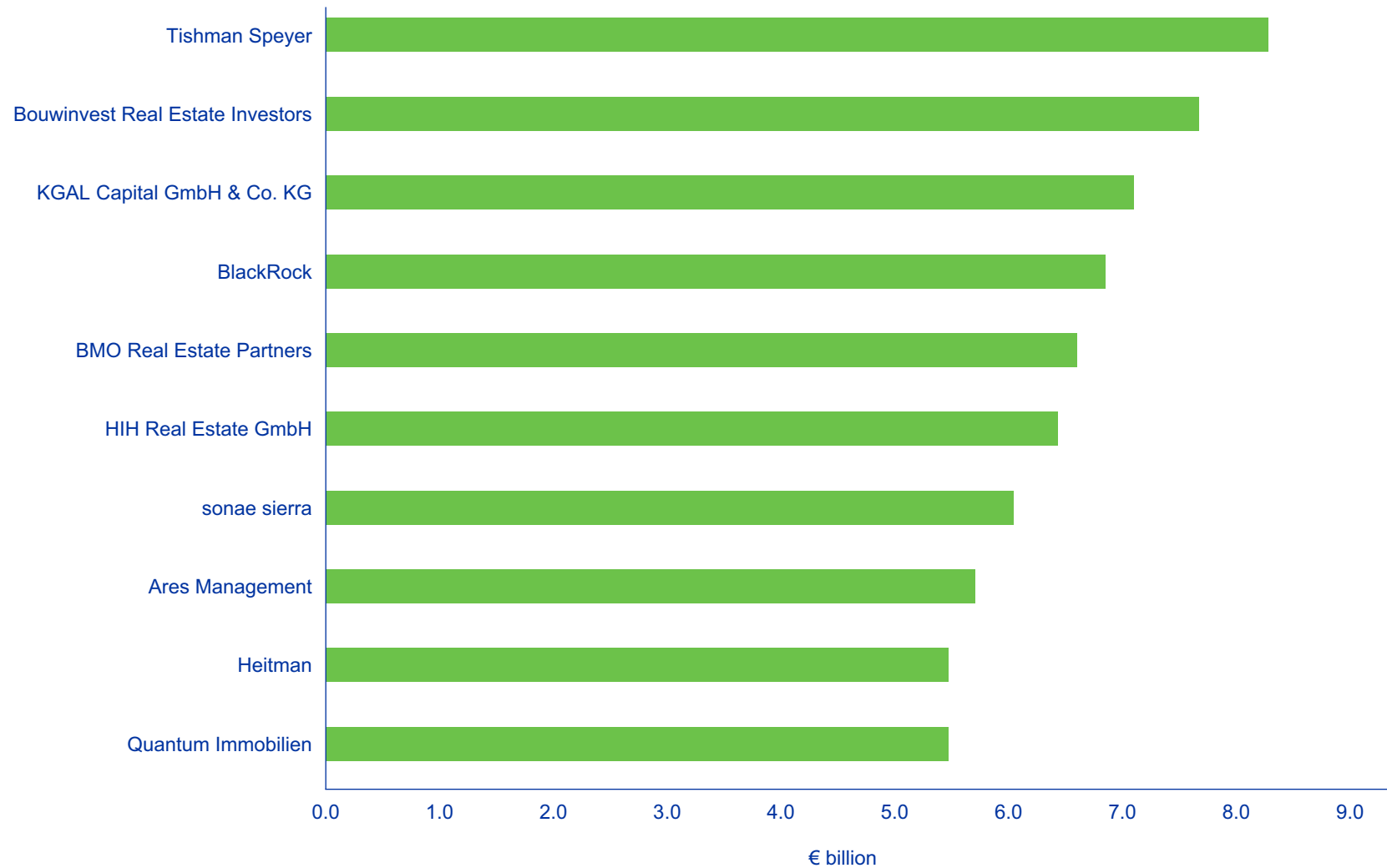


Figure 13: Top 10 fund managers by European real estate AUM - Second quartile

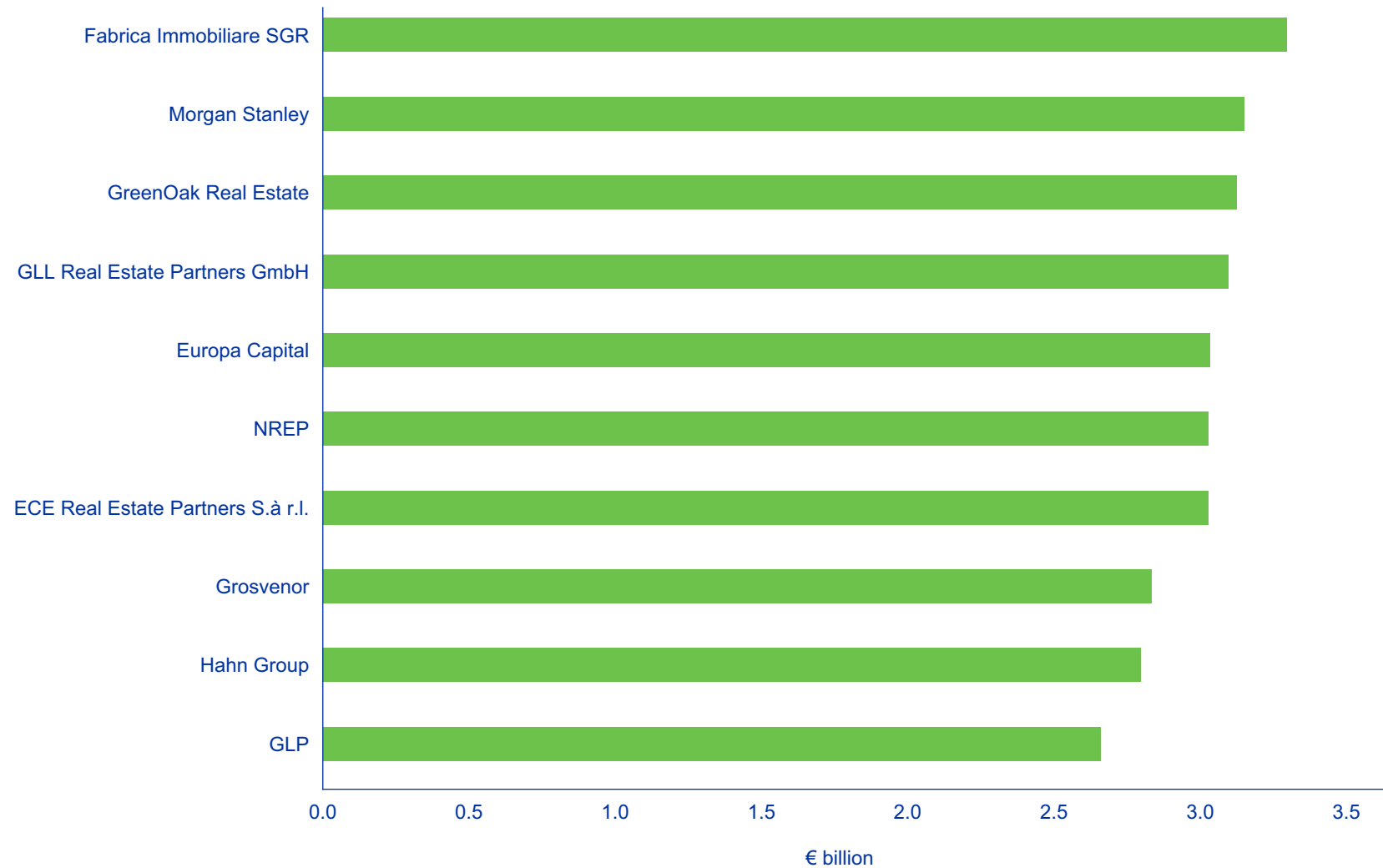
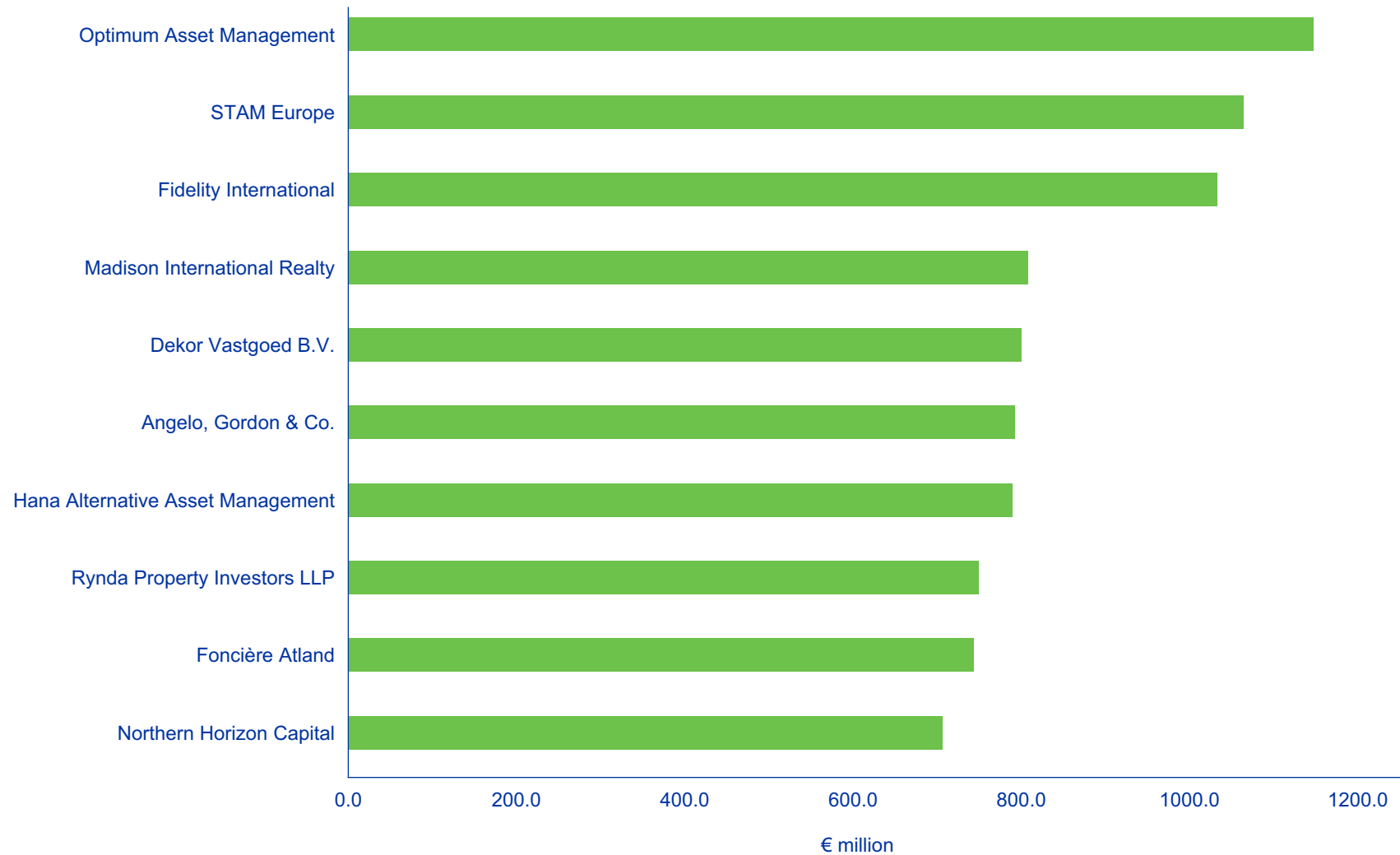


Figure 14: Top 10 fund managers by European real estate AUM - Lower quartile

Top 10 managers by total real estate AUM North America

Figure 15: Top 10 fund managers by North American real estate AUM - Upper quartile

