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 86 00 | research@inrev.org | www.inrev.org

© Vereniging INREV

This document, including but not limited to text, content, graphics and photographs, are protected by copyrights. You agree to abide by all applicable copyright and other laws as well as any additional copyright notices or restrictions contained in this document and to notify INREV in writing promptly upon becoming aware of any unauthorised access or use of this document by any individual or entity or of any claim that this document infringes upon any copyright, trademark or other contractual, statutory or common law rights and you agree to cooperate to remedy any infringement upon any copyright, trademark or other contractual, statutory or common law rights.
Contents

Executive summary 4
1. Introduction and research definition of AUM 6
2. Total real estate assets under management 8
3. Non-listed real estate vehicles 30
4. Non-listed real estate funds 39
5. Investor composition for non-listed direct real estate vehicles 49
6. Mergers and acquisitions 53

Appendix
1. Participants 56
Executive summary

> Total real estate AUM at €4.1 trillion, marking a new record in the history of the survey
> Concentration of assets in the upper quartile continues. The 36 fund managers in the upper quartile accumulate around 79% of the total global real estate AUM
> Top 10 RE managers reported a total of €1.7 trillion AUM, a 41.6% increase on the €1.2 trillion equivalent at the end of 2020

Real estate AUM reaches €4.1 trillion
At the end of 2021, the total global real estate assets under management (AUM) reached a new record high of €4.1 trillion. At least in part, this is down to a significant amount of consolidation and merger and acquisition activity, further supported by record levels of capital raising activity.

The average AUM across all 143 of this year’s respondents stood at €28.7 billion. This is a notable increase on the €21.5 billion average reported in 2020. By number, the upper quartile of survey respondents accounts for 79% of total global AUM (€3.2 trillion), confirming the persistence of high concentration of the sector in larger fund managers.

The total AUM of the top 10 managers exceeds €1.7 trillion
The total AUM of the top 10 managers exceeded €1.7 trillion, with the average top 10 fund managers’ AUM at €189 billion. The list of top five managers, namely Blackstone, Brookfield, Prologis, PGIM, and Nuveen remain unchanged compared to the 2020 results in terms of both names and order. Blackstone has remained the only fund manager to feature in the top 10 rankings in all three main regions, as well as for global strategies. Due to the strong fundamentals in the industrial/logistics market, Prologis kept its third position in the global ranking, while GLP was the only new entry into the top 10, taking the 10th position in this year’s survey.

North American strategies dominate
In 2021 North American strategies (38%) overtook those focused on Europe (34%), with Asia Pacific strategies in a third position with 15% of the total global real estate AUM, followed closely by global strategies with 12%.

In addition to entering the overall top 10 manager list, GLP has become the manager with the largest Asia Pacific allocations. This fast growth from the third to the first position in the Asia Pacific ranking is largely due to its focus on industrial/logistics, one of the most attractive sectors in the region.

In Europe, Blackstone moved up from the third to the first position, with a total of €85.7 billion. UBS reentered the top 10 list after one year out, while NN emerges as one of the largest managers in Europe for the very first time.

Dry powder at 7.2% of the global AUM
Confirming strong and persistent demand for global real estate, the dry powder stood at €214 billion at the end of 2021, representing 7.2% of the total fund manager AUM.
Given that most of dry powder (€153 billion) is concentrated in the hands of large fund managers, and applying the 25.6% weighted average leverage, we estimate that this translates into around €300 billion for potential new acquisitions.

Pension funds and insurance companies remain the main sources of capital
Pension funds and insurance companies remain the main sources of capital in Europe and North America, whereas in Asia Pacific sovereign wealth funds overtook insurance companies and now stand in second place. Non-listed funds represent more than half of the non-listed real estate globally.

Reduced consolidation plans, but opportunistic M&A activities feature for the first time
After several years of activity, the latest survey highlights a reduction in planned consolidations and mergers and acquisitions overall, especially in North America. Scale, geography and multi-rationale are all equally important motivations for the planned M&A activities in 2022. Opportunistic activities are rising in importance for the first time since the series began, while product, which has featured consistently as an important motivation factor over the years, is not selected when asked about the 2022 plans.

1 The latest trends on capital raising activities in non-listed real estate can be found in the ANREV/INREV/NCREIF Capital Raising Survey.
2 Based on the sample of 96 fund managers with the total global real estate AUM of €2.8 trillion
3 Based on the sample of 68 fund managers with the total global real estate AUM of €1.8 trillion
Section 1

Introduction and research definition of AUM
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. This year’s survey includes 143 managers with the latest year end 2021 sample covering a significant total of real estate assets under management of €4.1 trillion, compared to €3.3 billion at year end 2020.

When questions were left unanswered, aggregates include the not reported data allowing for the sample to remain constant throughout the report. However, historical comparisons should be treated with caution.

All figures in the report are quoted as of 31 December 2021, unless stated otherwise.

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

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

Introduction

Use

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

They may not be used for the following:

• To determine the value of a fund
• To determine the value of a financial instrument
• To determine the amount payable under a financial instrument
• To determine the amount payable under a financial contract
• To calculate performance fees
• To define the allocation of a portfolio

It is important to note that the sample size and composition of the survey vary by year. Therefore, historical comparisons should be treated with caution.
Research Definition of AUM

The streamlined research definition of AUM was first applied to the 2020 year end survey to ensure greater consistency in reporting to the Fund Manager Survey and is as following:

Assets under Management (AUM) refers to the market value of real estate-related assets with respect to which your company provides, on a global basis, oversight and investment management services (for internal client capital and third party capital), and which generally consist of direct real estate investments, real estate funds and real estate-related loans; securities portfolios; and underlying real estate of investments in operating companies, joint ventures/co-investments, separate accounts and funds of funds.

