



# Real Estate Investment in UK Defined Contribution Pension Schemes

**MAY 2018** 

**MAJOR REPORT** 



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### Report

IPF Research Programme 2015–2018

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### RE Investment in UK DC Pensions

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This document looks at the state of property investment in UK defined contribution pensions today and in the future.

In a changing savings environment what is the current and future scope for property investment?

As part of their work in preparing this document, the authors carried out a survey of 122 companies during 2017, who were sponsors of 164 DC schemes, and who between them represented DC assets of £21bn and 870,000 memberships.



#### **EXECUTIVE SUMMARY**

- DC market change Automatic enrolment introduced in stages from 2012 kick-started what we project to be a doubling in workplace DC membership and a threefold increase in assets under management in the 10 years to 2026. In this new savings environment we explore the current and future scope for property investment.
- Assets in DC Our latest estimate is that the UK DC workplace market holds £338bn in assets. We have projected that the overall rate of growth of assets will be 10% per year over the next 10 years and that UK DC assets will reach £871bn.
- Popularity of property investment We estimate that 30% of all DC schemes currently invest in property, either through property funds or via multi-asset funds. As schemes fall in size then so does the popularity of property investment: across mega and large schemes, the popularity averages 51%. Where today there are 30% of schemes invested in DC, we forecast that this will rise to 40% over the next 10 years.
- Allocation of assets to property We estimate that 1.8% of workplace DC assets, including those of smaller schemes, are currently invested in property. We think that allocations to property will grow, both through property and multi-asset funds. Overall, we anticipate it will rise from the current 1.8% to 5.4% in 2026.
- Property assets in DC In total, we now think that there are £6.2bn of property assets in workplace DC today. Most of these are in the largest schemes. Our conclusion is that there will be £47bn in property investment in DC schemes in 2026. The majority of these assets will be held by Master Trusts.

- **Growth drivers** The main driver of this growth is the increase in assets. The part of the DC market that drives growth most is the larger schemes.
- Scenario variance Other scenarios identified for future development of property investment in UK DC in the next 10 years show a worst case where property investment is 85% lower than this projection and a best case where it is 50% higher.
- Property investment reasons Most schemes told us that what they wanted
  to achieve from property investment was diversification, followed by a desire
  for long term investment. Also mentioned were risk diversification and
  non-correlated return.
- **Property vehicles** Virtually all property investment in DC is done through pooled vehicles, both REITs and other daily traded pooled funds. Other than within SSASs¹ (whose property investments we have chosen to exclude from this study) there is little 'direct' property holding that we are aware of.
- **Barriers to property investment** The main reason why schemes will not invest in property, or will not increase their investment, is the lack of liquidity. It has been clear for some time that the barriers to illiquid investments are structural and not regulatory.

<sup>&</sup>lt;sup>1</sup> Small Self Administered Schemes

#### 1. INTRODUCTION

This report looks at the state of property investment in UK defined contribution pensions (DC) today and in the future.

The background to this analysis is a pensions system experiencing great change. For years DC pensions had been moribund, hardly growing in size. A series of regulatory changes, starting with the introduction of Automatic Enrolment from 2012, has prompted a pensions revolution in the UK.

We think that assets and membership in DC prior to 2012 were not growing with any vigour, as illustrated in Figures 1. 1 and 1.2 respectively. Automatic enrolment – introduced in stages from 2012 – kick-started what we now project (as we describe later) will be a doubling in workplace DC membership over the next 10 years and a threefold increase in assets under management.

By 2026, DC assets, while not catching up with defined benefit (DB), may be the size that DB was in 2010.

In summary, we project that property investment in UK DC will grow to represent some £47bn in assets under management in 10 years. Less than 2% of DC assets are allocated to property today, and we explain why we think this will grow to over 5% by 2026.

Figure 1.1: Growth in DB and DC assets, end-2015 to 2026 (£bn)

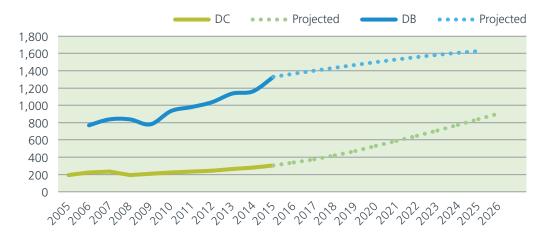
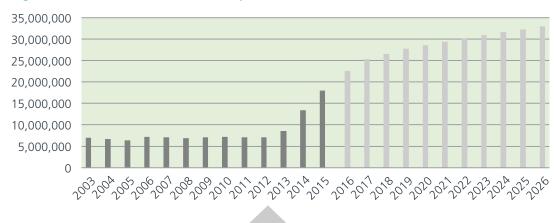


Figure 1.2: Growth in DC memberships, end-2015 to 2016



### 2. TYPES OF WORKPLACE DC SCHEMES

The UK DC market consists of workplace and personal savings. This report looks only at workplace schemes, which are defined as schemes with two or more members, usually arranged or 'sponsored' by an employer or an organisation dedicated to this purpose.

There are three types of workplace scheme:

- Trust-based schemes operate under a trust deed, and are managed by a board of trustees. Often, in larger companies, it will be the same board that manages both a company's DB and DC scheme. Trust-based scheme investments are sometimes managed internally, but usually rely on external advice.
- Contract-based schemes are technically individual contracts between the member and the pension provider, but in reality are managed by the company sponsoring the scheme. Many are Group personal pensions (GPPs).
- Master Trusts are multi-employer DC schemes. The highest profile
  example is NEST, which was set up by the government and has no
  shareholders, but others are commercially run as profit seeking
  enterprises. They achieve scale, and can therefore access expertise at low
  cost per member. In the UK they do not pool investment risk, this still
  stays at an individual level.

**Bundled and unbundled schemes** We also make a distinction between bundled and unbundled service. Schemes often receive advice from consultants or financial advisers. In addition, they need two main services to operate – administration and investment processing – and, while these can be provided in-house, usually they are done externally. If the administration and investment processing (usually via a platform) is carried out by one supplier, then the scheme is said to receive a 'bundled' service. If the administration and investment are from different suppliers, the services are 'unbundled'. The majority of bundled providers are insurance companies.

### **Pensions governance**

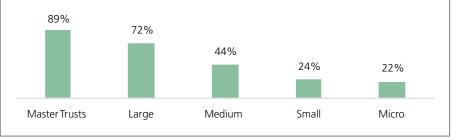
Trust-based schemes require trustee boards and other governance structures that can appear expensive to corporate sponsors, which explains the shift from a trust- to a contract-base for many schemes.

At their best, contract-based appear similar to trust-based schemes; for example, they are often managed by an investment committee that resembles a board of trustees. So, large schemes, whether contract- or trust-based, are often managed with great skill, but smaller schemes can suffer from lack of time and resource, which can lead to inappropriate investment decisions.

The direct relationship between small size and poor pensions governance is picked up time and again in research by the regulator, an example from 2017 is shown in Figure 2.1<sup>1</sup>.

There are four Key Governance Requirements (KGRs)<sup>2</sup> and this governance issue informs government policy, which favours the aggregation of pension assets into fewer, larger pools.