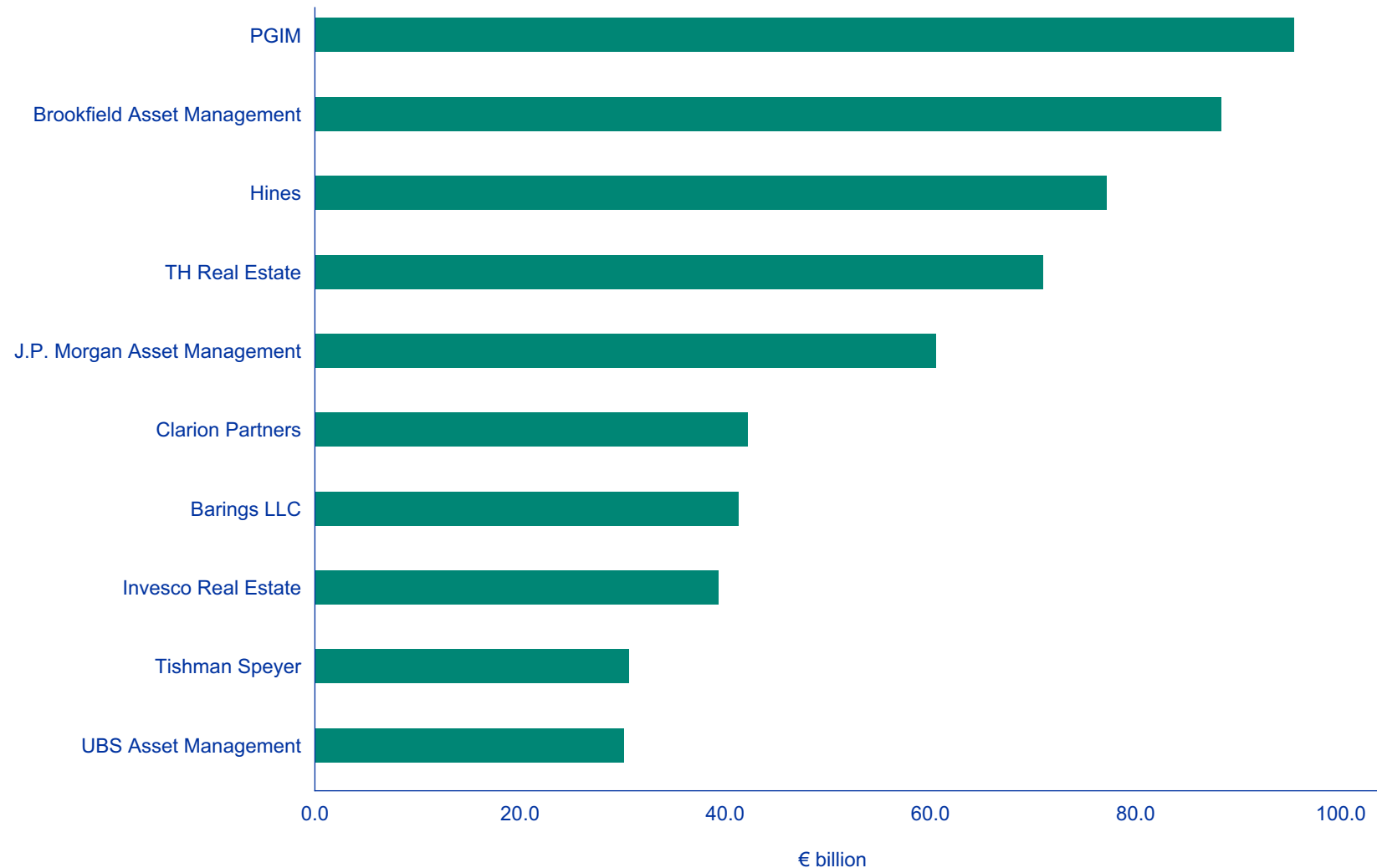


Figure 16: Top 10 fund managers by North American real estate AUM - Third quartile

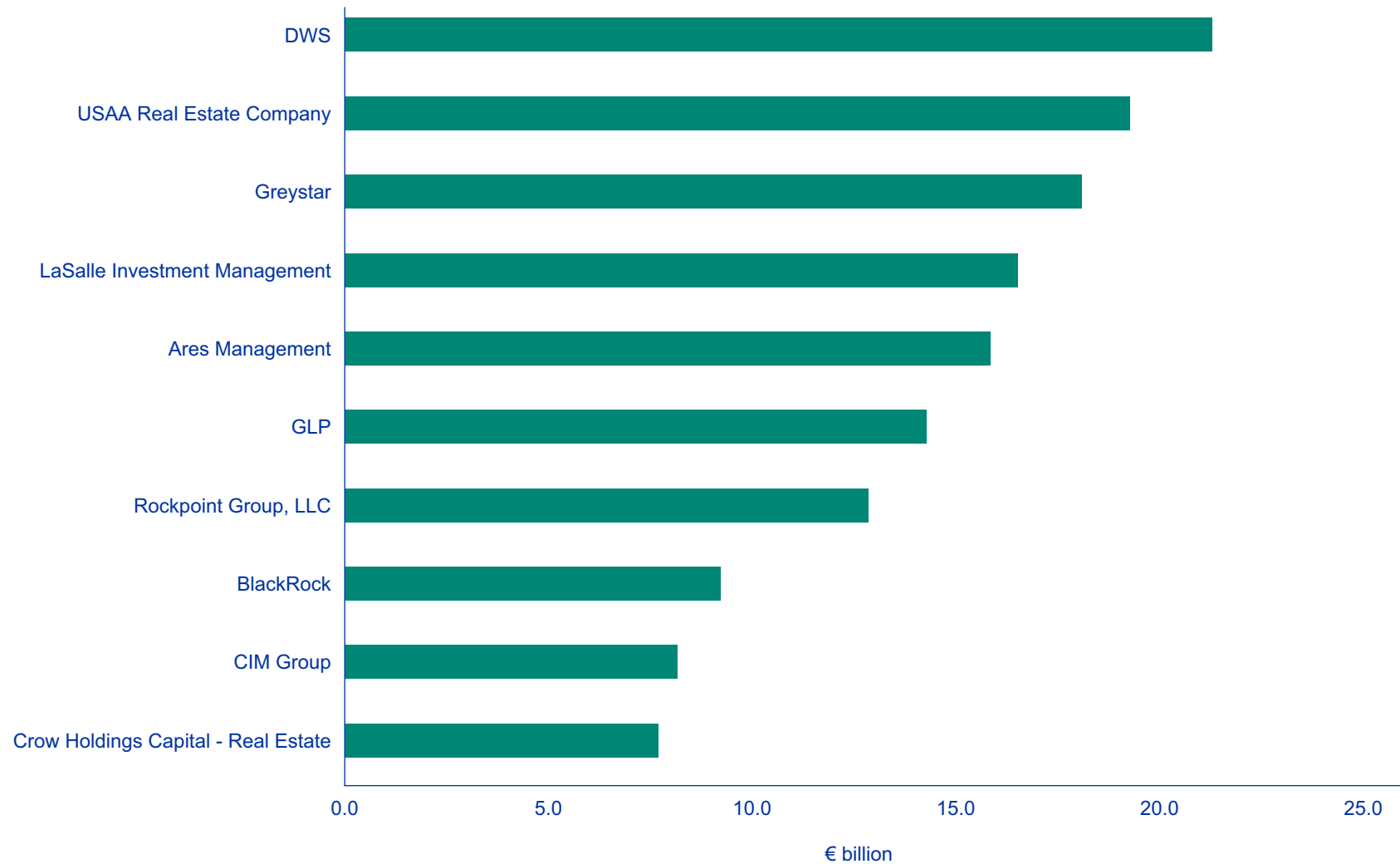


Figure 17: Top 10 fund managers by North American real estate AUM - Second quartile

