Milliman White Paper

The evolution of lifecycle investing: Personalised overlays

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Target date funds, initially developed for the North American market in the early 1990s, were based on a simple but effective premise–that investment strategies need to take into account an individual's circumstances, based on a range of factors such as their objectives, age and time horizons.

They also formed part of the recommendations made by the Cooper review with respect to MySuper. This paper investigates the current state of play with respect to these options and where they are headed.

In North America, the target date concept was quickly and seamlessly adopted by the retirement sector, where numerous target date funds were developed, marketed, and in most cases, badged with the year in which investors planned to retire. For example, a 2025 fund would communicate that the investment strategy had been developed specifically for people planning to retire sometime in or around the year 2025.

The appeal, simplicity and take-up of these funds overseas was nothing short of spectacular, with assets registered with the Securities and Exchange Commission totalling in excess of $227 billion[1] in the United States alone. This was largely driven by a number of factors, most notably that these funds represented a tailored investment scheme that would progressively reduce risk (exposure to growth assets) as the target date was approached.

Through a relatively simple pooled investment structure, providers of these funds were able to offer an investment vehicle that delivered a 'set and forget' strategy tailored to fund members. Target date funds also enjoyed substantial flows as they obtained default status for many defined contribution pension plans.

The 'default status' of these target date funds was perhaps the dominant driver of flows, and parallels the current structure of Australia's profit-for-members, or 'industry fund' sector, where default options account for the vast bulk of member investments.

However, while these funds enjoyed huge success, they were found wanting in the midst of the financial crisis, which ironically coincided with the first cohort of Baby Boomers reaching their target retirement date. Some funds experienced substantial drawdowns and created significant stress for the retirees they were designed to protect.

In the aftermath of the financial crisis, much soul-searching has occurred, resulting in a Senate inquiry, which produced a number of criticisms and areas of concern with respect to traditional target date funds:

Not all target date funds are created equal. Even prior to the shortcomings that were highlighted during the financial crisis, questions were raised with respect to comparing and evaluating funds with similar target dates. From fees through to asset allocations, funds with similar labels could produce significantly different outcomes.

Conflicts of interest. It was also questioned as to whether the practice where target date funds often contain the administrators own fund offerings represented a conflict of interest. As the fund is ultimately a bundled structure, it is quite possible that this may be the case and potentially raise questions with respect to a trustee's fiduciary duty.

Risk management in name only. The use of the glide path (the rule by which growth asset exposure was reduced over time) as a risk management device was demonstrated in the harshest possible way to be a flawed mechanism, with some target date funds experiencing negative returns beyond anyone's expectations.

Target date funds labelled 2000 to 2010 lost an average 23% in 2008, with some falling by as much as 41%. The Standard & Poor's 500 index by comparison, fell 38%.[2]

To retirement, not through retirement. Finally, and perhaps one of the main reasons adoption of these funds in Australia has been lacklustre, designing a fund around the attainment of the retirement date is really only half of the solution and ignores the potential length of retirement, and consequently the ongoing need for an exposure to growth assets. While some target date funds continued to manage the glide path after the retirement date, this was not a universal feature.

Although subject to much recent criticism, Australian funds have long recognised the need for exposure to growth assets well into retirement. Reducing growth exposure into retirement substantially impacts the likelihood of a member exhausting their superannuation assets early. As outlined in previous Milliman research,[3] de-risking at the point of retirement from 70% exposure to growth assets to 50% can more than double the likelihood of exhausting one's superannuation assets at age 90.

1 The Wall Street Journal, 'Target Date Funds Get Senate Scrutiny,' October 2009, *http://online.wsj.com/article/SB125686394427117615.html.*
2 Bloomberg, 'Kohl Says Target-Date Funds May Present Conflicts of Interest,' October 2009, *http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aDUMt4vNvTzU.*
3 Milliman research: Risk in retirement, July 2008. The probability of exhausting superannuation assets increased from 21% to 53% at age 90 based on the simulations conducted.

THE TARGET DATE REACTION

As the fallout from the GFC subsides, the original principles underpinning target date funds are undergoing a natural evolution as providers learn from past failings and adapt to the current economic climate. This evolution is attempting to address the following areas:

