

THE

Frontier Line

Thought leadership and insights from Frontier Advisors

Issue 143

November 2018

Lifecycle investing

A refresher

FRONTIER
ADVISORS



▶ Frontier Advisors

Frontier Advisors has been at the forefront of institutional investment advice in Australia for over two decades and provides advice over more than \$320B in assets across the superannuation, charity, public sector and high education sectors.

Frontier's purpose is to enable our clients to generate superior investment and business outcomes through knowledge sharing, customisation, client empowering technology and an alignment and focus unconstrained by product or manager conflict.

AUTHOR



David Carruthers

Principal Consultant,
Head of Member Solutions

David joined Frontier in 2015 and leads the Member Solutions Group. He provides investment advice to a range of clients and conducts research in the area of retirement strategy and product development for superannuation funds. Prior to Frontier David spent nineteen years at Mercer in roles in Australia and the UK. Prior to joining Mercer, David was at Towers Perrin for around six years, working in an investment advisory and research capacity. David holds a Bachelor of Economics from Macquarie University and is a Fellow of the Institute of Actuaries.

AUTHOR



Andrew Longmore

Consultant

Andrew Longmore joined Frontier as a consultant in 2018. His responsibilities include providing consulting support to a number of Frontier clients and preparing client investment reports. Before joining Frontier, Andrew spent seven years at Mercer in their Institutional Wealth business providing advice to clients on a broad range of superannuation and investment related issues. Prior to this, he also worked for Mercer in the United Kingdom where he spent four years in an actuarial consulting role. Andrew holds a Bachelor of Science (Applied Mathematics and Theoretical Physics) from Queen's University Belfast. He is a Fellow of the Institute and Faculty of Actuaries and a Chartered Enterprise Risk Actuary.

Introduction

When MySuper came into effect in July 2013, many funds faced a choice between continuing with a single investment option approach (typically their existing ‘Balanced’ or 70/30 growth/defensive default investment option) or adopting a new ‘lifecycle’ investment approach.

The majority of funds selected the first option and simply fine-tuned their existing default option to comply with the MySuper requirements. However, a significant number, particularly in the retail sector, chose a lifecycle strategy as their MySuper offering.

The latest APRA superannuation statistics at June 2018 show that lifecycle strategies account for around 30% of all MySuper products in the market and 35% of total MySuper assets. As the charts below highlight, MySuper has become more popular over time with a number of funds.

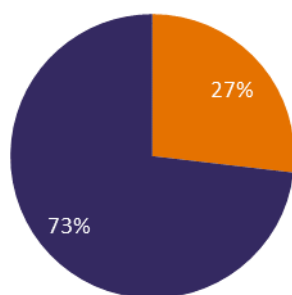
It is clear that lifecycle strategies have been a popular choice for some funds as their default MySuper offering, but how suitable are they for members?

This is the question raised in draft finding 4.3¹ of the Productivity Commission inquiry assessing efficiency and competitiveness in the superannuation system.

“The inclusion in MySuper of life-cycle products is questionable given the foregone returns they pose for many members’ balances (with some foregoing higher returns by adjusting asset allocation as early as 30 years of age). Life-cycle products comprise around 30 per cent of all MySuper accounts, but are mostly suited to members who want to ‘lock in’ a lump sum for some immediate purchase after retirement. For other members, maintaining a balanced portfolio before and after retirement would maximise retirement and lifetime income. Life-cycle products are better suited to the choice segment.”

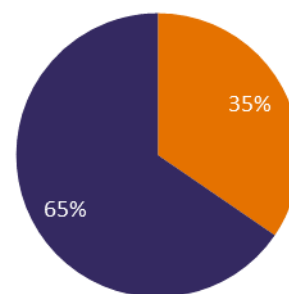
We discussed lifecycle products in a 2013 Frontier Line [“Dynamic retirement product solutions”](#). In this Frontier Line, we look at how different funds have chosen to implement their MySuper lifecycle strategy before discussing their strengths, weaknesses and potential enhancements.

Chart 1: MySuper Funds at 31 Dec 2013



■ Lifecycle Assets ■ Single Default Option Assets

Chart 2: MySuper Funds at 30 Jun 2018



■ Lifecycle Assets ■ Single Default Option Assets

Source: APRA Quarterly Superannuation Performance Statistics

¹Productivity Commission – Superannuation: Assessing Efficiency and Competitiveness, Draft April 2018

Why lifecycle?

