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Which?

The Future of Retirement Income

Retirement income
after the 2014 Budget

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This a Which? report prepared by Debbie Harrison and David Blake of the Pensions Institute, drawing on their expertise and research. The main research took place between December 2013 and April 2014, but the insights into the market represent a continuation of the analysis in previous Pensions Institute reports that investigate the decumulation market and DC workplace schemes. We are also grateful for the insights of the organisations interviewed for this report. These are listed in the acknowledgments.

Peter Vicary-Smith **Group Chief Executive, Which?**

The welcome flexibilities introduced in the 2014 Budget are the biggest changes to the retirement income market for decades. Quite rightly, a significant amount of attention has been given to the delivery and content of the free, impartial guidance which will be provided to consumers at retirement. But just as important in this debate is ensuring that the retirement income products offered to consumers are suitable and that they offer value for money.

These reforms are likely to lead to a significant decline in the sale of annuities. This raises important questions about the features and risks of the alternative products which currently exist and those which will be developed in the run-up to April 2015. To contribute to this debate, Which? commissioned Debbie Harrison and David Blake of the Pensions Institute to evaluate the alternative products which are currently available and those which could be developed.

Their report finds that, overwhelmingly, the current system funnels consumers towards the purchase of annuities, regardless of whether or not they are appropriate or offer good value. The regulatory regime has failed to take into account the significant pressure on consumers at a stressful time in their lives and the fact that, for most, there has been only one chance to make the right decision.

Policy and regulation in the retirement income phase has, arguably, been premised on the idea that consumers will make better decisions with more information; that they will use this information to select the option they know they prefer, and that they can accurately estimate future costs, needs and circumstances. We know from the behavioural sciences that this is simply not the case.

In the past, this has led to a lack of effective competition and too many consumers receiving a poor deal. For example, insurance companies selling an annuity 15 per cent off the best market rate effectively wipes out nine years of a consumer's hard earned pension contributions at a stroke. Reforms need to be made to avoid the emerging market in alternative retirement income products becoming as dysfunctional as the annuity market. Innovation in this area must be based on the needs of consumers. As this report highlights, many of the current alternatives to annuities do not meet the needs of the mass market of consumers.

For many consumers, leaving their pension invested and drawing an income from it will become the norm, rather than the exception. These products must be transformed from a niche strategy for the wealthy, due to the potentially high initial and ongoing costs and investment and longevity risks, into a mass market product accessible to most, if not all, consumers.

It is essential that these flexible pension income products are transparent, with risks and benefits highlighted clearly and that they have reasonable charges. The human tendency to do nothing in the face of complexity means that consumers will need

help when making these decisions. This help must take into account the likelihood that they will underestimate their own life expectancy and care costs, and cover factors including how much they might want to draw out of their pension each year, their tax position and attitude to risk.

Equally, how information and options are framed will have a significant impact on consumer decision making; therefore, regulatory oversight of the presentation of information will be critical, as will strict enforcement on how fees, risks and rates are communicated to individuals. The reforms could also act as a honeypot for those peddling unregulated investments and all stakeholders need to do more to help consumers avoid such pitfalls.

If there is one thing we have learnt from auto-enrolment, it is that a default option is a powerful tool and that, in the face of complexity, many consumers will end up taking the default retirement income product offered by their scheme. So, default investment strategies need to be reviewed urgently to reflect the fact that more consumers will remain invested after retirement. Most importantly it is vital that there is strong governance in place to ensure that those running schemes and taking decisions about retirement income products have strong duties to act in the best interests of consumers.

In the run-up to the new reforms, the FCA should revise its rules around the sale of retirement income products and must not hesitate to use its product intervention powers to prevent unsuitable products from being sold to consumers.

Even with the newly-introduced flexibilities, annuities will remain an important part of retirement income provision for some consumers, albeit it's likely that they will be bought at a much later age - perhaps 75 to 80. So it remains vital that reforms to this market are accelerated so that consumers receive the right type of annuity and the best rate possible, bought at the right time for them.

Automatic enrolment has got off to a good start, with the first increase in participation in workplace pension savings for 8 years. Ensuring that consumers get a good deal at retirement when turning their hard-earned contributions into an income stream must now be a central focus for Government, industry and regulators.

We hope that the ideas in this report - including the bold idea of exploring how to extend the 'institutionalised' benefits of auto-enrolment into the retirement income phase - will make a significant contribution to the debate.

Peter Vicary-Smith
Group Chief Executive, Which?

Executive summary

Auto-enrolment has brought great benefits to the DC pensions market in the UK. Coupled with the introduction of large, multi-employer trust based schemes, it has effectively institutionalised the savings 'accumulation' phase of workplace DC pensions. This institutionalised approach has brought with it improved governance and communications, carefully designed investment strategies and lower charges - in other words, value for money.

But these value-driving benefits currently end at the point of retirement when scheme members, and individuals with personal pension plans, convert their pension savings into a retirement income. Currently, many consumers are left to sort out their own retirement income choices; they enter the opaque, high-cost and poor-value market of retail annuities and retail drawdown products with little support.

The 2014 Budget proposes flexibility but, at the same time, even more complexity for consumers. The government has promised free, impartial guidance, but it will still be a huge challenge for all parties to ensure that real benefits flow from the new flexibility that has been introduced and that the same problems do not simply shift from the retail annuity market, with its flawed pricing and distribution, to the retail drawdown market, which is served largely by the same providers and distributors and which, as a result, suffers from the same potential flaws. The risks of a future drawdown mis-selling scandal should not be underestimated.

We have four central points for the government and the regulators to consider:

■ **First**, while introducing flexibility, the new DC retirement income market presents a number of potential pitfalls for consumers, who will need to make a series of complex decisions which require personalised advice. The choices they make will be significantly influenced by how the options are presented and explained. Some DC customers will be attracted to single-asset investment strategies, such as buy-to-let, and many will be vulnerable to firms that sell unregulated investments that appear to offer attractive yields.

■ **Second**, there are inevitable individual investment and longevity risks associated with a mass market for drawdown. No amount of improvement in product design or reduction in charges can remove these risks.

■ **Third**, longevity insurance, in the form of a lifetime annuity, will remain an essential component of the DC retirement income market, especially for the later stage of retirement, when insurance becomes more attractive and appropriate relative to keeping assets invested.

■ **Fourth**, improvements in product design and/or reductions in charges cannot compensate for inadequate contributions into DC pension schemes, particularly if the government wants DC pots to fund care costs in later life. This remains a fundamental problem for the UK DC model.

We believe that there is now a golden opportunity for all players involved in pensions policy to consider whether and how an institutional model could be applied to the decumulation, as well as the accumulation, phase of DC pensions.

Any new institutional structure would have to address the optimal age to purchase longevity insurance - in other words, the age at which a lifetime annuity should come into effect. It would also have to address what are the most effective and efficient products both to provide and defer income in the period between retirement and the purchase of longevity insurance.

These new ideas need further debate, and further work needs urgently to be done on their design, and on the governance and regulatory framework in which they could operate.

Key findings

1. At present, the immediate purchase of the Life Time Annuity (LTA) is driven by pressure applied by those responsible for DC scheme governance. There are vested interests on the annuity sell-side (insurance companies) and also conflicts of interest on the part of trustees of DC schemes. Insurers that sell both DC pensions and annuities have a vested interest in retaining customers' pension pots at retirement and also by capturing other customers via the LTA open market option. Trustees of DC schemes arguably are conflicted because they discharge all responsibility to members at the point of the annuity purchase. In some cases, the trustees and the provider are one and the same, which creates further conflicts.

2. These conflicts of interest and vested interests are compounded by a regulatory system that to date has favoured LTAs, due to the guarantees that they offer, and which does not appear to understand the risks associated with this product. Risks include the absence of inflation protection, historically low annuity rates due to quantitative easing, and the impact of the increased use of individual underwriting techniques on the annuity risk pool, among other factors. The current system gives DC customers only one shot at making the right decision. It takes little or no account of the pressure on DC customers, at a very difficult and stressful time in their lives, to make a complex and, in the case of the LTA, an irreversible decumulation decision for which there is no learning curve.

3. Following the 2014 Budget, income drawdown and non-pensions investment products increasingly will be the norm for DC customers who do not qualify for trivial commutation. Therefore many DC customers will bear investment and longevity risks into retirement. They might also be tempted to take inappropriate risks in a bid to secure a higher return - for example by investing in a single asset class via buy-to-let - and be preyed upon by unscrupulous firms that sell wholly unsuitable unregulated investment products.

4. Current alternatives to lifetime annuities do not meet the needs of the mass market, due to the costs and investment risks. Moreover, the advice market is ill-adapted to the new regime, as few firms offer full regulated advice to customers who have DC pots worth less than £50,000 to 100,000 and no additional investible assets. If this scenario does not change, then the biggest beneficiaries of DC decumulation flexibility will be the manufacturers and distributors of products - the insurance companies, investment managers and advisers - that will profit from the high charges and sales commissions, but bear none of the risks.

5. At the heart of the DC decumulation challenge is a disconnection between the trend towards an institutional model for governance for accumulation in multi-trust, multi-employer auto-enrolment schemes, which includes carefully-designed investment strategies and lower charges, and the cost and risks associated with retail decumulation products all of which are borne by the individual.

6. Providing free face-to-face impartial guidance for more than 400,000 people each year - which is what the government has promised - will be a massive challenge that requires sustainable funding. Under the new regime the choices will be far more complex, for example, DC customers who want to draw a regular income will need to consider a complex range of factors, including the impact on income tax, investment risk, and longevity risk. They will need personalised help to determine the appropriate level of income to draw. Beyond the free guidance, many DC customers will need fully regulated advice, which recent research demonstrates is not readily available at an acceptable cost.

Behavioural economics tells us that when faced with complex decisions, consumers are heavily influenced by how the options are presented by providers and advisers, who might not have the customer's best interests at heart.

7. The sales of annuities will decline, due to the new trivial commutation and drawdown rules - possibly triggering a period of instability in the market with the collapse or withdrawal of smaller insurers. Longevity insurance in the form of individually underwritten lifetime annuities (LTAs) is expected to remain a crucial element of DC decumulation. However, the age at which longevity insurance comes into effect is likely to be higher than historically. Deferring an annuity means most purchases will be made much later in life. The deferral of the purchase of longevity insurance until age 70-80, for example, in the form of the LTA, might well be a sensible strategy, given the low rates available, especially to younger retirees in good health. Nevertheless, it might be sensible to purchase longevity insurance (in the form of a deferred annuity) at the time of retirement in order to ring-fence a secured retirement income in later life.

However, it is hard to assess whether LTAs are being appropriately priced and offer good value for money - and this is true even when they are sold to pensioners in their mid-to-late-70s, as well as to new retirees. Insurers do need to build in a prudent mortality buffer into their pricing models, given the potential length of retirement. However, the mortality buffer is only part of the load that insurers add to the modelled annuity price to cover other items such as administration and profit. The question the FCA needs to ask in its competition investigation is this: 'is the mortality and profit margin built into the annuity price excessive in relation to the capital the insurer needs to

allocate to support its annuity business?. What is already clear from the FCA's thematic review is that the sale of annuities to an insurer's existing customers is more profitable than competing for business in the open market.

8. The FCA, among others, argues that more people should purchase an enhanced annuity. While enhanced annuities better reflect life expectancy, and therefore deliver a better rate to those with relevant lifestyle and medical factors, there are two important caveats. First, under the proposed April 2015 regime, those with severe life-shortening conditions, who have dependants, might be better off not annuitising, so that on death, any residual fund goes to their estate. Second, there is no regulatory definition of 'enhanced' and no benchmark rates: a very slight increase in relation to an uncompetitive internal rate qualifies for the description 'enhanced'. It is important to note here that insurance companies are not obliged to offer enhanced annuities although, if they do not, they must explain the potential benefits of enhanced rates to customers in pre-retirement literature.

9. Innovation in the DC decumulation market was evident well before the 2014 Budget. However, for this to benefit DC customers, it is important for the government and regulators to take a clear view of what a good outcome means in practice. This should combine suitability (effective) and value for money (efficient, competitive), and might be expressed as a four-stage process to ensure: (a) the right timing, (b) the right decumulation product, (c) the right features, and (d) a competitive price.

Innovation, therefore, needs to address the following three issues:

- The optimal age to purchase longevity insurance and the optimal age at which the longevity insurance comes into effect (i.e., the age at which the LTA is purchased).
- The most effective and efficient products for providing income drawdown in the deferral period between retirement and the age at which the longevity insurance comes into effect.
- The impact of deferring the LTA purchase on local authority means-testing, of eligibility for support with long-term care costs. This currently requires the individual to pay fees in full until capital falls below £23,250.

10. Innovators need to recognise that, at some point between age 70 and age 80, it will become optimal for most DC customers to switch between income drawdown and longevity insurance since the implied return on a LTA - as a result of the high mortality premium at these ages - exceeds any realistic return available in the financial markets.

An appropriate deferment product for the mass market, which can be integrated into auto-enrolment, might be described as one that:

- Benefits from institutional design, governance, and pricing
- Delivers a reasonably reliable income stream (i.e., with minimal fluctuations)
- Maintains the purchasing power of the fund
- Offers the flexibility to purchase the LTA at any time (or at regular predetermined intervals to hedge interest rate and mortality risk)
- Is simple to understand, transparent and low-cost
- Requires minimal consumer engagement, e.g., by offering a high-quality default option
- Benefits from a low-cost delivery system.

Recommendations

Products:

1. The pensions industry should work towards the replacement of the sales-driven retail annuity market with improved retirement income solutions under an institutional auto-enrolment model, characterised by a seamless transition between the two phases of the pension process: accumulation and decumulation. An institutional asset-management scheme-based approach to DC decumulation in the early years of retirement, combined with institutional annuitisation, would represent a much more effective and efficient market:

a. 'Scheme drawdown' products are expected to be introduced to the market in 2014. The concept appears to provide a rational asset management alternative to annuitisation (full longevity insurance) during the early years of retirement, not least because whatever is left in the fund can be inherited if the scheme member dies early. Over the longer term, it offers the potential for higher returns than might be available via an annuity, but at the cost of increased investment and longevity risk. Scheme drawdown might take the form of a series of target-date funds that offer flexible membership periods or are fully liquid, so that members can buy a LTA at any time. This option might be offered by multi-employer, multi-trust auto-enrolment schemes. It might also be provided by the national scheme, NEST, so that it is available to all DC customers, including the self-employed - a long-neglected sector of the DC population.

While scheme drawdown does not replicate the risk pooling concept of annuities, it does maintain the collectivisation and pooling concept of large-scale, trust-based multi-employer DC schemes.

We stress, however, that the longevity risk associated with drawdown of people running out of money if they live longer will not be made more palatable through improvements in product design and distribution. This risk, and the costs of hedging it, cannot be ignored. Moreover, the asset allocation of the accumulation fund in the pre-retirement years will need to be modified, as at present, this de-risking phase is designed to meet the needs of those who take 25% as tax-free cash and use the rest of the fund to buy a LTA. All of these risks will need to be communicated to - and understood by - DC customers, otherwise there is a very real danger the DC market will face future mis-selling scandals.

b. 'Institutional annuitisation' is already prevalent in the DB bulk buy-out market, where economies of scale can benefit scheme members as well as providers. If this model could be adapted for the DC auto-enrolment market, it could deliver better value for money. This model might be implemented via a national clearing house to ensure universal access. It might also be offered by the large-scale DC schemes, once they have achieved the necessary critical mass, and where they have adopted scheme drawdown.

Regulation:

2. The regulators should ensure that the new flexible regime for drawdown is effective and efficient. They must also proactively monitor new regulated products coming on to the market and warn DC customers about the risks of unregulated investments.

a. The **FCA** should ensure that DC customers are not exploited where they take advantage of the more flexible income drawdown rules in 2014-15 and, in particular, the very flexible rules proposed for April 2015. Current alternatives to LTAs must be evaluated urgently. The FCA should use its product-intervention powers to prevent a flood of unsuitable products entering the market. These powers allow it to restrict certain product features, control which products are sold and to which types of customer, and to ban a product altogether. It should issue clear warnings about the dangers of investing the whole of the DC pot in a single type of investment, for example buy-to-let, and in particular about the dangers of unregulated investments, including those that are legal and those that are scams.

b. The **FCA** should revise the rules on drawdown (Regulatory Update 55), introduced in 1998, which allow advisers and providers to understate the investment risks associated with this product and which facilitate the recommendation of high-risk investment strategies in order to offset high costs.

c. The **FCA** should ensure that the face-to-face guidance regime, to be introduced in 2015, is separated from all sales processes to avoid conflicts of interest. The guidance should be delivered via an intermediary that is genuinely impartial, which means it must have no connection to insurance companies and asset managers.