For the purposes of the survey, the AUM should be reported on the following basis:

- Gross Managed Assets – as the market value, including leverage. This should include 100% of the owned assets, and only the % share owned in the case of JVs and club deals.

- Assets under administration, such as fund accounting and fiduciary services only, should be excluded.

For the second time, the Fund Manager Survey explicitly reports data related to dry powder held by fund managers. It was introduced to help assess the state of the industry in terms of total committed capital that is yet to be invested.

- Dry powder is the total undrawn commitments, defined as contractually committed from investors capital, which is available and ready for deployment, but not yet invested. For the purpose of the survey, it should be included in the AUM.
Section 2

Total real estate assets under management
The total global real estate assets under management (AUM) increased to €4.1 trillion in 2021 from €3.3 trillion at 2020 year end, more than doubling in size since 2015. This growth has been supported by the increase in the AUM of the biggest managers. The top 10 managers by size represent 41% of the total AUM, although the medium size and small size managers have also significantly increased in size over the years.

The total real estate under management of the top 10 managers stood at €1.7 trillion, with an average size of €169 billion. On the other hand, the average AUM of managers in the second and lower quartiles increased moderately in terms of average size compared with the 2020 year end results. The average fund manager size in the second quartile increased from €3.8 billion to €4.1 billion and in the case of the lower quartile, from €803 million to €831 million.

All managers in the top 5 reported total real estate allocations of above €100 billion, with PGIM, Prologis, Brookfield, and Blackstone reporting AUMs of above €180 billion. The combined assets under management of these four managers account for more than 25% of the total real estate capital in this year’s survey.

Figure 1: Total global real estate under management
Global real estate under management: quartiles by a number of fund managers

The figure below shows the concentration of total real estate assets under management globally, using quartiles by number of fund managers. Given that the top 10 fund managers account for 41% of global AUM, it is no surprise that the 36 managers in the upper quartile accumulate around 80% of the total AUM globally, accounting for EUR 3.2 trillion at the end of 2021. The increase in the concentration of global AUM is partially due to larger fund managers attracting an increasingly greater amount of capital, as well as ongoing consolidation as non-listed real estate industry continues to grow and mature. Blackstone alone, for example, increased their total AUM by almost €200 billion in 2021.

The following sections of the report will present further analysis, including the top 10 fund managers for each of the quartiles to illustrate the top bands of AUM in each of the cases.

Figure 2: Global real estate under management: quartiles by number of fund managers
Upper quartile: Top 10 managers by total global real estate AUM

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

1. Blackstone
2. Brookfield
3. Prologis
4. PGIM Real Estate
5. Nuveen Real Estate, a TIAA company
6. MIM
7. CBRE Investment Management
8. AXA IM Alts
9. UBS
10. GLP

€ billion

Upper quartile: Top 10 managers by total global real estate AUM
Third quartile: Top 10 managers by total global real estate AUM

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

2. Ares Management
3. ESR Singapore Pte Ltd
4. Primonial REIM
5. BlackRock
6. BNP Paribas REIM
7. La Française REM
8. CIM Group
9. Legal & General Investment Management Real Assets
10. Lendlease Investment Management

€ billion
Second quartile: Top 10 managers by total global real estate AUM

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

1. Sentinel Real Estate Corporation
2. Cromwell Property Group
3. Amvest
4. a.s.r. real estate
5. Art-Invest Real Estate Funds GmbH
6. Landmark Partners, An Ares Company
7. SC Capital Partners
8. Phoenix Property Investors
9. Intermediate Capital Group (ICG)
10. Alpha Real Capital LLP
Lower quartile: Top 10 managers by total global real estate AUM

Figure 6: Top 10 fund managers by total real estate AUM - Lower quartile

1. DBJ Asset Management Co., Ltd.
2. Sarofim Realty Advisors
3. White Peak
4. BPEA Real Estate
5. CONREN Land Management GmbH
6. Ardstone Homes
7. Brunswick Real Estate Capital
8. JINUSHI Asset Management Co., Ltd.
9. SilkRoad Property Partners
10. Clearbell Capital LLP

€ million
For the second year in the row the ANREV / INREV / NCREIF Fund Manager Survey captures data related to dry powder held by fund managers globally. Dry powder helps to assess the state of the industry in terms of total undrawn contractually committed from investors capital, which is available and ready for deployment but is not yet invested.

At the end of 2021, there was a total of €214 billion of dry powder, which represents 7.2% of the total global fund manager AUM. This is an small increase a from the €195 billion reported at the end of 2020, and slightly down in terms of percentage of AUM (9.3% at the 2020 year end). To put the latest figures in context of the net AUM, it is worth mentioning that the average leverage for those respondents that provided the data stood at 34.9%, but the weighted average leverage is lower, at 25.6%, suggesting that larger fund managers tend to apply lower gearing. Given that most of dry powder (€153 billion) is concentrated in the hands of large fund managers, and applying the 25.1% weighted average leverage, we estimate that this translates into around €300 billion for potential new acquisitions.

As was the case in 2020, the largest managers account for the majority of the dry powder (€153 billion), representing 71.5% of the €214 billion total. When expressed as percentage of AUM, the upper quartile of respondents has the lowest result of 6.4%, while the share increases gradually across the quartiles, with the third and second quartile results at around 10-11%. Due to smaller average size of managers in the lower quartile, dry powder as a percentage of AUM is much higher at 23.9%.