Planning for retirement is probably one of the most important financial decisions in a member's lifetime and needs to be tailored for their individual needs, wants and objectives, taking into account factors that may sit outside the superannuation system. With this in mind, actively engaging with members and helping them plan for their retirement would appear to be the ideal strategy.

However, in the face of low levels of engagement, super fund trustees have a reasonably strong argument that utilising a lifecycle strategy as the default option is in most members' best interests, with choice available for those members whose circumstances differ. Another consideration is that high engagement levels do not necessarily translate to better member outcomes. A lifecycle strategy can offer behavioural support by helping members remain in an effective strategy, thus avoiding suboptimal switching activity which may occur for engaged members actively managing their investments. For example, a member locking in a period of poor performance by switching to cash after an equity market crash.

Traditional lifecycle funds involve an investment strategy and asset allocation that systematically adjusts in a predetermined manner over time (the "glide path") as members approach retirement, with the investment strategy moving from a high growth (higher risk) profile to a more (or very) defensive profile (lower risk) at, and into, retirement.

The main selling point of a lifecycle strategy as a default strategy is in ensuring that members who are unwilling or unable to make their own investment choices at least adopt a reasonable risk/return profile as they get closer to retirement. In particular, it provides protection against sequencing risk – the risk that poor returns in the last few years before retirement will amplify negative outcomes at a point in time when the investor can least afford them.

While this is an intuitively sensible approach, it is predicated on the notion that reaching retirement is an event horizon for the member, a point at which immediate access is required to some or all of the capital invested. This may be true for members who wish to buy an annuity, pay off their mortgage etc. but will not be the case for everyone.

The alternative argument is that superannuation is designed to provide a retirement **income**, and as such members may have an ongoing investment horizon of up to 20 years or more at the point of retirement.

A more appropriate strategy for such a member may be to maintain a significant exposure to growth assets throughout their life. This is especially true for retirees who will receive the Age Pension and whose superannuation is a small part of their overall retirement income.

It becomes clear the main weakness in a default lifecycle strategy lies in its blunt mass customisation approach. However, the counter argument is that the idea of MySuper, and the belief that a default product can be created which is suitable for all members, regardless of individual circumstances, is itself flawed.

Implementation approaches

Invariably, fund managers stated they consider ESG factors throughout investment diligence and in annual asset planning processes.

There are no hard and fast rules as to the optimum strategy to adopt for de-risking and indeed there is significant variation in the underlying approach adopted by funds within their lifecycle strategies. This makes direct comparison between MySuper products difficult as customers not only have to distinguish between lifecycle strategies and single investment option strategies but also consider the underlying differences in the lifecycle approach.

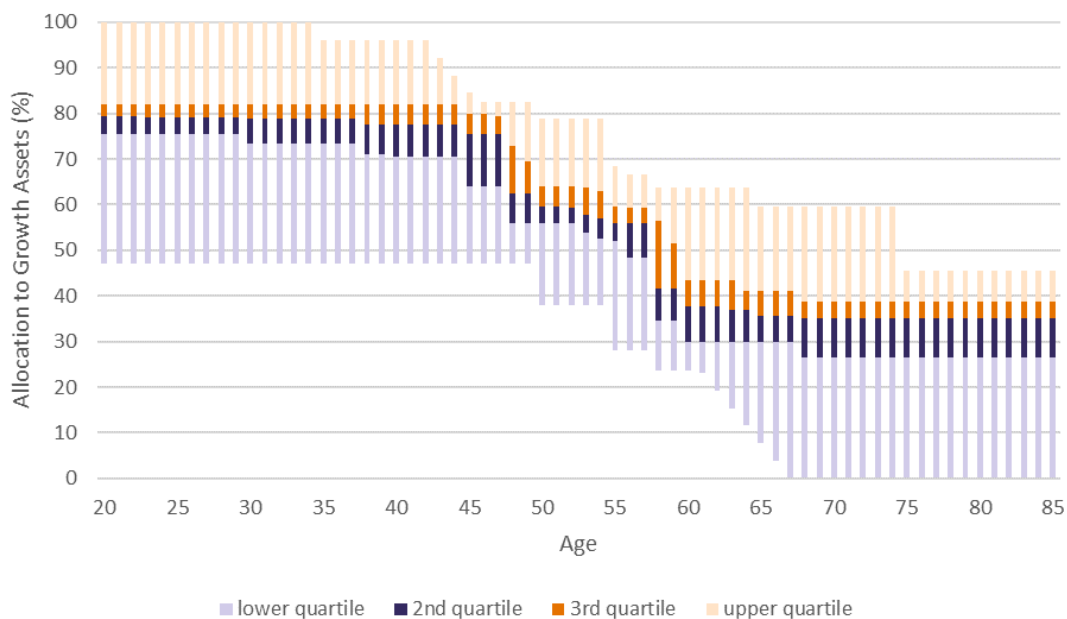
Nearly all funds adopted 'age' as the distinguishing factor on which to base transition of the investment strategy from a high growth to more defensive profile. However, the underlying approach to and pace of the adjustment varies significantly between funds.

