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Pensions Institute

RETURNING TO THE CORE

Rediscovering a Role for Real Estate in Defined Contribution Pension Schemes

A Pensions Institute report for real estate and DC pensions professionals

Debbie Harrison

David Blake

Tony Key

October 2013

Returning to the Core: Rediscovering a Role for Real Estate in Defined Contribution Pension Schemes

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Cass Business School
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About the Authors

Debbie Harrison
Dr Debbie Harrison is Visiting Professor at the Pensions Institute at Cass Business School, City University London.

David Blake
Dr David Blake is the Director of the Pensions Institute and Professor of Pensions Economics at Cass Business School, City University London.

Tony Key
Tony Key is Professor of Real Estate Economics at Cass Business School, City University London

The Pensions Institute (www.pensions-institute.org) is the first and only UK academic research centre focused on pensions issues. The views expressed in this report are those of the authors and not the Pensions Institute which takes no policy positions.

List of abbreviations

ABI	Association of British Insurers
ALM	Asset-liability modelling
AMC	Annual management charge
AMD	Active member discount
APUT	Authorised property unit trust
AUM	Assets under management
CDS	Credit default swap
CEF	Closed-ended fund
CMBS	Commercial mortgage backed security
CIMP	Contracted-in money purchase scheme
CPI	Consumer Price Index
DB	Defined benefit
DC	Defined contribution
DGF	Diversified growth fund
DMP	Deferred member penalty
DWP	Department for Work and Pensions
EPUT	Exempt property unit trust
ETF	Exchange-traded fund
FCA	Financial Conduct Authority
FOS	Financial Ombudsman Service
FSA	Financial Services Authority
FSCS	Financial Services Compensation Scheme
GFC	Global Financial Crisis
GPP	Group personal pension
GSIPP	Group self-invested personal pension
GSP	Group stakeholder plan
IMA	Investment Management Association
LDI	Liability-driven investing
MVPO	Mean variance portfolio optimisation
NAO	National Audit Office
NAPF	National Association of Pension Funds
NAV	Net asset value
NEST	National Employment Savings Trust
NIC	National Insurance Contributions
OEF	Open-ended fund
ONS	Office for National Statistics
PAIF	Property authorised investment fund
PPP	Personal pension plan
PRA	Prudential Regulation Authority
PUT	Property unit trust
RDR	Retail Distribution Review
RAC	Retirement annuity contract
REIT	Real estate investment trust
RR	Replacement ratio
SERPS	State Earnings-Related Pension Scheme
SIPP	Self-invested personal pension
SSAS	Small self-administered scheme
TER	Total expense ratio
TPR	The Pensions Regulator
UCITS	Undertakings for Collective Investment in Transferable Securities
VaR	Value-at-Risk
WPC	Work and Pensions Committee

Glossary of Terms

Accumulation: In **DC** this refers to the period of pension contributions and investment, after which the fund is used to provide the lifetime income in retirement (known as **decumulation**).

Active member: A member of a DC scheme who is working for the sponsoring employer. See also **deferred member**.

Alternative asset class: A collective term that describes asset classes that generally are illiquid, such as commodities, hedge funds, infrastructure, and private equity, among others. DC default funds often include a small weighting (e.g. 5%) to a fund of alternatives.

AMC: The annual management charge deduced from member funds, which covers investment and administration. This is regarded as an incomplete disclosure of the full cost of membership. The **TER** offers improved disclosure but is still not complete. There is a move towards full disclosure, which would include all fund costs such as transaction costs and the costs of sub-funds.

Annuity: In the DC market, a lifetime annuity is an insurance policy that guarantees an income for life in return for the DC pension fund (the 'premium'). The annuity 'rate' is the annual or monthly income the insurance company guarantees to pay, usually expressed as a 'per £1,000 of fund' rate. The purchaser is described as an annuitant.

In the real estate market, annuity denotes a source of long-term secure income.

Asset allocation: The relative weighting in an investment fund to the major asset classes: equities, bonds, real estate etc.

Auto-enrolment: The new system of pension scheme provision for private sector employees in the UK, which is being phased in by all employers between October 2012 and 2018. Employers and qualifying workers (those earning at least £9,440 in 2013-2014) must make minimum contributions based on **band earnings** (between £5,668 and £41,450 in 2013-2014), but these workers have the right to opt out. Qualifying auto-enrolment schemes do not have to be DC but, in practice, the majority will be so. They must offer a default fund for members who do not wish to make their own investment decisions.

Band earnings: Under auto-enrolment for qualifying workers the minimum contribution is 8% (comprising 4% from the employee, 3% from the employer, and 1% in tax relief), based on 'band earnings' of £5,668-£41,450 in 2013-14.

Blended fund: 'blends' multiple investment funds into a single unit price. Most commonly, it is used to denote a fund designed by a consultant for a large employer's single **trust-based** scheme.

Bundled service: one where the platform also provides member administration in addition to its usual investment administration services. A more modern term is **vertical integration**.

Closed-ended fund: A type of mutual fund that raises a fixed amount of capital for a defined period. However there may be provision for raising additional capital occasionally and/or extending the life of the fund. With some funds there is also an active secondary market in units. See **Open-ended fund**.

Commission: Until January 2013, many **corporate advisers** that sold pension schemes to employers were remunerated by the provider in the form of sales

commission, the cost of which was incorporated into the member's **annual management charge**. See **RDR**.

Consultant/EBC: The distinction between employee benefits consultants and **corporate advisers** is generally denoted by the remuneration basis. EBCs provide fee-based pensions advice to employers and trustees, although some have also operated on a **commission** basis.

Contract-based DC: DC schemes can be established under contract or trust law. In a contract-based scheme, the contract is between the member and the provider, for example, a life office. Contract-based DC is regulated by the Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA). See also **trust-based DC**.

Consultancy charge: This replaced sales commission following the **RDR**, but was banned by the government a few months after it was introduced, as it was concerned that the deduction of the charge from member contributions would undermine auto-enrolment, especially for lower earners and frequent job changers.

Core asset class: A 'core' asset in a default fund denotes an asset class that represents a single and significant component of the fund. See also **alternative asset class**.

Corporate adviser: The distinction between **consultants/EBCs** and corporate advisers is generally denoted by the remuneration basis. Until January 2013, corporate advisers that sold pension schemes to employers were remunerated by providers in the form of sales **commission**.

Decumulation: In **DC** this refers to the process whereby the fund built up during the **accumulation** stage is converted into a lifetime income in retirement. Typically this involves the purchase of an annuity, but the member might also draw directly from the fund (**income drawdown**).

Deferred member: A member of a DC scheme who has left the sponsoring employer's company. In a **contract-based** scheme, the accrued fund would usually be reclassified as an individual personal pension. In a **trust-based** scheme, the member's fund remains within the scheme, so continues to be looked after by the trustees (although there is a growing section 32 buyout market).

Defined ambition (DA): A DWP initiative that aims to encourage employers to provide DC schemes that offer more predictable outcomes, for example via some form of return guarantee or risk-sharing mechanism between different cohorts of members.

Defined benefit (DB): Members' pensions are linked to salary (e.g., final salary or earnings averaged over the period of membership). The sponsoring employer is ultimately responsible for meeting the liability if the scheme is underfunded. See **defined contribution**.

Defined contribution (DC): In DC, the member's pension is based on the contributions invested and the charges deducted, among other features. The fund is used at retirement to generate a lifetime income, usually in the form of an **annuity**. Therefore the investment and longevity risks fall on the individual members.

Default fund: The fund designated to receive the contributions of members who do not make an individual investment choice. Under **auto-enrolment**, an estimated 90-97% of members will rely on this fund.

De-smoothing: The smoothing effect on returns of consecutive real estate valuations being similar understates market volatility when compared with

equities and bonds and therefore overestimates the risk-adjusted **Sharpe Ratio**. To address this distortion, real estate returns are de-smoothed in modelling exercises used to determine the optimal asset allocation.

Ex-ante: A term that refers to the anticipation of future events, such as future returns or prospects of a company. Deals with expectations about likely future movements in price or the future impact of a newly implemented policy, for example.

Glide path: In a DC default fund, members are transitioned over a period of years before retirement (e.g. 10-15) from risky assets into bonds and cash in order to protect them from market shocks before **decumulation** and to match the cost of purchasing an **annuity**.

Group personal pension (GPP): A **contract-based** workplace pension scheme. In effect a grouping of individual **personal pension plans**.

Income drawdown: At retirement, instead of purchasing an annuity, the member draws a regular income directly from the fund. The maximum amount that can be drawn is linked to the prevailing **annuity rate** to avoid overspending (unless the member has £20,000 in guaranteed income for flexible drawdown).

Life fund: The generic term to describe collective or pooled funds sold by the life office and asset management arms of insurance companies.

Lifestyle/lifecycle: Another term to describe the **glide path** of a default fund.

Liquidity: The ease with which an asset can be sold (liquidated) for cash without sacrificing value or waiting a long time to do so.

Long-only strategies: Investment strategies that only involve the purchase of securities (i.e., no **short selling**).

Long-short strategies: Investment strategies that involve the purchase of some securities (those that are believed to be underpriced) and the short selling of other securities (those that are believed to be overpriced).

Master trust: A **trust-based** DC workplace pension scheme that can accommodate multiple employers.

Maximum drawdown: The largest peak-to-trough decline in the value of an investment over a period.

Net asset value: A mutual (or collective) fund's price per share calculated by dividing the total value of all the securities in the fund, less any liabilities, by the number of fund shares outstanding.

Open-ended fund: A type of mutual fund that has no restrictions on the number of shares it can issue. Where demand is high, the fund can issue more shares. Investors normally have the right to sell shares back to the manager, subject to conditions. With some funds, there is also an active secondary market in units. See **Closed-ended** fund.

Pensioneer trustee: A professional trustee appointed to oversee the administration of a **SSAS**.

Personal pension plan (PPP): An individual (retail) DC pension plan, introduced in 1988.

Platform: With reference to DC schemes, this is the life office's 'engine', which manages the day-to-day running of a range of functions including investment management, administration (e.g., of contributions), compliance, integration

with employers' pensions and payroll systems, and member communication and documentation. There might also be (and frequently are) third party investment managers which the platform is hosting or life wrapping into one of their own funds.

Property authorised investment fund (PAIF): A collective or pooled fund that is designed to be readily accommodated in a DC **default fund** and on a life office **platform**. Over the past few years asset managers have converted existing funds, e.g. exempt property unit trusts (EPUTs), into PAIFs in order to make them tax-friendly for DC by moving the taxation incidence from the fund to the investor.

Real assets: Assets whose values and returns broadly move in line with the general price level.

Replacement ratio (RR): ratio of the pension at retirement to the final salary before retirement.

Retail Distribution Review (RDR): The RDR came into effect on 1 January 2013. It banned adviser commission for new sales of investment products, including pension schemes and plans. From this date onwards, such advice must be fee-based, although in the retail market, commission is still paid where the consumer makes the product choice (execution-only). See **consultancy charge**.

Section 32 buyout: An insurance policy used to buy out a member's pension benefits, following termination of the member's pensionable service (named after Section 32 of the Finance Act 1981).

Self-invested personal pension (SIPP): A type of personal pension plan that permits a wide range of investments. In addition to funds, investors can buy equities and bonds and also certain types of property.

Self-select funds: The term used to describe the range of funds in which members of a DC scheme can invest if they want to make their own decisions, as opposed to using the **default** fund. Not all schemes offer self-select funds, but where they do the range often includes a property fund.

Sharpe ratio: This measures risk-adjusted performance. The ratio is calculated by subtracting the risk-free rate (e.g. Treasury bill rate), from the realised rate of return on a portfolio and then dividing the result by the standard deviation of the portfolio returns.

Short selling: Borrowing a security and selling it on the market. Later the security is repurchased and returned to the original lender

Small self-administered scheme (SSAS): A trust-based DC arrangement designed for small family businesses, where the employer sets up the trust and invites certain employees to join (a minimum of two and maximum of 12). The trustees can use the pension fund to purchase the business premises (commercial real estate), which are rented back to the employer at a commercial rent which is tax free to the scheme. They can also provide a loan to the sponsoring company.

Smart beta: A form of enhanced passive investment where the asset manager deviates from the standard market capitalisation weightings in the relevant index. Typically this involves reducing the weighting in what are considered over-priced stocks and increasing the weighting in undervalued stocks, by passively weighting allocations towards 'fundamental' factors other than market capitalisation (e.g., sales, book value, cashflow, dividends, etc).

Staging date: This is the date at which employers' new duties under **auto-enrolment** become obligatory. The date depends on the size of the employer's

pay-as-you-earn (PAYE) scheme and began with the largest in October 2012 (120,000+ employees in the PAYE scheme) and concludes in 2017-18 with the smallest (fewer than 30 employees).

Stakeholder pension scheme: Introduced in 2001, stakeholder schemes are like **personal pension schemes**, but must meet certain requirements in relation to accessibility and fair terms and conditions.

Target date fund (TDF): An investment strategy used by for DC **default funds**, whereby the scheme establishes a range of TDFs, each with its own **glide path** or **lifecycle** structure. This might involve a TDF for each possible retirement date, or there might be a single TDF for members who plan or are expected to retire within a given five-year window. For example, a 40-year-old joining in 2013 might be put into the 2038 TDF.

Total expense ratio (TER): The TER is a more comprehensive measure of the member's total annual cost than the **AMC**. It covers the annual management charge and fees for a range of services including legal, administration, audit, marketing, directors, regulation and 'other' – a category that has yet to be defined clearly. In future it is expected that total member charges will include costs deducted at fund level, such as transaction costs and the costs of sub-funds. In future, the TER will be known as the ongoing charges figure (OCF).

Trust-based DC: Schemes set up under trust law where the trustees are the legal owners of the assets on behalf of members and have a fiduciary duty to act in members' best interests. These schemes are regulated by The Pensions Regulator (TPR).

UCITS IV funds: Funds established under the European Undertakings for Collective Investment in Transferable Securities IV Directive (2011). UCITS are regulated products marketed extensively in Europe and can accommodate a wide range of investments. This is an alternative to a life insurance fund and a PAIF, which also offers a tax framework for exempt investors such as pension funds.

Value-at-Risk (VaR): A measure of the level of financial risk within a fund over a specific time frame. The risk manager aims to ensure that risks are not taken beyond the level at which the firm can absorb the losses of a probable worst outcome.

Vertical integration: Also known as **bundled**, this term describes schemes that provide their own administration and asset management.

130/30: Investment strategy which is long 130% of the investment and short 30%: the strategy scales up the initial investment by 30% and this is financed by taking a short position (borrowing) that is equal to 30% of the initial investment.

Preface

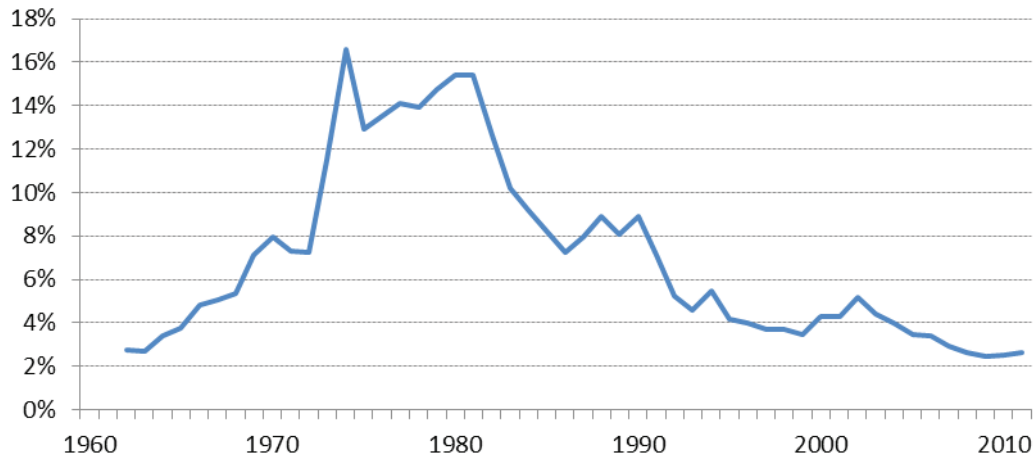
This report was prepared by the Pensions Institute at Cass Business School.

The objective of the research was to analyse and evaluate the role of real estate in the UK's defined contribution (DC) pensions market in relation to auto-enrolment – the new system of pension scheme provision for private sector employees in the UK, which is being phased in by all employers between October 2012 and 2018. The most important feature of auto-enrolment schemes is the 'default fund', which is the multi-asset investment strategy designed for the majority of members who do not wish to make investment decisions.

The research presents what the authors believe is the first comprehensive independent academic study of its kind that investigates the role of real estate in the new world of auto-enrolment. From our research, it was apparent that although there is clear evidence that real estate is being incorporated as a core (significant separate) asset class in default funds, to fully harness the role real estate can play, DC and real estate professionals need to build a better mutual understanding of their respective markets and objectives.

As the chart below shows, forty years ago, real estate (then more commonly known as property) was a 'core' asset class in defined benefit (DB) pension funds, along with equities and bonds. It was also used as a core asset class in some of the early group DC schemes. Yet as DB declined in the private sector and DC gained ascendancy, for a combination of reasons that are not necessarily well understood, real estate became reclassified by DC professionals as an 'alternative' asset, a collective term that includes asset classes whose common characteristic is that they are illiquid (to a wider or lesser degree), such as, commodities, hedge funds, infrastructure, and private equity, among others. Given that allocations to 'alternatives' have been capped at a fairly modest level (e.g., 5%) in most DC pension funds, this switch in classification has had a strongly negative impact on the real estate sector and, it might be argued, constituted a serious flaw in the investment strategy of DC default funds on account of the demand of the DC market for daily pricing and liquidity, among other requirements.

UK Pension Funds Real Estate Holdings as % of Total Net Assets 1962-2012



Source: ONS, Business Monitor MQ5

Yet real estate appears to be a very attractive asset to hold in a pension fund portfolio during both the accumulation stage of a DC scheme and – in due course – the decumulation stage. When pension scheme members are young, they need to invest in a multi-asset strategy that includes an appropriate proportion of growth assets: real estate (with its potential for capital appreciation) and equities are the key asset classes that deliver growth. As members age and approach retirement, they need to reduce the risk of sudden large adverse security market shocks by participating in some form of de-risking asset allocation 'glide-path' (also known as 'lifecycle' or 'lifestyling'), typically where the equities held in the pension fund will be exchanged for bonds and cash, which have less volatile total returns and also match annuities better. We would argue that there is a key role for real estate during this phase, because of its potential for generating stable inflation-matching cash flows linked to rising rental values.

Arguably the role of real estate also extends beyond the glide-path into retirement where the income-generating potential of real estate and bonds are needed to pay pensions. Real estate, therefore, is unique as an asset class in that it has an important role to play throughout the life of a pension scheme (in both the accumulation and decumulation stages), first for its growth potential when the scheme is immature, and then for its income-generating potential when the member approaches and enters retirement. In this report, we argue that real estate needs to 'return to the core' and we present evidence that this trend is already well underway.

Our research took place between September 2012 and September 2013. We would like to thank the many organisations that helped with this research in terms of access to documentation, permission to publish extracts from reports, and, in particular, participation in the extensive series of interviews (conducted between September 2012 and August 2013) that informed our analysis of historic, current and expected future market practice. The organisations that were happy to be named are listed in the acknowledgements. Where we quote from a published report, the relevant organisation is credited. Where we quote from interviews, the comments are anonymised. This technique, pioneered by the Pensions Institute for its practitioner reports, enables us to express the views of actual and potential market stakeholders more candidly and more fully than might otherwise be the case.

The research was commissioned by the Investment Property Forum (IPF) and jointly sponsored by them together with the Association of Real Estate Funds (AREF), the European Public Real Estate Association (EPRA), and the Institute and Faculty of Actuaries. These organisations did not seek to influence the authors in any way. The views expressed herein are those of the authors.

Debbie Harrison, David Blake and Tony Key

Cass Business School, City University London

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Key findings

1. We forecast that the DC auto-enrolment market will increase sixfold by 2030, from £276bn assets under management (AUM) pre-auto-enrolment (2012) to £1,680bn. Several new DC schemes designed for auto-enrolment have selected real estate as the first illiquid or 'alternative' asset class to be incorporated as a core component of 'default' multi-asset investment strategies ('default funds') with weightings of 5-20% and an average of 10%. Default funds will be used by 90-97% of members, which means that if this trend is adopted across the market real estate AUM in these funds might be worth £170bn by 2030.

2. The National Employment Saving Trust's (NEST's) decision in 2013 to allocate 20% to real estate in both its principal and ethical default funds is very significant, although it is important to note that the 20% weighting in real assets will include other illiquid asset classes in due course, such as infrastructure. This move by the national multi-employer auto-enrolment scheme, established by the government, demonstrates that the perceived barriers (i.e., DC conventions rather than regulatory requirements) to real estate in DC – daily pricing, liquidity and cost – can be overcome within an overall cost constraint that achieves a member charge of 0.5% p.a. over the long-term.

3. The main real estate sub-classes favoured by auto-enrolment schemes are actively managed funds of UK property and passively managed funds of global listed real estate companies – typically in the form of real estate investment trusts (REITs). Real estate derivatives are also emerging as a possible sub-class, but the real estate derivatives market has significant capacity problems. The potential for other sub-classes, such as funds of real estate debt, has yet to be tapped, but might have an important role to play in the pre-retirement phase of default funds and in decumulation.

4. While the prognosis overall for real estate in DC schemes is positive, there is currently a wide gap in the understanding that real estate and DC professionals have of each other's positions. On the one hand, real estate asset managers argue that there is a major disconnection between what DC default funds want and what they need. On the other hand, DC professionals argue that real estate asset managers tend to over-engineer their funds and concentrate too much of their marketing presentations on the sub-classes and the underlying holdings. The DC approach, by contrast, typically is to focus on high-level asset allocation and to use funds that offer the potential for market-average (passive) or market-plus (smart beta) returns. Further, DC platforms require daily pricing and liquidity for all assets included on the platform. However, this is not a regulatory requirement and means that asset classes that have a potential role in improving outcomes for DC members might be excluded from the default fund. Nevertheless, there are early signs that the real estate asset management arms of insurance companies are gaining some market share because they are beginning to understand DC objectives better.

5. Despite the overall positive outlook for real estate in DC schemes, it is not at present an open market for third-party asset managers. An estimated eight and possibly nine out of the 10 top providers in the auto-enrolment market

use their own investment management arms (i.e., in-house funds) for the default fund.

6. Competition and the downward pressure on member charges have triggered a battle to secure market share. Scale is considered crucial to deliver good quality default funds at low cost. It is likely that fewer than 10 multi-employer schemes will emerge as the dominant players by 2020; their business structure and investment philosophy will determine the openness of the market to opportunities for third-party real estate asset managers.

7. Our research indicated that there was no clear consensus about the most appropriate asset allocation model for determining the optimal weighting to real estate relative to other asset classes. There was widespread criticism of mean-variance optimisation models. Yet the alternative proprietary models in use are not accessible to independent scrutiny and hence lack transparency. This is a significant point, since, unlike in DB, where the sponsoring employer is ultimately responsible for meeting the liability for the salary-linked pensions, in DC, the investment risk falls solely on the individual members. Currently DC scheme members have little idea what the asset allocation selected by any given default fund means in terms of the ultimate pension in retirement.

Areas of concern include:

a. The lack of a meaningful target for a DC investment strategy to aim at, such as a target income replacement ratio (RR). Without this, the potential for real estate in the default fund – and in the decumulation vehicle (typically an annuity) – might not be fully realised.

b. The strong disagreement between professionals about the modelling assumptions and methodologies that should be used to evaluate the potential performance characteristics of real estate relative to other asset classes. A particular issue was how to deal with the low liquidity of real estate in portfolio optimisation models. Such disagreements might undermine confidence in this 'new' core asset class, but also indicate a disconnection between the needs of DC default funds and the ways in which real estate asset managers present their rationale for inclusion in such funds.

c The use of third-party proprietary modelling services, which appears to be standard practice. While outsourcing this function might represent a prudent allocation of resources, the proprietary nature of these services mean that they are not available to independent academic scrutiny.

d. The application of significant judgmental adjustments to modelling results, which means that there is no clear relationship between the de-smoothed optimal weightings for real estate – that result from the quantitative modelling exercises – and the actual weightings used in practice.

8. There are important messages for both the real estate and DC markets from the research:

a. The real estate asset management market needs to understand better the political, regulatory and economic implications of and pressures on auto-enrolment. The disconnection between DC professionals and the real estate market identified in the research is far from unique – it extends to other

managers of 'real asset' funds, such as infrastructure and commodities, both of which were cited as examples of future 'must-have' asset classes in a diversified default fund. Arguably, real assets (i.e., those that match inflation) are essential to the success of auto-enrolment default funds, but they need to be delivered in a DC-friendly format, which requires a new approach. This is not so much about the tax status of the fund (which can be readily made compliant with the DC tax regime), it is more about the sub-class combinations. The preferred format favoured by NEST, and several other new multi-employer schemes designed for auto-enrolment, is to combine a domestic fund of actively managed properties with a global REITs tracker.

b. The DC market needs to understand better the role of real assets in delivering optimal member outcomes. Ultimately, it is the member who suffers if restrictions on asset classes due to their low level of liquidity result in sub-optimal investment strategies throughout both the accumulation and decumulation stages.

Section 1: The DC Market

In this section, we describe the DC pensions market, with a particular focus on the new regime for private sector employers and employees, known as auto-enrolment, and the multi-asset investment strategies (default funds) that are designed for the majority of members who prefer not to make investment decisions. DC auto-enrolment schemes are expected to complete the replacement of DB schemes that from the 1970s until the turn of the present century were the most common pension arrangement for larger private sector employers. Auto-enrolment will also extend workplace pension provision to all but the very lowest-paid employees in the private sector.

To contextualise the new market, here we describe the legal and regulatory framework for DC and explain the role of the scheme providers and consultants that determine the investment strategies and the distribution channels. We also examine the way that conventions and behaviour influence the supply (value) chain, from the 'manufacture' of DC schemes and funds through to their use by individual members.

The material in this section will be familiar to those working in the DC pensions market. Its primary purpose, therefore, is to inform real estate professionals about the market in which they wish to participate. We reverse this approach in Section 2, where we consider the DC market from the perspective of the real estate asset manager. Section 3, which explores the perspectives of professionals we interviewed, highlights the need for better understanding and collaboration between the two markets. The retail DC markets in the UK are discussed in Appendix 1, while overseas DC markets are considered briefly in Appendix 2. Appendix 3 provides an overview of real estate investment vehicles.

Key Facts: UK Pensions AUM

- DB AUM in 2012: £1,063bn
- DC scheme AUM in 2012: total: £276bn[1]
  - Trust-based ('occupational') £152bn
  - Contract-based: £124bn
- Personal pensions AUM 2012: £326bn
- Auto-enrolment to increase DC AUM sixfold from c. £276bn in 2012 to £1,680bn in 2030[2]

1 We stress that all figures quoted for the DC market are estimates which are both poor and unreliable. This is partly due to the blurring between 'retail' and 'workplace' and also to archaic distinctions between 'occupational' (trust-based) DC and 'workplace' (contract-based). Moreover, 'deferred' members of contract-based schemes who leave are reclassified by providers as individual personal pension (retail) customers, while deferred members of trust-based schemes can find themselves in a similar position after a 'section 32 buyout' with the same provider as the original scheme.

2 Source: The Pensions Institute. The main assumptions underlying this projection are auto-enrolment minimum contribution rates of 8% of salary p.a., salary growth of 5% p.a., nominal investment returns of 6% p.a., and CPI inflation of 3% p.a.

- We found it impossible to predict future AUM for personal pensions (which include the self-invested version, known as SIPPs), due to the potential impact of auto-enrolment, whereby many employees with personal plans will abandon these when they become members of their employer's scheme.

- 90-97% of auto-enrolees' contributions in aggregate will be invested in schemes' multi-asset default investment strategy (the 'default fund') designed for members who do not make their own investment choices.