Figure 7: Global dry powder by fund manager quartiles

<table>
<thead>
<tr>
<th>Quartile</th>
<th>Dry powder total (€ billion)</th>
<th>Dry powder as % of AUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>195</td>
<td>9.3%</td>
</tr>
<tr>
<td>2021</td>
<td>214</td>
<td>7.2%</td>
</tr>
<tr>
<td>Upper quartile</td>
<td>144</td>
<td>8.7%</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>153</td>
<td>6.4%</td>
</tr>
<tr>
<td>2020</td>
<td>25</td>
<td>8.1%</td>
</tr>
<tr>
<td>2021</td>
<td>42</td>
<td>10.4%</td>
</tr>
<tr>
<td>Third quartile</td>
<td>18</td>
<td>15.8%</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>1</td>
<td>11.4%</td>
</tr>
<tr>
<td>Second quartile</td>
<td>8</td>
<td>30.9%</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>7</td>
<td>23.9%</td>
</tr>
<tr>
<td>Lower quartile</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 Based on the sample of 96 fund managers with the total global real estate AUM of €2.8 trillion
5 Based on the sample of 68 fund managers with the total global real estate AUM of €1.8 trillion
Total real estate AUM by regional strategy

North American strategies are predominant among other strategies accounting for 38% of the total AUM (€1.6 trillion). European strategies are the second biggest and account for more than one-third of the total allocations (€1.4 trillion).

Asia Pacific strategies represent around 16% (€635 billion), followed by global strategies with a 12% share or €471 billion. According to the 2022 ANREV/INREV/NCREIF Capital Raising Survey, global strategies grew in importance in 2021 with a record high €56 billion of capital raised for global real estate strategies out of the total €254 billion, which was also a record high.

North American managers are, on average, the largest across the globe. All the managers in the top five by size are headquartered in the US or Canada, and only three managers in the top ten are based in Europe or in the Asia Pacific region. The real estate AUM of the four largest North American manager exceeds the combined AUM of the ten largest fund Asia Pacific Managers and the top four European managers.

All managers in the European top 10 recorded real estate AUM of above €40 billion, with the two largest - Blackstone and Swiss Life Asset Managers - both at above €85 billion.

Strong home biases can be observed across all regions, fund managers tend to manage more capital in the region where they are headquartered. Blackstone is the only exception to this trend and the only manager to feature in the top ten in all three regions. The other two managers that show a similar pattern are UBS and Brookfield, featuring in the top ten in their own region (Europe and North America, respectively), as well as in another region, which in both cases is Asia Pacific.

Figure 8: Total real estate assets under management by regional strategy

- 15.5% Asia Pacific
- 34.4% European
- 38.2% North American
- 11.5% Global
- 0.4% South American
Upper quartile: Top 10 managers by total AUM – Asia Pacific strategies

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

1. GLP
2. CapitaLand
3. Charter Hall
4. ESR Singapore Pte Ltd
5. Mapletree Investments
6. Brookfield
7. IGIS Asset Management
8. Blackstone
9. Lendlease Investment Management
10. UBS
Third quartile: Top 10 managers by total AUM – Asia Pacific strategies

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

1. ISPT Pty Ltd
2. LaSalle Investment Management
3. Mitsui Fudosan Investment Advisors, Inc.
4. PGIM Real Estate
5. Invesco Real Estate
6. AXA IM Alts
7. SC Capital Partners
8. CBRE Investment Management
9. Phoenix Property Investors
10. MIM
Figure 11: Top 10 fund managers by Asia Pacific real estate AUM - Second quartile

<table>
<thead>
<tr>
<th>Rank</th>
<th>Manager</th>
<th>Annuity (€ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AEW</td>
<td>3.85</td>
</tr>
<tr>
<td>2</td>
<td>Altis Property Partners</td>
<td>3.53</td>
</tr>
<tr>
<td>3</td>
<td>Challenger (CIP Asset Management)</td>
<td>3.02</td>
</tr>
<tr>
<td>4</td>
<td>J P Morgan Asset Management</td>
<td>2.00</td>
</tr>
<tr>
<td>5</td>
<td>Scape Australia</td>
<td>2.51</td>
</tr>
<tr>
<td>6</td>
<td>DTZ Investors</td>
<td>1.50</td>
</tr>
<tr>
<td>7</td>
<td>Morgan Stanley Real Estate Investing</td>
<td>1.00</td>
</tr>
<tr>
<td>8</td>
<td>CITIC Capital</td>
<td>0.50</td>
</tr>
<tr>
<td>9</td>
<td>Qualitas</td>
<td>0.15</td>
</tr>
<tr>
<td>10</td>
<td>DWS</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Lower quartile: Top 10 managers by total AUM – Asia Pacific strategies

Figure 12: Top 10 fund managers by Asia Pacific real estate AUM - Lower quartile

1. Schroders Capital
2. JINUSHI Asset Management Co., Ltd.
3. SilkRoad Property Partners
4. RF CorVal
5. abrdn
6. Madigan Capital
7. Chelsfield Asia Limited
8. AEP Investment Management
9. PATRIZIA
10. Syntrus Achmea Real Estate & Finance

€ million
Upper quartile: Top 10 managers by total AUM – European strategies

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

1. Blackstone
2. Swiss Life Asset Managers
3. AXA IM Alts
4. union investment
5. abrdn
6. NN Investment Partners
7. Credit Suisse Asset Management
8. Deka Immobilien Investment GmbH
9. PATRIZIA
10. UBS
Third quartile: Top 10 managers by total AUM – European strategies

