Market size project

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Relevance of market sizes

Project provides a series of important benefits for **IPD**
- Weightings for multinational benchmarks & composite indexes
- Information of IPD’s market coverage

Project provides a series of important benefits for **Asset owners**
- Weighting in multinational indexes
- Replication of global universe in portfolios

Project provides a series of important benefits for **Asset managers**
- Geographic focus and growth opportunities for new funds and expansion of existing funds
- Weighting in multinational portfolios
Methodology

Previous literature
- Relationship with GDP (Lian and McIntosh, 1999)
- DTZ, LaSalle and Pramerica produce their own estimates

Despite benefits, there have been **significant limitations**
- Inconsistencies in approach between countries (IPD)
- Limited depth of coverage in terms of sector weights, portfolio types, etc

IPD Global Market Size numbers are **unique**
- bottom-up estimates of professionally managed portfolios
Methodology - Market size levels

Top down

- Owner occupied
- Invested
- Professionally managed
- IPD measured

Portfolio by portfolio
## Methodology – Definition

<table>
<thead>
<tr>
<th><strong>Included:</strong></th>
<th><strong>Excluded:</strong></th>
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</thead>
<tbody>
<tr>
<td>Insurance &amp; pension funds</td>
<td>Small private landlords (&lt; USD 100 million)</td>
</tr>
<tr>
<td>SWFs</td>
<td>Owner occupied portfolios (pubs, hotels, hospitals)</td>
</tr>
<tr>
<td>Unlisted funds (closed &amp; open)</td>
<td></td>
</tr>
<tr>
<td>Traditional estates &amp; charities</td>
<td>Mortgage companies</td>
</tr>
<tr>
<td>Listed funds</td>
<td>Development property</td>
</tr>
<tr>
<td>Large private landlords (&gt; USD 100 million)</td>
<td>Fund of funds and indirect holdings (double counting)</td>
</tr>
<tr>
<td>Leased Office, retail, industrial, residential and other property Including self storage and parking</td>
<td>Municipal and social housing</td>
</tr>
<tr>
<td></td>
<td>Forestry, Farmland &amp; infrastructure</td>
</tr>
</tbody>
</table>
Portfolio by portfolio data collection – end 2013

<table>
<thead>
<tr>
<th>Funds</th>
<th>Number of assets</th>
<th>Capital value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPD databases</td>
<td>&gt; 1400</td>
<td>&gt; USD 1.4tn</td>
</tr>
<tr>
<td>Extra portfolios added</td>
<td>&gt; 7500</td>
<td>&gt;USD 5.5tn</td>
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</tbody>
</table>

Data collected:
- Debt, equity
- Sector and geographic real estate investment portfolio breakdown

Sources: Annual reports, information on websites and confidential information received on portfolio level
Absolute market size estimate compared to previous IPD estimate

Estimates in USD million
Relative market size estimate - comparison
Relative estimates per capita & GDP (USD)

Source GDP and population: Worldbank
Relative market size estimate - comparison
Relative estimates per capita & CV per sqm. (USD)

Source population: Worldbank
Relative market size estimate – compared to other indicators
Global breakdown by market

Source GDP and population: Worldbank
Market size ownership by domicile of the fund
Non-domestic ownership still small
Home bias in asset owners portfolio
Weighting in global index versus domestic exposure
Market size estimate - Development over time
Changes over time, due to capital growth and currency impact
Market size estimate – sector composition
Retail and office dominate, but large differences for residential
Market size estimate – portfolio type by country of assets
Listed dominated dominates ASIA and unlisted funds
Europe
Market size estimate – leverage
Based on the country of assets

Unlisted funds

<table>
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<tr>
<th>Country</th>
<th>Equity</th>
<th>Debt</th>
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<tr>
<td>Global</td>
<td></td>
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<td>Europe</td>
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<td>Americas</td>
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Listed funds

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Use of leverage
LTV on individual portfolio level

- Listed fund Total
- Unlisted Total
New market size estimate impact on return in USD
Total return

![Graph showing total return over years from 2001 to 2013, comparing 2013 update and 2012 update.]
Conclusions

Real estate isn’t concentrated like the equity market

Relative market size is more related to the capital value per square meter than the GDP

Portfolio type and sector composition differs by country, but also the use of leverage

Non-domestic investment in portfolios is still small and there is still a strong home-bias for asset owners