Figure 2.1: Proportion of schemes meeting two or more key governance requirements (KGRs) 2017



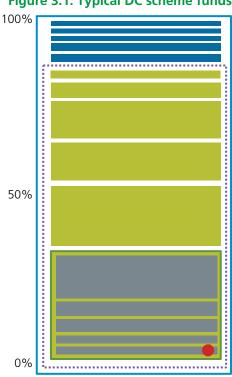
DC Pension Scheme Research 2017 The Pensions Regulator

<sup>&</sup>lt;sup>1</sup> DC Pension Scheme Research 2017, The Pensions Regulator

<sup>&</sup>lt;sup>2</sup> For more info on KGRs see http://www.thepensionsregulator.gov.uk/docs/dc-research-summary-report-2017.PDF

### 3. DC SCHEME INVESTMENT

Figure 3.1: Typical DC scheme funds



Whole scheme

Default arrangement

Funds that make up the default arrangement

Multi-asset fund within

default arrangement

Self-select funds

Funds within the

multi-asset fund

By describing how a typical DC scheme invests, we are then able to explain property investment in context.

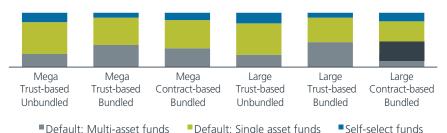
A typical large company DC scheme that uses what is called a 'lifestyle' approach, as most do, might look like Figure 3.1. It is scaled approximately to asset size, as evidenced by Figure 3.2. Each column in this chart represents a fund but note there are funds-within-funds.

The dotted line shows the extent of the 'default arrangement', as it is often called. It is not the 'default fund' because it is often not one fund (a common misconception) - in reality it is several funds, often four or five.

Note that the underlying assets of a fund (the one marked for example) may be 'wrapped' many times over, by being contained in other vehicles. An example is given in the case study in Section 3.1.1, where property assets are wrapped four times over.

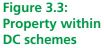
This multiple wrapping can make things very confusing. It is very possible that a scheme Trustee – even a well-informed one – will not know, in detail, what the scheme's underlying funds or assets are, or their relative scale. This makes research of property in DC very difficult, since, in many cases, property assets will be multi-wrapped in this way.

Figure 3.2: DC scheme distribution of assets by type (% of AuM)



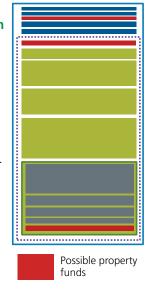
Source Spence Johnson DC Sponsor Survey 2017

### **Property funds**



Property funds may appear in three places within a DC scheme, highlighted in red in Figure 3.3.

Note that all the schemes' Investments are via funds; no assets are directly held.



- 1. They may be a self-select fund;
- 2. They may be a fund within a multi-asset fund; or
- 3. They may be a single asset class fund within the default arrangement.

### 3.1 CASE STUDY: TYPICAL LARGE DC SCHEME

- This case study illustrates how one DC scheme works and how property investment fits into it.
- While all schemes differ, there are often many similarities between them.
- The scheme selected is The Metal Box company pension scheme, which has 1,904 members.
- All information shown is publicly available.

# The Metal Box scheme

Typically, The Metal Box DB scheme (£2.4bn) is much larger than its DC one (£36m). The DC scheme has 1,904 members, which we would categorise as 'large' in terms of size.

It is governed by Trustees and uses Standard Life as its bundled provider and, in addition, uses Equiniti to provide administrative and other services. We would categorise it, therefore, as a trust-based, bundled scheme.

THE METAL BOX PENSION SCHEME	Note	DB Section As at 31 March 2017 (£000)	DC Section As at 31 March 2017 (£000)
Investment assets:			
Equities	13	20,190	-
Bonds	13	1,159,985	- <u>-</u>
Pooled investment vehicles	14	1,188,410	35,959
Derivatives	15	214,721	-
Cash	13	80,174	-
Other investment assets	13	3,750	
		2,667,230	35,959
Investment liabilities:			
Derivatives	15	117,187	-
Other investment liabilities	13	179,750	
		296,937	
Total net investments		2,370,293	35,959

All the DC assets are in pooled funds - again, this is typical.

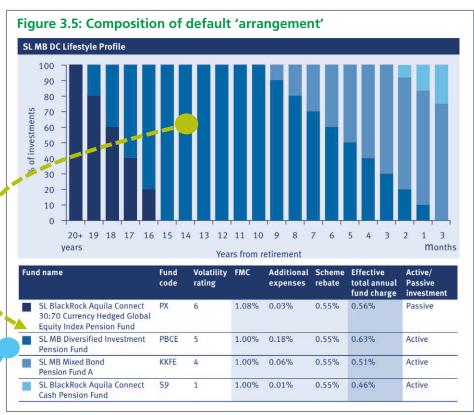
Property is one of the DC asset classes shown, and it represents 4.2% of the total DC fund. The DB scheme in contrast has only 0.9% in property.

Figure 3.4: Asset allocations within The Metal Box scheme

	DB Section Value as at 31 March 2017 (£000)	DC Section Value as at 31 March 2017 (£000)
Equity funds	550,299	18,160
Bond funds	103,020	3,520
Hedge funds	276,613	-
Property funds	21,592	1,512
Private equity funds	163,110	-
Diversified investment funds	-	11,908
Money market	-	859
Cash	73,776	
	1,188,410	35,959

Source The Metal Box Pension Scheme

#### 3.1.1 CASE STUDY: HOW THE DEFAULT 'ARRANGEMENT' WORKS



# THE METAL BOX PENSION SCHEME

### The default 'arrangement'

If a member of this scheme chooses the default option, they would be put in an 'arrangement' that switches the member between a combination of funds (four in this case, which is typical) to form a 'glide path' towards retirement. In most large companies, this arrangement will have been constructed with advice from external consultants and, typically, will be called a 'lifestyle' structure.

Between 19 years and one year from retirement (as shown by ), the member would be partially invested in the 'SL MB Diversified Investment Pension Fund' (). This multi-asset fund has been badged specially for this scheme. In some cases, funds of this sort are made to order for schemes on the advice of consultants.

The SL MB Diversified Investment Pension Fund is itself made up of five other funds. 55% of the funds assets are in a BlackRock index fund, and this helps to keep costs low.

Another 15% of the fund is invested in the 'Standard Life Property Pension Fund' ( ), which invests direct into real estate in the UK. This fund gains its exposure to property by investing in assets held by another property fund: the Standard Life Pooled Property Fund ( ).



	Standard Life Pension Fund	Pooled Property Standard Life Investments
Standard Life Property Pension Fund	Standar	rd Life
Composition by Sub-Sector		(D)
		"Please note this
	Fund %	Fund gains its
Industrials - South East	17.1	exposure to
Retail Warehouses	15.3	Property by
Offices - West End (and Mid-Town)	13.9	investing in a
Shopping Centres	13.2	much larger
Cash and Other	11.3	pool of assets
Standard Retails - South East	6.7	held mainly in
Offices - City	6.2	the Standard
Offices - Rest of UK	5.5	Life Pooled
Industrials - Rest of UK	4.6	Property Fund." Source The Metal Box Pension Schem

#### 3.1.2 CASE STUDY: THE 'SELF-SELECT' FUNDS INCLUDE PROPERTY

### THE METAL BOX **PENSION SCHEME** Figure 3.6: Range of self-select options

Standard Life's volatility rating	Risk type	Code	Fund name	Summary	Style	Total Expense Ratio (TEF	
0	Low	S9*	SL BlackRock Aquila HP Cash Pension Fund	Invests in a diversified portfolio of money market instruments.	Active	0.46	
<b>3</b>	Medium	НН	Standard Life Corporate Bond Pension Fund	A lower volatility growth option that invests mainly in sterling denominated corporate bonds.	Active	0.46	
8		Medium	FM	Standard Life Property Pension Fund	Invests in mainly prime quality UK commercial property.	Active	0.47
4		KKFE*	SL MB Mixed Bond Pension Fund A	Aimed at members who want a level annuity at retirement. Invests mainly in sterling fixed-interest corporate and UK Government bonds.	Active	0.51	
4		AAMH	SL MB Mixed Bond Pension Fund B	Aimed at members who want an inflation linked annuity at retirement. Invests mainly in sterling index- linked corporate and UK Government bonds.	Active	0.51	
6	Llink	G7	Standard Life Ethical Pension Fund	Invests in a diversified portfolio of assets, including equities and corporate bonds, that meets Standard Life's strict ethical criteria.	Active	0.46	
6	High	CZ	SL Majedie UK Equity Pension Fund	Invests in a diversified portfolio of predominantly UK Equities.	Active	1.22	