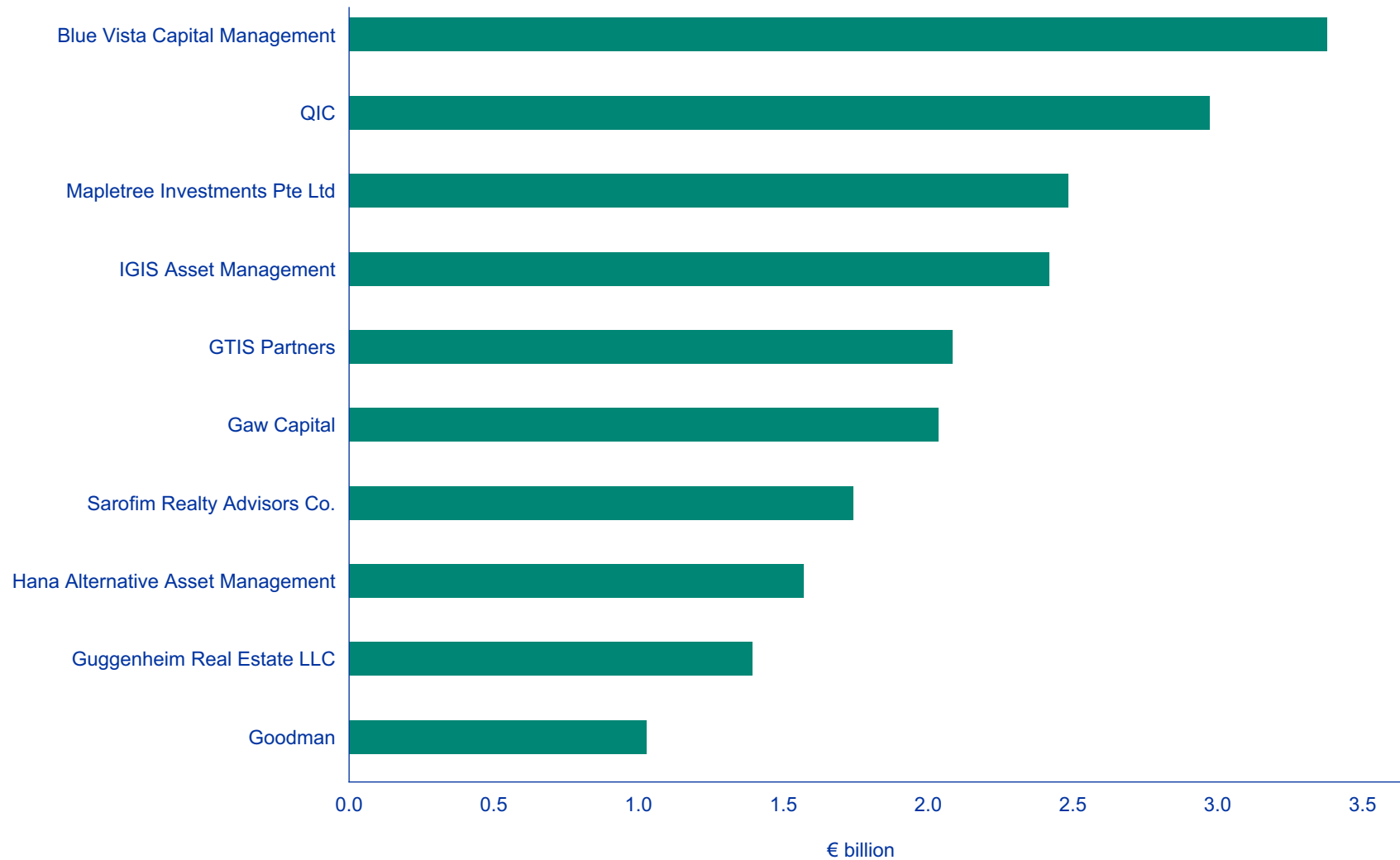
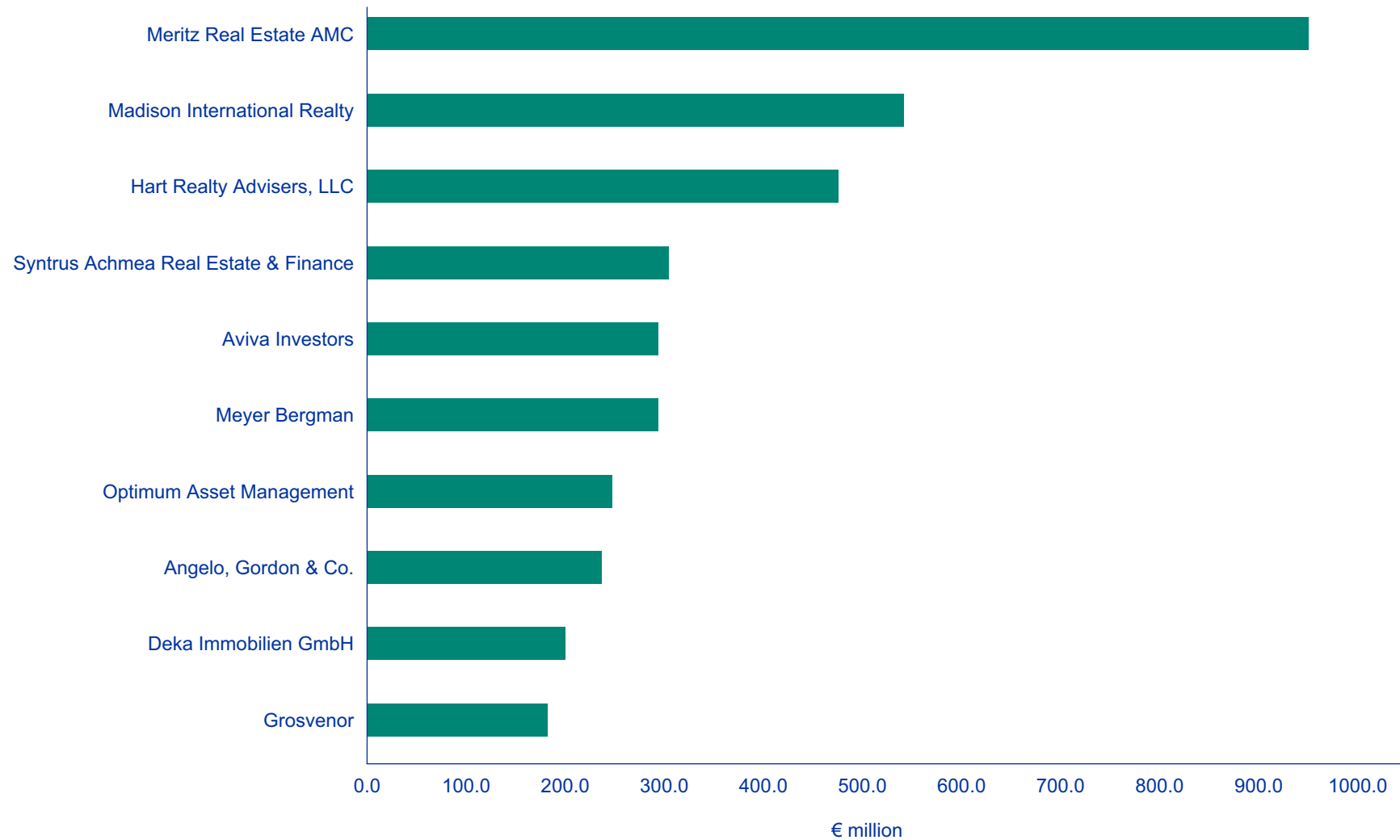
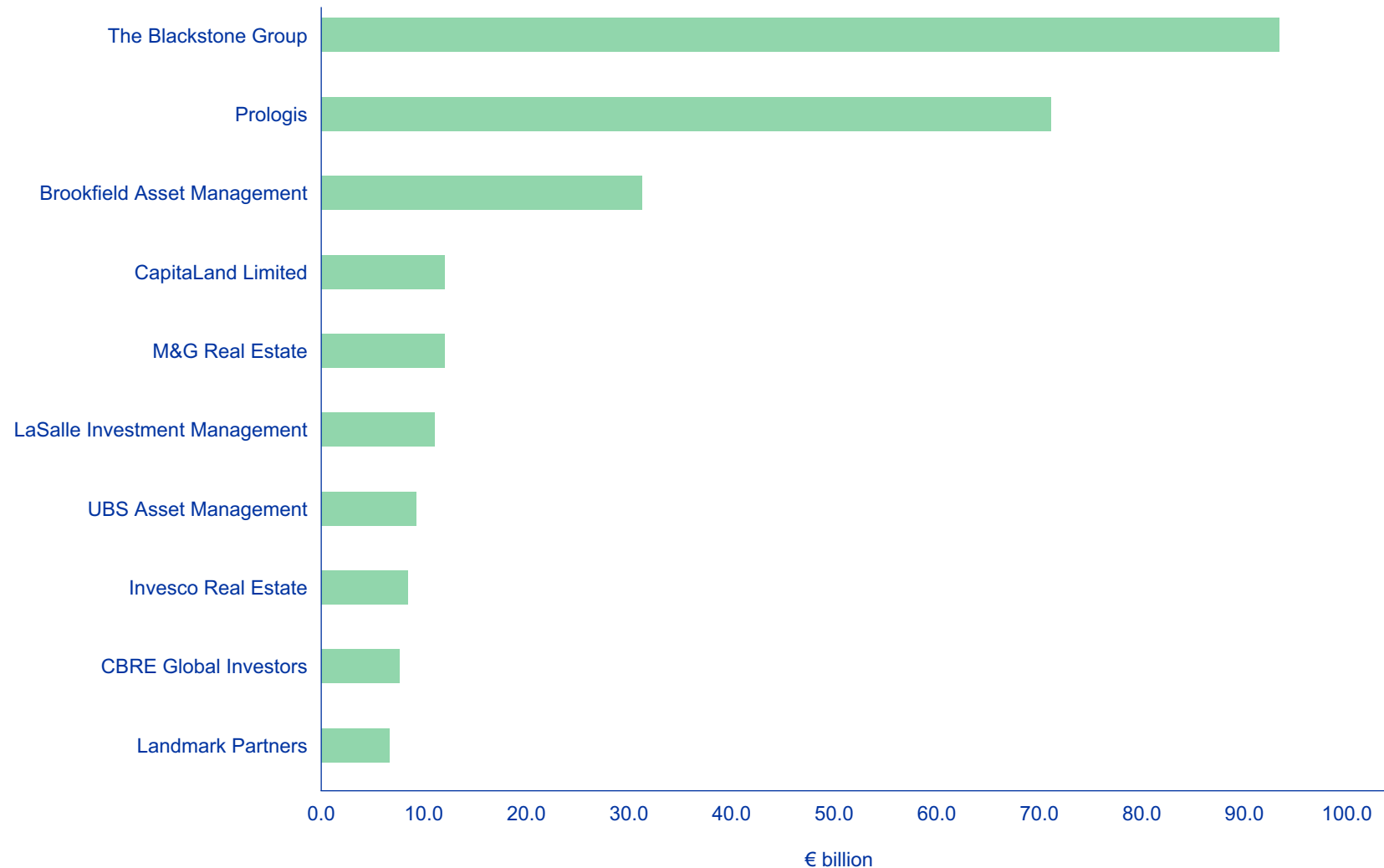


Figure 18: Top 10 fund managers by North American real estate AUM - Lower quartile

Top 10 managers by total real estate AUM Global

Figure 19: Top 10 fund managers by real estate AUM of global strategies



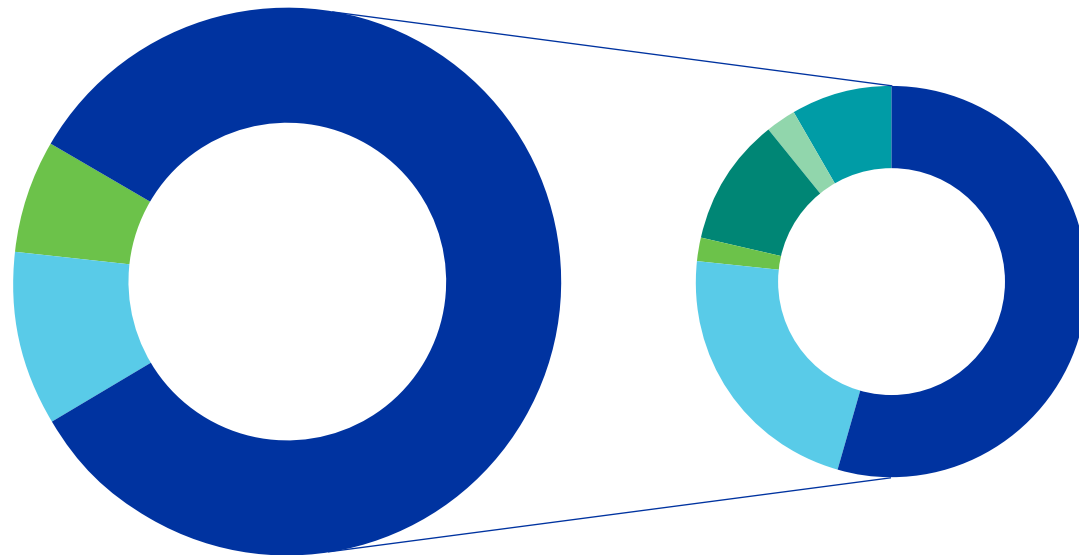
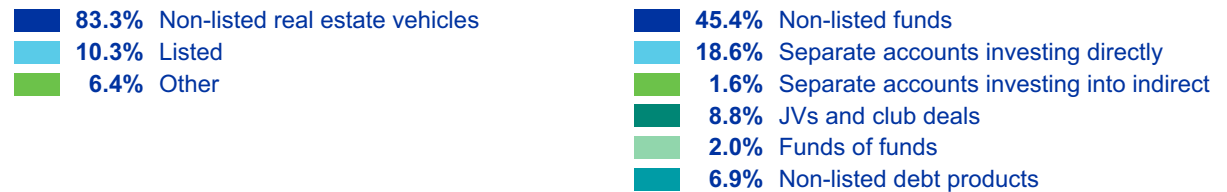
Non-listed real estate vehicles

Non-listed real estate represents a significant portion of total real estate assets under management. Of the €2.7 trillion total AUM, non-listed real estate accounts for 83.3% or €2.3 trillion. Meanwhile listed and other real estate represent 10.3% (€277.4 billion) and 6.4% (€ 173.2) respectively.

Funds comprise almost half, 45.4%, of the total real estate assets under management. The next most significant portion is accounted for in separate accounts investing directly (18.6%) and separate accounts investing indirectly (1.6%).

Joint ventures and club deals follow next making up 8.8% of total real estate AUM, while non-listed debt products account for 6.9%. Funds of funds comprise just 2.0% of the overall AUM.

