RESEARCH & MARKET INFORMATION

INVESTOR UNIVERSE UK SURVEY 2010

INREV

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INREV
STRAWINSKYLAAN 631
1077 XX AMSTERDAM
THE NETHERLANDS

T +31 (0)20 799 39 60
INFO@INREV.ORG
WWW.INREV.ORG

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 funds 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 funds market. The association's primary focus is on institutional investors, although other market participants such as fund managers, investment banks, lawyers and other advisors provide additional support.

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ACKNOWLEDGEMENTS

The contribution of the pension fund, insurance company and charity investors that provided data and information on their real estate investments and strategies is sincerely appreciated. Most wished their identities to remain anonymous. The report would have not been possible without their contribution.

Thanks are also due to the investment consultants who provided insights and information on the real estate strategies adopted by UK institutional investors, and to State Street Investment Analytics for providing data on pension fund and charity exposures to real estate.

Of course, those contributing information are not responsible for the views expressed in this report.

EXECUTIVE SUMMARY

The aim of this research is to provide estimates of the current and future size of the UK institutional non-listed real estate universe and the overall UK institutional real estate universe. A further objective is to understand the strategies influences behind these real estate exposures. The project has been undertaken in conjunction with the UK's Investment Property Forum.

The UK institutions covered are mainly defined benefit pension schemes and insurance companies' life funds, specifically those funds where institutional investors have responsibility for multi-asset allocation decisions. Charities are also included. A survey of these institutions has been undertaken to acquire information about their real estate exposures and strategies.

The sample in this report covers institutional investors whose assets total £447 billion and hold real estate valued at £44 billion, representing over a third and a half of the respective universes. The research also draws on interviews with major institutional investment consultants and additional sources of information, particularly on the real estate exposures of smaller pension funds.

The UK life and pension fund total real estate universe is estimated at £80 billion, representing 7% of their total assets; charities add roughly another £10 billion to this figure. The life and pension fund non-listed real estate universe is estimated to be £23 billion, representing 2% of their total assets and 29% of their global real estate investments. The very large pension funds account for a relatively small proportion of the non-listed universe – 16% compared to their 40% share of the overall real estate universe. The smaller pension funds with total assets < £2.5 billion and the life funds dominate the non-listed real estate universe.

Direct investment, at approximately £53 billion, is the largest component accounting for two-thirds of the institutional real estate universe. This reflects the high proportion in the universe of the life funds and the big pension funds, all of which invest most of their capital directly.

Some of the big pension funds are fundamentally opposed to investing in non-listed real estate because they perceive that:

– returns are not in line with the vehicles' risk and illiquidity,
– the nature of returns are different from the core UK IPD-type return they aspire,
– investors' weak control and influences over non-listed funds.

Most of these small and medium-sized pension funds invest in core diversified ('balanced') vehicles. However, a growing, albeit still small, proportion of these pension funds are pursuing more adventurous strategies that non-listed vehicles make possible, where the objective is either higher returns or superior diversification for their multi-asset portfolios.

The life funds account for almost one third of non-listed investments. This partly reflects their weight in the real estate universe, but they have significant exposure to specialised non-listed vehicles. They invest in these to improve the diversification of their real estate portfolios and, in particular, to access out-of-reach sectors and sectors where they do not have the expertise to invest directly. The life funds' heavy weight to non-domestic real estate also contributes to their exposure to non-listed real estate.

The big pension funds invest in non-listed real estate for many of the same reasons as the life funds. However, a notable finding is that their exposure to non-listed is disproportionately low. One reason is that many prefer to access out-of-reach and specialist sectors through joint ventures which are considered to offer greater control, influence and alignment of interest than non-listed vehicles. Another factor contributing to big pension funds' modest use of non-listed real estate is an unusually low exposure to non-domestic real estate.

Non-listed was by far the most important way of investing outside the UK. Three quarters of the £10.5 billion non-domestic real estate universe is estimated to be in non-listed vehicles. By comparison, non-listed accounts for about 22% of domestic real estate investment.

Non-domestic investments are estimated to account for almost £8 billion (a third) of the £23 billion institutional non-listed universe. This leaves £15 billion of non-listed real estate in the UK.

The institutional total real estate universe is expected to grow by around 20% from £80 billion to over £97 billion in the next three years. There are two elements to this growth. First, exposure to real estate is currently below targets/allocations by around £9 billion.

Second, on balance, investors' expectations are to increase future allocations to real estate. Pension funds expect to increase future allocations by 0.7 percentage points; this is on top of the 1.3 percentage points by which their current exposure is below present-day targets. These increases would result in a prospective real estate allocation of 7.9% for pension funds, representing a return to their longer term strategic exposure to real estate. Life funds, however, are anticipating a lower exposure to real estate than they have at present, a continuation of the downward trend underway since the mid-2000s.

Non-listed real estate faces opposing pressures. First, it will be affected as the life funds, which have a relatively high exposure to non-listed, generally reduce their investments in real estate. Second, both the life funds and the big pension funds, whose primary form of investment is direct real estate, have expressed regret over the unexpected risk and illiquidity of their non-listed exposure and plan to reduce the share of their domestic real estate that is in non-listed vehicles, in favour of direct real estate and joint ventures.

Finally, a more favourable development is the growth in pension funds' exposure to real estate and the growing proportion of this invested in non-domestic real estate which is predominantly non-listed.

Overall, the share of total real estate which is non-listed is expected to remain more or less constant. However, growth in real estate investments generally are expected to increase the non-listed institutional universe by almost 25% from £23 billion to over £28 billion. Almost all this increase is likely to be accounted for by non-domestic investment.

1 INTRODUCTION

This is the first report of a series of studies INREV is conducting to estimate the current and future size of the European institutional non-listed real estate market, the size, composition and the strategies behind these allocations in the context of the wider institutional real estate universe. The scope of this report is the UK institutional market and the allocations British investors are making globally to real estate, the corresponding size of the institutional real estate universe in total and, specifically, of the non-listed universe.

Section 2 of the report considers the total size of the UK institutional universe, of real estate in aggregate and, briefly, the types of real estate that make up the universe. Section 3 presents detailed estimates of these various forms of real estate before examining non-listed real estate in detail in Section 4.

Section 5 examines the real estate strategies being adopted by institutional investors and the role of non-listed real estate within these strategies. Section 6 presents indicative estimates of the future size of the total and non-listed real estate universe. The appendices contain more details of the approach.

1.1 Methodology and sample

The study has been conducted by Paul Mitchell Real Estate Consultancy Ltd and has been undertaken in conjunction with the UK's Investment Property Forum (IPF), for which a separate report has been prepared.

The data for the study was mainly collected through in-depth face-to-face and telephone interviews with institutional investors. This was supplemented by an on-line questionnaire completed by additional institutions. Information from 39 schemes – 26 pension funds, eight with-profits life funds, two other insurance company funds, and three charities/similar – was collected between September 2009 and January 2010.

The sample's total assets (equities, bonds, real estate, etc.) measured £447 billion, representing over a third of the universe. Their real estate investments accounted for about one half of the UK institutional real estate universe. Further details of the sample are given in Appendix 1.

The universe covers those investors making multi-asset allocation decisions to meet a future liability. These include defined benefit pension schemes and some insurance company funds, particularly their with-profits life funds. It includes the UK subsidiaries of foreign insurance companies, but not the overseas subsidiaries of the British insurers. Charities, foundations and similar types of organisations are also included in the definition.

The universe excludes the funds the insurance companies manage on behalf of other institutional investors (thereby avoiding double-counting). Also excluded are the funds they manage on behalf of non-institutional investors and those where the decision to allocate capital to real estate is out of their hands. These criteria generally exclude funds managed for retail and other private investors and also most insurance company unit-linked life and pension schemes. By definition, the research relates to the capital of investors rather than that managed by fund managers.

The analysis covers institutions' investments globally. Real estate is defined as such by the investor and potentially includes REITs/listed property companies etc.

Interviews with three major investment consultants were undertaken to provide further information and data on the real estate allocations and strategies of pension funds. Their insights on small pension funds were particularly helpful, adding to the limited information from the sample.

A desk top review of small pension funds' investments and allocations, drawing on their published annual reports & accounts, was also undertaken. State Street Investment Analytics, the institutional performance measurers, provided detailed information on the real estate exposure of UK pension funds and charities. Both these additional sources were valuable supplements to the investor sample, enabling a fine tuning of the universe estimates.

Other sources used in the analysis are highlighted in Appendix 2.

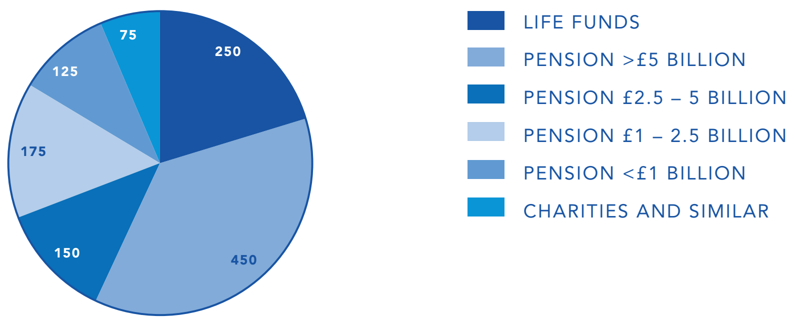
2 THE UK INSTITUTIONAL UNIVERSE

2.1 Total assets

The total investment universe of the UK institutions covered by the research is approximately £1225 billion. The investor sample accounted for over a third of this investment. As Figure 01 shows, this universe is dominated by the life funds and the very large pension funds (total assets >£5 billion), which together account for almost three-fifths of the total. Further details are presented in Appendix 2.

FIGURE 01 / UK INSTITUTIONAL TOTAL ASSETS BY TYPE OF INVESTOR

£ BILLION



2.2 The real estate universe

As Figure 02 illustrates, the UK institutional (life and pension funds, excluding charities) global real estate universe is estimated at £80 billion, of which £23 billion (29%) is non-listed. This excludes charities, who invest another £10 billion or so in real estate. Overall, total real estate accounts for about 7% of the institutional universe, with non-listed representing approximately 2% The overall real estate estimate relates only to those exposures that are part of institutions' real estate allocations; REITs etc. are typically part of institutions' equity allocations and, unless included in the investor's real estate allocation, are not covered by this estimate.

FIGURE 02 / UK INSTITUTIONAL TOTAL ASSETS BY TYPE OF INVESTMENT

£ BILLION

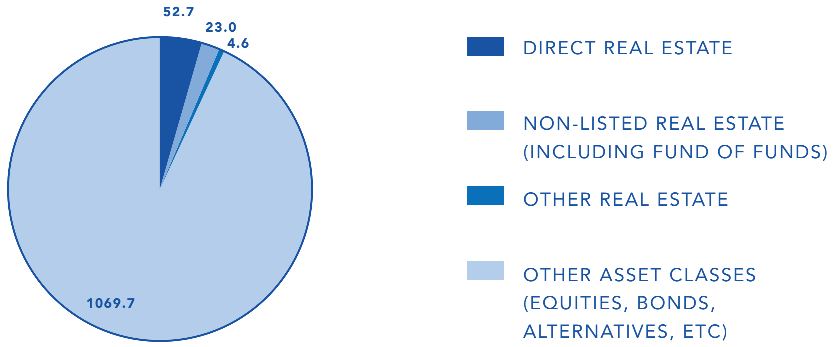
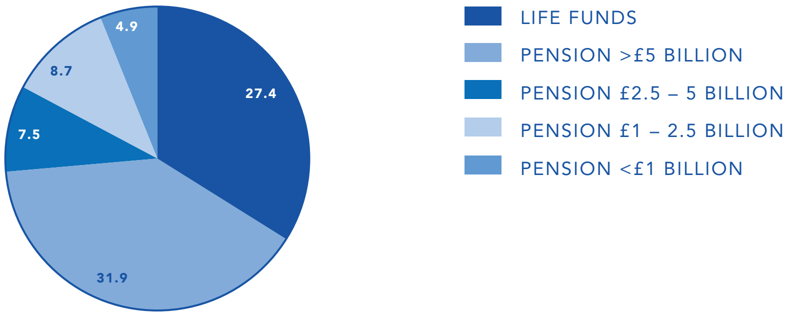


Figure 03 shows that the life funds and the very large pension funds (total assets >£5 billion) dominate the real estate universe, accounting for almost three-quarters of the total. This reflects their share of the overall multi-asset universe. The small proportion of the real estate universe in the remaining pension funds not only reflects the fund's size, but also their lower propensity to invest in real estate. By contrast, almost all the very large pension funds invest in real estate.