Standard Life's volatility rating	Risk type	Code	Fund name	Summary	Style	Total Expense Ratio (TER)
6		PBCE*	SL MB Diversified Investment Pension Fund	Invests in a diversified portfolio such as equities (including emerging markets), bonds, property funds and money market instruments.	Active	0.63
6		ADKL	SL Veritas Global Focus Pension Fund	Invests primarily in equities both in the UK and overseas markets.	Active	1.31
6	High	PX*	SL BlackRock Aquila HP 30:70 Currency Hedged Global Equity Index Pension Fund	Invests primarily in equities both in the UK and overseas markets.	Passive	0.56
6		JP	SL iShares UK Equity Index Pension Fund	Invests primarily in UK equities.	Passive	0.46
0		NC	SL JP Morgan Emerging Markets Pension Fund	Invests primarily in equity and equity-linked securities of emerging markets.	Active	1.31

Source The Metal Box Pension Scheme

### **Self-select options and costs**

In Section 3.1.1, we looked at 'default' options. Here, we consider self-selected funds. In this scheme there are 12 self-select options. One ( ) is property: 'Standard Life Property Pension Fund'. This same fund is also used within the default arrangement.

In the communication to members, Figure 3.6, this daily priced fund is described as medium risk and medium volatility.

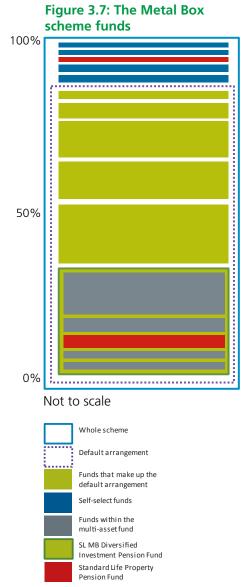
The charge to members of this scheme is 45bp and the scheme reveals here that its total expense ratio (TER) is 47bp, similar to both the corporate bond and cash funds. One might expect to see these three guite different vehicles charging guite different fees, but DC platform providers sometimes cross-subsidise their products.

In their annual report, The Metal Box trustees state that "members of the scheme invested in the default arrangement pay, on average, a fee of 0.57%". Thus, the costs borne by members are, in this case, well below the charge cap of 75bp. This is guite usual in larger schemes, where trustees and other fiduciaries place a significant emphasis on minimising costs to members.

The fund charges on these funds are the bundled fee that members pay to Standard Life. Some portion of this fee will then be allocated to the fund managers, but another portion will contribute towards the running costs of the platform.

The Metal Box subsidises some of the costs of the scheme. which is guite typical – in this case, the fees to Equiniti and some other service providers are paid by the company. Members also receive other benefits paid for by the company, such as death in service and ill health provisions.

### 3.1.3 CASE STUDY: PROPERTY ALLOCATION OF ASSETS



## THE METAL BOX PENSION SCHEME

### **Property allocation of assets**

Figure 3.1 introduced the key elements of a scheme and Figure 3.7 highlights, in red, property investment in The Metal Box scheme via the Standard Life Property Pension Fund. The diagram is indicative only, because we do not know the exact proportions.

From what is shown in the scheme accounts, we can estimate that the holding in the Standard Life Property Pension Fund represents at least 4% of the total assets of The Metal Box DC scheme, which is high by comparison with the average observed in our survey.

We know that the Standard Life Property Pension Fund is 15% of the SL MB Diversified Investment Pension Fund, which is high for a multi-asset fund.

We have assumed that the default arrangement is 85% of the total assets (which is typical), and also that the multi-asset fund represents 35% of the default fund arrangement (again, typical).

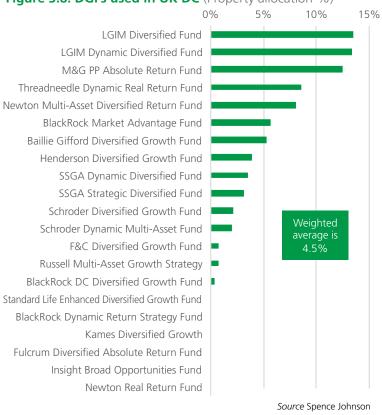
An above average property holding for a DC scheme of this size category

An above average property holding for a multi-asset fund used in DC

### Multi-asset funds in DC

Multi-asset, particularly Diversified Growth (DGF) funds play an increasingly important role in DC investment strategies. Figure 3.8 shows those DGFs used in UK DC for which we know their property allocation. Note that some are zero. On average this sample invest 4.5% of their assets in property.





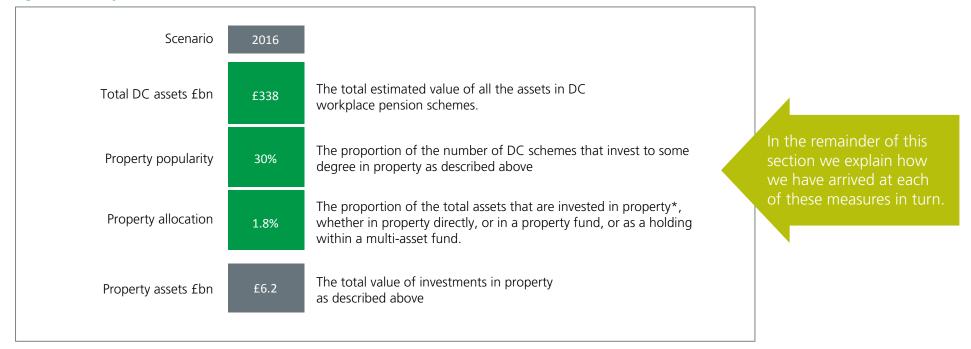
### 4. KEY METRICS FOR ASSESSING PROPERTY IN DC TODAY

### How the market looks at end 2016

We have chosen to focus here on just three key metrics: total assets, the number of schemes invested in property and the proportion and volume of assets held in property. There are a multitude of other variables that could influence the future, ranging from economic and stock market related ones, through to technical pensions factors, such as the growth of membership, and contribution rates. Focusing on these three alone makes forecasting easier to describe, whilst still allowing for the complexity of the many underlying variables.

As at end 2016 (the latest data we have) we estimate the UK DC workplace market holds £338bn in assets. 30% of schemes invest in property and 1.8% of their assets are property, making a total of £6.2bn, as detailed in Figure 4.1. This excludes certain small scheme holdings\*.

Figure 4.1: Analysis of DC assets



<sup>\*</sup> See Section 7 for reasons to exclude property assets held by small trust-based schemes.

#### 4.1 VALUE OF REAL ESTATE IN DC ASSETS

### **Workplace DC assets**

No definitive measure of DC workplace assets exists at present. We think that the UK DC workplace market holds £338bn in assets<sup>1</sup>, as shown in Table 4.1, including the probable spread of the different segments across the market.

Different types of scheme are explained in Section 2. We also analyse by size of scheme, based on the number of memberships within each, because the market varies so much in behaviour according to size.