Figure 20: Total real estate assets under management

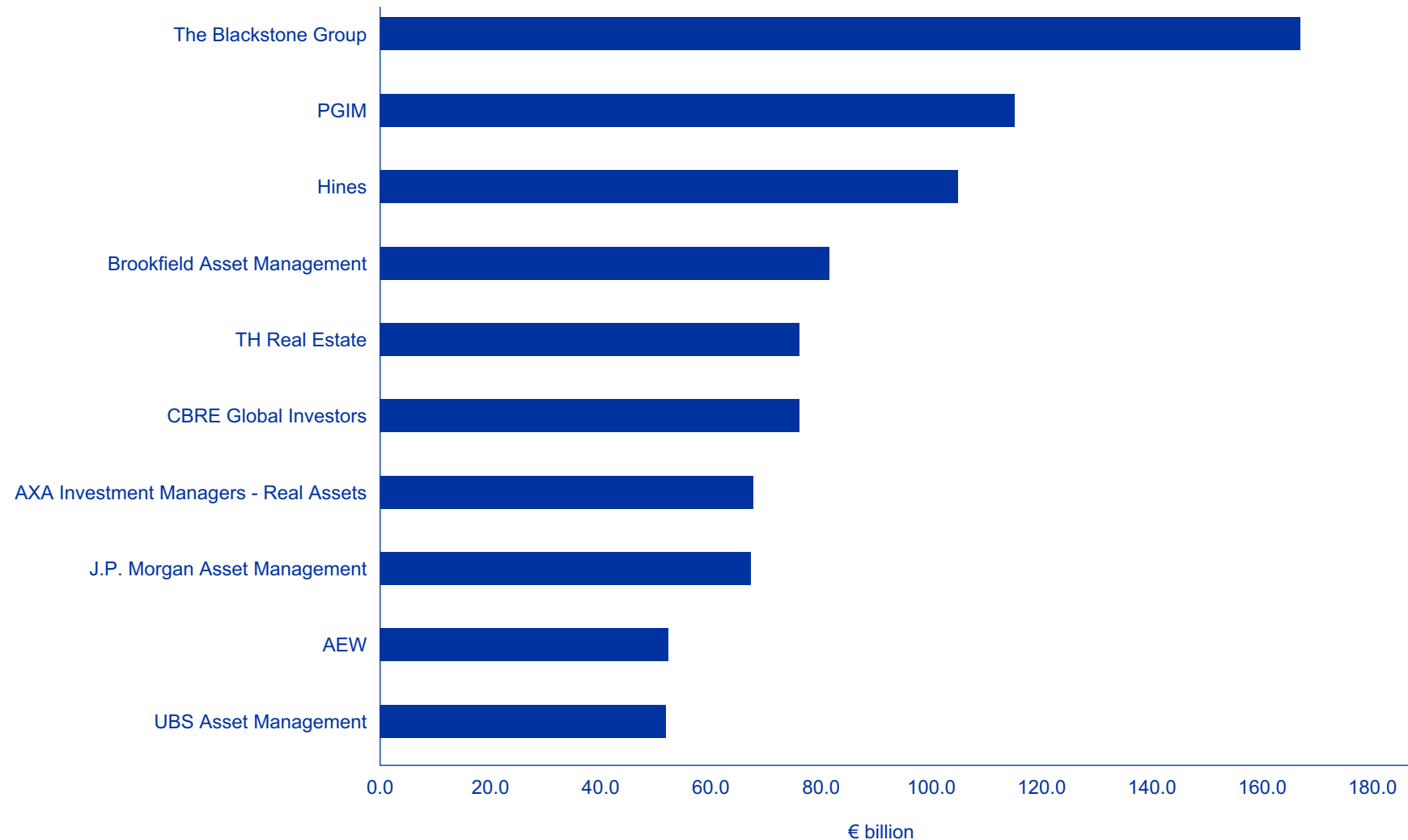


Total real estate AUM by vehicle type

‘Non-listed real estate accounts for 83.3% or €2.3 trillion of total real estate AUM’

Top 10 managers by non-listed real estate AUM

Figure 21: Top 10 fund managers by non-listed real estate AUM - all strategies

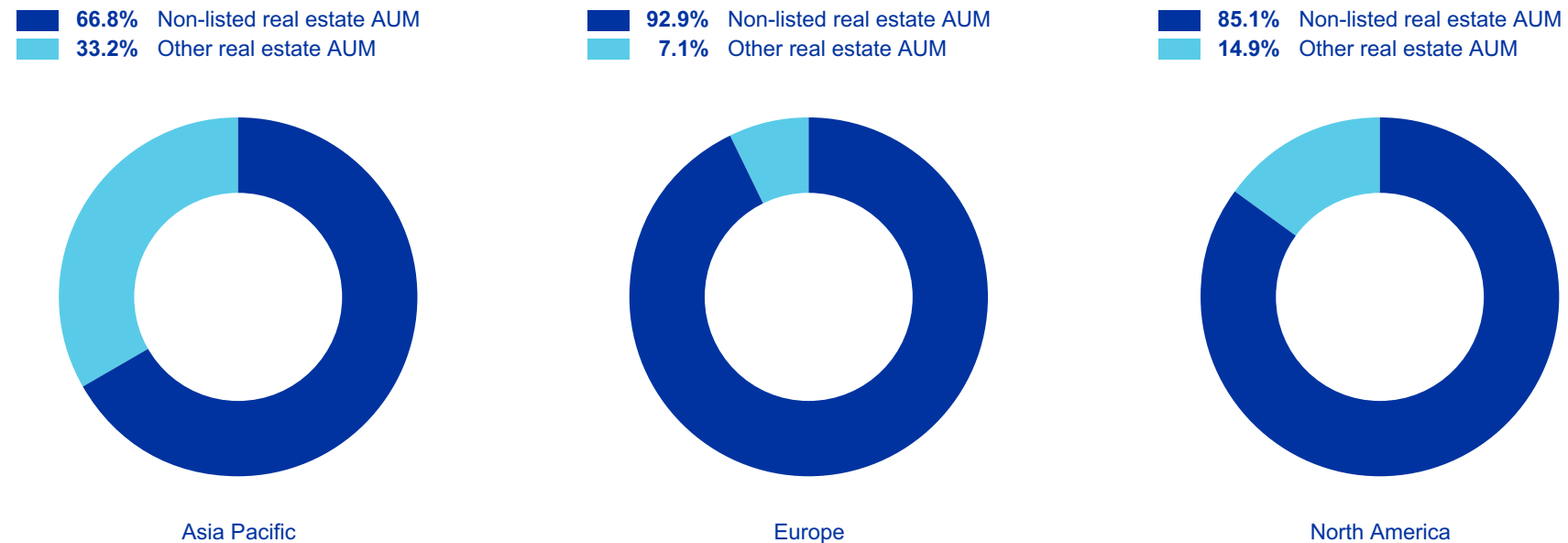


Non-listed real estate vehicles by regional strategy

Non-listed real estate accounts for a significant proportion of total real estate assets under management across all regional strategies. This is especially the case for European strategies where 92.9% of AUM is comprised of non-listed real estate, while the remaining 7.1% is held in other real estate products.

It is a similar story for North American strategies where 85.1% of AUM is represented by non-listed real estate. For Asia Pacific strategies this proportion drops to just two thirds of total AUM, 66.8%, while the remaining third, 33.2%, is represented by other real estate.

Figure 22: Non-listed real estate vehicles by regional strategy



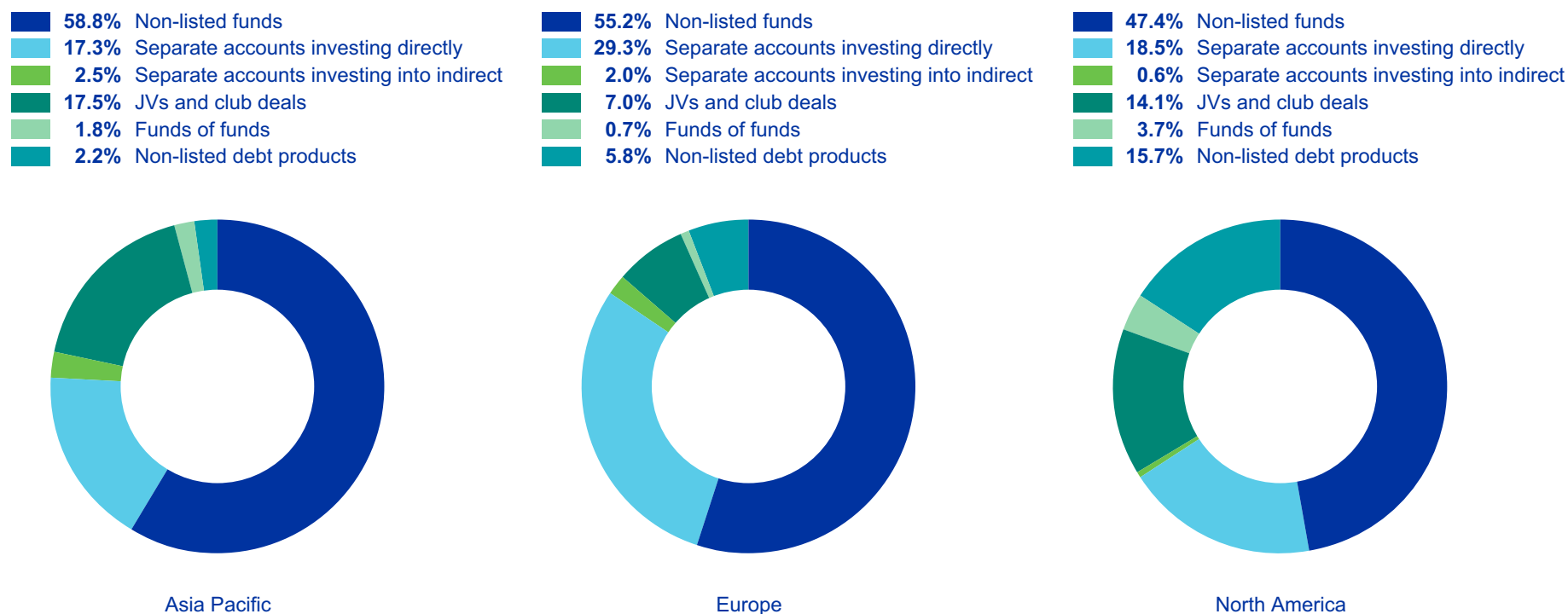
Non-listed real estate vehicles by vehicle type

Across all regional strategies funds represent the majority of the non-listed real estate AUM, but there are some variations worth noting. Funds comprise a larger portion, 58,8%, of total AUM for Asia Pacific strategies than for either of the other two regional strategies. For European strategies funds represent just over half, 55.2%, of overall AUM. While for North American strategies the proportion is slightly below half at 47.4%.

JVs and club deals feature more heavily for Asia Pacific strategies than any other region with these vehicles representing 17.5% of the AUM for non-listed real estate. Meanwhile for European strategies it is separate accounts investing directly that are the next most favoured vehicles among the non-listed real estate suite. These vehicles represent 29.3% of the real estate AUM for European strategies.

Non-listed debt products feature more heavily for North American strategies than any of the other two regional strategies. Here debt products account for 15.7% of non-listed real estate AUM. JVs and clubs and separate accounts investing directly also feature strongly for North American strategies, but to a lesser extent than its regional peers.