As Chart 3 highlights, exposure to growth assets at low ages can range from as low as 50% up to as high as 100%. Likewise, systematic de-risking of the portfolio can start as early as age 40, although the starting age is dependent in many cases on the starting level of growth assets and is not directly comparable.

In addition to differences in the factors that trigger an asset allocation switch, there is further variation in the approach taken to switching at a fund level. There are two broad options:

- The member's account is switched from an investment in the fund's pre-mixed high growth investment option to a more conservative option and in some cases, finally to a cash type option; or
- Members are placed into age defined cohorts (based in some cases on a single age or on groupings ranging from 5 to 10 years) and the asset allocation for each cohort is gradually adjusted over time i.e. the option for each cohort is effectively managed as a separate strategy

Chart 3: Lifecycle approaches



Source: Frontier, APRA

Member outcomes analysis

Many papers and articles have been published in recent years with modelling that show a lifecycle strategy can be expected to result in a lower account balance at retirement compared to a single investment in a balanced portfolio. However, the comparison is dependent on how the lifecycle strategy is constructed.

A lifecycle strategy which de-risks members before retirement (relative to the balanced portfolio) may result in a lower expected balance. On the other hand, a lifecycle strategy which significantly increases the risk for younger members and de-risks to the same level of the balanced fund close to retirement will have a higher expected outcome.

Importantly, a balanced portfolio will produce a higher expected retirement balance than a comparable lifecycle option where the lifecycle option has the same average return over its lifetime as the balanced portfolio. This is because the lifecycle option is predicted to have a higher return (and risk) in the early years when the balance is low and a lower return (and risk) in the later years when the balance is high. As a result, while the expected returns are the same, investment returns matter most when balances are higher.

To highlight the potential outcomes from lifecycle strategies, we have compared a single balanced default fund strategy with two simple lifecycle strategies. For the purposes of this comparison, we consider a member on an average salary who enters at age 25 and retires at age 65.

Lifecycle strategy 1 has been constructed to achieve the same return over their 40 year membership as the single default strategy. Lifecycle strategy 2 has been constructed to produce the same balance at age 65 as the single default strategy. Details of the strategies are included in the appendix.

As expected, Lifecycle 1 produces a lower balance for the same return as the single default. In comparison, Lifecycle 2 needs to achieve a return 0.25% pa higher over 40 years than the single default.

Table 1: Lifecycles

Strategy	Description	Expected Return	Expected Real Balance at Age 65
Single Balanced Default	No change (70/30 growth/defensive split throughout working life)	6.5% pa	\$379,000
Lifecycle 1 'return equivalent'	De-risks from High Growth (90/10) to Balanced (70/30) at age 40 and to Moderate (50/50) at age 55	6.5% pa	\$359,000
Lifecycle 2 'balance equivalent'	De-risks from High Growth (90/10) to Balanced (70/30) at age 45 and to Moderate (50/50) at age 60	6.75% pa	\$379,000

However, the key takeaway from this is the realisation that a lifecycle strategy is not necessarily designed to maximise returns, but rather to balance risk and return across the member’s working life. Therefore, any analysis comparing lifecycle with a single default which only considers the expected outcome is lacking.