Growth of workplace DC was driven by smaller schemes for many years. Large companies have more recently begun to collect assets as they closed their DB schemes. This explains why 58% of assets are currently in Medium and Small schemes.

#### Other measures of DC assets

There are few other publicly available measures of current UK DC assets. The Pensions Policy Institute (PPI) estimates that there are DC assets of £373bn in 2017<sup>2</sup>. The Pensions Institute estimated that there were assets of £276bn in 2012<sup>3</sup>. Willis Towers Watson estimates that there is \$516bn in DC pensions in the UK<sup>4</sup> but does not provide an exact definition of DC. The ONS is working on developing a measure of DC workplace assets that may emerge in coming months. However, the existing ONS measures<sup>5</sup> exclude key parts of the market in ways that make them unhelpful<sup>6</sup>.

#### **Small Self-Administered Schemes (SSAS)**

There is a particular concentration of assets in one segment: small trust-based, unbundled schemes. We do not know the precise amount but our estimate indicates that it is large. Much of this segment consists of small self-administered schemes (SSAS), in many cases established a long time ago. These are relevant because, anecdotally, we have learned that many of these schemes invest directly in property, typically their own business premises, and, thus, have been excluded from this study.

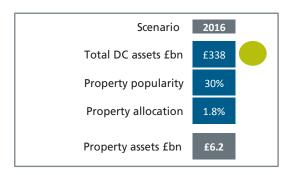


Table 4.1: Assets in UK DC, 2016 (£bn)

Type of scheme	<i>Memberships</i> Mega >5,000	Large >1,000	Medium >100	Small <100	
Master Trust	£11.7				£12
Trust-based unbundled	£42.6	£5.9	£1.1	£84.9	£135
Trust-based bundled	£9.0	£8.6	£7.3	£4.3	£29
Contract- based	£36.2	£28.6	£56.4	£41.3	£162
	£100	£43	£65	£130	£338

Source Spence Johnson DC Market Intelligence 2017

- 1. UK Defined Contribution Market Intelligence 2016 Looking beyond the passive approach Spence Johnson
- The Future Book: unravelling workplace pensions 2017 Pensions Policy Institute Median Scenario
- 3. DC Returning to the Core Rediscovering a Role for Real Estate in Defined Contribution Pension Schemes 2013 Pensions Institute
- 4. Global Pension Assets Study 2017 Willis Towers Watson
- 5. The UK Enhanced Financial Accounts: changes to defined contribution pension fund estimates in the national accounts; part 1 the methods. ONS 2017
- 6. ONS measures omit: contract-based pensions, Master Trusts, hybrid schemes and SSAS schemes with less than 12 members, and do not adequately reflect mega scheme growth. In the past the ONS has also unhelpfully blended DB and DC pension assets, and also blended decumulation assets with DC accumulation assets.

#### 4.2 POPULARITY OF REAL ESTATE INVESTMENT

### **Popularity of property**

We estimate that 30% of all DC schemes currently invest in property, either through property funds or via multi-asset funds. This conclusion is based on our survey and external research, as well as estimates.

The proportion varies widely by segment, as can be seen in Table 4.2. Among mega schemes, popularity is 45-70%. Our findings suggest that, across mega and large schemes, popularity averages 51%.

Among larger UK Defined Benefit schemes, the equivalent popularity ratio is currently 63%, although it has been as low as 53% in recent years<sup>1</sup>. Among European DB pensions it is currently 52%<sup>3</sup>. However, it is likely that these ratios exclude any investment made via multi-asset funds, so they cannot be compared directly with the DC proportions above.

As schemes fall in size then so does the popularity of property investment. We do not have a measure for popularity among small DC schemes but we estimate that the weighted average of all DC schemes<sup>3</sup> figure is probably around 30%.

Trust-based schemes invest in property more often than contract-based, as is shown in Table 4.2. Of the several reasons for this, one is that larger trust-based schemes are run by trustees, who often have DB investment experience and are, therefore, familiar with property investment. Another is that contract-based schemes are sometimes limited in their choices of investment to what is available on their chosen platform, and this can limit the range of property investment options.

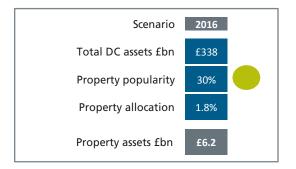


Table 4.2: Popularity of property in UK DC, 2016 (% no. schemes invested in property)

#### Memberships

	Mega >5,000	Large >1,000	Medium >100	Small <100	
Master Trust	50%				
Trust-based unbundled	71%	38%			620/
Trust-based bundled	67%	82%			62%
Contract-based	45%	35%			38%
Total	61%	45%			
	51	%	Si	ource Spence Joh	nnson

<sup>&</sup>lt;sup>1</sup> PLSA Annual survey 2016, quoted by PPI. PLSA membership and survey respondents are weighted towards larger schemes.

<sup>&</sup>lt;sup>2</sup> Real Assets allocation - European asset allocation survey 2017, Mercer

<sup>&</sup>lt;sup>3</sup> There are over 200,000 schemes in the Small/Medium categories and only around 1,500 in the Large/Mega category, so any weighted average is going to favour the experience of the smaller end of the market.

### **4.3 REAL ESTATE IN MASTER TRUSTS**

### **Master Trust property allocations**

There are 70 registered Master Trusts. Of these, 23 are what we term 'non-commercial', by which we mean they have been set up by an employer or a single industry-focused body for not-for-profit purposes. The remaining 47 are 'commercial' and have been set up by an insurance company, consulting firm or an investment firm or, in one case, (NEST) the government. Figure 4.2 lists our view of the 19 largest Master Trusts.

They contain only small amounts of assets today since they have been in existence for only a short time, but between them they already have nearly 10 million members, so they will grow quickly and will play an important role in DC.

Not all Master Trusts reveal their asset allocations in detail, but where they do we know that about half of them use property.

In many cases Master Trusts do not make it easy to identify their property investment. In one example, shown in Figure 4.3 from NOW Pensions, there is a description of the diversifying strategies within the default fund, otherwise referred to as alternative investments. It is not clear from this text or other materials made available whether property is included within this or, indeed, in other strategies in the fund.

**Figure 4.3: NOW Pensions Diversifying Strategies** 

Diversifying Strategies

Contained within **Diversifying Strategies** are systematic rule-based strategies which are specifically targeted to introduce additional diversification to the DGF. These strategies will typically have a low correlation to the other risk factors which are essentially long-only exposures. An example of this approach might be taking positions on a variety of currencies against the US dollar. Other strategies used within this factor could include trend strategies where we will invest more in assets with strong recent performance; or a "betting-against-beta" strategy, where we buy more shares with lower risk and fewer shares with higher risk.

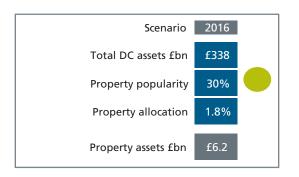
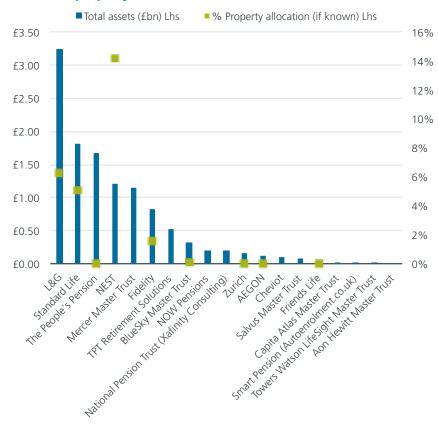


Figure 4.2: Leading commercial Master Trusts (AuM and property allocation)



### 4.4 CURRENT ALLOCATION TO REAL ESTATE

### Allocation to property today

When we surveyed large DC schemes, 89 of them told us what their allocation to property was; the results are shown in Figure  $4.4^{\circ}$ . This consists of two forms of investment:

- Investment into property funds (quoted or unquoted)
- Investment in property via multi-asset funds

From this, we estimate that, overall, 1.8% of workplace DC assets, including those of smaller schemes, are invested in property. Within the total, we think that investment into property funds represents 1.1% and investment in property via multi-asset funds represents another 0.7%.