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

1. Hines
2. LaSalle Investment Management
3. Schroders Capital
4. Tristan Capital Partners
5. GLP
6. Invesco Real Estate
7. PGIM Real Estate
8. Bouwinvest Real Estate Investors
9. Edmond de Rothschild REIM (UK) Ltd
10. DeA Capital Real Estate

€ billion
Second quartile: Top 10 managers by total AUM – European strategies

Figure 15: Top 10 fund managers by European real estate AUM - Second quartile

1. Tishman Speyer
2. Alpha Real Capital LLP
3. M7 Real Estate
4. Mapletree Investments
5. OP Real Estate Asset Management
6. Europa Capital Partners LLP
7. Cromwell Property Group
8. DRC Savills Investment Management
9. IPUT plc
10. Altera Vastgoed

€ billion
Lower quartile: Top 10 managers by total AUM – European strategies

Figure 16: Top 10 fund managers by European real estate AUM - Lower quartile

1. Ardstone Homes
2. Brunswick Real Estate Capital
3. Clearbell Capital LLP
4. Dekor Vastgoed BV
5. Moorfield Group
6. Premico Group Oy
7. Tribeca AIFM
8. Grosvenor Europe
9. Clarion Partners
10. CapitaLand

€ million

0 200 400 600 800 1,000 1,200 1,400
Figure 17: Top 10 fund managers by North American real estate AUM - Upper quartile

1. Blackstone
2. PGIM Real Estate
3. Prologis
4. Brookfield
5. MIM
6. Nuveen Real Estate, a TIAA company
7. Clarion Partners
8. J P Morgan Asset Management
9. Invesco Real Estate
10. Hines

Upper quartile: Top 10 managers by total AUM – North American strategies

€ billion
Third quartile: Top 10 managers by total AUM – North American strategies

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

1. Tishman Speyer
2. Barings
3. Ares Management
4. CIM Group
5. DWS
6. LaSalle Investment Management
7. Pretium Partners, LLC
8. CBRE Investment Management
9. Manulife Investment Management
10. DivcoWest

€ billion
Figure 19: Top 10 fund managers by North American real estate AUM - Second quartile

1. American Realty Advisors
2. Crow Holdings Capital
3. Sentinel Real Estate Corporation
4. GLP
5. Starwood Capital
6. IGIS Asset Management
7. Pacific Urban Investors
8. Meritz Alternative Investment Management
9. Forest Investments Associates
10. TGM Associates L.P.

€ billion
Lower quartile: Top 10 managers by total AUM – North American strategies

Figure 20: Top 10 fund managers by North American real estate AUM - Lower quartile

1. Sarofim Realty Advisors
2. CapitaLand
3. Lendlease Investment Management
4. Paramount Group Real Estate (Fund X)
5. Farmland Opportunity, LLC
6. Hart Realty Advisers
7. WHI Real Estate Partners L.P.
8. Deka Immobilien Investment GmbH
9. Syntrus Achmea Real Estate & Finance
10. abrdn

€ million
Top 10 managers by total AUM - Global strategies

Figure 21: Top 10 fund managers by real estate AUM of global strategies

1. Blackstone
2. Starwood Capital
3. CBRE Investment Management
4. Keppel Capital Holdings Pte Ltd
5. Brookfield
6. CapitaLand
7. Commerz Real
8. M&G Investments
9. DWS
10. LaSalle Investment Management

€ billion
Section 3

Non-listed real estate vehicles
Global real estate AUM by vehicle type

The largest proportion of the real estate portfolios is composed of non-listed real estate vehicles. Non-listed real estate vehicles include funds, separate accounts, joint ventures (JVs), club deals, funds of funds and debt products. Combined, these vehicles represent the biggest share, 84.8% (€3.4 trillion). Together, the other types of real estate, such as listed, derivatives, and other real estate, account for the remaining 15.2%, of which listed real estate represents 7.6%.

Non-listed real estate funds continue to be the largest non-listed product by AUM globally, accounting for 58.4% (€2.0 trillion) of the total non-listed real estate AUM. Next are separate accounts investing directly, followed by JVs and club deals and debt funds. The share of debt vehicles remained stable at 8.9% of the non-listed real estate allocations, highlighting the importance of debt products within real estate portfolios.
Top 10 managers by non-listed real estate AUM

Figure 23: Top 10 fund managers by non-listed real estate AUM - all strategies

1. Blackstone
2. PGIM Real Estate
3. Brookfield
4. MIM
5. Nuveen Real Estate, a TIAA company
6. CBRE Investment Management
7. AXA IM Alts
8. UBS
9. Swiss Life Asset Managers
10. Hines
Non-listed real estate is the most common route to access the real estate market across all regional strategies (84%).

This is most prominent for European strategies, where non-listed real estate products account for over 91.9% of the total real estate AUM. For strategies focusing on North America and Asia Pacific, non-listed real estate vehicles represent 81.0% and 73.4%, respectively.

Although non-listed vehicles account for the largest share of the real estate portfolio across all regions, managers have a more diversified product strategy when they invest in North America and Asia Pacific.