FIGURE 03 / UK INSTITUTIONAL REAL ESTATE BY TYPE OF INVESTOR

£ BILLION

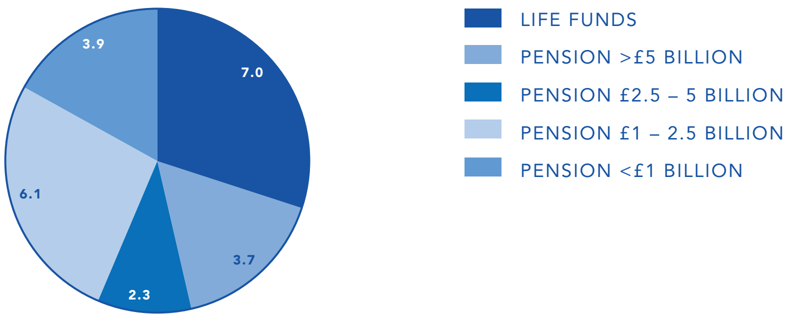


The sample included three large charities with assets totalling £22 billion and real estate investments of £8.5 billion. These three investors represent another significant group within the real estate universe. The real estate investments of the remaining charities, mostly small organisations, are estimated to be much lower at £1 – 2 billion, implying that the total real estate universe of the charities sector is approximately £10 billion.

Figure 04 shows that the very large pension funds account for a relatively small proportion of the £23 billion non-listed universe – 16% compared to their 40% share of the overall real estate universe. The smaller pension funds with total assets <£2.5 billion and the life funds dominate the non-listed real estate universe.

FIGURE 04 / UK INSTITUTIONAL NON-LISTED REAL ESTATE BY TYPE OF INVESTOR

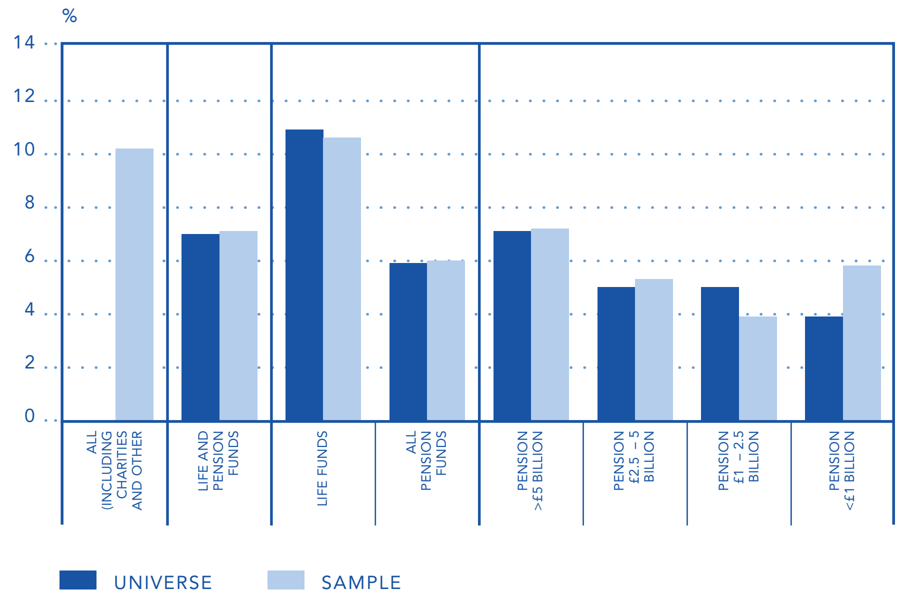
£ BILLION



2.3 Exposures to real estate

Figure 05 presents the universe estimates of the proportion of investors' total funds in real estate. The results from the survey are on an unweighted basis (e.g. equal weight to each response), are also shown.

FIGURE 05 / PROPORTION OF TOTAL ASSETS IN REAL ESTATE



Real estate accounts for about 7% of the universe's (life and pension funds) total assets. This universe estimate is slightly lower than in the investor sample because of the sample's under-representation of small pension funds and those that do not invest in real estate.

Life funds have the highest exposures to real estate at approximately 10.9%, compared to pension funds at almost 6%.

These life and pension fund's exposures are lower than in mid-2006 which were approximately 15% and 7.5%, respectively, as estimated as part of the IPF research *Multi-asset allocation in the modern world*. Investors reported that exposures had fallen since the mid-2000s because real estate had been viewed as unattractive relative to other asset classes, and also because the closure of their funds to new investments and the increasing maturity of their liabilities had led to a shift in strategy in favour of bonds.

Among pension funds, the very large investors have the highest exposure to real estate. The investor sample, covering about two-fifths of the very large funds, indicated an overall exposure of 7.1%.

While there were some small pension funds in the investor sample with unusually high exposure to real estate, both State Street Investment Analytics (which measures the performance of pension funds) and a further check on pension funds not covered by the sample indicate that the percentage exposure to real estate declines with investor size. Overall, the smallest pension funds, as Figure 05 illustrates, have a real estate exposure of only 4%.

The main reason why exposure to real estate is lower for pension funds with total assets <£5 billion is that they are less inclined to invest in real estate at all. According to State Street Investment Analytics, two-thirds of pension funds invest in real estate, but the smaller the fund, the less likely it is to invest in real estate.

Discussions with investment consultants suggest that the demands on pension fund management time, which are perceived to outweigh the benefits from diversification, are the primary reason why smaller funds do not invest in real estate.

Both the survey and the State Street Investment Analytics data reveal that the largest funds on average also devote more of their capital to real estate. Otherwise, variations across pension funds of different sizes in the proportion committed to real estate are small and around 5 – 6%. This lack of variation across different-sized funds, with the exception of the very largest, fits in with the views of investment consultants.

With respect to charities & similar, the information from the survey was limited to three large investors but showed an average exposure of 21%.

State Street Investment Analytics' measurement of charities' investment performance indicates a much lower 2.6% real estate exposure in the charity sector, but those covered by State Street are relatively small organisations.

Combining the information from the survey with that from State Street, the overall exposure of the charity sector is estimated to be around 13%, which is higher than the life funds and the pension funds. This estimate is close to that reported in JP Morgan's *Charity Investment Industry Survey*[1].

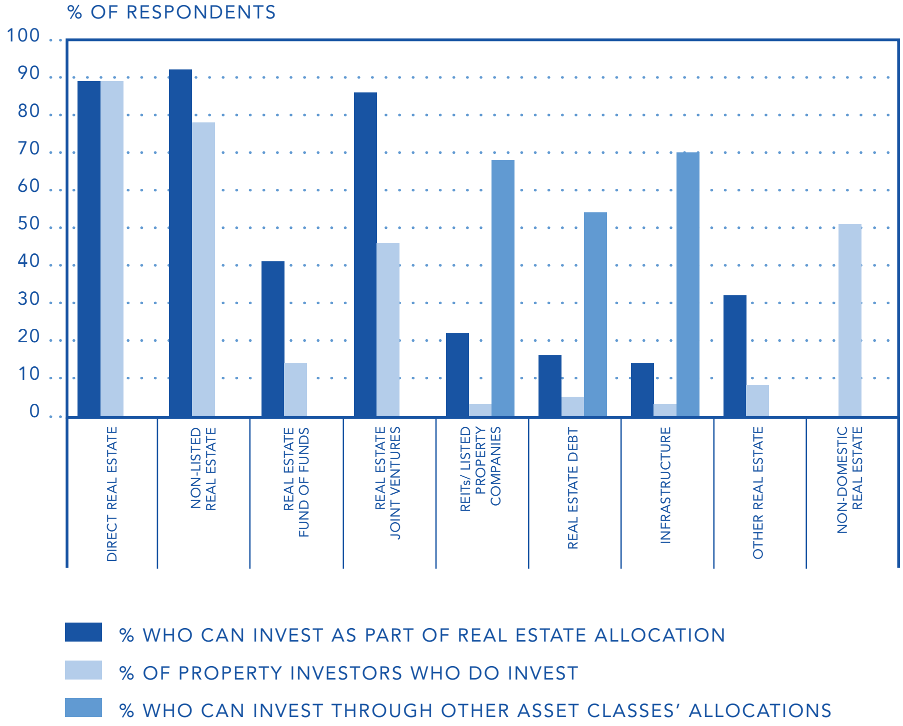
[1] JP Morgan's Charity Investment Industry Survey 2007, page 6.

3 TYPES OF REAL ESTATE EXPOSURE

3.1 Permitted forms of real estate investment

Investors were asked which forms of real estate they were allowed to invest in as part of their real estate allocation, and which forms were permitted elsewhere in other asset class allocations. Figure 06 summarises the responses and also shows the proportion of real estate investors who actually invested in each form.

FIGURE 06 / REAL ESTATE INVESTMENTS THROUGH REAL ESTATE OR OTHER ALLOCATIONS



Almost all real estate investors in the sample can invest in non-listed and direct real estate. All investors permitted to do so were investing directly, although only 85% of those allowed to were currently investing in non-listed.

A slightly lower proportion can invest in joint ventures, even though little more than half were actually doing so. Less than half can invest in real estate fund of funds, but only a small proportion of investors in the sample had invested in them.

Only a fifth could invest in REITs & listed property companies as part of their real estate allocation and very few of these were actually doing so. Such investments were more likely to be part of other allocations such as equities. Respondents attributed this to tradition and to the equity-like expertise they believed was required to manage a listed real estate exposure.

Even fewer were allowed to invest in real estate debt including securitised debt and infrastructure. This was more likely to be allowed elsewhere, respectively as part of the fixed-income and alternative asset class allocations.

The 'other' form of real estate investment account only for 8%. This typically includes derivatives, although limited information was given about 'other' investments.

Half of the property investors in the sample had an exposure to non-domestic real estate.

3.2 Current exposures to real estate asset classes

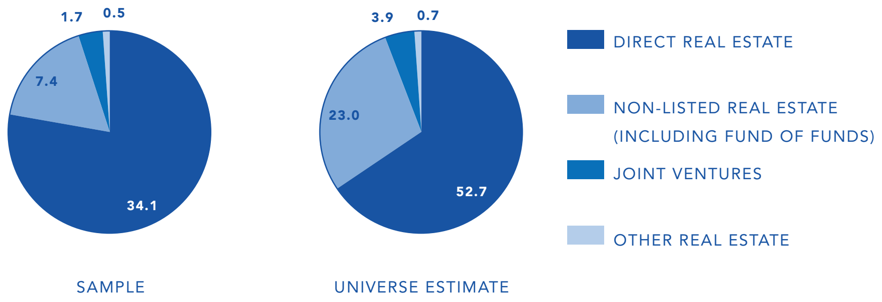
Figure 07 illustrates the composition of the real estate in the sample and the universe. The universe estimates have been derived by re-weighting the sample responses to be representative of the total investment universe.

Direct real estate dominates the sample, accounting for 78% of real estate investments, while non-listed (including fund of funds) accounted for 17% and joint ventures for 4%.

The remaining forms of real estate investment accounted for only 1%.

FIGURE 07 / TYPES OF REAL ESTATE EXPOSURE

£ BILLION



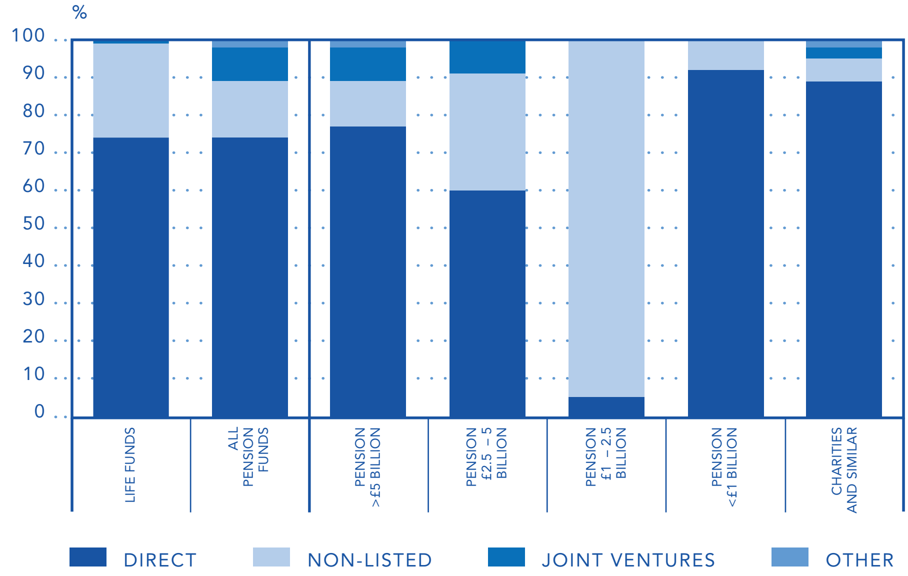
Direct property accounts for a lower proportion than in the sample, but still dominates the universe, accounting for £53 billion (66%) of total real estate of £80 billion. Non-listed (including fund of funds) at £23 billion accounts for a much higher proportion (29%) than in the sample. Joint ventures represent a small proportion of the real estate universe at around £4 billion, while the remaining forms are relatively insignificant at less than £1 billion.

3.3 Current real estate exposures by investor type

Figures 08 and 09 present the composition, by type of investor, of the real estate exposures in the investor sample and across the universe, respectively.