Chart 4 highlights the range of balances which could result from the different strategies. This analysis has been calculated by simulating future returns based on the expected return and risk of each strategy (details in the appendix).

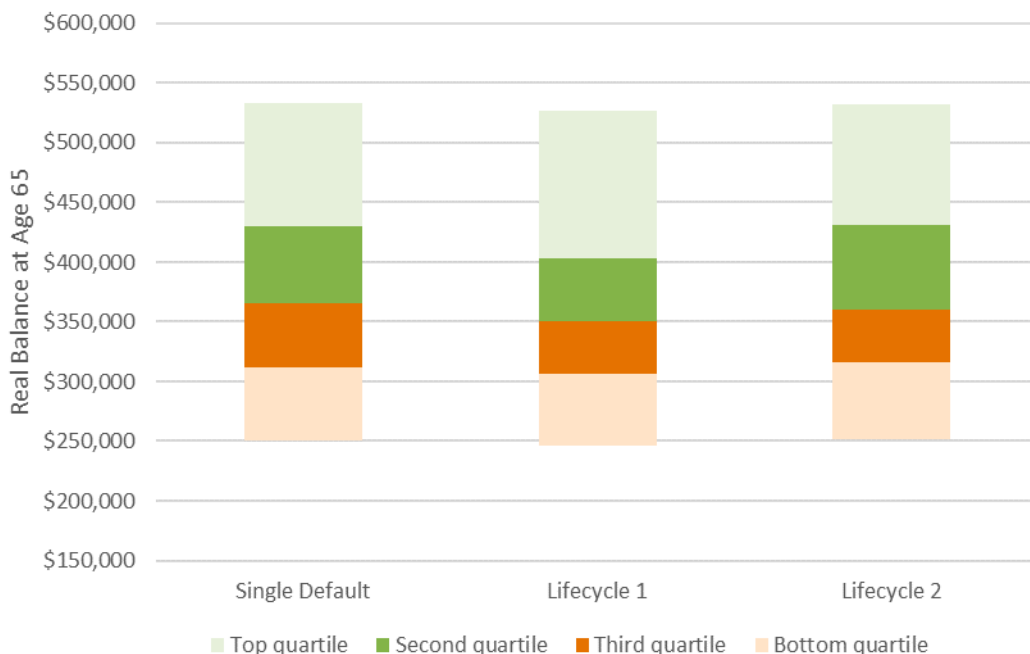
The first point to note is that all three alternatives produce similar results – the retirement balance ranges from around \$250,000 in the worst case, to a best case of over \$500,000. The differences between the best and worst outcomes under all strategies are much more significant than the differences between the strategies.

The range of outcomes is the smallest under Lifecycle 1 and the greatest under the Single Default. In this sense, the lifecycle strategies are producing the outcomes that are expected – more certainty in the outcomes to members. However, the increase in certainty is relatively minor.

It is also important to note this greater certainty comes at the expense of the actual balance. Rather than protecting the members when returns are poor, the Lifecycle 1 strategy produces lower outcomes in the worst scenarios than the single default. In fact, the riskier Lifecycle 2 strategy produces the best outcomes when returns are poor.

There is concern that the relatively simple implementation structure modelled above (and as adopted for the majority of currently available lifecycle MySuper products) is not ideal and would benefit from further refinement. Potential enhancements are considered in the next section.

Chart 4: Project balance at age 65



Potential enhancements

In some respects, the current lifecycle products available in the market should be considered 'Lifecycle 1.0' with further room for improvement and development. There are a number of enhanced features that could be added to a lifecycle model which we believe would offer better outcomes for members.

Better defining member cohorts

The MySuper legislation included a list of prescribed factors which funds were authorised to allow for in designing their MySuper lifecycle products, including:

- the member's:
 - account balance; and
 - contribution rate; and
 - current salary; and
 - gender; and
- the time remaining, in the opinion of the trustee, before the member could be expected to retire.

Despite this, currently lifecycle is essentially a single factor mass customisation model, with age/time to retirement the key cohort determinant. An exception to this is QSuper which uses a combination of both age and account balance. Broadly speaking, members' over age 40 with lower balances are assigned to marginally higher risk strategies than similarly aged members with higher account balances.

