DC DYNAMICS

Is de-risking a good idea?

Investment strategy during retirement

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EXECUTIVE SUMMARY

How should pensioners change their investment strategy as they age? In this edition of DC Dynamics, we examine the DC journey for individuals who have started to take a retirement income.

The highlights of our findings are as follows:

1. There are good reasons to de-risk with age, but equally there may be sound motives for maintaining a relatively high level of investment risk throughout retirement. Key supporting factors for de-risking include the increasing importance of longevity risk (the uncertainty over how long you are likely to live), the decreasing importance of investment risk, and investors' dislike of short-term volatility.

2. From a theoretical perspective a 'purely rational' investor, who also plans never to buy an annuity, should actually do the opposite and increase investment risk with age. This aims to minimise what is known as 'sequence risk' (the risk that the same asset class returns occurring in a different chronological order lead to different outcomes). Cashflows switch from being paid into a pension scheme to being paid out from at retirement, making retirement outcomes most sensitive to the returns achieved near their retirement date. However, we

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see that in practice these theoretical benefits are likely to be small.

3. There are many other factors involved that depend on individual circumstances, making this a highly complex topic.

SHOULD YOU FOLLOW CONVENTIONAL WISDOM?

"Introduced in the UK's 2014 Budget, the 'Freedom and Choice' pension reforms created new ways for pensions to be accessed."

DC pensioners can now take significant cash sums at times of their choosing. In addition, large numbers are now opting to retain exposure to the investment markets during retirement through 'income drawdown'.

But should those individuals choosing income drawdown de-risk or re-risk with age? More precisely, should they decrease or increase the percentage of their portfolio in growth assets such as equities?

Conventional wisdom says that they should de-risk. For instance, one rule of thumb suggests that investors should hold a percentage in equity equal to 100 minus their age, meaning a typical 65 year old should hold just 35% in growth assets. The rest would consist of relatively safe assets such as cash and high-quality bonds. The simplicity of this old guideline is appealing, but does its advice really stack up?

PART ONE: THE IMPLICATIONS OF NEGATIVE CASHFLOWS

Seeking to minimise sequence risk

Before retirement, a DC pot only experiences positive cashflows i.e. incoming payments. After retirement, however, cashflows are negative, as individuals start to withdraw money from their pension. The upshot of this is that retirement outcomes are most sensitive to the returns achieved at and near retirement.

Rational investors should avoid making concentrated bets on how any asset class performs in a single period. Ideally, the investment strategy should have no 'sequence risk'. This is the risk that the same returns on an asset class occurring in a different chronological order lead to different outcomes. By seeking to minimise sequence risk, investors can diversify their exposure to how investments perform across multiple time periods. Time in the market, not market timing, should be what matters most.

De-risking before retirement and re-risking during retirement avoids retirement outcomes being unduly sensitive to how assets happen to perform near retirement.

PART TWO: GAUGING 'RETIREMENT OUTCOME' RISK

Investment return volatility matters less with age

In our December 2016 edition of DC Dynamics, we included an important observation: the impact of longevity risk is likely to increase with age, whereas the impact of investment risk is likely to decrease with age. Unsurprisingly, this influences how investment strategy should evolve.

These conclusions were founded on a measure of retirement outcome risk called YEARS (Years Expected After Retirement Savings).[1] This metric is the mean number of years of life after running out of money, based on numerous simulations, and aims to capture the likelihood and severity of a pensioner running out of money.

One way to choose an investment strategy is to seek to minimise the risk of running out of money (as measured by our YEARS measure).

Figure 1 shows YEARS against static mixes of a multi-asset income drawdown fund and cash for a 65 year old, with a withdrawal rate of 6% per annum. It also shows a similar plot at age 85 where, due to capital depletion, the withdrawal rate is now 12% per annum.

Both lines achieve their lowest value (i.e. lowest number of expected years without a pension) with 100% in the

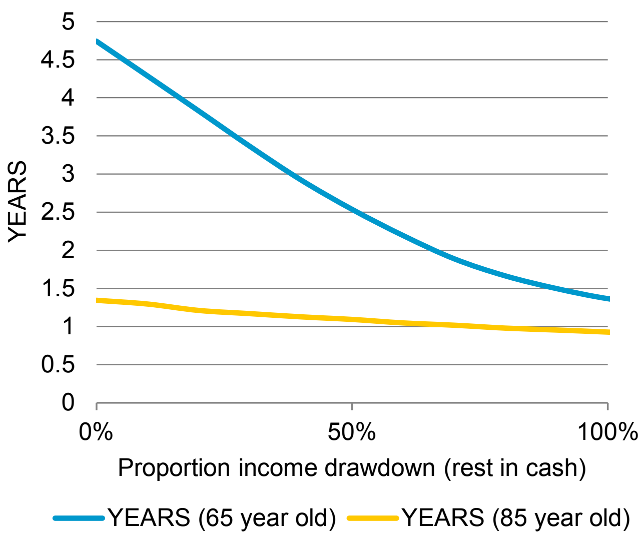
1. Similar conclusions are found with other measures, such as the raw probability of running out of money

income drawdown fund and 0% in cash. Given a less constrained problem, the optimal strategy for the 85 year old holds a greater percentage in growth assets than the optimal strategy for the 65 year old, consistent with the theory outlined in part one.[2]