For the reasons given in Section 2, it may be difficult for scheme fiduciaries in a multi-wrapped investment environment to master adequately underlying investments in detail. We suggest, therefore, that greater reliance is placed on the total than on the subtotals.

Our estimated total property allocations vary widely by segment from 1.0% to 5.5% as can be seen in Table 4.3. In particular they vary with scale, and there are obvious reasons for this: property investment is perceived to be complex, and only larger schemes have the appropriate skills either in-house or at hand through advisers. In a recent study of European pensions<sup>2</sup>, property allocations of the largest schemes were four times higher than that of the smallest ones, which is an even greater scale-related difference than we found in UK DC.

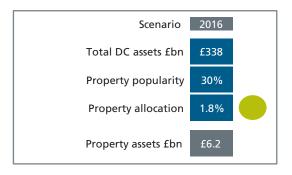


Figure 4.4: Allocation to property: % of Scheme AuM (Mega/large schemes only, n= 89)



Table 4.3: Estimated allocation to property in UK DC 2016 (% of Assets)

	Membership Mega >5,000				
Master Trust	5.5%				5.5%
Trust-based unbundled	4.5%	1.8%	1.0%	1.0%	2.2%
Trust-based bundled	1.8%	2.1%	1.0%	1.0%	1.6%
Contract-based	1.8%	2.1%	1.0%	1.0%	1.4%
Total	3.4%	2.1%	1.0%	1.0%	1.8%

Source Spence Johnson

<sup>&</sup>lt;sup>1</sup> For Master Trusts we have carried out separate research shown on previous page

<sup>&</sup>lt;sup>2</sup> European asset allocation survey 2017, Mercer

### 4.5 VALUE OF DC REAL ESTATE IN 2016

In total, we now think that there are £6.2bn of property assets in workplace DC today. Most of this is in the largest schemes.

In particular, a third of the investment is probably concentrated in larger schemes. As explained in Section 2, these schemes are managed with governance structures that are more likely to allow for the skill and resource to make complex specialist property investment judgements.

Table 4.4 excludes the direct property holdings of SSAS schemes. If you were to include them, and if our estimates of the considerable direct investment activity within SSASs are correct, then the total assets as shown here would be more than doubled. We shows the alternative version of these numbers in Appendix 1.

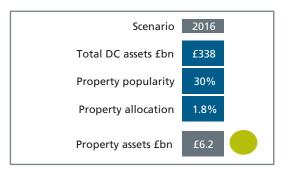


Table 4.4: Assets in property in UK DC, 2016 (£bn)

Type of scheme	Memberships Mega >5,000	Large >1,000	Medium >100	Small <100	
Master Trust	£0.6				£0.6
Trust-based unbundled	£1.9	£0.1	£0.0	£0.8	£2.9
Trust-based bundled	£0.2	£0.2	£0.1	£0.0	£0.5
Contract-based	£0.7	£0.6	£0.6	£0.4	£2.2
	£3.4	£0.9	£0.6	£1.3	£6.2

Source Spence Johnson

#### 4.6 HOW REAL ESTATE IS HELD

The three broad ways in which property may be held are summarised in Table 4.5. Property fund is the term used to describe either a quoted REIT-type vehicle or an unquoted pooled fund. Directly held property assets, not held in a fund but owned directly by the scheme, is the second method, whilst multi-asset pooled funds, which are frequent investors in property, usually via REITs or daily-traded pooled funds, constitutes the third option.

Note that virtually no property investment in DC is done through directly held property assets. In our survey, only two schemes mentioned direct property holdings. NEST, which is often quoted as a leader in the field, and which some mistakenly state is directly invested in property assets, invests in property via two LGIM funds: The Managed Property Fund and The Global Real Estate Equity Index Fund.

As shown in Section 7, the demand for liquidity is very strong, so property vehicles with daily pricing, such as REITs, are favoured. However, in The Metal Box case study, see Section 3.1, the daily-traded pooled fund used is not a REIT, so REITs are not the only vehicles in use.

In their 2013 report, the PI predicted that "Direct investment in real estate is always going to be limited to the largest investors with total real estate allocations of £300m+ which, assuming an allocation of 10%, is limited to funds with total assets of £3bn+".

By this benchmark, DC is still sub-scale and, thus, not yet ready to make significant property investment. In Table 4.6, we show our estimate of average assets per scheme at present to highlight this point. Even in so-called 'mega' trust-based schemes, average assets per scheme are below £1bn. Across all DC schemes, including the small ones, the average value of real estate assets per scheme barely reaches £2m. To the best of our knowledge, there is now only one DC scheme, including the Master Trusts, that has property assets of more than £3bn in AuM in 2017.

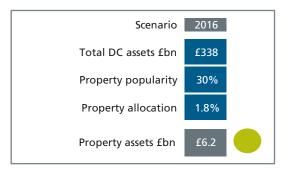


Table 4.5: How property holdings are described

Definitions used in this report	Structure	Quoted?	Daily- traded?	Underlying investments
Property fund	REIT	Yes	Yes, always	Directly held assets, other funds
	Pooled fund	No	Usually	Directly held property assets
Directly held property assets	Assets	No	No	N/a
Multi-asset fund	Pooled fund	Yes	Yes	Wide variety, including other funds

Table 4.6: Average assets per scheme, 2016 (fm)

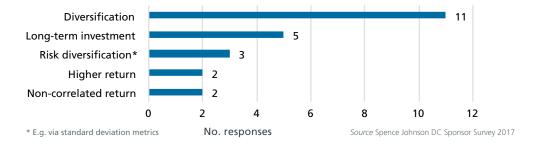
,						
Type of scheme	Membership Mega >5,000	Large >1,000	Medium >100	Small <100	Total weighted average	Low
Master Trust	615				615	
Trust-based unbundled	857	52	7	5	8	
Trust-based bundled	192	49	7	0	1.6	
Contract-based	310	32	2	0	1.0	
Weighted average per scheme	378	22	1.4	0.4	1`.6	

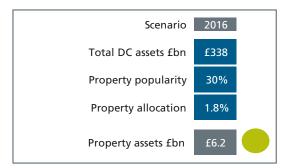
### **5. ATTRACTIONS OF REAL ESTATE**

### **Reasons for property investment**

We asked mega and large schemes that had selected property as part of their scheme, what was it they wanted to achieve? As is shown in Figure 5.1, most said it was for diversification, which respondents phrased in a number of ways, followed by a desire for long term investment.

Figure 5.1: Objective in selecting property





### 6. FUTURE OF REAL ESTATE INVESTMENT

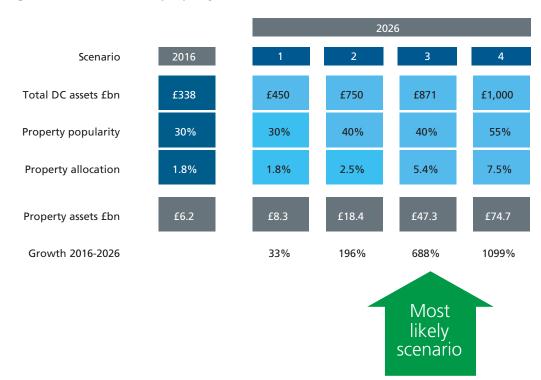
We have developed four scenarios to describe the range of possible futures for property investment in UK DC schemes and have identified one as the most likely to occur.