Key Facts: DC Market

- DC has replaced DB as the main form of private-sector employer pension scheme going forwards. Auto-enrolment will complete this process, although some of the largest employers might opt for a modified DC structure that provides some form of risk-sharing between the employer and members, for example.
- Auto-enrolment is a 'game changer' for DC providers and is seen as a one-off opportunity to increase assets under management and maximise scale. It has triggered intense rivalry for new business between traditional providers and new entrants.
- Unlike DB, the value of a DC pension is not linked to earnings, but depends largely on:
  - The level of employer/employee contributions
  - The asset allocation and investment returns of the selected fund(s)
  - The length of the investment horizon
  - The annual member charges
  - The cost of converting the fund into a lifetime income, usually via an annuity.
- In the UK, DC pension schemes can be set up under contract law or trust law:
  - In a contract-based scheme, the contract is between the member and the provider, for example a life office. Contract-based DC is regulated by the Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA).
  - In a trust-based scheme, the trustees are the legal owners of the assets on behalf of members and have a fiduciary duty to act in the members' best interests. These schemes are regulated by The Pensions Regulator (TPR), which also has an overarching responsibility for ensuring employers meet their new duties under auto-enrolment, which began in October 2012 and will be fully implemented by 2018.
- Total DC schemes pre-auto-enrolment:
  - Contract-based: c. 165,000
  - Trust-based: c. 45,000
  - Total 205,000
    - Only c. 10,000 (5%) of the total have more than 100 members
- The typical total expense ratio (TER) for new schemes, as % of member assets
  - New schemes: 0.5% - 0.75%
  - Older schemes (e.g., dating from 1990s): 1.5% - 3%

1.1 How DC works

Like DB schemes, DC schemes are tax-efficient. Members receive tax relief on contributions, the funds grow virtually tax-free,[3] but the resulting member's lifetime income in retirement is taxable, apart from the facility to take up to 25% of the fund as a tax-free cash lump sum.[4]

But as a vehicle that delivers a guaranteed lifetime income in retirement, DC schemes could not be more different from DB schemes. In a DB scheme, there is no direct relationship between the member's contribution and the benefits, which are defined as a proportion of earnings, e.g. 'final salary' or 'career average earnings' (earnings averaged over the membership period). So the value of the lifetime retirement income under DB depends on the member's level of earnings in relation to the 'accrual rate' (the rate at which the pension guarantee builds up) and the period of membership. For example, a traditional final salary DB scheme in the private sector provided an accrual rate of one-sixtieth of final salary for each year of membership, up to a maximum of forty-sixtieths or two-thirds of final salary after 40 years of service.[5]

In the private sector, most DB schemes are now closed and have been replaced with DC. This is due to employers' unwillingness – or inability – to bear the cost of the growing liabilities. Sponsoring employers of DB schemes are required by law to underwrite DB liabilities, which rose rapidly at the end of the 1990s due to a range of factors. These included the impact of sustained employer contribution holidays (i.e., withholding of contributions during the 1990s), the use of the DB fund surplus for corporate restructuring purposes, and the increasing life expectancy of scheme members. The combined impact of these factors, together with the 2000-03 equity bear market, pushed the majority of DB schemes into deficit. New accounting rules in 2001 put that deficit onto the corporate balance sheet and in many cases the deficit was very significant relative to the company's market capitalisation. The turn of the century, therefore, was also the turning point when employer DB pension provision shifted from a human resources interest to a major corporate finance problem.

Following the demise of DB, as a sustainable pensions model in the private sector, most employers introduced DC as a cheaper alternative that was perceived to confer little, if any, risk on the employer's balance sheet. In this respect, initially, DC proved effective from a business perspective, but auto-enrolment marks the formal end of the DC honeymoon period for employers, if it can be called such, since it imposes new legal requirements and mandatory employer contributions. Further, the abolition of the default retirement age in 2011 – the age at which employers could insist an employee retire – raised concerns about the problems employers will face if older employees cannot afford to stop working due to the inadequacy of their DC pensions. Under this

3 Dividends on UK equities are taxed.

4 For full details see www.hmrc.gov.uk/pensionschemes/tax-basics.htm

5 There is a maximum cap on the size or value of the accrued fund, known as the Lifetime Allowance. This is the maximum amount of pension saving an individual can build up that benefits from tax relief. Anything in excess is subject to a tax charge. The lifetime allowance is £1.5 million, but this will go down to £1.25 million from 6 April 2014. In certain situations, for example where a large pension was built up before 6 April 2006, it is possible to secure protection from the lifetime allowance. See www.hmrc.gov.uk/pensionschemes/understanding-la.htm

scenario, DC presents a very real risk to employers, which might lose control of their ability to manage effectively the retirement of their employees and, therefore, their recruitment programmes and productivity.

Unlike DB schemes, there is no target benefit in DC in the form of a specified income replacement ratio (RR). Instead the member's contributions are invested – typically in a multi-asset strategy – to build up a fund, the size of which at retirement depends mainly on the level of contributions, the investment returns and the charges deducted explicitly – in the annual management charge or total expense ratio – but also at fund level (for example transaction costs, performance-related fees and the cost of sub-funds). Members can take up to 25% of the fund as tax-free cash, but the rest is used to generate a lifetime income, usually via the purchase of a lifetime annuity.[6]

A lifetime annuity is an insurance policy which provides longevity insurance, i.e. it guarantees a lifetime income irrespective of how long the policyholder (the 'annuitant') lives and how markets perform. Although there are alternatives – such as income drawdown (drawing an income directly from the fund, which remains invested), at present, annuity purchase is the most common form of DC 'decumulation' in the UK.[7] The annuity 'rate' is the level of annual or monthly income the insurance company guarantees as a proportion of the size of the DC fund (which is effectively the insurance premium). Annuity rates fluctuate because they depend on a range of factors, including interest rates (insurers primarily hold gilts and corporate bonds to back their annuity liabilities), the age and health status of the annuitant, and the 'load factor', which defines the deductions insurers make to cover profits and overheads, including distribution costs.

Annuity rates have fallen steadily over the past 20 years, due to increasingly longevity and falling gilt yields, among other factors. This decline in rates is shown in Figure 1.1 below, which charts the annual level of guaranteed income a 65-year-old man would have secured per £10,000 of DC assets had the annuity been purchased in one of the years between 1990 and 2012.

To summarise thus far, the five most important factors that determine the DC member's outcome – that is, the amount of the lifetime annuity – are:

- The level of contributions (typically expressed as a percentage of pensionable salary or of the 'band earnings' required under the government's minimum contribution rules for auto-enrolment – see 1.2 below).
- The length of the investment horizon (qualifying employees for auto-enrolment are those aged between 22 and the state pension age).

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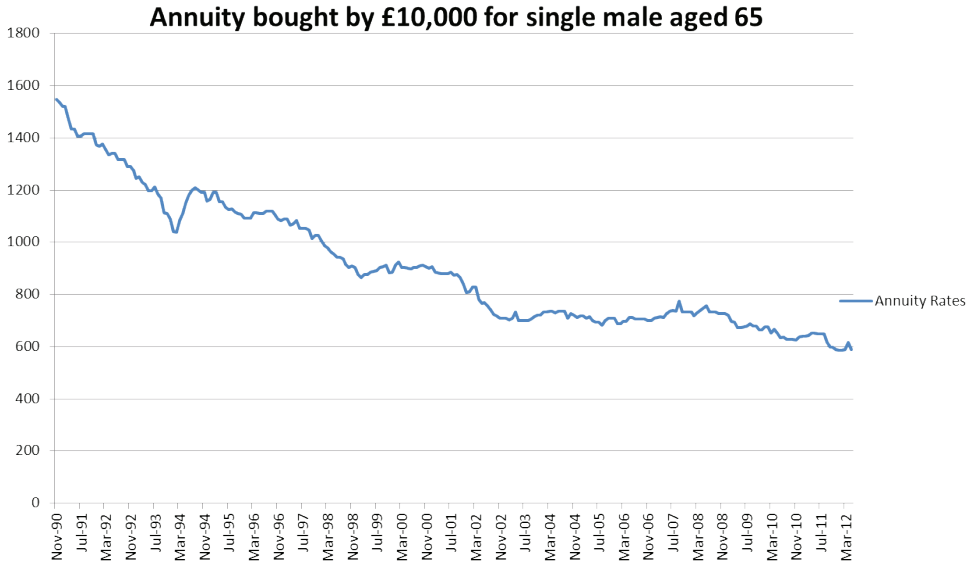
6 'Annuity' in the DC market denotes a specific retirement product providing life-long income. The term is used very differently in real estate asset management to denote long-term secure income.

7 There has in fact been no legal requirement to buy an annuity since 6 April 2011. Since that date, anyone retiring over the age of 55 can draw down their accumulated pension fund in the form of either 'capped drawdown' or 'flexible drawdown'. With the former, the scheme member can take up to 120% of the amount of an equivalent annuity each year from the fund. With the latter, there is no such cap and the member can draw down as much as they like each year from the fund, so long as they satisfy a combined 'minimum income requirement' of £20,000 p.a. from all their pension schemes, including the state scheme. Nevertheless, most members choose to buy an annuity.

- The asset allocation of the fund and the investment return it delivers.[8]
- Member charges during the investment period (accumulation).
- The cost of annuity conversion.

With the exception of the contribution level and the explicit member charge, all of the above factors cannot be known in advance. This is why DC is considered a much more risky way for individuals to save for retirement, when compared with DB. It also explains the reason why the government is consulting on a new design, known as defined ambition (DA), which aims to make DC outcomes more predictable, for example via some form of return guarantee or risk-sharing mechanism between different cohorts of members.

Figure 1.1: Falling annuity rates 1990-2012



Source: Annuity Direct

1.2 How default funds work

In 2012, about 80% of members in aggregate were invested in what are described as default funds. The remaining 20% of members selected funds from the scheme's range of individual funds, which typically comprised a combination of the provider's own funds and a selection of third-party asset manager funds. According to the Pensions Institute's 2012 report, Caveat Venditor, by 2018 'in aggregate, an estimated 90-97% of members will use the default fund and in some [scheme-specific] cases the figure will be 100%'.[9] This makes the default fund the most important focus of DC investment strategy, both in terms of AUM and member outcomes.

8 David Blake, Andrew J.G. Cairns, and Kevin Dowd (2001) 'PensionMetrics: stochastic pension plan design and value-at-risk during the accumulation phase', Insurance: Mathematics and Economics 29, 187–215

9 Caveat Venditor: The brave new world of auto-enrolment should be governed by the principle of seller not buyer beware, www.pensions-institute.org/reports/caveatvenditor.pdf

The term 'default fund' is relatively new, but the concept is well-established. From the late 1980s onwards, where employers that offered a DC scheme wanted an automatic facility for employees who did not want to choose their investments, providers (the life offices) usually recommended what they described as a balanced managed fund for this purpose. In the 1980s and 1990s, balanced managed funds were heavily weighted towards equities (typically 80% of total assets) and did not necessarily incorporate a de-risking 'glide path', whereby member assets were transferred to bonds and cash in the run up to retirement and the purchase of an annuity. For members of these earlier schemes – many of which continue to be used today – this model has resulted in generally poor and volatile performance since 2000, delivering highly variable member outcomes in terms of retirement incomes. In particular, member funds have been subject to significant losses pre-retirement due to equity bear markets and the financial crisis.

In 2013, default funds in the new multi-employer schemes designed for auto-enrolment primarily comprise sub-funds of equities, bonds and cash, with varying allocations to diversified growth funds, alternatives, and, more recently, to real estate. Depending on the sophistication of the fund, each asset class might combine sub-classes, e.g. the sub-class 'global equities' might comprise allocations to a range of indexed funds covering the UK (possibly split between large and small cap), Europe, US, Japan, Asia-Pacific ex-Japan, emerging markets, etc. The same is true of the bond allocation, which might include gilts, investment-grade corporate bonds and possibly a small allocation to emerging market debt.

The equity and bond components usually are invested on a passive or quasi-passive basis (e.g., diversified or smart beta[10]). The dominance of passive and quasi-passive sub-funds for the main asset classes is expected to continue for a range of reasons. These include concerns about the potential scale of the major auto-enrolment schemes, where fund size might have an impact on market movements, and also the pressure on schemes to offer low member charges, which constrains asset manager fees. The research for this report indicated that the typical total cost of sub-fund asset management for a modern default fund ranges from 10-25bps and is 5-15bps in some modern and many older bundled life office funds that combine asset management and administration. This raises questions about the 'spend' on non-asset management services and indicates that any further downward pressure on asset management costs might be misplaced.

The main exceptions to the passive strategy are funds of UK property and funds of alternatives, both of which might be actively managed. Funds of alternatives combine property, infrastructure, private equity, emerging market equity, hedge funds, etc. What these asset classes have in common is that they are illiquid, so access via an appropriate fund structure provides the daily pricing and liquidity DC schemes claim they need.

The asset class weightings in a given default fund are determined by modelling exercises that take account of the overall investment risk/return objectives set by the provider of the default fund, which can vary depending on the investment

10 The asset manager deviates from the standard market capitalisation weightings in the relevant index. Typically this involves reducing the weighting in what are considered overpriced stocks and increasing the weighting in undervalued stocks, by passively weighting allocations towards 'fundamental' factors other than market capitalisation (e.g., sales, book value, cashflow, dividends, etc).

philosophy and target market. An example might be an annual target of the Consumer Price Index (CPI) + 3%.

Most default funds construct the de-risking 'glide path' (the changing asset allocation in the lead up to retirement – also known as the lifestyle or lifecycle path) by using two main funds (or sub-funds) which hold different allocations: the growth fund and the consolidation or pre-retirement fund.[11] The transition from the growth to the consolidation fund aims to reduce risk in the later years of the accumulation stage – typically ending up with a weighting of 75% bonds/25% cash.[12] This weighting is aligned with the anticipated decumulation strategy, whereby the member is expected to take 25% of the fund as tax-free cash and use the remaining 75% to buy an annuity. The purpose of the bond fund is to hedge the interest rate risk in annuities: if interest rates fall, the price of annuities rises and this risk can be partially hedged by switching into bonds along the glide path.

The research found that weightings in the growth phase of default funds varied considerably. Some schemes – including several traditional life offices – still adhere to the high weighting to equities (e.g., around 80%) that characterised investment strategy in the 1980s and 1990s. Examples include B&CE's People's Pension and Scottish Widows. In B&CE's case, the potential higher volatility and risk is intended to be mitigated by incorporating a long de-risking period of 15 years. The alternative approach to asset allocation and risk mitigation that has developed more recently has resulted in much lower weightings to equities, e.g., 40%, with a further 40% in bonds and 20% in cash/currency. L&G's master trust is an example of this type of strategy.

In addition to the main default fund, providers might also offer an ethical and Sharia self-select option. Ethical funds operate a screening process to exclude investment in companies that sell arms, alcohol and tobacco, for example, or which are involved in the gambling market, undertake animal testing for products or where there are concerns about human rights issues. An alternative approach is to invest in companies that are committed to specific policies such as those that relate to human rights or the environment. One of the main characteristics of ethical funds is their weighting to smaller companies, which tends to be high relative to conventional funds.

Sharia funds, where the screening reflects Sharia law, are a type of ethical fund designed primarily for Muslims (although they are used by other investors with similar ethical views). There are two main restrictions that result in the exclusion of asset classes or types of company stocks. The first is 'usury' ('Riba'), e.g., bonds, but also mortgage-related businesses. The second is 'impermissible' ('Haraam') investments, such as businesses that have links to pork, alcohol, arms, gambling, pornography, prostitution, tobacco, and certain forms of Western entertainment and advertising. Sharia funds for auto-enrolment tend to invest 100% in selected equities, which makes these default options much more volatile than modern multi-asset funds – an issue that is expected to come under scrutiny if such funds attract a significant number of auto-enrolees.

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11 NEST is unusual because in addition to the 'growth' and 'consolidation' phases in its target date funds, it has a low risk 'foundation' phase designed to reduce volatility. This is to deter members from opting out as a result of disappointing returns experienced shortly after joining.

12 'Target date funds' run a lifestyling model within each dated fund, so, for example, the 2040 fund (which assumes retirement in 2040) will have its own glide path.

There is no obligation for a qualifying auto-enrolment scheme to offer a choice of 'self-select' funds and several of the new trust-based multi-employer schemes limit this feature to ethical and/or Sharia funds. Older group personal pension schemes (GPPs) tended to offer a very wide range of funds, often running into the hundreds, including named third-party asset managers as well as the provider's own selection. More modern schemes have tended to 'white label' a small number of self-select funds that represent the main asset classes and are described as the scheme's (employer's name) 'UK smaller companies fund' or 'Global equity fund', etc. The reason for the white label approach is to enable the scheme provider to monitor the performance of the underlying asset manager and to make changes without the member having to transfer from the old to the new manager if a manager is replaced and also without any change in the unit price. Most schemes that offer a self-select option include a real estate fund, although providers report that assets under management in these funds are very low.

1.3 Member charges

Low charges are an important feature of the auto-enrolment market. This is partly because they have a major impact on the member's outcome, but also because they are easier to examine than investment governance and asset allocation, the two other important features that influence member outcomes. Members in smaller schemes (i.e., employees of smaller companies) have often paid up to six times (if not more) the annual charge that applied to those in the very largest schemes, which is a clear indicator of scale economies and skilful negotiation on the part of the buyer (the employer or trustees).

The main member charges relate to administration and asset management, but there are many others, including accounting, custody and research, for example. Indeed the typical 5-15% of the member charge allocated to asset management is dwarfed by 'other' charges. Until recently, the preferred way to disclose member costs was the annual management charge (AMC), which is used by many life offices, and which covers administration, asset management, legal, accounting and audit, among others.

The AMC was introduced in 2001 for stakeholder schemes – a type of contract-based group pension scheme that met certain requirements in relation to terms and conditions. The AMC aimed to capture in a single charge all of the various costs previously associated with personal pensions, which were difficult to evaluate and which applied in the GPP market too. However, the single-charge regime has not been universally adopted by new auto-enrolment schemes. NEST is unusual in that it has an AMC (0.3% of AUM) and a contribution charge (1.8% of contributions) – the latter required on a temporary basis to repay the set-up loan provided by HM Treasury. The TER for NEST is about 0.5% over the longer term, but is higher over the short term due to the impact of the contribution charge. Many of the older trust-based schemes – and the new scheme from NOW: Pensions – have an AMC/TER and a separate monthly administration charge.

The AMC has largely been replaced by the total expense ratio (TER), which is a more comprehensive measure, although it does not include transaction costs, which can be significant for active funds, or bid-offer spreads for open-ended funds, performance-related fees[13] and the cost of any sub-funds.

13 The TER is being replaced by the ongoing charge figure which does include performance-related fees.

Following a heated debate in the industry, in future it is likely that disclosure requirements will insist on much greater clarity concerning fund transaction costs, sub-fund charges and performance fees, among others. This will be particularly important for actively managed funds and enhanced passive funds where the fund manager has significant discretion and where substantial portfolio trading can raise transactions costs, for example. It is also important to recognise that the fund charge is not necessarily the same for all customers, as we discuss in Section 2.3, where research from the consultant Lance Clark & Peacock (LCP) shows that the same fund can charge between 0.7% and 1.2%, depending on the scheme structure and scale.[14] Our research showed that where the provider applies an underwriting process (i.e., undertakes a specific investigation of a potential employer client before deciding whether to accept the employer's members into its scheme), the member charge is directly linked to the attractiveness or otherwise of the employer and the employee profile, a process that is understandable but which generally discriminates against employees in smaller companies and where the employee earnings profile indicates low earnings and/or a high annual staff turnover rate.

The government announced in May 2013 that it would consult on the potential for a cap on the total member charge for the default fund (this would exclude the self-selection range of funds that might be offered as an alternative to the default). If implemented, the cap might be in the region of 50-75bps, although it is not clear what definition of annual member charge the DWP might use. As part of this initiative, the government is expected to encourage – or possibly enforce – a migration of assets from high cost legacy schemes to the new schemes.

The charge cap, if introduced, would be compulsory for auto-enrolment default funds, but it might also draw attention to the higher charges that still apply to assets under management in older (legacy) schemes, which formed a key focus on the Office of Fair Trading (OFT) investigation into competition in the DC market under auto-enrolment, published in September 2013 as Defined Contribution Workplace Market Study.[15]

In addition, there are closed (legacy) funds which retain assets because members have not transferred their pots to a new scheme. This issue relates mainly to contract-based schemes, where each member has to sign a transfer form and where very few do so in practice, unless they are encouraged and assisted. Schemes sold pre-stakeholder (2001) are also likely to have exit penalties and also certain guarantees (on the annuity rate, for example), which makes the transfer issue complicated. According to the OFT, there is £40bn AUM in older higher charging schemes and £25.4bn in closed funds.

The OFT report stated that workplace DC schemes represented one of the weakest markets it has seen for some years, due to the poor understanding of many employers and also due to the misalignment between provider interests, employer interests, and members' needs. It also identified weak competition in asset management, whereby nine out of 10 of the providers that gave evidence were vertically integrated.

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14 www.lcp.uk.com/news--publications/publications-and-research/2012/dc-fees-survey-2012. See also www.dcisions.com/assets/downloads/2012_DCisionsReport_Web.pdf.

15 Defined contribution workplace market study, Sept. 2013, http://www.oft.gov.uk/OFTwork/markets-work/pensions/#.UklnzE9wbIU

Its conclusion was that 'competition cannot be relied upon to ensure value for money for savers in the DC workplace pensions market.' The OFT has agreed certain measures with the regulators and the industry to improve standards, but it has not referred the market to the Competition Commission.[16]

At present, for new schemes under auto-enrolment, the AMC is typically in the range 0.5% - 1%. Only a minority of schemes, such as NEST and B&CE, apply the same member charge irrespective of the employer size and profile. As mentioned above, most providers (particularly the life offices) underwrite each scheme to ensure it represents an economic proposition. As a result, a very large employer with lower than average staff turnover and a higher than average employee earnings profile can expect to negotiate a much lower member charge than a small employer with a less attractive employee profile.

The NAPF has set a benchmark total member charge maximum of 0.75% for schemes to qualify for its multi-employer Pension Quality Mark ('PQM-Ready').[17] Schemes sold in the 1990s, by contrast, might have a total member charge of up to 3%, which includes the adviser's ongoing (trail) sales commission.

1.4 Auto-enrolment and its impact on the retail DC scheme market

The new auto-enrolment regime

Under auto-enrolment, we predict that DC default fund AUM will increase sixfold by 2030, from £276bn pre-auto-enrolment (2012) to £1,680bn. DC schemes have selected real estate as the first illiquid or 'alternative' asset class to be incorporated as a core component of 'default' investment strategies ('default funds') with weightings of 5-20% and an average of 10%. Default funds will be used by 90-97% of members,[18] which means that assuming the trend towards the inclusion of real estate as a core asset class is widely adopted), real estate AUM in these funds might be worth £170bn by 2030.

Auto-enrolment is a 'game changer' for DC providers and is seen as a one-off opportunity to secure assets under management and maximise scale economies in the private-sector employment-based pensions market. It has triggered intense rivalry for business between traditional providers and new entrants.

Historically, private sector employers in the UK have been under no obligation to contribute to their employees' pensions. Larger employers tended to offer DB schemes until the turn of the present century. Smaller and medium-sized employers tended to offer DC schemes, many of which have suffered due to lack of scale, poor investment strategy and high charges. The DC market in 2012 was characterised by a very large number of schemes (205,000) with small memberships: only 5% had more than 100 members, while smaller schemes

16 In April 2014, the OFT and Competition Commision will be merged into the Competition and Markets Authority.

17 http://www.pensionqualitymark.org.uk/pqmready.php

18 Pensions Institute, Caveat Venditor (www.pensions-institute.org/reports/caveatvenditor.pdf)

(with fewer than 100 members) accounted for 40% of AUM.[19]

Since 2000, membership of private-sector employment-based (DB and DC) schemes has fallen dramatically. A report published by the Office for National Statistics (ONS) in July 2013 showed that the number of active members of employment-based schemes had fallen to its lowest level in 60 years, hence the urgent need for the government to take action to reverse the trend.[20]
The Pensions Acts of 2007 and 2008 introduced new pension duties on employers. Starting with the largest employers in October 2012 and ending with the smallest in 2018, the auto-enrolment legislation requires employers to automatically enrol qualifying workers (those earning at least £9,440 in 2013-2014) between age 22 and the state pension age into a 'designated' pension scheme, which must include a default fund for members who do not wish to make investment decisions.

Employers can use a new scheme specifically set up for the auto-enrolment regime to meet their duties or they can use their existing scheme. However, many existing schemes are considered sub-optimal relative to new schemes for the reasons stated above. Therefore in July 2013, the government began consulting on what constitutes a 'good' scheme and default fund. At the same time, the Office for Fair Trading (OFT) was investigating competition in the employment-based DC market and produced its report in September 2013 (see 1.3 above). The results of these investigations are expected to result in improved standards for auto-enrolment schemes and default funds, together with changes in the way the market operates. In particular the government is keen to exclude older schemes with uncompetitive charges and poorly designed default investment strategies.

The date at which the new duties take effect (the employer's 'staging date') depends on the size of the employer's pay-as-you-earn (PAYE) scheme. The first staging date in October 2012 applied to employers with 120,000+ employees in the PAYE scheme; the final staging dates in 2017 and 2018 apply to employers with fewer than 30 qualifying employees (see Table 1.1).

For qualifying workers the minimum contribution is 8% (comprising 4% from the employee, 3% from the employer, and 1% in tax relief), based on 'band earnings' of £5,668-£41,450 in 2013-14. Employer contribution rates are being phased in, which means that the full 8% will not be compulsory until 2017-18. Employers can choose to set higher minimum contribution levels, but while this practice is common among some of the larger employers, most smaller and medium-sized employers – especially those that have not paid any contributions in the past – are expected to meet the minimum requirement only. It is widely recognised, and acknowledged by the government, that 8% of band earnings will not deliver adequate pensions, even when combined with the more generous state pension being introduced in April 2016. The government is expected to increase the minimum contribution requirement once auto-enrolment is fully implemented.

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19 For DC market analysis, see Spence Johnson's 'Broad Brush' reports, in particular numbers 7 and 10: www.spencejohnson.com/TheBroadBrush.html

20 See www.ons.gov.uk/ons/rel/pensions/pension-trends/chapter-7--private-pension-scheme-membership--2013-edition/chapter-7--private-pension-scheme-membership.html

Table 1.1: Employer auto-enrolment dates by PAYE scheme size or reference

PAYE scheme size or reference	Staging date
120,000 or more	1 October 2012
50,000-119,999	1 November 2012
30,000-49,999	1 January 2013
20,000-29,999	1 February 2013
10,000-19,999	1 March 2013
6,000-9,999	1 April 2013
4,100-5,999	1 May 2013
4,000-4,099	1 June 2013
3,000-3,999	1 July 2013
2,000-2,999	1 August 2013
1,250-1,999	1 September 2013
800-1,249	1 October 2013
500-799	1 November 2013
350-499	1 January 2014
250-349	1 February 2014
160-249	1 April 2014
90-159	1 May 2014
62-89	1 July 2014
61	1 August 2014
60	1 October 2014
59	1 November 2014
58	1 January 2015
54-57	1 March 2015
50-53	1 April 2015
40-49	1 August 2015
30-39	1 October 2015
< 30	1 June 2015 – 1 April 2017
New employers	1 May 2017 – 1 Feb 2018

Source: The Pensions Regulator. The dates for smaller employers can be postponed (see www.thepensionsregulator.gov.uk/employers/staging-date-timeline.aspx). 'New employers' refers to companies which started up during the auto-enrolment implementation period.

The government's policy aim for auto-enrolment is to ensure that as many private sector employees as possible build adequate private pension provision and do not have to rely on additional state support in retirement. However, under auto-enrolment, employees have the right to opt out. This is the feature that

distinguishes this system from full compulsion (where no opt-outs are permitted), which is the system that applies in Australia and in most Eastern and Central European, Asia-Pacific, and Central and South American countries. The success of auto-enrolment is predicated on the behavioural principle of inertia, namely that once in members will stay put.[21] If they do opt out, they will be re-enrolled on a regular basis (every 3 years), until eventually (the government hopes) inertia will overcome resistance. The inertia principle means that member engagement in investment issues is expected to be low, hence the necessity and importance of the default investment strategies on which an estimated 90-97% of members will rely.