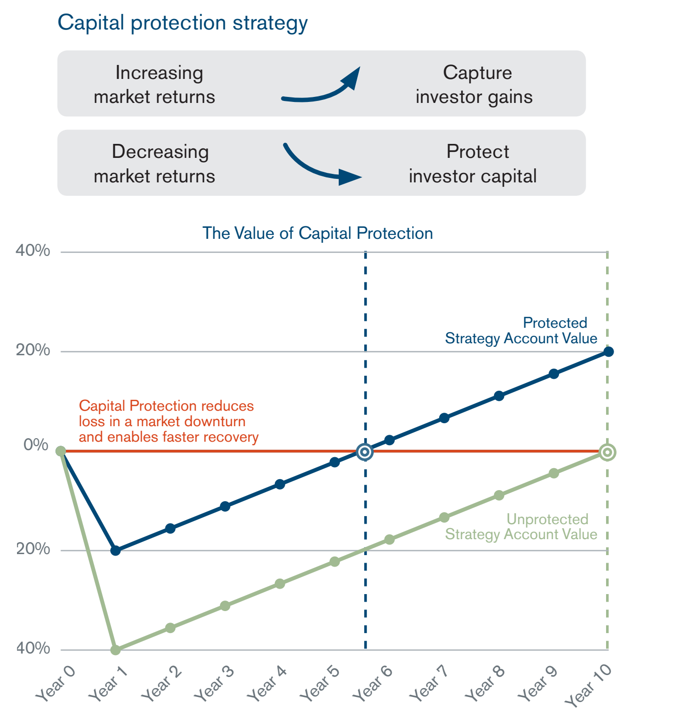
Focus on the real risk. Given that the primary failing was in managing risk, it is natural that this has been the largest area of focus for new developments. As we are now well aware, asset allocation is a poor proxy for the risk that an investment is exposed to and, whilst diversification is necessary, it is imperfect.

What is important is the shape of the return distribution to which members are exposed. This is fundamentally changing through the use of two techniques:

a) Capital protection

As pointed out in various research papers, including Milliman's paper on holistic financial planning, retirees have substantial exposure to market risk at and around the retirement date due to the fact that their financial assets are close to or have reached their peak.

FIGURE 1: CAPITAL PROTECTION: MANAGING DOWNSIDE RISK



This hypothetical illustration shows the the potential benefits of downside protection and helps to clarify the importance of reducing portfolio losses. A fund with the capital protection strategy may still experience a loss during a market downturn, but it should be less than if the fund were unprotected–and, of critical importance, it will take the protected fund less time to recover. By reducing losses when the market is down, look how quickly a portfolio can recover: a portfolio that drops 20% would regain its assets by Year 5, but a portfolio that loses 40% wouldn't recover until Year 10.

Balancing the need for growth assets (due to the length of retirement) with the exposure to volatility and timing of returns this creates, some target date funds have begun to assess and implement a capital protection strategy either side of the target date. These strategies can be implemented in various ways.[5]

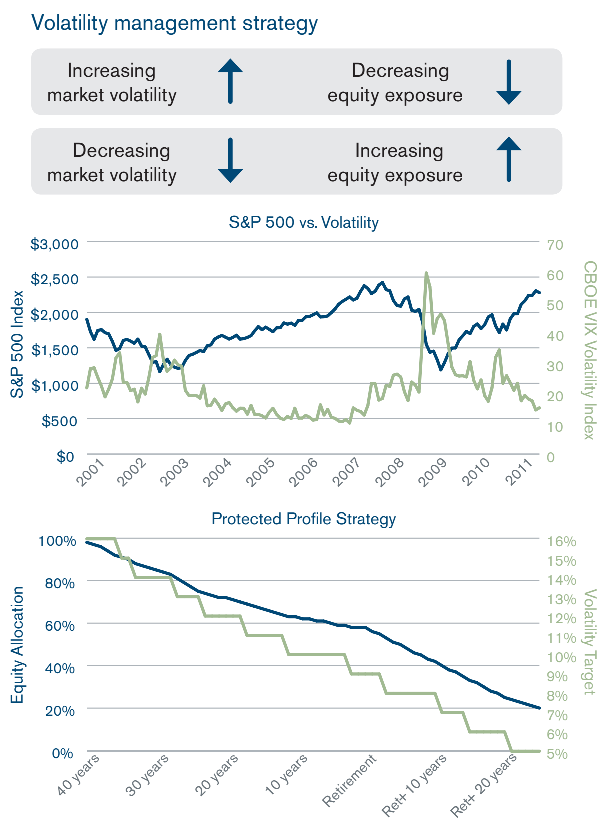
Already, a number of funds and platforms have incorporated capital protection into their offering. The result (as demonstrated in Figure 1 below[6]) is that fund members are insulated from market corrections.

b) Target volatility

In addition to the capital protection strategies identified above, some funds have also taken to forsaking their traditional equity allocation glide paths in favour of managing to a volatility target. By utilising a dynamic asset allocation programme, fund managers are able to adjust the underlying asset allocations to reflect market conditions.

