Aberdeen Standard Investments

January 2018

Rethinking DC Default Design

Part 1: budgeting for risk

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Introduction

Following the introduction of pension freedoms in the UK in 2015, we explore defined contribution (DC) default design and consider some principal challenges for DC pension providers. We identify simple steps that have potential to substantially improve the retirement outcome. We evaluate the impact of changes to investment componentry and show that by reducing volatility without sacrificing return potential we can lower contribution rates. Our findings make a clear case for quality as opposed to simply low cost during the return-seeking accumulation phase. In this context, quality is multi-dimensional.

Executive summary

In the UK, the Pension Schemes Act 2015 presents multiple challenges for both DC members and scheme providers. While the ultimate aims of the reforms are clearly stated – including 'value for money' and 'good retirement outcomes' for DC members – there is scant guidance for providers as to what these objectives actually mean, let alone how they might be achieved. The most vigorous debate centres attention around costs, which are both visible and somewhat controllable.

Cost is important but must be considered in relation to outcomes, taking into account reliability of outcomes and consistency across members. When designing a default investment option, scheme providers must consider the degree of risk to which they subject members' assets and whether this is aligned with their members' risk tolerance. Not to do so breaches trust, potentially discouraging member engagement and jeopardising the final outcome.

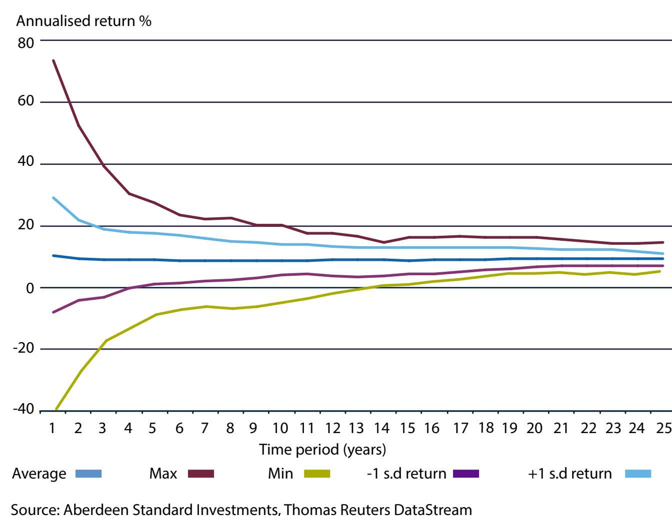
How much needs to be saved into an individual's pension fund to provide a reasonable cushion against investment uncertainty and give a fair degree of confidence of achieving their retirement needs? Bringing the probability of different outcomes into the equation changes the perspective.

It is relevant to consider the risk of failing to accumulate a sufficiently large asset base to sustain an individual's standard of living in retirement. We find that a reduced-volatility, multi-asset approach can offer the same level of confidence of achieving these objectives at lower levels of contribution compared with the uncertainty budget needed using passive equity, even after allowing for relevant fee differentials.

Cost versus value

In the UK, a core demand of the Pension Schemes Act 2015 is that DC schemes provide 'value for money' for members. It does not, however, define what constitutes value for money. The debate has focused almost entirely around cost – unsurprisingly perhaps as this is easy to measure and readily comparable. However, as we showed in our earlier research, focusing on cost alone may result in a poorer investment outcome for DC pension savers (**https://uk.standardlifeinvestments.com/WP_Value_ For_Money_For_DC_Pension_Savers.pdf**). While cost is important, the consistency of returns is also vital if our industry is to provide good, reliable outcomes for all members, irrespective of when they joined the scheme.

Chart 1: Historical annualised equity market returns over rolling time periods S&P500, gross



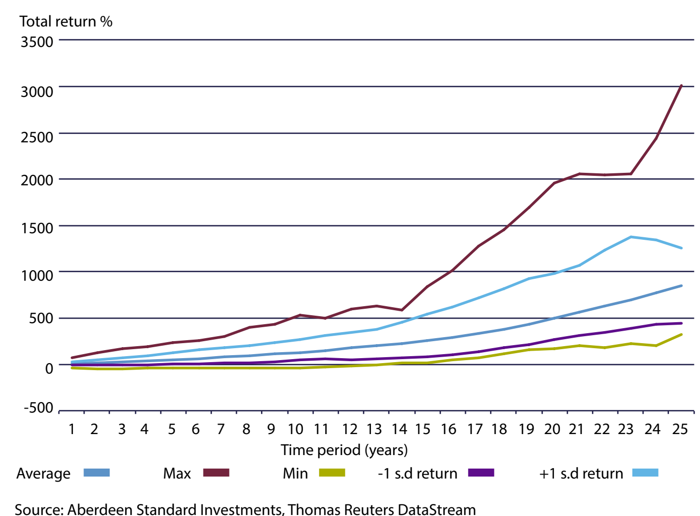
Source: Aberdeen Standard Investments, Thomas Reuters DataStream

Volatility and outcome uncertainty

Few would argue that volatility can be severely damaging over short investment timeframes. Does volatility matter to the long-term investor? Intuitively, we might expect the effects of volatility to wane over time as returns even out year-by-year.