To summarise the impact of auto-enrolment thus far: by 2018 there will be more than 1m new employers providing pension schemes and about 9m new members, which will increase DC scheme membership from c. 5-6m[22] pre-auto-enrolment to about 12-14m by 2018, depending on the number of employee opt-outs. As noted above, DC assets under management in the pre-auto-enrolment market were estimated at about £276bn by the ONS. Estimates of future growth are somewhat speculative, since it will not be known until 2018 how many employees will opt out. Based on the available data from the DWP,[23] we estimate that auto-enrolment will increase DC scheme AUM sixfold from £276bn in 2012 to £1,680bn in 2030.

Impact of auto-enrolment on the retail DC market

Auto-enrolment is expected to have a major impact on the retail DC market. At present, contract-based individual personal pension plans are bought by the self-employed and also by private-sector employees who do not have access to a company scheme. Many employees also have personal pensions as legacy 'pots' from membership of contract-based schemes in previous employments.[24] The retail market is worth about £326bn. By 2018, all but the lowest-paid employees will be auto-enrolled into a company scheme and so this retail market is likely to shrink. The remaining market will comprise the self-employed and, possibly, a minority of employees who want to use a personal pension plan to top-up their auto-enrolment scheme. If employees transfer older personal pensions into their auto-enrolment scheme – a trend encouraged

21 Opt-out rates for the largest employers – the first to implement auto-enrolment – are in the region of 8-15%.

22 Estimates vary due to double-counting in data and also the fact that trust-based schemes include deferred members, whereas contract-based schemes generally do not (leavers are re-categorised as personal pension customers). According to TPR, in 2012, there were about 6.3m active members of private work-based pension schemes. This group is made up of 3.3m members of trust-based occupational pension schemes and 3m members of work-based personal pension arrangements. In addition, there are around 11m deferred pensioner memberships across 54,000 occupational trust-based schemes, with a large concentration of members in a small number of schemes (only 1,600 schemes have 1,000 or more members). See www.thepensionsregulator.gov.uk/docs/delivering-successful-automatic-enrolment.pdf

23 Making Automatic Enrolment Work Review, Chapter 3, https://www.gov.uk/government/publications/making-automatic-enrolment-work-a-review-for-the-department-for-work-and-pensions

24 In contract-based schemes when a member leaves, their contract becomes an individual personal pension. See www.gov.uk/government/uploads/system/uploads/attachment_data/file/191697/automatic-transfers-consolidating-pension-savings.pdf

by the government in its bid to reduce the millions of small legacy pots from employees' previous employment – this would boost AUM in the new large-scale schemes at the expense of the retail market.

A special type of personal pension, the self-invested personal pension (SIPP), offers greater investment choice, including direct investment into equities and bonds, for example. This market is valued at about £103bn in 2013, although we understand that this forms part of the total £326m AUM for personal pensions as a whole.[25] Some employers that wish to offer higher earners a more sophisticated pension arrangement than their basic auto-enrolment scheme have established group SIPPs (GSIPPs) for this purpose.

A third product where change is imminent is the trust-based small self-administered scheme (SSAS) market, which is worth about £16-20bn at present. The prognosis for SSASs is unclear, but it is likely that this market will contract under auto-enrolment. SSASs are an unusual DC 'occupational' pension arrangement that allow small family businesses, for example, to use the pension fund to purchase the business premises, which are rented back to the employer at a commercial rate. Such schemes will not qualify for auto-enrolment because the regulations require qualifying schemes to offer a suitable multi-asset default fund, which rules out investment strategies that consist primarily of commercial property.

We provide more information about the retail market in Appendix 1.

1.5 Legal structures for DC schemes

Contract-based schemes

The main providers of contract-based schemes are life insurance companies ('life offices'), which traditionally have combined (the DC term is 'bundled') the asset management and administration functions.[26] Life offices and their investment arms also provide asset management services to third-party schemes, via trustees and consultants, for example, and to life offices that prefer to outsource certain asset management functions.

A distinguishing feature of contract-based DC is that the contract is between the provider and the member, not the employer. There are no trustees.[27] This means that a scheme with, say, 10,000 members, represents 10,000 individual contracts. Another important feature is that the provider is the legal owner of the assets and member data. Where an employer changes the scheme, each member has to sign a transfer form if they wish their accrued assets to be transferred otherwise these assets are treated as individual pension plans. The same is true where an employee leaves the scheme on changing jobs. This confusing situation makes the data on contract-based schemes and plans somewhat unreliable as a measure of assets accrued through employment-based schemes.

25 Source: Money Management SIPP Survey, July 2013.

26 Confusingly, bundled arrangements provided by life offices are often described as 'insured'.

27 Technically, the board resolution or deed poll will refer to a trust deed and rules because by law the distribution of death benefits (i.e., the return of fund if the member dies before retirement) must be discretionary in order to avoid inheritance tax.

The contract- versus trust-based DC structures has long been the subject of heated debate. Evidence to date – from the government and the Pensions Institute,[28] among others – has indicated that there are clear examples of good and poor practice in both arrangements. However, under auto-enrolment, the contract-based legal framework has come under further scrutiny with a particular focus on governance, where ultimate responsibility can be unclear and alignment with members' interests poor. Investment governance responsibilities are typically shared between providers, asset managers, advisers, and employers. None of these parties has interests that are necessarily well-aligned with the members', which are career-length rather than based on a period working for a particular employer. Moreover, the Pensions Institute's November 2012 report, Caveat Venditor, observed that there were significant disconnections between those responsible for selecting the scheme and the actual investors (the members), who bear the risks: 'The employer is the buyer, but not the customer; the member is the customer, but not the buyer, and therefore has no influence over the choice of scheme to which he or she is passively auto-enrolled'. The report noted that the employer might take advice on the choice of scheme, but this advice is not regulated because employers, like trustees, are classed by the FCA as institutional purchasers, even though they may have very little knowledge about pensions, which is a common problem among certain smaller and medium-sized employers.

There are different types of contract-based scheme, but they all operate in a similar way:

- **Group personal pensions (GPPs)**: the most common structure. GPPs offer a default investment strategy (or a choice of such strategies, from which the employer or adviser selects the most appropriate for the scheme), plus a range of 'self-select' funds for members that wish to make their own investment decisions.
- **Group stakeholder plans (GSPs)**: introduced in 2001, these are almost identical to a GPP, but must meet certain legal requirements, for example, there can be no exit penalties and there must be a single annual member charge.[29] At the time, most GPPs adopted these features. GSP investment strategies are similar to GPPs (often the same default fund range is offered by providers for both products), although the self-select range of funds tends to be more limited.
- **Group self-invested personal pensions (GSIPPs)**: similar to a GPP, but this arrangement offers a more sophisticated investment choice and might be chosen by employers to meet the needs of higher earners or directors, for example.

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28 See Caveat Venditor (www.pensions-institute.org/reports/caveatvenditor.pdf)

29 Previously, there was a wide range of member charges which were often difficult to understand. These might include: a policy set-up fee, a monthly policy fee, an 'allocation rate' (after a bid-offer spread deduction, eg 5%); levies on 'capital units' or 'initial unit charges', which applied to contributions paid during the first two years (typically) and which bore the higher AMC through the full term of the investment or until a certain minimum investment period was completed; 'accumulation unit charges', which was a lower charge applied to contributions paid after the 'initial' period; exit charges (in the form of a redemption fee payable at maturity, a transfer fee payable when the policy was transferred, or a fee associated with conversion of the policy to paid-up status), which varied considerably and were not illustrated in life office disclosure documents.

Trust-based schemes

A trust-based scheme is governed by its trust deed and rules and is run by a board of trustees (or possibly a trustee company), which has a duty under trust law (supervised by TPR) to put the members' interests first. This is the governance feature that many commentators argue is best for auto-enrolment, since there is a clear alignment between the trustees' and members' interests. However, the government and TPR have identified many cases of poor governance, especially among smaller schemes, which demonstrates that this feature does not always work in practice.[30]

The trustees engage directly with providers of services, such as asset managers and third-party administrators, although they might also purchase a bundled arrangement through a single provider. Trustees are the legal owners of the assets and member data which means that, if they wish to change the scheme, they can transfer all member assets to the new arrangement – a clear advantage over contract-based schemes. Members have notional accounts rather than 'contracts' to identify their individual assets in the wider pool of scheme assets, although, in practice, what members see in their annual statements looks very similar in a contract- and trust-based scheme. When employees change jobs, they become a deferred member of the scheme, which means that the trustees are still responsible for looking after their interests – a second advantage over contract-based schemes.

Trust-based schemes can be divided into:

- **Single-employer trusts**: usually designed by a consultant for a large employer
- **Multi-employer trusts**: designed for multiple unconnected employers and with either a fully independent trust board or with a board that includes representation from the scheme provider. These schemes are also described as master trusts. The government-established National Employment Savings Trust (NEST) is the most obvious example of this model.[31] NEST is not a 'manufacturer', since it uses third-party service providers for asset management and administration, as we discuss below. An alternative model is where the target date funds are outsourced to an asset manager that acts as a portfolio manager, such as AllianceBernstein, which, like NEST, uses open-architecture (i.e. it outsources asset management to third-party managers – or in some cases the choice is made by the client scheme). AllianceBernstein currently uses a combination of State Street, Blackrock and Legal & General as its passive manager selections within its target date funds.

  There has been considerable debate in the industry about the term 'master trust' and some have argued that there needs to be further clarification over the independence, or otherwise, of the trustees. In most of the examples we

30 See DWP 2010, 'Charging levels and structures in money-purchase pension schemes'. See also TPR 2011, http://www.thepensionsregulator.gov.uk/docs/role-of-trustees-in-dc-schemes-statement-oct-2011.pdf

31 NEST Corporation, the trustee body that runs the scheme, is a non-departmental public body (NDPB) that operates at arm's length from the government and is accountable to Parliament through the Department for Work and Pensions (DWP). The initial selection of NEST's trustee members was made by the Secretary of State for Work and Pensions. This is in line with the practices of the Office of the Commissioner of Public Appointments, the body that scrutinises public appointments.

examined, the provider is strongly represented on the trustee board. This might lead to conflicts of interest, the most obvious of which relates to the trustees' ability (set out in the trust deed and rules) and willingness (possibly influenced by the provider that appoints them) to replace the asset manager.

- **Small 'bundled' trust-based schemes.** This type of scheme, now in decline, was sold by life offices to smaller employers, particularly in the 1990s.[32] In practice, these 'money purchase schemes' operate like contract-based schemes because for smaller employers engagement in trustee duties can be minimal. The reason for their popularity was due to the fact that, in a trust-based scheme, employers can refund a member's contributions if an employee leaves within two years of joining the scheme. The employer contributions revert to the scheme. The 'short service refund' is expected to be abolished.
- **Small self-administered schemes (SSASs).** These schemes represent a small but apparently thriving market. Due to the primary use of the fund to purchase the employer's business premises, such schemes are unlikely to meet auto-enrolment qualifying scheme requirements. See Appendix 1 for further details.

1.6 Regulation of DC schemes

As discussed above, the regulator of a DC scheme depends on its legal structure:

- For contract-based schemes, this is the Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA),[33] which also regulate the annuity market.
- For trust-based schemes, this is The Pensions Regulator (TPR). However, TPR is also responsible for overseeing all qualifying DC schemes for auto-enrolment in relation to minimum contributions and eligible workers, among other requirements.

At the time of writing, there was pressure on the government – from the National Audit Office (NAO) and the parliamentary Work and Pensions Committee (WPC), among others[34] – to introduce a single regulator for DC workplace pension schemes. These bodies point out that employees have no control over the employer's choice of pension scheme and that they should be treated equally irrespective of whether the scheme is based on contract or trust law. However, the government has said it will not make substantial changes to the regulatory system during the implementation phase of auto-enrolment, the commencement of which coincided with the replacement of the Financial Services Authority (FSA) by the FCA and PRA in 2013. However, the OFT investigation into competition and

32 Under trust-based DC, these are also known as contracted-in money purchase schemes (CIMPs). Contract-based bundled schemes include group personal pensions and stakeholder schemes. Although employers can access the same default fund via a single provider's GPP and stakeholder, the stakeholder charges can be higher for reasons that are not yet understood. While contract-based providers will provide the default fund, like platforms they will usually offer access to third-party funds.

33 Until April 2013, the regulator was the Financial Services Authority (FSA).

34 See NAO 2012, 'Regulating defined contribution pension schemes' http://www.nao.org.uk/report/regulating-defined-contribution-pension-schemes; Work & Pensions Committee 2013, http://www.parliament.uk/business/committees/committees-a-z/commons-select/work-and-pensions-committee/news/pg-rpt/

the DWP consultation on governance are expected to improve standards across contract- and trust-based schemes and eliminate some of the major differences.

1.7 Scheme providers and advisers: The supply chain and the drive to scale

The auto-enrolment market

The auto-enrolment market is characterised by a rapidly growing demand side. But, the demand side is unlikely to exercise the full extent of its powers because many purchasers – namely the thousands of employers forced to pay into employees pensions for the first time – have a low level of knowledge and understanding and are 'buying' pension schemes on behalf of largely disengaged employees, who will foot the bill via the member charge. The weakness of the demand side of the auto-enrolment market might be summarised as follows:

- The expertise of employers, as purchasers, will depend on the company size, their previous experience of providing pensions, and the pensions/HR infrastructure. Smaller employers, in particular, tend not to be experienced buyers. The DWP June 2012 survey found that only one-third on average knew that members pay any charges, let alone the level of charges and their impact on the pot at retirement.[35] It is even questionable whether most employers new to pension provision actually care about their employees' pension provision, particularly once they leave employment. The September 2013 OFT report on competition in the DC market said that most employers do not have the capability to ensure that they get good outcomes on behalf of their members and that employer incentives are not necessarily aligned with those of the members.
- The expertise of trustees, as purchasers, also varies and will depend on the size of scheme and the trustee board expertise and infrastructure, for example the board might have an investment sub-committee that includes independent investment experts. Trustee boards for larger employer schemes are likely to have expertise in DB investment strategy, although this is not necessarily a directly transferable skill to DC investing. Moreover, many such trustee boards are forced to focus on managing/mitigating DB deficits, so in practice they might not spend a lot of time on the DC scheme and might be inclined to accept their consultant's recommendation. Trustees of smaller schemes tend to have low levels of expertise, as noted by TPR.[36]

Asset managers in the DB market have long understood the need to identify and engage with scheme decision-makers (trustees) and 'gatekeepers' (consultants) in order to understand their requirements and to compete successfully for mandates. The same understanding and engagement is necessary in the workplace DC scheme market, but here the structure and the decision-makers (or gatekeepers) are quite different.

Table 1.2 gives an overview of the supply and distribution chain in the auto-enrolment market. This is discussed in the remainder of this section.

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35 See 'Pension landscape and charging', DWP 2012, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/193451/rrep804.pdf

36 See TPR 2011, http://www.thepensionsregulator.gov.uk/docs/role-of-trustees-in-dc-schemes-statement-oct-2011.pdf

Table 1.2: The DC scheme supply and distribution chain

Scheme providers

The contract- or trust-based scheme providers (e.g. life offices, independent trust-based schemes, and a minority of consultants) sell to:

- Employers
- Trustees

Mainly via:

- Consultants:
  - Historically fee-based
  - Have strong relationships with trustees and with larger employers in particular (but also medium-sized employers)
  - Generally, have a high level of expertise in investment strategy, although not necessarily in illiquid asset classes
  - Potentially are conflicted if they sell their own schemes as well as act as independent consultants
- Corporate advisers:
  - Historically commission-based
  - Experienced in selling contract-based DC schemes in the medium-sized and smaller-employer market
  - Not necessarily noted for expertise in investment strategy, particularly in illiquid asset classes, but more likely to be influenced by brand and, before the ban on sales commission in 2013 (see below), by commission rates.
- Direct-to-employer distribution – a growing market following the introduction of NEST and its competitors, supported by the introduction of low-cost web-based scheme-selection services.

Asset managers

- A small minority are scheme providers in their own right, typically via a life office subsidiary (e.g. Fidelity). In this case, they can provide a scheme that offers a bundled asset management and administration service to employers and trustees. They might sell these schemes to employers and trustees via:
  - Consultants
  - Corporate advisers (less likely, as they tend to target the top-end fee-based market)
- Offer complete default fund investment solutions (e.g. target date funds). They might sell these:
  - Direct to trust-based schemes that want to outsource to a single asset management
  - Via consultants
- Offer investment-only components (one or more sub-funds that form part of the default investment strategy, such as global equities, global bonds, etc.).

- They might sell these to:
  - Consultants that design trust-based blended default funds for single larger employers or to multiple employer schemes
  - Trust- and contract-based multi-employer scheme providers
- Offer funds to self-select members of DC schemes and to retail customers via:
  - Their own life office platform, where they have one
  - The platforms of other providers and fund supermarkets
  - A scheme platform, where they might be re-branded (white-labelled) as the scheme's 'global passive equity fund', for example.

The member (investor)

The member, who is the investor, has no interaction with the above process.

Source: The Pensions Institute

The role of providers and advisers

The role of different types of providers and advisers has always been complex – driven by the business models of providers, particularly those that have targeted the smaller and medium-sized employers via commission-based advisers, and the consultants that have dominated the large employer market. Over the past few years the number of major providers has fallen, partly due to mergers and acquisitions, but also due to the formal or tacit withdrawal of certain life offices from the market. Distribution channels have also started to change very significantly. In this and the following section, we set out a brief overview of the current 'value' chain.

Scale is considered crucial to the success of auto-enrolment, a point that is well understood by the government, which recognises that good member outcomes require a market that can deliver low charges and strong investment governance, among other desirable features. Of course, from a competition perspective there is no guarantee that a smaller number of larger players would deliver optimal outcomes. Scale, therefore, is not a panacea.

In the late 1980s, when personal pensions and GPPs were introduced, more than 100 life offices, building societies and friendly societies sold DC products in the corporate and retail markets. The trend towards consolidation began in the 1990s and early 2000s, but it accelerated rapidly in the run up to auto-enrolment. In 2013, there were fewer than 20 major players, which included several new multi-employer schemes. By the 2020s, the market is expected to be dominated by just six or eight multi-employer schemes, which are likely to be trust-based.

Types of scheme by provider

The distinctions between different types of scheme provider in the DC market are not clear-cut. The following description, therefore, aims only to provide a broad picture of the four main categories identified in the research.

Life office schemes (historically contract-based, but in some cases now trust-based)

In 2013, the ABI listed the following 11 member firms (life offices) that provided qualifying auto-enrolment schemes – i.e. the life offices actively seeking auto-enrolment business:

- Aegon
- Aviva
- B&CE: People's Pension
- Fidelity
- Friends Life
- HSBC
- Legal & General
- Prudential
- Scottish Life
- Scottish Widows
- Standard Life

Several major life offices, for example, L&G and Standard Life, still offer contract-based group schemes, but have also launched new trust-based multi-employer schemes for the auto-enrolment market. In the past, L&G and Standard Life did not necessarily target smaller employers (e.g., with fewer than 50 qualifying employees), but have established arrangements with distributors to reach this market.

New multi-employer schemes (trust-based)

There are several new trust-based multi-employer schemes, the most prominent example of which is NEST, the government-established national scheme set up to accommodate employers that other providers perceive as uneconomic, including smaller employers and companies with high staff turnover. New schemes competing primarily, but not exclusively in the smaller and medium-sized employer market (which is also the target of about half of the life offices listed above) are provided by, among others:

- B&CE: People's Pension (B&CE is also an ABI member)
- BlueSky
- NEST
- NOW: Pensions
- The Pensions Trust
- SuperTrust

Single-employer schemes (mainly trust-based)

A third category is the single-employer trust-based scheme, which was already part of the landscape pre-auto-enrolment. Typically this type of employer will have a closed DB scheme and will use the same trustee infrastructure to oversee its DC scheme. In these examples, the default fund tends to be constructed by investment consultants appointed by the trustees, although some have chosen bundled life office schemes instead.

Consultants' schemes (contract- and trust-based)

The fourth type of provider – the investment consultant – is relatively new. Here the consultant establishes its own scheme and uses third-party asset manager funds to construct the default fund. These include:

- JLT
- Mercer
- Xafinity

The launch of such schemes has proved controversial, since they represent a move on the part of consultants into 'provider' space. This has raised concerns about potential conflicts of interest, since the consultant would still operate as an independent adviser to employers and trustees and may run beauty parades in which its own scheme participates. In practice, the consultant would use a different arm of the business to deliver these two services.

Types of scheme distributor

The main distributors of DC schemes are:

- Employee benefit consultants (EBCs): Often referred to simply as 'consultants', these advisers also provide actuarial and investment consulting services. Examples include the top three (by size) – Aon Hewitt, Mercer, Towers Watson – plus some key mid-sized consultants (e.g., Hymans Robertson, JLT, Lane Clark & Peacock (LCP), and Xafinity), plus a number of regional firms. Also competing in the consultancy market are the accountancy firms, such as Deloitte, KPMG, and PwC.
- Corporate advisers: Often referred to simply as advisers (although the term 'corporate' is used to distinguish these firms from the advisers that only/also operate in the retail market). Examples include Bluefin and Hargreaves Lansdown.

'Disintermediation' and the direct-to-employer market

Employers with pension schemes pre-auto-enrolment are likely to have a consultant or corporate adviser. This remains the case for larger employers, but elsewhere the market is evolving and 2013 has witnessed the development of new distribution channels. These cater for the many new employers that do not have an adviser, but also some of the existing employers that prefer not to pay an adviser fee following the introduction of important new rules on adviser remuneration.

Broadly speaking, in the past, the consultants that dominated the DB market were fee-based and many still are, so their DC clients are also fee-based. The corporate advisers that sold DC schemes were largely commission-based. Under a fee-based arrangement, the employer or trustees pay a fee directly to the consultant. Under a commission-based arrangement the employer would agree the commission level, but this would be deducted by the provider from the members' pots via the annual management charge (AMC). Commission on new sales was banned under the Retail Distribution Review (RDR), which came into force on 1 January 2013.[37] Previously it was embedded in the member's AMC as

37 See http://www.fsa.gov.uk/rdr

an annual commission, which might be significant in the first year of membership (e.g. 20%) and then continue as a 'trail' commission of 0.5-1% p.a. Importantly – and unfortunately – trail commission is still embedded in the AMC of members of schemes sold pre-RDR, and applies to new members auto-enrolled into these older schemes after January 2013. Embedded trail commission appears to be an anomaly, which the government and FCA are investigating.

The reasons why smaller and medium-sized employers have preferred not to pay a fee for pension advice are poorly understood, since they obviously pay a fee to other professional advisers, such as accountants and lawyers. However, there is a lot of truth in the adage that under the voluntary system, pensions for smaller and medium-sized employers were 'sold, not bought'; it is certainly the case that the marketing of commission-based schemes has always been very competitive and, at times, quite aggressively so. The fact that the member paid for the scheme via commission was a major selling point, as this enabled the employer to offer an apparently attractive employee benefit at no cost to the company.

Whatever the reasons, it seems to be the case that among many smaller and medium-sized employers the aversion to paying fees for pension advice is an established behavioural trait and one that is expected to continue as new employers are required to pay contributions for the first time under auto-enrolment legislation. Indeed, we understand that for many employers that have not paid into employees' pensions in the past, the auto-enrolment requirements are regarded less as a positive employee benefit and more as an additional burden under employment legislation, akin to the minimum wage.

This objection to paying for pensions advice, magnified under auto-enrolment, has triggered a trend towards 'disintermediation', whereby providers and employers make connections directly, without the participation of an intermediary. Following the ban on commission in January 2013 – and then the short-lived 'consultancy charge' (little more than a variation on commission)[38] – this trend is accelerating and will be further strengthened by the introduction of web-based search engines which offer a low-cost, one-off fee-based service that identifies the best scheme for the employer and provides an actuary's certificate of employer due diligence.[39]

In future, the government might facilitate the growth of direct-to-employer and web-based search engines by identifying a small number of large-scale schemes that comply with a quality mark in relation to standards of governance and charges. The proposal for a quality mark for auto-enrolment schemes and their default funds was first raised by the Pensions Institute in 2012.[40]

'Vertical integration' and its implications for asset managers

As Table 1.2 indicated, asset manager access to the employment-based DC market is limited by the ways in which the dominant providers operate. There is nothing new here – it was the same story in the late 1980s. However, the scale has changed due to the demise of DB and the introduction of auto-enrolment.

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38 https://www.gov.uk/government/news/government-announces-clampdown-on-pension-charges

39 See https://www.pensionplaypen.com/

40 Caveat Venditor, pp. 31-33

Historically life offices have dominated the DC scheme market – with the exception of some of the large single-employer trust-based schemes. Since most life offices are asset managers – often with their own specialist asset management arm – providers have sold bundled arrangements whereby they act as asset manager and administrator. The OFT describes the use of in-house asset management not as 'bundled', but as 'vertical integration'.

In theory, we might have expected the DC market to open up to third-party asset managers under auto-enrolment, but the research shows that access to multi-employer schemes remains very limited because most new multi-employer schemes are run by 'manufacturers' of asset management. The master trusts launched by L&G and Standard Life (both with around 8% in real estate) use in-house funds, as does Scottish Life's main default fund for contract- and trust-based schemes (20% in real estate). The newcomer NOW: Pensions uses the asset management capability of its parent company, ATP, which is a major player in the Danish workplace pensions market. Fidelity's main scheme for auto-enrolment (with 14% in real estate) uses in-house funds. In most cases, these allocations are restricted to funds of direct UK real estate and real estate investment trusts (REITs).

According to the OFT's September 2013 report on competition, nine out of the 10 providers that submitted evidence were vertically integrated and used their own investment management for the default fund, while the research for the current report revealed that not all of the main providers use real estate. This suggests that the market is very concentrated and that the use of real estate as a core asset class is wholly dependent on the provider's investment philosophy and capability. Vertically-integrated providers argue that internal funds are better value for money because they can be offered at lower cost than external funds. However, it is not necessarily the case that these funds deliver good investment results.

This gives rise to concerns about the impact of scale on the market. Arguably scale is necessary to achieve low-cost, well-governed schemes, but an oligopoly can have the effect of reducing rather than increasing competition. For example, there are a variety of costs – including custodian fees, depository fees and fund manager expenses – which are borne by the fund. While these are essential investment management costs, a vertically-integrated provider may not have a strong incentive to manage down these costs because they are not included in the quoted AMC. It also appears to be the case that where the FCA's best-execution rules require fund managers to get the most competitive deal in terms of price for retail customers, these rules do not apply to professional or market counter-party customers. The lack of clarity in the distinction between 'retail' and 'institutional' customers in the contract-based DC market complicates this issue.

This concludes our review of the DC pensions market. We now turn to an examination of the use of real estate in DC.

Section 2: The Use of Real Estate in DC

In this section, we examine the role of real estate in DC, the sub-classes of real estate currently used in default funds, the fund structures that hold real estate and their legal forms, and costs; we end by asking whether it is possible to determine what the optimal weighting of real estate should be in a DC default fund and then provide some examples of default funds using real estate.

An encouraging possibility for real estate – and potentially for other illiquid asset classes – is the beginning of a recognition among the more astute DC professionals of the need for the default investment strategy to look beyond pure 'risk diversification' to examine the significance of asset classes that deliver reliable income streams, inflation-hedging, and capital growth in a diversified multi-asset portfolio. This requires investment strategies to focus on the liability-hedging characteristics attributed to real estate, namely its ability to match the growth in the earnings of DC scheme members during the accumulation stage of the scheme and to generate stable real (inflation-adjusted) income streams in the decumulation stage.[41]

Currently real estate represents about 6-7% of DB scheme weightings, but back in the 1980s, this was about 16% in direct property and about 8% in real estate funds. Aggregate DB assets under management were worth £1,063bn at the end of 2012, according to TPR, but the increasing trend to de-risk schemes is likely to reduce AUM as liabilities are transferred to insurance companies, reinsurers and capital markets, while the growing maturity of funds will lead trustees to reduce allocations to risky assets and increase weightings in bonds. This scenario is more imminent than many real estate asset managers appreciate, given TPR's pressure on schemes to plan recovery periods (return to full funding relative to liabilities) of no more than 10 years or so, and the urgency with which sponsoring employers are seeking to remove completely the DB liability from the corporate balance sheet as soon as full funding makes this possible.

This means that, going forwards, DC auto-enrolment default funds represent the biggest source of potential institutional business for asset managers seeking to participate in the private sector workplace pension scheme market.