We view this more nuanced approach as a positive and one that should result in better outcomes for members.

A greater level of cohort customisation is possible when other factors that also reflect member needs and objectives are incorporated. We discuss potential factors in Table 2. A number of these could be used to define member cohorts, whereas others are likely more useful in assessing whether a lifecycle approach makes sense for a fund's membership as a whole.

Incorporating multiple factors into product design would, in our view, lead to better member outcomes. However, there is a trade-off of providing a more tailored product against increasing complexity and potentially increasing costs. Indeed, these potential enhancements would likely bring the new product into direct conflict with a number of the key aims of the MySuper reforms. An enhanced lifecycle product may be a more natural fit as a member choice option, rather than the default MySuper offering.

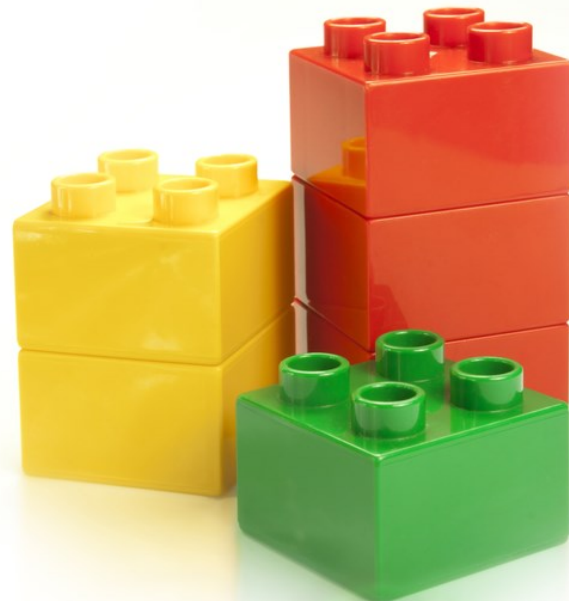


Table 2: Potential Factors for Mass Customisation of Member Cohorts

Factor	Comment
Age/years to retirement	This is a core factor as risk capacity and tolerance decrease with age. Funds can also collect member information regarding target retirement age rather than assuming an average experience.
Nature of job	Some professions involving physical labour may have younger retirement date experiences than more stationary professions. For a multi-industry fund, considering this type of factor may be useful in tailoring the retirement date used.
Balance size	Balance size is an important factor in our view, principally to assess whether the member is on target for the savings required at retirement. Someone who is not on target may wish to take more risk to achieve a higher balance, whilst someone who is on target may wish to decrease investment risk.
Salary/income level	Spending requirements and expectations in retirement will vary by member, and salary can be used as a reasonable indicator of such requirements. This could be incorporated via the targeting a particular income replacement ratio, or a balance size as a multiple of expected final average salary.
Access to age pension	Access to the age pension in retirement can influence the appropriate investment strategy for that member, as the age pension provides a low risk minimum income stream. This would likely require collecting additional data from members, rather than making assumptions for individual members given their non-superannuation assets are not known.
Other assets	The total level of assets (or at least total superannuation assets) also provides an indicator as to how much risk that member could tolerate, particularly in the near and in retirement phases. This would also require collecting additional data from members.
Risk tolerance	Collecting information regarding members' risk tolerance (via surveys) may be useful for calibrating the risk level of a lifecycle approach, or to assist members to opt in/out of a lifecycle offering.
Engagement	The degree of engagement shown by members (via contacting the fund or switching behaviour) is evidence of whether a lifecycle approach is useful for a membership group or not. Funds with very low member engagement would find more benefit in a lifecycle strategy as a default option, compared to funds where a meaningful number of members are already active participants in investment choice options.
Contribution rate	A high contribution rate within a fund can reduce the extent to which members need to achieve high investment returns to have a sufficient balance at retirement. A high contribution rate may be a feature of specific funds or be reflected in members opting to voluntarily contribute more. Providing information to members on the interaction between contributions and investment returns assists members make more informed choices on their investments.
Gender/interrupted workplace participation	Time out of the workforce (due to maternity/parental leave for example) can meaningfully impact the adequacy of savings at retirement. The most effective way to catch up is to increase contributions as early as possible. Targeted communications encouraging members in this situation to make increased contributions when that leave has occurred is one solution.

