Milliman Research Report

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Defined Ambition pensions A review of some opportunities for insurers

Summary report



INTRODUCTION

Future UK retirees have a whole new set of choices at retirement, but sitting alongside them are significant risks. The question is, can insured solutions deliver to their varied objectives and add real lasting value in helping mitigate their risks?

The authors of this paper believe the answer is yes. Structures can be developed which provide individuals with guaranteed income for life, with flexibility to change income levels to reflect changing circumstances, with the ability to combat the risk posed by inflation and pass residual funds to their dependents. The priorities and measures of success will vary for different people and trade-offs are required-the building blocks to achieve this are already available.

Will insurers step up to the challenge or will the opportunity be allowed to slip away?

This paper presents a very brief summary of this research-for a copy of the full paper please contact the authors of this paper. Contact details are provided at the end of this report.

OVERVIEW

Under the revolution unfolding in UK pensions, the introduction of auto-enrolment, coupled with the proposals announced in the March 2014 Budget for much increased flexibility over how benefits can be taken in future, represent a sea change. Alongside this are the Government's plans, introduced in November 2012, for the genesis of a new class of occupational pension scheme to occupy a middle ground between the established approaches of Defined Contribution (DC) and Defined Benefit (DB). The new approach, known as 'Defined Ambition (DA),' aims to provide scheme members with a higher degree of certainty over the ultimate outcome of their pension savings activities whilst at the same time avoiding the creation of additional balance sheet liabilities for employers. 'Increased certainty' is perhaps a somewhat vague goal but, critically, DA pensions explicitly envisage some degree of hard guarantee being provided to members, which it is expected will help demonstrate the value of pension provision, improve engagement and encourage persistent savings habits.

Whilst Defined Ambition represents a specific initiative, the related goals, challenges, risks and opportunities resonate broadly across the insured pensions market.

Turning to the practicalities, it is important and nontrivial to assess whether DA pensions can be feasibly delivered. To further this goal, we have considered and analysed several possible models which might be used to provide them. All the models considered have their challenges, but we have deliberately looked at approaches which might be readily constructed from the building blocks of existing insurance products.

The DA pension models we envisage have a degree of commonality, in that they aim to provide a progressively increasing guaranteed pension underpin from a trigger age (say 55) up to the final retirement age of the member. Where the options differ, is around the level and speed with which the guarantees build up and also the underlying insurance

The two models we investigated are:

- 'Retirement Income Insurance' model, which is based around income guarantees being provided by a unit-linked insurance product. The commencement date of the income is flexible and members can receive increases to their guaranteed income entitlement related to investment performance and the time they elect for income to start.
- 'Pension Income Builder'² model, which employs traditional deferred annuity contracts to deliver the income underpin.

We have also considered different approaches to the investment of the underlying funds as they accumulate and in particular the impact which risk management techniques can have on member outcomes.

When assessing the feasibility of providing DA pensions, key things to consider are:

- The specific Defined Contribution (DC) proposition
- The approach for providing guarantees around the level of pension income which members will ultimately receive when they retire
- The role that insurers and insured solutions might play in helping to deliver the desired increase in certainty around outcomes
- How risk management may be embedded within members' underlying investments in order to achieve greater stability of pension outcomes and support the delivery of guarantees, which remain a key aspiration for many members
- Likely financial outcomes for members and the risks for insurance companies

Name comes from Model 3 outlined by the Department for Work and Pensions (DWP) in its paper 'Reinvigorating Workplace Pensions for Future Generations,' 1 November 2012. 2

Name comes from Model 4 outlined by the DWP in its paper 'Reinvigorating Workplace Pensions for Future Generations,' November 2012.

MEMBER OUTCOMES

Our primary focus has been on assessing alternative approaches to translate pension savings into retirement income.

Nevertheless, funds must first be accumulated and so we need to specifically consider the impact of different approaches to risk management in this phase. We think it is important to consider a common investment approach, where risk is handled via asset class diversification based on fixed target allocations, which vary with a member's age (a traditional static allocation approach with 'lifestyling'). We also consider an alternative dynamic approach, which aims to address investment risk more directly through the control of return volatility and the implementation of capital protection to explicitly mitigate downside risk.