- Our first scenario is the most cautious; it assumes limited growth of total assets and no growth in the other two variables. It leads to property investment growing only by a third in the next 10 years.
- Our fourth scenario is the most aggressive; it assumes the maximum growth in each variable, based on projections by other market observers. On this basis, property investment would grow by 1099% in the next 10 years. This scenario is consistent with the projections contained in the 2013, Returning to the Core, PI report commissioned by the IPF.

We consider the most likely outcome to be the third one and set out the justification of each measure under this scenario, in turn, in the remainder of this section.

The extreme scenarios identified for future development of property investment in the next 10 years show a worst case, where property investment is 85% lower than this third scenario projection, and a best case, where it is 50% higher.

Figure 6.1: Scenarios for property investment



#### **6.1 DC REAL ESTATE GROWTH**

### DC asset growth to 2026

Under Scenario 3, we have projected that the overall rate of growth of assets will be 11% per year over the next 10 years and that UK DC assets will reach over £870bn, as shown in Figure 6.2. Whilst many assumptions underpin this projection, we detail two important elements and a key driver.

The growth of number of new members is the most important assumption, for which we show our projections in Section 1 Figure 1.2. As recently as 2013, there were fewer than 10m DC memberships, whereas there are now 22m, which, in our view, will rise to 33m by 2026. It is this growth in memberships that will drive asset growth more than anything else in coming years.

Annual investment growth is also an important assumption. In 2016, we assumed 5% growth per year; this year we have scaled this back to 4%.

There will be more growth from some parts of the market than others. Mega and large schemes (or 'larger' schemes, as designated in Figure 6.2) will grow faster than the smaller schemes. These larger schemes hold 42% of assets currently but represent 74% of the memberships. We project that, over the next 10 years, the larger schemes will see an above-average growth rate and will eventually represent 56% of the assets by 2026. Overall, larger schemes will drive 65% of the increase in assets, compared to 35% for the smaller schemes.

In particular, Master Trusts will be the fastest growing segment of all. They represent only 3% of assets today – having only recently been established – but they are set to double their memberships in the next 10 years, driven by auto-enrolment and, in 10 years' time, Master Trusts will hold 35% of total DC assets.

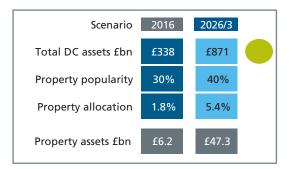
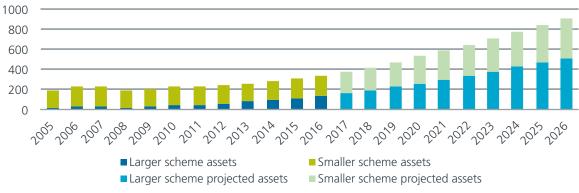


Figure 6.2: Assets in UK DC, 2005-2026 (fbn)



Source Spence Johnson DC Market Intelligence 2016

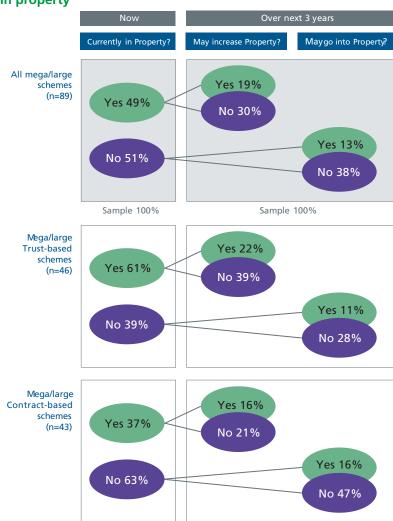
#### Other predictions

There are few publicly available projections of UK DC assets in the future. In 2016, Spence Johnson predicted £1trn by 2026 but, this year, we have revised this down to £871bn¹. In 2013, the Pensions Institute used a prediction for 2026 of approximately £1trn² (£1.7trn in 2030), with this prediction recently repeated by the Law Commission³. These, and other predictions, including one from McKinsey⁴, suggest a UK DC asset growth rate of 10-11% per year. However, in contrast, the PPI, in 2017, predicted approximately £450bn in assets by 2026⁵ (£682bn by 2035), expressed in real terms, which is real growth of less than 3.5% per year – we have used this low prediction as the basis for Scenario 1. This estimate is likely to prove to be low – according to Willis Towers Watson⁶, global DC assets have grown at a rate of 5.6% per year since 2006, which includes large and mature DC pension systems that tend to grow at slower rates than maturing ones like those in the UK.

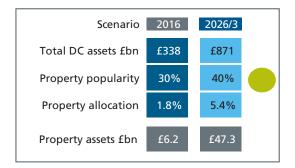
- <sup>1</sup> UK Defined Contribution Market Intelligence 2017 Spence Johnson
- <sup>2</sup> DC Returning To The Core 2013 Pensions Institute
- <sup>3</sup> Pension Funds and Social Investment Law Commission 2017
- <sup>4</sup> In the Eye of the Storm: Transformation in the UK Retirement Market 2015 McKinsey
- <sup>5</sup> The Future Book: unravelling workplace pensions 2017 Pensions Policy Institute Median Scenario
- <sup>6</sup> Global Pension Assets Study 2017 Willis Towers Watson

#### **6.2 RISE IN POPULARITY**

Figure 6.3: Mega and large schemes indications of future investment in property



Source Spence Johnson DC Sponsor Survey 2017



### **Growth in popularity of property investment**

Where today there are 30% of schemes invested in DC, we forecast that this will rise to 40% over the next 10 years.

We estimate that, of the 10% uplift in the popularity ratio from 30%-40%, we think that two thirds of this change will be driven by changes in the behaviour of larger schemes.

There is evidence to support this projected growth in popularity, as shown in the survey results in the shaded boxes at the top of Figure 6.3. Of the 89 mega and large schemes surveyed, roughly half of this number were currently invested in property. One in four of the 51% that was not currently invested (i.e. 13%) may consider investing in the next three years. If this was to come about among larger schemes, it would bring an uplift in popularity, which, in our view, would be replicated to some lesser extent among smaller schemes too. As our projection covers 10 years, we feel it reasonable to allow for additional converts in the remaining seven years. Overall, we feel that projecting an uplift from 30-40% seems reasonable.

In the bottom two sets of boxes in Figure 6.3, we show how trust-based and contract-based schemes vary in their intimations of future investment in property. We identified that trust-based schemes invest in property more often than contract-based ones and this is clear from the current popularity of property investment shown here. In the case of both trust-based and contract-based schemes, there are future intentions to invest more, so we believe that the future growth of property popularity will not be any more weighted towards one or other type of scheme than it already is.

### 6.3. PRECEDENTS FOR GROWTH

### **6.3.1 Growth assumptions**

We think that allocations to property will grow, both through property and multi-asset funds. Overall, we think it will rise from the current 1.8% to 5.4% in 2026, as shown in Table 6.1.

We think that 2.4% (or 79%) of the change in allocation will be driven by the impact in changes of allocation projected for larger schemes. The smaller schemes will contribute the rest.