While real estate funds have gained a modest reputation as an attractive specialist asset class in the DC retail market – among personal pension plan (PPP) and, especially, self-investment personal pension plan (SIPP) investors – until recently, most scheme providers have not regarded them as a natural fit for their 'default funds'. This has changed over the past few months as providers and schemes have designed more sophisticated default investment strategies.

However, concerns remain about the lack of formal asset-liability modelling (ALM) in the DC scheme market, where auto-enrolment has been designed to look like some form of savings account rather than a vehicle that is preparing to deliver an income stream in retirement. DC default funds, therefore, have a liability (albeit an implicit one) in the form of an income stream at retirement

41 See, for example, Dirk Brounen, Melissa Porras Prado and Marno Verbeek (2008), 'Real Estate in an ALM Framework –The Case of Fair Value Accounting', published by the Network for Studies on Pensions, Ageing and Retirement.

that we believe is best expressed in terms of an income replacement ratio (RR) at retirement. The RR is the most meaningful outcome for members, since it links their pension to their pre-retirement income. ALM has been an important factor in the use of real estate in DB schemes on account of the fairly reliable, inflation-linked cash flows it delivers. DC investment strategies have been criticised in the past for being 'too retail' in focus and design, due to the origins of the contract-based DC market in individual personal pension schemes. While there is clear evidence of an institutional approach to investment governance and strategy in the new default funds designed for auto-enrolment – and importantly a clear recognition of the need for dynamic[42] rather than static asset allocations as part of a de-risking glide path – there currently remains the reality that the vast majority of schemes pay little or no attention to even implicit ALM in DC. This is because in most schemes, the accumulation stage is treated as completely separate from the decumulation stage, so, with the exception of a minority of innovators, the focus on targeting a specific member replacement ratio in retirement is absent.

Consistent with current usage in the DC market, we have adopted a simplistic definition of 'core' and 'alternative' in this section. We use the term 'core' as it generally employed in the DC market, which is to denote a 'significant' weighting (5% or above) to a single asset class. A more technical definition of core implies the availability of continuous pricing and trading, low transactions and holding costs, high liquidity, and market price transparency. In practice, the funds of real estate used by DC schemes have been designed to meet most if not all of the features required by the more technical definition. 'Alternatives' refers to any asset class that falls outside of the above definition, which can make for an eclectic mix, although the main characteristic in common is illiquidity.

With reference to these definitions, we can say that real estate is the first illiquid asset class to make the transition in the DC scheme default fund market from a component part of a small allocation to a fund of alternatives – 5% in total in some of the examples we encountered – to a core asset class. Based on our forecast for the auto-enrolment default fund market, if real estate comes to represent 10% of AUM in aggregate, as we suggest might be the case, total AUM in real estate in DC schemes might be worth £170bn by 2030.

However, while the overall prognosis for the use of real estate in DC default funds is better now than it has ever been, this is cold comfort to the many third-party asset managers who are not providers in their own right and who therefore rely on third-party manager tenders for DC business.

2.1 What do DC schemes want from a real estate fund?

Before we examine real estate and its current role in DC pensions, we begin with an apparently simple question which cropped up again and again in the interviews we conducted (see Section 3): what do DC schemes want from a real estate fund? The question is revealing because it highlights the behavioural differences between real estate asset managers and DC practitioners.

Speaking candidly in the interviews, real estate asset managers argued that they are best placed to understand real estate, which on the face of it seems

42 Dynamic in this context refers to the ability of those responsible for investment strategy to change asset class weightings within pre-set parameters, and also to add new asset classes.

to be a reasonable assumption. They also argued that they are best placed to know what DC default funds need from real estate, an attitude that might be considered to be somewhat presumptive in the view of DC investment decision-makers. Speaking equally candidly, the latter said that they understand the DC market best, which again is a reasonable assumption. They also argued that they are best placed to know what it is that they want. The difference between need and want is not merely semantic, but reflects behavioural differences at play that, unfortunately, do not tend to promote a fruitful dialogue.

DC investment decision-makers need assets to generate stable risk-adjusted returns in a diversified multi-asset portfolio. But they want more than this. An example is the demand from DC schemes for funds that provide daily pricing and liquidity, which they say is necessary in order to allow investors to transfer freely in and out of funds using up-to-date valuations for those assets. However, some asset managers argue that daily pricing and liquidity are not essential. There is some justification in this argument, partly because default funds attract investors who are not engaged in the investment process, so they are less likely to switch, but also because daily liquidity is not a regulatory requirement. Nevertheless, it is a strong convention in DC, where platforms have been developed to cope with retail as well as institutional investors. For this reason, DC decision makers find the attitude of asset managers rather puzzling. 'We are the customers,' they told us, 'and therefore we expect our requirements to be accepted and met, even if they are not fully understood. We do not expect to be faced with a barrage of criticism for imposing "unreasonable" conditions on suppliers'.

In practice, the pricing and liquidity issues do not appear to be insurmountable, as is evident from the 5-20% allocations to real estate we found in several of the default funds constructed for new auto-enrolment schemes (see Section 2.7 below). However, the willingness of schemes to accommodate asset classes that are illiquid and lack transparent pricing varies considerably, and, where there is a successful negotiation between scheme and asset manager, the solution appears to require a degree of compromise and adjustment on both sides.

Nevertheless, 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+. For smaller investors, real estate is accessed via funds, i.e., an indirect rather than a direct investment. Some of the largest single-employer trust-based schemes might have sufficient scale – and also the appetite – for segregated funds, where they make specific requirements about the underlying assets held in a sub-class (discussed in Section 2.3 below) and where the asset manager ring-fences the scheme's assets, keeping them separate from other schemes' assets. In most cases, however, the funds used are pooled (co-mingled), where the asset manager determines the underlying holdings and where the fund is open to multiple investors who all get the same return. This route to market will always involve some loss of control over investment strategy on the part of the institutional buyer. It also entails varying degrees of departure from the 'pure' real estate performance characteristics measured by direct indices of real estate.

When DC schemes choose a pooled fund, they do so on the basis that it has the right specifications – or close enough – to meet their asset allocation criteria, which, in turn, are derived from asset allocation modelling. They are not necessarily interested in the underlying holdings of the fund. Since DC schemes are designed to operate with high liquidity, low costs and tightly-controlled risks, what they need from a fund is straightforward index-tracking performance.

2.2 The case for real estate in DC default funds

The material in this section will be very familiar to those working in real estate asset management. Its primary purpose, therefore, is to inform DC professionals about the asset class, its risk profile, and where it 'sits' between equities and bonds in a multi-asset portfolio.[43]

Performance characteristics

Real estate generally refers to commercial property, which includes shops and retail units, offices, warehousing and light industrial premises, as well as hotels, leisure facilities and other forms of 'bricks and mortar' structures.[44] The conventional 'case' for an allocation to real estate derives from the fundamental characteristics of underlying cash flows and the evidence of realised returns, as represented by the indices most generally used to track the asset class.[45] The standard measure for the performance of directly-held properties (bricks and mortar) assumes no leverage, and is net of directly attributable property costs (but gross of portfolio overheads) and manager fees and tax. This represents what might be called 'pure' or 'plain vanilla' real estate. The performance of other forms of real estate exposure may therefore be judged in terms of how it compares with the performance of plain vanilla real estate.

The cash flows from real estate are generally treated as a blend of fixed income (contractual payments determined by the current lease) and variable income (uncertain future rental flows driven by market movements and occupancy rates). The fixed income component involves an element of credit risk and is priced to reflect the risk-free rate plus a credit spread determined by the quality of the tenant covenant, and hence with an expected return and risk above government bonds. The variable income element is largely driven by the state of the economy. Real estate cash flows can therefore be seen to be riskier than government bond coupons, on par with some types of corporate bond coupons, and less risky than equity dividend payments, partly because property rents are based on physical assets, but also because real estate cash flows are unleveraged, while equity dividends are leveraged by corporate debt. Real estate returns incorporate additional premia to compensate for the asset class's lower liquidity, higher transactions costs and holding costs compared with assets traded on security markets.

Drawing on the longest available UK returns series, Tables 2.1 and 2.2 compare real estate performance with the major asset classes over two different time periods. Column 1 of Table 2.1, which covers the longer period starting in 1951, indicates that, over long run time horizons, average real estate returns do lie between those of bonds and equities. The table also shows that real estate has

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43 For a useful introduction see http://www.prea.org/research/WhyRealEstatePREA.pdf and the NAPF guide, https://ols.napf.co.uk/membersarea/shop/details.asp?id=53&Blue=True

44 It is worth noting that this is the current position and there are other alternatives potentially and historically. The big one going forward is private rented residential; there are few funds at present but it is gaining traction with large asset managers. Also, historically, pension funds held let agricultural land and forestry.

45 The current industry-standard indices are produced by Investment Property Databank (IPD – a division of MSCI) for a large number of countries, alongside national providers in some (notably the National Council of Real Estate Investment Fiduciaries, NCREIF in the USA).

low correlations with the other asset classes and so is a good diversifying asset class. However, column 1 also reports a low volatility for real estate returns in comparison with the other asset classes. As mentioned previously, this is conventionally attributed to the smoothing effect of real estate valuations, which understate volatility and therefore overestimate the risk-adjusted Sharpe ratio.[46] Column 2 shows performance with 'de-smoothed' returns. The standard deviation is approximately doubled and the Sharpe ratio is approximately halved.[47] The de-smoothing procedure also slightly increases the correlation between real estate and both equities and bonds.

Table 2.1: Real estate and other assets: UK returns 1951-2012

	Real Estate Index	Real Estate De-smoothed[1]	Equities	Bonds	T Bill
Annualised	9.6	9.6	12.2	7.2	6.8
Average	10.1	9.9	15.1	8.0	7.0
Standard Deviation	10.0	19.7[1]	26.6	12.9	3.9
Sharpe Ratio	0.31	0.15	0.30	0.07	0.00
		Correlations			
	Real Estate Index	Real Estate De-smoothed[1]	Equities	Bonds	T Bill
Property	1.0	1.00			
Equities	0.29	0.49	1.00		
Bonds	0.13	0.25	0.49	1.00	
T Bill	0.12	-0.07	0.09	0.28	1.00

Sources: Scott, *The Property Masters*, IPD, and Barclays Capital Equity-Gilt Study

Table 2.2 Real estate and other assets: UK returns 1981-2012

	Real Estate Index	Real Estate De-smoothed[1]	Equities	Bonds	T Bill
Annualised	9.0	9.0	11.7	10.1	7.2
Average	9.5	9.2	13.0	10.9	7.5
Standard Deviation	9.9	13.4[1]	15.8	11.0	4.1
Sharpe Ratio	0.20	0.13	0.35	0.31	0.00
		Correlations			
	Real Estate Index	Real Estate De-smoothed[1]	Equities	Bonds	T Bill
Property	1.00	1.00			
Equities	0.39	0.45	1.00		
Bonds	-0.03	0.00	0.23	1.00	
T Bill	-0.01	-0.13	0.23	0.27	1.00

Sources: Scott, *The Property Masters*, IPD, and Barclays Capital Equity-Gilt Study
Note 1: De-smoothed using a lag 1 autoregressive formula, calibrated to set the standard deviation of real estate mid-way between equities and bonds.

46 The Sharpe ratio measures risk-adjusted performance and therefore helps to explain whether returns are due to investment skill or to excessive risk. The ratio is calculated by subtracting the risk-free rate (e.g. Treasury bills), from the rate of return for a portfolio and then dividing the result by the standard deviation of the portfolio returns.

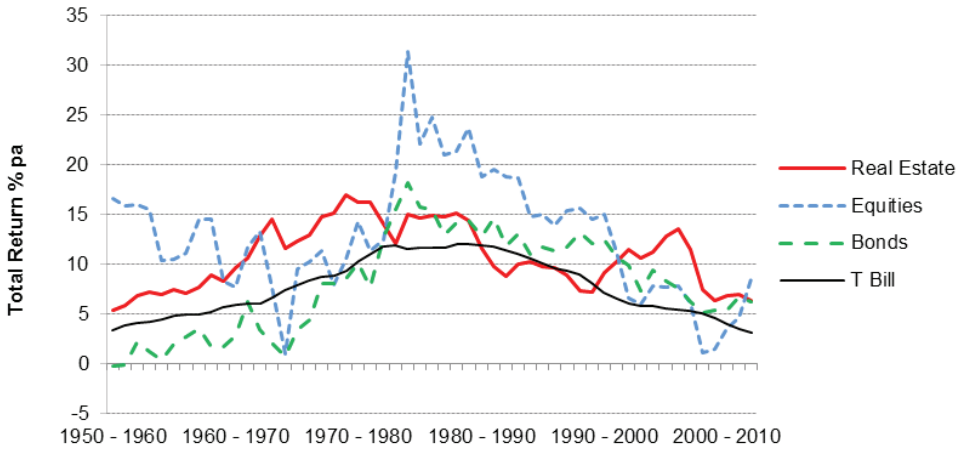
47 This is achieved by applying the standard lag 1 autoregressive formula, calibrated to set the 'true' standard deviation of real estate to an (arbitrary) value mid-way between equities and bonds.

Table 2.2 reports the same information as in Table 2.1, but for the shorter time horizon beginning in 1981. The underlying real estate index over this shorter period was more widely based than that used in Table 2.1 and the structure of the investment market was also closer to its modern form. In comparison with bonds, real estate posted what look like sub-par returns and a low Sharpe ratio against both equities and bonds. Nevertheless, as in Table 2.1, even after a de-smoothing adjustment, real estate still shows a low correlation with other assets, especially fixed income.

Figures 2.1 and 2.2 show that there has been quite a considerable degree of variability in returns and Sharpe ratios around the average returns reported in Tables 2.1 and 2.2. Real estate, in particular, has shown a tendency to have protracted periods of both relatively weak and very strong returns.

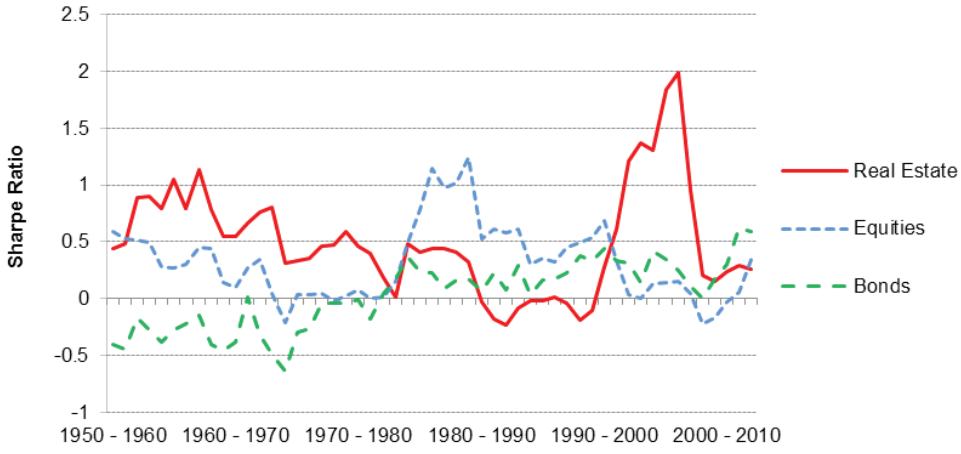
So although it is reasonable in theory to treat real estate as sitting between bonds and equity in terms of its long-run risk-return configuration (as reflected in Table 2.1), DC investors nevertheless need to be aware of realities reflected in Table 2.2 and Figures 2.1 and 2.2 in terms of short-term performance.

Figure 2.1: UK ten-year rolling returns by asset class, 1951-2012



Source: Scott, *The Property Masters*, IPD

Figure 2.2: UK ten-year rolling Sharpe ratio by asset class, 1951-2012



Source: Scott, *The Property Masters*, IPD

Pricing and liquidity

Contract-based DC platforms, in most cases, require daily pricing and daily liquidity. As discussed earlier, it seems that the demand for daily liquidity is a convention, rather than a regulatory requirement for DC. Nevertheless, life offices have invested heavily in their DC platforms[48] and they are unlikely to make costly changes just to accommodate real estate.

It is important to recognise the significance of the liquidity issue in real estate. In times of poor performance, property funds can suffer large and sustained redemption requests and could be in a position where they have to impose a redemption queue. This can spiral out of control, leading to a run on the fund, e.g., UBS Triton, or to a lesser extent, Aviva Property. In addition to the performance drag caused by forced sales, redemption queues can last six+ months, which is not suitable for a dynamic default or for a self-select investor who might be close to retiring.

So the perceived need for liquidity highlights one of the most problematic characteristics of the DC contract-based market for illiquid asset classes: however much it strives to be institutional, it must deal with the huge proliferation of individual contracts and accounts. Investment strategies might adopt an institutional approach and increasing scale might assist this process, but taking the 'retail' out of DC is presently a big challenge for the industry. It is for this reason that the trend towards trust-based schemes should be welcomed by managers of illiquid asset classes.

2.3 The sub-classes of real estate

It is important to understand the different sub-classes of real estate available for investment. The two sub-classes in use at present are funds of UK property and funds that invest in listed real estate (i.e., property) companies, typically in the form of real estate investment trusts (REITs). Asset managers refer to the former as 'unlisted' funds (since the underlying property is not listed on a stock exchange) and the latter as 'listed' (since the underlying real estate companies are listed on a stock exchange). Hybrid funds invest in a combination of the two, plus cash and possibly derivatives, although the use of derivatives is unusual at present in funds used for DC schemes.[49]

Listed companies and REITs

Listed real estate companies and REITs provide an alternative to funds of direct UK property as a way to access the asset class on a global scale. Listed companies invest in a range of commercial properties for much the same reasons that an institutional investor would do so. However, while investment in

48 The use of platforms appears to shape the demands that contract-based DC scheme decision makers make on asset managers. We understand that platforms vary in their capacity to deal with real estate – older versions being less flexible. A platform (confusingly, also known as a corporate wrap, corporate platform, benefits platform, benefits portal, and workplace savings platform) is an IT interface between the member and the scheme, plus, in many cases, other employee benefits, including even bicycles. There are about a dozen DC pension platform providers, such as Aegon, Aviva, Axa, Fidelity, Legal & General, Scottish Widows, Standard Life, and Zurich.

49 See Appendix 3 for more details of these fund types and the investment strategies they use.

listed companies eliminates the liquidity problem, it brings its own drawbacks because the investment performance will be influenced by general movements and sentiment in share prices as well as by the performance of the underlying properties. The volatility in share prices will also be increased by any leverage applied to the underlying investments.

This combination of factors gives rise to important questions over the use of shares in listed companies as a proxy for real estate. Are listed shares more like real estate or more like equities? To what extent do they preserve the critical diversification benefits of exposure to real estate?

The theory is that, over the shorter term, shares in real estate companies tend to behave more like equities because they respond primarily to stock market factors; over the longer term, share prices will reflect more strongly the value of the underlying real estate. The definition of shorter term and longer term is disputed, however. Some put it at three years; others at five or more. Hoesli and Oikarinen (2012) suggest returns converge over a three-year period for the US, UK and Australian real estate markets and conclude that 'REITs and direct real estate should be relatively good substitutes in a long-horizon investment portfolio'.[50] Yunus et al. (2012) demonstrate the existence of long-run relationships and short-run linkages between the private (direct, unlisted or unsecuritised) and the public (listed or securitised) real estate markets of Australia, Netherlands, United Kingdom and the United States.[51] Devaney et al. (2012) use transaction-based indices of direct real estate prices in their study of six European markets: France, Germany, the Netherlands, Sweden, Switzerland and the UK. These indices are more volatile than valuation-based indices and so imply a smaller difference in volatility between direct and listed real estate. Nevertheless, this study shows cycles with a minimum duration of 5.5 years in the listed and direct markets.[52]

Figure 2.3 appears to support the conjecture that listed real estate is more like equity in the short run and more like property in the long run. The correlations in Figure 2.3 look at the associations between listed and direct real estate, and other asset classes over varying investment horizons. Over a one-month horizon, listed real estate moves strongly in line with the equities market, and is not at all correlated with the real estate market. The correlation with equities falls with an increasing investment horizon, however, to 0.30 for returns over a five year rolling period, while the correlation with real estate rises to 0.50. Moreover, listed stocks lead the direct real estate market by around six months, even when direct returns are de-smoothed. Incorporating that lag raises the correlation between listed and direct real estate to more than 0.80.

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50 Martin Hoesli and Elias Oikarinen (2012) 'Are REITs Real Estate? Evidence from International Sector Level Data', Swiss Finance Institute Research Paper Series N°12 –15.

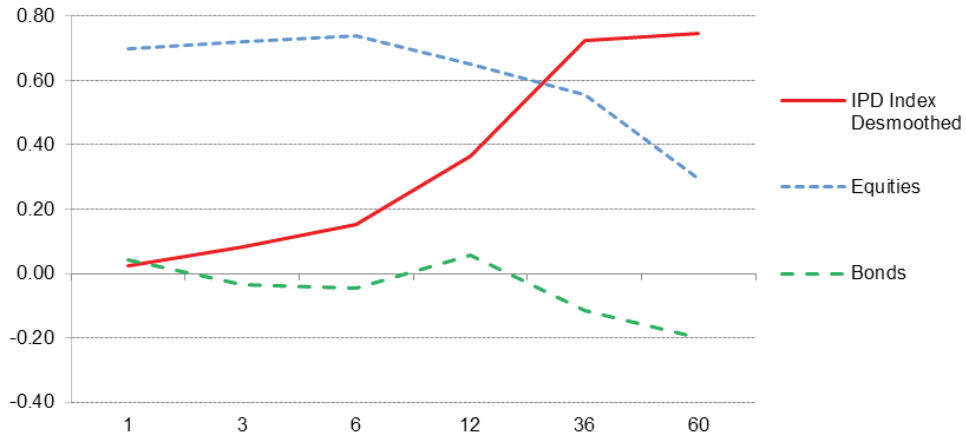
51 Nafeesa Yunus, J. Andrew Hansz, and Paul J. Kennedy (2012) 'Dynamic Interactions between Private and Public Real Estate Markets: Some International Evidence', Journal of Real Estate Financial Economics, 45, 1021–1040.

52 Steven Devaney, Qin Xiao, and Mark Clacy-Jones (2012) 'Listed and Direct Real Estate Investment: A European Analysis', EPRA Research, Square de Meeus 23B 1000 Brussels Belgium. Most previous research used valuation-based indices for the direct real estate market, but these have the problem of excessive 'smoothness' and lagging of market performance.

Maran et al. (2012) investigated the investment performance of real estate in France, Germany, the Netherlands, Sweden, UK, Pan-Europe, Australia and the US. Their investigation 'highlights the enduring characteristics of real estate as an asset class depicting long-term outperformance in key investment markets relative to bonds and equities. Moreover, direct real estate holdings demonstrate markedly lower levels of volatility relative to equities culminating in enhanced risk-adjusted performance credentials over the period 2002-2011'.[53]

Andonov et al. (2012) examine the investments of 884 US, Canadian, European and Australian/New Zealand pension funds in direct real estate and real estate investment trusts (REITs) over the 1990-2009 period. They find that 'larger pension funds are more likely to invest in real estate internally, have lower costs, and higher net returns. Smaller funds are more likely to invest in direct real estate through external managers and fund-of-funds, but largely ignore REITs. The additional investment layers significantly increase their costs and disproportionally reduce returns'.[54]

Figure 2.3: Correlation between listed real estate and other assets over varying investment horizons (in months): UK total returns 1987-2011



Source: IPD, EPRA, Datastream

Derivatives

Derivatives, in the form of total return swaps, futures, or options, in principle, offer an ideal solution to the problem of tracking a real estate performance index without the associated investment problems of tracking error, illiquidity and transactions costs.

Finance theory suggests that derivatives would be expected to deliver index returns in exchange for the risk-free rate plus a margin set by the cost of carry associated with trading in the underlying assets amortised over the period

53 Martin Maran, Peadar Davis, Michael McCord, Stanley McGreal, Graeme Newell, and Terry V. Grissom (2012) 'Commercial Real Estate Investment: Co-integration and Portfolio Optimisation',EPRA Research, Square de Meeus 23B 1000 Brussels Belgium.

54 Aleksandar Andonov, Piet Eichholtz, and Nils Kok (2012) 'Value Added From Money Managers in Private Markets? An Examination of Pension Fund Investments in Real Estate', Maastricht University Discussion Paper, September.

(tenor) of the derivative. For buyers of exposure to real estate, the bid margin for a one-year derivative exposure would therefore be set around the 5-6% saving of purchase costs (made up mainly of stamp duty plus agency and legal fees). For sellers, the ask margin would be risk-free, less the 2-3% savings in sales costs which would be incurred in the direct market. Theory therefore suggests property derivatives would be priced in a window between the premium set by purchase costs and the discount set by sales costs around the risk free rate, with the price at any point in time determined by the balance of buyers and sellers.

However, in practice, other features of the underlying asset market are likely to intrude upon the pure pricing model projection. Lags in index production and the high serial correlation in returns mean that an element of short- to medium-term predictability in index returns should also be embedded in prices. Because of the high specific risk and substantial tracking errors of a portfolios against the index, a seller of exposure through derivatives cannot fully hedge future payments due by holding the underlying asset. Perhaps most importantly, the illiquidity of real estate means that holders of derivatives cannot adjust or close-out their positions by taking offsetting positions in the underlying assets.

A large and active market in real estate derivatives – especially if they were available for different market segments – would have many valuable applications in real estate fund management, notably hedging overall exposure, adjusting portfolio weightings and providing a home for spare cash awaiting investment. Derivatives that covered a spread of countries would be an extremely attractive way of avoiding the heavy information and intermediation costs of constructing global portfolios via direct or fund investments.

For these reasons, over the past 10 years, the real estate investment industry, index producers and investment banks have made considerable efforts to promote derivatives markets. In the UK, in particular, an array of instruments, regulations, intermediaries, and trading desks was established in the mid-2000s, in the first instance based on total returns swaps in an over-the-counter market; latterly in the form of a Euronext exchange-traded index future. Despite initial expectations that real estate would rapidly achieve the scale and liquidity in derivatives trading seen in other asset classes, the realisation of those ambitions has been extremely disappointing.

Activity in the UK swaps market, launched in 2003, set off on a rising trajectory which was, unfortunately, cut off sharply by the GFC and volumes have dwindled to minimal levels since then. Even at its peak, low liquidity kept dealing spreads very wide, and market volume was insufficient to support the number of banks and dealers attempting to operate in the sector. With the shrinkage in volume after the GFC, therefore, much of that trading infrastructure has been eroded.

The focus of UK derivatives activity has shifted to the Euronext Futures market, but, while trading volumes are running at a level which indicates a continuing interest in the concept, the scale again remains too small to offer a viable derivatives strategy for large investors.

Real estate derivatives, in summary, remain highly attractive in principle, but very disappointing in practice. The market is currently too small in size and uncertain in pricing and liquidity to play any significant role in the strategies of large-scale investors. Nevertheless, industry interest in the concept remains strong. Many pension funds now have mandates which allow the use of derivatives and there

are several derivatives-based funds open to investors. Given that derivatives would potentially be a good match for the index-tracking, low cost, pricing and liquidity requirements of DC funds, it might be hoped that the growth of the DC market would foster the development of an active market, although, given past experience, it is difficult to predict the form in which it might emerge.[55]

2.4 Fund structures [56]

In this section, we discuss the fund structures or investment vehicles that are used for hold real estate.

To date, the major funds in the UK are balanced open-ended funds run by, for example, Aviva, BlackRock, L&G Investment Managers (LGIM), M&G, Schroders, Scottish Widows Investment Partnership (SWIP), and Standard Life Investments (SLI).

Traditional asset managers linked to insurance companies with a life office DC provider might offer a conventional insurance/life pooled fund, while asset managers generally seemed to prefer Property Authorized Investment Funds (PAIFs), with a small number favouring a UCITS IV vehicle.[57] Clearly, funds will need to accommodate DC's requirements for appropriate tax treatment and also to accommodate the relevant pricing and liquidity requirements.

Real estate funds are differentiated by style – a spread of investment objectives achieved by varying financing and investment policies – as well as by structure. Defined by investment objectives, style targets points along an efficient risk-return frontier, most often grouped into three categories. Core funds are those which sit at the lower end of the risk-return spectrum, in essence aiming at returns and risks close to a general market index – for the UK, this implies medium to long run expected rates of 6% to 8% p.a. At the other extreme, opportunistic funds aim to achieve private-equity-type returns, typically 15%+. Value-added funds occupy the mid-range. A fourth category – core plus – is sometimes used to denote funds setting return targets a little above the general index.