Indeed, if we measure the range of annualised returns experienced over different time periods, it can appear that uncertainty lessens over longer time periods. Chart 1 shows that, as time progresses, the annualised return becomes more consistent. This is shown by the diminishing difference between the maximum and minimum returns. However if, instead of the annualised return, we measure the total return to investors over rolling time periods, the picture is markedly

Chart 2: Historical total equity market returns over rolling time periods



Source: Aberdeen Standard Investments, Thomas Reuters DataStream

different. In fact, outcomes become increasingly varied, with the difference between minimum and maximum returns widening as time passes (see Chart 2). Clearly volatility matters greatly to investors, whatever their investment horizon.

When considering how much to save for retirement, the consistency of the expected return achieved on assets is critically important. In earlier work, we established the pivotal role played by volatility in determining returns (**https://uk.standardlifeinvestments.com/WP_Investment_Challenges_Of_Decumulation_17.pdf**). Moreover, the sequence of returns also has a crucial bearing on investment outcomes. In particular, outcomes are likely to be better if returns are high when the pension pot is at its largest.

What, then, is the appropriate response of a long-term saver with a particular objective in mind? Reducing risk in the conventional manner (switching from equities to bonds) sacrifices return potential, in turn necessitating higher contributions. An alternative is to budget for the negative effects of volatility while retaining the chance of higher returns.

This offers an interesting perspective on the potential role in DC saving of advanced risk-controlled portfolios where return potential is not compromised. We explore this in the next section.

Budgeting for uncertainty

Let us suppose that a satisfactory retirement outcome can be achieved by accumulating a specified amount in the pension pot at retirement. The rational pension saver will naturally wish to have high confidence of accumulating this sum. How much must they budget for the uncertainty associated with their investment to have this confidence?

To explore this question, we constructed a model based on the following assumptions:

- 40-year savings period
- overall pension contributions of £1,200 per year (escalating at 3.5% per annum)
- investment performance consistent with historic experience of global equities:
  - 8.5% annualised return
  - 16% annualised volatility
- passive fund management expenses: 0.2% annual management charge.

If there were no investment risk or expense, at the end of 40 years, the member would have accumulated a pot worth £577,405. Suppose this just happens to be the required asset pot for this member.

We now perform a series of simulations to allow for investment risk to reveal the full range of expected investment outcomes. We see for example that there is actually a one-in-three chance that less than £443,635 is accumulated, a 23% shortfall versus what this individual needs.

Put another way, in order to have an 80% probability (i.e. a fair degree of confidence) of achieving at least £577,405, the member's contributions would need to rise to £2,041 per year at outset, some 70% more than the risk-free £1,200 initially envisaged.

Now consider the difference if we were able, through a diversified investment approach, to reduce investment volatility without sacrificing returns? We re-ran our model, making two changes to the above assumptions:

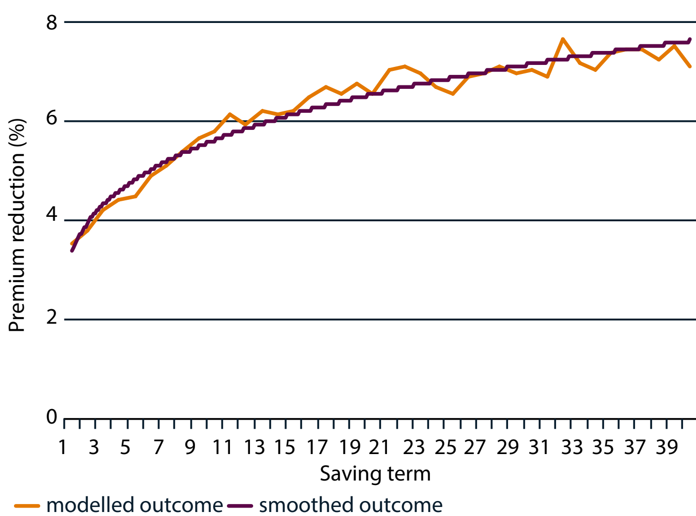
- annualised volatility reduced to two-thirds of the previously chosen level of 16%

- 50 basis points annual management charge to reflect a higher fee for the active management required in this approach.

Our results showed that by using a reduced-volatility, multi-asset approach, we can now reach 80% probability of exceeding the target with a contribution of only £1,896. So, in this particular example, even allowing for higher fees for active management, we can reduce contributions by £145 per year. The value of controlling volatility represents a 7.6% saving to the member versus the budget for uncertainty needed using a low-cost passive investment.

We then compute the percentage contribution reduction across a range of investment horizons and find there is a material benefit across a very wide spectrum (see Chart 3).

Chart 3: Reducing volatility to achieve targeted return with reduced contributions



Source: Aberdeen Standard Investments

We conclude that there is potential for a real economic benefit in using an advanced multi-asset strategy in DC defaults, despite the pressure to use low-cost passive equity. Members can experience a tangible benefit in reduced contributions when targeting a particular outcome and/or have greater confidence in the scale of outcome they can expect to achieve. The approach also has the potential to positively influence investor behaviour, an aspect we explore in our companion paper Rethinking DC default design, Part 2: budgeting for behaviour.

Conclusion

Lower-volatility default approaches can help improve retirement outcomes in several ways. They can materially reduce the scale of contributions needed to increase confidence in reaching a particular retirement outcome. In doing so, they can more than justify the higher fees generally associated with this active approach versus cheaper passive alternatives. Additionally, their reduced risk is consistent with behavioural drivers that are shown to improve member engagement and contribution rates.

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