Increased focus on post-retirement phase

As discussed earlier, a major weakness of many lifecycle style products currently available is their focus on the pre-retirement or accumulation phase of superannuation. This is by no means unique to lifecycle products but also applies to most other investment strategies. The focus is predominantly on achieving a target return (such as CPI + 3.5% etc.) with little or no thought given to what that translates to in terms of a post-retirement income. This viewpoint loses sight of the central tenet of the superannuation system – to provide an income in retirement.

A potential solution is defining an outcome in terms of an expected income rather than expected balance on member statements. This is likely to help members more easily gauge how they are tracking relative to their current salary. In many cases, a large pot of money will appear to be more than enough to provide in retirement when in reality, the annual income amount which it could secure is relatively small when measured against current salary and expenses.

The suitability of a lifecycle investment strategy (or indeed any strategy) needs to be assessed in tandem with post-retirement objectives and individual circumstances if it is to be an effective strategy for the member.

Incorporating low value members

In the 2018 Federal Budget, the Government announced that superannuation funds would be prevented from charging fees exceeding 3% of a member's balance where the balance is below \$6,000. For a fund which charges an administration fee of \$1.50 per week, this means that members with a balance of less than \$2,600 would be in breach of this requirement.

An option for funds offering a lifecycle approach is to build this into their lifecycle approach. For example, the lifecycle strategy could entail investing in a low cost fund until the balance reaches \$6,000 (regardless of age) and then transitions to the age-based scale thereafter.

The UK government scheme, NEST, has implemented a similar approach. In the "foundation" phase (typically the first five years) aims to grow by at least inflation while avoiding sharp falls. Taking a lower risk, lower fee approach while the balance is low will have minimal effect on a member's ultimate retirement pot but will help younger members develop a savings habit.



Adapting to the prevailing market environment

A clear concern with some existing lifecycle models today is that they shift into defensive investments irrespective of the return outlook (e.g. bonds today look expensive). We believe that an enhanced lifecycle model needs to take a dynamic approach to incorporating the prevailing market environment when setting the asset allocation. There are a number of aspects to consider.

- The use of dynamic asset allocation to incorporate the prevailing market environment is a valuable tool for improving risk-adjusted returns for all phases.
- To meet the objectives of the various life phases, it is important that an asset allocation risk framework is in place. This could include neutral strategic asset allocations and ranges for each cohort to ensure that asset allocation tilts do not negate the core objectives of that cohort (e.g. reducing too much defensiveness because of valuations).
- The scope of potential variation from the neutral strategic asset allocations should be transparent to members to ensure that the members fully understand the nature of the lifecycle strategy and do not lose conviction in it over time.
- If member cohorts are defined for earlier age groups in a more comprehensive customisation model, this increases the scope for additional tilts to the investment strategy. For example, such cohorts could lock in a strong return when interest rates are high via long duration bonds – a strategy that would make sense for young members who can hold the bonds to maturity.

This approach is a relative dynamic asset allocation approach, similar to what many superannuation funds undertake today – involving tilts against a strategy that is expected to meet the targeted return in normal market conditions. An alternative to this is a target objective approach, where the asset allocation has a much wider scope to change, so can result in a portfolio very different to peers. This latter approach makes sense when the investment strategy for a member is targeted at meeting a specific balance or income replacement objective, as where those members are on the path to that objective is important.

Fees

Finally, there is the issue of fees charged and the use of active or passive management. Again there is significant variation between available lifecycle products (and indeed the funds who have adopted a single investment option approach). In order to achieve the low fee targets imposed by MySuper some funds have opted to utilise low cost passive management either for select asset classes or across all asset classes. Whether this is to the advantage of members awakens the debate between the merits of active versus passive management and is a discussion for another day.

One thing that is more straight-forward is that defensive assets such as fixed interest or cash are typically cheaper to manage than more growth oriented assets. It is then logical that the base investment fee charged should reduce as the weighting to growth assets reduces in a lifecycle product. The MySuper reforms recognised this and up to four price points are allowed where a lifecycle strategy has been adopted. However, many of the funds charge a single standard fee across all stages of the lifecycle investment, regardless of the underlying investment mix.