Figure 24: All regional strategies

- 84.0% Non-listed real estate AUM
- 16.0% Other real estate AUM

Figure 25: Non-listed real estate vehicles by regional strategy

- Europe
  - 91.1% Non-listed real estate AUM
  - 8.9% Other real estate AUM
- Asia Pacific
  - 73.4% Non-listed real estate AUM
  - 26.6% Other real estate AUM
- North America
  - 81.0% Non-listed real estate AUM
  - 19.0% Other real estate AUM
Funds represent the biggest share of the non-listed real estate portfolio across all regions. In Asia Pacific non-listed real estate funds account for 65.0% of all the capital allocated to non-listed real estate, higher than the share in Europe and North America, at 57.7% and 51.8%, respectively.

Separate accounts investing directly in real estate represent the second biggest allocation in North America and in Europe, with 19.9% and 20.8% of the total non-listed allocations, respectively.

JVs and club deals are the second most popular products for Asia Pacific strategies, accounting for 16.5% of the total non-listed real estate allocations. This vehicle type is also significant for fund managers investing in Europe and North America, representing respectively 9.0% and 10.2% of the non-listed AUM.

It is worth highlighting the importance of non-listed debt products in North America and Europe, which account for 17.2% and 5.2% of the total real estate AUM of fund managers, respectively.
Asia Pacific Strategy:
Top 10 managers by non-listed real estate AUM

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

1. GLP
2. Charter Hall
3. ESR Singapore Pte Ltd
4. IGIS Asset Management
5. Blackstone
6. Lendlease Investment Management
7. UBS
8. LOGOS
9. CapitaLand
10. Dexus

€ billion
European strategy:
Top 10 managers by non-listed real estate AUM

Figure 28: Top 10 managers by non-listed real estate AUM - European strategy

1. Blackstone
2. Swiss Life Asset Managers
3. AXA IM Alts
4. union investment
5. NN Investment Partners
6. Credit Suisse Asset Management
7. Deka Immobilien Investment GmbH
8. CBRE Investment Management
9. Amundi
10. PATRIZIA

€ billion
North American strategy:
Top 10 managers by non-listed real estate AUM

Figure 29: Top 10 managers by non-listed real estate AUM - North American strategy

1. Blackstone
2. MIM
3. PGIM Real Estate
4. Nuveen Real Estate, a TIAA company
5. Clarion Partners
6. J P Morgan Asset Management
7. Brookfield
8. Hines
9. Invesco Real Estate
10. Prologis

€ billion
Global strategy:
Top 10 managers by non-listed real estate AUM

Figure 30: Top 10 managers by non-listed real estate AUM - Global strategy

1. Blackstone
2. Starwood Capital
3. Brookfield
4. CBRE Investment Management
5. Commerz Real
6. M&G Investments
7. Keppel Capital Holdings Pte Ltd
8. DWS
9. Deka Immobilien Investment GmbH
10. Credit Suisse Asset Management

€ billion
Section 4

Non-listed real estate funds
This section of the report focuses only on the non-listed funds. Non-listed real estate funds represent a large portion of the total global real estate portfolios across all the regions, accounting for 49% of the total non-listed real estate allocations. The remaining 51% is invested through other non-listed products and listed real estate or other investment routes as previously mentioned.

There are small differences when breaking this down into regional strategies. Non-listed real estate funds are the most popular vehicle for European strategies representing 51.3% of the total European real estate AUM. For Asia Pacific and North American strategies, the shares are lower, 46.4% and 41.8%, respectively.

Figure 31: Non-listed real estate vehicles by regional strategy

Figure 32: Non-listed real estate vehicles by regional strategy
Non-listed real estate funds by regional strategy and by style

Looking at the split of AUM by regional strategies and by style, we see that core represents most assets under management hold by fund managers globally.

However, it varies by region. Core represents 54.8% of the AUM of Asia Pacific strategies compared with 80.6% in Europe and 86.1% in North America. Opportunities strategies represents the largest share of global strategies at 86.1%.

By number it is clear that core funds are bigger in size than riskier type of funds in Asia Pacific and North America, whereas core funds in Europe are similar by number and size.

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

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

6 Based on reported data of €2.0 trillion
Non-listed real estate funds by regional strategy and by structure

Open end funds represent the largest share of AUM of non-listed real estate funds globally. However, closed end structures represent 79.3% of AUM of global strategies and 59.3% of the AUM of Asia Pacific strategies. For North American and European strategies open end structures are dominating the landscape by AUM.

Looking at the number of vehicles, closed end vehicles are more numerous for every regional and global strategies apart from European strategies, indicating that they are, again, on average smaller in size.

Figure 35: Value of non-listed real estate funds by structure and regional strategy

<table>
<thead>
<tr>
<th>Regional Strategy</th>
<th>Open end</th>
<th>Closed end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>59.3%</td>
<td>40.7%</td>
</tr>
<tr>
<td>European</td>
<td>72.6%</td>
<td>27.4%</td>
</tr>
<tr>
<td>North American</td>
<td>83.4%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Global</td>
<td>79.3%</td>
<td>20.7%</td>
</tr>
<tr>
<td>South American</td>
<td>74.9%</td>
<td>25.1%</td>
</tr>
<tr>
<td>All strategies</td>
<td>64.0%</td>
<td>36.0%</td>
</tr>
</tbody>
</table>

Figure 36: Number of non-listed real estate funds by structure and regional strategy

<table>
<thead>
<tr>
<th>Regional Strategy</th>
<th>Open end</th>
<th>Closed end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>91.6%</td>
<td>8.4%</td>
</tr>
<tr>
<td>European</td>
<td>55.8%</td>
<td>44.2%</td>
</tr>
<tr>
<td>North American</td>
<td>40.8%</td>
<td>59.2%</td>
</tr>
<tr>
<td>Global</td>
<td>23.8%</td>
<td>76.2%</td>
</tr>
<tr>
<td>South American</td>
<td>47.1%</td>
<td>52.9%</td>
</tr>
<tr>
<td>All strategies</td>
<td>34.3%</td>
<td>65.7%</td>
</tr>
</tbody>
</table>

7 Based on reported data of €2.0 trillion
By country and sector strategies it is interesting to see the different landscape in funds offering. Single country/single country funds are dominating Asia Pacific strategies whereas single country/multi sector are dominating the North American strategies (represented by the ODCE funds). European strategies are much more diverse with multi country/multi sector funds representing 46.2% of the AUM of funds.