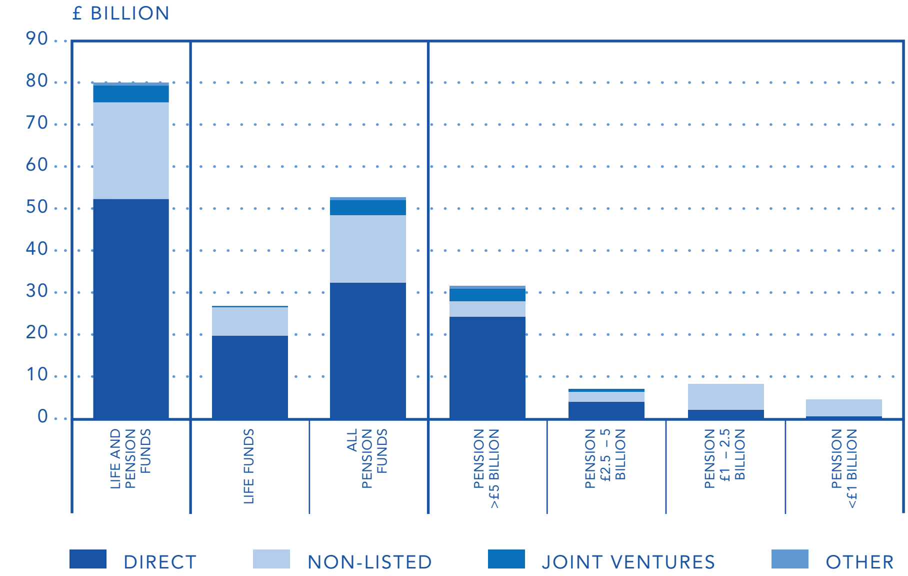
Figure 08 shows that direct dominates the real estate exposure of the life funds, the pension funds and, to the greatest extent, the charities in the sample. Pension funds' exposure to non-listed is lower than that of the life funds, with joint ventures accounting for most of the difference. Joint ventures represented as much as 20% of real estate in some pension fund's portfolios, compared to only 1% on average in the life funds. Charities in the sample had a relatively low proportion in non-listed and, while less than that in non-listed, their exposure to joint ventures was greater than that of life funds.

FIGURE 08 / DISTRIBUTION OF REAL ESTATE IN THE SAMPLE BY TYPE



Large pension funds (total assets between £2.5 – 5 billion) had a higher exposure to non-listed and a correspondingly lower exposure to direct than their very large peers. The concentrations of non-listed and of direct, respectively, in medium-sized pension fund respondents (total assets £1 – 2.5 billion) and small funds (total assets less than £1 billion) look inconsistent. The universe estimates in Figure 09 for these two groups of pension fund are therefore supplemented with additional information to correct for these anomalies.

FIGURE 09 / REAL ESTATE UNIVERSE EXPOSURE BY TYPE



The universe estimates in Figure 09 re-emphasise how the life funds and very large pension funds dominate the UK institutional real estate universe. Their exposures are mainly direct and they account for about 85% of the £53 million direct universe.

Non-listed, however, dominates the real estate exposure of medium-sized and small pension funds. Together with the life funds, they dominate the non-listed universe, accounting for about three-quarters of the £23 billion total.

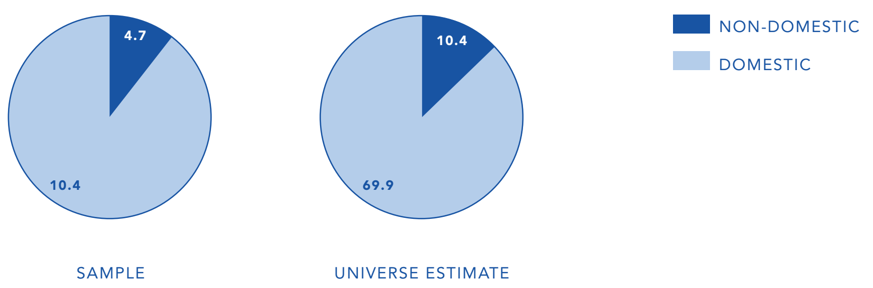
These small and medium-sized pension funds' non-listed exposure is qualitatively very different than that of the life funds. The latter's non-listed exposure is split evenly between UK specialist and non-domestic vehicles while the non-listed exposure of small and medium-sized pension funds is mainly in UK diversified vehicles, with a small proportion (approximately 20%) in non-domestic and an even smaller amount in UK specialist vehicles.

3.4 Non-domestic real estate exposures

Non-domestic real estate exposures amounted to £4.7 billion, representing 1% of respondents' total assets and 10.7% of their total real estate exposure in the sample (Figure 10). The UK institutional non-domestic real estate universe is estimated to be around £10 billion, which is 0.9% of total institutional assets and 13% of total institutional real estate investment.

FIGURE 10 / NON-DOMESTIC AND UK REAL ESTATE

£ BILLION



Non-listed dominates the non-domestic universe and at almost £8 billion accounts for three-quarters of the total. The rest is in direct property and, to a lesser extent, joint ventures.

Half of the property investors in the sample invested non-domestically. Almost all life funds did so, but only two-fifths of the very large pension funds invested this way. These large pension funds' relatively low propensity to invest outside the UK is one the most notable findings from the study.

Figure 11 details the proportion of real estate invested non-domestically for the various types of investors, showing the results from the sample and the estimates for the universe. The universe estimates draw both on the sample data and on the supplementary information for the small and medium-sized pension funds.

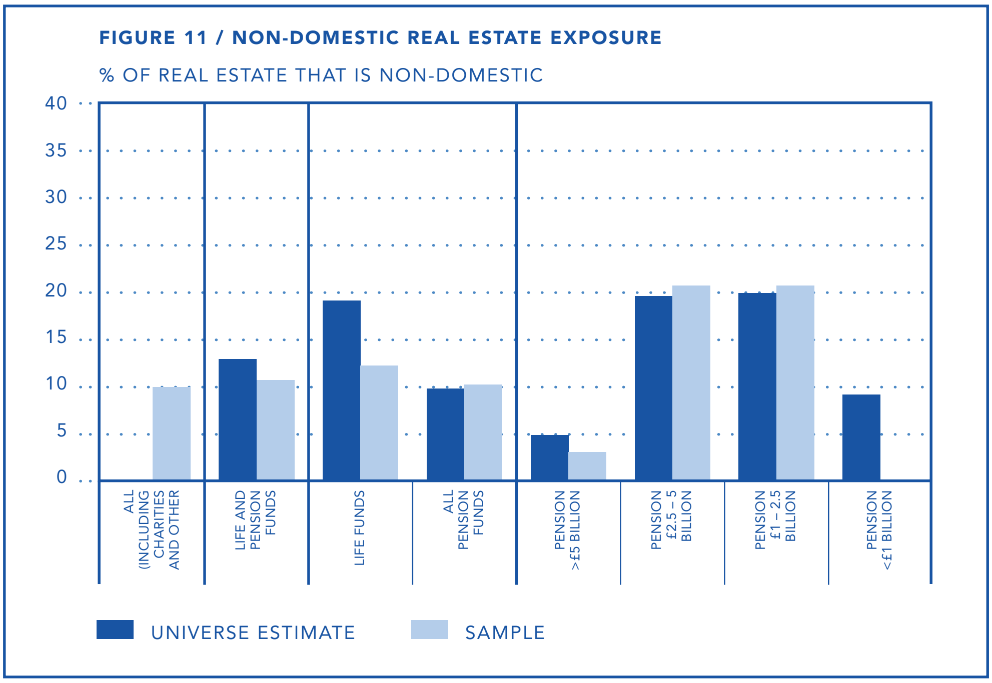


Figure 11 emphasises the low exposures to non-domestic real estate among very large pension funds, and the high exposure of the life funds. Pension funds with total assets below £5 billion are much bigger investors non-domestically than their very large peers.

There are two factors behind very large pension funds' low exposure to non-domestic real estate. First, relatively few of them make real estate investments outside the UK, and, second, when they do, they commit relatively low amounts to it.

4 THE NON-LISTED REAL ESTATE UNIVERSE

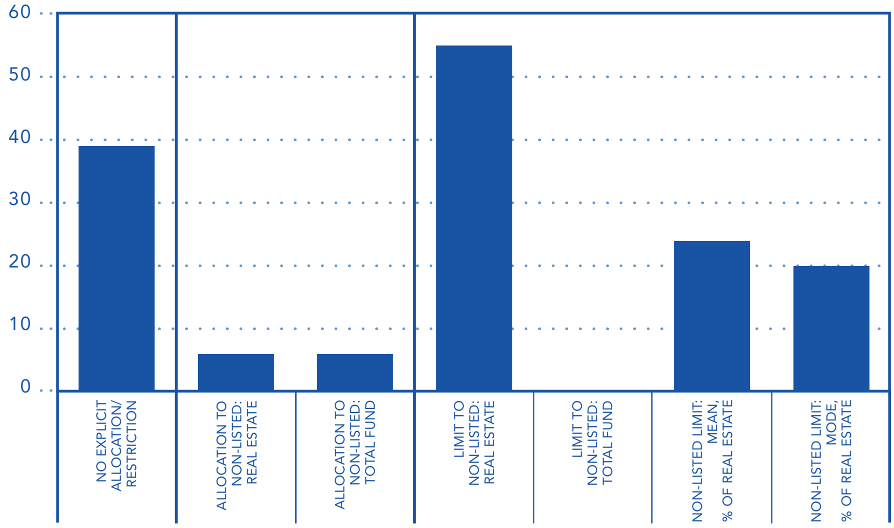
4.1 Allocations to and restrictions on non-listed real estate investments

Few investors in the sample had an explicit allocation or target for investing in non-listed real estate. It seems to be more the case of first specifying the allocation to real estate and the investment objective before determining the best way to achieve them.

Figure 12 indicates that only 12% of those investing in non-listed real estate had an explicit allocation to non-listed, this figure split evenly between those expressing the allocation as a proportion of the real estate exposure and those as a proportion of the total multi-asset fund.

FIGURE 12 / ALLOCATIONS TO AND RESTRICTIONS ON NON-LISTED REAL ESTATE INVESTMENTS

% OF RESPONDENTS



The majority (55%) of those investing in non-listed imposed limits on their exposure. Although sometimes such limits were specified to include exposure to other forms of indirect real estate investment, non-listed tended to account for most of the overall indirect exposure and therefore, in practice, the limits were a constraint on non-listed investment.

These limits were always expressed in relation to the size of the overall real estate exposure and were predominantly measured on the basis of Net Asset Value (NAV). In such cases, the limit was typically 20%, but it ranged from 15 – 45%. Most exposures were below these limits, although they had been breached in a few cases where investors had been required to reduce their real estate exposure but had found their non-listed investments harder to sell than direct assets.

A small proportion of investors imposed restrictions on the basis of Gross Asset Value (GAV) or the amount of debt (a Loan-To-Value (LTV) Ratio of around 20% for the whole portfolio was the norm), either instead of or in addition to a NAV-based limit.

The high proportion imposing limits on non-listed investment reflected the high number of sample participants using direct as their primary means of real estate investment. The rationale for the limit was mainly to control risk and liquidity and, to a lesser extent, to minimise extra fund management costs.

Almost 40% of those investing in non-listed real estate did not impose any restrictions on their exposure. However, some of these had other controls, which had the effect of limiting non-listed investment, and some others felt no need for any controls because their strategy was not to invest significantly in non-listed real estate. The average exposure to non-listed for investors (excluding those investing entirely through non-listed) without any constraints was only marginally higher (20% vs.17%) than those that had a limit or allocation.

4.2 The non-listed universe

Figure 13 shows that the life funds and the medium-sized pension funds (total assets £1 – 2.5 billion) are the biggest investors in non-listed real estate. This is from a total non-listed universe of £23 billion. Figure 14 re-illustrates how, relative to the overall real estate universe, that very largest pension funds are under-represented in the non-listed universe, while the life funds are equally represented, and the smallest pension funds are over-represented. This contrast between the two big investor groups – life funds and the very large pension funds – is one of the most notable findings from the research.

