The Investment Challenges of Decumulation

Part 2

Standard Life Investments

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The investment challenges of decumulation

The 2014 reforms have given UK pension savers significantly greater freedom than they had previously. The reforms have material implications for the investment strategies used for accumulation in Defined Contribution (DC) schemes - in particular, the lifestyle strategies adopted. They also greatly influence the investment choices individuals make in the post-retirement period. No longer are pension savers forced to take an annuity - the implications of this for savers, as well as for pension providers, are profound as the various benefits and risks of this new 'freedom' are assessed. This article aims to share some of our key insights into this challenge and builds on work from our previous analysis and findings.

Summary of our earlier findings

Investment Challenges of DC – Part 1

Using actual historic investment data, we demonstrated that:

- a decumulation strategy will require taking investment risk
- investment volatility is a major determinant of member outcomes
- investment approaches that can deliver equity levels of return for lower volatility are very attractive in a decumulation world and
- payment systems (such as withdrawal caps and variable income) are also key tools in delivering good outcomes for members living off their retirement savings.

Investment Challenges of DC – Part 2

This paper focuses on the investment aspects of the decumulation challenge. In particular, it seeks to illustrate:

- the substantial added value of a multi-asset growth approach to savings in retirement compared with passive equity, even after fees and
- whether there is a single 'drawdown' level that is appropriate for all.

Modelling assumptions

Data

While our initial research work used actual historic data (34 30-year cohorts), for the purposes of this paper we have used a stochastic model (1,000 post-retirement cohorts) to help illustrate our insights. Reassuringly, there is a broad equivalence between the analysis of the historic and stochastic sets of data.

Also, while we modelled a 'reduced-volatility' equity strategy in our initial research, here we revise our terminology to 'Multi-Asset Investment Growth' (MAI Growth) since the targeted investment outcome for many MAI Growth funds (commonly known as diversified growth funds) is to deliver an equity level of return over a market cycle for two-thirds of the volatility of a traditional passive equity portfolio.

Allowance for fund management charges

In modelling passive global equity returns, we have allowed 0.1% (or 10 basis points) per year for fund management fees. For MAI Growth, given this is an active management specialism for the most part, we have modelled a charge of 0.6% per year (or an additional 0.5% per year compared with the passive alternative).

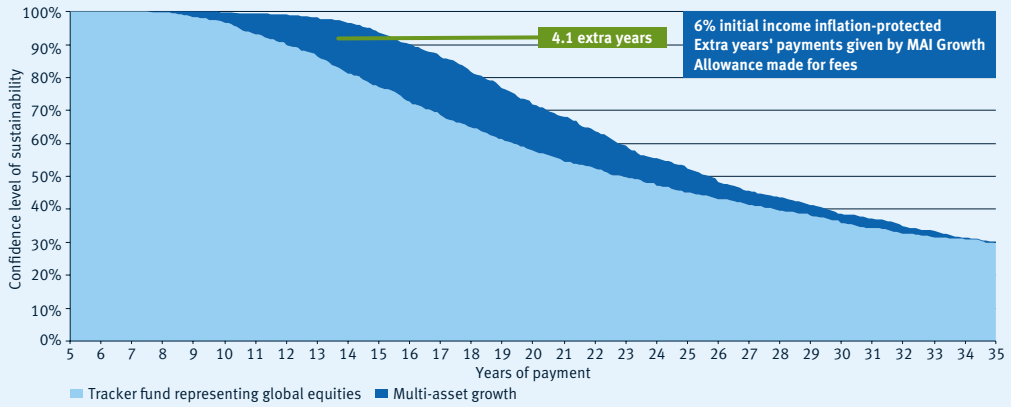
Multi-asset growth – how much value does it add versus passive equity?

The DC world has become increasingly cost-conscious recently. Charge caps in the accumulation phase will be the norm for most pension schemes.

With the new investment freedoms, it has already been voiced that these cost curbs should also be implemented in the post-retirement world. After all, many savers have limited monies and do not want their pension pot eaten away by high fees. But there is another side to this story. If the higher fees are associated with a more effective investment approach which can offer a lower-risk outcome, then this can be of material benefit to the saver, more than compensating for higher costs.

For the purposes of this analysis, we assume an initial pension income of 6% of the retirement pot, inflation-protected over time. By using our 1,000 cohorts, we are able to produce a probability distribution to show how long that pension could be sustained by investing in a low-cost passive global equity fund compared to a higher-cost, lower-risk MAI Growth approach. The results are summarised in Chart 1 below.

Chart1: Income sustainability comparison of global equity versus multi-asset growth



Source: Standard Life Investments

The lighter blue shading demonstrates the predicted robustness of the passive equity approach. In more than 30% of the simulations, payments lasted over 35 years. This illustrates the benefit of taking investment risk in retirement compared to just keeping money in cash. However, in 10% of the cases, payments lasted 12 years or less, again highlighting the dangers of 'pound cost ravaging' that we have discussed previously.