Before looking briefly at the DC-friendly investment vehicles currently on offer or undergoing conversion, it is helpful to bear in mind the underlying generic fund structures, which are open-ended funds and closed-ended funds.

Open-ended funds

Open-ended funds (OEFs) are a long-established form of real estate fund in the UK and many other countries. In the UK, in the form of Property Unit Trusts, they date back to the 1960s; with the growth of institutional investors in the 1970s, other forms – Insurance Managed Funds, Pensions Managed Funds – catering for smaller institutional investors were added. Through the 2000s, the shift of

55 One example we encountered in the research was inProp Capital's Trident fund, which is an open-ended fund with fortnightly liquidity, which invests primarily in REITs, REIT debt, credit default swaps (CDS), commercial mortgage-backed securities (CMBS), and property derivatives.

56 See Appendix 3 for a summary of available funds, including domicile, type, legal form, whether they are closed- or open-ended, and the listed/unlisted structure.

57 UCITS stands for Undertakings for Collective Investment in Transferable Securities. We discuss this below.

institutional investors to indirect investment vehicles and the growth of retail investors drove both a rapid expansion in the size of the open-ended funds market and further variation in forms to include, for example, offshore-domiciles and differentiation by style.

The generic pricing of OEFs – based on a periodic valuation of assets, with trading costs covered by a bid-offer spread – mean they offer for buy-and-hold investors a close reflection of the pure real estate performance represented by a valuation-based index of direct investment. Against direct real estate, they offer additional liquidity through purchase and redemption via the fund manager, and potential diversification in portfolios that can run to valuations of £1bn-£2bn, comprising 50-100 individual assets. For UK OEFs, redemption prices are based on external valuations of the fund portfolio once a month. Unit prices may, however, be quoted on a more frequent or daily basis through 'desktop updatings' to account for acquisitions, disposals or other major portfolio events. Redemption notice periods, similarly, vary across individual funds: some with quarterly redemption windows and notice periods, others which allow daily trading.

Given the illiquidity of the underlying assets, real estate OEFs have to hold balances of cash or highly liquid assets to meet short-term demand for redemptions. Holdings of liquid reserves vary with the redemption terms: for those with longer redemption notice periods and frequencies (typically quarterly in the UK), liquid reserves average about 5% of gross asset value; for those with daily trading, reserves are about 20% of gross asset value. If held in cash, the liquid reserve will be expected to dilute fund return – the 'cash drag' – by the difference in returns between short-term interest rates and real estate. If held in liquid risky assets, the cash reserve may introduce additional volatility. In the past, some UK OEFs have held liquid reserves in the form of listed real estate stocks, on the grounds that this offers high liquidity as well as a form of exposure to the asset class. The tendency for real estate company share values to fall more heavily and somewhat in advance of direct real estate, however, means this policy may lead to losses in liquid reserves at a time when fund redemptions are likely to be higher.

OEFs may close to redemptions when the level threatens to erode the liquid reserve and force asset sales to the detriment of the remaining investors, or, less commonly, may delay or close to unit purchases when inflows cannot be invested quickly enough. Prior to 2008, there was only one example of a closure to redemptions among UK OEFs, although in other countries (e.g., Netherlands, Germany and the US) they had occurred more often. The sharp and protracted drop in values through 2007 and 2008 did, however, lead to many redemption closures in the UK. Therefore although, under normal circumstances, OEF units are much more liquid than direct property, there is an element of liquidity risk which theory suggests should be reflected in pricing.

Closed-ended funds

Closed-ended funds (CEFs) in several respects represent the antithesis of open-ended funds: a predetermined lifespan as opposed to an indefinite one; a fixed capital base rather than variable; and no provision for liquidity through trading with a fund manager. In the UK, CEFs became a major feature of the real estate investment market in the mid-1990s. The early CEFs took the form of limited partnerships, used mostly by UK institutional investors to spread the ownership of very large assets (such as Bluewater Park) or to access specialist managers

in niche market sectors. Rapid growth in the 2000s saw CEFs develop into a wider range of corporate forms – Investment Companies and Joint Ventures, for example – catering for the full range of investment objectives and investors. CEFs, in particular, became a major vehicle for foreign and high-net-worth investors. Moreover, because direct investment is a risky way of accessing overseas markets – and there are considerable regulatory and tax complications in constructing multi-country open-ended funds – CEFs became a default route for the growth in cross-border investing in the 2000s.

Although CEFs play a substantial role in the investment strategies of DB pension schemes, the structure appears to conflict with the pricing and liquidity requirements of DC schemes, and there is no provision for return of capital prior to fund termination. Although there has been an increasingly active secondary market in back-to-back trades, which may be facilitated via general partners or trading platforms – CBRE/GFI PropertyMatch, and JLL Corporate Services, for example – trading volumes have been highly variable. Pricing of CEF participations also swings from premiums to discounts to net asset value (NAV) – which also raises a question mark about whether it is realistic to value holdings at fund NAV. CEFs which raise capital in advance of property acquisitions or conduct a significant amount of active asset management will have irregular patterns in their draw-down of committed capital and return of cash, so to maintain an allocation to CEFs will require investment across a large number of funds and variable holdings of cash. Finally, CEFs are more likely to adopt a specialist focus or pursue management strategies, with corresponding increases in both likely tracking errors against the plain vanilla real estate index and marked differences in the level of fees.

The most common means of targeting higher risk and return targets is leverage. This ranges considerably: zero, 'moderate' (for example up to 50% loan to gross asset value ratios) for core and core-plus funds; up to 60%-70% for value added; rising to more than 70% for opportunistic. Assuming typical rates of expected return and the cost of debt, increasing leverage on average assets (i.e., those expected to produce core returns) will not be enough to generate value-added or opportunistic target rates of return. More aggressive styles, therefore, need to hold assets with above-average rates of return. Managers can aim for excess returns on underlying assets by targeting higher risk markets, undertaking active asset management such as re-leasing or refurbishment, or higher risk activities such as development or corporate investments.

Specialisation – or lack of it – is one further dimension that applies to the diverse range of unlisted fund characteristics. Diversified funds pursue multi-sector strategies within a national market, or, less commonly, multi-country strategies across markets. Given the high specific risk of individual property assets, portfolios upward of 30 properties, or about £500m in value, are required to achieve low tracking error. Specialist or focused funds may be distinguished by specific property types or locations, typically rationalised on the argument that they offer economics of scale or particular expertise in the target markets.

The most important example of a CEF is a real estate investment trust (REIT). A REIT is a type of real estate company allowing anyone the opportunity of investing in income-producing real estate. Income-producing real estate refers to land and the improvements on it – such as apartments, offices or hotels. REITs may invest in the properties themselves, generating income through the collection of rent, or they may invest in mortgages or mortgage securities tied to the properties, helping to finance the properties and generating interest income.

REITs allow anyone to invest in portfolios of large-scale properties the same way they invest in other industries – through the purchase of stock. In the same way shareholders benefit by owning stocks in other corporations, the stockholders of a REIT earn a share of the income produced through real estate investment – without actually having to go out and buy or finance property. Listed REITs are a triple-play asset class, providing a combination of investment income, long-term capital appreciation and inflation protection.

Why should someone invest in REITs – what advantages can REITs potentially offer investors?

Diversification: Over the long term, equity REIT returns have followed a path that has been different from the path of returns for other stocks, an important source of portfolio diversification.

Dividends: REITs must pay out at least 90 percent of their taxable income as dividends to shareholders who, in turn, pay income taxes on those dividends at ordinary rates. Significantly higher dividends on average than other equities, the industry's dividend yields historically have produced a steady stream of income through a variety of market conditions.

Liquidity: Shares of publicly traded REITs are readily converted into cash because they are traded on the major stock exchanges.

Performance: Over many long term holding periods, publicly traded REITs have outperformed the leading stock market indexes, while offering long term direct real estate performance.

Transparency: Publicly traded REITs operate under the same rules as other public companies for securities regulatory and financial reporting purposes, with 90% of European REITs following EPRA BPR reporting guidelines. This scrutiny provides investors with a measure of protection and more than one barometer of the REIT's financial condition.

Growth: Over long holding periods, equity REIT returns have tended to outpace the rate of inflation, helping investors hedge the purchasing power of their portfolios.

REIT characteristics

The following provides a simple overview of the main characteristics of an 'attractive' REIT structure:

- Legal Form – stock company with limited liability, recognised internationally
- Mandatory listing condition – no private REIT option
- Scope of activities – primary focus on property investment activities, although third party development activities could be allowed but not benefit from 'tax flow through' treatment
- Leverage – restrictions to avoid the distributable income being eroded
- Distribution obligation – at least 80% net tax-exempt income
- Conversion regime – allows a company to convert to a REIT and pay tax on the latent capital gains at a reduced rate

- International investments – a weakness in certain European regimes is that they are not allowed to invest overseas.

Tax revenues for governments

While REITs do not pay corporation tax, they do pay a number of other forms of taxation that offer Governments stable sources of income. The following are main sources of taxation:

- Exit tax receipts – member states that have introduced REIT regimes in Europe have raised considerable amounts of taxation revenue through a 'conversion charge' or 'exit tax' – a payment made as consideration for benefiting from the tax transparency provided by REITs
- Increased withholding tax receipts – mandatory distribution of 90% or more of their annual profits to shareholders – the tax is paid by the shareholders of the REIT
- Other taxes include:
  - Corporation tax paid by REITs on non-qualifying income and gains
  - Transfer taxes
  - Property taxes
  - VAT
- Tax increased transaction activity – the tax take from transfer tax on corporate share transactions, direct property transactions and the transfer of shares in REITs themselves is likely to increase following the introduction of such a vehicle and as the market evolves.

Source: Consilia Capital

Legal forms

DC schemes are classed as 'exempt' investors. This means that they qualify for special tax treatment, including exemption on investment income and gains and therefore invest in funds that can provide this framework.[58] In relation to real estate, the funds they use are vehicles that can pay gross dividends from property rental income without the deduction of corporation tax.

To date the main legal forms used for funds of real estate sub-classes are:

- Pooled life assurance (unitised). These are the large life assurance funds, typically with scale and a long track record, e.g. Aviva, BlackRock, L&G, M&G, and Threadneedle.
- PAIF. This is a relatively new structure that typically is being used for conversions of existing funds, e.g., exempt property unit trusts. Such conversions aim to preserve scale and heritage and avoid the deduction of tax on rental income,

58 See http://www.hmrc.gov.uk/pensionschemes/understanding.htm#3

for example, by moving the taxation point from the fund to the investor.[59] Examples include M&G, RLAM, Schroders and Scottish Widows.

- Onshore UCITS IV. This is an 'Undertakings for Collective Investment in Transferable Securities' fund established by the European UCITS IV Directive in 2011. UCITs are regulated products marketed extensively in Europe and which can accommodate a wide range of investments. Pacific Real Estate Capital Partners offers an onshore UCITS IV fund with a tax framework for exempt investors. It invests in UK and international real estate indices.

From the available evidence, we were unable to identify very significant differences in these legal forms where they are used to hold the two main real estate sub-classes that appeal to DC schemes, namely funds of UK property and REITs. The ability to use derivatives, which is possible through a PAIF, for example, might determine the preferred vehicle going forwards, but it is too soon to tell.

The pooled life assurance vehicle certainly has a strong lead, since it is the vehicle used historically in the DC market. In the interviews, we asked if this legal form was a better 'fit' for life office DC platforms, but consultants said that the preference was more to do with the scale (and therefore diversification), heritage (brand and longevity in the market), and performance of such funds. It is noteworthy, perhaps, that NEST selected this type of legal form for its 20% asset allocation to real estate in 2013. Elsewhere in the market, scheme providers tend to use their in-house funds for real estate allocations and these are also life funds, managed by the life offices and their sister asset management companies. Of the small number of schemes that outsource asset management – other than NEST – the main example of real estate we encountered was in the form of REITs.

2.5 The cost of real estate funds

Asset managers and DC schemes keep very quiet about the cost of funds for obvious commercial reasons. Published average costs, therefore, provide no clear indication about actual costs, which might be agreed in the context of expectations of scale economies, which, if not achieved, would trigger a fee increase. We were told that a typical fee for a real estate fund for the institutional market lies in the 45-75bps range. Most DC schemes aim to pay less than 25bps in aggregate for asset management, but the higher cost of real estate (and funds of alternatives, for example) can be offset by the very low fees they pay for their mainly passive funds.

Figure 2.4 from LCP's Investment Management Fees Survey 2013,[60] shows how real estate annual fees compare with other asset classes, based on the AMC but including additional costs to present the TER, although importantly this does not include transaction costs. LCP asked for transaction costs, which are incurred on as a result of the underlying assets being traded, but about two-thirds of asset managers did not provide these, which, as the consultant said, means 'that the real cost of investing in a fund remains unclear'.

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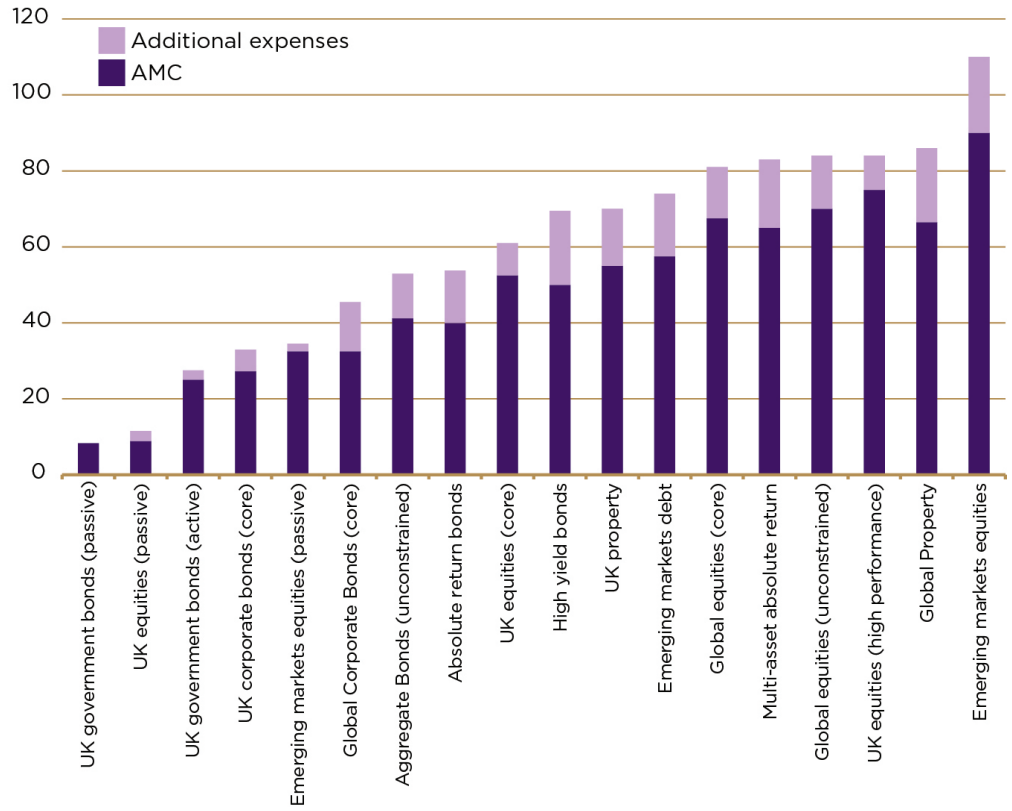
59 See KPMG, 'Property Authorised Investment Funds', 2011.

60 www.lcp.uk.com/news--publications/publications-and-research/2012/dc-fees-survey-2012. See also www.dcisions.com/assets/downloads/2012_DCisionsReport_Web.pdf

Figures 2.5 and 2.6, also from the LCP fee survey, show the cost of UK and global real estate funds. In terms of the UK market, there is little evidence of scale economies in mandate size being passed on via lower fees; indeed, there is strong evidence of an effective lower bound to fees at 50bps. There is greater evidence of economies of scale operating in the global market, although median fees are higher for most mandate sizes.

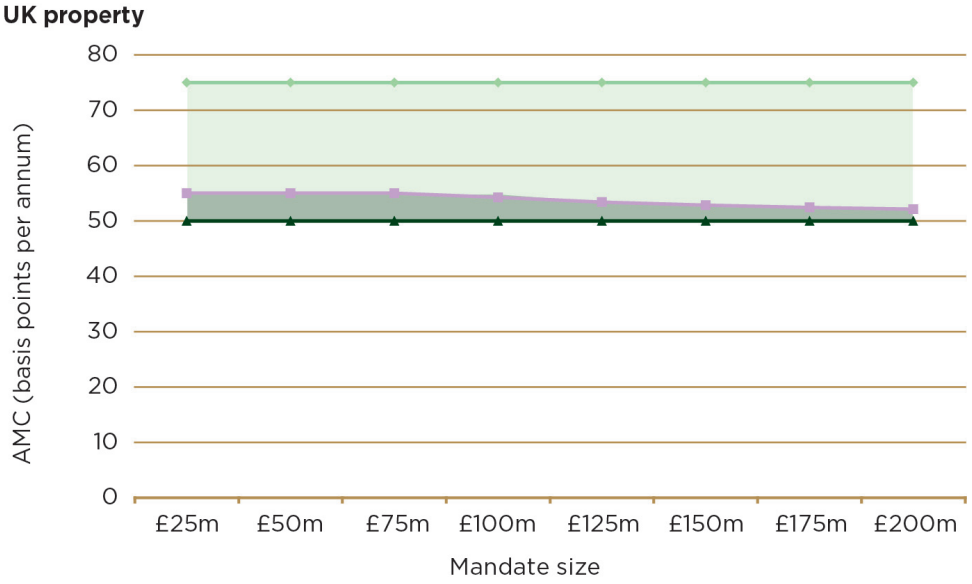
Figure 2.4: Asset class AMCs and TERs for UK pension funds 2013

Overall costs for a range of asset classes



Source: LCP Investment Management Fees Survey 2013

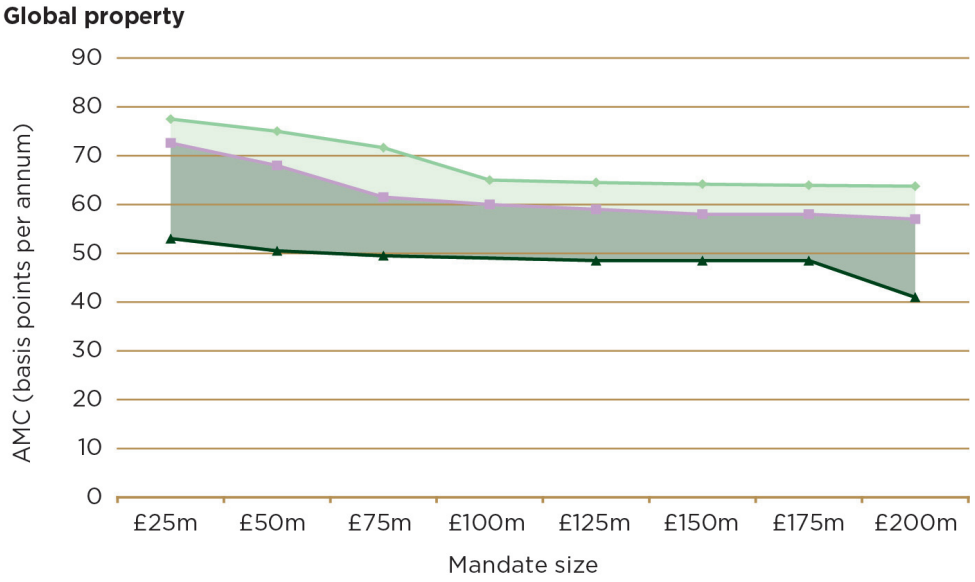
Figure 2.5: UK real estate AMC relative to mandate size



Key: The top line is the top quartile for fees, the middle line is the median and the bottom line is the bottom quartile.

Source: LCP Investment Management Fees Survey 2013

Figure 2.6: Global real estate AMC relative to mandate size



Key: The top line is the top quartile for fees, the middle line is the median and the bottom line is the bottom quartile.

Source: LCP Investment Management Fees Survey 2013

2.6 Is it possible to determine the optimal weighting of real estate in a default fund?

Assuming that DC professionals accept the case for real estate in default funds, the next obvious question is: 'how much'? The published asset allocations for multi-employer default funds provide an indicative answer to this question: the actual weightings in multi-employer default funds at the time of writing varied between 5% and 20%. Is it possible to assess whether this range of weightings is optimal?

Before attempting to answer this question, we consider the process by which the above actual weightings were determined. Put simply, our interviews indicated that the weightings in DC default funds are determined via a process that begins with some form of quantitative modelling and concludes with one or more 'judgmental adjustments' on the part of the DC decision-makers.

There were significant differences in opinion over which type of quantitative model was appropriate. A number of providers used standard mean-variance portfolio optimisation (MVPO) models, typically with some form of de-smoothing of real estate returns. Without this de-smoothing, as mentioned above, the portfolio optimiser would give a high weight to real estate in the optimal portfolio. To avoid this, real estate returns are de-smoothed. De-smoothing is one example of a 'judgmental adjustment'. Another example is to look at the implied weighting after de-smoothing, decide it is still too large and to keep cutting it until the weighting 'looks right', very much a 'finger-in-the-air' approach as it was described to us.

We encountered a number of objections to the MVPO modelling methodology:

- The standard MVPO framework generates results that are very sensitive to the assumptions made about the expected return and risk parameters.

  There is no commonly accepted way of using historical returns to generate forward-looking return and risk parameters. Similarly, correlation estimates are sensitive to the sample period used and historic correlations can move significantly over time, as we saw above. Small changes in the expected return or risk parameters can lead to large changes to the optimal asset allocation generated by the MVPO model. As a consequence, results usually have to be heavily constrained in what feels like an arbitrary (finger-in-the-air) manner.

- The standard MVPO framework does not embrace new measures of risk.

  Following the GFC, there is a view that volatility (as measured by standard deviation, and a key part of MVPO) is not an appropriate risk measure. Alternative measures, such as maximum drawdown and value-at-risk (VaR[61]) are increasingly popular. In addition, one of the key types of risk – illiquidity risk – is not encapsulated within the standard MVPO framework. This particularly affects real estate whose illiquidity should generate an illiquidity premium for long-term buy-and-hold investors in real estate. The standard MVPO model ignores the issue of illiquidity.

61 VaR – A statistical technique used to measure and quantify the level of financial risk within a firm or investment portfolio over a specific time frame. VaR is used by risk managers to measure and control the level of risk that the firm undertakes. The risk manager's job is to ensure that risks are not taken beyond the level at which the firm can absorb the losses of a probable worst outcome.

- The standard MVPO framework does not deal with liabilities.

  Within DC schemes, as in DB, the ability of a portfolio to match its future pension liabilities arguably should be the main determinant of a pension fund's asset allocation, rather than raw (or even risk-adjusted) returns on asset classes. As we discussed at the beginning of this section, in theory liability-driven investment (LDI) techniques (as part of ALM) for DC might enable members to target (but not guarantee) an earnings replacement ratio (RR).

  While such techniques are coming to the market, only the most sophisticated DC scheme designers currently use them.[62] Resistance to LDI from schemes and asset managers in the market is based on the assumption of additional cost and complexity and also on the potential variability in contribution levels and annuity rates.

  The greater use of strategies that target a particular replacement ratio might lead to the more widespread use of real estate, not just in the accumulation phase (the default fund), but also into decumulation, where the asset class could be used to back insurers' annuity books and form part of target date funds that could be used for a comparatively low cost and flexible form of income drawdown.[63] A number of consultants are therefore seeking to determine what specific forms of real estate vehicle can achieve in terms of matching future cash flow liabilities, and enhancing an existing portfolio profile.

- The standard MVPO framework does not deal with de-risking.

  The optimal asset allocation will change over time. The risk, return, income, inflation and capital protection requirements will change through the de-risking glide path.

- General asset class classifications are being replaced by investment characteristics.

  MVPO relies on standard asset classifications such as equities, bonds, real estate etc, with no differentiation between the sub-sectors available in each classification with their different investment characteristics, such as income generating, capital growth potential, inflation protection, risk reducing, or liquidity enhancing. To illustrate, over the last few years, around 70% of allocations to real estate have gone to dedicated property income funds. The conclusion that we draw from this is that investors have been seeking income as a characteristic, in general, rather than real estate per se.

As a result of these objections, some market professionals – most notably investment and actuarial consultants – have developed proprietary models which they regard as superior to MVPO models. However, they were not able to share with us the structure of their models. We conclude from this that there does not appear to be a single universally accepted transparent alternative in use by the consultants or providers.

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62 See, for example, Hymans Robertson, Guided Outcomes, http://www.hymans.co.uk/what-we-do/services/defined-contribution-consulting.aspx, and Dimensional's Managed DC, http://www.dfaus.com/service/dimensional-managed-dc.html

63 See AllianceBernstein's Retirement Bridge, https://www.alliancebernstein.com/Research-Publications/Research-Articles/DCUK-Retirement-Bridge/Stories/DCUK-Retirement-Bridge.htm

As a consequence of the criticisms of standard portfolio optimisation models and the lack of transparency of the proprietary models, we are not able to provide a clear answer to the question: 'how much' real estate should be in the DC default fund. Instead, we are left with the observation that the new multi-employer default funds at the time of writing are investing between 5% and 20% of their portfolio in real estate, with an average of 10%. This weighting is justified on the following grounds. In the accumulation phase of DC schemes, real estate is justified by its growth potential and its potential to provide a long-term inflation hedge, which is considered important in the latter years of the default fund's accumulation phase when de-risking takes place in the run-up to retirement. It is justified by its income-generating potential in the decumulation stage. The next section looks at three examples of default funds and their current exposure to real estate.

2.7 Examples of default funds using real estate

NEST is widely considered as a benchmark for auto-enrolment schemes in relation to governance, investment strategy and charges (Table 2.3). This does not mean its competitors regard it as the benchmark for asset allocation, but its prominent position in the market, as the government-endorsed scheme for auto-enrolment, does mean that when NEST innovates, its competitors have no choice but to take notice. Some might act quickly to add real estate as a core asset class in the default fund, but others might want to wait to see what the impact of such a high allocation to real estate has on volatility and performance. This is an important point because the performance and volatility of the new auto-enrolment default funds are under close scrutiny. Where funds make a major change in investment strategy, it will be essential to be able to demonstrate that this adds value over time.

Table 2.3: Asset allocation for the growth phase in NEST's default fund

Real estate* 20%, of which:

- UK 13%
- Listed 7%

Equities 47%, including:

- Global developed
- Global small cap
- Asia-Pacific
- Emerging markets

Other assets 33%, including:

- Credit
- Emerging market debt
- Other

Note: *NEST classifies real estate as a 'real asset'. The allocation of 20% to real estate is expected to be reduced in future because NEST intends to incorporate other illiquid asset classes, e.g. infrastructure, within this 20% overall allocation to real assets.

Source: NEST

B&CE's People's Pension, like NEST, has an independent trustee board. It outsources asset management to a single manager, in this case LGIM, although unlike L&G's master trust, this multi-asset fund does not include real estate. As is evident from Table 2.4, B&CE's asset allocation and glide path are quite different from NEST's.

B&CE's outsourcing arrangements are similar to the BlueSky and the Pension Trust's Smarter Pensions schemes, both of which use a single third-party asset manager – in this case AllianceBernstein, which, as mentioned above, provides target date funds, which comprise a portfolio of third-party asset manager funds (the 10% allocation to REITs is managed by L&G).[64]

Table 2.4: Asset allocation for the growth phase in People's Pension default fund

UK equities 39.3%

North American equities 14.3%

Europe (ex-UK) equities 12.1%

Bonds 13.8%

Cash 6.4%

Asia-Pacific (ex Japan) equities 4.8%

Emerging market equities 4.5%

Japan equities 4.3%

Commodities 0.5%

Source: B&CE

Consultants work closely with the trustees of large single-employer trust-based schemes, where they advise on the asset allocation and the appointment of managers, which makes this an important market for asset managers. Some consultants favour the use of diversified growth funds (DGFs), which offer a multi-asset strategy and frequently include illiquid asset classes.