FIGURE 13 / NON-LISTED REAL ESTATE UNIVERSE BY TYPE OF INVESTOR

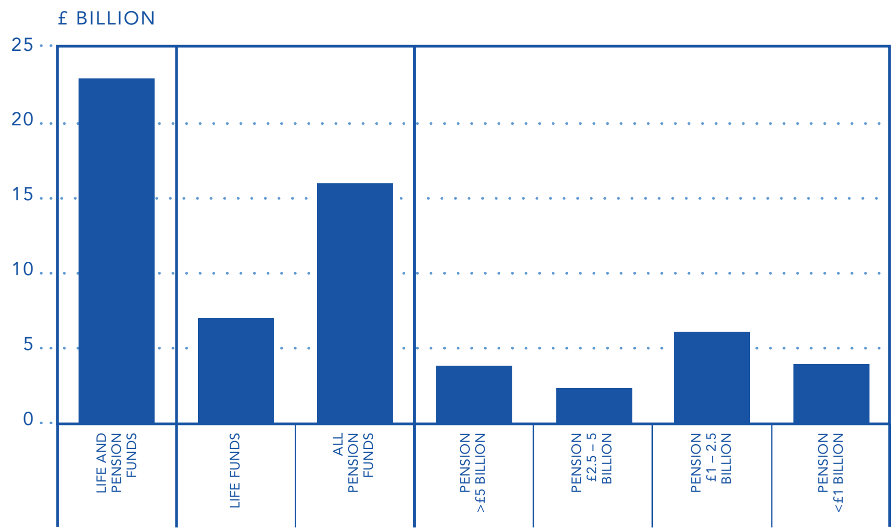
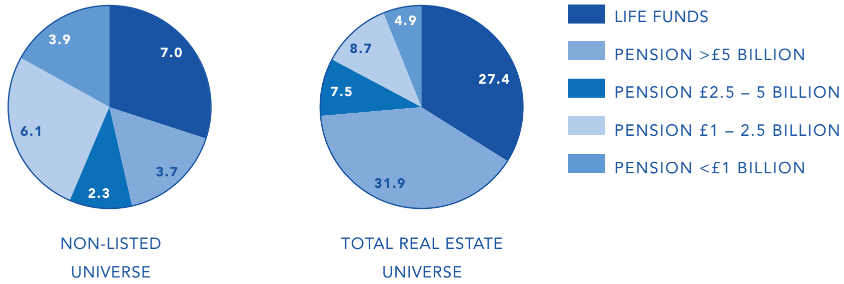


FIGURE 14 / NON-LISTED VS. TOTAL REAL ESTATE UNIVERSE

£ BILLION

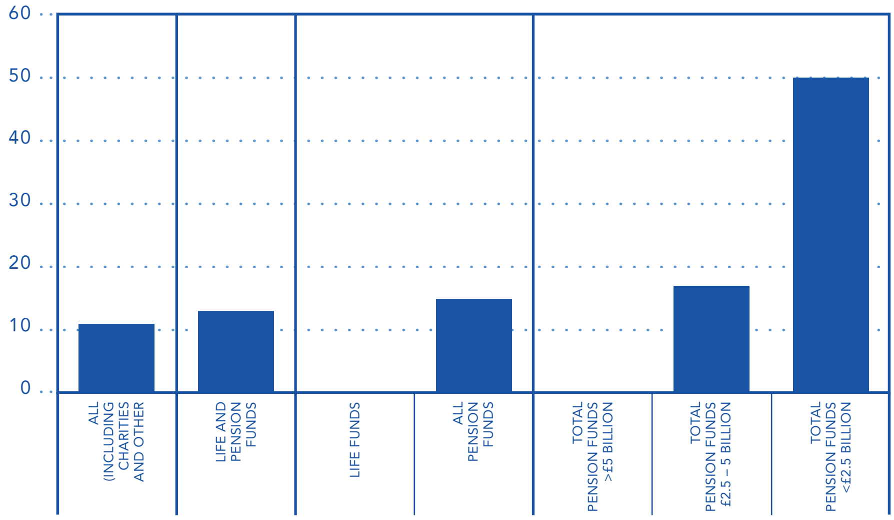


4.3 Variations in exposures to non-listed real estate

Most of the respondents had both direct and indirect real estate exposures. This was particularly true of the life funds, charities (all of which were large) and the largest pension funds. None of the life funds, charities or pension funds with total assets in excess of £5 billion (corresponding to a real estate exposure >£500 million) had an exclusively indirect exposure to real estate.

FIGURE 15 / PROPORTION OF SAMPLE WITH EXCLUSIVELY NON-LISTED PORTFOLIOS

% OF RESPONDENTS



Subsequent checks and the interviews with investment consultants confirm that a predominantly direct approach to real estate investing is the most commonly used model among pension funds with total assets in excess of £1.75 billion (and real estate >£150 million).

Across the sample, only a small proportion of investors got their real estate exposure exclusively through non-listed investment. Figure 16 excludes these and highlights the range in non-listed exposure among those that also invest in real estate directly. These investors had total real estate portfolios ranging in size from under £75 million to over £5 billion.

FIGURE 16 / FREQUENCY DISTRIBUTION OF NON-LISTED EXPOSURES TO REAL ESTATE OF DIRECT INVESTORS IN THE SAMPLE

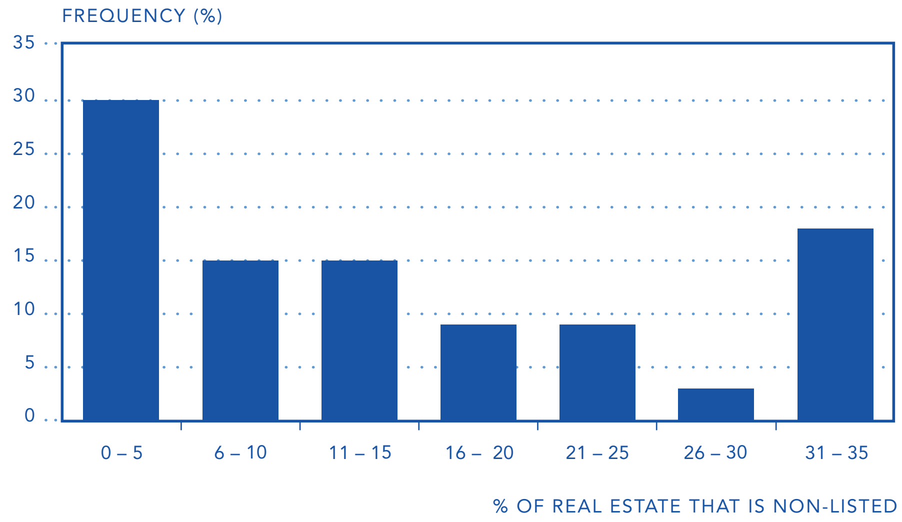


Figure 16 indicates that, for a large number of these investors, non-listed accounts for a relatively small proportion of their real estate portfolios and that a minority have a high exposure. Nearly half had 10% or less of their real estate exposure in non-listed vehicles, while 18% had more than 30% of their real estate in non-listed.

Those investors at the top and bottom end of the range had similarly sized real estate portfolios. The biggest investors in non-listed vehicles had a relatively high proportion of their real estate portfolio invested outside the UK of 20%, compared to 1% among those investors where non-listed accounted for 10% or less of the real estate portfolio.

Finally, those investors with a low exposure (<15% of their real estate) to non-listed had a relatively high exposure (5.2% of their real estate) to joint ventures, compared to a negligible exposure (0.3%) among those where non-listed accounted for more than 25% of real estate.

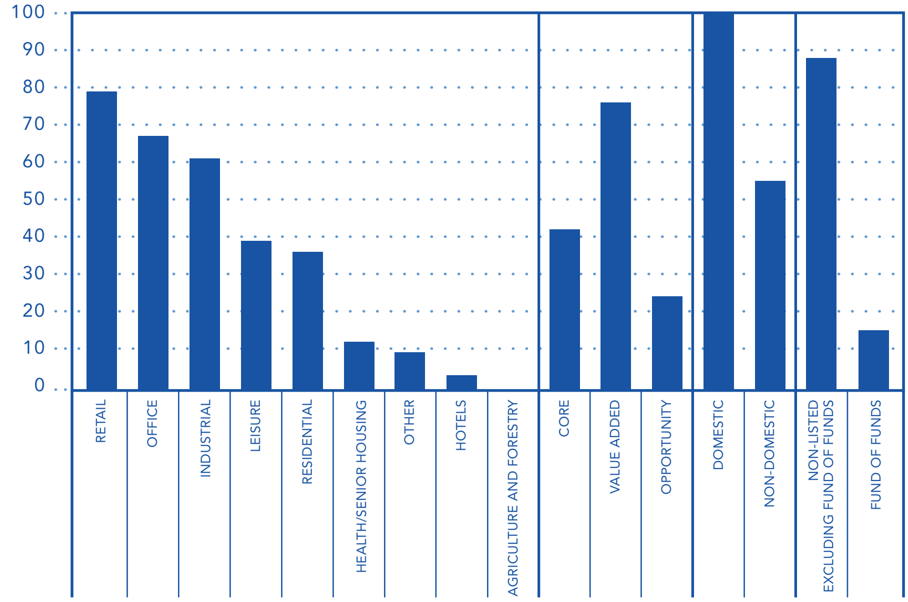
The investment consultants reported that most pension funds with total assets less than £1.5 billion invested through non-listed vehicles, including fund of funds. Such investors typically have a real estate exposure below £125 million and it would be difficult to find a fund manager who would run a segregated portfolio of this size for a satisfactory fee. There were, however, examples in the sample of real estate portfolios of less than £100 million run on a segregated basis, although these were mainly either legacies from a time when the portfolios were bigger or associated with an investor with another, larger real estate portfolio.

4.4 Types of exposure to non-listed vehicles

Figure 17 illustrates the types of exposure among survey participants investing in non-listed vehicles. Investment in the retail sector is most likely and most have an exposure to offices and industrials. Over a third have a non-listed exposure to leisure and residential real estate.

FIGURE 17 / TYPES OF NON-LISTED INVESTMENTS

% OF RESPONDENTS WITH A NON-LISTED EXPOSURE



Value added was the most common style, cited by three-quarters of respondents with an exposure to non-listed real estate, while 42% and 24%, respectively, had exposure to core and opportunity.

Fund of funds were used by 15% of those investing in non-listed vehicles. Almost half of these respondents were using the fund of funds vehicles to complement their direct real estate exposure.

All non-listed investors in the sample had an exposure to non-listed vehicles investing in the UK and just over half had an exposure to vehicles investing outside the UK.

4.5 Non-domestic investment in non-listed vehicles

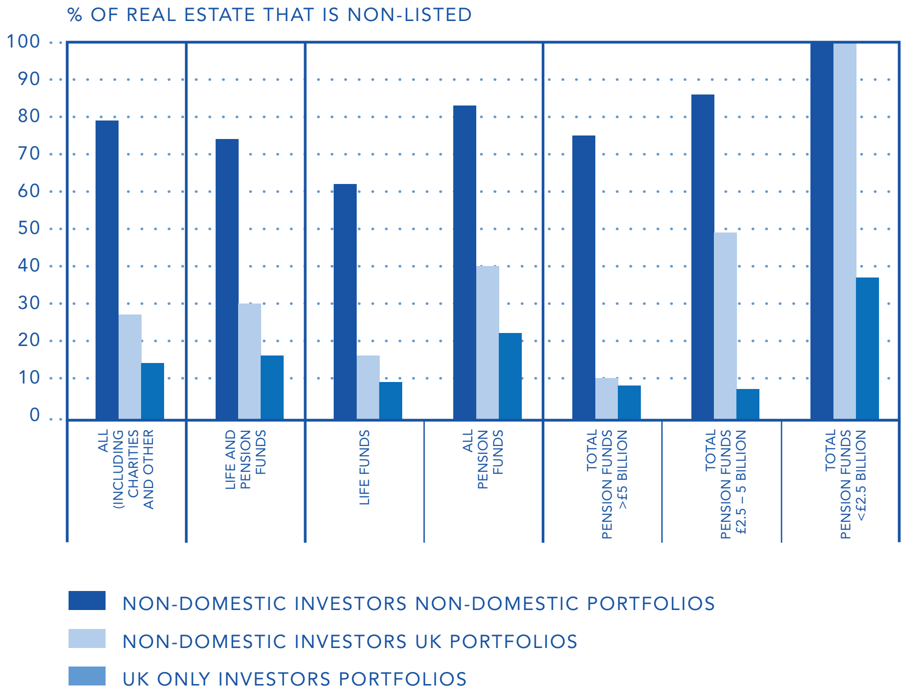
Non-listed was by far the most important way of investing outside the UK.

Figure 18 considers those real estate investors that invest non-domestically as well as in the UK. It shows how much of their UK and of their non-domestic real estate is invested in non-listed.

The figure shows that non-listed accounts for a much larger share of investors' non-domestic exposure than the share of their UK investments. This contrasts with the high proportion of directly-owned real estate in their UK portfolios.

Figure 18 also shows this information for those who invest exclusively in the UK. Interestingly, these investors have relatively low proportions of their real estate in non-listed real estate.

FIGURE 18 / NON-LISTED EXPOSURE IN THE UK AND NON-DOMESTIC PORTFOLIOS OF RESPONDENTS



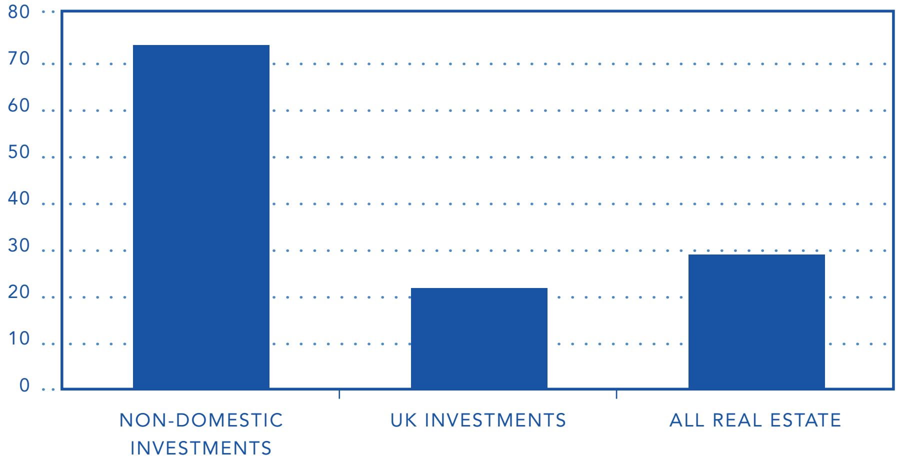
Pension funds with total assets of less than £5 billion as well as charities make almost all of their non-domestic real estate investments through non-listed real estate funds.