The darker blue shading illustrates the extra years of payments predicted for those using the MAI Growth strategy, even after paying an extra 0.5% in fees per year. The benefit of the lower-risk approach of the MAI Growth strategy is of demonstrable value through retirement. While the higher fees eventually erode this benefit over the very long term, in our model, MAI Growth gives significant protection compared with passive equity. This is particularly evident in the event of an 'unlucky' outcome, the worst 10% of cases, when unfavourable investment conditions prevail in the early stages of retirement. In this scenario, the MAI Growth pension would last for up to four years longer. Indeed, it is only after 40 years of retirement that the lower-cost benefits of passive equity would overcome the lower-risk benefits of MAI Growth.

The cost of volatility

In our model, the superior performance of the MAI Growth investment strategy is founded on a more stable set of returns than are achieved by passive equity. An alternative way of producing a robust decumulation solution would be to use a strategy with a reliably higher return profile. It is therefore worth establishing how much higher the returns of a 100% equity-based solution would have to be to compensate for the dangers of the more pronounced risk profile.

The level of extra return depends on how cautious the decumulation investor is. If the investor wants the same level of protection against a bad outcome as provided by MAI Growth with 95% certainty then, according to our model, an equity-based investment solution would need to return around 4% above the index (assuming no additional risk is incurred, and net of an additional active management fee). The premium return required falls as the required level of security falls.

The true measure of an investment strategy's success is risk-adjusted return, and this is particularly evident in decumulation. Savers should beware the dangers of choosing a 'cheap' investment approach when other strategies could more than pay their way in achieving a beneficial outcome. They should question the higher risk to the pension payments they receive of low-cost solutions at least as closely as they consider the higher cost of more reliable investments – the focus should be on the after-cost outcome.

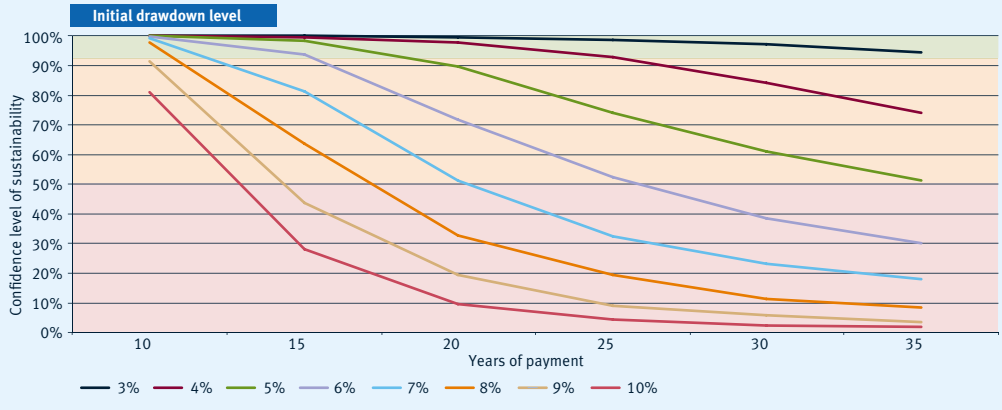
Is there a sustainable pension payment level?

Our previous analysis used a 6% initial drawdown to fund the pension payments. Why choose 6%? There are two reasons. First and foremost, we thought that a 6% rate would be an upper limit of sustainable pension payments and is demonstrably higher than current annuity rates. Secondly, given the new freedom for savers to access their pension pots, and the fact that these pots are often relatively small, we believe it is realistic that many savers will choose to take higher levels of income than modelling alone would suggest. Therefore, what we want to illustrate is the robustness of different investment strategies across a wide range of investment returns.

Chart 2 shows a comparison of the robustness of our MAI Growth strategy at different initial drawdown levels over different payment periods. At a 6% initial drawdown level (the purple line), there is a 70% probability that payments can be sustained for at least 20 years and a 50% chance that they could last as long as 25 years. By comparison, at a 5% drawdown level (the green line), there is a 90% probability that these payments can be sustained for 20 years or longer with around a 50% chance that the payments could last as long as 35 years, 10 years longer than the 6% drawdown.

We have shaded the chart to give an 'at a glance' indication of the robustness of levels of drawdown and different payment periods. However, we question whether a Red / Amber / Green (RAG) status is appropriate to such analysis. Should we instead use a risk-rating basis?

Chart 2: Sustainability of different drawdown levels with MAI Growth



Source: Standard Life Investments inital payments inflation-protected, net of fees

As a potential framework, we demonstrate a simple 1-10 rating, based on percentage probabilities, where rating 1 represents the lowest risk of failure of payment sustainability up to 10. Using the same RAG colour banding as before, Tables 1 and 2 provide a quick comparison of sustainability levels for different payment tenors, as well as providing a simple visual comparison of two alternative investment strategies.