One scheme we examined allocates 50% to Standard Life Investment Management's diversified growth fund GARS (Global Absolute Return Strategies), which in 2013 incorporated a 5% allocation to real estate. Certain larger employers have also favoured the DGF model for their default investment strategy, for example Whitbread, which allocates 75% to the Schroders DGF, with the remaining 25% in passive equity mandates. At the time of writing, the Schroder Life DGF held only 0.3% in real estate, as is shown below in Table 2.5. However, this is expected to increase in the near future.

There has been a lot of debate about the prospective role of DGFs in the DC auto-enrolment market, since they provide a ready-made multi-asset strategy. However, we understand that the cost of these funds, together with the volatility associated with the quasi-hedge-fund investment strategy adopted by certain asset managers, means that they might struggle to meet the more cautious approach to risk and volatility that has come to characterise the auto-enrolment default fund market.

64 Another example is Dimensional which provides the fund for SuperTrust (www.supertrustuk.com)

Table 2.5: Asset allocation in Schroder Life Diversified Growth Fund [65]

Equities 46.8%

High Yield Debt: 14.6%

Absolute Return 6.8%

Emerging Market Debt 6.8%

Investment Grade Credit 4.3%

Infrastructure 3.4%

Commodities 1.9%

Private Equity 1.2%

Leveraged Loans 1.1%

Property 0.3%

Cash 12.8%

Source: Schroders

65 As at June 2013

Section 3: The Interviews

This section represents the results of more than 20 in-depth interviews with practitioners in the DC and asset management markets to ascertain their views on asset allocation for the auto-enrolment default investment strategies ('default funds') designed for the majority of DC scheme members who do not wish to make their own investment decisions. Topics ranged from the current and prospective role of real estate in default investment strategies, the construction of default funds, and the relationships between DC scheme providers and asset managers, which included perceptions of levels of expertise and knowledge.

This part of the research is includes a special focus on specific schemes that recently have incorporated real estate as a core asset class in their auto-enrolment default funds. The interviews are discussed under appropriate headings, but there will inevitably be overlaps. This is an inevitable consequence of qualitative research, where interviewees often discuss several points in a single comment. Our interviewees are anonymised, so that they can speak in a candid manner and 'tell it how it is'. Interviewees are identified by descriptions, such as 'asset manager', 'consultant' and 'DC scheme provider', the generic term we use to denote the contract- and trust-based scheme providers, which include independent schemes, traditional life offices and the small number of asset managers that also have a life arm. Additional comments on the retail DC market are included in Appendix 2.

The majority of interviews took place in late-2012 and early 2013. In the short time that has elapsed since then, it is evident that the decision-makers for DC default funds are recognising the potential real estate has to offer and that real estate asset managers are meeting the demands of default funds in relation to pricing and liquidity.

Despite this increasing use of real estate in DC, the interviews demonstrate evidence of significant barriers or disconnections between the real estate and DC communities that will not disappear overnight. Real estate asset managers tended to argue that DC default fund investment strategies are under-developed and that scheme designers do not understand the characteristics of this asset class and also the role that different sub-classes can play in a portfolio. For their part, DC practitioners argued that they are the DC experts and that they are the customers; that real estate asset managers are stuck in the DB past and do not strive to understand how DC works, instead developing over-engineered strategies that are not appropriate.

While it might be argued that such disconnections between providers and asset managers characterise the pensions market as a whole, it was evident from the interviews that it is also present within large multi-line or multi-service organisations, where experts in real estate and DC work in separate silos and do not always communicate effectively with each other.

A persistent problem that emerged from the interviews was the confusion over terminology. This is due to the inevitable problem of each community having its own jargon, but the problem is exacerbated by the fact that commonly used terms in both markets mean different things or have different connotations. Asset managers refer to real estate; DC practitioners refer to property and tend to view the term real estate as an American invention, which is not always

perceived as a 'good thing', particularly when discussing the UK 'property' market. 'Active' management in the DC world describes a fund where the manager makes all the investment decisions, as opposed to passive funds, which track an index. In real estate 'active' usually denotes an aggressive high-return style. A third example is 'annuity', which is a DC decumulation vehicle – an insurance product that provides a guaranteed income for life in exchange for the accumulated fund – but, in real estate, the term denotes long-term secure income from an asset. Clearly there is a need for practitioners to develop a common language or to improve their bilingual skills.

Behavioural factors and disconnections

The differences in opinion between the real estate asset management and DC communities were very evident and at times were characterised by what we can only describe as a degree of mutual intolerance, which indicated that there are presently behavioural barriers to improved communication.

The following comments reflect opinions among asset management about the DC market:

> *The DC market is under-evolved and is not yet ready for an institutional approach to real estate. It clings to its retail roots and is overly-simplistic.* Asset manager

> *The DC market is run by people who think appearance is more important than content, cost more important than value, and administration more important than asset management.* Asset manager

Real estate asset managers were also frustrated by the poor DC market data and the fact that it could be difficult to identify the key DC decision-makers:

> *DC market data are unbelievably poor in terms of AUM. There is so much double-counting, it makes it impossible for asset managers to estimate the current size and potential growth prospects in this market.* Asset manager

> *Who do we talk to in DC? Who are the real decision-makers? It's impossible to identify them – there is no central control.* Asset manager

> *If you want to talk to a DC scheme about real estate, it's virtually impossible in a lot of cases to see who is in charge of investment decisions. Is it the life office, the trustees, the employer, the members, the consultant, or any combination of these parties?* Asset manager

Following on from the last comment, asset managers that do not have their own life office (the majority) felt that those responsible for investment strategy in most DC schemes were conflicted because they had access to – and usually used – their own in-house funds.

The next set of comments present the DC point of view of real estate asset managers:

> *DC is a fiercely competitive market at present. If you're not a top-five player by 2020, you're out. We've had to drive costs down to the extent where business is unprofitable and where future success is predicated on achieving scale. Asset managers have to play this game or keep out.* DC scheme provider

Property asset managers don't get DC and our technical requirements. They don't get the fact that we have to take liquidity and cost very seriously – otherwise we will not be competitive. We are the customers here – they need to meet our needs. Instead they keep on telling us why we've got it all wrong. Life office

You could drive a truck through the gap between the two markets. Over the past 10 years, the DC scheme market has been forced to focus increasingly on transparency, both of fund structures and also of costs. In the meantime, the property market seems to have been working hard to develop products that are unnecessarily complicated. Consultant

Property asset managers have come up with a lot of investment vehicles that simply don't apply in the DC market – so, they've got solutions alright, but to the wrong problems. It's only very recently that they've started asking us, the customers, what it is we really want and need and why. DC scheme provider

Some of the routes to real estate are simply weird. If you have to go via a hedge fund, then the structure is very complicated and transparency can be poor, which can present insurmountable problems for a modern DC governance strategy and also for regulatory compliance. DC scheme provider

The first rule of trusteeship is that you don't invest in something if you don't understand it. Some of the property wrappers [meaning fund structures] are very complicated; others just don't do what the asset manager claims. Take REITs, for example. An asset manager wrote to me promoting a new report. His opening line was: 'Real estate securities provide the benefits of commercial real estate investing without the cost or illiquidity of owning property directly'. I'm no expert, but my understanding is that REITS represent about 10% property and 90% equities in the way they behave. That does not equal 'the benefits of commercial real estate' in my book. Independent trustee

While several major schemes have embraced real estate as a core asset class (as opposed to a component in a fund of alternatives), asset managers were aware that there might be conflicts of interest on the part of decision-makers, such as life offices in relation to contract-based schemes, and trustees of multi-employer schemes where the provider is also an asset manager:

Client demand is the real issue for asset managers trying to get a share of the DC market and the client is conflicted. Even where they decide to incorporate real estate in the default fund, most use their own asset management. Asset manager

Certain major consultants appear to have complicated or blurred traditional market demarcation lines because they are seeking to enter, or have already entered, the market as providers/asset managers, while still retaining their independent consultant status:

How can independent consultants that advise employers and trustees on scheme choice offer their own scheme? This is an unbelievably conflicted position. Asset manager

Developing mutual expertise, the art of compromise, and a common language

While DC practitioners that had examined real estate funds were critical of their overly-complex structures, many directors of pension strategy, business

development and marketing for workplace DC (including some very well-known DC 'experts') did not seem to have got beyond a general impression that real estate was a 'sophisticated' asset allocation issue and not their area of expertise. This position was reflected in interviews with pension, insurance and asset management trade organisations, one of which said that their organisation's knowledge level was 'lower than desired'.

By mid-2013, it was evident that a more fruitful dialogue was developing that recognises the role real estate can play in a diversified default investment strategy, but also recognises the urgency with which asset managers need to develop 'DC-friendly' funds to gain a share of this growing market.

One scheme said that the key issue for DC diversification was to incorporate real assets and that real estate asset managers jumped that hurdle first:

> *If we want to offer sustainable returns above inflation and to hedge investment risk, we need real assets in the portfolio. Real estate is the first one that's available, but over time, while our weighting to real assets might stay the same, we hope to diversify into infrastructure, for example. As with real estate, we are looking to asset managers of infrastructure and other real asset funds to come up with solutions.* DC scheme provider

Trustees with expertise in the DB and DC markets agreed that asset managers now have the expertise to design DC-friendly funds of real assets, but have been slow to do so:

> *For too long, property experts have continued to focus on DB at the expense of DC. During this crucial development and growth period for DC [i.e., 2012-18 auto-enrolment period], they have failed to appreciate that as DB schemes mature and de-risk, they will need to establish an equivalent relationship with DC schemes. When DB schemes sell out of property, without a corresponding buy-side appetite from DC schemes, the impact on the property market could be severe.* Independent trustee

> *Part of our job as consultants is to take best practice from the DB market to the DC market. With real estate, we are encouraging asset managers to think outside the box.* Consultant

Interviewees said that the number of asset managers genuinely competing in the DC market – by which he meant being prepared to accommodate DC requirements – was limited:

> *We are now in discussions with asset managers to see if they can design a property vehicle that meets our needs and that we can accommodate in our default fund, but we have only identified about 10 managers that are interested and potentially capable.* DC scheme provider

Asset managers held different views on how far to go in accommodating DC demands:

> *If you want to do DC, you have to deal with life offices and their platforms. A lot of the demands – like daily pricing – are a convention rather than a regulatory requirement. Unless we challenge and change this mind-set, real estate will remain a minority asset class in the 'alternatives' bucket.* Asset manager

If the customer demands daily pricing, you've got to deliver it. We are not going to make any headway if we persist in thinking that the DC market is being unreasonable and has to change its attitude because real estate asset managers know best. Asset manager

There seemed to be agreement on the need to locate a middle ground, where asset managers and DC schemes can identify areas where compromise is appropriate. This requires an educational process, so that DC schemes can 'appreciate' the different ways that real-estate sub-classes and fund structures can be used in a default fund:

The scheme or provider must understand how best to access property for DC default funds and how the different investment vehicles work in replicating a direct property fund or in delivering equity- and bond-like returns. In the old days, property was bricks and mortar; now it's anything but. DC scheme provider

Some asset managers recognised that they need to make real estate more accessible, starting with the language:

The terminology and classification system for real estate is confusing and inconsistent. We need to sort this out; otherwise, we will continue to have conversations with the DC market – and even within our own market – that are at cross-purposes. Asset manager

This was clearly perceived as a challenge, since real estate as an asset class, together with its extensive sub-classes, reflects very different characteristics from those found in the equity and bond markets and therefore evaluation of such funds requires a specific skill set:

DC investment analysts need to look very carefully at each type of vehicle to understand what the regulation permits. A second layer of evaluation is the prospectus, which is where the asset manager sets further limits on permitted investments. It's a bit like DB schemes – the regulator sets overall limits, but the trust deed and rules often set further limits for the specific scheme. Most importantly, you need to look under the bonnet to see what types of property within a given category are being bought and sold, and also what the turnover is like. Asset manager

While investment consultants said they can undertake this task, they stressed that it is not easy to 'sell' the benefits of complex structures to DC schemes, often for good reasons:

We evaluate third-party real estate funds before we recommend them to DC customers. The more complex the structure, the more challenging it is to deliver the type of risk management and due diligence that DC transparency and liquidity requirements demand. Consultant

Is the DC default fund market open to third-party asset managers?

The assumption that a better dialogue between the DC and real estate markets combined with the development of DC-friendly fund structures will lead to more business for asset managers cannot go unchallenged. This is not just a problem for real estate, however, but one that extends across the asset class spectrum:

The issue here is the vertical integration model that major providers use. Most of them

are asset managers and therefore use their own sub-funds. The chances of breaking this near-monopoly are very slim. Asset manager

Why would we use third-party asset managers when we have our own asset management arm? Scheme provider (major insurance company)

Auto-enrolment changes the size of the market, but not the way the scheme providers operate. Some of the medium-sized life offices outsource certain asset classes to external managers, but most of the big providers represent a closed mind and a closed shop. Asset manager

The DC scheme market – with the exception of the consultant-designed blended funds for large employers' single trust-based schemes – has never been open to third-party managers:

We can design the best funds in the world, but we can't change the way the DC providers' operate. Asset manager

Legal and regulatory issues

Several interviewees drew attention to the problems associated with dealing with different legal structures and regulatory regimes for DC, i.e., contract-based schemes (regulated by FCA and PRA) and trust-based schemes (regulated by TPR):

Why does the auto-enrolment market need two separate regulators [TPR and FCA] that don't talk to each other? Then there's the DWP's constant intervention to make 'improvements', which means that there is no general consensus on what good investment governance really looks like. Asset manager

There are fundamental differences for the implementation of the underlying real estate investment strategies, depending on whether the scheme is contract- or trust-based. This means that you can't develop a single vehicle that will necessarily work for both legal structures, even though the scheme objectives, in terms of member outcomes, might be identical. Asset manager

From the interviews, it seems that DC scheme trustees have more scope to use real estate because they 'own' the assets and have a direct relationship/contract with asset managers. If the fund is large, they also have more scope to negotiate on price and can also work with asset managers to construct bespoke funds.

Certainly, it is the case that trust-based schemes (single large employer schemes and the multi-employer trust-based schemes) are the main investors in real estate at present. There was some confusion about the additional flexibility conferred on trust-based schemes relative to contract-based, but there was a view that the former can manage liquidity more effectively than the latter. The point was also made that trustees with long experience in the DB market might take a very different attitude towards liquidity in their DC schemes:

DB investors don't mind illiquid assets – they seem to rather like them, although possibly for the wrong reasons. The fact that physical property is illiquid reduces the appearance of volatility in the funding rate. Trustees of DC schemes might be influenced by this point. Asset manager

Another interviewee said that the illiquidity premium was very valuable to DB schemes and that there was no reason why this should not be the same with DC. A scheme provider said that regulation needed to consider the more youthful profile of multi-employer DC memberships under auto-enrolment, which implies strongly positive contribution inflows compared with the closed DB schemes that are effectively in 'run-off'. But there are also disadvantages with these DC characteristics that have implications for liquidity and rebalancing:

> *To understand the problem with liquidity, you need to appreciate the cash flows a scheme has to deal with. DC default funds have to cope with a constantly changing inflow of contributions and also with a constantly changing outflow of funds due to members retiring and transferring. You also have to deal with the fact that employer clients come and go. The biggest employers, which started auto-enrolment in October 2012, have tens of thousands of members. As a scheme, you have no control over these factors and the loss of a single client could mean the exodus of more than 100,000 members.* DC scheme provider

> *If you hold, say, 10% of a default fund in property you have to think carefully about how you are going to rebalance to maintain the desired asset allocation. Rebalancing in DC is expected to be a precise science, but with physical property funds that might be a challenge – you need to be able to rebalance a position that's shifted from 10% to 9.9%.* DC scheme provider

If the government 'pot follows member' proposal comes into force, it would put even more pressure on illiquid holdings, as, at present, many thousands of members leave their DC funds with the former scheme when they change employers:

> *Never underestimate the impact of government policy and regulation on default funds.* DC scheme provider

Liquidity and pricing

There is no doubt that the real estate liquidity crisis of 2008 has left its mark in terms of reduced confidence in the market and the use of this asset class in multi-employer scheme default funds, where the onus for investment governance lies with the scheme provider:

> *The closure of funds that were illiquid led to a lot of problems, including reputational.* Asset manager

> *Funds offered direct access to property with a cash reserve, but when the redemptions occurred, they used their cash and then had to close because they couldn't sell the property. This will stick in the minds of DC schemes.* DC scheme provider

> *We saw some very bad practice at this time. One fund we looked at was not marked to market, so an investor going in to the fund was paying over the odds and those getting out were doing disproportionately well. Some of the practices might have been down to subjective pricing, but this one was just dodgy and led to unfair losses for investors.* Asset manager

Schemes that have embraced real estate have taken this experience into consideration. One result is the REITs-only approach, but this is not the model favoured by NEST, for example, which uses a hybrid life fund that allocates 70%

to UK property and only 30% to REITs – weightings reflected elsewhere in the market, for example in PAIFs:

> *We need access to institutional property funds that have the freedom to implement long-term investment strategies without worrying about short-term liquidity issues – within reason.* DC scheme provider

Daily pricing was perceived as a major barrier to the use of real estate funds and interviewees were concerned that artificial pricing could lead to imbalances in the default fund:

> *The problem with physical property is that you can't price daily – or if you try to there is a big danger of mis-pricing because you're taking the book price and incorporating a market adjustment that cannot replicate the actual market value on a daily basis. This type of pricing gives property the appearance of investment characteristics it doesn't really have.* Asset manager

> *Illiquid assets are prone to mispricing, given that, by definition, they are hard to price, which could also give rise to an unintended redistributive effect between pension members.* Asset manager

One interviewee said that the demand for daily liquidity acts as a barrier to investments in many less liquid asset classes, such as hedge funds, private equity, infrastructure, and reinsurance, despite the fact that these might fit well within a long-term multi-asset portfolio:

> *According to calculations by Towers Watson, DC funds could provide their members with as much as 5% extra income in retirement if they could fully diversify their portfolios across all asset classes.* Asset manager

Platforms

The demand for daily pricing did not appear to be a regulatory requirement, but rather to relate to life office conventions and, in particular, to their platforms, which they use to deliver the scheme's funds, among other features:

> *DC funds say they must offer daily pricing. This isn't strictly speaking a regulatory requirement, as far as I know – it's more to do with the DC platforms, which are used by providers so that they can change underlying fund managers easily and ensure the individual members' accounts are updated immediately.* Asset manager

> *Life offices developed their platforms for the retail DC market, when they assumed that investors would want to choose from 200+ funds and be able to switch on a regular basis. This retail model for retail life office funds required daily liquidity. In the event, most investors didn't use the facility – they went for the default fund and that pattern has continued ever since, but the life offices have not updated their platforms.* Asset manager

> *I think the problem is that platforms have a single piece of software that deals with every fund and this does not cater for both liquid and illiquid funds. If so, this looks like a software problem rather than an investment or regulatory issue.* Consultant

This suggests that the problems could be 'fixed', but interviewees said that there were complications:

Platform providers have put this problem into the 'too hard to solve' box. They don't know how to make the adjustment given the regulatory requirements for the treatment of retail investment funds, which is what their platforms are designed to deliver. Asset manager

One interviewee said that the 'requirement' for daily pricing, while not derived from regulation, might be a misinterpretation of the FSA's 'readily redeemable' requirement for funds:

DC platforms interpret the regulatory requirement for permitted links or funds to be 'readily redeemable' as synonymous with 'daily pricing', but that's not an accurate interpretation. If the DC market could get over this, it would mean they could use the large DB-compliant funds, although they would need a back-stop to ensure the funds do not close due to redemptions. Trustees should push platforms for this and get legal advice. Consultant

Some interviewees stressed that daily pricing was a very different requirement from daily trading:

We manage funds used by large trust-based DC schemes – and also by DB schemes – where we provide daily pricing, but not daily liquidity. The trustees need the daily pricing, but they can also accommodate less liquid asset classes that can't guarantee daily trading. Asset manager

Cost of real estate funds

Rightly or wrongly, the cost of real estate funds – more specifically, the impact on member charges – is a crucial issue for DC providers in the current environment. Getting costs down is a government priority and, at the time of writing, it was consulting on a maximum cap on the total member charge. As noted above, competition is fierce and providers recognise that they need to achieve the scale associated with a significant market share in order to secure a position in the market longer-term:

There is a strong body of opinion amongst regulators and politicians of all persuasions that the cost of default funds should not exceed 50 basis points all in; that is, for both admin and investment expenses, which means that the investment fund cost would not exceed c. 20 bps. This is a huge challenge for real estate funds. It puts the onus on property managers to demonstrate that their after-cost performance will at least meet that of a lower cost passive multi-asset fund. Trustees and plan sponsors [employers] are understandably mindful of the legal risk of selecting higher charge default funds. DC scheme provider

The reason why property gets excluded within the contract-based world is cost. It is difficult to get property within the 1% TER cap for stakeholder schemes [after the first 10 years], which is being pushed down for auto-enrolment and, as such, it [property] won't make the cut. The other challenge that one faces with UK property is that you have to select an active manager and changing/replacing a manager is a very expensive process. Due to costs such as stamp duty, the typical total cost a member would encounter as a result of moving manager can be in the region of 5-8% which is fairly substantial. Asset manager

The headline cost was clearly considered important, but so too was transparency of pricing:

It's hard to present real estate costs through a TER because some of the costs fall outside of the current understanding of this term. We can't have grey areas, given the spotlight on DC charges, and this is particularly true of stakeholder schemes under auto-enrolment. DC scheme provider

A scheme provider pointed out that it is very difficult to compare real estate costs associated with different sub-classes:

We need to be careful how we evaluate costs, and transparency is a major 'noise' at present. Costs can be hidden – or implicit – in quoted property companies that are explicit in non-quoted companies. This doesn't mean the costs don't exist. DC scheme provider

An asset manager made a similar point about comparing the cost of real estate funds with other asset classes:

DC providers don't understand how pricing works in the property market. A property portfolio is expensive to manage and you have to understand how the cost of that management is factored in to the total charge. For quoted companies, it's all in the share price, but elsewhere it shows up as a management cost. In the former, it looks like the cost of property management expertise has magically disappeared, whereas for a physical property portfolio it's likely to show up as an explicit additional cost in the annual management charge, because the asset itself doesn't 'contain' the management function. This is the same problem you get when you look at the cost of private versus quoted equities. Asset manager

Another interviewee commented on the reasons why trading property is more expensive than trading conventional assets:

Each property is unique, so this is a very research-intensive asset class with higher trading costs, such as stamp duty, registration fees and taxation issues to consider. It's nothing like buying and selling listed bonds or equities. DC scheme provider

A scheme provider argued that it was very difficult to justify the value embedded in real estate costs:

How do we define value? What exactly is value in a property fund in terms of cost-benefit analysis? We don't hold real estate in any form in our default fund and at present we have no intention of doing so. What might persuade us is if we could see an independent study of the ways in which real estate delivers value and to see this demonstrated empirically. Looking at historic returns is not enough. We also need to understand what is driving property prices relative to inflation. Is this a general trend or location-specific? How sustainable is this? DC scheme provider

Real estate sub-classes favoured by DC

The main sub-classes used in DC schemes are actively-managed funds of UK property and passively-managed funds of global real estate investment trusts (REITs), which might track the FTSE EPRA/NAREIT Global Real Estate Total Return Index, for example. In some cases, these two sub-classes are combined into a single fund that is weighted approximately 70% to UK property and 30% to REITs. Cash might also be used within the real estate fund for liquidity purposes. The rationale for funds of UK property and global REITS is that they offer liquidity and transparency, and can be bought at a cost that is acceptable to the DC scheme provider.

The first issue encountered in the interviews was the 'myth' of the third asset class:

> *The third asset class theory is a myth: there are equities and bonds and then what's known as 'other' or alternative, which behaves in an equity-like or bond-like manner or perhaps combines these characteristics. So ultimately all you are trying to achieve is better diversification within your equity and bond portfolios. REITs, for example, provide diversification within your equity portfolio – not against it.* Asset manager

A second interviewee countered this view:

> *The risk and return profile of real estate is very different from equities and bonds – for example UK property can deliver a 6% yield as well as capital appreciation. We need a wide range of asset classes to reflect the full range of available risk premiums. UK property is a comparatively stable asset, so we can hope to get the returns and also reduce the overall risk. It's a natural asset to hold, but the DC fund needs to have control.* Trust-based scheme

We encountered very few opposing views about funds of UK property, but there were two points that stood out. First, interviewees said that buyers needed to understand the profile and characteristics of the underlying investments relative to the liquidity constraints, which would affect the choice of underlying properties:

> *Where a fund of UK real estate is designed for the DC market, the liquidity constraints will have a strong influence on the choice of property bought, held and sold. We have to forego certain opportunities and we do so knowingly – it's the price we have to pay.* Asset manager

Second, the immaturity of the auto-enrolment market and its cash-flow profile gave rise to concerns:

> *When people talk about lumpiness, they mean different things. One reason I regard property as lumpy is that the asset manager needs large sums in order to make investments in the underlying property. DC schemes receive member contributions on a monthly basis and so they drip-feed investments into the fund. Asset managers are not quite sure how to deal with the shape of this type of investment inflow and this might be one of the reasons they've held back.* Asset manager

> *Real estate asset managers – like a lot of specialists – have held back from the DC market because they see a mis-match between the type of cash flows they need [to purchase direct property] and the type of cash flows DC funds deliver. I'm not sure if DC funds can deliver investment flows in any other way, given the direct relationship between member contributions and capital for investment.* Analyst

Opinions on the role of REITs were more diverse:

> *REITs fit in with DC infrastructure – they tick the right boxes in terms of liquidity, so are used in many cases as a proxy for real estate, but they won't deliver the optimum returns.* Asset manager

Interviewees said that the diversification characteristics of real estate are diluted when it is converted from its natural state – illiquid – into a liquid asset that can be accommodated in DC:

The key challenge for property as an asset class in DC is liquidity and the big challenge is to ensure liquidity can be provided without compromising exposure to the asset class. Often REITs are used to help provide this liquidity, but at the end of the day they tend to have a higher correlation to equities than true bricks-and-mortar property and so they are not an ideal match. Asset manager

One asset manager said that REITs are regarded as equity-like in the early years (three-five) and thereafter 'trend back to direct real estate'. Another said that 'the bond-like nature of REITs' rental yields means that they have slightly greater defensive properties when compared with more traditional equities':

Our experience indicates that while REITs behave like equities in the early years, after a period of time they behave more like physical property. Life office

In the first year or so, REITs do behave in an equity-like manner, but if you hold them for three-to-five years they begin to replicate property more accurately. Consultant

There seems to be a misunderstanding of the way property companies work. They do not hold property until the end of the mortgage – in which case they would own the property and the REIT would become more property-like. But instead they constantly change the portfolio, buying properties, improving them and then selling on.
DC scheme provider

Buying real estate in the form of investment trust equities overcomes daily pricing and liquidity problems. However, there is a wide diversity of opinion – sometimes totally opposing views – on the asset class characteristics of REITs in relation to physical property:

We buy REITs to diversify the equity portfolio, in just the same way that we would buy across other listed sectors. REITs are equities, pure and simple, so don't kid yourself. They diversify into an important sector – property companies – but within the equity market universe. This is not a way to replicate physical property, though, so by buying REITs you don't achieve genuine exposure to this asset class.
Asset manager

But it is interesting to note that the above manager separates REITs into a 'property' asset class in its fund details. It is not clear why this is the case if REITs are 'equities pure and simple'.

A separate point made about REITS was the ability of these investment trusts 'to leverage-up their exposure':

Leverage brings advantages, but it also changes the characteristics of the investment. If an investment trust holds 25% of its assets in property and 75% in the form of borrowing from the market, the correlation with physical property is significantly diluted and makes the property investment company more akin to a mortgage bank. This isn't a property investment, nor is it bond-like – it's just a bond.
DC scheme provider

It's essential to take the degree of leverage into account in the investment strategy. Consultant

You absolutely have to know how much leverage you are running. The more the leverage the greater the volatility, so you need to understand how much leverage a fund is running and this differs between the major REITs managers.
DC scheme provider

Beyond UK property and REITs – and a limited, but growing interest in derivatives – interviewees said that mezzanine and senior debt funds were also being developed for the DC market. If such funds can provide a reasonably steady income stream, then they might be suitable for the de-risking phase of a DC fund and also in the retirement phase, either as an asset held by retail investors for drawdown or as an alternative to the gilts and bonds held by annuity providers. Moreover, DC providers are developing drawdown facilities that use the same fund as the final stage in accumulation and this provides an institutional fund framework through which to deliver this decumulation strategy.