Non-listed was also the predominant form of investing non-domestically for the life funds and the very large pension funds, but they also had significant exposure to other forms of non-domestic real estate, in particular direct for the life funds and joint ventures for the very large pension funds. The life funds were early investors outside the UK and their pioneering investments were often undertaken directly.

Across the universe, Figure 19 (page 22) indicates that about three-quarters of non-domestic real estate investment is in non-listed vehicles, compared to about a quarter of UK real estate investment in non-listed vehicles.

FIGURE 19 / NON-LISTED EXPOSURE IN DOMESTIC AND NON-DOMESTIC UNIVERSE

% OF NON-LISTED REAL ESTATE



Overall, it is estimated that non-domestic exposure accounts for about a third of the institutional universe of non-listed real estate investments, as Figure 20 illustrates.

FIGURE 20 / NON-LISTED REAL ESTATE — UK VS. NON-DOMESTIC

£ BILLION

5 REAL ESTATE STRATEGIES AND THE PROS & CONS OF INVESTING IN NON-LISTED REAL ESTATE VEHICLES

5.1 Real estate strategies

The survey responses and interviews with investors and investment consultants portray a number of real estate strategies, each with different exposure to and roles for non-listed vehicles.

The predominant strategy is the **direct real estate based 'benchmark plus' approach**. The objective of the real estate exposure is to provide diversification for the multi-asset fund and a return between bonds and equities that is marginally better than the UK IPD Index (or similar). Investors require performance to closely track the IPD benchmark, for example with a tracking error <2.5%.

Such real estate portfolios are mainly direct, according to investors and investment consultants, because of investors' preference for control over their real estate investments and strategy. This is the strategy pursued by most large institutional investors and is feasible because it is cost effective to manage the real estate portfolio either internally or on a segregated basis.

Such strategies may be exclusively UK-based or may have a non-domestic exposure added to them. The aim of the latter is primarily to reduce the risk of the multi-asset fund and the real estate portfolio and, to a lesser extent, deliver a comparable or marginally higher return than the UK portfolio.

The non-listed investments in such strategies, according to the interviews with investors, are primarily a supplement to the direct portfolio, providing exposure (and hence diversification) to out-of-reach sectors and those where expertise is not available directly. Non-listed exposure is therefore primarily specialist with the remainder mainly non-domestic.

A smaller proportion of investors also used non-listed vehicles to access favoured assets such as a shopping centre fund with one or two assets. In addition, a few looked to fund managers' specialist skills to deliver moderate out-performance.

In all of the above respects, joint ventures were an alternative to non-listed vehicles, and were preferred by around a quarter of investors pursuing a **direct real estate based benchmark plus** strategy on account of their perceived superior control and alignment of interest.

Some of the investors following this **direct real estate based benchmark plus** strategy also had part of their exposure in non-listed funds with the objective of providing liquidity. The life funds found this rationale particularly attractive, as it would enable them to retain an interest in favoured assets as the fund shrank. Conversely, a number of investors using non-listed vehicles funds found themselves with higher than desired exposure as a result of their illiquidity during the downturn.

The non-domestic exposure of investors following this strategy was comprised predominantly of non-listed vehicles. The role of these vehicles was to generate the necessary diversification to lower the risk of the real estate portfolio and the multi-asset fund. Funds pursuing this multi-national variant of the direct real estate based benchmark plus strategy on average had relatively high exposure to non-listed real estate vehicles – see Figure 18 in Section 4.

This **direct real estate based 'benchmark plus' approach** is the predominant model in terms of capital value because it is practiced by almost all life funds and large pension funds, investors that represent about 85% of the total institutional real estate universe. This strategy also accounts for about half of institutional non-listed investments.

Smaller pension funds seeking the same objectives from their real estate investment pursue a **non-listed real estate based 'benchmark plus' approach**, using single or multiple balanced funds, because it is not feasible to do this directly for a satisfactory fee. For the smallest investors, investment consultants also cite the heavy internal management demands as a rationale for avoiding direct investment.

Investment consultants also report that investors following this model are, in the same way as their larger peers, increasingly adding a separate non-domestic exposure. The aim is to lower the risk of the real estate portfolio and multi-asset fund and in some cases also to moderately inflate returns. These two strategies (i.e., with and without non-domestic exposure) are, according to both the universe analysis and the investment consultants, the predominant models for those institutions investing exclusively through non-listed real estate vehicles.

All these strategies can be seen as 'traditional. However, investment consultants report the emergence over the last five years of new strategies that might be described as 'contemporary'. There were a number of examples of these among the survey responses. Most of these are fundamentally based on investments in non-listed real estate vehicles.

The objectives for the investor following these contemporary strategies are typically to deliver either a significantly different return or a lower level of risk for the real estate portfolio and the multi-asset fund than in 'benchmark plus' strategies. The strategies seeking higher returns involve either a **core traditional balanced exposure** (direct or non-listed) **and an 'alpha' satellite** (intended to generate high risk-adjusted returns and achieved through a non-listed vehicle, either within the UK or non-domestically), or a **pan-European or global real estate strategy**. Rather than higher returns, the latter may instead be used primarily to provide superior diversification for the real estate portfolio and therefore lower risk for the multi-asset fund.

Non-listed vehicles feature centrally in these strategies, either providing the source of higher returns or alpha through specialist skills, on account of risk such as through an opportunity fund, or through the tactical flexibility that a large choice of non-listed vehicles enables. Similarly, the large set of vehicles globally facilitates greater diversification.

At the opposite end of the return spectrum, some investors – specifically those whose liabilities are more fixed-income like – are seeking a lower risk and returning type of real estate exposure and, in particular, are following a **high-lease value real estate strategy.** This is typically achieved through non-listed vehicles, although some life insurance companies are using a direct real estate exposure within their internal, predominantly fixed-income annuity funds.

Investment consultants report significant nascent interest – but so far little take-up – in strategies seeking to deliver **cheap and liquid beta**, through an exposure to a fund of REITs/listed property companies. The aim is to achieve a geared, but otherwise underlying real estate return for a relatively low fee and superior liquidity. Such **cheap and liquid beta** strategies may be supplemented **with an alpha satellite** achieved through a non-listed vehicle in order to enhance returns.

These contemporary strategies, while featuring significantly in the new mandates that investment consultants are currently dealing with, at present account for a low proportion both of UK institutions' real estate exposure and of the non-listed vehicles they invest in.

Finally, a small number of investors in the sample were eschewing the objective of a benchmark real estate return and, instead, setting a target return that was independent of their peers' real estate performance. This is a contemporary strategy, sometimes labelled misleadingly as **absolute return**[2], which seeks target returns wherever and in whatever form they may be. The investors adopting such a strategy have used non-listed vehicles, very selectively, with the objective of earning superior risk-adjusted returns ('alpha') through their specialist expertise.

A related, traditional variant of this absolute return approach was reported in the sample by a significant minority of large pension fund investors. Their objective was to achieve a **target core real estate return** and not to benchmark themselves against or match their peer group's real estate performance and structure. It could involve strategically under-weighting and over-weighting unfavoured and favoured sectors, and eschewed exposure that could corrupt delivery of this core real estate target return.

Non-listed real estate was largely avoided in this strategy, both because there was no need to diversify the real estate exposure with the objective of tracking the benchmark and because of its perceived greater risk. Superior risk-adjusted returns ('alpha') and multi-asset fund diversification could be achieved efficiently in other asset classes, for example through hedge funds.

This type of investor also avoided investing non-domestically, first because there was no desire for more diversification from real estate, and second due to their aversion to non-listed real estate vehicles, which was the only way by which a non-domestic exposure could be attained.

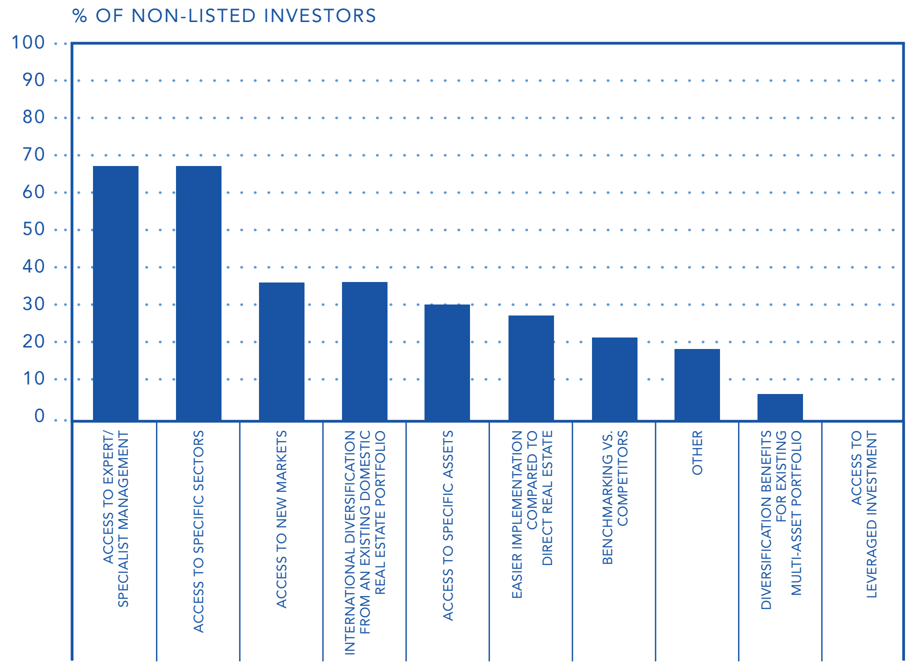
Not surprisingly, investors following this strategy featured prominently among those with a negligible exposure to non-listed vehicles. They represent as much as a tenth of the institutional real estate universe.

[2] Absolute return strategies, such as those run by hedge funds, normally aim for a steady return that is independent of market conditions.

5.2 The attractions of investing in non-listed vehicles

As Figure 21 reveals, the survey – covering mainly large investors with predominantly direct real estate portfolios – indicated that the primary motive for using non-listed real estate vehicles was to provide access to out-of-reach sectors and to skills and expertise not available directly. In some of these cases, non-listed vehicles were also used to provide exposure to new markets such as healthcare. As noted earlier, investors typically were using non-listed investments in these ways to improve the diversification of their direct exposure and, in some cases, with the objective of providing superior returns.

FIGURE 21 / SAMPLE: MAIN REASONS FOR INVESTING IN NON-LISTED REAL ESTATE



Non-listed vehicles were also seen by a third of investors as useful in facilitating a non-domestic real estate exposure. Only a few large life funds had direct non-domestic exposure and these were legacies of their pioneering investments; this was also the case for the few large pension funds that had an exposure to non-domestic joint ventures. Most of those investing non-domestically mentioned the easier implementation that a non-listed approach provided.

Easier implementation compared to investing directly, cited in total by a quarter, was also strongly emphasised by those predominantly using non-listed to get real estate exposure. Large pension fund investors said that a non-listed approach removed the need for costly specialist real estate staff. Investment consultants reported that it was difficult to have a competitively priced segregated fund with real estate exposure of less than £150 million, while smaller investors also did not have the wherewithal to oversee a segregated portfolio run by an external fund manager.

5.3 Concerns about investing in real estate through non-listed vehicles

Those with unfavourable attitudes towards using non-listed vehicles fell into two broad groups. First those fundamentally opposed to using non-listed real estate vehicles, which represented about a fifth of respondents and were all large funds. Secondly those whose recent experiences had led to a re-appraisal of their attitudes and strategy, which also represented about a fifth of respondents and, again, were all large investors.

Those with fundamental concerns cited the following concerns. The first three being the most common:

- That the prospective returns were not commensurate with non-listed vehicles' risk and illiquidity;
- That the nature of the return delivered by non-listed funds was different from the core UK IPD-type return that the investor aspired to;
- The weak control and influence that the investor had over non-listed funds. Joint ventures were preferred in this respect. In the sample, an exposure to JVs was offset in a near one-to-one lower exposure to non-listed real estate;
- Illiquidity and unpredictability of cashflows; and,
- The high cost of non-listed funds relative to the marginal cost of adding additional properties to a direct portfolio.

The second group were those re-appraising their strategies and exposures to non-listed. As outlined in the following section, more investors were looking to lower the proportion of non-listed vehicles in their real estate fund than to increase it.

The most common reason was that the returns from non-listed vehicles had not been commensurate with their risk and liquidity.

Many of these investors were now expressing a preference to invest directly in sectors previously perceived to be out-of-reach or where the expertise to invest directly had been thought to be lacking. Such investors were happy to compromise the diversification benefits that had originally justified the non-listed approach. Joint ventures were now being recognised as an alternative to non-listed exposure.

Finally, the downturn had exposed previously unrecognised high levels of manager risk in non-listed exposure and misalignment of interest, not only between fund managers and investors, but also between co-investors. Such factors would lead to a lowering of exposure to non-listed vehicles, in favour of direct and joint ventures.