The guidance regime must address the need for individuals to fully understand the costs, investment risk and longevity risk they bear if they do not annuitise. It must also assist with the selection of the annual income drawn down with reference to the marginal rate of income tax and in relation to the risk of drawing too much income in the early years of retirement, leaving their DC funds exhausted in later retirement.

Due to the complexity of new choices, in many cases, DC customers will also need regulated advice. The development of the new guidance regime, therefore, should be accompanied by an overhaul of SIPP regulation, and the advice market and its regulation. All intermediaries - whether they offer regulated advice, non-advice, or guidance, should be required to adhere to a robust code of conduct, as recommended by the Financial Services Consumer Panel [FSCP 2013]. The code would be strengthened by the introduction of a clear measure of, and guidance on, the practical meaning of value for money, which would help avoid mis-selling and mis-buying scandals in the DC decumulation market post-April 2015.

- d. The **FCA** should introduce a risk-based regulatory classification system for all DC decumulation products – LTAs and the alternatives, such as fixed-term annuities and income drawdown – that takes account of a simple range of typical customer profiles, for example, in relation to age, state of health and dependants (partner, children for whom an inheritance is desired), etc.
- e. The **FCA and PRA** should consider urgently the need to manage the consumer and market risks associated with a significant contraction in the annuity market. There is a real danger that one or more of the recent market entrants could fail, especially where this is a mono-line provider.
- f. The **FCA and The Pensions Regulator (TPR)** should ensure that strong governance arrangements apply to the default investment option used for drawdown and that these are reviewed in the light of the new flexibility for DC decumulation. The current model – which assumes 25% of the fund will be taken as tax-free cash and the rest used for annuity purchase – will no longer be appropriate. This will be a complex challenge, as the potential scenarios vary significantly. Those with smaller pots might decide to withdraw the whole fund as cash – possibly over two or three years to avoid paying income tax at a higher rate – which would require a cash-based fund. Those with larger pots might decide to keep their fund fully invested, which would require a very different asset allocation that includes growth assets.
- g. **FCA and TPR** should introduce clear guidance to trustees and other types of governance boards as soon as possible on the regulation of scheme drawdown and appropriate member communications.
- h. **FCA TPR and the actuarial profession** should examine the rules for cash-equivalent transfer values (CETVs), where members of DB schemes want to transfer to the DC regime, to ensure schemes do not exploit the new rules and provide poor value to members in order to off-load the DB liabilities from the sponsoring employer's balance sheet.
- i. **FCA, TPR and the actuarial profession** should consider the risks in existing annuity bulk buy-ins and buy-outs, where an insurance company's covenant has been weakened by the loss of business in the retail market and a fall in the company's share price.

Government

3. The government should oversee the smooth introduction of the new flexible DC decumulation market. It should:

- a. Ensure tax planning is embedded in the new guidance regime, so that consumers do not inadvertently pay a higher rate of tax by drawing too much income.
- b. Set out clearly the impact of taking income and/or cash, rather than buying an annuity, in relation to local authority means-testing for care home fees, should residential/nursing home care become necessary at some point.
- c. Work closely with the FCA to evaluate new decumulation products launched in response to the tax rule changes and to pre-empt firms from introducing unsuitable (e.g., high risk) and unregulated investments that appear to offer higher yields than are available through more suitable (lower-risk) and regulated products.
- d. Consider the introduction of full cost disclosure and a charge cap in the DC decumulation market at the same time that it makes these features a requirement for auto-enrolment DC schemes.
- e. Above all, the government should recognise that consumers may face difficulties resulting from the different mechanisms involved in the accumulation and decumulation phases. The success of auto-enrolment has been predicated on the behavioural principle of inertia, while HMT's planned reforms for April 2015 will produce a decumulation landscape requiring consumer engagement in making complex choices. Government needs to help consumers navigate the transition between these two phases to enable them to avoid potential pitfalls and get the most out of the reforms.

Section 1 the lifetime annuity market

Compared with defined benefit (DB) pension schemes, where the member receives a salary-linked retirement income for life, and where the investment and longevity risks are borne by the sponsoring employer, DC pension schemes and plans place all the risks on the individual. Nowhere is this more apparent than at retirement, when the individual must decide how to convert the accumulated fund into a lifetime income. For the majority of people who need to replace an earned income immediately with a pension income at the point they stop working, the decision is complex and pressured, frequently leading to ill-informed purchases of retirement income products. This problem cannot be ignored, as the government recognised in its 2014 Budget announcements and in HMT's Freedom and Choice in Pensions consultation paper.¹

DC is now the main pension arrangement in the private sector. Auto-enrolment will bring up to 11m new employees into workplace DC schemes in a market that is expected to grow from about £276bn assets under management (AUM) in 2012 to an estimated £1.7trn by 2030.² Employers are introducing the new pension system between October 2012 and 2018 and it is to be hoped that employees will be able to consolidate pots from older high-charging schemes and plans, where appropriate, into these new low-cost arrangements.³

Auto-enrolment schemes have been the focus of policy and regulatory attention over the past two years in particular, resulting in very significant improvements. The original DC model – based on the retail personal pension, which emerged in the late 1980s, and encumbered by flawed governance and high charges – has been transformed into an institutional accumulation model that passes on to members the benefits of economies of scale in relation to governance, asset management, administration, and charges. Unfortunately this transformation has excluded the decumulation phase of DC.

In this section, we begin with a brief analysis of the sweeping tax rule changes introduced in the 2014 Budget. We also look at the current retail DC decumulation market, which is inefficient

and ineffective in comparison with the institutional structure of the new multi-trust, multi-employer DC auto-enrolment schemes.

This overview puts into context our analysis of the lifetime annuity (LTA) which, we argue, remains a crucial feature of the DC decumulation market and could become a very effective and efficient product, if purchased at the appropriate age via an institutional-style process. At present it is purchased by about 90% of DC customers at retirement.⁴ The current alternatives to the LTA for DC customers in the early years of retirement are explored in Section 2 and emerging alternatives in Section 3, seeking out the most suitable products and delivery mechanisms for the post-2014 Budget environment.

A note on terminology: For the sake of simplicity, we use 'DC customer' as a generic description to denote members of workplace DC schemes and those with individual pension plans, including the self-employed and employees who have built up small pots from membership of contract-based group DC arrangements (group personal pensions and stakeholder schemes) with former employers.

1.1 The 2014 Budget

The 2014 Budget, delivered on 19 March 2014, introduced the most significant overhaul of the DC decumulation tax rules since the Finance Act 1921.⁵ We set out the details here and begin our consideration of the consequences – intended and unintended – which continues in Sections 2 and 3.

The FCA issued guidance in early April 2014 that included a requirement for advisers and providers to ensure customers are aware of the proposed major changes scheduled for April 2015 before making a decision based on the 2013-2014 rules.⁶ This is crucial, since otherwise less scrupulous practitioners might try to sell restrictive products, such as fixed-term annuities, in advance of the introduction of the more flexible regime. The FCA guidance to firms should ensure that, if this occurs, customers will have reasonable grounds for claiming they were victims

¹HM Treasury, 2014, Freedom and Choice in Pensions. ²Pensions Institute, 2014, VFM: Assessing value for money in defined contribution default funds. ³The exception might be where an older pension plan has a guaranteed annuity rate (GAR) that is significantly higher than prevailing rates. ⁴FCA 2014, Thematic Review of Annuities. ⁵HM Treasury, 2014, Freedom and Choice in Pensions. ⁶The FCA's guidance can be found here: <http://www.fca.org.uk/your-fca/documents/finalised-guidance/fg14-03>

of mis-selling and be able to take the case to the Financial Ombudsman Scheme.

1.1.1 Immediate changes

Trivial commutation pre-Budget: A DC customer who was aged 60 or more, and who had total pension savings worth no more than £18,000, could withdraw the DC pot(s) as cash, the first 25% of which was tax-free and the rest taxable at the marginal rate.⁷ In addition, up to two small personal pension pots, worth £2,000 or less, could be taken as a lump sum (taxed as per trivial commutation), even where total pension savings were worth more than the £18,000 limit.

From 27 March 2014: For DC customers aged 60 or over:

- The amount of total pension wealth, all of which an individual can take as a lump sum, is increased from £18,000 to £30,000.
- The maximum size of small pension pots which can be taken as a lump sum, regardless of total pension wealth, is increased from £2,000 to £10,000 and the number of personal pots that can be taken under these rules is increased from two to three.
- The tax treatment of lump sums remains the same.
- The new rules are not retrospective: those who have already made an annuity purchase with a small pot will not be able to reverse the contract.

Income drawdown pre-Budget: The maximum income that could be taken under the main drawdown arrangement (known as 'capped drawdown' because the maximum annual income is capped) was 120% of the annuity rate set by the Government Actuary's Department (GAD). To qualify for 'flexible drawdown', where there is no cap on the maximum annual income, it was necessary to have an income of at least £20,000 per annum from secure pension sources (for example a combination of DB and state pensions).

From 27 March 2014:

- The capped drawdown limit is raised from 120% to 150% of the GAD annuity rate.
- The minimum income requirement for flexible drawdown is reduced from £20,000 to £12,000

The overall impact of the Budget changes for 2014-15 is that an estimated additional 85,000 people – approximately one-quarter of DC retirees for this period – will be eligible to access flexible drawdown or to take their pot(s) as a lump sum.

1.1.2 2015 changes

Much more radical changes will be introduced in April 2015, but these are subject to further consultation during 2014, followed by new legislation.

Cash or drawdown choice for all: The main change is to allow DC customers aged 55 and over to draw down from their fund however they wish – i.e., as income or cash – irrespective of the fund size and other sources of pension income. As previously, it will be possible to take a 25% tax-free lump sum. All additional funds drawn will be subject to the marginal rate of income tax.

DC retirees who recently took a tax-free lump sum from their defined contribution (DC) pension have 18 months to decide what to do with the rest of their savings – previously this was six months. This means that they will not be put at a disadvantage should they wish to wait to draw on their DC pot under the more flexible rules planned for April 2015.

Free guidance for all: A crucial new feature of the regime will be to ensure that all DC customers have access to free and impartial face-to-face guidance on their full range of options. Pension providers and schemes will be required to deliver a 'guidance guarantee' by April 2015. The FCA is responsible for making sure this guidance 'meets robust standards, working closely with consumer groups'. To help finance this unprecedented initiative, the government is making available a £20m development fund.

Rise in DC pension age: By 2028, when the state pension rises to 67, the minimum age at which it will be possible to access a DC fund will rise from 55 to 57.

1.1.3 Budget impact

The government will now consult with consumer bodies and the industry on the most significant changes, which it plans to introduce in April 2015. The government will also address concerns over access to the new DC decumulation flexibility for members of private sector DB schemes. It has already said that it intends to prevent members of public-sector DB schemes – most of which are unfunded – from transferring into the DC regime.

While the confirmed details for 2014-15 will have a significant impact, the proposals for April 2015, if approved, would change the DC decumulation market beyond recognition, largely replacing annuity purchase at the point of retirement with cash withdrawals and regular income drawdown. This is a big gamble for the government, as it means that many DC retirees will retain investment and longevity risks by using drawdown instead of annuities and in many cases might not realise the implications.⁸

The Treasury is expecting net tax receipts from the recent round of changes of £3bn over the next five years (£320m in 2015/16; £600m in 2016/2017; £910 in 2017/2018; and £1.2bn in 2018/2019; with a net gain every year until 2023). The figures are based on assumptions about increased income tax on

withdrawals above the 25% tax-free lump sum, but also on an increase in inheritance tax, i.e. the additional tax receipts from DC funds on death that will go to the Treasury, rather than to insurers' reserves, as is the case with annuities.

It is impossible to predict how many people might take their whole funds as cash, but it is important to remember that, once the 25% tax-free cash has been taken, the rest of the fund drawn will be subject to the individual's marginal tax rate in the relevant year. This means that DC investors, whom we would expect to want to try to minimise their tax liability, are likely to only withdraw amounts that do not push them into a higher-rate tax for any given year. However, since most DC pots are worth less than £50,000, and about half are worth less than £15,000, it would be possible to withdraw these sums over a small number of years and still avoid paying a higher rate of income tax.

Moreover, the negative perception of annuities might prompt DC customers to conclude that all retirement income products offer poor value for money and suffer from high and opaque charges. As this report demonstrates, this might be a rational conclusion at present, but it would be detrimental to DC customers in the longer term – and as pot sizes increase – if they suffered unnecessary income tax in order to 'liberate' their pension assets.

We are also concerned about HMT's⁹ positive references to overseas markets, where annuitisation is not the norm. In Australia, for example, the DC customer's freedom to take cash has given rise to concerns over the use of DC pots for short-term aspirational spending projects at the expense of longer-term income needs. The description 'double-dipping', which is used in Australia (full compulsion), and also in New Zealand (auto-enrolment), describes this kind of spending behaviour, which forces pensioners to fall back on means-tested state benefits in later retirement.

One issue that has not been clarified as yet is the impact of keeping the DC fund invested post-retirement on means testing for care home fees. At present, if it becomes necessary to enter a nursing or residential home, under local authority means-testing rules, if you have assets of more than £23,250, you will need to pay the full cost of your care. Your income is also taken into account.¹⁰

It is to be hoped that DC customers who do not want to buy an annuity will use drawdown as a means of spreading income over the full retirement period and that the government's proposed new impartial guidance system will ensure that they fully understand the investment and longevity risks they will now bear as a consequence.

The use of behavioural economics analysis will be important here. Consumers will need to make complex decisions in relation to the level of income they take each year and the point

at which it might be appropriate to buy an annuity. Decisions need to take into account taxation, investment risk, inflation risk and longevity risk. Behavioural economics tells us that consumers' choices are influenced significantly by behavioural biases, their capacity to make informed decisions, and by the ways in which the options are presented. Decisions might also be influenced by lack of trust in the pensions, investment and advice markets, which might encourage people to withdraw all of their money and to put it in a 'safe' home, such as a deposit account.

DC customers will be very vulnerable to the less scrupulous providers and advisers. Therefore the government and the regulators must spell out clearly the risks associated with non-pension investments. Since the Budget there has been speculation that many DC customers will use their pots to invest in residential property via buy-to-let schemes. While bricks and mortar has long been a favoured 'investment' in the UK, the concentration of risk, where an individual relies on residential property to deliver growth (their own home) and income (buy-to-let), has all the hallmarks of a trend that will end in tears.

Of particular concern – especially in this low-yield environment – is the potential susceptibility of DC customers to wholly inappropriate investments, where they might not understand the high costs and high risks involved. In addition, the government and regulators should be very concerned about unregulated products and scams. Unscrupulous firms that operate on either side of the borders of legality will see the new regime as a golden opportunity to part unsuspecting pension savers from their money.

Our most immediate concern, however, is that current drawdown products are not suitable for the potential mass market April 2015 heralds, due to the investment risks and high costs we identify in Section 2. (In Section 3, we examine 'scheme drawdown', which could replace the retail drawdown product with an institutional scheme-based model.)

A further problem with the current drawdown market is the cost of full advice. As the FSCP report said¹¹, there has been a shift away from full advice in the DC decumulation market, in favour of the light regulation and commission-based non-advice model. 'Non-advice' – also known as 'guided' advice – is a commission-based, predominantly sales-driven commodity distribution channel. Technically, this is execution-only, where the DC investor takes responsibility for the purchase.

To help people make the right decisions, one of the proposed 2015 changes is a new advice regime that promises to give all DC customers free, face-to-face guidance that is 'impartial and high-quality'. In HMT's consultation report¹² 2014, the government said:

"In order to ensure that this guidance really is impartial and

⁷The value of the pension pot in a DB scheme is the annual pension multiplied by 20. If there is a lump sum in addition, this must be added to the value of the pension pot. DB schemes calculate pensions for trivial commutation purposes, but where there is more than one DB scheme involved, the cash-equivalent values must be combined. The DB scheme administrator will deduct any tax due at the basic rate of 20% and should provide a P45 showing how much tax has been paid. Overpayments can be claimed back from HMRC. Underpayments are settled via the self-assessment tax return. ⁸The new rules also blur the lines between pensions and individual savings accounts (ISAs), which may or may not be intentional – i.e., a longer-term HMT plan might be to merge the two tax-efficient savings regimes.