Similar findings are observed when looking at the split by number of vehicles.

Figure 37: Value of non-listed real estate funds by country / sector strategy and regional strategy

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Asia Pacific</th>
<th>European</th>
<th>North American</th>
<th>Global</th>
<th>South American</th>
<th>All strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single country/single sector</td>
<td>25.0%</td>
<td>12.4%</td>
<td>61.9%</td>
<td>20.9%</td>
<td>61.9%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Single country/multi-sector</td>
<td>46.2%</td>
<td>21.8%</td>
<td>11.0%</td>
<td>17.9%</td>
<td>11.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Multi-country/single sector</td>
<td>11.0%</td>
<td>46.2%</td>
<td>11.0%</td>
<td>11.0%</td>
<td>11.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Multi-country/multi-sector</td>
<td>20.9%</td>
<td>74.8%</td>
<td>74.8%</td>
<td>74.8%</td>
<td>74.8%</td>
<td>74.8%</td>
</tr>
</tbody>
</table>

Figure 38: Number of non-listed real estate funds by country / sector strategy and regional strategy

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Asia Pacific</th>
<th>European</th>
<th>North American</th>
<th>Global</th>
<th>South American</th>
<th>All strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single country/single sector</td>
<td>87.0%</td>
<td>25.5%</td>
<td>87.0%</td>
<td>52.9%</td>
<td>87.0%</td>
<td>36.0%</td>
</tr>
<tr>
<td>Single country/multi-sector</td>
<td>41.6%</td>
<td>21.6%</td>
<td>21.6%</td>
<td>21.6%</td>
<td>21.6%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Multi-country/single sector</td>
<td>23.5%</td>
<td>23.5%</td>
<td>29.3%</td>
<td>41.8%</td>
<td>29.3%</td>
<td>29.3%</td>
</tr>
<tr>
<td>Multi-country/multi-sector</td>
<td>29.3%</td>
<td>29.3%</td>
<td>29.3%</td>
<td>29.3%</td>
<td>29.3%</td>
<td>29.3%</td>
</tr>
</tbody>
</table>

8 Based on reported data of €2.0 trillion
All strategies: Top 10 managers by non-listed real estate funds AUM

Figure 39: Top 10 managers by non-listed real estate funds AUM - all strategies

1. Blackstone
2. Brookfield
3. PGIM Real Estate
4. Starwood Capital
5. Swiss Life Asset Managers
6. Nuveen Real Estate, a TIAA company
7. J P Morgan Asset Management
8. Deka Immobilien Investment GmbH
9. GLP
10. Union Investment
Asia Pacific strategy: Top 10 managers by non-listed real estate funds AUM

Figure 40: Top 10 managers by non-listed real estate funds AUM - Asia Pacific strategy

1. GLP
2. ESR Singapore Pte Ltd
3. IGIS Asset Management
4. Blackstone
5. Charter Hall
6. Lendlease Investment Management
7. Mastern Investment Management
8. ISPT Pty Ltd
9. Dexus
10. CapitaLand

€ billion
European strategy: Top 10 managers by non-listed real estate funds AUM

Figure 41: Top 10 managers by non-listed real estate funds AUM - European strategy

1. Blackstone
2. Swiss Life Asset Managers
3. union investment
4. Deka Immobilien Investment GmbH
5. Credit Suisse Asset Management
7. PATRIZIA
8. CBRE Investment Management
9. Amundi
10. Prologis

€ billion

0 10 20 30 40 50 60 70 80 90
North American strategy: Top 10 managers by non-listed real estate funds AUM

1. Blackstone
2. PGIM Real Estate
3. Clarion Partners
4. J P Morgan Asset Management
5. Nuveen Real Estate, a TIAA company
6. Morgan Stanley Real Estate Investing
7. Prologis
8. Invesco Real Estate
9. UBS
10. DWS
Global strategy: Top 10 managers by non-listed real estate funds AUM

Figure 43: Top 10 managers by non-listed real estate funds AUM - Global strategy

1. Blackstone
2. Starwood Capital
3. Brookfield
4. Commerz Real
5. Deka Immobilien Investment GmbH
6. Keppel Capital Holdings Pte Ltd
7. Morgan Stanley Real Estate Investing
8. union investment
9. Credit Suisse Asset Management
10. Mastern Investment Management

€ billion
Section 5

Investor composition for non-listed direct real estate vehicles
Pension funds keep their position as the most important source of capital for the non-listed real estate industry globally. They are the source of 37.7% of the capital invested in non-listed direct real estate AUM, with insurance companies coming in second place (19.3%), followed by sovereign wealth funds (6.7%). Unspecified investors (other) account for a notable 14.4% of the capital and mostly represent endowments, parent companies/GPs, private equity firms, and other asset managers.