Behavioural research³ indicates that individuals can have very strong negative reactions to investment losses. So an outcome of concern during the accumulation period might be the incidence of occasions when a member receives a pension statement which shows a fund value below the level of the previous year. Our analysis indicates that adopting a modern dynamic approach to the management of investment risk can significantly reduce the annual likelihood of such events. Furthermore, such an approach can be constructed so that the mitigation is focused on the most severe losses between statements dates that are likely to be of most concern—the incidence of successive statements showing a 5% fall was roughly halved by this approach, while the incidence for a 15% fall was almost eliminated. By targeting the most severe losses, this helps balance the overall cost of employing the risk management strategy over the longer term.

Having accumulated funds, the key question is how might members translate these into the retirement benefits they seek.

The likelihood of a member achieving a specified target level of pension income is certainly an intuitive measure of success and one which is expected to resonate with many members. Figure 1 considers this for a traditional fixed annuity approach and income drawdown. These results are also compared with several variants of the Retirement Income Insurance approach to DA.

Some variants of the Retirement Income Insurance model provide a higher likelihood of achieving the target pension income, at least through the earlier years of retirement. Nevertheless, on this basis, the established market approaches of fixed annuitisation and income drawdown appear relatively attractive. However, we might argue that the metric used is a little myopic, as it is really an 'all or nothing' measure and provides us with no indication of the range of income levels a member might receive. An alternative metric would be to consider the range of actual income levels, and probabilities of achieving each level of income.

3 For example, 'Understanding reactions to volatility and loss,' research carried out for National Employment Savings Trust (NEST) and published in September 2010.



FIGURE 1: COMPARATIVE PROBABILITY OF MEETING TARGET PENSION INCOME

4 For a definition of these model variations, please request a full copy of the research report.

FIGURE 2A: DISTRIBUTION OF REALISED PENSION INCOME LEVELS



Income Drawdown-No Guarantees

With the traditional income drawdown approach we see that our member is able to exactly meet the target income for the first 10 years of retirement. Note that whilst there are no scenarios which deliver income below the target there are equally none that deliver income above it. The reason for this is that, even in positive investment scenarios, should the member take income in excess of the target, this directly increases the risk that funds will be depleted and the target will fail to be met in the later years.

Even with this constraint in place, we note that after age 78 there is a progressively increasing risk of fund exhaustion and income cessation-mean income levels begin to fall below the target.

Figure 2A and 2B provide a rather different perspective on the relative performance of just two of the options we considered and provides additional valuable information regarding the shape and level of the income which the member can expect. However, the focus here remains solely on income. When members are asked about their retirement priorities, a further consideration, which often ranks highly, is the ability to pass money on to dependents when the member dies. Thus, a more complete comparison of approaches would consider residual funds available upon death alongside income. A measure which captures all the benefits available to members is the internal rate of return.

FIGURE 2B: DISTRIBUTION OF REALISED PENSION INCOME LEVELS⁵



Retirement Income Insurance-Phased Partial Purchase

This version of a DA approach combines a partial purchase of insured guarantees (around 60% of the member's fund) with the remainder invested in non-guaranteed income drawdown.

Similarly to pure income drawdown, the member is able to meet the target income with complete certainty in the early years of retirement, though this period is now around three years shorter.

Unlike pure income, drawdown income cannot fall to zero here as there is a guaranteed floor, albeit a low one in this example.

A further significant difference is the potential for income levels to be increased above the original target, which is due to enhancements related to investment performance raising mean income above the target level. Crucially, the member is able to take advantage of these enhancements with confidence, as once granted they are guaranteed and have no adverse implications for the future sustainability of the member's target income.

⁵ Figure 2B illustrates results for one of the many variations in the DA model considered in the full research report. Model 3.2 represents a variation of the retirement income insurance, where purchase of the income guarantee product is phased over ages 55 to 68, and only a proportion of the funds are used to purchase a guarantee. The residual funds are invested in a non-guaranteed income drawdown product at age 68 instead. For further explanation of this model, and details of all other variations in DA models considered, please request a full copy of the research report.