At the time of writing, real estate debt (commercial mortgage-backed securities), was being considered by an asset manager whose funds are used in a trust-based DC scheme:

> *What we are aiming to do longer term is to replicate the characteristics of physical property. At present, we use REITs to give us exposure to the equities of property management companies. So, obviously this is an equity-like asset. But if we add real estate debt into the mix, this would give us exposure to the bond-like characteristics of property. We will probably include index-linked gilts as well to match the rental income flows from property, which are linked to inflation because commercial property is rented out on a long lease.* Asset manager

But another interviewee said there were good reasons for avoiding debt:

> *We've looked at debt and decided not to incorporate it in our funds. It's very heavily regulated and the legal and compliance requirements are onerous.* Asset manager

One DC scheme we interviewed had considered the possibility of using derivatives or property swaps to hedge liquidity concerns, but decided against it due to the complexity, cost and the uncertainty about liquidity in these markets:

> *Someone, somewhere, has to own the risk. We were not convinced that the de-risking mechanisms available to DC funds are yet in place.* DC scheme provider

Real estate in diversified growth funds

Diversified growth funds (DGFs) represent a very wide range of multi-asset strategies, including those designed for specific schemes. Asset managers target the large single-employer trust-based schemes and are also targeting the new multi-employer schemes.

Interviewees said that the high degree of manager discretion in some DGFs reduced concerns about liquidity:

> *DGFs get around the liquidity issues because they are multi-asset funds where the asset manager understands the liquidity measure of the portfolio.* Consultant

It is not yet clear if DGFs will gain widespread popularity among the new auto-enrolment default investment strategies. Interviewees said the main reason is cost:

> *They [DGFs] are expensive. It's only the trustees of very large default funds – and at present these tend to be found in the older single-employer trust-based schemes – that can negotiate an acceptable cost due to their skills and the fund's scale.* Consultant

A second issue is that schemes that already use a DGF might assume they have 'ticked the box' for diversification, including for real estate, which is not necessarily the case. DGFs frequently incorporate real estate, but in some cases the weightings are low at only about 1-3%, which is further diluted if the DGF is used as only one of several mandates within the default fund:

> *An increasing number of default funds tend to use diversified growth funds which incorporate a small allocation to property and this means that another separate allocation to property could be viewed as doubling up.* Asset manager

> *Allocations to property in DGFs are too small to be of genuine benefit to the DC scheme; nor do they really benefit the real estate asset managers.* Consultant

Real estate fund structures

It is the overall real estate weighting within the default investment strategy that is the most important issue and the biggest challenge for providers of real estate. Nevertheless, interviewees were keen to discuss the different types of fund structures that can be used to hold real estate because they were aware that these need to meet certain requirements – tax-exempt status, pricing frequency and liquidity, for example – in order to be considered DC-friendly.

The multi-billion-pound real estate funds run by the asset management arms of insurance companies have dominated both the DB pensions market and the large single-employer trust-based DC schemes for years. They now appear to be gaining traction in the multi-employer scheme market. Asset managers that are not part of an insurance company are developing other fund structures for this purpose, for example, the property authorised investment fund (PAIF). They argue that PAIFs would be in common use by now if they had not been introduced at such a difficult time for the real estate market (2008). We do not know if this is the case, but it is clear that some large fund conversions are under way:

> *The main opportunity for real estate asset managers is not to provide a single fund for a platform, but to provide a component part of a multi-asset fund.* Asset manager

> *What we are seeing at present is the morphing of institutional funds, where liquidity is less important, with retail funds, where daily dealing is the norm. The question and challenge for asset managers is to determine where these two meet so that the fund delivers institutional oversight, but within a retail-style product. We haven't quite got there yet.* Asset manager

PAIFs, like the new hybrid life fund used by NEST, can offer a blend of UK property and REITs. They can hold cash for liquidity purposes and also derivatives. At the time of writing, several conversions to PAIFs were in progress, mainly from authorised unit trusts:

> *These [authorised unit trusts] are generally offshore exempt unit trusts situated in Jersey, for example. Asset managers are looking to convert them for the UK market and also for Germany and the Netherlands. For the UK, they need to be 'life-wrapped' to widen the appeal to* DC. Consultant

However, concerns remained about the interaction between PAIFs and DC platforms. With reference to platform requirements, an Investment & Pensions Europe (IPE) report said:

Enough fund platforms to matter have now tweaked their operations to allow for the required three-way income streaming into rent-derived, dividends on equities and interest on cash deposits. But even if the platforms are up to the job, and assuming the costs of making them so are not passed on to investors, Nell [Philip Nell at Aviva Investors] believes the structure is still too complicated, especially because a PAIF will need to include a feeder fund for large investors breaking through an existing 10% holding rule. [66]

We were told that it takes between six and nine months to complete a PAIF conversion, due to legal, tax, accounting, and custodial issues. The tax and legal requirements, in particular, are very complex. One asset manager said:

The rules can be used, but they are far from ideal. We've had to adapt our operational model – it has taken 18 months at a huge cost in terms of investment and people's time. Asset manager

In conclusion, the interviews presented a very mixed range of views. Nevertheless, the general mood of asset managers was optimistic, since they believed they could overcome technical barriers to the DC auto-enrolment market. The most pressing concern, therefore, was not whether the market would embrace real estate, but the extent to which this market would be dominated by just a handful of major asset managers, which was certainly the case in 2013.

66 See www.ipe.com/realestate/news-analysis-is-the-paif-about-to-take-off_46758.php

Conclusion

Our research has raised a number of questions that DC scheme providers, in conjunction with real estate asset managers, should consider. We summarise these questions here and offer answers based on the evidence from the research. The issues raised here might best be addressed via a cross-practice working group that brings together experts in the real estate and DC auto-enrolment investment strategy.

1. Should DC schemes' default fund have a weighting in real estate?

The evidence indicates the beginning of a clear trend towards the inclusion of real estate as a core asset class in DC default funds, especially in the new schemes designed for auto-enrolment. These schemes have chosen real estate not only to diversify investment risks and increase risk-adjusted returns, but also for its growth potential during the accumulation stage and its ability to generate reliable inflation-linked cash flows during the decumulation stage. However, we should be aware of the risk of speculative bubbles or liquidity-enforced closures of funds, both of which are key risks in the accumulation phase and more so in the decumulation phase.

2. What is an appropriate weighting?

At the time of writing, the weighting to real estate in schemes designed for the multi-employer auto-enrolment market varied considerably. In some cases, the allocation was zero; where real estate was used, as a separate asset class, weightings varied from 5% to 20%. Our analysis of portfolio optimisation models in use did not, however, did not give a clear cut answer as to what the optimal weighting in real estate should be. Nevertheless, the increased use of asset-liability modelling techniques in the DC world should enable the attractiveness of real estate in both the accumulation and decumulation stages of a DC pension scheme to be more fully recognised.

3. Which schemes offer the best examples of the use of real estate?

The auto-enrolment scheme market is in its infancy. However, NEST's decision in 2013 to allocate 20% to real estate is a very significant move in the development of the DC market. At the same time, it should be remembered that NEST does not intend to maintain this weighting over the long term, but will reduce it when other 'real' asset classes become available in a suitable pooled fund format, e.g., infrastructure.

4. Which are the most appropriate real estate sub-classes?

At the time of writing, the two main sub-classes being used were funds of UK property (actively managed) and funds of listed companies (typically global tracker funds of REITs). NEST's choice of a 70% UK/30% global REITs fund might provide a benchmark for the market going forward.

In future, it is possible that real estate debt funds might have a role to play in default fund bond portfolios, especially if real estate is used as an asset class during the later stages of the accumulation glide path and into decumulation. Derivatives, in theory, appear attractive for hedging purposes, but the current lack of a robust market that can readily scale up undermines their present prospects.

5. Which are the most appropriate investment vehicles?

In theory, any fund that can accommodate the tax-exempt status of DC schemes and offer the required pricing and liquidity features might be used. However, convention plays a strong hand in the decision, and the dominance of life offices in the market – and the widespread use of life office platforms – suggests that, at present, life funds have an edge over PAIFs and UCITS IV funds. We cannot explain why this should be the case, but suggest that this is a subject for debate between the DC and real estate markets.

6. What is the potential impact of the liquidity requirement on member outcomes?

Under a strong governance framework, default fund optimal investment strategies must determine the most appropriate asset classes and glide path to meet members' requirements in terms of a realistic and reliable target replacement ratio. They should not be constrained by DC conventions. The research indicates that DC funds would benefit from the inclusion of illiquid asset classes such as real estate – during the initial growth phase of accumulation, the de-risking glide path prior to retirement, and also during the decumulation phase via products delivering retirement income.

7. Is the current liquidity constraint likely to be eroded over time?

There is no doubt that the need for a relaxation of the daily dealing/pricing requirements for illiquid asset classes is crucial if default funds are to achieve their optimal level of diversification. We stress that there is no regulatory barrier to illiquid asset classes, so this is also a subject for debate between the DC and real estate markets.

8. How large, and how quickly, could real estate AUM grow under auto-enrolment?

We have provided projections of the growth of the auto-enrolment markets in this report. We forecast that the market will increase sixfold by 2030, from £276bn AUM pre-auto-enrolment (2012) to £1,680bn. Assuming default funds allocate 10% to real estate and that these funds are used by 90-97% of members, real estate AUM in these funds might be worth £170bn by 2030. However, we do not know at this stage which of the current schemes will be the emerging 'winners' in the battle for market share and presently each scheme has a different allocation to real estate (in some cases zero).

9. How much of this market will be captured by third-party asset managers?

At present, 'vertical integration' is the most common business model, which means that most scheme providers are using their own in-house real estate funds. The observation we make in point 4 above – the potential for NEST's allocation to a fund of 70% domestic (active) and 30% global REITs (passive) to become a benchmark in the market – assumes that multi-employer DC schemes will have access to such hybrid funds. At present, the majority do not.

Real estate asset managers, together with the wider asset management community, might consider the questions vertical integration in the auto-enrolment market raise for market competition and take up these issues with government, regulators and the OFT.

10. Does the use of real estate in default funds open the door to other illiquid assets?

Our view is 'yes' and we would cite NEST's stated objective with respect to its 20% weighting in 'real assets' as an example, with infrastructure standing out as the second 'alternative' asset likely to transition into the class of 'core' assets, providing asset managers can develop fund structures that are DC-friendly in relation to taxation, liquidity and pricing frequency.

One option suggested to us was the potential for 'real asset' funds of real estate, infrastructure and commodities, which together might offer a strong inflation-hedging instrument. This might represent a more focused method of categorising and grouping the illiquid assets classes that currently are incorporated within funds of 'alternatives', which also include hedge funds and private equity.

Appendix 1: The Retail DC Markets

In this appendix, we provide a brief overview of the three main components of the retail market: personal pension plans, self-invested personal pensions (SIPPs), and small self-administered scheme (SSASs), which are an unusual form of company pension scheme for small businesses that are run on a retail basis. We also incorporate relevant comments from the interviews.

SIPPs can be used collectively (group SIPP) by employers – usually for higher earners – and also by professional firms, such as dentists and accountants, as well as individuals, which is why we categorise this section of the market as, in part, 'quasi-retail'. SSASs are also quasi-retail because they are used typically by small family businesses and, generally, are sold by advisers and consultants in the retail wealth investment market, which caters for small firms as well as wealthier individuals. Some advisers specialise exclusively in SIPPs and SSASs.

Retail assets under management

- Personal pensions: c. £326bn, of which:
  - SIPPS account for c. £103bn
  - An unknown value accounts for 'deferred' contract-based DC members, whose funds, held under individual contracts between the provider and member, are classed as retail personal pensions on leaving the employer.
- SSASs: c. £16-20bn.[67]

Regulatory concerns

There has long been a nagging concern about the use of SIPPs and SSASs to hold the members' business premises because the primary purpose of any UK pension scheme or plan is to provide a retirement income. Where partners in a professional practice or directors in a small family business use the pension scheme to purchase the business premises, the illiquidity problems associated with of real estate are exacerbated. Where the business premises represent the main or a major investment of the scheme there might be severe conflicts of interest between the retirement income needs of a retiree and the remaining members. The 'exit strategy' is crucial, therefore, to such arrangements.

In recent years, there have been increasing concerns about the regulation of SIPPs and SSASs in response to evidence of poor management and administration and inadequate capital adequacy. One focus has been 'pension liberation', whereby unscrupulous firms of advisers offer investors the opportunity to access to their funds, but at a massive cost in terms of charges to the adviser and tax to HMRC. Such practices have been condemned by both the government and regulators.

Moreover, some SIPP providers and advisers have sold SIPP investors highly risky assets – frequently unregulated and therefore not covered by the Financial Services Compensation Scheme (FSCS) and Financial Ombudsman Scheme (FOS) – apparently without consideration of due diligence. A major issue at the heart of these problems appears to be the low hurdles advisers face to establish

67 Our estimate is the aggregate of AUM held by providers that responded to the February 2013 Money Management survey, but this excludes several major providers.

themselves as SIPP and SSAS providers. There are an estimated 110 SIPP providers alone, which far outnumbers the mainstream DC providers.[68]

At the time of writing, the FCA was changing the capital adequacy requirements for SIPP providers following a 'thematic review', which identified 'significant consumer detriment' through the failure of providers 'to adequately control their business' with the ultimate concern that some providers were at risk of failure.[69] According to Money Management's April 2013 survey, the new rules will place 'far greater emphasis on non-standard assets, the thinking being that – in the event of a wind-up of a SIPP provider – these assets would be more difficult to sell on transfer [to a buyer of the SIPP book of business]'. The FCA considers commercial property to be a non-standard asset, despite widespread objections.

The result is that many smaller operators in the SIPP market – particularly those that have sold non-standard assets heavily – will be forced to withdraw, which leaves the fate of policy holders in question as it is possible that such firms would struggle to find buyers. Unfortunately, many of these non-standard assets are in some form of property, such as hotel rooms.

The concerns about personal pensions are less to do with inappropriate investment strategies and more to do with charges on older plans. As the auto-enrolment market develops and establishes a new low-price model for DC in general, there is a growing awareness that personal pension plan investors – which include an unknown number of former members of contract-based DC schemes – might be paying an excessive annual charge. The problem applies to older plans in particular that date back to the 1980s and 1990s, days when charges, which included adviser commission, could be as high as 3% or more. Embedded commission still applies to much more recent plans, however, as commission on new plan sales was not banned until 1 January 2013. A further concern with more recent sales applies where an employer has agreed with the provider that leavers should be charged a higher amount than 'active' members (current employees). The 'active member discount' (AMD) and 'deferred member penalty' (DMP) are under investigation by the government and are likely to be abolished.

The future of these retail products is inextricably linked to the development of the auto-enrolment market. Arguably, once all but the very low paid employees in the private sector (who would be unlikely to save for retirement in any event) are auto-enrolled into an employer's DC scheme, the demand for retail plans will fall dramatically. In addition, it is possible that existing assets held in personal pensions might migrate to auto-enrolment schemes if individuals realise that the charges are significantly lower than the 1%+ they pay at present. The government might encourage this migration of assets in future.

Self-select real estate funds in DC schemes

As has been discussed previously, the distinctions between retail and group DC schemes are blurred. Therefore we start the analysis of 'retail' with group schemes.

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68 See Money Management, SIPP special report, April 2013, p. 1

69 http://www.fsa.gov.uk/library/policy/guidance_consultations/2012/1212 and http://www.fca.org.uk/your-fca/documents/consultation-papers/fsa-cp1233

Under auto-enrolment, if employees do not make an explicit investment decision, their contributions will be directed into the default fund automatically. Prior to auto-enrolment, a similar system prevailed, although the default fund might have been called the 'balanced managed' fund, or the 'medium risk' fund.

To meet the needs of members who wish to make their own investment decisions, schemes might offer a range of individual funds from which to choose. This would comprise a choice of asset classes and, in some cases, a choice of managers within each asset class. A real estate fund (which would probably be described as a property fund), run by the provider or a third-party asset manager, often appears on the list. This would comprise commercial property companies (UK and/or global REITs).

The extent and format of the self-select range has changed considerably since the turn of the century. Group personal pensions (GPPs) sold prior to this time typically offered 50+ funds in addition to the default. In some cases, the number ran into the hundreds. The rationale was that choice was a good thing and the more choice the better. This proved to be a huge mistake. As behavioural economics theory predicts, too much choice can often lead to no choice being made at all because of the fear of making a mistake. As a result, more modern schemes have reduced the choice to about 12-15 funds. In many cases these are 'white-labelled' so that the fund name reflects the scheme name and describes the asset class rather than the asset manager, as in 'the [scheme name] Property Fund'. This enables providers to change the underlying asset managers without having to arrange for members to transfer their funds, which is a complex process under contract-based arrangements. It also encourages members to consider asset allocation rather than asset managers:

> *We don't like to see named asset managers on a self-select list for several reasons. White-labelling can provide a real estate fund where we can change the underlying asset manager without the individual member having to make any adjustments. So this presents real estate as an asset class option. The second option, which is better, is to put together a fund of funds, so there is a spread of asset managers.* Consultant

Interviewees said that it is often the senior managers and directors that opt for self-select as a demonstration of their knowledge. However, there might be a certain amount of 'macho' behaviour at work here, one interviewee said. In practice, such employees, although very well paid and probably making substantial contributions, might not have the expertise and almost certainly would not have the time to manage their asset allocation on a regular basis.

From the research and the interviews, it seems that assets under management in DC scheme real estate funds are very limited:

> *Out of our self-select fund range, in which property is an option, it accounts for about 0.6% of AUM.* DC scheme provider

Scheme providers also expressed concerns about the rationale on which a member might base the selection of funds, including real estate:

> *Self-select is a double-edged sword because few DC scheme members know what they are doing. They might become day-traders; put everything in one asset class and fail to revisit the decision for years; or they divide their contributions evenly across all eight or ten funds, if this is the number available.* DC scheme provider

Each of these strategies can be disastrous. Take day-trading for example:

> *The company pension scheme is no place for day-traders. It's not just about the cost and mistakes – employers are furious if they find out an employee is spending all his time switching pension funds.* DC scheme provider

Unless a member is very well-informed and has other well-diversified assets, the one-fund approach results in a very risky lack of diversification, which frequently is not revisited.

> *The '10% of contributions in 10 different funds' approach results in 'naïve diversification'. Not only is this risky, but it is also likely to be very costly relative to the member charge for the multi-asset default fund, since self-select funds are more expensive.* DC scheme provider

Members rarely receive advice on asset allocation via the scheme/employer and so there was concern among interviewees about their tendency to assume that a 'property fund' reflects trends in the retail residential property market. Indeed, one interviewee said that 'members often assume that commercial property is virtually synonymous with residential property':

> *The take up of property funds by individual investors is highly correlated to what's happening in the residential property markets. People think they understand property as an asset class and that what they buy through their DC scheme is very similar to their own home.* Asset manager

Where members switch funds on a regular basis, this can lead to problems for the real estate fund asset manager:

> *Property and DC is an interesting mix. For long in the DC market, we have said that illiquid asset classes are a no-go, due to the liquidity requirements – and yet we have assumed that property is fine, due to the fact that the traditional life companies offering this (in the form of pooled funds) use cash flows to manage the daily liquidity requirements. This concept has been tested in both directions. When property markets were doing really well, a lot of individuals were channelling a lot of cash flow into this asset class through their DC schemes which added to the overheating of the market. When property went out of favour, this gave the manager another type of headache. Funds were not cash-flow positive, so they had to provide the liquidity, but were not getting an attractive price on the underlying assets and as a result had to suspend trading.* Asset manager

Another issue is transparency of charges in DC:

> *Greater transparency of costs, if they are revealed in full to members, would make the situation even more difficult. How do you explain real estate transaction costs to a DC member?* DC scheme provider

While self-select will continue in the auto-enrolment market, there is no clear prognosis for take-up in general and the use of real estate funds in particular. However, the projections indicate that while AUM in private sector schemes in aggregate will increase rapidly under auto-enrolment, most auto-enrolees will use the default fund, so AUM in self-select funds will not change significantly and as a percentage of aggregate AUM it will fall.

Personal pensions

Contract-based personal pensions were launched in 1988 and replaced retirement annuity contracts (RACs), the retail pension products previously used by the self-employed and by employees who did not have access to or did not wish to join a company scheme. Unlike RACs, personal pensions could be used to contract out of the State Earnings-Related Pension Scheme (SERPS) on an individual basis in exchange for a rebate of national insurance contributions (NICs). Such was the then government's enthusiasm for choice and its desire to reduce reliance on what became known as the Second State Pension that it made contracting out very attractive, adding bonuses to the NI rebates. Following a series of misselling scandals, the use of personal pensions to transfer out of good quality DB schemes was heavily criticised and curtailed. More recently, there have been reforms to state pensions, SERPS is being replaced by a new single flat-rate state pension and the contracting-out possibility has been withdrawn.

We were unable to find any robust data on AUM in personal pension real estate funds, although interviewees said that historically (1988 to the early 2000s) property was a popular choice. In future, the use of personal pensions is expected to decline significantly once auto-enrolment is phased in for private sector employees. The self-employed will still use these plans (or SIPPs – see below) for retirement savings and so this is likely to be the main market going forwards.

Self-invested personal pensions

A SIPP is a contract-based personal pension that confers greater investment choice. Where personal pensions offer investment in funds, the SIPP investor can also invest directly in equities and bonds, among other assets. From an AUM perspective, the distinction between these two products is blurred and we assumed that the £100bn+ in SIPPs forms part of the £386bn in personal pensions. According to Money Management, there are more than 1m SIPPs in existence.[70]

Real estate is a relatively popular asset class for SIPP investors. SIPPs can invest directly and indirectly (i.e., via funds) in a range of commercial real estate, although the choice might be restricted by the type of SIPP and the provider's expertise, as direct investment in this asset class is considered a specialist area. In addition to funds, permitted holdings in direct real estate includes:

- Commercial, e.g.
  - Offices
  - Shops
  - Warehouses
- Certain types of permitted properties blur the boundaries between commercial and residential. These include:
  - Care homes
  - Hotels

70 Source: Money Management April 2013 SIPP survey

    - Prisons
    - Public houses
    - Student halls of residence
- Land, e.g.
    - Agricultural
    - Forestry
    - Land for development
    - Woodland
- Overseas real estate is permitted, but many SIPP providers restrict direct investment to the UK. Moreover, SIPP investment in overseas property has been the subject of regulatory concern, due to the apparent lack of due diligence exercised by certain SIPP providers.

SIPPs have been available since 1989, but were not regulated until 2006. Investors are considered to be more sophisticated than personal pension investors, although this is not necessarily the case. Many SIPP investors have little more than £100,000 invested. A fund of £100,000 would buy an annuity of about £4,500 after tax-free cash is taken, which does not make the investor 'wealthy' or indicate an ability to tolerate higher risks than personal pension plan investors.

At the other end of the spectrum, a SIPP investor might use this tax-efficient pension wrapper in a similar way to a SSAS (see below), i.e., to buy the premises in which they work. In this case, the business pays a commercial rent to the fund. One advantage of this strategy is that the business is not the owner of the property, so the premises are removed from the balance sheet, although as the Money Management April 2013 survey pointed out, there are downsides to this arrangement:

> *The business will no longer have a secure asset on which to obtain credit if needed … it is merely a tenant of a property owned by the pension scheme. This means the property cannot be bought, or sold, to connected parties on favourable terms; nor can below-market rent be paid.*

SIPP investors might be more inclined to use a financial adviser than those with a personal pension, since many firms sell their own SIPPs – more than 100 in fact. As a result, DC providers and asset managers are less concerned about this section of the DC market because the onus of responsibility falls upon the adviser and the FCA's regulatory system. A poor choice, arguably, is the adviser's responsibility and the investor can claim compensation.

Nevertheless, there have been growing concerns in recent years about the promotion of SIPPs by unscrupulous advisers, who allegedly direct clients to unregulated funds in return for a high rate of sales commission. Moreover, regulators have investigated the capital adequacy of SIPP providers and one result is that they are expected to exclude commercial property from the list of standard investments that can be purchased by an investor with a low aggregate SIPP fund value. This appears to be due to concerns about the time it might take to sell underlying SIPP investments.

Small self-administered schemes

SSASs, introduced by the Finance Act 1973, are trust-based DC arrangements designed for small family businesses, where the employer sets up the trust and invites certain employees to join (a minimum of two and maximum of 12). These members are also trustees. As this is a trust-based arrangement, SSASs are regulated by TPR, although, in practice, internal disputes in these very small schemes, i.e., between the trustee-members, are often dealt with by the Pensions Ombudsman.

According to TPR, there are about 43,000 DC trust-based schemes that have between two and 12 members. These so-called micro schemes account for 5% of occupational scheme membership. TPR explained:

> *These schemes are not designed for the mass market and we would not expect that they would be used for automatic enrolment. They are not designed to achieve economies of scale and often have relatively informal governance structures that are tailored to the specific needs of high net-worth individuals. Their operation is often based on close trustee-member affinity, as many of these schemes are effectively tax wrappers, rather than pension schemes offered to employees by an employer.*[71]

The trustees can use the pension fund to purchase the business premises (commercial real estate), which are rented back to the employer at a commercial rent which is tax free to the scheme. They can also provide a loan to the sponsoring company. These features have made SSASs a popular tax-efficient business tool (as opposed to retirement fund) with the directors of small businesses, especially when economic conditions make bank loans difficult to arrange.

Money Management's February 2013 SIPP Survey said that hundreds of SSASs are set up each year. Some are thought to be speculative; the survey noted:

> *There is an in-built higher barrier to entry for setting up a SSAS [compared with a SIPP] – the employer must create it. But it is easy to set up a company online for less than £50 and use it to start a SSAS, even if it is a non-trading company. It is unlikely that such people would appoint a professional trustee, so the risk is real.*

Total AUM are estimated at £16-20bn. The number of SSAS providers appears to have grown significantly: 43 providers responded to the survey in 2013 compared with 29 in 2012, although the response rate is not an accurate indication of the total market size. Some of the major providers, such as Standard Life, have said that they are no longer writing new business after the end of 2013 due to the fall in the number of advisers that recommend these schemes. Standard Life has about £490m AUM in SSASs in 2013; in 2012, L&G had £392m and AJ Bell had £677m. One of the biggest providers – Friends Life – has £1.3bn AUM, but the life office does not appear to be selling new schemes actively.

With the gradual withdrawal of life offices, the market is fragmented, spread across a broad range of dedicated small SIPP and SSAS providers and firms of financial advisers, some of which are seeking to grow through acquisition, such as Xafinity, which recently purchased Alliance Trust's SSAS book.

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71 http://www.thepensionsregulator.gov.uk/docs/purple-book-2012.pdf

As we explained in Section 1, we anticipate that SSASs will not qualify for auto-enrolment because the regulations require qualifying schemes to offer a suitable multi-asset default fund, which rules out investment strategies that comprise mainly commercial property. Moreover, like SIPPs, there are growing concerns about the use of SSASs for inappropriate transactions, in this case, money-laundering. This relates to the poor controls and governance structures identified in some schemes, which might be deliberate, but which might also be due to lack of expertise. In 2006, the government relaxed controls for SASSs, which previously had required the appointment of a professional trustee, known as a 'pensioneer' trustee. The change, which was in response to EU law, gave many schemes the opportunity to save money by eliminating the position of pensioneer trustee and instead rely on the administrator. This unusual type of trustee is an HMRC-approved individual or company whose primary role is to prevent the scheme from winding-up in an inappropriate manner and to ensure fair distribution of the assets, but who also must be a signatory on scheme bank accounts and co-owner of the assets. By 2013, there were calls from specialist SSAS advisers to reinstate the pensioner trustee as a legal requirement.

There is also a concern that, as the regulation of SIPPs is tightened, SSASs might be used as an alternative vehicle through which unscrupulous advisers could sell unregulated and risky investments.