Table 6.1 shows how we think growth will vary between large and small schemes. We believe that property investment allocations will grow more in larger schemes than smaller ones, as supported by survey evidence of larger scheme intentions to grow allocation, illustrated in Figure 6.3.

Scenario	2016	2026/3	
Total DC assets £bn	£338	£871	
Property popularity	30%	40%	
Property allocation	1.8%	5.4%	
Property assets £bn	£6.2	£47.3	

We assume that, by 2026, larger schemes property fund allocations will have grown by 200% to produce average allocations of between 3% and 7% depending on the segment. In the case of Master Trusts, there is an argument for even greater allocation, such that we think they will grow their allocation by 300%, with 7.2% in 2026, compared to the 2.4% today, a natural consequence of their growing scale. By contrast, we assume property allocations in smaller schemes will grow by only 25% over the period.

We do not think the allocation to property via multi-asset funds will grow much. There is already widespread usage of multi-asset funds. Although we allow for this to grow a little, we see no reason for multi-asset funds to raise their existing allocations significantly to property in future.

Table 6.1: Forecast property allocations in 2026

Pr	operty fur	nd investm	ents (% of	AuM)	Property via Multi-asset funds (% of AuM)						Total property (% of AuM)					
Type of scheme	Membershi Mega >5,000	Large >1,000	Medium >100	Small <100		Membershi Mega >5,000	ps Large >1,000	Medium >100	Small <100		Membershi Mega >5,000	ps Large >1,000	Medium >100	Small <100		2016-2026 Growth assumption
Master Trust	7.2%				7.2%	3.9%				3.9%	11.1%				11.1%	300%
Trust-based unbundled	7.0%	2.5%	0.6%	0.6%	2.7%	1.3%	0.6%	0.6%	0.6%	0.8%	8.3%	3.2%	1.3%	1.3%	3.5%	200%
Trust-based bundled	2.6%	2.6%	0.6%	0.6%	2.1%	0.6%	0.6%	0.6%	0.6%	0.6%	3.2%	3.2%	1.3%	1.3%	2.7%	125%
Contract- based	2.6%	2.6%	0.6%	0.6%	1.2%	0.6%	0.6%	0.6%	0.6%	0.6%	3.2%	3.2%	1.3%	1.3%	1.8%	
	6.5%	2.6%	0.6%	0.6%	3.6%	3.1%	0.6%	0.6%	0.6%	1.8%	9.5%	3.2%	1.3%	1.3%	5.4%	

### 6.3. PRECEDENTS FOR GROWTH

### 6.3.2 Precedents for allocation growth assumptions

As is well-known, UK DB pensions investment allocations have changed dramatically over the past 10 years (see Figure 6.4). Equity holdings have decreased whereas the proportion of bonds has increased, as schemes close to new members and derisk in long-term preparation for closure.

What is less frequently mentioned is that, despite these changes, the allocation by UK DB schemes to property has remained around 5% in this period, as seen in Figure 6.4. This is the weighted average of all sizes of schemes. The allocations of larger DB schemes are much higher than the average, however, as surveys focused on larger DB schemes (such as PLSA and LGPS data) show, with property assets significantly higher than 5%.

DC does not slavishly follow DB, but it is noticeable how many larger companies manage their DB and DC schemes with the same internal team and/or advisers, so cross-pollination of allocation benchmarks is bound to occur.

There are precedents elsewhere in Europe for much higher assumptions than 5%: Italian and Swiss schemes average 20% or more, for example<sup>2</sup> and Australian DC schemes, often mentioned for their property investment activities, hold 9% on average<sup>2</sup>.

There are also precedent for property allocations to grow: they have doubled in Switzerland and the Netherlands since 2001<sup>2</sup>.

There are few projections of UK DC Property assets to compare to, but one was created in 2013 by the Pensions Institute, which suggested that allocations might reach 10% by 2030<sup>3</sup>. Our interpretation is that by 2026 this allocation level might have reached 7.5%, thus in line with Scenario 4.

- 1. The Purple Book 2017 The Pensions Regulator
- 2. Pension Fund Indicators 2017 UBS
- 3. DC Returning to the Core Rediscovering a Role for Real Estate in Defined Contribution Pension Schemes 2013, Pensions Institute

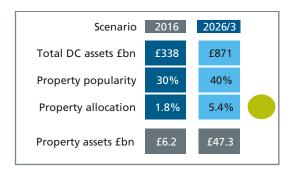
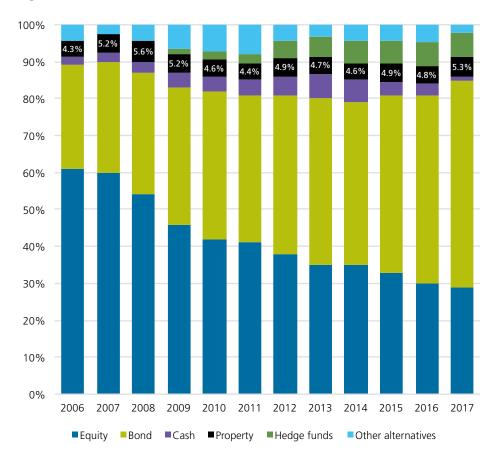


Figure 6.4: Asset allocation in UK DB<sup>1</sup>



#### 7. BARRIERS TO INVESTMENT

### Lack of liquidity the key barrier

The main reason schemes do not invest in property, or will not increase their investment, is the lack of liquidity. As is shown in Figure 7.1, of the 61 reasons given, 27 of these relate to liquidity.

It is perceived that property investments are not liquid. As one scheme put it: "You can only sell when allowed to sell, not when you want to." Another pointed out that this causes difficulty when members join and leave the scheme: "Accessibility is the problem, being able to deal with members that are coming into and out of the scheme."

While there are clear justifications for long-term investors to hold illiquid investments, these are not permeating the thinking of DC scheme fiduciaries. As we show in Figure 7.2, illiquidity holds little appeal, as only 18% of respondents said they were considering it as an investment approach. In contrast, ESG, or socially responsible investing, seems to hold far greater appeal.

Member-related factors are also of importance as barriers. As one scheme told us: "We don't make the decisions, members do. If the manager thinks it's beneficial, then he has complete liberty to invest." As another said: "Member preference, they don't want to select it."

Cost is clearly a factor, as the price of transacting property funds makes it that much more difficult to maintain low costs to members, which, for some schemes, is a top priority.

Complexity is also a major factor. Property as an investment is "a bit complex for members to understand." Another told us that: "Our pensions are designed to be quite simple, off the shelf."

Providers are also a barrier, in the sense that they make the decisions in some cases, particularly for contract-based schemes: "Because our scheme is a GPP, Scottish Widows select the funds on the platform depending on what the investment Governance Committee decide to do."

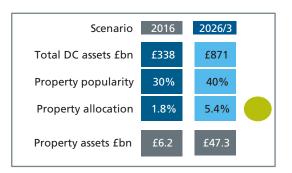
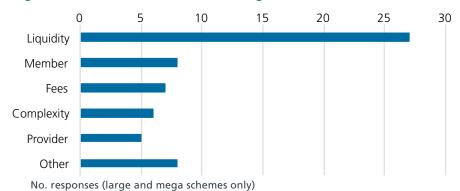
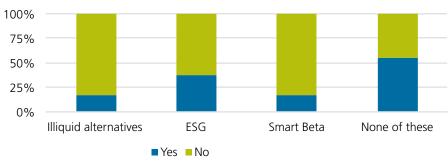


Figure 7.1: Main constraints to selecting real estate



Source Spence Johnson DC Sponsor Survey 2017

Figure 7.2: Consideration of investment approaches



No. responses (large and mega schemes only)

### 7.1 STRUCTURAL NOT REGULATORY BARRIERS

# Negligible regulatory barriers to property

It has been clear for some time that the barriers to illiquid investments are structural and not regulatory. The Law Commission¹ recently published the results of an investigation into the factors that inhibit DC schemes' ability to invest in 'social investments²' which include property. The conclusion was that the Commission had "not identified any legal or regulatory barriers to social investment by pension schemes. The barriers that we did identify were, in most cases, structural and behavioural barriers within the pensions industry".