⁹HM Treasury, 2014, Freedom and Choice in Pensions. ¹⁰See <http://www.ageuk.org.uk/home-and-care/care-homes/paying-for-permanent-residential-care/>. We are grateful to the Actuarial Users Group of the Financial Reporting Council for bringing this point to our attention. ¹¹FSCP, 2013, Annuities: Time for Regulatory Change. ¹²HM Treasury, 2014, Freedom and Choice in Pensions.

high quality, providers and trust-based schemes will be required to ensure that the guidance follows a set of robust standards. These standards will be designed to ensure that guidance focuses on helping consumers understand the choices open to them, how to engage with products and providers confidently and knowledgeably, and how to access professional independent financial advice where it is appropriate for them to do so. The government will ask the FCA (working closely with the Pensions Regulator and the Department for Work and Pensions in relation to standards for trust-based pension schemes) to coordinate the development of these standards, and the framework for monitoring compliance. In developing these standards the FCA will work in close partnership with consumer groups, the Pensions Advisory Service, and the Money Advice Service. The guidance will be developed using insights from behavioural economics, as well as the expertise of consumer groups and others, to ensure that it promotes better understanding and active choice.”

It will clearly be a significant challenge to deliver this guidance to some 400,000 DC customers (about 8,000-10,000 per week)¹³ – a number that will rise rapidly under auto-enrolment. We argue that impartiality must be predicated on total independence of any sales process and therefore that ‘free’ means just that (the word is still used and abused by sales-driven annuity websites). It must also be predicated on a complete absence of insurance company influences, which means that the rapidly-growing number of financial relationships between insurance companies and distributors must be examined very carefully.

Assuming that effective and efficient drawdown products can be made available in the mass market – preferably via scheme drawdown rather than retail products – then this is likely to represent a better alternative to annuitisation in the early years of retirement, especially for those in good health. In some cases, retirees might use drawdown for a short period in order to create a breathing space during which they can consider their annuity options more carefully. In many cases, it is likely that drawdown could be used for a considerable period, e.g., up to the mid-to-late 70s. At this point, the annuity purchase would be made with reference to the needs of later retirement and long-term care (LTC), which is one of the government’s objectives for the reforms. For all of these reasons, the FCA’s competition review of the annuity market, which we assume will investigate pricing and profitability, remains crucial for the continued use of annuities as the best hedge for longevity risk in later retirement.

It is not clear what the impact of these changes will have on the way that insurance companies underwrite annuity business.

As the annuity market contracts, the insurance pool of annuitants will shrink, leading to a smaller spread of ‘lives’ and a lower diversification of risk. Moreover, insurers will no doubt be concerned about the adverse selection implications of a market where purchases are entirely voluntary.¹⁴ The combination of these factors could lead to lower rates for those who want to purchase a LTA.

There will be other pressing matters for the FCA and PRA. The Budget will lead to a significant fall in the £12bn-a-year annuity market, as was anticipated in the sharp fall in the share prices of insurance companies, particularly those that specialise in annuity business and therefore do not have a diverse business model. While the rapid drop in insurance company share prices, on the day of the Budget and the week that followed, might have been an overreaction, there is no doubt that analysts will be looking at how the loss of annuity business will affect insurance company profitability and sustainability. This applies not only to the retail market, but also to the annuity bulk buy-out market, where the insurance company’s financial strength or ‘covenant’ is a crucial issue and where there is also evidence that advisers to trustees and employers will try to exploit the new DC tax regime as a means to off-load DB liabilities using ‘innovative’ transfer techniques. The FCA, PRA and TPR should monitor developments here very closely.

1.2 The reasons for the overhaul of the DC decumulation market

The radical overhaul to DC decumulation tax rules was the government’s response to growing evidence that the current market did not work in the consumer’s best interests. The FCA’s February 2014 annuity report described the annuity market as ‘dysfunctional’¹⁵ and therefore of major concern given that about 10.5m consumers have a DC pension that will need to be converted into an income at some point and that as many as 11m additional employees will become members of workplace DC schemes under auto-enrolment, joining the approximately 5m who became members under the voluntary system.¹⁶

The FCA report found that 60% of DC customers buy an annuity from their current provider and that of these, 80% could get a better rate on the open market. Small pots (pre-Budget) were of particular concern, since the number of providers in the open market begins to fall off at about £15,000 and only two providers are thought to offer an Open Market Option (OMO) for pots of £5,000. Pensions Institute analysis of annuity sales figures, reported in the Financial Times in January

2014, shows that the median value of purchases is around £15,000 and that this is a more meaningful figure than the ‘average’ of £33,455 frequently quoted by the ABI^{17,18}.

The dysfunctional nature of the annuity market is even more evident when compared with the advances made in the accumulation market. As the Pensions Institute repeatedly stresses, the success of auto-enrolment is predicated on member inertia in an environment where increasingly trustees take full responsibility for good member outcomes. It is for this reason that the government and regulators have pressed for an accumulation phase where the default process – including the default fund which 90-97% of auto-enrollees are expected to use – is subjected to rigorous independent governance standards, either by a board of trustees (trust-based schemes) or a governance board (contract-based DC). Compared with the early days of group personal pensions in the late 1980s, it can be argued that the transition from a retail model to an institutional model is virtually complete in modern schemes.¹⁹

The benefits of institutional governance and the cost savings of the modern auto-enrolment multi-employer, multi-trust scheme come to an abrupt end at the point of retirement, when it is assumed that the provision of information about decumulation options – and in particular about the OMO – is sufficient to discharge the trustees’ responsibilities and to ensure members will make an informed decision. This is a premature conclusion to the trustees’ fiduciary duties and represents a serious breakdown in governance in the auto-enrolment system.

To contextualise the analysis of the flaws in the current DC-decumulation market, it is helpful to consider what a good outcome at decumulation might look like. We suggest that this combines suitability (effective) and value for money (efficient), and might be expressed as a four-stage process to ensure:

1. The right timing
2. The right decumulation product relative to taxation and to investment, inflation and longevity risks
3. The right features
4. A competitive price at the point of sale and ongoing, where applicable

Suitability includes a clear understanding of the product characteristics and the associated risks. The factors that need to be considered more carefully in relation to the DC customer’s profile and needs (e.g., age, state of health, dependants, etc) include:

1. Longevity insurance and the appropriate age at which it comes into effect
2. Cost (immediate/ongoing)
3. Inflation risk

4. Investment risk (and reinvestment risk for short-term products)
5. Flexibility, e.g., to change to a different product when necessary
6. Death benefits
7. Execution risk (mis-selling/mis-buying)

The pre-Budget landscape could be described as follows. Most DC customers bought a LTA with the proceeds of their individual personal pension plans and workplace schemes – usually after taking 25% tax-free cash. In certain cases, this was likely to be due to life-shortening medical and lifestyle conditions (see Enhanced Annuities in Section 2). While an estimated 40-60% of DC customers might qualify for an enhancement, the number of enhanced sales has remained comparatively low, particularly in rollover sales (sales to existing pension customers by insurance companies). There has been no analysis of which we are aware that has set out the levels of enhancements and compared these with the top rates for standard and enhanced annuities in the open market. Another ‘informed’ reason for immediate annuitisation was where the individual had no dependants and therefore could focus on maximise income rather than on passing on death benefits.

The majority of DC customers have annuitised immediately at retirement because they needed to replace an earned income that has ceased. This pattern has been driven by pressure that is not necessarily in the customers’ best interests. For example, there are very significant vested interests on the sell-side (insurance company scheme providers) and also conflicts of interest on the part of trustees of DC schemes. Insurance companies that sell both DC pensions and annuities have a vested interest in retaining customers’ pension pots at retirement and also by capturing other customers via the LTA open market option. Trustees of DC schemes are able to discharge all responsibility to members at the point of the annuity purchase, which builds in a strong behavioural bias in the guidance they give to their members. In some cases, the trustees and the provider are one and the same. Whether trustees like it or not, the Budget changes will extend their relationship with and responsibility for scheme members who opt for drawdown rather than purchase an annuity, as they will remain in the scheme.

These conflicts of interest and vested interests are compounded by a regulatory system that appears to favour LTAs, due to the guarantees that they offer, and which does not appear to understand the risks associated with this product in terms of the absence of inflation protection, historically low annuity rates due to quantitative easing, the impact of the increased use of individual underwriting techniques on the annuity risk pool, among other factors. The current alternatives to the LTA are characterised by one or more of the

¹³The exact number is not known. The ABI annuity data shows that about 420,000 annuities are sold each year, but in an unknown number of cases individuals will make more than one annuity purchase, particularly where they have multiple pots. There are only about 20,000 financial advisers in the UK. ¹⁴It is not clear if the government will change the tax treatment of LTAs. ¹⁵FCA, 2014, Thematic Review of Annuities. ¹⁶Data on existing members is imprecise, however. For example, where an employee changes jobs and leaves an employer’s scheme, under a trust-based scheme, the ex-employee becomes a deferred member and remains the responsibility of the trustees. Where the scheme is contract-based, the connection with the scheme is severed completely and the ex-employee’s pension pot is reclassified as an individual personal pension customer of the insurance company – and in many cases a higher charge might apply. Where active members (i.e., employees) benefit from a low AMC, leavers can be subjected to a deferred member penalty, which can increase the AMC significantly.

¹⁷FT Jan 31 2014. ¹⁸In other words, 50% of purchasers have pots of less than £15,000 and 75% of purchasers have pots of less than £33,455. Of the 420,000 annuity purchases, about 20% of pots (80-90,000) are worth above £50,000 and 6% (26-27,000) are above £100,000. ¹⁹Although we stress that in the light of the Budget changes, all schemes should be required to review their default investment option, to ensure that it is appropriate in an environment where fewer members will purchase annuities at age 65 and the de-risking glide path now terminates at age 55 for some members.

same factors, so while conceptually they introduce alternative decumulation strategies, they are not suitable for the mass market, particularly in the case of retail drawdown products.

Moreover the system took – and might continue to take – little or no account of the pressure on DC customers, at a very difficult and stressful time in their lives, to make a complex and, in the case of the LTA, an irreversible decumulation decision for which there is no learning curve. The Holmes and Rahe stress scale,²⁰ which was based on their Social Readjustment Rating Scale (SRRS), shows that retirement is among the top-10 major stress events in life, out of a total of 43 that range from death of a spouse to a minor violation of the law²¹.

In some cases, the decision to annuitise is based on a simple, but widespread misunderstanding about tax-free cash and decumulation. It is possible to take the tax-free cash and to leave the rest of the pot in the pension fund, until the income is needed, yet we were told by an annuity adviser that about one-third of LTAs are purchased at age 55 on the assumption that this is the only way to get access to the cash.

We summarise our concerns about the current DC decumulation market as follows:

1. DC customers are pressurised into the LTA purchase at retirement by providers, trustees and distributors that have vested and/or conflicts of interest.
2. The decumulation decision, which usually involves making a complex irreversible decision, takes place at the worst possible time – i.e. immediately pre-retirement, which is a period of considerable stress and uncertainty.
3. There is now an outdated assumption that longevity insurance – in the form of the LTA – is appropriate and represents value for money for customers who are in good health, have dependants, and are in the 55-75 age range.
4. Current alternatives to the LTA embed considerable risks that are often not recognised by or explained to purchasers.
5. There are no price caps in the DC decumulation market. While it can be argued, with justification, that, in an efficient market with well-informed consumers, competition ensures fair pricing, the evidence [FCA 2014, FSCP 2013] indicates that the buy-side (annuitants) generally are not well-informed and therefore do not exercise the required competitive pressures, particularly as the LTA purchase is one-off and irreversible, so there is no learning curve.²²
6. The commercial interests of insurance companies are such that they are likely to direct their DC customers towards their ‘roll-over’ products in cases where customers do not want to buy an annuity.
7. Under auto-enrolment, the retail DC decumulation phase is disconnected from the modern institutional accumulation phase.
8. The default investment option in most pension schemes is geared towards the purchase of an annuity at age 65.

1.3 How the lifetime annuity (LTA) market works

The LTA is an insurance policy that guarantees an income for life in return for the DC pension fund (the insurance premium). As a perfect hedge against longevity risk (i.e., the individual will not run out of money before dying), LTAs play an essential role in DC decumulation and, we stress, will continue to do so. As a long-term insurance product, the Financial Services Compensation Scheme (FSCS) guarantees 90% of the annuity rate in the case of an insurance company failure. Most, but not all insurance companies that sell DC pensions, also sell annuities. About 12 insurers sell in the open market and of these about five represent 75% of open-market business by volume.

The purchaser is described as an annuitant. The ‘annuity rate’ is the income the insurance company guarantees to pay per annum in return for the lump sum. It can also be expressed as a percentage yield of the premium. The rate is calculated according to the insurance company’s assumptions in relation to a range of factors, in particular mortality assumptions and gilt yields. The gilt yield is the benchmark for the main financial instruments insurance companies purchase to back their guarantees, namely, gilts, but also investment-grade corporate bonds. According to a report published by the Retirement Academy in early 2013, the yield on gilts and corporate bonds had fallen to the lowest level since records began in 1703.²³ The report explains that when the gilt yield was 4.79% in March 2005, the ‘payback’ period (the number of years it takes for the insurance company to return the full premium or original capital) was 14.3 years. In March 2013, when the gilt yield was 2.47%, the pay-back period was 17.9 years. The Retirement Academy argues that ‘those investing in annuities at the moment are giving their capital to insurance companies, only to get back their original capital plus a small amount of interest’. We should point out that this is not strictly correct since it ignores the mortality drag (or premium) embodied in the annuity rate.

1.3.1 Pricing risk and the annuity rate

LTAs operate on the basis that the insurance companies selling annuities pool the mortality risks of the annuitants. Each individual annuitant’s lifetime is uncertain, but if the pool of annuitants is large enough, then the distribution of (i.e., the range of possible) lifetimes within the pool becomes much more predictable. This enables the insurance company to predict with a high degree of accuracy how many annuitants can be expected to die each year, even if it does not know in advance who those annuitants will be. This is important for the purpose of pricing annuities.

Annuities are priced using ‘discounted cash flow’ methods:

■ First, the insurance company needs to forecast the likely future pattern of annuity payments. Let us assume it has sold annuities to 1,000 65-year olds each paying £1 p.a. Let us also assume that the insurance company forecasts that approximately 0.9% of the 65-year olds will die before they reach age 66, so it expects to pay out £991 in the first year. If approximately 1% of 66-year olds will die before they reach 67, the insurance company expects to pay out £981 in the second year, and so on.

■ Second, the expected future annuity payments are discounted using a discount rate that reflects the yield on assets that the insurance company will buy in order to make the annuity payments. As mentioned, these assets will typically be gilts and high-grade corporate bonds.

■ Third, the insurance company will add a margin or load to the discounted value that it calculates. This allows for factors such as administration costs, the insurance company’s profits, and a risk margin to account for various uncertainties in the forecasts it makes.

We need to look at these uncertainties in more detail:

■ First, there is mortality risk. This relates to the uncertainty about how long annuitants are going to live. There are two types of mortality risk: idiosyncratic mortality risk and systematic (or aggregate) mortality risk. The former is the risk that any given annuitant will live longer than the annuity provider predicts. This risk can be reduced significantly with a sufficiently large pool of annuitants. The latter is the risk that all the annuitants will live longer than the annuity provider predicts as a result of, say, a medical breakthrough.

■ Second, there is selection risk. This is the risk that the insurance company sells annuities to customers who know from their own family history that they are likely to live longer than average. If this happens, the insurance company is said to be ‘selected against’. To deal with this, the insurance company uses different mortality tables for different classes of customers. For 65-year old customers who purchase annuities as part of their pension schemes, the insurance company might predict that 0.9% of them will die before 66. But for 65-year old customers purchasing annuities on a voluntary basis (PLAs), the insurance company might predict that only 0.75% of them will die before 66. The same stream of annual annuity payments will therefore cost a pension annuitant less than a voluntary annuitant.

■ Third, there is interest rate risk. If interest rates fall, then the price of the bonds insurance companies buy to make the annuity payments increases. This means that a given purchase price, e.g. £100,000, buys a lower annual payment (i.e., a lower annuity rate) when interest rates are low than when interest rates are high.

■ Fourth, there is investment and re-investment risk. The insurance company needs to project the returns that it will receive on the assets – gilts and corporate bonds – it buys to make the annuity payments. The realised returns might be lower than expected. A key example of when this occurs is when the insurance company re-invests the principal repayment on a maturing bond.

■ Fifth, there is inflation risk. If inflation is higher than expected, then payments under an index-linked annuity will need to increase.

As a result of these risks, the market for annuities has become much more challenging in recent years and insurance companies have had to respond to these challenges where they have been able to do so. One of the biggest recent challenges has been the consequences of quantitative easing. This has significantly raised the price of long-term bonds and lowered annuity rates, making annuities much poorer value than before the global financial crisis that began in 2008. There is little insurance companies can do about this. There is also little insurance companies can currently do about systematic mortality risk. A market has recently started to hedge systematic mortality risk, but it is not yet fully developed. Because life expectancy is increasing much more rapidly than retirement ages have increased, insurance companies are currently paying out for 20-30 years, whereas it was half this length of time a half a century ago.