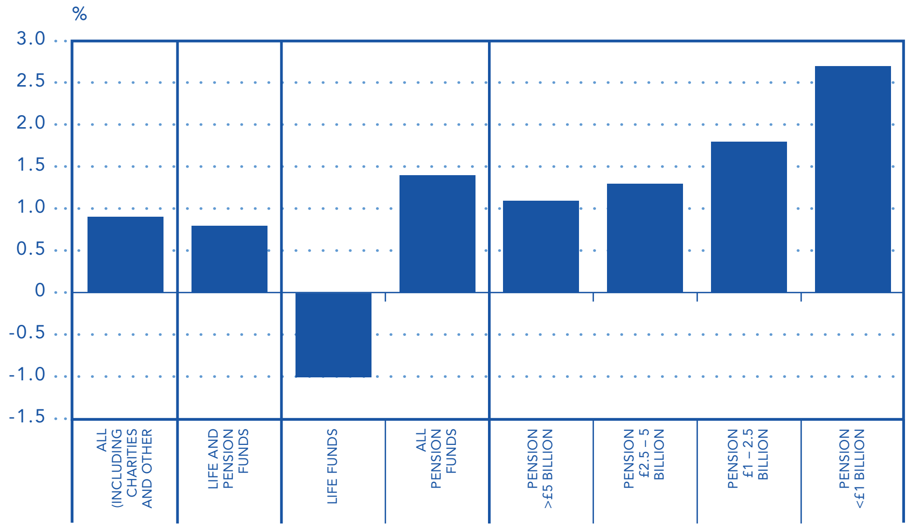
6 THE PROSPECTIVE REAL ESTATE AND NON-LISTED UNIVERSE

6.1 Prospective changes in real estate exposures and allocations

In the survey, those investing in real estate were asked first, what their current target or allocation to real estate was, and second, how this target or allocation was likely to change over the next three years.

Figure 22 presents the information from the sample on the current target/allocation to real estate relative to the current exposure.

FIGURE 22 / DIFFERENCE BETWEEN CURRENT TARGET/ALLOCATION TO REAL ESTATE AND CURRENT EXPOSURE OF THE RESPONDENTS



Overall, the current target exposures of all real estate investors in the sample are 0.9 percentage points higher than current exposures. The targets/allocations of pension funds are higher, on average by 1.3 percentage points.

By contrast, life funds' current exposure is a full percentage point above allocations. During the interviews, just less than half the life funds reported that illiquidity during the downturn had restricted the selling needed to reach allocations. With their allocations unlikely to increase in the future pressure to sell would remain. The downward trend in life funds' exposure to real estate is therefore set to continue.

There were three factors behind these changes:

- Most pension funds' tactical allocations to real estate were reduced in the second half of the 2000s due to real estate looking unattractive, were being restored back to the slightly higher strategic levels;

- In recent years, allocations had not been drawn on or committed given a lack of attractive opportunities. The pension funds affected in this way now expected these allocations to be invested; and,

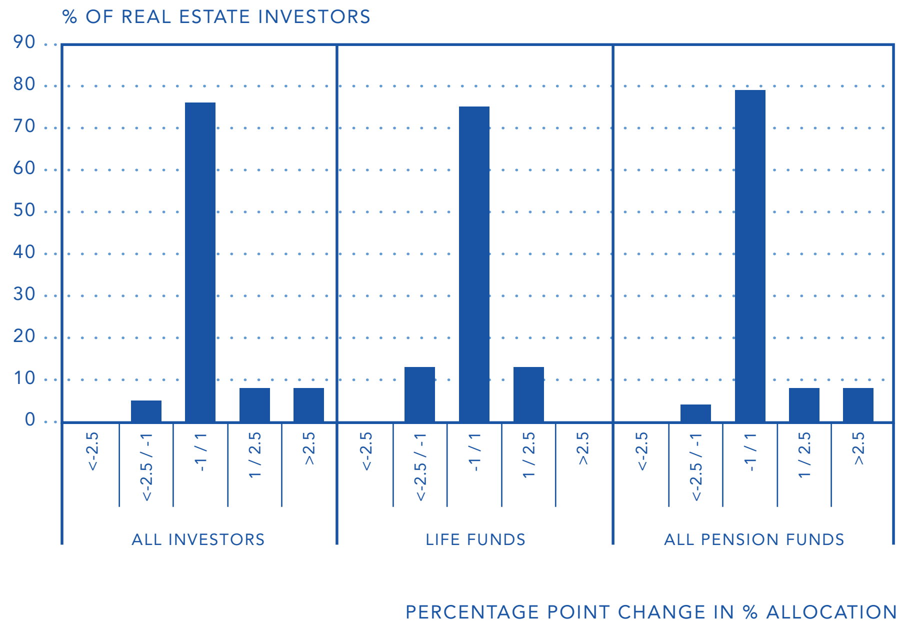
- Almost all life funds and a minority of pension funds had seen reduced allocations as the maturation/closure to new investments of their funds was leading to an asset allocation shift in favour of bonds.

Applied to the universe, the increases in real estate exposure will be less than indicated above because of the dilutive effect of those investors that do not invest in real estate. Only a rough approximation of the change in the universe's real estate exposure can therefore be made.

On this basis, the life and pension funds' targets suggest an increase in the total real estate universe from £80 billion to around £89 billion, or 7.8% of their assets, compared to the current 7%. The life fund universe declines but, for pension funds, a 22% increase from £53 – 65 billion is indicated (5.9% of assets to 7.2%).

Looking forward to the next three years, Figure 23 illustrates the changes in allocations anticipated by those in the sample. Most investors in real estate anticipate little significant change in their allocations over the next three years, compared to current allocations. The balance is in favour of those expecting a significant increase (16% vs. 5% anticipating a reduction in excess of 1% in the percentage real estate allocation). Pension funds were slightly more likely to expect an increase in allocations than life funds.

FIGURE 23 / EXPECTED CHANGE IN TARGET/ALLOCATION TO REAL ESTATE IN THREE YEARS



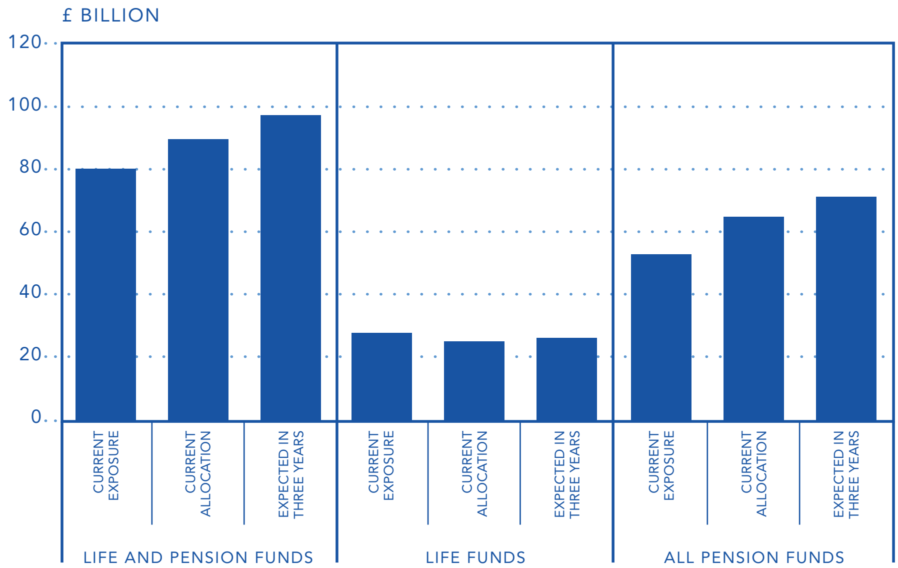
Most respondents gave more detailed estimates of the allocations they anticipated in three years. These are used in the detailed estimates of the future universe as outlined in Appendix 2.

Further growth will be contributed by those investing in real estate for the first time. Neither of the two respondents currently not investing anticipated doing so in the future. However, the trend in recent years has been an increase in the proportion of pension funds investing in real estate – State Street Investment Analytics report a rise from 60% in mid-2006 to 66% now. Notably, investment consultants report that new mandates to invest in real estate have been coming forward since the middle of 2009.

Such growth from investors new to real estate has been accounted for in the estimates of the real estate universe in three years. The estimates assume no change in institutions' total assets and no capital growth. They also assume there is sufficient liquidity to allow investors to fulfil their expectations.

Figure 24 summarises the estimates of prospective changes in the real estate universe. Overall, the life and pension fund real estate universe is anticipated to grow by over 20% from the £80 billion current exposure to £97 billion in three years. Pension funds are expected to increase by £18 – 71 billion. Life funds are expected to decline by £1 – 26 billion, although they expect to see a modest increase once exposures are aligned with current targets.

FIGURE 24 / CURRENT AND EXPECTED EXPOSURES TO REAL ESTATE UNIVERSE



6.2 Prospective changes in domestic and non-domestic exposures

The interviews with investors and investment consultants provided qualitative insights into the regions in which this increased capital would be placed.

Half of those in the sample investing in real estate did not invest outside the UK. Three-quarters of these were not intending to invest non-domestically over the next three years, and only another two respondents said they were likely to do so within the next three years. In line with these observations, investment consultants reported that most existing real estate investors are acting conservatively and not looking to change their strategies at present.

Those with both domestic and non-domestic investments that have capital to spend were targeting the UK at present. A small proportion, mainly life funds, was looking to reduce their non-domestic investments. For the life funds, the implication is that the comparatively high proportion of their real estate portfolios that is non-domestic will decline.

Other multi-national real estate investors had uncommitted allocations to non-domestic property. This was particularly the case for the very large pension funds, whose current non-domestic investments are relatively low. The expectation was that capital would be committed as the attractiveness of non-domestic markets improved.

Investment consultants reported that the growing interest in pan-European and global strategies waned in 2008 and most of 2009, but that interest is now re-emerging as new mandates come through. However, in their view, interest in predominantly UK strategies is greater than it has been for some time and some are steering their clients in this direction as prospective returns are perceived to look better there than they do outside the UK.

The overall impression from most investors and investment consultants is that the longer term justification for a multi-national real estate strategy remains strong. Non-domestic exposure will increase as the very large pension funds with uncommitted allocations invest their capital and as more small and medium-sized pension funds either append non-domestic exposure to their UK investment or switch to/make their first real estate investment in a pan-European or global strategy.

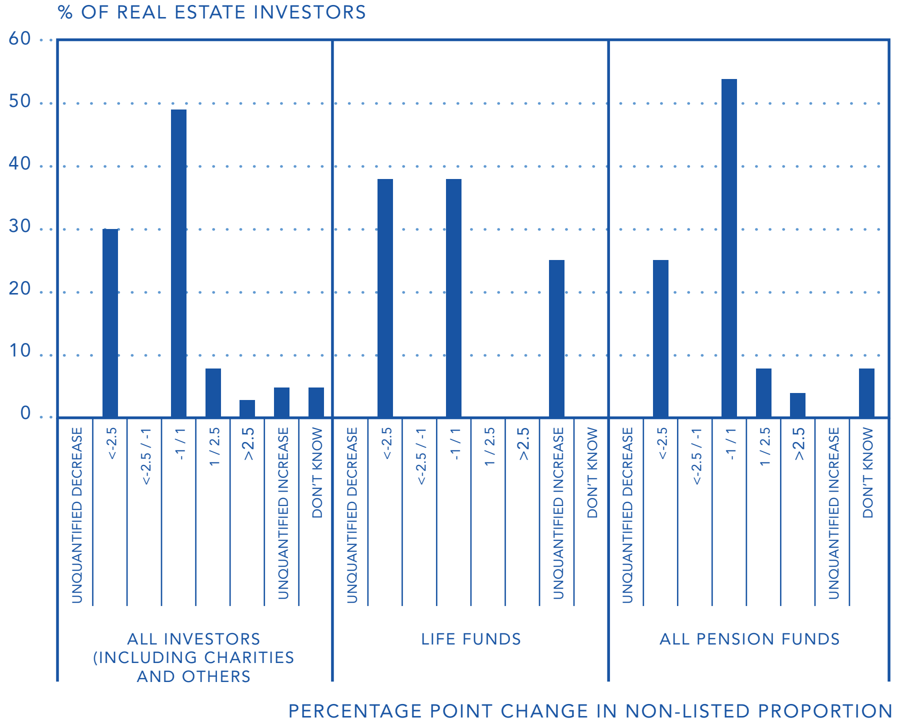
An indicative estimate is that, subject to liquidity and market conditions, the non-domestic life and pension fund universe will increase over the next three years by around 40% to about £15 billion. While the life funds' investment will decline, the pension fund non-domestic universe is likely to double.

Corresponding to this, the life and pension fund domestic real estate universe will increase less quickly, by 18% to about £82 billion. Within this, life funds are expected to record a marginal decline in their domestic investments as their overall allocation to real estate falls.

6.3 Prospective changes in the exposure to non-listed real estate

Investors in the sample were asked by how much they expected the proportion of non-listed in their real estate portfolios to change over the next three years. The responses are summarised in Figure 25.