Appendix 2: Overseas DC Markets

DC is the dominant form of pension provision going forwards in Central and Southern America, Eastern Europe, South-East Asia (with the exception of Japan) and the US, among other regions. But while there is an extensive range of literature on overseas DC markets, the research found very little on the specific subject of real estate weightings. Nevertheless, it does appear that the trend in the UK towards using real estate as a core asset class in default or 'balanced' funds mirrors similar trends in several of the largest DC markets overseas. According to PIMCO, in the average default fund growth phase, the weighting to real estate is up to about 10% in Australia and the US.[72]

However, we would urge caution in making comparisons with overseas markets, since there are very significant differences in legal structures and requirements for contributions (e.g. voluntary, auto-enrolment and compulsory) and also in regulation, design, and investment management, among other features. However, as in the UK, pricing and liquidity appear to be important issues for illiquid asset classes, but this does not seem to deter the incorporation of such asset classes in practice. For example, under the mandatory DC system in Chile, funds offer daily liquidity, but they also allocate 5-10% in illiquid assets

There are also differences in the way pension funds can be used, which can affect the glide path. For example, in the UK and Ireland, the most common form of decumulation is to purchase an annuity (although direct drawdown from the fund is permitted) and it is not possible under normal circumstances to draw on the fund before age 55. By contrast, in most countries, it is more common to draw directly from the fund in retirement and, in many cases, it is possible to draw on the fund pre-retirement for non-pension purposes, such as house purchase.

Probably the most relevant markets for comparison purposes with the UK in relation to DC as a whole are Australia and the US, where 81% and 58%, respectively, of all pension assets are held in DC funds, according to Towers Watson.[73] At present, the UK figure is about 26%, although this will change rapidly as DB schemes are wound up and auto-enrolment DC assets grow. Towers Watson also noted that Australia, the UK and the US have a higher than average weighting to equities relative to the global DC markets in aggregate.

The mandatory DC system in Australia was introduced in 1992 and, therefore, now represents a relatively mature market, particularly in comparison with the UK's new auto-enrolment system. Contributions, which are paid by employers only, have risen from an initial 3% to 9% in 2013 and will rise again to 12% by 2019-20. At the heart of the Australian model is the very large-scale 'super' (superannuation) scheme – a multi-employer trust-based model that typically allocates 5-10% of assets to real estate via its 'tactical balanced funds', which are broadly similar to lifestyle and target date funds in the US and UK in their de-risking strategy pre-retirement. Real estate accounted for about A$65bn

72 PIMCO, Featured Solutions, May 2013, 'Global DC Plans, Distinctly Different Paths', http://europe.pimco.com/EN/Insights/Pages/Global-DC-Plans-Similar-Destinations-Distinctly-Different-Paths.aspx

73 Towers Watson, 'Global Pension Assets Study 2013', http://www.towerswatson.com/en/Insights/IC-Types/Survey-Research-Results/2013/01/Global-Pensions-Asset-Study-2013

(£43bn) in 2010 and AUM are expected to double to about A$120bn by 2023, according to Infrastructure Partnerships Australia.[74]

While daily pricing and liquidity are theoretical barriers in Australia – as they are in the UK – the experience of the market is that, under the mandatory system, few scheme members switch between funds in practice, which has enabled the super funds to accommodate illiquid asset classes such as real estate and also infrastructure. The impact has been noted by the Australian Prudential Regulation Authority, which compared Australian diversified not-for-profit DC pension funds with traditional 'retail' DC pension funds:[75]

> *Not-for-profit funds outperform retail funds on a risk-adjusted basis by an average of 144 basis points per annum. The regression results imply that around one-quarter of this performance difference can be attributed to the greater positive impact of illiquid investments on the net returns of not-for-profit funds compared to retail funds.*

The US DB market in 2012 was estimated at $6.5 trillion and projected to grow by 4% annually over the next 20 years. The DC pool was $5 trillion and projected to grow by 7% over that same period.[76]

The US DC market is voluntary and, until comparatively recently, was characterised by individual fund selection, which delivered sub-optimal results according to market commentators. But in 2006, the Pension Protection Act facilitated automatic enrolment into employment-based DC plans (schemes[77]) and about 50% of employers now use this system. The Act also opened the way for the wider use of target date funds, to enable members to benefit from a professionally managed multi-asset investment strategy that automatically de-risked the member's position in the run up to retirement. According to the Plan Sponsor Council of America, in 2012, 70% of DC plans used target date default strategies. Recent research shows that 47% of DC investors own target-date funds, up from 10% five years ago.[78]

According to JP Morgan,[79] the current average allocation to real estate, including the minority of DB plans with zero allocations, is approximately 5%, with 90% of that allocation in private market assets and the remaining 10% in publicly traded REITs. DC plans, which today represent the main retirement savings vehicle for employees, due to the decline of DB, allocate very little to this asset class in aggregate. JP Morgan reported that only 34% of DC plan members have the

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74 http://www.infrastructure.org.au/Default.aspx

75 Australian Prudential Regulation Authority, quoted in DC Investment Forum, 2013, DCIF10, 'Mind the Gap: The case for a relaxation of daily dealing requirements for DC Pension funds' http://www.dcif.co.uk/Publication.html

76 See the Pension Real Estate Association (PREA), http://www.prea.org/. Some publications are only available to members.

77 The term 'plan' in the US is synonymous with the UK's use of the term 'scheme'. However, in the US, 'scheme' has negative connotations as the term is associated with unregulated and often fraudulent ventures.

78 See the Pension Real Estate Association (PREA), http://www.prea.org/. Some publications are only available to members.

79 http://www.jpmorgan.com/tss/General/Building_Portfolios_with_Real_Estate/1306536124562

option to invest in real estate and, even then, only through publicly traded REITs. 'When left to their own devices, these participants also tend to allocate too little, with only 1% average REIT balances'. However, this is beginning to change due to the gain in popularity of multi-asset target date funds, where real estate is incorporated in about 75% of cases, although this is largely in the form of REITs.

> *The median defined contribution participant has underperformed the median defined benefit plan persistently through time, and the return gap is widest in weak years for financial markets. We believe the underperformance stems from two causes: lack of professional management and the inability of DC participants to invest in diversifying asset classes, like direct real estate. The DC industry is nearly there in solving the former issue through adding professional management in target date funds. Now, the real estate investment community is solving the latter by delivering direct real estate products that address the DC issues of daily pricing and liquidity.*[80]

It is interesting to note that this major real estate asset manager in the US, which had $850m of daily valued real estate AUM in 2012, has designed funds for the DC market that broadly replicate LGIM's hybrid fund used by NEST. The former allocates 75% to domestic property and the rest to REITs (with a small allocation to cash); the split in the LGIM fund is 70/30.

Most western European DC markets are less developed than in the UK (although Switzerland has a large DC market relative to DB), but Mercer's 2013 survey on institutional strategic asset allocation as a whole indicates a propensity for real estate in Denmark (8%), Finland (9%), Germany (10%), Norway (15%), and Switzerland (15%).[81]

Mercer also noted a significant difference in the use of real estate and other illiquid asset classes according to pension scheme size, which supports our findings on the trend towards the use of real estate in the large-scale multi-employer default funds designed for auto-enrolment:

> *Property and alternative asset allocations are more significant for larger plans. Plans below €50 million in assets have an average combined allocation to property and alternatives of 7%, compared with 19% for plans with more than €2.5 billion in assets.*

The report found that in Europe real estate is the most significant component of schemes' allocations to real assets compared with the other categories considered: high-income property, infrastructure, timberland/agricultural, and natural resources. Mercer said:

> *Given the extent of the monetary stimulus being applied by the world's major central banks, there remains a desire to introduce a greater degree of inflation sensitivity into portfolios, without accepting the negative real yields available on index-linked government bonds. Investors are therefore increasingly considering income focused (long lease or ground lease) property mandates, infrastructure, and, to a lesser extent, timberland, agriculture, and natural resources. The barriers to allocations rising materially in these areas appear to be a desire to retain liquidity and the paucity of investable, accessible funds.*

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80 PREA, p 46

81 Mercer, 2013 European Asset Allocation Survey, http://uk.mercer.com/articles/2013-european-asset-allocation

Appendix 3: Overview of Real Estate Investment Vehicles

This appendix briefly discusses the principal real estate investment vehicles and is split into five sections:

- An overview of common characteristics
- Listed fund investment strategies[82]
- Unlisted fund investment strategies
- Hybrid investment strategies
- A summary of common structures for UK and European real estate investment.[83]

Overview – Common Characteristics

All real estate funds, regardless of the asset type invested in, have certain structural characteristics that affect the risk and return at the investor level.

These include:

- Structure – either open-ended or closed-ended structures
- Externally priced and listed on a stock exchange or third party platform ('actively traded') or internally priced ('inactively traded')
- A degree of investor liquidity
- A level of underlying asset liquidity
- A structure designed for either Institutional or retail clients
- Either a finite life (typically seven years) or perpetual
- The ability to leverage or not
- A mandate of investments that can be undertaken which can be broad (across asset types and geographies) or narrow
- An investment strategy that can be either active or passive
- A benchmark – either an absolute target or the return on a comparable index
- A level of management costs deducted from the assets under management ('expense ratio')
- A level of co-investment (starting at zero) by both the asset manager and the company sponsor
- A level of tax efficiency
- A distribution policy for dividends to investors
- A legal structure such as limited partnership, unit trust, investment trust etc.

82 Alex Moss and Andrew Baum (2013) 'The Use of Listed Real Estate Securities in Asset Management', Consilia Capital and Property Funds Research

83 Courtesy of PFR

- A risk profile, which is either explicit, as in the case of private equity funds, or implicit in the case of most real estate securities funds
- A level of corporate governance and transparency
- A financial track record
- A regulatory authority (in most cases)
- A frequency of valuation of the underlying assets
- A level of asset concentration – specialist or diversified
- A stated objective of focusing on income, capital, or total return
- Varying degrees of risk and return correlation with the underlying real estate market.

There are three broad structures/strategies available:

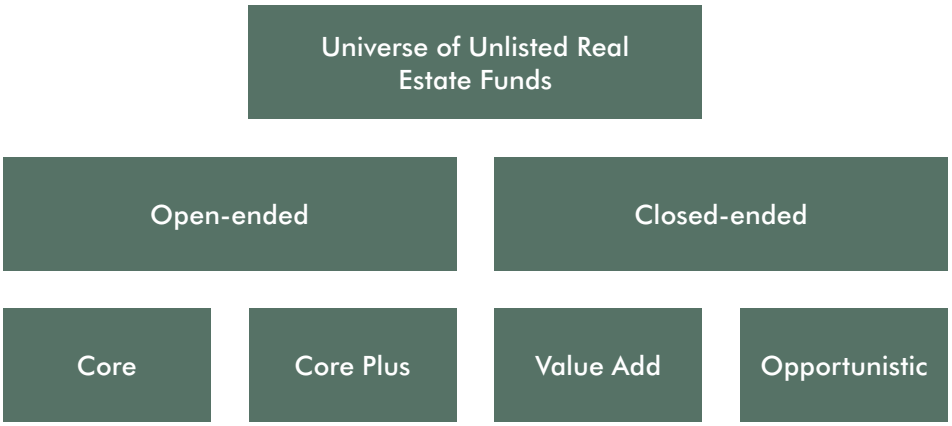
- Funds which invest in listed securities ('listed funds')
- Funds which invest in direct property ('unlisted funds').
- A combination of the two ('hybrid funds')

Listed fund investment strategies

The investment strategies available in the listed funds universe are considered below.

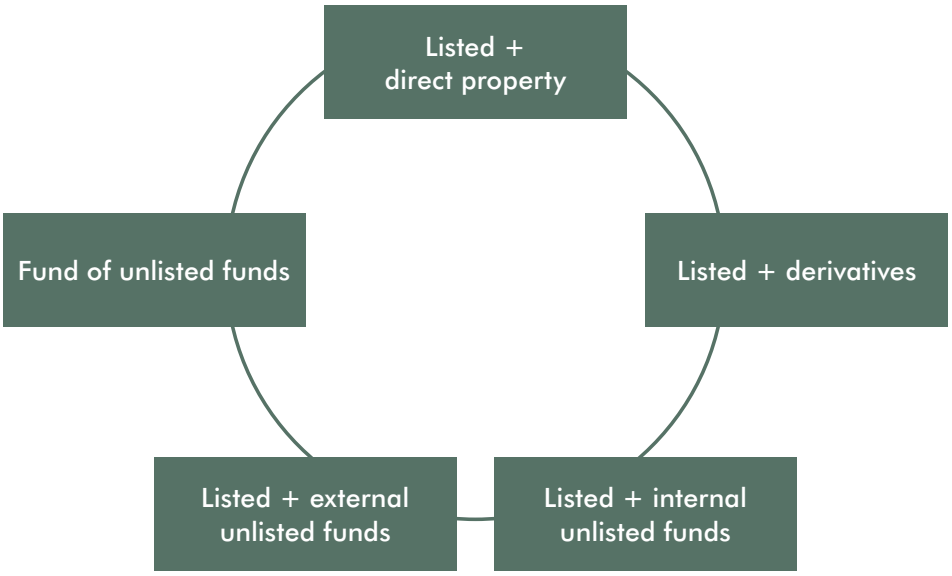
Unlisted fund investment strategies

The investment strategies available in the unlisted funds universe are considered below.



Hybrid investment strategies

The investment strategies available in the hybrid funds universe are considered below.



Summary of common structures for UK and European real estate investment

Domicile	Type	Legal form	Open/closed ended	Listed/unlisted structure (not assets)
UK	Common Investment Fund	Trust	Open-ended	Unlisted
UK	Investment Company	Corporate	Both	Both
UK	Limited Liability Partnership	Partnership	Closed-ended	Unlisted
UK	Limited Partnership	Partnership	Both (usually closed)	Unlisted
UK	Limited Partnership (JV)	Partnership	Both?	Unlisted
UK	Managed Fund	Contract	Open-ended	Unlisted
UK	Private Company	Corporate	Closed-ended	Unlisted
UK	UPUT	Trust	Both (most likely to be open)	Unlisted
UK	APUT	Trust	Open-ended	Unlisted
UK	REIT	Trust	Closed-ended	Unlisted
UK	PAIF	Corporate	Open-ended	
Guernsey	Investment Company	Corporate	Closed-ended	Both
Guernsey	Limited Liability Company	Corporate	Closed-ended	Unlisted
Guernsey	Limited Partnership	Partnership	Closed-ended	Unlisted
Guernsey	Limited Partnership (JV)	Partnership	Closed-ended	Unlisted
Guernsey	Property Investment Trust	Corporate	Closed-ended	Listed
Guernsey	PUT	Trust	Both	Both (usually unlisted)
Guernsey	Protected Cell Company	Corporate	Both	Both
Isle of Man	Investment Company	Corporate	Both	Both
Isle of Man	Managed Fund	Contract	Closed-ended	Unlisted
Isle of Man	Protected Cell Company	Corporate	Both	Both
Jersey	Investment Company	Corporate	Both	Both
Jersey	Limited Partnership	Partnership	Closed-ended	Unlisted
Jersey	Limited Partnership JV	Partnership	Closed-ended	Unlisted
Jersey	PUT	Trust	Both	Both (usually unlisted)
Jersey	Protected Cell Company	Corporate	Both	Both
Jersey	Split Capital Trust	Corporate	Open-ended	Both
Ireland	Investment Company	Corporate	Both	Listed
Ireland	Limited Partnership	Partnership	Both	Unlisted
Ireland	PUT	Trust	Both	Both?
Ireland	Variable Capital Company (OEIC/ ICVC)	Corporate	Open-ended	Both

Domicile	Type	Legal form	Open/closed ended	Listed/unlisted structure (not assets)
Australia	Property Trust	Trust	Both	Both
Austria	AG	Corporate	Open-ended	Unlisted
Austria	Open ended real estate fund	Contract	Both	Unlisted
Bermuda	Investment Company	Corporate	Open-ended	
Bermuda	LP	Partnership	Closed-ended	Unlisted
British Virgin Islands	LP	Partnership	Closed-ended	Unlisted
Cayman Islands	Investment Company	Corporate	Both	Unlisted?
Cayman Islands	LP	Partnership	Closed-ended	Unlisted
Cayman Islands	Unitised Fund	Trust	Open-ended	Listed
Denmark	APS (Anpartsselskab)	Corporate LLC- type	Closed-ended	Unlisted
Denmark	Joint Stock Company	Corporate	Closed-ended	Unlisted
Denmark	Limited Partnership	Partnership	Both	Unlisted
Finland	LP	Partnership	Both	Unlisted
Finland	LLP	Partnership	Closed-ended	Unlisted
France	FCP	Contract	Both	Both
France	SARL	Corporate	Closed-ended	Unlisted
France	SAS	Corporate	Closed-ended	Unlisted
France	SCI	Partnership	Closed-ended	Unlisted
France	SCPI	Corporate	Both	
France	SICAV	Corporate	Both	Unlisted
France	SICAR	Corporate	Both	Both
France	SICAF	Corporate	Closed-ended	
France	SA	Corporate	Closed-ended	Unlisted
France	SIIC (REIT)	Trust	Closed-ended	Listed
France	OPCI		Open-ended	Unlisted
Germany	Closed ended fund	Corporate/ Partnership	Closed-ended	Unlisted
Germany	Open ended fund	Contract	Open-ended	Unlisted
Germany	KG	Partnership		
Germany	Publikcumsfond		Open-ended	
Germany	Spezialfonds	Contract	Closed-ended	Unlisted
Greece	SA	Corporate	Closed-ended	
Italy	Closed ended fund	corporate	Closed-ended (a few are semi-open)	Both
Italy	SIIQ (REIT)	Trust	Closed-ended	Listed
Japan	Tokumei Kumiai (TK)	Partnership	Closed-ended	Unlisted
Korea	Joint Stock Company	Corporate	Closed-ended	Unlisted

Domicile	Type	Legal form	Open/closed ended	Listed/unlisted structure (not assets)
Luxembourg	FCP	Contract	Both	Both
Luxembourg	LP	Partnership	Closed-ended	Unlisted
Luxembourg	Marchands de Biens	Corporate	Closed-ended	Unlisted
Luxembourg	SA	Corporate	Closed-ended	Unlisted
Luxembourg	SARL	Corporate	Closed-ended	Unlisted
Luxembourg	SCA (can qualify as a SOPARFI)	Partnership	Closed-ended	Both?
Luxembourg	SICAF	Corporate	Both	Unlisted
Luxembourg	SICAR	Corporate	Closed-ended	Unlisted
Luxembourg	SICAV	Corporate	Both	Both
Luxembourg	SOPARFI	Corporate	Closed-ended	Unlisted
Mauritius	Limited Liability Company	Corporate	Closed-ended	Unlisted
Netherlands	BV	Corporate	Closed-ended	Unlisted
Netherlands	CV	Partnership	Closed-ended	Unlisted
Netherlands	FGR	Contract	Both	Unlisted
Netherlands	NV	Corporate	Both	Both?
Netherlands	Stichting	Contract	Open-ended	
Norway	LP	Partnership	Both	Unlisted
Poland	Closed ended Fund	Corporate	Closed-ended	
Portugal	Real estate fund	Corporate	Both	Unlisted
Spain	FII	Contract	Open-ended	Listed
Spain	SII	Corporate	Closed-ended	Unlisted
Sweden	Joint Stock Company	Corporate	Both	Unlisted
Switzerland	Anlagestiftung	Contract	Closed-ended	Unlisted
Switzerland	Open ended	Contract	Open-ended	Both
US	Limited Liability Company	Corporate	Closed-ended	
US	Limited Liability Partnership	Partnership	Closed-ended	
US	LP	Partnership	Both	Unlisted
US	LP JV	Partnership	Closed-ended	Unlisted

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Law Debenture
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Sponsor Statement by AREF

The Association of
Real Estate Funds

The Association of Real Estate Funds was particularly keen to sponsor this important project as pension funds have long been significant investors in most of our member funds and we wanted to ensure that the potential for real estate to form a core part of the asset base of the now rapidly growing DC market was fully recognised.

Real estate is a real asset which can offer an important blend of relatively high income return from the rental income stream, combined with growth in capital value, driven by real rental growth which is in turn driven by overall economic growth. In many countries, particularly the UK, supply of new stock is constrained by land use policy, which underpins rental and capital values. In addition, unlike equities and corporate bonds, corporate failure (of the tenant) does not result in complete loss of value, just an interruption to the income stream until the asset can be re-let.

The authors note that these positive qualities contributed historically, to real estate being considered a core asset alongside, and positioned between, equities and bonds in terms of risk and return. But they comment that "... for a combination of reasons that are not necessarily well understood, real estate became reclassified by DC professionals as an 'alternative'asset …".
Yet, due to the combination of real, long-term capital growth and stable, growing income stream "real estate appears to be a very attractive asset to hold in a pension fund portfolio during both the accumulation stage of a DC scheme and – in due course – the decumulation stage."

The recent decision by the National Employment Savings Trust (NEST) to invest 20% of total assets in real estate both in the UK and globally is an important endorsement of the benefits of real estate and we hope that this report will be a key contributor to the better understanding of all practitioners as to how real estate can and should be used in the DC market to the ultimate benefit of the scheme members.

Sponsor Statement By EPRA

EPRA is pleased to sponsor this report examining the potential impact and future developments of the Defined Contribution (DC) market in the UK which is forecasted to grow from GBP276 billion AUM to GBP 1.68 trillion AUM by 2030.

The growth of DC schemes in the UK will present many challenges for asset allocators, consultants and investment managers in offering appropriate schemes at the various points in a savers road to retirement. One thing is clear, real assets and real estate will comprise a fundamental portion of the overall asset allocation. A recent report by CREATE Research estimates that 20% of the overall allocation should be allocated to real assets. In practice, the National Employment Savings Trust (NEST) follow this line investing 20% of total assets in UK direct real estate (70%) and Global REITs (30%) at this current time.

EPRA strongly believes that the GBP 1 trillion of high quality global real estate owned by listed real estate/REITs sector offers DC schemes the flexibility to access professionally managed quality assets, in major cities throughout the world – there is no better way to gain quality diversified exposure to cities like London, Paris, Zurich, New York, Hong Kong and Tokyo without the costs associated with doing it directly.

Over the past ten years, EPRA has spent much time and effort breaking the myth that listed real estate only provides investors with equity-like performance. Whilst this is true in the short term (holding periods under two years), a growing body of research, from the industry's leading independent academics, clearly proves that listed real estate/REITs provide direct real estate performance over the medium to long term. Whilst some respondents to section three of this report still subscribe to this myth, many UK investors have changed the way they look at listed real estate/REITs since the GFC and this presents our sector with a host of opportunities in the future.

EPRA looks forward to supporting continued research in this area, particularly looked at the potential of the DC market in Continental Europe in order to provide a broader pan-European picture.

EPRA,
October 2013

Sponsor Statement By I&FOA

For many years, direct real estate investment has been an important part of a diversified strategy within defined benefit pension funds. Such investment has often taken the form of directly managed portfolios in the larger pension funds; alternatively, some pension funds – especially smaller ones – have invested through open-ended funds which themselves hold direct property.

In recent years, however, there have been profound changes in the investment environment. Defined contribution schemes open to new members are now much more common than defined benefit schemes, especially in the private sector. This has changed the investment decision-taking process, putting the responsibility in the hands of the members rather than trustees, as well as changing some of the considerations that investors might regard as important when deciding on asset allocation. Over a similar time period, the tax treatment of pension funds has been changed, for instance the tax changes of 1997 made equity investment less attractive than was previously the case. Whilst this did not affect direct real estate investment, it did affect real estate vehicles such as traditional property investment companies. The perceived inconsistency between different forms of property investment led the government to introduce real estate investment trusts, tax transparent vehicles of which all pension funds – large or small, defined contribution or defined benefit – could easily take advantage. Subsequent reforms of the taxation of real estate investment vehicles have expanded the range of tax transparent funds.

Most recently, the introduction of automatic enrolment will lead to a larger number of defined contribution scheme members with small pension pots which themselves invest in large funds with long-term stable investment strategies. Those taking investment decisions will be able to choose from the new range of tax-transparent investment vehicles available.

Given the background of so much change in recent years, this research and excellent review of real estate investment in defined contribution pension funds is most welcome. It will assist the actuarial, investment and real estate professions in understanding the needs of pension fund investors and how the various approaches to real estate investment fit into the new investment environment.

Sponsor Statement By Investment Property Forum

Research Programme
2011–2015

The Investment Property Forum is pleased to be a sponsor and lead co-ordinator of this important report into the role of real estate in retirement savings schemes in the UK. This topic was first identified by the IPF Research Committee as a priority area for the real estate industry several years ago, as the pensions market moved away from Defined Benefit schemes, which traditionally had a significant weighting for real estate, towards Defined Contribution schemes, which typically did not have a real estate weighting. The impending arrival of auto-enrolment, which started 12 months ago in October 2012, provided the catalyst for us to seek a research team who could undertake this important work.

At the outset there were a number of key questions that we were keen for the research team to answer, and several important assumptions that needed to be challenged. These included identifying who made the asset allocation decisions for DC schemes, what analytical tools were used to make those decisions, whether daily pricing and liquidity genuinely was a pre-requisite for asset allocators, how and why allocations might differ from a DB to a DC scheme and, most importantly, whether real estate in all its forms had a significant role to play in DC schemes, as it had in DB schemes.

The conclusions of this independent study highlight that there is, indeed, a role for real estate in DC schemes, and why, but it also identifies a number of issues that need to be addressed, not least the lack of clarity and inconsistency in the application of modelling standards and practices by investment consultants and asset allocators.

We hope the publication of this research succeeds in the aim of increasing the awareness of the benefits of real estate to the pensions industry and similarly, improving the understanding of real estate practitioners of the issues faced by pension fund managers and consultants in making asset allocation decisions for DC schemes.

This research was commissioned and co-funded through the IPF Research Programme 2011-2015, which supports the IPF's wider goals of enhancing the understanding and efficiency of property as an investment. This initiative provides the UK property investment market with the ability to deliver substantial, objective and high-quality analysis on a structured basis. It encourages the whole industry to engage with other financial markets, the wider business community and government in a range of complementary issues.

The Programme is funded by a cross-section of 22 businesses, representing key market participants. The IPF gratefully acknowledges the support of the following contributing organisations: Aberdeen Asset Management, Aviva Investors, Berwin Leighton Paisner, BNP Paribas Real Estate, CoStar Group, Deloitte, GIC, Grosvenor, Hammerson, IPD, Jones Lang LaSalle, Kames Capital, LaSalle Investment Management, Legal & General, M&G Real Estate, Nabarro, Real Capital Analytics, Scottish Widows Investment Partnership, Standard Life Investments, Strutt & Parker, The British Land Company and Wells Fargo.

IPF,
October 2013

About the Pensions Institute

The objectives of the Pensions Institute are:

- to undertake high quality research in all fields related to pensions
- to communicate the results of that research to the academic and practitioner communities
- to establish an international network of pensions researchers from a variety of disciplines
- to provide expert independent advice to the pensions industry and government.

We take a fully multidisciplinary approach. For the first time disciplines such as economics, finance, insurance and actuarial science through to accounting, corporate governance, law and regulation have been brought together in order to enhance strategic thinking, research and teaching in pensions. As the first and only UK academic research centre focused entirely on pensions, the Pensions Institute unites some of the world's leading experts in these fields in order to offer an integrated approach to solving the complex problems that arise in this field.

The Pensions Institute undertakes research in a wide range of fields, including:

Pension microeconomics
The economics of individual and corporate pension planning, long-term savings and retirement decisions.

Pension fund management and performance
The investment management and investment performance of occupational and personal pension schemes.

Pension funding and valuations
The actuarial and insurance issues related to pension schemes, including risk management, asset liability management, funding, scheme design, annuities and guarantees.

Pension law and regulation
The legal aspects of pension schemes and pension fund management.

Pension accounting, taxation and administration
The operational aspects of running pension schemes.

Marketing
The practice and ethics of selling group and individual pension products.

Macroeconomics of pensions
The implications of aggregate pension savings and the impact of the size and maturity of pension funds on other sectors of the economy (e.g. corporate, public and international sectors).

Public policy
Domestic and EU social policy towards pension provision and other employee benefits in the light of factors such as the Social Chapter of the Maastricht Treaty and the demographic developments in Europe and other countries.

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'Caveat Venditor: The brave new world of auto-enrolment should be governed by the principle of seller not buyer beware' by Debbie Harrison, David Blake and Kevin Dowd, October 2012.

'An evaluation of investment governance in London Local Government Pension Schemes: A discussion paper for stakeholders to the London Funds', by David Blake and Debbie Harrison, November 2012.

'A healthier way to de-risk:
The introduction of medical underwriting to the defined benefit de-risking market', by David Blake and Debbie Harrison, February 2013.