Figure 23: Non-listed real estate by vehicles by regional strategy



Top 10 managers by non-listed real estate AUM

Figure 24: Top 10 managers by non-listed real estate AUM - Asia Pacific strategy

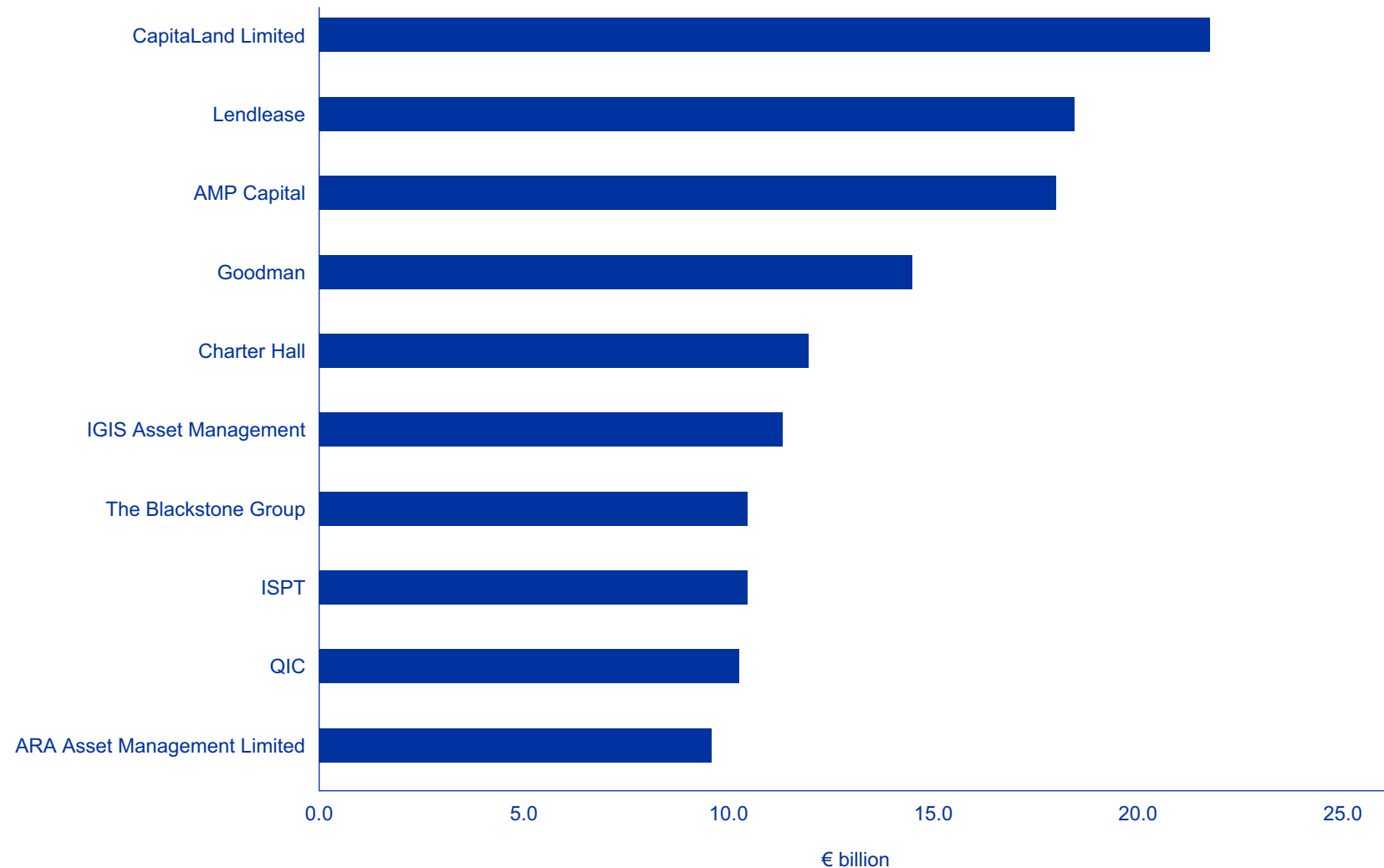


Figure 25: Top 10 managers by non-listed real estate AUM - European strategy

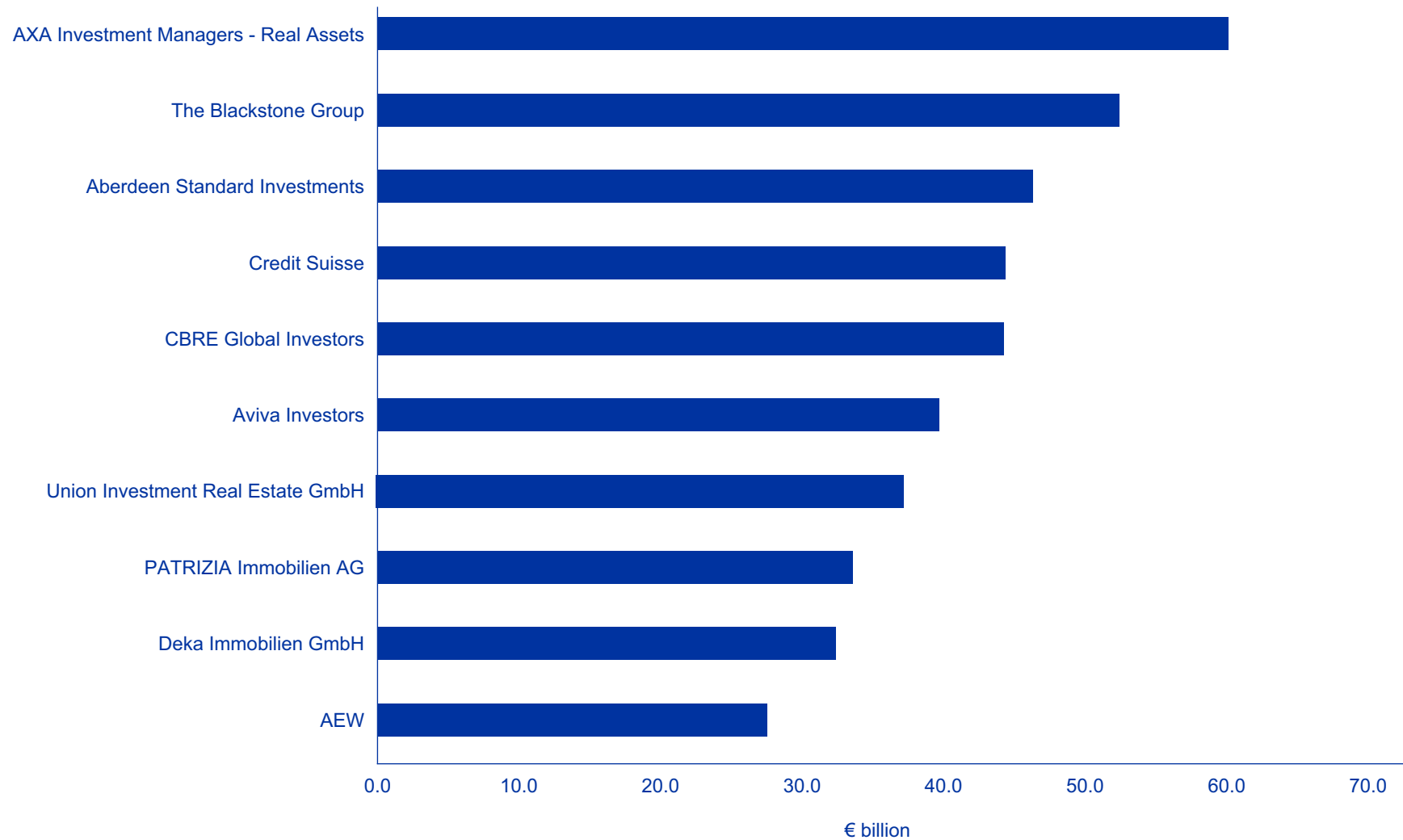


Figure 26: Top 10 managers by non-listed real estate AUM - North American strategy

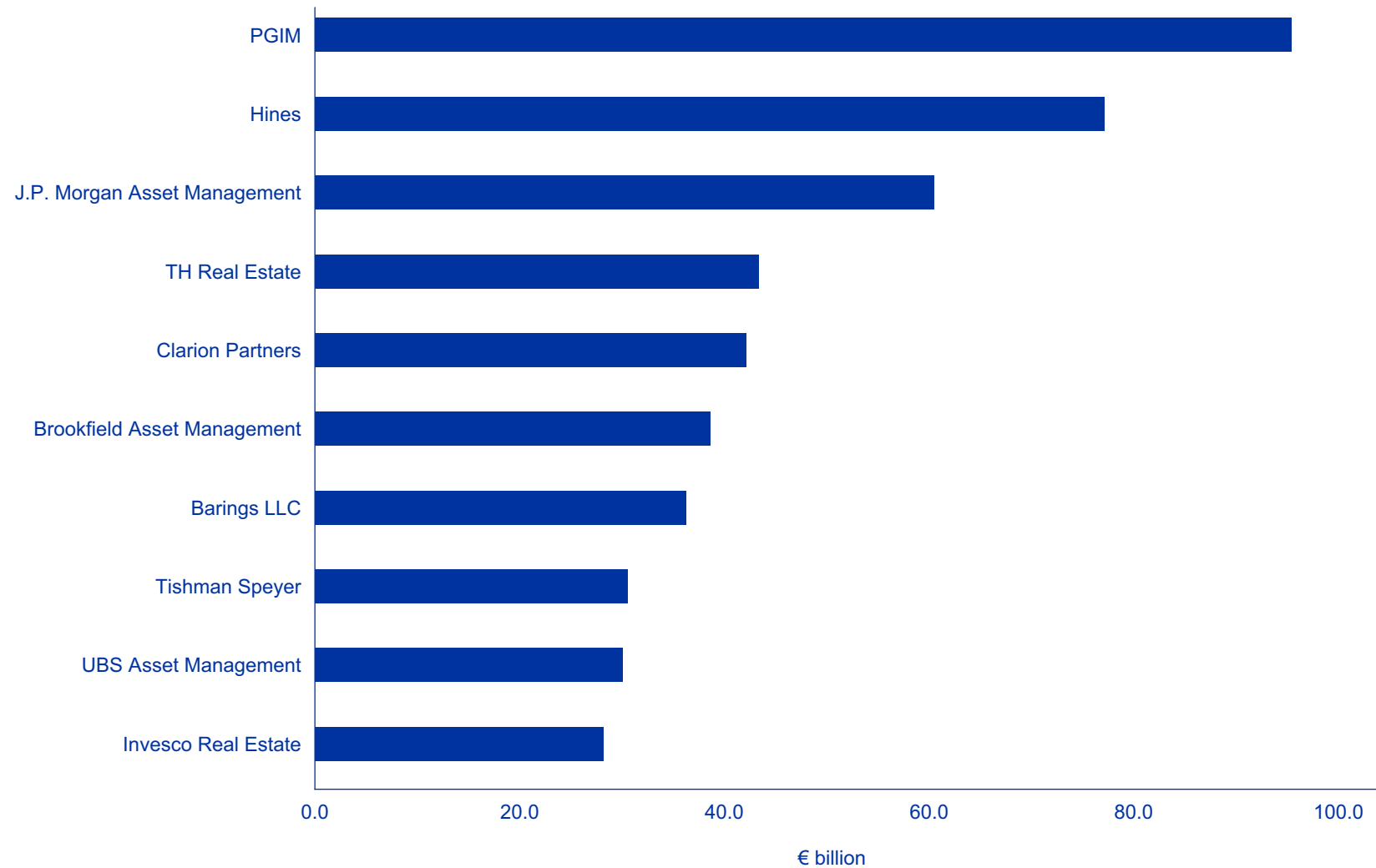
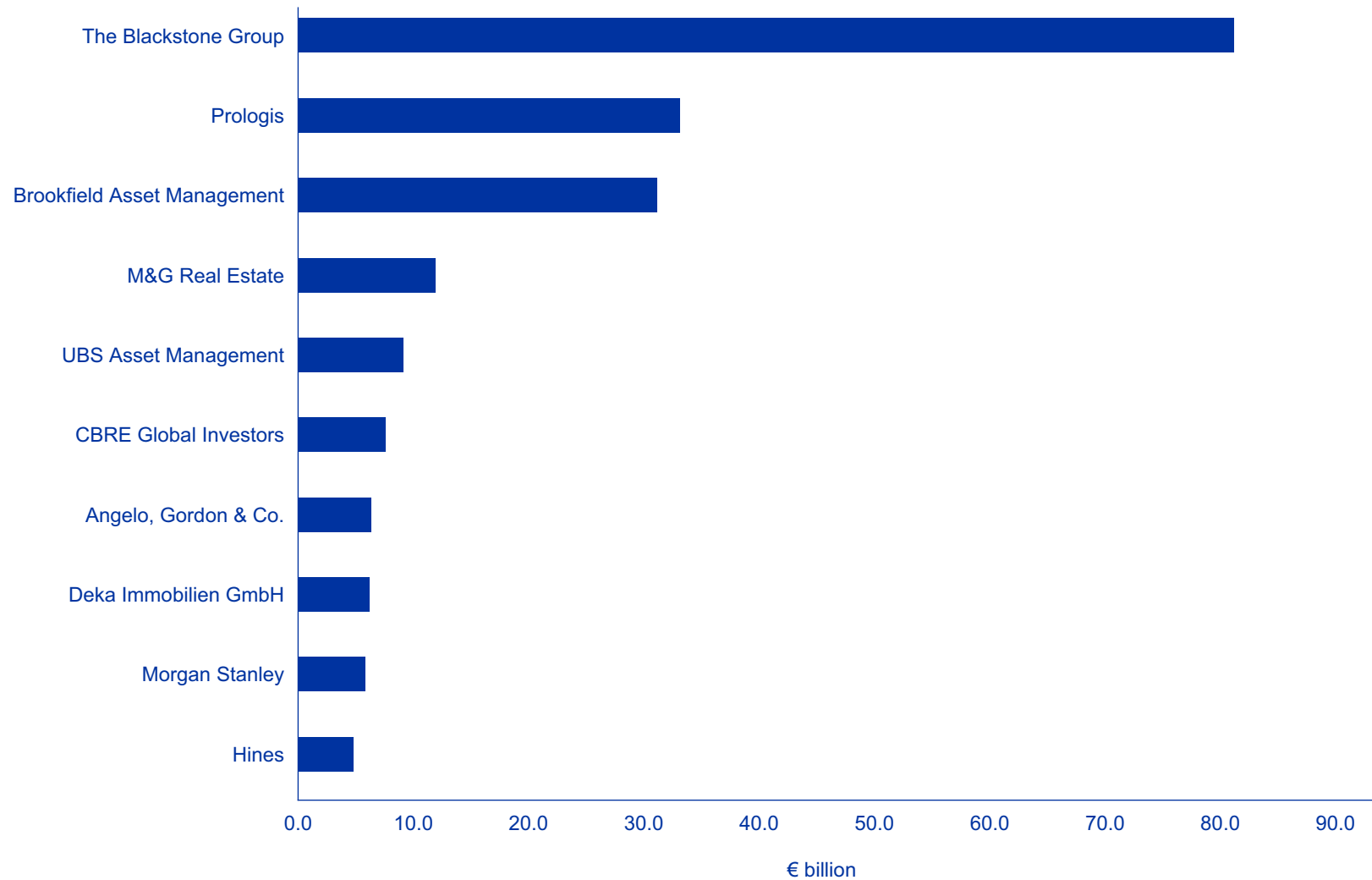


Figure 27: Top 10 managers by non-listed real estate AUM - Global strategy



Non-listed real estate funds by regional strategy

Non-listed real estate funds account for a larger proportion of total real estate AUM for European strategies than for Asia Pacific or North American strategies.

