

## Sci-fi super

Advances in technology will deliver more efficient retirement fund strategies, writes Wade Matterson.



As with many kids – and I suspect a majority of future actuaries – I was obsessed with science fiction. The most amazing elements to me weren't the epic space battles or alien life forms but depictions of how our lives would be enhanced by technology. From visions of smart households to driverless cars, the applications of artificial intelligence (AI) and its ability to improve our lives was, to a kid who hated doing the dishes, fascinating.

Fast forward a number of decades and we still don't have driverless cars on every street corner, but we can find AI concepts discussed and applied within the financial services industry, in superannuation in particular.

Smart defaults, life cycle investing and target date funds have been some of the buzz words since the global financial crisis highlighted the flaws in the traditional asset allocation approaches adopted for superannuation fund members. The arguments supporting life cycle approaches are eminently sensible, asking the question: under what circumstances should someone who is 20 years old and many miles from retirement invest the same way as someone who is 65?

Forming part of the recommendations of the Cooper review, life cycle approaches were strongly advocated. A number of funds in response have adopted these strategies within their MySuper products.

Like the futuristic cars of my youth, these funds promise to safely get you from point A to point B, navigating the potholes that might wait on the way to your destination – a comfortable retirement. In the majority of cases, this is implemented by progressively increasing the allocation to conservative asset classes (such as fixed income and cash) as the retirement date approaches.

On the surface, this sounds like the ideal

way to deal with the unengaged default member. As demonstrated in the United States, where the market for target date or target risk funds has surpassed \$400 billion, this simple message of de-risking as you approach retirement has resonated strongly. But scratch the surface of many of these funds and a variety of issues begins to emerge.

### Experience has not been kind

Perhaps the most significant indictment against these approaches to life cycle investing was the experience in the US during the GFC, when these funds were unable to adjust their course when faced with volatile financial markets. The application of a naive investment strategy (equities versus bonds) resulted in funds labelled with a target date of 2010 losing an average of 23 per cent in 2008, with some falling by as much as 41 per cent (see chart). This experience was pervasive across some of the largest names in the

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funds management industry. For a member of one of these funds, with only a couple of years until retirement, this was a disaster, and in many cases decimated existing retirement plans. This experience was so far from the marketing messages and positioning promoted by many of these funds that a "please explain" was issued by the Securities and

Exchange Commission (SEC) and a Senate inquiry was held to investigate.

You would imagine that this experience would lead to some serious questions regarding the adoption of similar approaches for superannuation fund members. However, this has not been the case, with many funds developing life cycle products that are eerily similar in terms of the underlying philosophy to their counterparts in the US.

Intoxicated by the simplicity of the message, many funds and their marketing departments were attracted to strategies based on following a predetermined glide path that would automatically move from growth assets to a more conservative investment mix as the retirement date approached. As experience demonstrated, this naive approach is fraught with danger. Following the types of "set and forget" asset allocation strategies offered within these products ignores the first rule of investing: valuations matter, or "buy low and sell high".

Put another way, in the current economic environment, with yields at historically low

### The expectations gap

Fund	Target equity (%)	2008 return (%)	2009 return (%)
Columbia Retirement 2010 A	67	-27.45	23.34
AllianceBern 2010 Retirement Strat A	62	-32.88	29.25
T. Rowe Price Retirement 2010	60	-26.71	27.95
Vanguard Retirement 2010	55	-20.67	19.32
BlackRock Lifecycle Prepared 2010 Inv A	52	-25.29	23.87
Fidelity Freedom 2010	50	-26.61	25.64
Russell Lifepoints 2010 Strategy R3	34	-21.88	22.75
Wells Fargo Advantage DJ Target 2010 A	26	-11.24	12.31

Source: Milliman

levels and many commentators referring to bonds as being in "bubble territory", should funds be blindly increasing retirees' allocations to these asset classes without considering the risks?

### Dumbed-down diversification

As the GFC so elegantly demonstrated, financial markets are also unpredictable and subject to bouts of extreme volatility. The experience in the US highlighted that long-term assumptions around returns and correlations between asset classes made by asset managers and investment teams can diverge substantially from reality. Further, simply de-risking by moving into conservative assets fails to recognise the length of retirement and the need for growth to sustain a member's assets and keep up with inflation.

Although debate on this sequence of returns risk has been ongoing, the number of funds that have actively sought to address this issue within their MySuper offering has been limited or non-existent.

A final criticism of traditional approaches to life cycle investing is the use of age as the sole determinant for underlying investment strategies. Using age or decade of birth as the

only variable for an investment strategy may be easy to communicate, but it is a fundamentally flawed approach. Other factors, such as salary, account value and gender, will influence expectations regarding income and time spent in retirement.

Despite the allure of applying AI approaches to superannuation, the evidence is that the experience has not lived up to the hype. However, progress is being made and in some cases we are beginning to see smarter approaches and solutions to these problems, which are taking shape under two separate operating models, each of which has its place within the Australian market:

### Life cycle v 2.0

As the flaws in the existing target date strategies came to light, debate gradually shifted toward subtle features of glide paths such as intervals (three-year versus five-year), shape (stepwise, S-shape) and so on.

However, much of this had little impact on the key issues and, in terms of designing the car of the future, debate was akin to asking whether it had a sun roof or heated cup holders when what was needed was a smarter way of getting to the ultimate destination.

Rather, the next generation of life cycle funds has learnt from the mistakes of the past and addressed them via the use of three key features or enhancements to the existing vehicle. They can best be described as:

- ☒ Proximity sensors – broader mandates or strategic asset allocation ranges that can take into account views with respect to asset valuations and seek to navigate through them.
- ☒ A traffic GPS system – this has been implemented through the adoption of glide paths that target levels of volatility, rather than equity/bond allocations.
- ☒ Air bags – installing explicit risk management through the use of approaches such as hedging or tail-risk strategies that are capable of dealing with unforeseen events when the risk is the greatest.

Some funds and advisory businesses have recognised the complexity of these issues and sought to take these steps further. Funds such as QSuper and advice business such as Fortnum Financial Advisors have been strong advocates of the individual nature of retirement and the need for more sophisticated approaches to meet the needs of members.

Doing this requires the development of both the intelligence necessary to analyse individual member-level data, combined with a supporting advice framework and product tool kit capable of implementing the solution. Unbundling this componentry has proved to bear its own challenges, but nothing that can't be navigated.

As someone who still reads the odd science-fiction novel, being a part of seeing these approaches move from fiction into reality is very exciting indeed.

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