Table 1: Sustainability ratings of different initial income drawdowns for MAI Growth

Years of payment	3%	4%	5%	6%	7%	8%	9%	10%
10	1	1	1	1	1	1	1	2
15	1	1	1	1	2	4	6	8
20	1	1	2	3	5	7	9	10
25	1	1	3	5	7	9	10	10
30	1	2	4	7	8	9	10	10
35	1	3	5	7	9	10	10	10

Source: Standard Life Investments, initial incomes inflation-protected, net of fees

Table 2: Sustainability ratings of different initial income drawdowns for passive equity

Years of payment	3%	4%	5%	6%	7%	8%	9%	10%
10	1	1	1	1	1	2	3	4
15	1	1	2	3	4	5	6	7
20	1	2	3	5	6	7	8	9
25	2	3	5	6	7	8	9	10
30	2	4	5	7	8	9	9	10
35	3	4	6	8	8	9	10	10

Source: Standard Life Investments, initial incomes inflation-protected, net of fees

For example, a pensioner choosing 5% initial drawdown using an MAI Growth strategy would have a better than 90% probability (risk rating 1) that the payments could be sustained for 15 years and a better than 70% probability (risk rating 3) that the payments could last for more than 25 years. By contrast, a pensioner using the same initial drawdown but using a passive equity strategy would see higher risk ratings across all tenors.

So, is there a sustainable level for drawdown growth? Currently, the marketplace tends to use 4% drawdown or less as an initial withdrawal level. However, in reality, savers will choose the level that best meets their requirements given other sources of income (other pensions in payment, investments, state pension, etc). Examples of inflation-linked annuity rates are shown in Table 3 to demonstrate the cost of eliminating investment uncertainty for the security of guaranteed payments for life.

Table 3: Pension pot of £100,000: inflation-linked annuity rate examples

Age	Single life	Joint life
60	£2,250	£1,965
65	£3,069	£2,531
70	£3,577	£2,913

Annuity rates checked: 31/12/2016. Source: Money Advice Service Annuity Comparison Tables for a person of standard health with a spouse five years younger. No guaranteed period on payments.

Other factors to consider

The modelling we have done makes allowance solely for fund management charges. For many savers, there will be additional administration charges by the pension payment provider that are not considered in this paper. Our first paper demonstrated the benefits of payment controls (variable payments and withdrawal caps). We envisage that pension providers will seek to regularly engage with their savers as they drawdown on their savings in retirement to give ongoing support according to how those savers want to use their monies. Savers may also dip into their pension savings throughout their retirement period for one-off expenditures and will thus need revised estimates of the longevity of their retirement pot. These extra levels of support and ongoing engagement will have associated costs. However, similar to our discussion on fund management costs, these administration costs should not be treated in isolation if the benefits for the saver can result in their pension better realising their targeted outcome.

Summary and future work

Passive equity may present an appealing low-cost option to someone looking to continue investing through retirement. However, as we have highlighted, what matters is realised value, not just cost. Indeed, we have highlighted the dangers of unmanaged volatility for traditional risk assets and the comparable benefits that an MAI Growth approach can offer.

Of course, one of the reasons savers may not choose an annuity is the desire to pass on remaining funds to descendants. We are now doing more work on demonstrating how this investment decision can be framed at different drawdown levels both in terms of comparing it with annuity rates and, more intriguingly, using mortality rate data. We will look to share our findings in a future paper.

Also, when looking at the decumulation challenge, it is important to take into account the accumulation strategy that precedes it. To date, lifestyling has been geared towards guiding savers into an annuity. With fewer savers likely to choose an annuity, we face the question of what alternative approaches to the final years of accumulation can be considered. Certainly, a more joined-up approach to the accumulation and decumulation paths will be pivotal in producing better benefit outcomes for many DC savers. We seek to delve further into this issue in our follow-up paper, 'The Investment Challenges of Decumulation Part 3'.

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An investment in any strategy is speculative and involves certain risks. Prospective investors should ensure that they: (1) understand the nature of the investment and the extent of their exposure to risk; (2) have sufficient knowledge, experience and access to professional advisors to make their own legal, tax, accounting, and financial evaluation of the merits and risks of participating in an investment in the strategy; and (3) consider the suitability of investing in light of their own circumstances and financial condition.

No investment strategy or risk management technique can guarantee return or eliminate risk in any market environment.

The above factors do not claim to be a complete list or explanation of the risks involved in an investment. In addition, as the investment markets and strategy develop and change over time, an investment may be subject to additional and different risk factors. No assurance can be made that profits will be achieved or that substantial losses will not be incurred.

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