Targeted objectives – an innovative approach

The previous sections discussed a number of potential enhancements to a lifecycle investment strategy. In this section we consider one approach which takes a more revolutionary and innovative approach to better meeting the needs of members.

There is broad agreement that the primary objective of superannuation is to provide income in retirement. While there is less agreement around the level of income that should be targeted, the traditional approach is to consider an income replacement ratio of around 70% (reflecting that expenses are less in retirement).

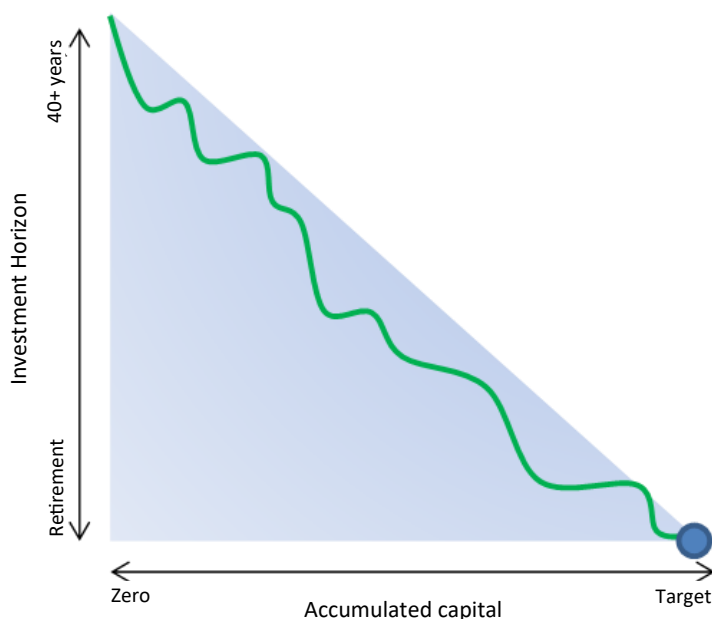
The purpose of this paper is not to add further to the debate of the required level or how it is funded, but rather to incorporate the concept of a targeted income replacement as our key investment objective.

Under this approach, the level of investment risk would depend on where members' balances are versus their targeted objective. If, for example, returns have been poor, and a member's expected balance is below their target, then a high risk investment strategy would be adopted until they are back on track. Conversely, if returns have been good, then a less risky investment strategy could be employed – reflecting that the member no longer needs higher returns to achieve their objective.

The main advantage of this approach is it specifically deals with where the member is on the path towards an adequate retirement income. An investment strategy managed in this manner is not guaranteed to be successful (e.g. members are still likely to be well below the targeted path in an extreme negative market environment), but it should improve the likelihood of a successful outcome for most members and provides a way to engage with the member so they are better informed during the accumulation period. Chart 5 conceptualises this approach.

The approach of using an income replacement ratio or target income level is intuitively appealing, as this is what the balance is intended to be used for and converts the thinking around superannuation from a "to retirement" model to one that is more clearly "in retirement".

Chart 5: Model for managing the path to target objective



This model is often considered to be a defined benefit (or liability driven) approach, as it considers an individual member's funded status, and helps manage an individual along the path to what they want their "defined benefit" in retirement to be. Of course, this is more complex to manage than the typical accumulation approach or even a traditional lifecycle approach. To implement, the following should be considered:

- Funds need to work out what the target objective should be – a generalised approach could be used, or funds could incorporate tailored information (e.g. if a member has received tailored financial planning advice). A more complex model might consider a target objective and a minimum target objective level.
- The defined benefit approach is a psychological shift for members, as it involves a change from members wanting to maximise their balance (wherever they are currently placed), to being focussed on a particular objective. Moving from a returns based discussion with members to a more meaningful target objective will be key in this evolution.

- Investment strategies and asset allocations would be required for member cohorts that are below or above the target objective, as well as by time to retirement. This enables funds to implement strategies that lock in significant investment gains if the members are above target, or otherwise reduce the level of risk taken.
- Communication will be particularly important when members are well below target, as a key part of the solution in this instance will be increased contributions. There is a significant advantage in members being advised of this early (compared to just near retirement). This scenario is similar to defined benefit funds needing additional employer funding. It does, however, require member engagement early in the accumulation stage, which may be challenging.