However, the line at age 85 is much shallower, implying that the amount held in growth is less important and that the choice of strategy has a declining impact with age. Holding too little in growth assets (such as 100% cash) is unlikely to have a severe impact but may be comforting given the very low short-term volatility of cash.

When deciding how to invest, there is often tension between what feels good now and what may deliver a good outcome. A highly 'loss-averse' 65 year old may feel happiest invested in cash despite the YEARS measure of retirement outcome risk being more than three times as bad as a multi-asset income strategy.[3] It is important therefore not to encourage 'reckless prudence. However, one cannot ignore this facet of human nature. In a worst-case scenario, pensioners could lose confidence, panic, withdraw all their savings and suffer a very poor outcome. There is a trade-off involved.

Figure 1: Retirement outcome risk (YEARS) for 65 year old and 85 year old income drawdown investors



Source: LGIM calculations, at 31 March 2016.

Managing this tension allows loss aversion to drive the allocation when the impact on outcomes is small, but less so when the impact is large. When short-term volatility can be reduced, without materially impacting outcomes, it is a good idea. A low-risk strategy for someone aged 65 is likely to be bad for income drawdown.

Aged 85, however, the choice of strategy doesn't make much difference: in old age, reckless prudence isn't quite so reckless.

Longevity risk matters more with age

We saw in our previous edition of DC Dynamics that the importance of investment risk declines with age but the importance of longevity risk increases. One consequence is that transferring longevity risk to an insurer (by purchasing an annuity) may become more compelling with age.

An annuity is effectively a packaged investment in high-quality bonds together with longevity insurance.[4] Investing in high-quality bonds in the run-up to annuitisation helps reduce 'conversion risk' by aligning asset price movements with annuity price movements. A dislike of conversion risk is actually a consequence of loss aversion. The 'In Focus' section of our August 2015 LDI monthly wrap article explores in more detail how loss aversion can lead to de-risking glidepaths.

2. Allowing for leverage the optimal strategy for a 65-year-old male is 140% income drawdown fund, -40% cash, and the optimal strategy for an 85-year-old male is 200% income drawdown fund, -100% cash. This supports our conclusion from part one that re-risking with age may improve outcomes. But the marginal benefits from taking more investment risk would be small and expose investors to much more short-term risk.

3. From age 65, withdrawing at 6% of the initial pot per annum and exposed to longevity risk in line with recent prospective mortality tables from the ONS. Please see our December 2016 DC Dynamics piece for more detail.

4. And other investments held by insurance companies, which are typically long-term assets with reasonably predictable, contractual cashflow profiles

PART THREE: WHAT OTHER FACTORS SHOULD WE CONSIDER?

Simplicity

The importance of simplicity should not be underestimated. Elderly pensioners are likely to value fewer complications.

It may be simpler to remain in a relatively static strategy. However, the requirement to monitor performance and make complicated withdrawal decisions may not be intuitive and is also likely to become more challenging with age. De-risking, followed by the purchase of an annuity, leaves retirees with a certain monthly income.

A range of other factors

In reality, there are many factors that may impact an investment strategy. These include an individual's state of health, their appetite for risk (for example whether they have any DB pension income), likely withdrawal pattern, wider objectives and investment beliefs.

If an individual is likely to leave an inheritance, their investment strategy may be influenced by what their heirs would prefer. This may suggest not de-risking if their heirs are younger and have a longer time horizon.

Any uncertainty over future income needs and later-life plans also play a part. Knowing exactly when one might buy an annuity makes de-risking relatively easy. In practice, however, the date of purchasing an annuity is unlikely to be set in stone or necessarily happen at all. It may also depend on market conditions and identifying an attractive time to buy the annuity. Other approaches, such as staggered annuity purchases (to avoid the risk of buying at a market high) may also be considered.

MANAGING YOUR DC JOURNEY

Investment strategy during retirement is a complex topic. In theory, if one never intends buy an annuity and is not particularly concerned about short-term risk, there is little reason to de-risk. However, the possibility of buying an annuity or a desire for a smoother journey in old age may promote de-risking. In reality, the precise journey taken depends on a changing mix of individual circumstances. It is important that pensioners choose a journey appropriate to their needs and how these are likely to evolve over time.

A more in-depth version of this article is also available on our website.

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