In Europe, non-listed real estate funds represent over half, 51.3%, of total AUM while the remaining 48.7% of AUM is held in other real estate.

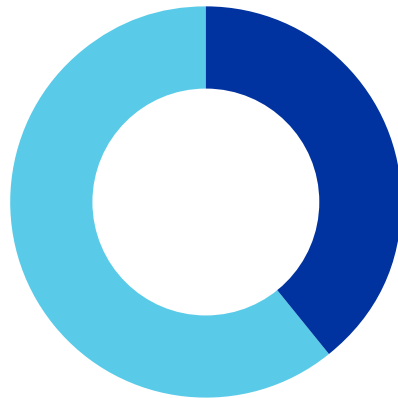
Meanwhile for North American strategies funds account for slightly less, 40.3% of total AUM with the majority, 59.7%, of AUM held in other real estate.

Asia Pacific strategies represent similar proportions to that of North American strategies. Here funds account for 39.3% and other real estate comprise 60.7%.

Some regional variations notwithstanding, funds continue to be a notable vehicle to access real estate, demonstrated by the high proportion of real estate AUM attributed to funds.

Figure 28: Non-listed real estate vehicles by regional strategy

■ 39.3% Funds AUM
■ 60.7% Other real estate AUM



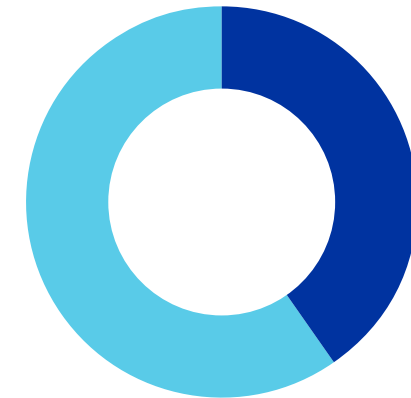
Asia Pacific

■ 51.3% Funds AUM
■ 48.7% Other real estate AUM



Europe

■ 40.3% Funds AUM
■ 59.7% Other real estate AUM



North America

Top 10 managers by non-listed real estate funds AUM

Figure 29: Top 10 managers by non-listed real estate funds AUM - all strategies

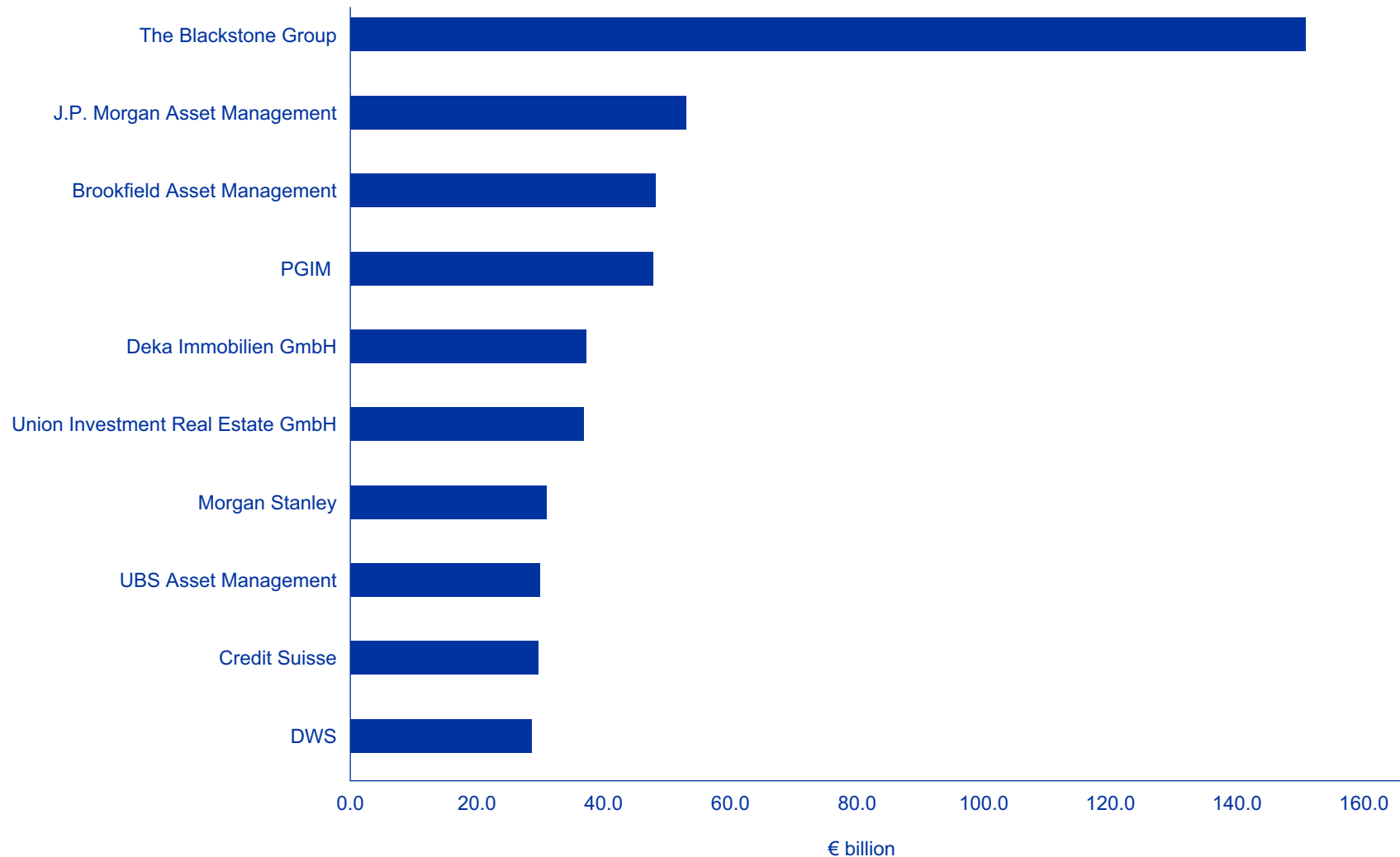


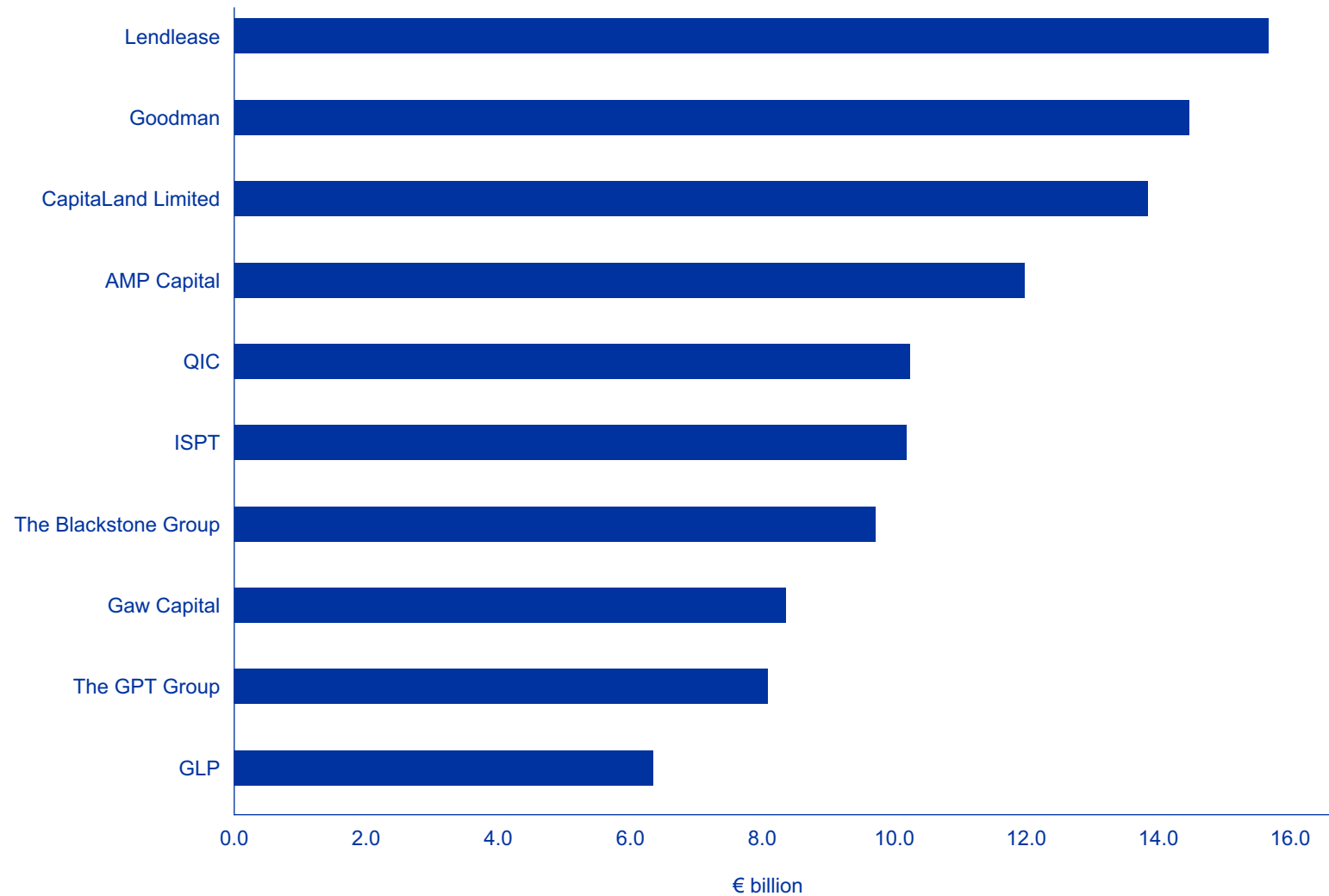
Figure 30: Top 10 managers by non-listed real estate funds AUM - Asia Pacific strategy

Figure 31: Top 10 managers by non-listed real estate funds AUM - European strategy