To overcome selection risk, insurance companies have introduced individual underwriting: this is where the insurance company prices on the basis of certain specific characteristics of the individual annuitant. One example of this is post-code underwriting. Insurance companies can work out from knowledge of a potential customer’s post code what their social class is (using data provided by information services companies such as Experian) and social class is a key predictor of life expectancy. Another example is lifestyle underwriting which involves the insurance company asking questions about the smoking, eating and drinking habits of potential customers and then offering annuity quotes based on the customers’ answers. Yet another example is medical underwriting where the insurance company asks whether a potential client has a history of cancer, heart disease, strokes, diabetes etc. Individual underwriting, therefore, has led to the introduction of lifestyle, enhanced and impaired life annuities, although, in practice, the specialist underwritings combine all the various factors in what is known as ‘deep underwriting’ (as opposed to ‘light underwriting’, which relies on a shorter and simpler questionnaire).

Since individual underwriting is designed to get a better estimate of an individual annuitant’s life expectancy, it has the effect of reducing the effectiveness of risk pooling. Moreover, since an increasing number of new annuity sales involve some form of enhancement this has had the effect of further

²⁰The top-10 stress events on the scale are: death of a spouse, divorce, marital separation, imprisonment, the death of a close family member, personal injury or illness, marriage, dismissal from work, marital reconciliation, and retirement. ²¹Holme & Rache, 1967, the Social Readjustment Rating Scale. ²²FCA, 2014, Thematic Review of Annuities, FSCP, 2013, Annuities: Time for Regulatory Change. ²³Retirement Academy 2013, Annuities at a Tipping Point.

reducing the annuity rate for normally healthy annuitants. An estimated 40 – 60% of DC customers might qualify for some form of enhancement. As yet, this is not reflected in the number of sales of enhanced annuities, but this is one of the areas the FCA intends to investigate further following its February 2014 report and we expect the regulator to apply pressure on insurance companies to ensure appropriate underwriting techniques are used. For example, where an insurance company does not sell enhanced annuities, the regulator might insist that it makes arrangements with a second insurer that does. This does not mean that everyone would get a competitive rate, as there is no regulatory benchmark for enhanced rates and, as mentioned above, there has been no systematic comparison of rates undertaken to assess value for money relative to the underwritten factors and medical conditions. Moreover, there are no regulatory requirements for insurance companies to make arrangements with third parties that offer the best deal. The FCA thematic review found that some insurers' arrangements with third parties resulted in lower rates than if the consumer had approached the third party directly through the open market. Taking action in these areas is an important task for the FCA in its continued investigation into the annuity market.²⁴

Finally on enhanced annuities, the term used to be distinguished clearly from impaired life annuities, which referred to individuals with very severe life-shortening medical conditions. If the proposed April 2015 changes go ahead, then many of these individuals will choose not to annuitise, but instead to pass on their DC pot, less income tax, to their dependants.²⁵

1.3.2 The expected investment return on assets held

According to Towers Watson, the investment strategies that support annuity books will reflect the insurer's annuity liabilities and the amount of investment risk they can afford to, or wish to take.²⁶ There are two main factors to consider:

- Interest rates and the yield curve: Changes in the interest rates priced into bonds of different terms to maturity (that is, the 'yield curve') are typically the biggest driver of annuity price changes. The sensitivity of annuity prices to changes in the yield curve reflects the average length of time the money is expected to be invested or the duration of the annuity. Insurers currently estimate a duration of about 11 years for individuals retiring at age 65. This means that a 1% fall in interest rates will raise the price of an annuity by 11%.

- Credit premium: Many providers invest significantly in corporate bonds, taking some credit risk in pursuit of additional returns. Changes in market conditions can impact the relative yields of bonds from companies with different credit ratings. This change is typically reflected in the price of an annuity, but not always. It depends to some extent on the reasons for the

change as well as the overall strategy being adopted by the insurer. In addition, the extent of the change is not always the same.²⁷

1.3.3 Business costs (the 'load') and objectives

As mentioned earlier, insurers will add a margin or load to the discounted value that it calculates for the assets it buys to support the annuity liabilities. These costs include running the business, profits and distribution, among others.²⁸ The actual costs will vary significantly depending on whether the insurer sells only to internal (pension) customers or whether it also sells in the open market, in which case it will have additional marketing and distribution costs. The main concerns raised by the FCA in its 2014 report related to internal sales, where the evidence for efficient and fair pricing is relatively weak. Ideally, advisers that distribute via the open market will search the whole of the market (although many do not). The final selection is likely to be made from the top three rates quoted for a given pot size, specified features and medical/lifestyle information. At this point, the purchase is based on the best price available on the market. Insurers move in and out of the top three rates, depending on their appetite for the business, which will depend, in part, on how their other business areas are performing. If growth in these areas is lagging, insurers can compensate for this by temporarily offering highly competitive quotes in annuities and attracting a big share of the 8-10,000 people per week who used to buy annuities. Once they are back on target or have reached their desired quotas of annuitants of various types, they reduce their rates in order to become uncompetitive. This is why it is not sensible to assume that there are 'leading annuity providers' who will always be competitive for a particular pot size. In practice, even among the 12 insurers that operate in the open market, there could be a 20% difference between the top and bottom rate. The differential between the lowest internal rate and the highest external rate can be much greater.²⁹

1.3.4 LTA features and the impact of the rate

The most common type of LTA purchased pays a level income for a single life. Extra protection, for example, inflation-linking and/or a partner's pension (via a joint life annuity), comes at a price, which means that the annuity rate will be lower than that for the single level benchmark. The FCA February 2014 report said that only 5% of annuities sold are inflation-linked. The most likely explanation for such a small market share is that inflation-proofing typically reduces the starting income by about one-third relative to the level annuity rate. DC customers might place more emphasis on the initial level of income, rather than consider the long-term risks from inflation.

The main features include:

- Guarantee period: the income can be guaranteed for five or 10 years, which means that it continues to be paid to your estate/dependants if you die before the period ends. A variation on this feature is a 'value protected' annuity, where the balance of the fund, less income received to date, is paid to the estate. Guarantees come at a cost and so reduce the annuity rate, but the cost can be very modest, e.g. just 1-2%. Most annuities are bought with a five-year guarantee.

- Increasing income: a level annuity pays the same annual income for as long as the annuitant lives. It is possible to buy indexed annuities where the increase is linked to increases in the retail price index (RPI) or the limited price index (RPI capped at 2.5% or 5% inflation), or escalating annuities where the income increases by a fixed percentage, e.g. 3%, each year, irrespective of actual changes in inflation. As mentioned above, indexation is one of the most expensive features to purchase and can reduce the initial income by up to one-third relative to the level rate.

- Partner's pension: income from a single life annuity stops when the annuitant dies. A joint life annuity continues the income (at 100%, two-thirds, or 50%) to the annuitant's partner until he/she dies. The cost will depend on the level of the partner's income selected and the partner's age and health.

- Payment frequency: income can be paid monthly, quarterly, every six months, or annually; in advance or in arrears (i.e. where the first payment is made at the end of the selected payment frequency). Less frequent payments and payments in arrears can increase the annuity rate slightly.

1.3.5 The LTA 'return' and 'money's worth'

Articles in the press usually treat the LTA as an investment, even though it is an insurance policy that guarantees to pay out so long as the policyholder remains alive. In fact, if it were treated as an investment for the purposes of regulated financial advice, it would be classified as high risk, since if the purchaser died within hours of concluding the purchase, the entire investment would be lost (if the annuity was single life with no guarantees). The same, of course, holds with the state pension or a DB pension, but people do not seem to see this comparison. This confusion between insurance and investment only seems to hold in a DC environment where individuals are encouraged to focus on their annual return and accruing fund size during the whole accumulation process. It is natural for them to consider annuities using the same investment frame, especially when it is not clear why an investment is also an insurance policy.

Unfortunately, the only way really to assess the value for money of an annuity is after death. Nevertheless, we can look at the size of the premium (the fund) relative to the annuity rate and average mortality assumptions, although we do not know the particular mortality table used by a particular insurance

company when it sets its annuity rate.

The Money Advice Service (MAS) shows the top six OMO quotations.³⁰

Example 1: £15,000: 5 year guarantee, level, male single life, age 65, paid monthly in advance

Annual income: £885.36 (highest), £764.40 (lowest), implying annuity rates in the range 5.10% - 5.90% and a pay-back period in the range 16.9 - 19.6 years

Example 2: £100,000: 5 year guarantee, level, male single life, age 65, paid monthly in advance

Annual income: £6,214.56 (highest), £5,566.44 (lowest), implying annuity rates in the range 5.57% - 6.21% and a pay-back period in the range 16.1 - 18 years

At the time of these quotes, the yield on 25-year gilts was 3.6%. This suggests that the average annual mortality premium (or drag) built into the best quotes were 2.3% (for a £15,000 premium) and 2.6% (for a £100,000 premium). However, it is hard to assess whether these represent good value without having access to individual insurance company assumptions.

We suggest that this is a task for the FCA's competition review.

Dr Edmund Cannon and Professor Ian Tonks have published a number of reports on annuities and their 'money's worth'.³¹ An annuity's money's worth indicates the value for money by showing the proportion of the premium (i.e., the value of the DC fund) that is distributed as the annuitant's income and the proportion that is retained by the insurance company. The most recent report notes:³²

"As a regulated industry, each life assurer must declare the actuarial assumptions used to value its liabilities, by comparing the mortalities used in its own calculations with the mortalities in the benchmark tables produced by the Institute of Actuaries' Continuous Mortality Investigation. The CMI collects data from all of the major life assurers, aggregates and anonymises it and then analyses the pooled data. So the CMI tables of mortality approximate to the average mortalities across the whole industry. The figures presented in life assurers' FSA returns are then compared to this average.

[The findings show that] for ages greater than 68, every life assurer assumes lower mortality rates than the benchmark [i.e., that the annuitant will live longer]. Some of the variation in assumptions between companies must be due to genuine variations in mortality of the annuitants, but it is obviously impossible that every company has lower mortality than the average, represented by the benchmark. This is prima facie evidence that firms are building some allowance for mortality risk into their valuations."

1.4 Conclusion

Clearly it is no easy task for the FCA to judge whether annuities are being appropriately priced and offer good value for money.

²⁴FCA, 2014, Thematic Review of Annuities. ²⁵See Towers Watson's budget impacts briefing on this and other points - <http://www.towerswatson.com/en-GB/Insights/IC-Types/Ad-hoc-Point-of-View/2014/04/UK-Budget-Impacts-2014>. ²⁶Towers Watson's, 2013, Pre-Retirement Investing. ²⁷An additional factor is the illiquidity premium on bonds that do not trade. ²⁸Where insurers reinsure their risks, this will be an additional cost. ²⁹See the ABI's 'annuity window', <https://www.abi.org.uk/Insurance-and-savings/Products/Pensions/Retirement-and-your-pension/Annuity-rates/About-the-annuity-window> frequently.

³⁰<http://pluto.moneyadvice.service.org.uk/annuities>. Interestingly, MAS does not provide indicative quotes for pots worth less than £10,000. Date: 13 March 2014.

³¹e.g. Cannon and Tonks, 2013, Cohort Mortality Risk or Adverse Selection in the UK Annuity Market; Cannon and Tonks, 2011, Money's Worth of Pension Annuities. ³²Cannon and Tonks, 2013, Cohort Mortality Risk or Adverse Selection in the UK Annuity Market; Cannon and Tonks, 2011, Money's Worth of Pension Annuities.

Insurers do need to build in a prudent mortality buffer into their pricing models, given that they are writing annuities for individuals who might live for 30 years or more. Underwriters of mortality risk pay very close attention to medical advances, such as genomic medicine – also known as personalised or stratified medicine because they are selected to suit an individual’s genomic profile and therefore can extend the lifespan in life-shortening conditions and with fewer side effects.³³ The impact on life expectancy of this type of medical advance could be as significant as the impact of the discovery of germ theory in the nineteenth century, which led to the introduction of vaccines and the discovery of antibiotics. However, the mortality buffer is only part of the load that insurers add to the modelled annuity price to cover items such as administration and profit. The question that needs to be answered is this: ‘is the profit margin built into the annuity price excessive in relation to the capital the insurer needs to allocate to support its annuity business?’

This is one of the reasons why LTAs might not be suitable for normally healthy individuals with DC pension pots at the point of retirement if they have adequate alternative sources of income in the form of say a DB pension or a state pension. This might cover around 20% of annuitants. We continue this discussion in Section 3, while in the next section we consider the current alternatives to the LTA.

³³Genomic medicine harnesses the predictive power of patients’ genomes and the products of those genomes, in order to identify individuals at risk of disease and to create smarter, more effective and personalised treatments for those who already suffer from a life-shortening condition. See <http://www.jax.org/ct/genomics.html> and <http://www.genome.duke.edu/research/genomic-medicine/>. See https://www.alliancebernstein.com/Research-Publications/CMA-created-content/Investments_US/Instrumentation/RWP_MolecularMedicine_ExecSummary.pdf.

Section 2 current DC retirement income alternatives to annuities

In this section, we examine the current alternatives to LTAs. We estimate that taken as a whole (but excluding ‘enhanced’ annuities, as these are a sub-set of LTAs), these alternatives currently account for at most 10% of the DC pots used for decumulation each year. We argue that, while at a conceptual level several of these products are rational in relation to their stated purpose, they are not necessarily a sensible choice for all customers, due to the investment risks and costs, which often are not fully understood by DC customers.

We would urge the FCA to include drawdown in particular into its review of the annuity market. Following the 2014 Budget, drawdown is expected to become a mass-market product and it is vital that the regulators investigate the product range together with the investment and longevity risks.

It is not clear what the future holds for the other LTA alternatives, but it is likely that at least some of these will wither on the vine. Enhanced annuities, however, will continue to be a crucial feature of the market. In 2014-15, and, in particular, from April 2015 (assuming the government’s proposals pass into law), for many people the LTA will be a later-life purchase, when full underwriting in a competitive open market is essential.

2.1 Enhanced annuities

Enhanced rates take into account health factors (a heart condition, diabetes, etc) and lifestyle factors (obesity, smoking, etc) to assess individual mortality more accurately. Where a range of factors apply and, where one or more of these is significant, the annuitant might receive an annuity rate that is 20-40% higher relative to the rate that would be offered to an individual in good health, particularly where the open market option is used to identify the best rate (See Table 1).

Enhanced annuities form a sub-set of LTAs, but we discuss them here because the rapid increase in individual underwriting over the past eight years is changing the market to the extent that the original concept of a single risk pool for LTAs has virtually

disappeared – an important reason why in Section 3 we argue that there needs to be better asset management alternatives for those DC customers in good health in the early years of their retirement.

As we discussed in Section 1, until comparatively recently, insurance companies operated a single risk pool for their LTA customers, where healthy and unhealthy lives were combined and the risks shared. The premiums of those who died early would subsidise the continuing incomes of those who were longer-lived. An estimated 40-60% of the population is likely to qualify for some form of enhancement; even if it is only minor, it might add a few percent to the rate. As sales of enhanced annuities rise and more unhealthy lives are extracted from the risk pool, the remaining healthy lives will face the prospect of lower rates, since insurers will assume these annuitants will enjoy longer lives. It will also now be a voluntary annuity, rather than

Table 1: Example of enhanced annuity rates: £100,000 fund*

Healthy: worst rate	£ 5,141
Healthy: best rate	£ 6,140
Impaired, smoker	£ 6,862
Impaired, smoker and obesity	£ 6,910.68
Impaired, very ill, heart attack**	£ 7,014.12
Impaired, very ill health, cancer***	£ 7,301.52

Notes: *Age 65, single life, no escalation, paid monthly in arrears, 5-year guarantee
 **2 Heart Attacks in last 1-3 years, surgery & 1-2 daily ongoing medications
 *** Lung Cancer diag. 6 months - 1 year treated with chemo and radiotherapy, only local tumour growth
Source: MGM Advantage/Aon Hewitt 2013, provided by Annuity Direct

Table 2: Example of an 'underwriting light' questionnaire

1. What is your height?
2. What is your weight?
3. Have you smoked 10 or more manufactured cigarettes per day for the past 10 years?
4. Have you smoked 3oz/85g or more of rolling tobacco per week for the past 10 years?
5. Have you been diagnosed with high blood pressure, requiring ongoing medication?
6. Have you had a heart attack requiring hospital admission?
7. Have you been diagnosed with diabetes requiring insulin or tablet treatment?
8. Have you suffered a stroke (CVA), excluding mini-strokes (TIAs)?
9. Have you been diagnosed with angina requiring ongoing medication?
10. Have you been diagnosed with cancer (excluding skin cancer and benign tumours) requiring surgery, chemotherapy or radiotherapy?