Figure 44: Non-listed direct real estate AUM by institutional investor type

- 37.7% Pension funds
- 19.3% Insurance companies
- 6.7% Sovereign wealth funds
- 3.7% Government institutions
- 3.8% Funds of funds
- 3.6% High net worth individuals/Family offices
- 2.3% Investment banks
- 6.4% Corporations
- 14.4% Other
- 2.0% Not reported
Non-listed direct real estate AUM: by investor type and fund manager domicile

There are several differences when looking into the sources of capital per region, although there are several similarities as well. Pension funds are the main source of capital for all three regions.

Sovereign wealth funds and insurance companies remain the second and third most important sources of capital for Asia Pacific strategies with 19.4% and 12.0% shares, respectively.

In Europe, insurance companies are the second most important investor, accounting for 23.1% of the capital in the non-listed direct real estate industry. For European strategies the two main investor types, pension funds and insurance companies, jointly account for more than 60% of the total capital allocated to the non-listed real estate segment.

Insurance companies, corporations and other types of investors are the most important sources of capital for North American strategies after pension funds, altogether making up nearly three-quarters of the total non-listed direct real estate AUM.

Figure 45: Non-listed direct real estate AUM by institutional investor type

<table>
<thead>
<tr>
<th>Region</th>
<th>Pension funds</th>
<th>Insurance companies</th>
<th>Sovereign wealth funds</th>
<th>Government institutions</th>
<th>Funds of funds</th>
<th>High net worth individuals/Family offices</th>
<th>Investment banks</th>
<th>Corporations</th>
<th>Other</th>
<th>Not reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>43.0%</td>
<td></td>
<td>12.0%</td>
<td>19.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>39.6%</td>
<td></td>
<td>23.1%</td>
<td>3.6%</td>
<td>4.4%</td>
<td></td>
<td></td>
<td>20.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>34.8%</td>
<td></td>
<td>18.1%</td>
<td>6.8%</td>
<td>6.4%</td>
<td>4.5%</td>
<td>3.9%</td>
<td>7.8%</td>
<td>12.7%</td>
<td></td>
</tr>
</tbody>
</table>
Non-listed direct real estate AUM by investor domicile

European and North American investors are the largest sources of capital for non-listed direct real estate vehicles globally, respectively accounting for 42% and 39% of the total AUM of fund managers globally. Asia Pacific investors account for the remaining 19%.

Almost 75% of the capital allocated to Asia Pacific strategies comes from Asia Pacific investors. The remaining 25% is split between European (12.1%) and North American investors (13.5%).

The landscape is similar in Europe, with around 76.4% of the non-listed direct real estate AUM coming from European investors, with Asia Pacific (5.7%) and North American investors (17.6%) making up most of the rest. North American strategies have a broader investor base. North American investors are the source behind 63.9% of the total capital allocated in this region, followed by European investors (21.1%) and Asia Pacific investors (14.2%).

Figure 46: Non-listed direct real estate AUM by institutional investor domicile

<table>
<thead>
<tr>
<th>Region</th>
<th>AUM (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>100%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>18.6%</td>
</tr>
<tr>
<td>Europe</td>
<td>42.1%</td>
</tr>
<tr>
<td>North America</td>
<td>38.9%</td>
</tr>
<tr>
<td>South America</td>
<td>0.2%</td>
</tr>
<tr>
<td>Africa</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Figure 47: Non-listed direct real estate AUM by institutional investor domicile and regional strategy

<table>
<thead>
<tr>
<th>Region</th>
<th>Asia Pacific</th>
<th>Europe</th>
<th>North America</th>
<th>South America</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUM (%)</td>
<td>74.4%</td>
<td>76.4%</td>
<td>63.9%</td>
<td>21.1%</td>
<td>14.2%</td>
</tr>
</tbody>
</table>

Asia Pacific investors account for the largest AUM in all regions, followed by Europe and North America.
Section 6

Mergers and acquisitions
The trend of consolidation that has been observed in the real estate industry in recent years is slowing down across all regions, and the wave of mergers and acquisitions seems to be notably reduced as well.

Around 21% of the respondents were involved in mergers and 15% in acquisition activities during 2021, with only 6% and 5% of the respondents expect to be involved in any of these processes in 2022. Europe is the only region where respondents expect to be meaningfully involved in merger activities in 2022 (15% of the respondents), this number drops to only 3% when speaking about acquisition activities.

---

**Figure 48: Merger activities in the past 10 years**

<table>
<thead>
<tr>
<th>Year</th>
<th>Asia Pacific</th>
<th>Europe</th>
<th>North America</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2011-2017</td>
<td>40%</td>
<td>15%</td>
<td>18%</td>
<td>6%</td>
</tr>
<tr>
<td>In 2018</td>
<td>15%</td>
<td>18%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>In 2019</td>
<td>10%</td>
<td>5%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>In 2020</td>
<td>10%</td>
<td>15%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>In 2021</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Planning in 2022</td>
<td>38%</td>
<td>41%</td>
<td>38%</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 49: Acquisition activities in the past 10 years**

<table>
<thead>
<tr>
<th>Year</th>
<th>Asia Pacific</th>
<th>Europe</th>
<th>North America</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2011-2017</td>
<td>25%</td>
<td>17%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>In 2018</td>
<td>25%</td>
<td>10%</td>
<td>14%</td>
<td>10%</td>
</tr>
<tr>
<td>In 2019</td>
<td>13%</td>
<td>21%</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>In 2020</td>
<td>13%</td>
<td>14%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>In 2021</td>
<td>25%</td>
<td>38%</td>
<td>45%</td>
<td>39%</td>
</tr>
<tr>
<td>Planning in 2022</td>
<td>30%</td>
<td>40%</td>
<td>41%</td>
<td></td>
</tr>
</tbody>
</table>

---

9 Based on 47 and 53 participants, respectively, out of the total of 143 fund managers surveyed
Motivations for merger and acquisition activities: all fund managers

In 2021 scale, geography multi-rationale were listed as the most important motivation for fund managers engaging in M&A activity, followed by opportunity. Scale bounced back in 2021 after the impact of Covid-19, with fund managers trying to increase their size and take advantage of the economies of scale.