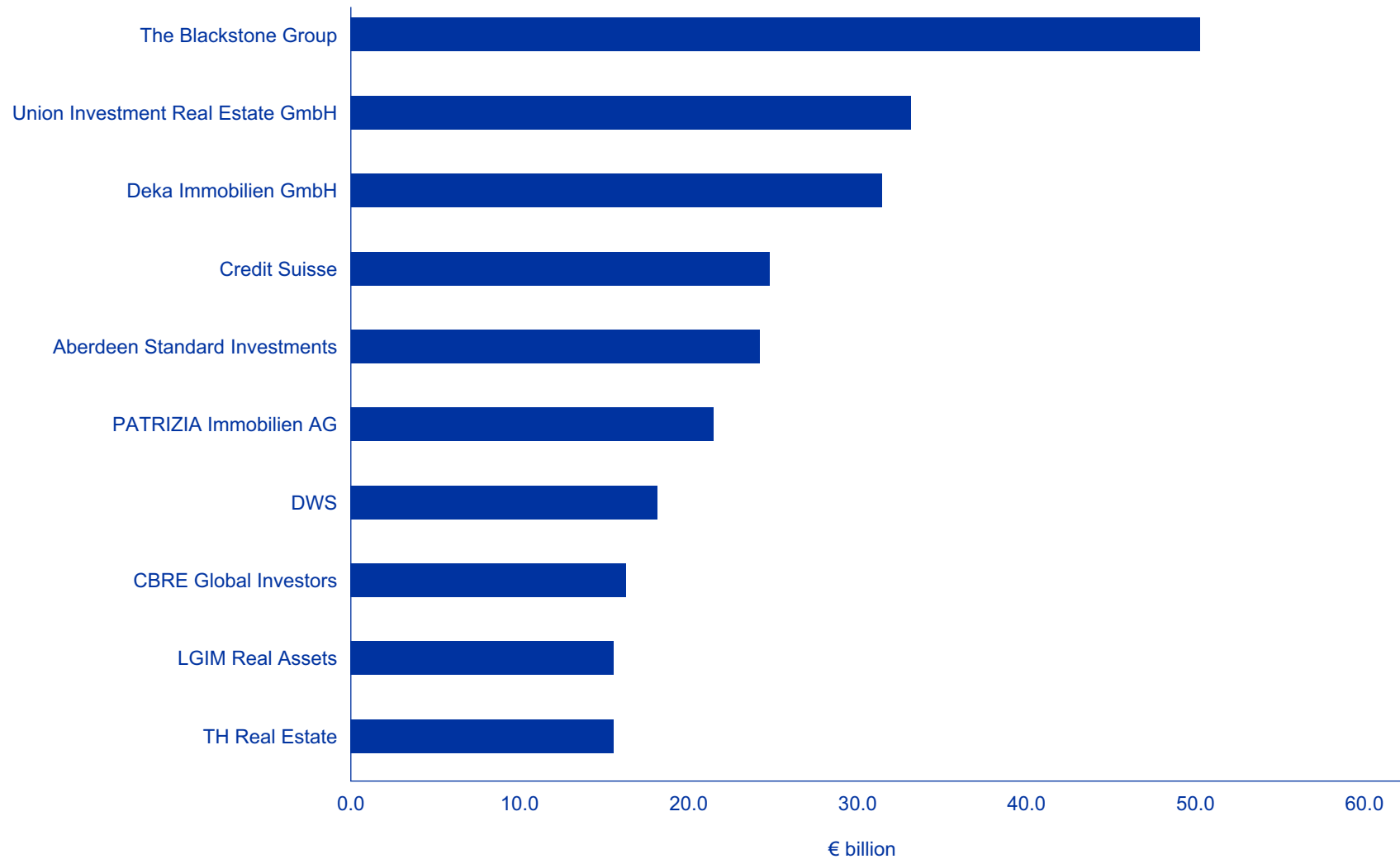


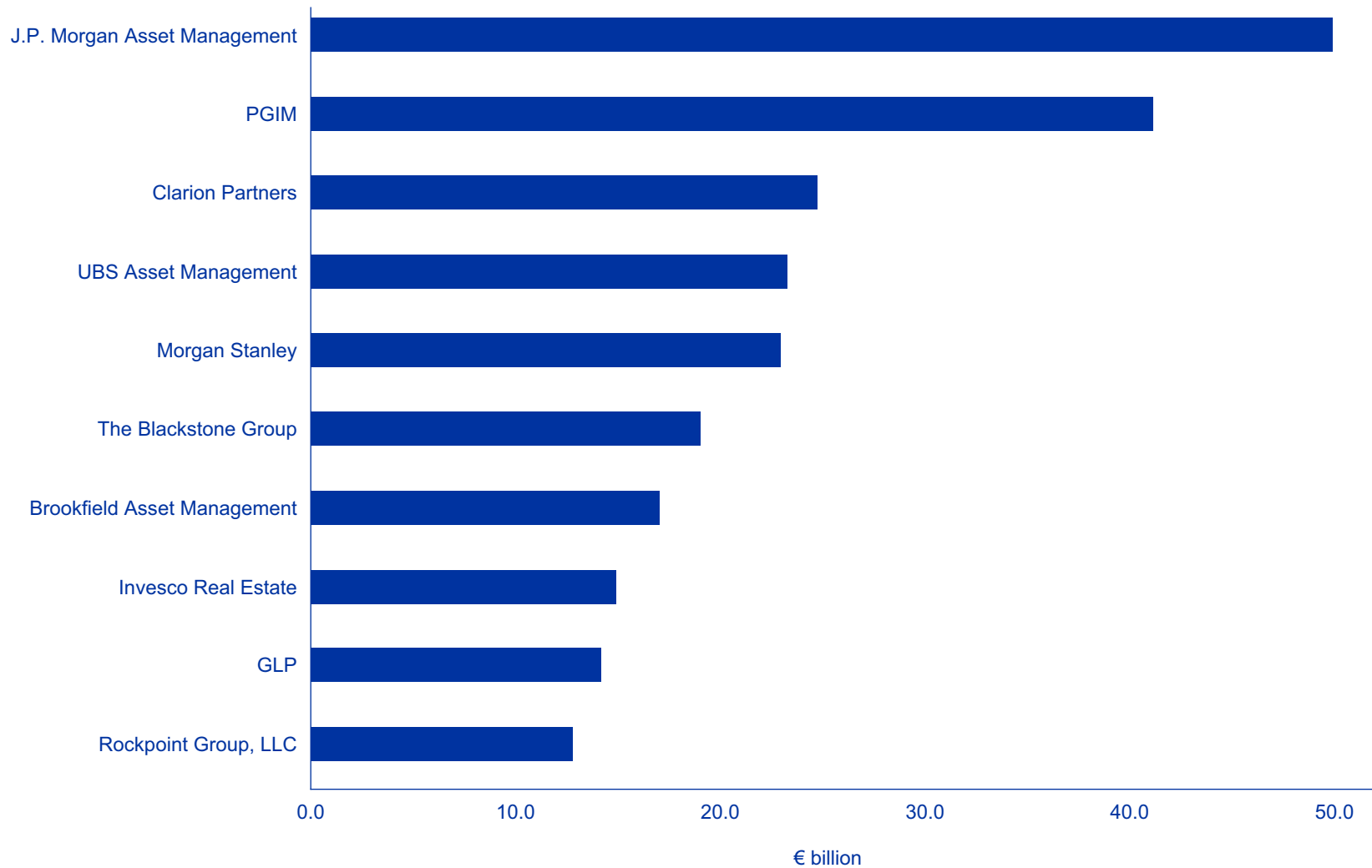
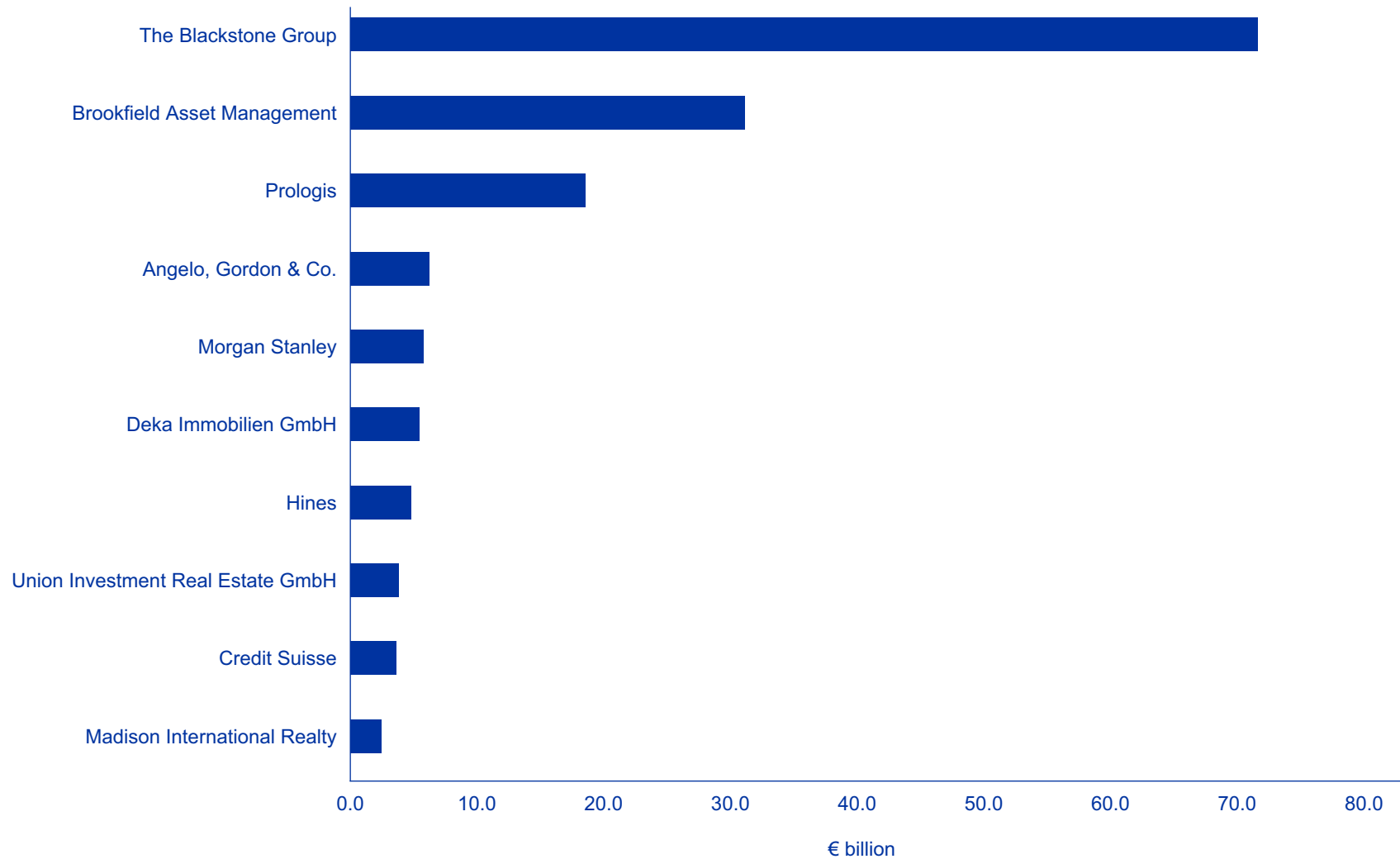
Figure 32: Top 10 managers by non-listed real estate funds AUM - North American strategy

Figure 33: Top 10 managers by non-listed real estate funds AUM - Global strategy



Non-listed direct real estate AUM by investor type

Across all regional strategies pension funds account for the lion share of capital into non-listed direct real estate.

For Asia Pacific strategies pension funds represent over half, 51.3%, of non-listed direct real estate AUM. While for European and

North American strategies the proportions are slightly less, 43.0% and 47.3% respectively.

For Asia Pacific strategies sovereign wealth funds are the next most significant source of capital for real estate, representing 15.6% of non-listed direct real estate AUM.

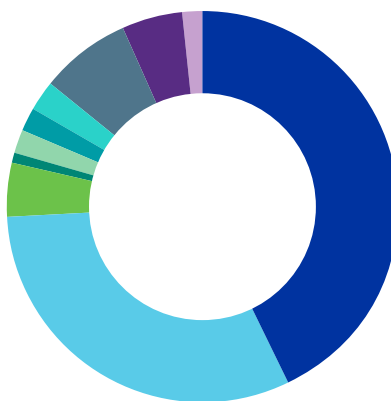
For European strategies insurance companies are the next most dominant source of capital for non-listed real estate. This category of investors represent 31.2% of the AUM for non-listed direct real estate.