Source: Pensions Institute, 'A healthier way to de-risk', February 2013

Table 3: Example of (a section from) a 'deep underwriting' questionnaire (smoker)

1. Have you been a regular daily smoker for the last 10 years?
2. If you are a regular smoker, please indicate the average daily level: a. Manufactured cigarettes b. Cigars
3. If you are a regular smoker, please indicate the average weekly level: a. Rolling tobacco i. Ozs, or ii. Gms b. Pipe tobacco i. Ozs, or ii. Gms
4. If you previously smoked, please advise of the years you started and stopped. [Here the form asks for day, month and year]
5. How much did you smoke? [Here the form repeats Q3].

Source: Annuity Direct, <http://www.annuitydirect.co.uk/>

a pension annuity and, as such, will be more expensive, since voluntary annuitants live longer than the population average.

The changes to the LTA risk pool appear to be irreversible in the retail market and therefore it is essential that all DC customers complete medical questionnaires. The loss of potential enhancements was one of the biggest issues the FCA identified in its recent report³⁴.

2.1.1 Underwriting techniques

Enhanced annuities initially were based on postcode, since this helps to identify the member's socio-economic status, and on occupation (white collar vs. blue collar, etc), since this helps to identify occupation-related health conditions. The insurer might also take into account the pot size, on the assumption that 'wealth-equals-health'.

A Pensions Institute report, published in 2013, noted that underwriting techniques are changing rapidly and becoming more sophisticated.³⁵ In most cases, underwriting data are captured via the annuity adviser or insurance company's website, but it might also require a phone interview. In certain circumstances – for example where the medical condition is serious and/or complex – a general practitioner's (GP's) report will be requested by the insurance company.

The underwriting process might consist of 10 simple questions (known as 'underwriting light' – see Table 2) or a more detailed questionnaire that asks for further information about the conditions indicated, so that the insurance company can better assess the annuitant's mortality ('deep underwriting' – see Table 3). For example, the underwriting-light questionnaire might ask if the applicant has diabetes mellitus. Deep underwriting will ask further questions, including precise details about the medication. The former process leads to enhanced rates based on average mortality experience; the latter is personalised and therefore, it is argued, can lead to a higher rate.

2.2 Short- or fixed-term annuities (FTAs)

Short-term or fixed-term annuities are written under income drawdown rules and the product is classed as an investment within a drawdown plan (see Section 2.5 below). This means the FTA could be a single arrangement whereby the whole of the DC pot is used as part of a drawdown portfolio that also includes investment funds. We understand the product is usually sold on a non-advised basis. Typical commission is about 2% of the fund.

While products vary, the conventional FTA provides income payments for a set number of years, up to a maximum of five or six. The annual income is between zero and the maximum permitted by the Government Actuary's Department (GAD) which, before the Budget was announced, was 120% of a single life level annuity. The premium might be invested in a short-term gilts fund, but some products link the income level to a fund or index performance. As with LTAs, most sales of FTAs are for a level single life, but the policy can be set up on a joint life basis

and with a guaranteed income period or value-protection option to provide death benefits, which are taxed at 55%.

At the end of the term, the insurer returns a percentage of the original premium as a maturity value, e.g. 80% after five years – the amount will depend on the level of income taken. The maturity value must be used to continue DC decumulation, for example, by purchasing another FTA, an LTA, or by using drawdown.

The advantages of the FTA, like income drawdown, include the deferment of making the LTA purchase, while still receiving a regular income. One very specific use, for example, is where the FTA provides a bridging pension for an individual who has a DC pot that matures at age 60 and a good DB pension that begins at age 65. In this case, it can make sense to take the maximum income permitted from the FTA.

However, the main attraction promoted by providers is that when the fixed term ends, annuity rates might have improved and/or the individual's health might have deteriorated, in which case he or she might qualify for a higher LTA rate than would have been the case previously. However, the opposite might also occur, so the individual needs to be aware of the risks associated with uncertain future annuity rates (interest rate risk) and the individual's future state of health (morbidity risk). We argue that these are very significant risks and that, from an individual's perspective, they are not so much unknown as unknowable.

There is a danger that this product confers a potentially misleading sense of psychological security. In a practical sense, it is not 'safe' in terms of protecting future income sustainability. Although it keeps the capital secure for a short period, it has a similar chance of delivering a lower future income as income drawdown from a balanced investment fund and unless invested in one of the less-common growth funds, has no upside potential. Importantly, there is no guarantee of what the income will be in five years' time, when it is necessary to reinvest the maturity value. This is a significant risk for a low-income investor, especially if they are also a conservative investor. Therefore we would argue that fixed-term annuities might be more accurately described as short-term income drawdown. It will be important for the promotion of these products to avoid the use of the word 'guarantee', unless the precise nature of this 'guarantee' is explained clearly.

Moreover, the combination of income and return of fund can vary and we were told that some providers emphasise the higher income at the expense of maturity value. One problem that can arise is when the income level is reviewed after three years in relation to maximum GAD rates (the same rule applies to drawdown at present). If the income taken at the outset is at the maximum, the fund returned at the end of the term will be lower than if a lower income had been taken. If at this time, interest rates are lower and less favourable mortality assumptions are being used to price new annuities, then the buyer of the FTA could end up with a lower income than if a LTA had been purchased from the start. We were informed that there needs to be a 10% increase in the prevailing annuity rate for the annuitant to break even, when compared with the purchase of an LTA from the outset. One adviser who ran a series of quotations for

us showed that, assuming no changes in health, the income that could be purchased after five years is likely to be significantly lower. Reinvestment risk is therefore the main concern with this product, as well as the additional charges and either the new fee for advice or the new commission where the replacement annuity is purchased via a non-advice service.

The product has been available for five years now and therefore the FCA could examine the income levels, maturity values and the income that could be achieved by purchasing an LTA rather than a series of FTAs.

2.3 Phased annuity purchase

Under phased annuity purchase, the DC pot – including tax-free cash – is segmented. Each year, one segment of the fund is used to buy an annuity, while the tax-free cash attached to each segment is used to provide the income in the early years and to boost it in the later years.

The perceived advantage of this strategy is that it hedges annuity rate risk, because the single point of purchase is converted in a series of purchases over a period of years so that the purchaser develops a portfolio of annuities of different commencement dates that relate to differences in age and health and different prevailing interest rates.

The disadvantages include the use of the tax-free cash to provide income (assuming an income is required, which might not be the case if the individual continues in part-time work, for example), interest-rate risk, and the cost of making multiple purchases.

2.4 Investment-backed annuities (IBAs)

This type of annuity (also known as 'investment-linked'), which accounts for about 5% of total annuities sold, invests the premium in one or more funds. There are two types: with-profits annuities and unit-linked (or flexible) annuities. As the name suggests, the former invests in a with-profits fund; the latter invests in the annuitant's choice of a range of funds, which can be actively or passively (indexed) managed. The income, which is set at the outset with reference to the prevailing annuity rate and assumed investment return, might fluctuate significantly, depending on the choice of fund. On average over the long run, a higher income should be achieved by an IBA which invests in growth assets compared with a LTA which invests in bonds.

IBAs offer a similar range of features to the LTA, such as single or joint life, a guaranteed period, and different payment frequencies. We understand that enhanced terms can apply. Some providers set a guaranteed floor below which the income will not fall, which might be about 50-55% of the LTA rate at the time of purchase. As an annuity, a mortality premium is built into the return, although this is likely to be smaller than with a LTA because in general it is only the wealthier annuitants who buy the product (the wealth-equals-health point made in Section 1).

While favoured by some experts, due to the potential for income growth, there are important considerations that might

³⁴FCA, 2014, Budget 2014 – Pension Reforms. ³⁵Pensions Institute, 2013, A healthier way to de-risk

make this product unsuitable for some people, in particular, the investment risk and the costs:

■ **Suitability:** There is little standardisation in product design, which makes it very difficult to compare like with like. Nevertheless, the purpose of the IBA is to combine the best features of drawdown – maintaining an investment in growth assets in the immediate period after retirement – with the best features of an annuity – providing longevity insurance. In principle, if it were well designed and offered good value for money, the IBA would be an attractive competitor to drawdown, particularly if it included capital protection features which are currently not common. At present, however, drawdown is more attractive for inheritance-planning purposes, especially for high net worth individuals, although drawdown costs are higher – and we understand they can be significantly higher – than IBAs. It might be for this reason that certain advisers favour the IBA where a cautious growth fund is selected. At present, this might be a more cost-effective way to retain the prospect of income growth, especially for those who would not qualify for an enhanced LTA rate and who have no partner or dependants to consider. The IBA might also represent a suitable component part of a mixed portfolio of DC decumulation products.

■ **Cost:** Annual costs are estimated at about 2% per annum, with a higher charge in the first year to include the cost of advice. However, we were shown many examples where the costs were not easy to calculate.

■ **Investment risk:** Investment risk and income risk are closely connected, as we show in the more detailed consideration of the with-profits annuity below. The perceived attraction of the IBA is that it will deliver a higher income over time than is possible with the LTA, therefore the fund must generate a minimum level of growth, after charges, so that the actual maximum income that can be drawn is higher than that offered by the LTA rate that was available at the date of purchase.

2.4.1 With-profits annuities

To explore the risks of the IBA, we focus here on the with-profits version. It is significant to note that the with-profits market is generally in decline, although several providers – including mutual insurers – continue to offer the fund as a general investment. The important point here is that the choice of provider and its financial strength (which indicates its ability to support future bonuses, among other factors) is crucial. Where a provider closes its with-profits book to new business, the investment strategy will become more cautious as the book matures. There is also a very real danger that the book could be sold to a consolidator, which might not have a strong reputation for treating customers fairly (TCF), as defined by the FCA.

With-profits funds invest in a range of asset classes, for example, bonds, property and equities. The declared annual bonus is set to provide a smoothed – generally growing – income from the fund, unlike the income from a unit-linked fund which is much more volatile since the value of the units directly reflects the value of the underlying fund. The smoothing mechanism requires the holding of a reserve, with the objective

of delivering a fairly stable income even during periods where the markets are volatile and falling.

How the bonus is calculated is not at all transparent to customers. The initial income is set in accordance with basic LTA principles, but the future level of income depends on the level of the declared bonus, which represents the ‘return’ on the fund. The annuitant – with the help of his or her adviser, where relevant – can increase the starting income by taking into account some of the likely investment growth during the coming year by selecting an anticipated bonus rate (ABR).

The Retirement Academy describes the process as follows: “The ABR can currently be anywhere between 0% and 5% and effectively allows a policyholder to borrow against future income payments. At the end of the year the anticipated bonus is subtracted from the annuity before adding the actual bonuses declared in that year. If the anticipated bonus is lower than the declared bonus, the annuity payments increase and vice versa.

For example if you select a 4% ABR, the starting income will be similar to a standard level annuity. This makes sense because standard annuities are priced in relation to yields on fixed interest and this is currently about 4%. The ABR is effectively the yield on which the WPA (with-profits annuity) is priced. Whereas the yield on the standard annuity is fixed for the term of the annuity, the annual bonuses on WPAs change every year.

This means that if in year two the declared WPA bonus is

Example
Assume a WPA with an ABR of 4% pays a starting income of £ 1,000 p.a.
If the year 2 declared bonus is 5% the Year 2 income increases to £ 1,000 x [1.05 (Declared bonus) – 1.04 (ABR)] = £1,010
However if the year 2 declared bonus is 3% the Year 2 income decreases to £ 1,000 x [1.03 (Declared bonus) – 1.04 (ABR)] = £ 990

higher than the ABR the WPA income will increase, whereas if the bonus is lower the WPA income will fall.”

A few insurance companies have tried to launch a product that invests part of the premium in an LTA and part in a with-profits annuity. However, we understand that these products have been withdrawn after a short period.

2.5 Income drawdown

The 2014 Budget changes to decumulation tax rules will have the most dramatic impact on the drawdown market, which will be transformed from a niche strategy for the wealthy, due to the potentially high initial and ongoing costs and investment risks, into a mass market product available to everyone whose pot is too large to take as cash under the new trivial commutation rules.

Drawdown does not involve the purchase of an annuity.

Here the consumer can take the tax-free lump sum and leave the rest of the fund invested and draw an income directly which is taxed at the marginal rate (or indeed no income at all). Investors can use a personal pension or a self-invested personal pension (SIPP) for drawdown and can invest in one or more life office funds or unit-linked funds designed for the purpose or in a wide range of other assets.

Although not a requirement, we understand that most (but not all) drawdown plans are sold on an advised basis. This is distinct from guided- or non-advice (execution-only) which is the most common method of purchasing annuities, particularly for funds worth less than £100,000. However, providers and advisers make drawdown available for DC customers with as little as £20,000 to invest, although we understand that small drawdown funds are often used to supplement a secure DB pension.

Charges for drawdown vary considerably and will depend on the cost of the underlying investments, the product charges, and the advice. Even for a simple fund structure from a low-cost provider, the annual management charge might be 1% plus an administration fee of £250 per annum, which would cover the cost of income payments and income level reviews, for example. A more common total cost is about 2% p.a. which is similar to that for an investment-backed annuity. Worryingly, we came across cases where the charges for a SIPP package and advice were 4%-4.5%. There are also hidden costs, including bid-offer spreads, the cost of sub-funds within the main fund, platform charges etc. Where an actively managed fund is selected, there is a risk that high turnover (churning) would add significantly to the total cost due to the transaction costs involved. A requirement for full disclosure of all costs, which is being discussed by industry, regulators and government, would help to shine a light on this murky issue.

Prior to the 2014 Budget, there were two types of drawdown (although the government plans to remove all restrictions with effect from April 2015):

■ **Flexible drawdown:** As the name indicates, the income is flexible and there is no upper limit. However, flexible drawdown can only be used where the individual has a secure source of retirement income (the minimum income requirement or MIR) worth £20,000 per annum. This might be from a single source – for example a defined benefit (DB) pension scheme – or from a combination of sources, including a DB pension, a state pension in payment, and a guaranteed annuity income. The MIR is reviewed every five years.

■ **Capped drawdown:** Where the individual does not meet the requirements for flexible drawdown, the rules link the maximum permitted annual income to 120% of the Government Actuary’s Department’s (GAD’s) annuity rate, which can be calculated from the GAD drawdown tables.³⁶ It is possible to defer taking income, as there is no minimum income requirement. The maximum is reviewed on a triennial basis to prevent those for whom the DC fund is their main

source of retirement income from taking too much in the early years and leaving insufficient income for later retirement. From age 75, the review is annual. The maximum income cannot take account of medical and lifestyle factors, so ‘enhanced drawdown’ is not possible.

2.5.1 Advantages and disadvantages of drawdown

The main advantages can be summarised as follows:

- Control over the investment strategy.
- Flexibility to change the income on an annual basis (subject to the maximum in the case of capped drawdown).
- Potential for higher returns over the longer term, but only if the fund is invested in riskier assets.
- Death benefits: on death in drawdown, the investor’s partner can continue to draw an income or take it as a lump sum that is taxable (at 55%).
- Deferral of the annuity purchase – in theory indefinitely, although experts agree that in most cases the guarantees provided by the LTA will become attractive at some point.

The main disadvantages can be summarised as follows:

- Ill-informed decisions: the risk that the advice and guidance market will not provide the level of individual support required to ensure all consumers make well-informed decisions, for example, in relation to taxation and the income level.
- Longevity risk: the risk that the individual will run out of money before death.
- Investment risk: the risk that investment returns will not outstrip costs and annuity rates appears to be quite high – much will depend on the costs incurred.
- Cost: this can be an expensive arrangement and not all of the investment costs will be visible, for example, where the chosen fund invests in a range of sub-funds. There might be separate platform costs and on top of this, there will be the cost of regulated advice where used, or commission for non-advice. We were told that total costs of 4.5% are not unusual, but that almost certainly the individual would assume he or she was paying much less. Investment risk and cost cannot be separated; for example, higher costs might mean that providers and advisers recommend inappropriately high-risk asset allocations in the hope of delivering a return in excess of these high costs.
- Annuity-conversion risk: a range of factors, including drawdown costs and investment returns, together with changes in interest rates, mortality assumptions and the individual’s health status, will all affect the LTA rate in the future, assuming the individual will buy longevity insurance at some point.

2.5.2 Suitability and the ‘critical yield’

In advised sales, the suitability of drawdown in relation to the risk-return trade-off will depend partly on the individual’s risk tolerance, but also on a professional assessment of the ‘Type

³⁶<http://www.hmrc.gov.uk/pensionschemes/gad-tables.htm>

A Critical Yield'. This is the growth rate needed to provide and maintain an income equal to that obtainable under an equivalent immediate annuity. The calculation assumes that an income will be taken at the level of the available annuity until a specified age (usually 75) and at that age there will be sufficient money in the drawdown fund to purchase an annuity equal to what could be bought at the point when drawdown started.