Scale, geography and multi-rationale are all equally important motivations for the planned M&A activities in 2022, with opportunistic activities notably rising in importance for the first time since the series began.

Product, which has featured consistently as an important motivation factor over the years, is not selected when asked about the 2022 plans.

Figure 50: Motivations for merger and acquisition activity

<table>
<thead>
<tr>
<th>Period of merger/acquisition activity</th>
<th>Scale</th>
<th>Product</th>
<th>Opportunistic</th>
<th>Geographic</th>
<th>Multi-rationale</th>
<th>Returns</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2017</td>
<td>19%</td>
<td>30%</td>
<td>17%</td>
<td>17%</td>
<td>6%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>2018</td>
<td>23%</td>
<td>19%</td>
<td>19%</td>
<td>17%</td>
<td>19%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>2019</td>
<td>17%</td>
<td>23%</td>
<td>17%</td>
<td>19%</td>
<td>17%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>2020</td>
<td>14%</td>
<td>25%</td>
<td>19%</td>
<td>12%</td>
<td>8%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>2021</td>
<td>21%</td>
<td>21%</td>
<td>19%</td>
<td>21%</td>
<td>6%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Planning in 2022</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
</tr>
</tbody>
</table>
Appendix 1

Participants
Participants

ANREV, INREV and NCREIF would like to thank the following list of managers for their contribution to the Fund Manager Survey 2022:

a.s.r. real estate
abrdn
AEP Investment Management
Aermont
Aetos Japan LLC
AEW
AHF GP Limited
Alpha Real Capital LLP
Altera Vastgoed
Altis Property Partners
American Realty Advisors
AMP Capital
Amundi
Amvest
Ardian
Ardstone Homes
Areim
Ares Management
Art-Invest Real Estate Funds GmbH
Avanath Capital Management
AXA IM Alts
Barings
BC Partners
BlackRock
Blackstone
BNP Paribas REIM
Bouwinvest Real Estate Investors
BPEA Real Estate
Brookfield
Brunswick Real Estate Capital
CapitaLand
CBRE Investment Management
Challenger (CIP Asset Management)
Charter Hall
Chelsfield Asia Limited
CIM Group
CITIC Capital
Clarion Partners
Clearbell Capital LLP
Commerz Real
CONREN Land Management GmbH
Credit Suisse Asset Management
Cromwell Property Group
Crow Holdings Capital
DBJ Asset Management Co., Ltd.
DeA Capital Real Estate
Deka Immobilien Investment GmbH
Dekor Vastgoed BV
Deutsche Asset One - Dupuis
Dexus
DivcoWest
DNB REIM / DNB Life
DRC Savills Investment Management
DTZ Investors
DWS
Edmond de Rothschild REIM (UK) Ltd
ESR Singapore Pte Ltd
Europa Capital Partners LLP
Farmland Opportunity, LLC
Fidelity International
Fokus Asset Management
Forest Investments Associates
Frogmore
GARBE Industrial Real Estate GmbH
Generali Real Estate Società di Gestione del Risparmio S.p.A.
GLP
Grosvenor Europe
Hart Realty Advisers
Hearthstone Investments
Heitman
Henley Investment Management Ltd
Hines
IGIS Asset Management
Intermediate Capital Group (ICG)
Invesco Real Estate
IPUT plc
ISPT Pty Ltd
J P Morgan Asset Management
JINUSHi Asset Management Co., Ltd.
Keppel Capital Holdings Pte Ltd
KGAL Investment Management GmbH & Co. KG
La Française REM
Landmark Partners, An Ares Company
LaSalle Investment Management
Legal & General Investment Management
Real Assets
Lendlease Investment Management
LOGOS
Lords LB asset management
M&G Investments
M7 Real Estate
Madigan Capital
Mandatum AM AIFM Ltd
Manulife Investment Management
Mapletree Investments
Mastern Investment Management
Meritz Alternative Investment Management
MIM
Mitsui Fudosan Investment Advisors, Inc.
Moorfield Group
Morgan Stanley Real Estate Investing
Niam
NN Investment Partners
Nuveen Real Estate, a TIAA company
OP Real Estate Asset Management
Pacific Urban Investors
Paramount Group Real Estate (Fund X)
PAREF
PATRIZIA
PGIM Real Estate
Phoenix Property Investors
Premico Group Oy
Pretium Partners, LLC
Primordial REIM
Prologis
Proprium Capital Partners, LP
Qualitas
RF CorVal
Sarofim Realty Advisors
SC Capital Partners
Scape Australia
Schroders Capital
Sentinel Real Estate Corporation
SilkRoad Property Partners
Sirius Capital Partners
Starwood Capital
Swiss Life Asset Managers
Syntrus Achmea Real Estate & Finance
TA Realty LLC
TGM Associates L.P.
The GPT Group
Tishman Speyer
Tribeca AIFM
Tristan Capital Partners
True North European Real Estate Partners
UBS
UBS Farmland Investors
Union Investment
Vesteda
Vicinity Centres
WHI Real Estate Partners L.P.
White Peak