The AUM of North American strategies is more diverse. Beyond pension funds all other sources of capital are present and evenly represented.

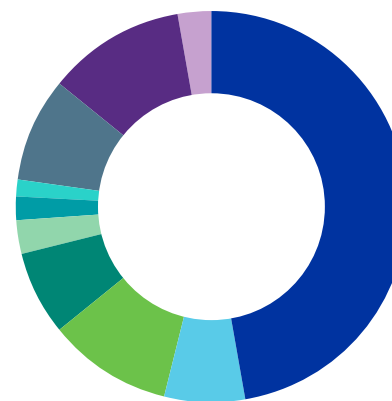
Figure 34: Non-listed direct real estate AUM by institutional investor type



Asia Pacific



Europe



North America

Non-listed direct real estate AUM by investor domicile

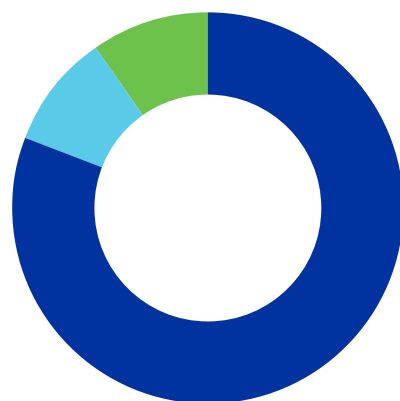
Regional strategies tend to be funded by domestic capital which is evident across all regions. Home bias is strongest for European strategies, where 85.6% of the AUM for non-listed direct real estate is sourced from investors domiciled in the region, with the rest coming from North America (7.7%) and Asia Pacific (6.6%).

Asia Pacific strategies show slightly more diversity in sources of capital with 80.9% of the non-listed direct real estate AUM sourced from investors within Asia Pacific itself. The remaining 19.1% is almost evenly split between capital from Europe (9.6%) and capital from North America (9.5%). While no capital was sourced from South America or Africa.

On the other hand, only two thirds, 65.7%, of non-listed direct real estate AUM for North American strategies is sourced its own home region. Here, one third (34.3%) of capital comes from overseas, with a larger share from Europe (21.6%) than Asia Pacific (11.6%). Capital from Africa is only present among North America strategies, and represents 0.8% of the AUM for non-listed direct real estate.

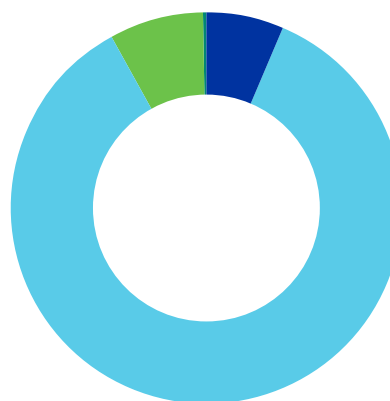
Figure 35: Non-listed direct real estate AUM by institutional investor domicile

80.9% Asia Pacific
9.6% Europe
9.5% North America



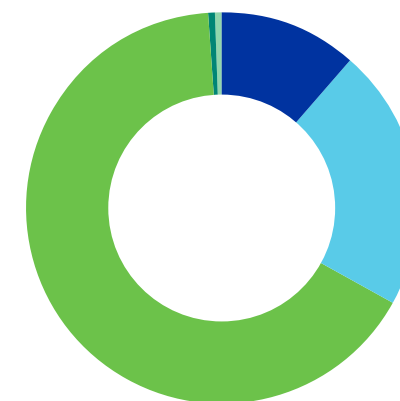
Asia Pacific

6.6% Asia Pacific
85.6% Europe
7.7% North America
0.1% Africa



Europe

11.6% Asia Pacific
21.6% Europe
65.7% North America
0.7% Africa
0.4% South America

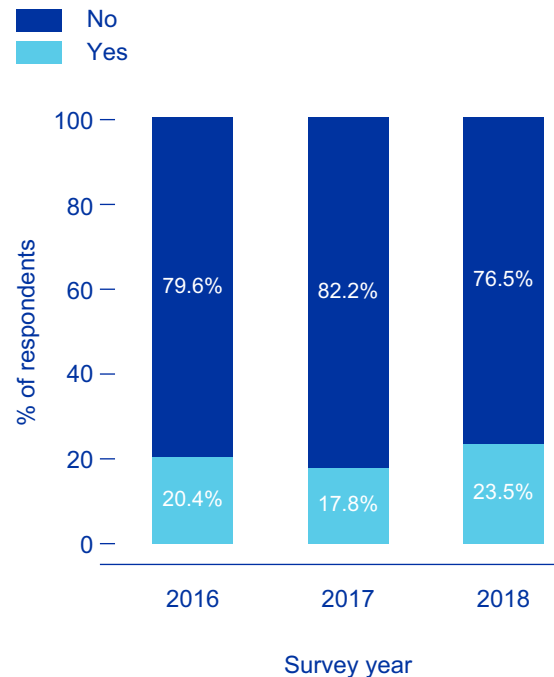


North America

Mergers and acquisitions

The trend towards consolidation has led to an increase in merger and acquisition activities in the real estate industry. Almost a quarter, 23.5%, of respondents were involved in merger activities over the past 10 years, while the remaining 76.5% have not. The 23.5% is an increase on the 17.8% recorded the previous year. For acquisition activities, 23.7% indicated yes, which is also an increase on the previous year, while the remaining 76.3% indicated no.

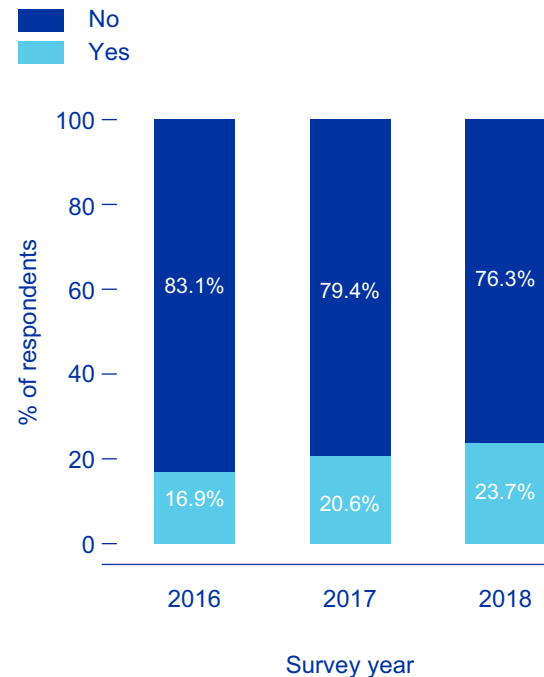
Figure 36: Merger activities in the past 10 years



Regarding the motivations for M&A activity a wide variety of unprompted responses (free text box) were provided. 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.

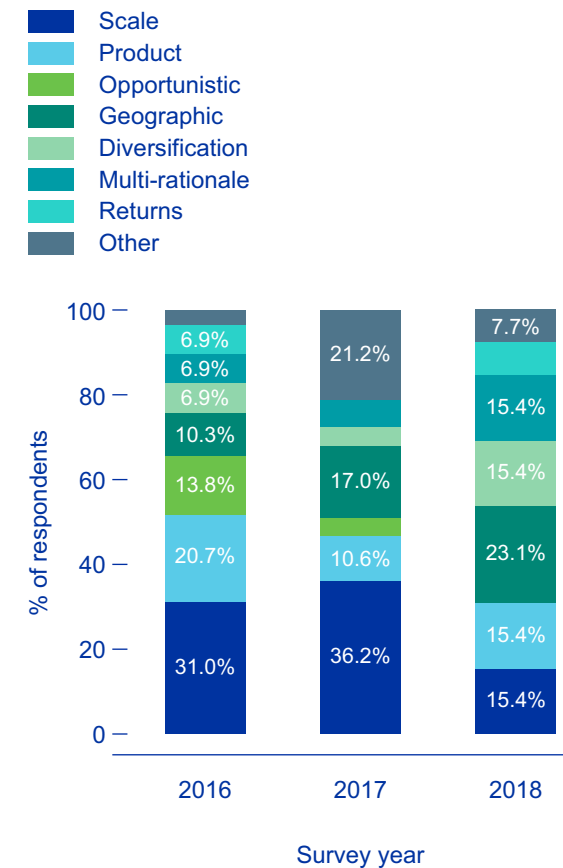
Expanding geographic footprint was cited by 23.1% of respondents as the key motivation for

Figure 37: Acquisition activities in the past 10 years



M&A activity. This has overtaken scale which was the most-often mentioned motivation last year. Scale, enhanced product offering, diversification and a multitude of reasons follow next as motivations mentioned by an equal number of participants (15.4% each).

Figure 38: Motivations for merger and acquisition activity



Glossary

Total real estate asset under management (AUM)

Refers to market value of real estate-related assets with respect to which your company 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 real estate vehicle

Refers to a structure where investors' capital is pooled together and managed as a single entity with a common investment aim.

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 investing directly into real estate.

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.

Participants

ANREV, INREV and NCREIF would like to thank the following list of managers for their contribution to the Fund Manager Survey 2018, and gave permission for their names to be published:

Aberdeen Standard Investments
 Activum SG
 AEPim
 AEW
 AINA Hospitality
 AIREF
 Alma Property Partners
 Altera Vastgoed NV
 American Realty Advisors
 AMP Capital
 Amundi Real Estate
 Amvest
 Angelo, Gordon & Co.
 APAC Capital Partners
 ARA Asset Management Limited
 Areim
 Ares Management
 Ascendas-Singbridge
 ASR Real Estate
 Aviva Investors
 AXA Investment Managers - Real Assets
 Barings LLC
 BEOS AG
 BlackRock
 Blue Vista Capital Management
 BMO Real Estate Partners
 BNP Paribas REIM
 Bouwinvest Real Estate Investors
 Brookfield Asset Management
 Capbridge Investors K.K.
 CapitaLand Limited
 CapMan Real Estate Limited

Catella
 CBRE Global Investors
 Charter Hall
 Chelsfield Asia (Hong Kong) Limited
 CIM Group
 CITIC Capital
 Clarion Partners
 Clearbell Capital
 Coima Sgr
 Commerz Real
 Cording Real Estate Group
 Credit Suisse
 Cromwell Property Group
 Crow Holdings Capital - Real Estate
 DC Values Investment Management
 Deka Immobilien GmbH
 Dekor Vastgoed B.V.
 Delancey
 Deutsche Finance Group
 Dexus
 Diamond Realty Mngement.inc
 DNB Life / DNB REIM
 DRC Capital LLP
 DTZ Investors
 DWS
 ECE Real Estate Partners S.à r.l.
 EG Funds Management
 Europa Capital
 EZLand
 Fabrica Immobiliare SGR
 Fidelity International
 Fokus Asset Management
 Foncière Atland
 Frogmore
 Gaw Capital
 Genesta
 GLL Real Estate Partners GmbH
 GLP

Goodman
 GreenOak Real Estate
 Greystar
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 Heitman
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 Lendlease
 LGIM Real Assets
 LimeTree Capital Advisors
 M&G Real Estate
 M7 Real Estate Ltd
 Madison International Realty
 Mapletree Investments Pte Ltd
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 Morgan Stanley
 Niam AB
 Northern Horizon Capital
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 PATRIZIA Immobilien AG
 PGIM
 Piramal Fund
 Pradera
 PROJECT Investment AG
 Prologis
 Propertylink Group
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 QIC
 Qualitas
 Quantum Immobilien
 Rockpoint Group, LLC
 Rynda Property Investors LLP
 Sarofim Realty Advisors Co.
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 SC Capital Partners
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 Silkroad Property Partners
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 STAM Europe
 Starcrest Capital Partners
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 Syntrus Achmea Real Estate & Finance
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 Vicinity Centres
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