The critical yield is the growth rate on the investment(s) that is required to enable the individual to draw an income equivalent to the LTA rate that could have been secured at the outset through to a specified age (usually 75). The residual fund must be sufficient to secure the LTA rate that was available at the outset. Put simply, the higher the annuity rate available (for example, enhancements might apply), the higher the critical yield required.

Unfortunately, it appears that the regulations on calculating the critical yield, which were introduced in 1998, are out of date and contain dangerous loopholes. Where these loopholes are exploited, this could lead to cases of mis-selling on the basis of an understated investment risk. In particular, the rules do not specify the basis of the calculation. A revision should include the requirement to use top OMO rates, including top enhanced rates.

Annuity Direct gave us the following explanation:

"This creates an issue in that the basis for the annuity is not properly defined and when RU 55 was drafted in August 1998, the enhanced market was not as advanced as it is today. This means that providers generally use their own annuity rate to calculate the critical yield. The result will be that, where the annuity rate is not competitive, the critical yield will be lower, resulting in the risks of drawdown being understated."

The problem is exacerbated when a client is eligible for an enhanced annuity because the higher the annuity rate available, the higher the yield required. Our practice therefore is to broke the annuity in the open market - including medical information where appropriate - and then to use the highest annuity rate to calculate the Type A Critical Yield. The following example may help:

A client has £61,000, which he wants to use for drawdown.

The quote from the [provider's name deleted] internal rates produced an annuity of £3,010 and this was used to calculate a Type A Critical Yield of 6.6% p.a.

We were able to obtain an enhanced annuity for the client amounting to £3,488. When we ran this rate through the critical yield quote system, the required yield increased to 7.65%p.a.

2.5.3 Pre-retirement advice and guidance on asset allocation

It is to be hoped that DC providers will contact customers who have entered, or are about to enter, the de-risking stage of accumulation, to let them know about their new options so that they do not automatically switch out of growth assets into cash and gilts.

2.6 Conclusion

In this section, we have evaluated the alternatives to the LTA and have found significant weaknesses in each product. However, as mentioned at the beginning of this section, there is a very important difference between weaknesses at the conceptual level and weaknesses that emerge due to the design and distribution. This is most noticeable in the products that aim to fully or partially substitute an asset management solution for the early years of retirement for the full longevity insurance solution (the LTA). For example, at present, asset management alternatives, such as investment-backed annuities and income drawdown, tend to be made available only to the wealthy, due to the perceived investment risks and the ongoing charges, which can be much higher than those associated with a one-off annuity purchase. In the following section, we consider how these asset management solutions might be improved through the creation of institutional/scheme products.

Section 3 innovation

3.1 What is the objective of innovation?

In this report, we distinguish between what constitutes an effective market and what constitutes an efficient market. The FCA's further investigations in 2014 aim to create an efficient market for decumulation, based on the current model. Improvements in efficiency are likely to target pricing at product level and introduce improvements in distribution via the OMO. In other words, the FCA aims to correct the lack of market efficiency. While this focus is crucial, it might also be described as backward-looking. We argue that what is also needed is a robust debate about what constitutes an effective DC decumulation market going forwards - an approach that would focus on radical improvements to product design and delivery channels. Our findings, explored in this section, lead to our key recommendation: the overarching goal of innovation should be to change the retail model for DC decumulation into a scheme-based institutional model, both in terms of product design and delivery.

We stress that, for most people, it will be necessary to buy a LTA at some point because the greatest risk of DC is that of outliving retirement savings. As discussed in Section 1, while the LTA is a perfect hedge for longevity risk, the return is unattractive for many people in the early years of retirement. This is already evident in the historically low annuity rates available for those in their late-50s and 60s who are in good health. Low returns also go some way towards explaining why only about 5% of annuitants buy inflation-linking, since it reduces the initial income by around one-third. This means that the current system embeds both low yields and massive inflation risk.

Innovation needs to address the following four issues:

- The optimal age to purchase longevity insurance and the optimal age at which the longevity insurance comes into effect
- The most effective and efficient products for deferring income in the period between retirement and the age at which the longevity insurance comes into effect
- The most effective and efficient products for providing income in the period between retirement and the age at which the longevity insurance comes into effect
- The level of income that should be drawn in relation to income tax (i.e., the avoidance of moving into a higher marginal

rate band where possible) and to longevity risk (i.e., the avoidance of drawing a high level of income in the early years that would result in running out of money in later retirement should the individual live longer than expected).

A retirement period of 20 - 30 years can be divided into three phases. A typical pattern might be early retirement (active, healthy), mid-retirement (more sedentary), and late-retirement (ill-health/care requirements). For the purpose of DC decumulation, we also believe it is helpful to consider the period prior to the purchase of longevity insurance and the period after the purchase. As a rough guide, we classify those who are aged between 55 and 70 - 75, in good health, and have dependants as being in the pre-longevity insurance stage of their retirement.³⁷ At some point between age 70 and age 80, it will switch between income drawdown and a LTA, since the implied return on a LTA at these ages - as a result of the high mortality premium built into their return at these ages - exceeds any realistic return available in the financial markets.

With reference to the second and third points, an appropriate deferment and drawdown product that can be integrated into auto-enrolment might be described as one that:

- Benefits from institutional design, governance, and pricing
- Delivers a reasonably reliable income stream (i.e. with minimal fluctuations)
- Maintains the purchasing power of the fund
- Offers the flexibility to purchase the LTA at any time (or at regular predetermined intervals to hedge interest rate and mortality risk)
- Is simple to understand, transparent and low-cost
- Requires minimal consumer engagement
- Benefits from a low-cost delivery system

We now consider the most effective and efficient products for providing income in the period between retirement and the purchase of longevity insurance

3.2 Scheme and institutional innovation

3.2.1 Scheme drawdown

Scheme drawdown is emerging as an institutional asset management solution to the decumulation needs of DC customers in early retirement. The first of these institutional drawdown products is expected to be launched this year.

³⁷We do not address the needs of late retirement, when long-term care may be required. This is because, at present, most DC pots are too small to accommodate LTC planning. In due course, this will become an important problem to solve in association with the pension problem.

Scheme drawdown aims to deliver a low-cost and flexible drawdown facility, for example, through target date funds (TDFs) that span the later years of accumulation and the early years of decumulation. The TDF is an investment strategy designed for DC default funds (accumulation), whereby the scheme establishes a range of TDFs, each with its own glide path. 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. In many respects, it is a natural extension of the default fund used by modern multi-trust, multi-employer schemes for the auto-enrolment accumulation stage. We also argue that it is a natural extension of the trustees' governance role and fiduciary duties, which at present end very abruptly and, in our view, prematurely, when members are steered towards the purchase of LTAs at the point of retirement. Under scheme drawdown, the trustees would be responsible for governance, which would include the selection of the asset manager(s) and administration of payments into retired member accounts. This governance structure would avoid the need to rely on individual employers. NEST has hinted that it might offer scheme drawdown in future. We encountered a number of asset managers that are developing this strategy and AllianceBernstein, which provides target date funds for several new auto-enrolment schemes, said it is close to launching its Retirement Bridge product to schemes in the mass market.

We were not given any specific details by asset managers, due to the sensitivity of their development and pre-launch planning, but we assume that the maximum income might still be linked to GAD rates, as a precaution to prevent depleting the fund, although it would be reviewed annually (rather than every three years) because investors might need to pull out at any point to purchase a LTA. The cap on maximum income might be set at a slightly lower level than the GAD maximum – e.g., 5-10% lower – in order to provide a 'buffer' or reserve. This would enable the fund to smooth the income payments when markets are volatile and also to return funds to members who decide the time is right to make an annuity purchase.

Income would be generated partly from the investment yield and partly from a drawdown of capital (i.e., the pension pot). For example, if the aim were to deliver a maximum income of 6%, this might comprise 3.5% from the yield and 2.5% from capital (i.e., the initial premium). Funds are likely to be low-risk and largely bond-based, but might also include a modest allocation to growth assets in order to help preserve the annuity-purchasing power of the members' funds.

The regulation of scheme drawdown will be of keen interest to trustees and asset managers, among others. No doubt TPR

would need to consider carefully the fund objectives, volatility and the smoothing mechanism, among other features. The regulator would also have to settle the question of advice vs. guidance.

We were told that there would be no need for individual advice with this type of arrangement because it is an income-paying fund and administration facility offered by the scheme trustees. Even if this is the case, it will be necessary for trustees to provide clear member communications and much will depend on whether scheme drawdown is the default or an option. Where it is the default for the early years of retirement there would need to be some form of screening process to ensure members for whom the strategy is not suitable are offered alternative arrangements, e.g., a single person with no dependants who is in poor health would probably be better off with an enhanced annuity. Where it is not the default, a professional decumulation service appointed and monitored by the trustees could steer members towards the most appropriate decision, in which case the scheme drawdown fund would be one of the available options.

The attraction of scheme drawdown is that it has the potential to be much cheaper and deliver more consistent results than conventional drawdown, due to economies of scale, trustee oversight, and the use of a well-designed institutionally managed fund. Scheme drawdown would also be more flexible than the FTA because members would be able to purchase an LTA at any time or at designated regular intervals, depending on the scheme rules.

We did not have access to the pricing of products likely to be launched in 2014-2015, but we estimate that the member charge might be in the region of 0.6% to 1%. The breakdown for a member charge of 0.6% might be 40bps for the fund management and 20bps for the administration of payments to individual accounts.

Under the above scenario, scheme drawdown could be used as a relatively short-term decumulation solution. This would provide members with a breathing space before purchasing the LTA, which might be a more effective and efficient alternative to the proposal for a post-LTA sale cooling-off period (see below). It might also be used for a longer period during the early stage of retirement.

Finally, trustees will need to reconsider the asset allocation of their glide path during the de-risking phase pre-retirement, since at present it aims to conclude with a fund that is 25% in cash, to hedge the tax-free cash element, and 75% in gilts, to hedge annuity rates. This would no longer be appropriate for members who go into drawdown. This point applies irrespective of whether the trustees intend to offer scheme drawdown.

3.2.2 Institutional annuitisation

This concept is already widely used in the DB annuity bulk buy-out market, where economies of scale can benefit scheme members as well as the DB scheme (i.e., through an improvement to its funding level and its risk profile relative to liabilities). The idea is for an insurance company to underwrite the longevity risks, relative to a guaranteed lifetime income, presented by a cohort of retirees. There would be a requirement for underwriting, but it is possible that this could be simplified if there were common characteristics in the cohort, for example, in relation to the industry in which they worked (occupational health risk) and/or in the area in which they lived ('postcode' socio-economic underwriting).

If this model could be developed for the DC auto-enrolment market, it could deliver better value for money for retirees, and it might be implemented via a national clearing house, for example, to ensure universal access. It might also be offered directly by the large-scale DC schemes, once they have achieved the necessary critical mass, and as a natural extension of scheme drawdown.

A variation on this is the pooled annuitisation operating in the Swedish Premier Pension System (PPM). Here each cohort of retirees completely 'self-annuitises'. The starting annuity rate is set on the basis of the latest available mortality projection and interest rates. However, the annuity is rebased annually in the light of revised mortality projections and returns. This means that the annuity can rise and fall over time. The idea is to avoid intergenerational cross-subsidies.

3.2.3 Defined Ambition (DA) and Collective DC Schemes (CDC)

Defined ambition (DA) is the description the government uses for a range of proposals for workplace pension schemes that combine some of the risk-sharing benefits of DB, but which impose zero or limited liabilities on the sponsoring employer. The aims are to provide more certainty for members than a typical DC scheme, but ensure less cost volatility for sponsors of DB schemes than is the case with the traditional model.

The DA proposals for DB schemes ('DB-light') for future accrual involve replacing the statutory indexation of pensions in payment with conditional indexation (which will depend on the scheme's funding position), change the scheme's normal pension age in line with changes in longevity assumptions, and automatically convert benefits to a DC pension when a member leaves the scheme, with the choice between a cash equivalent transfer value and full buy-out.

The DA proposals for DC schemes ('DC-heavy') for future accrual include (note: none of these options involves any risk to

employer):

- Money back guarantee (MBG) which ensures members receive the same amount that they paid in (i.e., they get at least their money back).
- Capital and investment return guarantees (CIRG) which ensure that members receive back their contributions plus a minimum investment return.
- Retirement income insurance (RII) which uses part of the member's fund to purchase insurance that insures a minimum level of income which is expected to grow every year as further insurance is purchased. At retirement the insurance is triggered if the member lives long enough to exhaust their fund.
- Pension income builder (PIB) which uses part of contributions to purchase a deferred annuity which provides a minimum pension in respect of that year. The rest of the contribution goes to a common pooled fund that is invested in riskier assets and is used to generate growth and pay conditional indexation. The deferred annuity can be bought from an insurer or provided from within the fund.
- Collective defined contribution schemes (CDC) which we discuss below.

The PIB is the strategy used in ATP, the largest pension fund in Denmark. Part of each contribution into the scheme is used to buy a deferred annuity which is payable from retirement. The level of income secured depends on the level of interest rates at the time and so will fluctuate from year to year. The rest of the contribution is invested in growth assets which allows for the possibility of pension increases and also provides a buffer against increases in life expectancy. The fund accrued with these remaining contributions could be used for drawdown during the initial phase of retirement, thereby enhancing the income from the deferred annuities (once they start paying). Part of the fund could also be used to buy ALDAs (see Section 3.3.1) which would add to the income in late retirement.

This is an interesting strategy which fully integrates the accumulation and decumulation stages. It has the advantage of expressing the benefit in terms of a future income – which participants are more likely to understand – rather than a pot size – which most participants find very difficult to convert into an income equivalent. There are, however, some disadvantages. First, deferred annuities typically have a specific date on which they start to make payments. This suggests that individuals would need to have a fairly clear idea about the date on which they are planning to retire when they start to purchase deferred annuities in say their early 20s. Standard deferred annuities give little flexibility to change this date. A very large fund like ATP might be able to accommodate a certain amount of flexibility, but a small scheme might not be able to do this.

Second, deferred annuities purchased through insurance companies can be expensive on account of the amount of capital the regulator requires the insurer to post. This is because of the potential large changes in life expectancy that might occur over the 40 or so years of accumulation. Again a fund the size of APT might be able to offer these annuities internally, but if it does underestimate increases in life expectancy, it is the next generation of members who will be subsidising the retired generation.

The most relevant proposal for the purposes of the current report is CDC. Here the contributions of the employer and employees would be fixed and the risks remain with the members, as per the current system. The key difference is that risks are shared collectively between the members (via intergenerational transfers) and retirement benefits are adjusted pre- and post-retirement according to the fund's performance (comparing the funding level relative to benefits promised). Benefits might rise, therefore, but they also might fall, although the arrangement would be designed to minimise fluctuations. At retirement, the member would receive the pension income directly from the scheme fund.

A form of CDC is used in the Netherlands, where it has been regarded as highly successful, in spite of recent reductions to pensions. However, the Netherlands benefits from a greater sense of social solidarity than does the UK with a collective approach to pension provision that brings together employers and unions as 'social partners' and supports a small number of very large industry-wide schemes where scale economies are fully exploited. A similar arrangement operates in Denmark. Even so, recent criticisms of the CDC model have begun to highlight the potential unfairness of the intergenerational risk sharing aspect of the model which has turned out to be more about 'borrowing from' the next cohort of members rather than sharing risks with them.

It is not clear if CDC would work in the UK's very different private-sector labour market where the idea of social solidarity is quite different. Intergenerational transfer of risk in the UK began to go badly wrong in the with-profits market in the 1990s and there are still concerns about the associated opacity of actuarial discretion. Overcoming these weaknesses would require very robust independent governance.

CDC relies on schemes that benefit from scale and in which there is stability of membership.³⁸ Auto-enrolment is likely to result in a small number – possibly as few as five or six – large-scale multi-employer multi-trust schemes, so this suggests that the former is possible. However, the latter – stability of membership – is far less certain.

3.3 Retail annuity product innovation

3.3.1 Advanced life deferred annuities

The 2014 Budget overhaul of the DC decumulation tax rules, and in particular the new regime proposed for April 2015, will – or certainly should – focus attention on the value of the LTA as an insurance product that provides a perfect longevity hedge for pensioners in later retirement, when insurance, rather than investment, is more appropriate. Such a focus would recognise that the real weakness in the DC model is the long tail of longevity risk that individuals must bear.

In the US, one form of DC decumulation for those with 401(k) pension plans³⁹ is to split the fund, say, 70/30, between a drawdown product and a deferred annuity product. The former, known as a 'rollover' or income retirement account (IRA), operates in a similar way to income drawdown. The latter, known as an advanced life deferred annuity (ALDA, also known in the US as longevity insurance), begins to pay out at a date in very late retirement, for example age 85, if the DC customer survives to that age. ALDAs are also available in Chile, although they are not yet available in the UK.