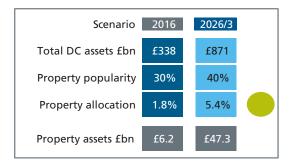
This has been well known for some time. "Daily dealing is not a regulatory requirement" was a key conclusion in a DCIF study on illiquid investment in DC carried out in 2013<sup>3</sup>. As part of its evidence the report quoted a platform provider revealing its structural – and not regulatory – concerns about illiquidity in DC:

"As a platform we have a responsibility for the funds we carry, and the DC saver ('policy holder') is deemed to be our responsibility. The issue is not whether illiquid assets offer a challenge to daily pricing. The issue is: will illiquid funds blow up in our faces? If a fund goes wrong, we run an execution risk, and we will be blamed."

The DCIF report recommended that solutions to this barrier were a combination of:

- 1. Communication of the value of illiquid investments;
- 2. Sharing of best practice; and
- 3. Change must be championed by trade bodies and the regulator.
- 1. Pension Funds and Social Investment, Law Commission 2017
- 2. Social investment was deemed to include "property and infrastructure projects such as social housing, green energy and sustainable transport initiatives as investment opportunities with a genuine potential to both do good and do well"
- 3. Mind the Gap The case for a relaxation of daily dealing requirements for DC Pension funds, DCIF 2013

# **Opportunities** to invest

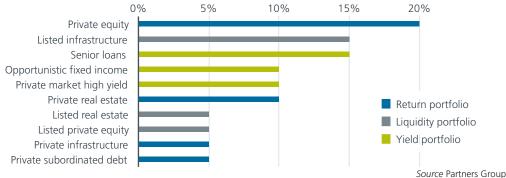


The challenge of illiquidity has been addressed in property in various ways. Real estate investment trusts (REITs) trade on major exchanges like other securities and provide investors with a liquid access to property. Several respondents to our survey use these vehicles. The investment industry is also developing new products that circumvent the structural issues around liquidity. One prominent recent example is the Partners' Group Generations Fund, illustrated in Table 7.1 and Figure 7.3.

**Table 7.1: Generations Fund product details** 

Strategy	Fully diversified: multi-manager, multi-strategy and multi-vintage
Exposure	Broad – exposure to over 100 assets at any one time
Structure	Non-UCITS retail scheme (NURS) operated as a Fund of Alternative Investment Funds (FAIF) Permitted Link. UK regulated so that it can be boarded onto platforms
Admin. Complexity	Daily trading, single priced, fully paid in, and mutual fund-like
Liquidity	Daily dealt and daily liquidity
Minimums	f1
Fees	TER cap to comply with charge cap

Figure 7.3: Illustrative Generations Fund portfolio



#### 8. CONCLUSIONS

### 8.1 Likely size of property assets in 2026

Our conclusion, based on previous assumptions, is that there will be £47bn in property investment in DC schemes in 2026, compared to £6.2bn today.

Within the total, we think that investment into property funds will represent £31bn, and investment in property via multi-asset funds will represent a further £16bn. The majority of these assets will be in Master Trusts, as summarised in Table 8.1.

In order to achieve these new investment assets, providers of property investment will need to show they are able to respond to existing DC scheme needs, identified in Figure 8.1. We asked DC schemes for the main factors that may, over the next three years, lead them to select property as an asset class. If property investment can deliver diversification and higher returns, it will satisfy the large majority of investor needs.

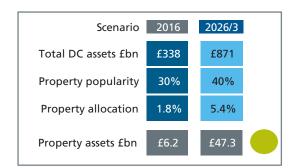
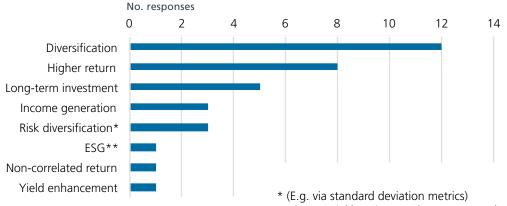


Table 8.1: Property assets in UK DC, 2016 (£bn)

	Membership	OS			
Type of scheme	Mega >5,000	Large >1,000	Medium >100	Small <100	
Master Trust	£33.9				£33.9
Trust-based unbundled	£4.2	£0.2	£0.0	£1.4	£5.8
Trust-based bundled	£0.6	£0.2	£0.1	£0.0	£0.9
Contract-based	£1.3	£2.1	£1.7	£1.7	£6.7
	£40.0	£2.3	£1.8	£3.1	£47.3 Source Spence Joh

Figure 8.1: Main factors that may lead to select (more) property



Source Spence Johnson DC Sponsor Survey 2017

\*\* (E.g. social housing, student accommodation)

### **8.2 MAIN DRIVERS OF GROWTH**

We have offered four scenarios for how property assets may evolve in UK DC, but favour Scenario 3, whereby assets are projected to grow from £6.2bn in 2016 to £47.3bn in 2026. We have presented why we believe the assumptions in Scenario 3 are reasonable. Figure 8.2 shows what we consider are the main drivers of this growth.

#### Most important assumption

As is revealed in Figure 8.2, the most important of the three variables we have explored is the growth in assets under management. We calculate that this contributes £29bn (70%) of the growth we project in property assets. Increases in popularity and allocation contribute the rest.

### Most important part of the DC market

The part of the DC market that drives growth most is the larger schemes, which includes Master Trusts, in this study defined as schemes with more than 1,000 members. We calculate that these schemes contribute £27bn (65%) of the projected growth, with smaller schemes contributing the remainder.



#### **APPENDIX 1**

### 2016 property assets revised

For reasons given in Sections 4.1 and 4.2, we have excluded the property assets contained in Small Self Administered Schemes (SSASs), which are within the segment we call Small Trust-based unbundled schemes. We think that there may be £80bn in this segment alone, and we have guessed on the basis of anecdotal evidence that some 10% of this may be invested in property assets, held directly by these small schemes. Typically, they invest in their company premises, benefitting from strong tax incentives that were in place in the past.

If we are right in these guesses, and if we were to include these assets in the study, then our revised figures would be as shown here. DC would contain £14.7bn in property assets instead of £6.2bn.

Table A1: Property assets in UK DC, 2016 (£bn)

	Memberships	;			
Type of scheme	Mega >5,000	Large >1,000	Medium >100	Small <100	
Master Trust	5.5%				5.5%
Trust-based unbundled	4.5%	1.8%	1.0%	11.0%	8.5%
Trust-based bundled	1.8%	2.1%	1.0%	1.0%	1.6%
Contract-based	1.8%	2.1%	1.0%	1.0%	1.4%
	3.4%	2.1%	1.0%	7.5%	4.4%
	Memberships		Medium	Small	
Type of scheme	Mega >5,000	Large >1,000	>100	<100	
Master Trust	£0.6				£0.6
Trust-based unbundled	£1.9	£0.1	£0.0	£9.3	£11.4
Trust-based bundled	£0.2	£0.2	£0.1	£0.0	£0.5
Contract-based	£0.7	£0.6	£0.6	£0.4	£2.2





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