FIGURE 25 / EXPECTED CHANGES IN THE NON-LISTED REAL ESTATE PROPORTION



Half of them expected the non-listed proportion of their real estate to show little change over the next three years. The balance is looking to reduce the proportion – 30% against 16% looking to increase. The life funds were most likely, at 38%, to be expected reducing exposure to non-listed. The 25% of life funds expecting an increase in the proportion of non-listed in their portfolio said that this would be involuntary, as they expected illiquidity would make sales difficult.

Just over half of the pension funds expected little change (some of these were exclusively invested in non-listed) and, at 25%, more were looking to reduce the proportion rather than to increase it (13%).

All those pension funds expecting the proportion of non-listed to increase attributed this to increased non-domestic investment, with UK non-listed exposures likely to decline. Similarly, half of the pension funds anticipating a reduction in non-listed were expecting large falls in domestic non-listed exposure to be partly offset by increases in non-listed investment outside the UK.

The expectation was that, in the UK, direct real estate and joint ventures would be the beneficiaries from the shift out of non-listed.

The indicative estimates of the future non-listed universe draw on three sets of information. First, the detailed estimates of future exposures to non-listed real estate made by most respondents. These indicate an approximate 4 percentage point decline in the proportion of life funds' real estate in non-listed, and a 0.5 percentage point increase for pension funds.

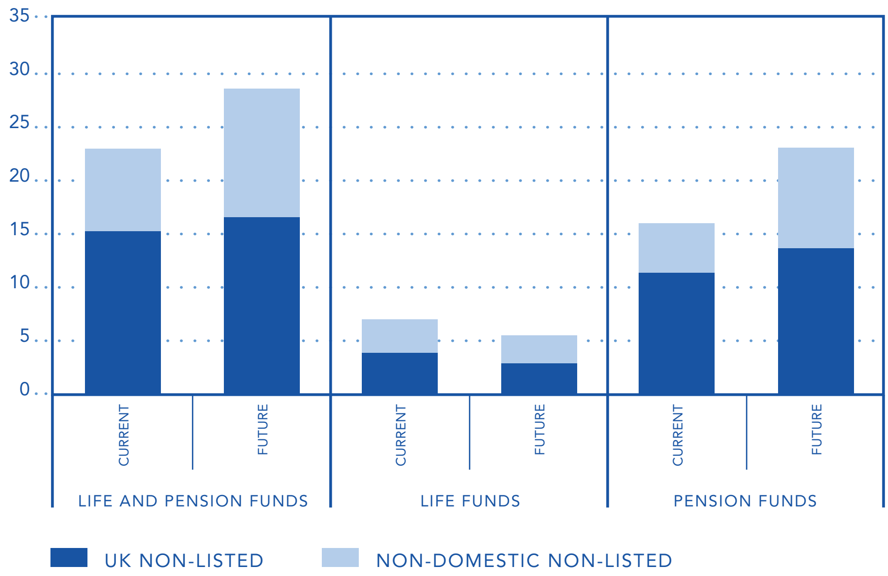
Second, further analysis to account for the low representation of smaller pension funds in the sample most of which are exclusively invested in non-listed. Finally the views of investment consultants that almost all of those new to real estate will invest exclusively through non-listed.

The key developments underpinning the estimates are the decline in life funds' total real estate exposure and their reduced dependence on non-listed, the growth in pension funds' exposure to real estate and the growing proportion of this invested in non-domestic real estate (which is predominantly non-listed), and the shift by big pension funds out of UK non-listed. The estimates assume that illiquidity will not restrict any changes.

The estimates are illustrated in Figure 26. The life and pension funds non-listed universe is expected to increase by almost 25% from £23 billion to over £28 billion. This broadly corresponds to the expected increase in the overall real estate universe. A decline in life funds' exposures to non-listed, particularly in the UK, is outweighed by a bigger increase in the pension fund non-listed universe. With investors' real estate generally increasing, the proportion of their total assets (equities, bonds, real estate, etc.) accounted for by non-listed increases from 2 – 2.5%.

FIGURE 26 / NON-LISTED UNIVERSE CURRENTLY AND EXPECTED IN THE NEXT THREE YEARS

£ BILLION



The estimates on the breakdown between the UK and the rest of the world are more tentative. The suggestion is that most of the growth in non-listed will be through non-domestic investments, which are anticipated to rise by half to around £12 billion. Only the pension universe sees any growth and some of this is offset by a decline in the life fund non-domestic universe. The UK non-listed universe is expected to see a relatively small increase, as the decline in the life fund universe is offset by moderately higher UK exposures in pension funds.

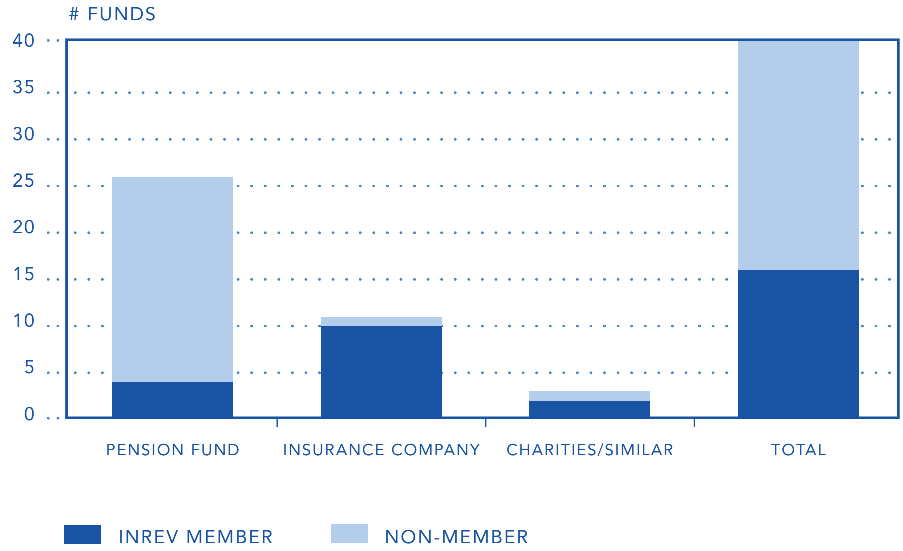
APPENDIX 1: SURVEY METHODOLOGY

Face-to-face or telephone interviews, typically lasting 30 – 90 minutes, were undertaken with either pension fund chief investment officers, senior property professionals from pension fund and insurance company internal investment management arms, or senior investment professionals from charities. The interviews were undertaken between September 2009 and January 2010.

Data and information from 35 schemes was collected this way (although one of these was unable to provide detailed data). In addition, an on-line survey of pension funds, using details provide by AP Information Services (publishers of Pension Funds and their Advisers) seeking comparable data but less qualitative information was undertaken during January and February 2010. This generated another five responses.

As illustrated in Figure A01, information was collected on 26 pension schemes, 11 insurance company life and other funds, and from three charities. Three-fifths were not INREV members. Their total assets amounted to £447 billion, accounting for 36% of the universe. Their real estate exposures were £44 billion, 49% of the estimated real estate universe including charities.

FIGURE A01 / TYPE OF INVESTOR AND INREV MEMBERSHIP OF THOSE PROVIDING INFORMATION



Only schemes with total assets >£500 million were contacted. Figure A02 shows that most were large funds with total assets in excess of £2.5 billion. Pension funds with total assets <£2.5 billion were under-represented in the sample. This is corrected for in the estimation of the universe (see Appendix 2).

FIGURE A02 / SAMPLE FUNDS BY SIZE OF TOTAL ASSETS

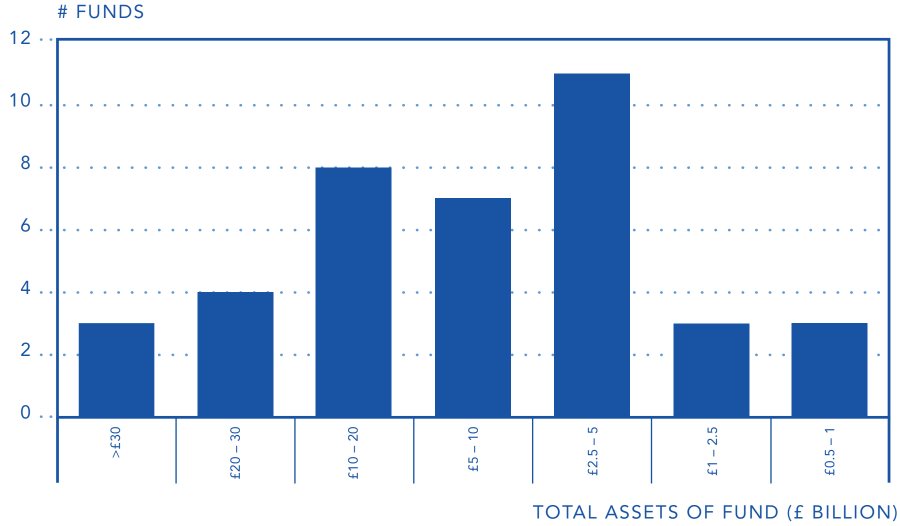
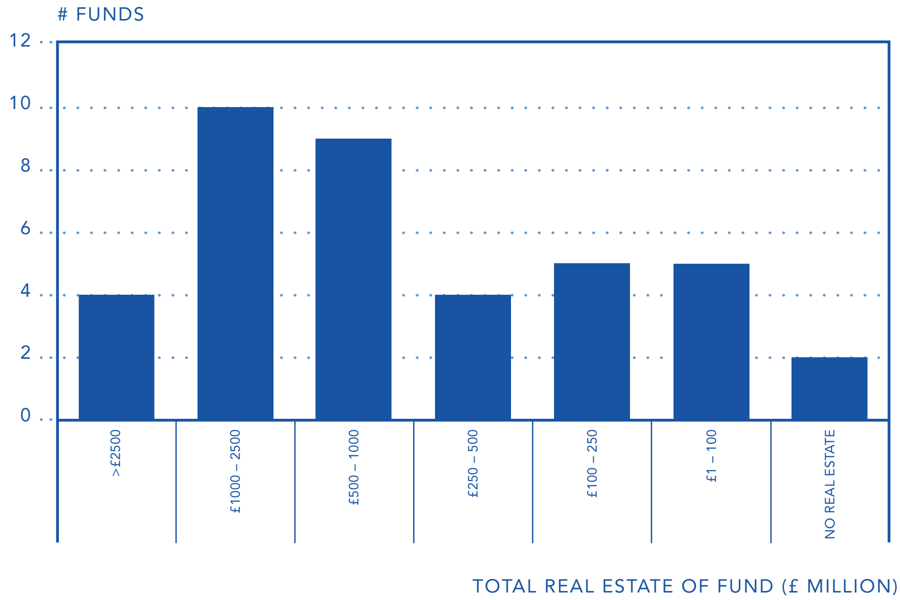


Figure A03 provides similar information on the funds' real estate exposure.

FIGURE A03 / SAMPLE FUNDS BY SIZE OF REAL ESTATE EXPOSURES



Only two pension funds (i.e., 8% of the pension funds and 5% of all investors in the sample) did not have any exposure to real estate. This compares with 34% of the pension funds participating in State Street Investment Analytics' performance measurement service. This under-representation of those not investing in real estate is corrected for in the universe analysis.

APPENDIX 2: ESTIMATION OF THE REAL ESTATE AND NON-LISTED UNIVERSE

Current real estate universe

The universe estimates draw on data from the survey and from State Street Investment Analytics on pension fund and charity exposures to real estate. They also draw on supplementary data on a sample of pension funds' total assets and their exposure to real estate in total, to non-listed real estate and to non-domestic real estate collected from their published annual reports.

There are five broad stages to the estimation of the real estate universe.

1. Estimate total assets of the universe of life funds and of pension funds by size of total assets. Data on insurance companies' with-profits life funds' total assets is collated from their regulatory annual reports to the Financial Services Authority. For pension funds, total assets are drawn from UK government statistics and by size of pension fund from AP Information Services, publishers of Pension Funds and their Advisers. An indicative estimate for charities is made by drawing on data from Charity Trends and from the biggest organisations' annual reports.

2. Make a representative estimate of each of these groups' percentage exposure to real estate. The sample is the primary source, but where the coverage is low (particularly for pension funds with total assets <£2.5 billion), the data from State Street Investment Analytics and from the supplementary information from pension funds' annual reports is also drawn on. Discussions with the investment consultants are used to fine tune the estimates.

   These assumed percentage exposures to real estate are then applied to the total assets universe for each group to derive an estimate of the universe's real estate. Note that the smaller pension funds in total are estimated to have a lower exposure to real estate than in the sample. This is because, compared to the sample, a higher proportion of them do not have any exposure to real estate.

3. Make a representative estimate of the proportion of real estate in each of these groups that is direct, non-listed, in joint ventures, and in other forms of real estate. The investor survey is the primary source. Where the coverage is low, this data is supplemented with information from additional pension funds' annual reports. Finally, discussions with the investment consultants are used to fine tune the estimates.

   These proportions are applied to the total real estate universe for each group to derive a universe estimate for each type of real estate.