The basic ALDA is pure insurance: it only pays out if the insured individual lives until the specified age. It is possible to buy certain features, which reduce the rate, e.g.:

■ **Death benefit:** if the annuitant dies before the start of payments, the insurance company returns the value of the fund and, in some cases, adds an amount for interest.

■ **Cash refund:** if the annuitant dies after payments commence, the balance of the fund is paid to his or her beneficiaries.

■ **Early payment:** this can be arranged with some providers, for example where the annuitant has to go into a nursing home. This element is also known as a life-care or immediate needs annuity.

While this combination of drawdown and tail-end longevity insurance sounds attractive, the standard ALDA is a level annuity, so the impact of inflation is likely to be significant by the time the annuitant begins to draw the income.

3.3.2 Extreme-inflation protection

At present, due to the approximate one-third reduction in initial income, only about 5% of people who buy a LTA purchase inflation-proofing. We were told that it would be possible to design a cheaper form of inflation-proofing which aims to match RPI more closely and which would provide a hedge against extreme inflation shocks (a feature described as an 'inflation-kicker').

The concept, which has yet to come to market, is based on the assumption that most retirees can tolerate a limited amount of inflation risk. Therefore, if inflation were below 3%, the annuity

income might fall slightly. If it were exactly 3%, there would be no change. Above this figure, the income would increase.⁴⁰ This is an interesting idea and quite different from the two existing methods of capping the cost of inflation protection. The first is to buy a fixed rate of escalation, e.g. 3% per annum. The problem with this is that the annuitant receives the increase irrespective of actual inflation rates, so it could be more or less than is needed to keep pace. Due to the low-interest rate environment, 3% indexation is not significantly cheaper than full RPI. The main problem with a fixed rate of escalation is that it offers no protection in the event of soaring inflation, such as that experienced in the 1970s. With quantitative easing about to unwind, it would be impossible to rule out an inflation spike over the next 20 or 30 years.

The second method is limited price indexation (LPI). This matches RPI, but only up to a limit of 2.5 or 5%. So, like fixed escalation at 3%, it does not protect against a future inflation spike.

3.3.3 LTA 12-month cooling-off period

The government had a pre-Budget proposal to introduce a 12-month cooling-off period after the LTA purchase.⁴¹ The government was aware of the intense pressure DC customers are under when they make their LTA purchase.

The idea is that the cooling-off period would give retirees the chance to review and change what might have been a poorly-informed decision. It would have the additional benefit of putting insurance companies and distributors on notice, since they would suffer if there were a mass exodus of customers in the first 12-months due to poor pricing and/or sales processes. Moreover, data on redemptions and repurchases would be very valuable for the industry and the regulators, as it would be possible to identify insurance companies that sell inappropriate products at uncompetitive rates and distributors that operate poor sales practices.

Nevertheless there are cost implications. Insurance companies would have to hold the premium in low-interest liquid assets for a year in case annuitants asked for their money back at the end of the cooling off period. Further, the annuity would have to be re-priced at the end of the year to reflect prevailing interest rates and any revised mortality assumptions. If insurance companies were required to honour the quote made a year earlier, then this would have to be sufficiently low to account for the risks that the insurance companies are carrying in the intervening period.

Following the 2014 Budget, this proposal should no longer be necessary at the point of retirement, particularly if scheme drawdown becomes the norm, since this would provide a breathing space pre- rather than post-LTA purchase. This would avoid the introduction of a potentially complex and costly process of LTA review, rebate and repurchase that the cooling-

off period would entail, and the equally likely danger of a 'churn' mentality developing among insurers and distributors, since they now have an incentive to bid for these clients during the cooling off period.

Nevertheless, it still might be relevant for two reasons. First, the purchase of annuities for health/lifestyle reasons at the point of retirement might be inappropriate where the enhancements are small. It will be important to avoid annuitisation under the new regime, where the rationale is based on the availability of an enhancement without considering its merits relative to drawdown. Second, it will still be important when DC retirees purchase a LTA in later life, since at this point it will be essential to achieve the optimal rate in the open market, based on deep underwriting of medical and lifestyle factors.

3.3.5 Switchable Annuities

This idea appears to be the least attractive and most impractical of the government's pre-2014 Budget proposals for insurance companies [BBC 2014]. In early 2014, the DWP said it was considering changing the rules for LTAs to allow people to switch providers post-purchase. The proposal was met with fierce criticism on the part of insurance companies, which argued that the cost of this flexibility would reduce LTA rates by about 25%. We were not able to verify this figure, but the point about increased costs is valid.

Insurance companies are buy-and-hold investors of the bonds used to make the LTA payments. They buy bonds with different maturities and make the annuity payments from the coupons and redemption payments on these bonds. The cash inflows from the bonds need to be received before the LTA payments are made in order to minimise the insurance companies' holdings of cash reserves.

LTA payments typically are made monthly, but the coupon payments on the bonds are only received semi-annually. The required cash-flow matching exercise is complex and needs to be done in the most cost-effective way. Once the bonds are in place, they are held until they mature and then the redemption proceeds are used to buy new bonds at prevailing rates which might be higher or lower than the insurance company had initially predicted. This is known as reinvestment risk and insurance companies need to hold reserves to cover the possibility that interest rates are lower and therefore that the new bonds are more expensive than predicted.

Insurance companies already have to accommodate in their reserves the possibility of adverse mortality experience, i.e., that realised mortality rates turn out to be lower (annuitants live longer) than predicted. If, in addition to this, insurance companies have to allow for the possibility that annuitants can sell back their annuities at any time, then this would certainly increase costs. Insurance companies would have to hold

³⁸One think-tank has claimed that CDC appropriately designed could deliver pensions that are 10-25% higher than under the pure DC system, which at present relies on the retail market for decumulation RSA, 2013, Collective Pensions in the UK; RSA, 2012, collective Pensions in the UK; see also DWP, 2009, Modelling Collective Defined Contribution Schemes. ³⁹A 401(k) is an employer-sponsored pension scheme ('plan' in the US), similar in some ways to a group personal pension in the UK. It is named after the section of the tax code that governs the plans, introduced in the 1980s.

⁴⁰This is similar to the smoothing principle of a with-profits annuity. ⁴¹Telegraph, 17 April 2014.

sufficient liquid reserves to avoid the possibility of having to sell some of the bonds needed to make payments to the remaining annuitants. It would be like an airline planning to fly non-stop from London to Sydney, but then being required to allow every passenger to get off the plane at any airport between London and Sydney and claim a partial refund on their ticket.

To summarise, while it might be argued that the facility to surrender annuities would stimulate competition and prompt insurance companies to offer higher rates initially, the calculation of the 'surrender value' of an annuity would prove complex and potentially allow the insurer to extract additional profit.

3.3.6 'State annuities'

On 2 April 2014 the government confirmed the details for its plan to allow pensioners and those who reach pension age before 6 April 2016 to top-up their state pension by up to £25 per week.⁴² The offer, which will be available for 18 months starting in October 2015, will enable people to get a higher inflation-proofed state pension by making Class 3A Voluntary National Insurance contributions. The cost is based on age and takes account of average life expectancy. For a 65-year-old an extra £1 of For a 65-year-old an extra £1 of weekly pension will cost £890; for a 75-year-old, £1 per week will cost £674. A calculator is available online.⁴³

This is an interesting move on the government's part, as, in effect, it represents a short-term entry into the retail annuity market. The government's pricing compares very favourably with an annuity bought on the open market.

Glossary of terms

Accumulation: In DC schemes and plans, this refers to the period during which pension contributions are invested, at the end of which the accumulated fund is used to provide a lifetime income (known as the **decumulation** stage), although this may change after the 2014 Budget.

Active member discount (AMD): A lower annual management charge that applies to active members of a scheme (i.e., employees), which is increased when they leave employment.

See deferred member penalty.

Advanced life deferred annuity (ALDA): A type of deferred annuity where payments begin when the annuitant is in the very late stage of retirement.

Advice: A confusing subject and terminology for consumers. The FCA regulates advice in relation to the sales of financial services products. 'Full' or 'regulated' advice is where the adviser takes responsibility for the recommendation and charges a fee (with any commission built in to the product pricing rebated). This type of advice confers access to the FOS in cases of mis-selling. **'Non-advice'** – also known as **'guided advice'** – is commission-based and the adviser is not responsible for the 'sale' because this type of selling is classed as **execution-only**, i.e., the customer is responsible for the purchase. A more simple form of guidance, such as that provided by MAS and TPAS, helps DC customers to understand their options, the terminology, and the factors they might wish to take into account. Typically this is delivered via a website and/or by phone and it is not linked to a sales process. The 2014 Budget announced plans to make available a form of impartial face-to-face guidance for all DC retirees, but the details were not known at the time of writing.

Annual management charge (AMC): The annual management charge, deducted from member funds during accumulation, covers disclosed investment costs and administration, among other items. The AMC is regarded as an incomplete disclosure measure. The total expense ratio is more comprehensive, but is still not complete, as is the IMAs 'ongoing charges'. There is growing pressure on providers to disclose all product and fund costs, including transaction costs and the cost of sub-funds.

Annuitant: The purchaser of an annuity.

Annuity: The **lifetime annuity (LTA)** is the most common type of annuity purchased with a **defined contribution (DC)** pot. This is an insurance policy that guarantees an income for life in return for the DC pension fund (the insurance premium). Other types of annuity include:

■ **Advanced life deferred annuity (ALDA):** Also known as longevity insurance, this type of annuity is not currently sold in the UK. The ALDA begins to pay out at a date in very late retirement, e.g., age 85, if the member survives to that age.

■ **Compulsory purchase annuity (CPA):** The name given to an annuity purchased with the proceeds of a DC pension fund prior to April 6, 2011. Compulsory annuitisation ended in the UK on this date. Before then, assets had to be annuitised by age 75 at the latest. At present, most DC customers still buy an annuity at some point, but this is likely to change in April 2015 if the 2014 Budget proposals become law, at which point there will be no requirement to buy an annuity with the DC pension fund.

■ **Enhanced and lifestyle annuity:** An individually underwritten LTA where life-shortening medical and lifestyle factors are assessed and the annuity rate increased accordingly.

■ **Fixed-term annuity (FTA):** This provides an income, usually linked to annuity rates, for up to five years, after which the insurance company returns a percentage of the fund.

■ **Immediate needs annuity:** A specialist product that is purchased at the point of entry to a care home. It pays a guaranteed income for life to help cover the cost of care fees in exchange for a one-off lump-sum premium.

■ **Indexed and escalating annuity:** The annuity rate increases each year. The rate of increase can be linked to the rate of inflation (indexed) or it can be fixed, e.g. 3% p.a. (escalating).

■ **Investment-backed (or investment-linked) annuity (IBA):** The DC pot (premium) is invested in a fund of growth assets, the performance of which determines the annuity income.

■ **Level annuity:** This pays a fixed annual income for life; it does not increase with inflation.

■ **Phased annuity purchase (phased retirement):** The DC pot – including the tax-free lump sum – is segmented. Each year one or more segments are used to buy an annuity. The tax-free cash attached to the segments is used to provide the income in the early years and to boost it in the later years.

■ **Purchased life annuity (PLA):** A voluntary annuity purchased with non-pension assets. The taxation of the PLA is different from the CPA. A part of the annuity is regarded as a return of capital to the annuitant with a PLA and hence is not taxable. The rest is taxable as income, but non-taxpayers can reclaim the 20% tax automatically deducted at source on PLA income.⁴⁴

Annuity rate: The income the insurance company guarantees to pay per month or per annum in return for the lump sum (the premium). It can also be expressed as a percentage yield.

⁴²<https://www.gov.uk/government/news/state-pension-top-ups-pensions-can-be-increased-by-up-to-25-a-week> ⁴³www.gov.uk/state-pension-topup

⁴⁴<http://www.hmrc.gov.uk/incometax/life-annuity-income.htm>

Anticipated bonus rate (ABR): In a with-profits *investment-backed annuity (see annuity)*, it is possible to adjust the annual income by making assumptions about the next annual return or bonus.

Auto-enrolment: The new system of pension scheme provision for all employers, which mainly affects the private sector and which is being phased in between October 2012 and 2018.

Employers and qualifying workers (those aged between 22 and the state pension age, earning at least £10,000 in 2014 – 2015) must make minimum contributions based on band earnings, but the latter 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.

Bundled scheme: A DC scheme where the provider is responsible for both the asset management and administration functions and might also be an annuity provider offering rates to members (internal or rollover sales). An alternative description to 'bundled' is 'vertical integration'.

Capped drawdown: See *income drawdown*

Cash-equivalent transfer value (CETV): The value of the benefits accrued in a *defined benefit* scheme when the member changes jobs and moves their benefits to another eligible scheme – often *defined contribution* – to take advantage of more flexible income options. It is calculated as the capital sum which, if invested appropriately, is expected to provide the member's DB scheme benefits as they fall due.

Collective DC: see *Defined ambition*

Commission: This has various meanings, but in the context of *annuities*, it refers to the sales commission paid by insurance companies to advisers (also known as brokers) that sell on a guided basis (also known as 'non-advice' and execution-only), where the customer receives guidance but is responsible for making the purchase decision. Commission is calculated as a percentage of the fund. Rates for annuities range from about 1.5% to 3.5%, although some brokers receive a much higher rate, e.g. 5-6%. *Income drawdown* must be sold under regulated *advice* and on a fee basis. See *Retail Distribution Review*.

Contract-based DC scheme: Broadly speaking, 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 scheme is regulated by the Financial Conduct Authority (FCA). More than one employer can use a contract-based scheme

(multi-employer DC scheme). See also *trust-based DC*.
Decumulation: The process whereby the DC fund built up during the accumulation stage is converted into a *lifetime* income in retirement. Typically, this involves the purchase of a lifetime annuity, but the member might also draw directly from the fund (*income drawdown*). This market will change radically if the 2014 Budget proposals become law in April 2015.
Deep underwriting: In pricing an enhanced annuity, this is where the insurance company takes into account a full evaluation of all the factors that might affect how long an annuitant lives. See light underwriting.

Default fund: In a DC scheme, this is the multi-asset fund designated to receive the contributions of members who do not make an investment choice. Under *auto-enrolment*, an estimated 90-97% of members will rely on this fund.

Deferred member: The description applied to members of DC schemes who leave the sponsoring employer's company. In a *trust-based* scheme, membership continues and so former employees continue to be the responsibility of the scheme trustees. In a *contract-based* scheme, the contract frequently is reclassified as an individual *personal pension*, so the individual is no longer a member of the previous employer's scheme.

Deferred member penalty: When a member leaves a *contract-based DC* scheme, some insurance companies impose a higher *annual management charge* on their pension plan. This practice, which the government has said it will ban, applies where 'active' members (employees) benefit from an *active member discount*, i.e., a lower annual management charge.

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. One option is collective DC (CDC). Here the contributions of the employer and employees would be fixed and the risk remains with the members, as per the current system. The key difference is that risk is shared collectively between the members (via intergenerational transfers) and retirement benefits are adjusted pre- and post-retirement according to the fund's performance (comparing the funding level relative to benefits promised). Benefits might rise, therefore, but they also might fall, although the arrangement would be designed to minimise fluctuations. At retirement, the member would receive the pension income directly from the scheme fund.

Defined benefit (DB): Members' pensions are linked to salary (e.g., final salary or now more commonly 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 a range of factors, the main ones being the level of contributions invested, the charges deducted, and investment returns. The fund is used at retirement to generate a lifetime income, usually in the form of an *annuity* (although this might change following the 2014 Budget). Therefore the investment and longevity risks, among others, fall solely on the individual members.

Diversified growth fund (DGF): A fund that aims to increase the return and/or reduce risk through investing in a wide range of asset classes, often including alternative asset classes.

Duration: This measures the sensitivity of the price of an annuity or the price of a bond to changes in interest rates. It also measures the average time in years that your money is invested in an annuity or bond, or equivalently the time it takes to get half your investment back in terms of annuity or bond payments. If the duration of an annuity or bond is, say, 11 (years), then a 1% increase in interest rates will reduce the price of an annuity or bond by 11%.

Enhanced annuity: See *annuity*.

Escalating and indexed annuity: See *annuity*.

Execution-only: See *advice*.

Fixed-term annuity: See *annuity*.

Flexible drawdown: See *income drawdown*.

Gilt: The common name for a UK government bond.

Glide path: In a default fund, members' funds are transitioned over a period of years before retirement (e.g. 10-15) from higher risk growth assets into lower risk bonds and cash in order to protect members from extreme market shocks just prior to decumulation and the purchase of an *annuity*.