The example in Figure 2 below illustrates this concept.[7]

FIGURE 2: VOLATILITY PROTECTION: THE ADVANTAGES OF MANAGING EQUITY RISK



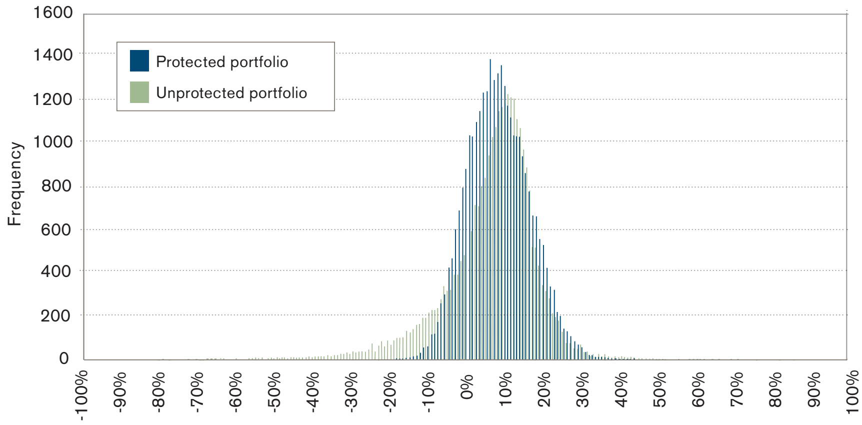
Why is volatility protection important? As you can see by the upper graph, volatility can spike, resulting in investors taking on more risk, e.g., 2002-2003 and 2008-2009. The inverse relationship between equity and the market means that when volatility spikes, markets have plunged. However, as the lower graph shows, the Protected Profile strategy reduces volatility targets into and through retirement. Volatility levels will be adjusted as participants age, with risk control accelerating at a faster rate than reduction to equity exposure. The volatility risk reduction offered by the Protected Profile Funds provides investors a risk-controlled approach to maintaining exposure to the equity market into and through retirement.

4 Milliman research: A holistic framework for life cycle financial planning, July 2009, *http://publications.milliman.com/research/life-rr/pdfs/holistic-framework-life-cycle.pdf*
5 Milliman research: Lifecycle investing for the post-retirement sector, *http://publications.milliman.com/research/life-rr/pdfs/life-cycle-investing-postretirement.pdf*
6 Lincoln Variable Insurance Products/Protected Profile Funds Brochure.
7 Lincoln Variable Insurance Products/Protected Profile Funds Brochure.

Maintain growth to and through retirement. With the risk management techniques described above, it is now possible to maintain higher allocations to growth assets to and through retirement. This inevitably provides retirees with the opportunity for their assets to maintain their purchasing power and sustainability over a lengthy retirement.

As Figure 3 demonstrates, combining these strategies can provide a substantial improvement and robustness to a superannuant's assets. This is particularly important for those entering retirement, given that a sharp fall in financial markets at or near the point of retirement can substantially alter the long-term sustainability of their superannuation assets.

FIGURE 3



Whilst many target date funds have moved on in terms of their underlying approaches to asset allocation, their bundled nature and potential for conflicts of interest still remain. However, the latest developments in this space seem destined to address this remaining flaw.

NO LONGER A FUND, BUT AN INDIVIDUALLY TAILORED OVERLAY

Right now, the next evolution of these concepts is taking place as traditional pooled investment vehicles are, through the use of technology, making way for personalised risk management overlays.

As described above, current approaches have focused on developing new investment approaches bundled within a single fund.

Separating the risk management techniques above from the underlying assets via an overlay that is tailored to each individual's portfolio provides a number of benefits. As Figure 4 demonstrates, an individual overlay is capable of operating alongside other investments to provide insulation against market downturns or volatility. Fund members participate in the combined returns of the overlay and their chosen investments and are better able to manage to a risk profile based on personal circumstances.

We believe this could comprehensively address the flaws of traditional target date approaches.

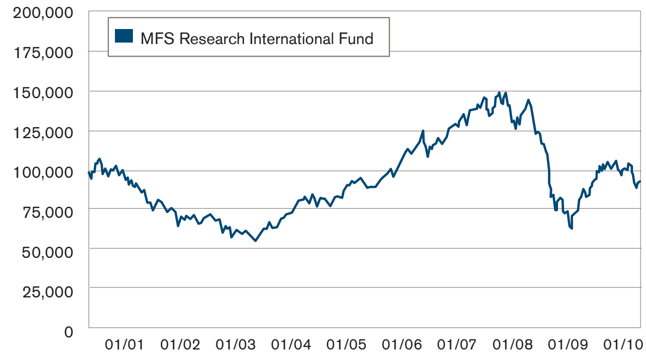
a) Control

Unbundling the overlay allows clients/trustees to choose the underlying asset allocation/funds, removing any potential conflicts that might exist in traditional bundled structures whilst giving fund members and their clients the ability to select 'best of breed' investment funds.