FIGURE 3: SUMMARY STATISTICS OF THE DISTRIBUTION OF PENSIONER INTERNAL RATES OF RETURN AT AGE 88 (CALCULATED FROM STARTING POINT AT AGE 55)

	DEFINED CONTRIBUTION	DEFINED AMBITION MODEL VARIATIONS RETIREMENT INCOME INSURANCE MODEL ⁶				DEFINED CONTRIBUTION
	AGE 68 ANNUITISATION	MODEL 3.0	MODEL 3.1	MODEL 3.2	MODEL 3.3	AGE 68 INCOME DRAWDOWN
1%	1.32%	1.57%	1.36%	1.22%	1.62%	1.01%
5%	2.60%	2.69%	2.68%	2.94%	2.88%	3.09%
50%	6.62%	6.78%	7.01%	7.15%	6.85%	7.14%
95%	11.82%	11.97%	12.14%	12.15%	11.98%	12.06%
99%	15.45%	15.54%	15.85%	15.89%	15.54%	15.47%
Mean	6.82%	7.00%	7.15%	7.33%	7.07%	7.30%
Standard Deviation	2.83%	2.81%	2.93%	2.89%	2.79%	2.76%
Sharpe Ratio	1.242	1.315	1.316	1.395	1.353	1.447

The overall return provided by the traditional annuitisation approach is highly sensitive to the age at which the member dies– increasing with age at death. The other approaches are relatively insensitive to this factor. The guarantees provided by the Retirement Income Insurance variants help mitigate the most adverse outcomes. At the extreme tail, in many cases, returns are more favourable than in the DC models. Furthermore, the cost of these guarantees does not always imply a material reduction in the positive outcomes. For some model variations, returns can be more favourable than for some of the DC models.

Ultimately, there is no universally optimal solution-approaches that are stronger in some areas may be less strong in others.

6 For a definition of these model variations, please request a full copy of the research report.

SUMMARY

Some of the key findings from our analysis are:

- During the period over which pension funds are being accumulated, occasions where members receive successive benefit
 statements which show a significant reduction in their fund values will cause concern and may prompt a reduction or cessation
 of contributions. The use of modern dynamic risk management techniques can help stabilise fund values and reduce the
 frequency of such events.
- DA models can offer a higher likelihood that scheme members will achieve their target pension incomes compared with the traditional approach of fixed annuitisation at retirement within DC.
- DA models can provide increased certainty and peace of mind for members compared with an unmodified DC income drawdown approach under which funds can become completely exhausted and income cease.
- DA models can provide benefit structures which can be flexed to meet differing member priorities. For example, models which provide for a phased but complete commitment to the purchase of guarantees align with members who desire a higher level of income underpin and a consistent income profile through retirement. Alternatively, models which use only a partial purchase of guarantees with residual funds drawn down flexibly to top-up income as required can be suitable for members who prefer a higher chance of hitting their target incomes through the earlier years of their retirements, but accept a lower guaranteed underpin and the chance that income levels may fall in the later years. Both profiles are equally valid, and the ability to offer such flexibility seems to us well aligned with the objectives of the pension reforms that are due to take effect in the UK from April 2015.
- Charges on DA pensions will inevitably be higher than for plain vanilla DC, which is due to the value of the guaranteed benefits being provided. However, our analysis indicates this does not have to mean poor returns for members.
- There are a number of operational considerations which will affect the attractiveness of DA both to providers and members. Flexibility, attractive to members, brings risk management challenges for providers. However, the retail chassis for some structures that already exists in the individual life insurance market faces similar challenges, and in these cases solutions to risk monitoring and mitigation are well developed.

The full paper contains more details about the analysis undertaken. The authors fully accept that the analysis has limitations. Alternative DA models are certainly possible and alternative assumptions would generate different results. Nevertheless, we hope to have made a useful contribution to the debate and remain cautiously optimistic about the prospects for the development of DA pensions over the coming years.

CONTACT

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