Including the balance versus target objective factor is an important enhancement to a lifecycle approach as it means that investment risk is only significantly reduced when members are above their target, improving on an area of weakness in traditional lifecycle models.

The final word...

Adopting a lifecycle strategy provides an element of protection against sequencing risk in the years approaching retirement but this protection comes at a cost of a likely lower balance at retirement. By selecting a lifecycle strategy as their MySuper offering, many funds have made the decision for their default members that this is a price worth paying. It is hoped that in making that decision, funds took the opportunity to canvas member opinion and complete some analysis of underlying membership trends such as:

- Engagement rates
- Historic switching activity
- Choices at retirement – annuity or account based pension etc.
- Cash flow trends in retirement

While well intentioned, defaulting members into a lifecycle strategy may perpetuate this low level of engagement. There is the danger that adopting a lifecycle strategy is seen to some extent as job done for the fund with no further need to attempt to regularly engage with members and check that a lifestyle strategy is still in their best interests.

Appendix: Lifecycle modelling

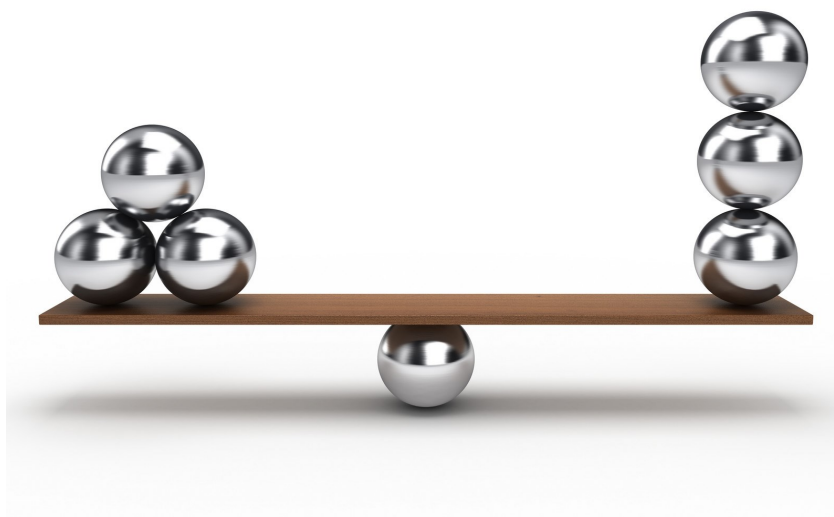
For the purposes of this paper, we have considered three investment portfolios:

Investment portfolio	Growth/Defensive allocation	Expected return (% pa after fees & taxes)	Expected risk (% pa after fees and taxes)
High Growth	90/10	7.25%	7.0%
Balanced	70/30	6.5%	6.0%
Moderate	50/50	5.5%	5.0%

The following investment options have been compared:

Age	Single balanced default	Lifecycle 1 'return equivalent'	Lifecycle 2 'balance equivalent'
Below Age 40	Balanced	High Growth	High Growth
40 – 44	Balanced	Balanced	High Growth
45 - 54	Balanced	Balanced	Balanced
55 - 59	Balanced	Moderate	Balanced
60 – 65	Balanced	Moderate	Moderate

The balanced for a person starting on a salary of \$50,000 and receiving SG contributions for has been projected for 40 years. The returns for each investment option have been modelled using the above assumptions and the real value of the balance has been calculated based on inflation of 2.5% pa. The results have been repeated stochastically using 5000 simulations.





About Frontier Advisors: Frontier Advisors is one of Australia's leading asset consultants. We offer a range of services and solutions to some of the nation's largest institutional investors including superannuation funds, charities, government / sovereign wealth funds and universities. Our services range from asset allocation and portfolio configuration advice, through to fund manager research and rating, investment auditing and assurance, quantitative modelling and analysis and general investment consulting advice. We have been providing investment advice to clients since 1994. Our advice is fully independent of product, manager, or broker conflicts which means our focus is firmly on tailoring optimal solutions and opportunities for our clients.

Frontier does not warrant the accuracy of any information or projections in this paper and does not undertake to publish any new information that may become available. Investors should seek individual advice prior to taking any action on any issues raised in this paper. While this information is believed to be reliable, no responsibility for errors or omissions is accepted by Frontier or any director or employee of the company.