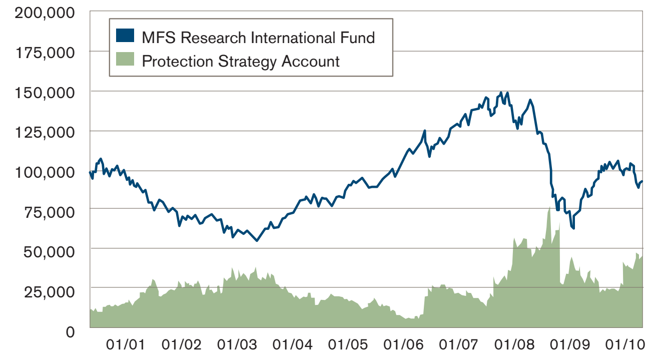
Being able to unbundle the risk management overlay from the fund manager also provides the flexibility to apply it across a range of platforms and investments, such as model portfolios, through to sophisticated investment platforms.

FIGURE 4

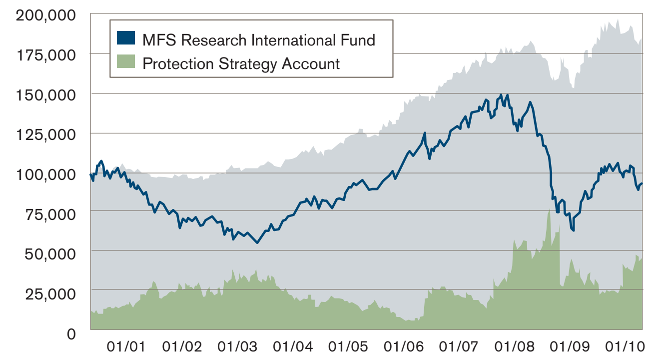
1. Investors select the funds or portfolios to invest in:



2. An overlay, or Protection Strategy Account (PSA), is created to match funds or portfolios:



3. Clients own a combination of funds and PSA:



This also potentially allows for a significant reduction in counter party risk. In particular, these overlays are increasingly bypassing traditional providers such as investment banks, removing any exposure to failure whilst at the same time minimising costs.

b) Transparency

As the overlay operates for each individual, a clear view of its performance can be provided without contaminating the underlying assets. This facilitates an efficient understanding of returns, as well as knowledge of ownership and comparison with alternative approaches.

c) Flexibility

Unbundling these investment structures provides fund members and their advisors with the ultimate flexibility, allowing individuals or trustees to turn the overlay on or off as circumstances dictate. This functionality is particularly valuable in the advised or self-managed superannuation sectors.

This could also operate well within a default structure such as those employed by the profit-for-members superannuation fund sector, whereby fund members meeting certain criteria are provided with the overlay as a default or 'opt-out' option.

d) Liquidity

Many of the strategies employed are cash settled daily—along with control, members have complete ownership of underlying assets. This is particularly important in retirement and provides the ability to adapt to unpredictable events, such as healthcare costs, deposits for nursing homes, etc.

e) Cost

The techniques used, coupled with a lack of any significant counterparty risk, reduces costs relative to traditional structured notes. Under 1% for a personalised risk management strategy is now a reality.

In the event a guarantee (e.g., capital or longevity) is overlaid, costs should again be lower relative to guarantees offered over funds or investments that do not include these techniques.

THE FUTURE IS ALREADY HERE

Within the Australian market, the prevalence of investment platforms combined with an increasing demand by advisors and their clients for flexible solutions to manage investment risk creates a natural environment for these types of solutions.

Within the industry fund sector, the traditional default models are already under strain and will need to evolve to account for the needs of different member cohorts. As the industry continues to consolidate, scale will facilitate the adoption of a broader suite of tailored offerings.

We anticipate that an increasing focus on individual fund members and low-cost superannuation solutions together with industry changes created via the future of financial advice reforms (FOFA) and MySuper will serve to further expedite the take-up of these types of solutions.

The recent take-up by unified managed account platform provider E-Clipse online (www.e-clipse.com.au[8]) illustrates that the Australian market is already beginning to follow the lead from overseas in adopting a more personalised approach to wealth management investment strategies.

So, while target date concepts may not be obsolete, they have evolved to a point whereby the concepts need to be reconsidered and past objections or opinions revised. With examples of this approach already available across the globe, including Australia, the future is already here and frameworks are currently being adapted to take into account this paradigm shift in investment philosophy.

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8 The personal risk management solution can be found at *http://e-clipse.com.au/eclipse_p2/p2home.html.*