4. Make a representative estimate of the proportion of real estate in each of these groups that is invested non-domestically. The investor survey is the primary source. Where the coverage is low, this is fine tuned using information from the supplementary sources, from investment consultants and following discussion with investment consultants.

   These proportions are applied to the total real estate universe for each group to derive a universe estimate for non-domestic and for UK real estate.

5. Make a representative estimate of the proportion of non-domestic and UK real estate in each of these groups that is invested in non-listed vehicles. The investor sample is

the primary source, but where the coverage is low, this is fine tuned using information from the supplementary sources and from investment consultants. These proportions are applied to the non-domestic and UK real estate universes for each group to derive universe estimates for non-domestic non-listed real estate and for UK non-listed real estate.

The estimates are detailed in Table A01A, B and C (page 38, 39).

Current target/allocation to real estate universe

The estimates from the investor survey of the difference between the current target/allocation to real estate and the current exposure are applied to the universe's total assets. Note that in the calculation, because these differences relate only to those investing in real estate, the universe's total assets to which they are applied must relate only to those funds investing in real estate. An estimate has to be made of this universe. This gives an estimate of the current target/allocation relative to current exposures.

The estimates are detailed in Table A02 (page 39).

Prospective real estate universe

The estimates from the investor survey of the difference between the expected future allocation to real estate and the current real estate target are applied to the universe's total assets. In the same way as above, the differences are applied to the total asset universe of those investing in real estate. This gives an estimate of the future real estate target allocation relative to the current target.

Account has also to be taken (net) of those newly investing in real estate. State Street Investment Analytics data suggests that the proportion of pension funds investing in real estate increased by about six percentage points between mid-2006 and late 2009. Such an improvement is assumed to continue, with these new investors having the same allocation as current investors. No change in the proportion of life funds investing is assumed.

The estimates are detailed in Table A03 (page 39).

Prospective non-listed real estate universe

The investor survey provided estimates of expected changes in the proportion of real estate that is non-listed. An adjustment has to be made to the estimates for the smaller pension funds because the proportion of these in the sample that exclusively invest indirectly was under-represented. This makes a difference because such investors are expected to continue investing exclusively through non-listed. The survey estimates give insufficient weight to such investors and, as a result, the changes in the proportion of real estate invested in non-listed will be closer to zero than indicated.

The estimated differences between the expected future proportion of real estate invested in non-listed and the current proportion are applied to the future total real estate universe of those currently investing in real estate. Investment consultants report that those new to real estate tend to use 100% non-listed and therefore all new real estate investors are assumed to invest this way.

The estimates are detailed in Table A04 (page 40).

TABLE A01 — A / TOTAL ASSETS AND PROPERTY UNIVERSE

	TOTAL ASSETS UNIVERSE *£ BILLION*	SAMPLE SIZE TOTAL ASSETS *£ MILLION*	SAMPLE PROPERTY *£ MILLION*	SAMPLE NON-LISTED *£ MILLION*	SAMPLE PROPERTY AS PERCENTAGE OF ASSETS	STATE STREET (WM) UNIVERSE PROPERTY AS PERCENTAGE OF ASSETS	ASSUMED UNIVERSE PROPERTY AS PERCENTAGE OF ASSETS	ESTIMATED UNIVERSE PROPERTY *£ MILLION*
LIFE FUNDS	250,000	156,298	17,105	4,348	10.9		10.9	27,359
PENSION FUNDS >£5BN	450,000	184,946	13,094	1,538	7.1	5.7	7.1	31,860
PENSION FUNDS £2.5 – 5BN*	150,000	26,031	1,294	405	5.0	4.6	5.0	7,456
PENSION FUNDS £1 – 2.5BN*	175,000	5,537	276	261	5.0		5.0	8,723
PENSION FUNDS £0.5 – BN*	100,000	1,680	98	8	5.8	4.1	4.1	4,100
PENSION FUNDS <£0.5 BN**	25,000	0				3.2	3.2	800
TOTAL PENSION FUNDS	**900,000**	**218,194**	**14,762**	**2,212**	**6.8**	**5.3**	**5.9**	**52,939**
TOTAL LIFE AND PENSIONS	**1,150,000**	**374,492**	**31,867**	**6,559**	**8.5**		**7.0**	**80,298**
OTHERS (CHARITIES, OTHER INSURANCE COMPANY FUNDS, ETC)		72,503	11,848	820	16.3			

* CHECKS ON ADDITIONAL FUNDS SUGGEST SURVEY IN RIGHT BALL PARK FOR £2.5 – 5 BILLION AND £1 – 2.5 BILLION, AND THAT FOR £0.5 – 1 BILLION WM IS IN RIGHT BALL PARK. N.B. PROPERTY EXPOSURES FOR FUNDS <£5 BILLION LOWER BECAUSE APPROX 30% DO NOT INVEST IN PROPERTY.

** NOT COVERED BY THE RESEARCH. ASSUME STATE STREET.

TABLE A01 — B / DIRECT, NON-LISTED AND PROPERTY UNIVERSE

	SAMPLE PERCENTAGE OF PROPERTY DIRECT	SAMPLE PERCENTAGE OF PROPERTY NON-LISTED	SAMPLE PERCENTAGE OF PROPERTY OTHER	ASSUMED UNIVERSE PERCENTAGE OF PROPERTY DIRECT	ASSUMED UNIVERSE PERCENTAGE OF PROPERTY NON-LISTED	ASSUMED UNIVERSE PERCENTAGE OF PROPERTY OTHER	ESTIMATED PROPERTY UNIVERSE *£ MILLION* DIRECT	ESTIMATED PROPERTY UNIVERSE *£ MILLION* NON-LISTED	ESTIMATED PROPERTY UNIVERSE *£ MILLION* OTHER
LIFE FUNDS	73	25	2	73	25	2	19,976	6,954	429
PENSION FUNDS >£5 BN	77	12	11	77	12	11	24,599	3,742	3,518
PENSION FUNDS £2.5 – 5 BN	60	31	9	60	31	9	4,472	2,334	651
PENSION FUNDS £1 – 2.5 BN*	5	95	0	30	70	0	2,617	6,106	0
PENSION FUNDS £0.5 – 1 BN**	92	8	0	25	75	0	1,025	3,075	0
PENSION FUNDS <£0.5 BN**				0	100	0	0	800	0
TOTAL PENSION FUNDS	**74**	**15**	**11**	**62**	**30**	**8**	**32,713**	**16,057**	**4,169**
TOTAL LIFE AND PENSIONS	**74**	**21**	**6**	**66**	**29**	**6**	**52,689**	**23,011**	**4,598**
OTHERS (CHARITIES, OTHER INSURANCE COMPANY FUNDS, ETC)	90	7	3						

* SAMPLE FOR £1 – 2.5 BILLION UNREPRESENTATIVE; ADDITIONAL DATA SUGGESTS 65% NON-LISTED MORE REPRESENTATIVE, CONSULTANTS & IPF SG SUGGESTED HIGHER, THE 70% IS THE COMPROMISE.

** SAMPLE FOR £0.5 – 1 BILLION UNREPRESENTATIVE: ADDITIONAL DATASUGGESTS 65 – 75% FOR NON-LISTED MORE REPRESENTATIVE. INVESTMENT CONSULTANTS ADVISE ALL EXPOSURES FOR <£0.5 BILLION WILL BE INDIRECT.

TABLE A01 — C / ASSETS INVESTED IN THE UK AND EX-UK PROPERTY UNIVERSE

	SAMPLE PERCENTAGE OF PROPERTY EX-UK	ASSUMED UNIVERSE PERCENTAGE OF PROPERTY EX-UK	ESTIMATED PROPERTY UNIVERSE *£ MILLION* UK	ESTIMATED PROPERTY UNIVERSE *£ MILLION* EX-UK	SAMPLE PERCENTAGE OF EX-UK NON-LISTED	ASSUMED UNIVERSE PERCENTAGE EX-UK NON-LISTED	ESTIMATED UNIVERSE EX-UK NON-LISTED *£ MILLION*	ESTIMATED UNIVERSE UK NON-LISTED *£ MILLION*
LIFE FUNDS	19.2	19.2	22,112	5,248	58.5	58.5	3,071	3,884
PENSION FUNDS >£5 BN	4.8	4.8	30,336	1,523	84.0	84.0	1,280	2,462
PENSION FUNDS £2.5 – 5 BN	19.7	19.7	5,987	1,469	80.4	80.4	1,181	1,152
PENSION FUNDS £1 – 2.5 BN*	37.0	20.0	6,979	1,745	100.0	100.0	1,745	4,362
PENSION FUNDS £0.5 – 1 BN**	0.0	10.0	3,690	410		100.0	410	2,665
PENSION FUNDS <£0.5 BN**		5.0	760	40		100.0	40	760
TOTAL PENSION FUNDS	**6.2**	**9.8**	**47,752**	**5,187**		**90.0**	**4,656**	**11,401**
TOTAL LIFE AND PENSIONS	**13.4**	**13.0**	**69,864**	**10,435**		**74.0**	**7,727**	**15,285**
OTHERS (CHARITIES, OTHER INSURANCE COMPANY FUNDS, ETC)	3.7							

* ADDITIONAL DATA SUGGEST 15 – 20% OF PROPERTY EX-UK -20% ADOPTED AS COMPARABLE TO £2.5 – 5 BILLION. ADDITIONAL DATA SUGGEST EX-UK IS APPROX 10%, CONSISTENT WITH CONSULTANTS' VIEW.

** RESEARCH DID NOT COVER VERY SMALL PENSION FUNDS, CONSULTANTS SUGGEST <10%.

TABLE A02 / ESTIMATION OF THE CURRENT REAL ESTATE TARGET UNIVERSE

	UNIVERSE TOTAL ASSETS	UNIVERSE TOTAL ASSETS FOR THOSE WITH REAL ESTATE	CURRENT UNIVERSE REAL ESTATE	TARGET PERCENTAGE LESS CURRENT PERCENTAGE EXPOSURE FOR THOSE WITH REAL ESTATE		REAL ESTATE UNIVERSE IMPLIED TARGET
	£ MILLION	*£ MILLION*	*£ MILLION*	*PERCENTAGE POINTS*	*IMPLIED EXTRA £ MILLION*	*£ MILLION*
LIFE FUNDS	250,000	250,000	27,359	-1.0	2,522	24,837
PENSION FUNDS	900,000	781,250	52,939	1.3	11,983	64,922
LIFE AND PENSION FUNDS	**1,150,000**	**1,031,250**	**80,298**	**0.8**	**9,460**	**89,759**

TOTALS SUBJECT TO ROUNDING.

TABLE A03 / ESTIMATION OF THE FUTURE REAL ESTATE UNIVERSE

	UNIVERSE REAL ESTATE TARGET	TARGET PERCENTAGE IN THREE YEARS LESS CURRENT PERCENTAGE TARGET		REAL ESTATE UNIVERSE IN THREE YEARS — CURRENT INVESTORS	REAL ESTATE UNIVERSE IN THREE YEARS — NEW INVESTORS	REAL ESTATE UNIVERSE TARGET IN THREE YEARS
	£ MILLION	*PERCENTAGE POINTS*	*IMPLIED EXTRA £ MILLION*	*£ MILLION*	*£ MILLION*	*£ MILLION*
LIFE FUNDS	24,837	0.5	1,162	25,999	0	25,999
PENSION FUNDS	64,922	0.7	5,210	70,132	1,284	71,416
LIFE AND PENSION FUNDS	**89,759**	**0.6**	**6,373**	**96,131**	**1,284**	**97,415**

TOTALS SUBJECT TO ROUNDING.

TABLE A04 / ESTIMATION OF THE FUTURE NON-LISTED REAL ESTATE UNIVERSE

	CURRENT UNIVERSE NON-LISTED REAL ESTATE TARGET	CURRENT INVESTORS — CHANGE IN NON-LISTED REAL ESTATE		NON-LISTED REAL ESTATE IN THREE YEARS — CURRENT INVESTORS	NON-LISTED REAL ESTATE IN THREE YEARS — NEW INVESTORS	NON-LISTED REAL ESTATE UNIVERSE IN THREE YEARS
	£ MILLION	*PROPORTION OF REAL ESTATE IN PERCENTAGE POINTS*	*IMPLIED EXTRA £ MILLION**	*£ MILLION*	*£ MILLION*	*£ MILLION*
LIFE FUNDS	6,954	-4.3	-1,457	5,498	0	5,498
PENSION FUNDS	16,057	0.9	5,826	21,883	1,284	23,167
LIFE AND PENSION FUNDS	**23,011**	**-0.2**	**4,370**	**27,381**	**1,284**	**28,665**

* EXTRA £ MILLION REFLECTS BOTH CHANGE IN THE PROPORTION OF REAL ESTATE THAT IS NON-LISTED AND THE CHANGE IN THE TOTAL AMOUNT OF REAL ESTATE. FOR LIFE & PENSION FUNDS, GROWTH IN THE LATTER MORE THAN OFFSETS THE DECLINE IN THE PROPORTION OF REAL ESTATE THAT IS NON-LISTED.

TOTALS SUBJECT TO ROUNDING.