Group personal pension scheme (GPPS): A contract-based workplace pension scheme. In effect, this is a grouping of individual *personal pension* plans, but with pricing to reflect the group nature of the arrangement.

Guarantee: With a lifetime annuity, it is possible to buy an additional insurance feature that ensures the annuity income will be paid for at least the period of the guarantee, e.g. five or ten years. If the annuitant dies before the end of the guarantee period, the income is paid to the estate.

Guaranteed annuity rate (GAR): The annuity rate is fixed at the time the member joins the DC pension scheme or plan, rather than at the time the *lifetime annuity* is purchased. GARs used to be offered by many insurance companies through their *with-profits* pensions policies, but when interest rates fell, the guarantees increased so much in value that they led to financial difficulties, particularly in the case of Equitable Life.

Guidance and guided advice: See *advice*

Immediate vesting: This is where an individual aged 55 or over makes a lump sum contribution to a personal pension plan, secures tax relief, then immediately takes 25% of the fund as tax-free cash and takes the rest as an annuity or, under the proposed April 2015 rules, as taxable income. It is possible the government may restrict this strategy.

Income drawdown: At retirement, instead of purchasing an *annuity*, the individual draws a regular income directly from the fund. At present there are two types of drawdown. Under *capped drawdown*, following a 2014 Budget change, the maximum amount that can be drawn per annum is 150% of the annuity rate set by the Government Actuary's Department (up from 120%). Under *flexible drawdown*, any amount can be drawn, provided the individual has £12,000 in secure pension from other sources (down from £20,000). From April 2015, the government plans to abolish all restrictions on the annual income and there will be no age restrictions.

Individual Savings Account (ISA): A tax-favoured savings and investment account whereby contributions are made from taxed income, but the investments are free from income tax and capital gains tax and the emerging pot is tax free. There are no restrictions on withdrawals and the 2014 Budget increased the annual allowance to £15,000.

Investment-backed annuity: See *annuity*

Load factor: A measure of the extent to which the *money's worth* will be less than 100% due to the administrative and regulatory costs and normal profits incurred by the annuity provider.

Light underwriting: In pricing an enhanced *annuity*, this is where the insurance company takes into account only limited details of the factors that might affect how long an annuitant lives, e.g., 10 questions on major lifestyle and medical factors. See *deep underwriting*.

Lifestyle/lifecycle: Another term to describe the *glide path* of a *default fund*, which aims to de-risk members' funds in the run up to retirement. The asset-class switching decisions are

made by the scheme fiduciaries and their advisers. From the member's perspective their pot appears to be in a single fund, but in reality the default fund comprises several risk-graded funds. Typically, a higher-risk range of sub-funds are used for the main growth phase and then during the de-risking phase, the member's assets are switched systematically into lower risk sub-funds over the period of the **glide path**. See **target date fund**.

Lifetime annuity (LTA): See **annuity**.

Limited price indexation (LPI): LPI is the retail price index (RPI) capped at a certain rate, e.g., 2.5% or 5%.

Longevity: A general term for expressing how long someone will live, more formally expressed in terms of life expectancy. For example, the life expectancy of a 65-year old male might be 22 years which means he is expected to live until age 87. See **mortality rate**.

Long term care (LTC): As a generic term, this refers to residency of a care home (residential/nursing) in later retirement. The government is concerned about the cost of LTC, which is funded by local authorities once the individual's assets fall below a certain level, and is looking for ways for people to fund the bills, either with their DC pot or with LTC insurance, which can be taken out at the point of entry into a care home (known as an 'immediate needs' **annuity**).

Marginal tax rate: This can be a surprisingly complicated point, but in relation to the **trivial commutation** rules and proposed **income drawdown** rules from April 2015, this denotes the individual's top rate of income tax, which will be deducted from a pension lump sum drawn in addition to the tax-free allowance).

Master trust: A **trust-based** DC workplace pension scheme that can accommodate multiple non-related employers. The trustee board might be wholly independent of the scheme provider or might include provider representation.

Money's worth: The expected present discounted value of the future annuity payments divided by the actual price paid. The closer money's worth is to 100%, the better the value for money received by the annuitant. See **load factor**.

Mortality assumptions: The assumptions about future **mortality rates** made by an annuity provider in determining the price of an annuity.

Mortality buffer: The extra margin built into the **mortality assumptions** used by an annuity provider in determining the price of an annuity to allow for the possibility that future

mortality rates are lower than projected.

Mortality rate: The percentage of a group of people who will die at a certain age. For example, the mortality rate for 65-year old males might be 0.9% which means that 0.9% of 65-year old males are expected to die before they reach 66.

Mortality drag (or mortality premium): The mortality drag at age x is equal to $q^x/(1 - q^x)$ where q^x is the proportion of annuitants aged x who die before their next birthday. The mortality drag measures the additional return an annuity offers compared with a risk-free asset such as government bonds (gilts). It increases with age, which is why it can make sense to delay the purchase of an annuity as long as possible. The mortality drag is also a measure of the cross-subsidy from those annuitants who die before their life expectancy to those who live beyond their life expectancy.

Mortality table: Underwriters use a mortality table to predict how long an **annuitant** might live in order to set the annuity rate. Different mortality tables will be used for different types of annuitant.

Multi-employer DC scheme: See **contract-based DC** and **trust-based DC**.

Multi-trust DC scheme: See **trust-based DC**.

Non-advice: See **advice**.

Open market option (OMO): The technical definition of 'exercising the OMO', introduced in 1975, is to buy an annuity from an insurance company that is not the provider of the pension plan. A better definition is to use an annuity adviser or website facility to broke the whole of the market, taking into consideration timing, lifestyle/medical features, product features, etc.

Payback period: The number of years it takes for the insurance company to return the full premium or original capital in the case of a lifetime **annuity**.

Pension liberation: This is classed by the regulators as a scam or fraud, depending on the circumstances. The process involves the transfer of a pension fund to an arrangement that facilitates access before age 55 (the legal age at which access is permitted, apart from in rare cases, e.g., terminal illness). The tax charges and fees, which individuals might not understand, are notoriously high. See **pension unlocking**, which is quite different.

Pension unlocking: This is where a DC investor takes their 25% tax-free lump sum early – often at age 55 (the legal minimum). It is perfectly legal, but unscrupulous salespeople

target DC customers, making it look like a little-known opportunity, and charge a high fee. In most cases, people buy their annuity at the same time, securing a very low rate due to their age. Unlocking is not the same as **pension liberation**. **Personal pension plan (PPP):** An individual (retail) DC pension plan, introduced in 1988.

Phased annuity purchase (phased retirement): See **annuity**.

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 on the platform to which DC customers have access in addition to the provider's own funds.

Purchased life annuity (PLA): See **annuity**.

Quantitative easing (QE): A type of monetary policy used to stimulate the economy when short-term interest rates have become so low that standard monetary policy is no longer effective. The central bank buys long-term bonds in the market which lowers their yields and increases the monetary base. This, in turn, increases private-sector investment and consumption expenditure, but the impact on annuity rates is negative.

Retail Distribution Review (RDR): The RDR came into effect on 1 January 2013. It banned adviser commission for new sales of regulated investment products, including pension schemes and plans. From this date onwards, all advice relating to the sale of new investment products must be fee-based. However, since most annuities are sold on a non-advice or guided advice basis, the commission system still operates. See **advice**.

Scheme (institutional) drawdown: This is an emerging solution to specific problems within the DC decumulation market and would most likely be offered by trustees of a workplace auto-enrolment scheme. The idea is to provide a breathing space between the point of retirement and the annuity purchase, or, where suitable, to provide an alternative to an annuity for an extended period of retirement. The fund would pay an income and might be flexible and liquid, so that it could be used for just a few months or up to age 75, for example. As in the accumulation phase, the member would pay an **annual member charge** or **total expense ratio**.

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

a single **annual management charge** and no exit penalties. **Target date fund (TDF):** An investment strategy designed for DC default funds, whereby the scheme establishes a range of TDFs, each with its own glide path. 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. See **lifestyle**.

Total expense ratio (TER): The TER is a more comprehensive measure of the DC scheme member's total annual cost than the **annual management charge (AMC)**, but is still far from complete. It includes the AMC and fees for a range of services including legal, administration, audit, marketing, directors, and regulatory costs. There is growing pressure on schemes to reveal all fund costs, including transaction costs and the cost of sub-funds.

Trivial commutation: From 27 March 2014, where the total pensions are worth £30,000 (previously £18,000) or less, the whole amount can be taken as cash; 25% tax-free and the rest taxed at the marginal rate of income tax. Up to three small pension pots each up to £10,000 can be taken as cash, even where total pension savings are worth more than the £30,000 limit (taxed as per above – previously the maximum was two pots worth up to £2000 each). From April 2015, the government plans to remove all restrictions on how much of the fund can be taken as cash (subject to income tax, after the first tax-free 25%).

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). **Multi-trust** schemes can accept multiple employers that are not connected (**multi-employer DC scheme**).

With-profits: These insurance company mixed-asset funds were heavily sold until the mid-1990s, but since then have been largely in decline. The fund invests in a range of asset classes, for example, bonds, property and equities. The declared annual bonus is set to provide a smoothed – generally growing – income from the fund, unlike the income from a unit-linked fund which is much more volatile since the value of the units directly reflects the value of the underlying fund. The smoothing mechanism requires the holding of a reserve, with the objective of delivering a fairly stable income even during periods where the markets are volatile and falling. Many companies that sold with profits pension plans offered a **guaranteed annuity rate**.

Yield curve: Plot of the yields on bonds of different terms to maturity, which insurance companies that sell **annuities** purchase to support the guaranteed lifetime incomes they pay to **annuitants**.

Abbreviations

ABI	Association of British Insurers
ABR	Anticipated bonus rate
AMC	Annual management charge
AUM	Assets under management
CDC	Collective Defined Contribution
CETV	Cash-equivalent transfer value
CPI	Consumer Price Index
DA	Defined Ambition
DB	Defined Benefit
DC	Defined Contribution
DGF	Diversified growth fund
DWP	Department for Work and Pensions
FCA	Financial Conduct Authority
FOS	Financial Ombudsman Scheme
FSCP	Financial Services Consumer Panel
FSCS	Financial Services Compensation Scheme
FTA	Fixed-term annuity
GAD	Government Actuary's Department
GAR	Guaranteed annuity rate
GPP	Group Personal Pension
GSP	Group Stakeholder Plan
HMT	HM Treasury
IBA	Investment-backed annuity
ISA	Individual Savings Account
LTA	Lifetime annuity
LTC	Long term care
MAS	Money Advice Service
NIC	National Insurance Contributions
OFT	Office of Fair Trading
ONS	Office for National Statistics
PLA	Purchased life annuity
PPP	Personal Pension Plan
PRA	Prudential Regulation Authority
QE	Quantitative easing
RDR	Retail Distribution Review
TDF	Target date fund
TER	Total expense Ratio
TPAS	The Pensions Advisory Service
TPR	The Pensions Regulator
VfM	Value for money
WPA	With-profits annuity

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Bibliography

BBC

- 2014 [5 Jan.]. Let pensioners switch annuities, minister says. <http://www.bbc.co.uk/news/business-25612605>

Cannon, E., and Tonks, I.

- 2013. Cohort mortality risk or adverse selection in the UK annuity market? <http://www.pensions-institute.org/workingpapers/wp1304.htm>
- 2011. Money's worth of pension annuities. DWP Research Report No. 563, 2009 [Annuity markets: Welfare, money's worth and policy implications]. Network for Studies on Pensions, Aging and Retirement (NETSPAR). <http://www.bath.ac.uk/management/research/pdf/tonks-cannon-annuity-markets.pdf>

Department for Work & Pensions

- 2009 [Dec.]: Modelling collective defined contribution schemes: A summary of the Government Actuary's Department modelling of collective defined contribution schemes. <http://www.dwp.gov.uk/docs/modelling-collective-defined-contribution-schemes-dec09.pdf>

Financial Conduct Authority

- 2014 [April]: Budget 2014 - Pension reforms: guidance for firms in the interim period. <http://www.fca.org.uk/your-fca/documents/finalised-guidance/fg14-03>
- 2014 [Feb.]: Thematic review of annuities in three parts:
 - Thematic review of annuities. <http://www.fca.org.uk/news/fca-finds-annuity-market-not-working-for-consumers-competition-market-study-launched>
 - Retirement income market study. <http://www.fca.org.uk/news/market-studies/retirement-income-market-study>
 - GC14/1 Annuity comparison websites - thematic review and guidance for firms. <http://www.fca.org.uk/news/guidance-consultations/gc14-01>

Financial Services Consumer Panel

- 2013 [Dec.]: Annuities: Time for Regulatory Change. <http://www.fs-cp.org.uk/newsroom/2013/244.shtml>

Financial Times

- 2014 [31 Jan.]: Boost state pension with AE cash. <http://www.ft.com/cms/s/0/9408c166-8a94-11e3-ba54-00144feab7de.html#axzz2s4GRONsH>
- 2014 [31 Jan.]: Definition of 'average' annuity makes a material difference. <http://www.ft.com/cms/s/0/12249590-8a70-11e3-ba54-00144feab7de.html?siteedition=uk#axzz2s4GRONsH>

HM Treasury

- 2014 [Mar.]: Freedom and choice in pensions. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/293079/freedom_and_choice_in_pensions_web.pdf

Holmes T.H., Rahe R.H.

- 1967. The Social Readjustment Rating Scale, in J Psychosom Res 11 (2): 213-8. The scale can be seen here: http://www.testandcalc.com/richard/resources/Teaching_Resource_Holmes_and_Rahe_Social.pdf

Michael Johnson, Research Fellow, Centre for Policy Studies

- 2014 [April 10]. Osborne may have sounded the death knell for private pensions. City am. http://www.cityam.com/sites/default/files/styles/author_thumbnail/public/profiles/photos/michael%20johnson.png?itok=F5SAMEGL.

Pensions Institute

- 2014 [Jan.]: VfM: Assessing value for money in defined contribution default funds. <http://www.pensions-institute.org/reports/ValueForMoney.pdf>
- 2012 [Oct.]: Caveat Venditor: The brave new world of auto-enrolment should be governed by the principle of seller not buyer beware. <http://www.pensions-institute.org/reports/caveatvenditor.pdf>
- 2012 [Feb.]: Treating DC scheme members fairly in retirement? Joint report with the NAPF. <http://www.pensions-institute.org/reports/TreatingDCMembersFairly.pdf>
- 2006 [Mar.]: Annuities and Accessibility: How the industry can empower consumers to make rational choices. March 2006. <http://www.pensions-institute.org/reports/annuities.pdf>

Retirement Academy

- 2013 [Spring]: Annuities at a tipping point: the case for investment-linked annuities. <http://www.retirement-academy.co.uk/library/annuitytippingpoint.pdf>

RSA

- 2013 [Nov.]: Collective pensions in the UK: Now is the time to act. http://www.thersa.org/_data/assets/pdf_file/0007/1534606/RSA_Collective_Pensions_in_the_UK_11_Nov_2013.pdf
- 2012 [Jul.]: Collective pensions in the UK. http://www.thersa.org/_data/assets/pdf_file/0020/750161/Collective-Pensions-in-the-UK.pdf

Telegraph

- 2014 [17 April]: Steve Webb: give pensioners one year to 'shop around'. <http://www.telegraph.co.uk/finance/personalfinance/pensions/10641312/Steve-Webb-give-pensioners-one-year-to-shop-around.html>

Towers Watson

- 2013 [Nov.]: Pre-retirement investing. <http://www.towerswatson.com/en-GB/Insights/IC-Types/Ad-hoc-Point-of-View/2013/11/Pre-retirement-investing>

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

Ending compulsory annuitisation: Quantifying the consequences?, David Blake, Edmund Cannon and Ian Tonks, September 2010

Ending compulsory annuitisation: What are the consequences?, David Blake, Edmund Cannon and Ian Tonks, July 2010

And death shall have no dominion: Life settlements and the ethics of profiting from mortality, David Blake and Debbie Harrison, July 2008

An unreal number: How company pension accounting fosters an illusion of certainty, David Blake, Zaki Khorasane, John Pickles and David Tyrrell, January 2008

Dealing with the reluctant investor: Innovation and governance in DC pension investment, Alistair Byrne, Debbie Harrison and David Blake, April 2007

Annuities and Accessibility: How the industry can empower consumers to make rational choices, Debbie Harrison, Alistair Byrne and David Blake, March 2006

Pyrrhic Victory? The unintended consequences of the Pensions Act 2004, by Debbie Harrison, Alistair Byrne, Bill Rhodes and David Blake, October 2005

Delivering DC? Barriers to participation in the company-sponsored pensions market, Debbie Harrison, Alistair Byrne, and David Blake, October 2004

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