

Thought Pieces with The Conexus Institute

Assessing retirement income strategies... when outcomes are but a promise¹

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Introduction

This article discusses how retirement income strategies (RIS) offered by superannuation funds might be assessed. Assessment is an important element of any activity. It not only facilitates accountability, but also provides a framework for improvement – an important reason for starting the assessment process earlier rather than later, and a key motivation behind the approach suggested in this article. The aim is to establish assessment criteria that sets the superannuation industry on the right path, while still providing the freedom to innovate.

The nature of retirement income streams makes RIS quite difficult to assess. We outline the challenges and suggest two complementary approaches to begin the assessment journey. The first applies a checklist to assess how well fund trustees are meeting their obligations under the Retirement Income Covenant (RIC)². The second is quantitative assessment where potential outcomes are simulated and evaluated against objectives. Both approaches are necessarily *ex ante* (forward-looking) in nature, and aim to assess the effectiveness by which superannuation fund trustees are assisting their retired members to achieve their retirement goals. Both approaches might be used by trustees in parallel for the purposes of reviewing where the fund currently stands, and identifying areas for improvement and thus forward planning. External assessors such as regulators, research houses and asset consultants might make use of the checklist, and consider building their own quantitative assessment tools.

We commence with an overview of the challenges involved in assessing the RIS offered by trustees, including outlining how retirement differs from accumulation. We explain why *ex ante* assessment is essential. Our two approaches comprise a solution to the challenges outlined. The checklist approach assesses the range of activities that trustees *should* be undertaking to deliver good outcomes for their members. Meanwhile, forward-looking quantitative modelling assesses the outcomes that are expected to arise from the retirement solutions that are offered to retirees. Development of RIS assessment frameworks should start now. It is a difficult area that will evolve through iterations of learning and feedback loops. Not taking the initial step simply defers the opportunity for accountability, learning and improvement.

Retirement Income Strategies: the point of assessment

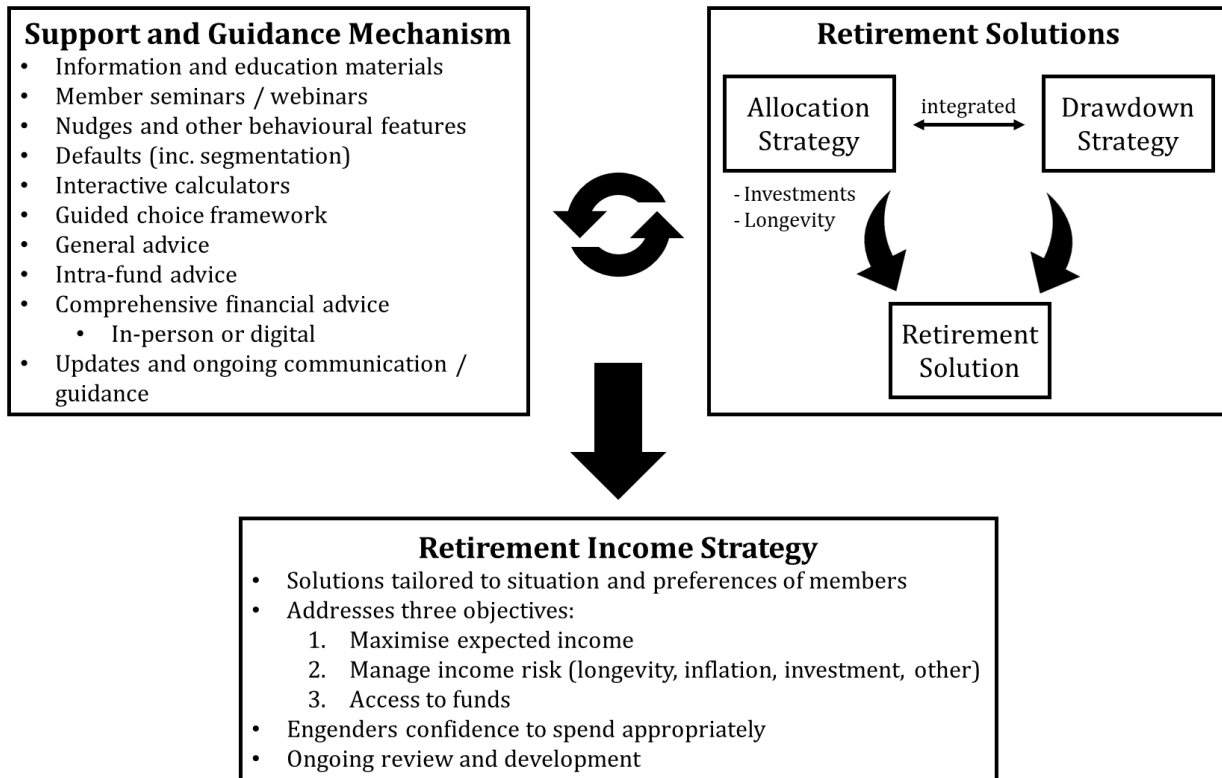
The RIC is principles-based, requiring fund trustees to develop a RIS that balances the three objectives of maximising income, managing risks to income and providing access to capital. Further, trustees are required to consider how they will understand aspects of member financial situations (specifically including Age Pension eligibility), and assist members in identifying an appropriate solution.

The two core functional requirements of the RIC are captured in Figure 1 over the page. For the purpose of this article, we denote the specific strategies that members ultimately adopt as retirement income ‘solutions’ (see box at top-right of Figure 1). Solutions generate an income stream by allocating available assets to direct investments and longevity solutions, potentially in the form of product ‘building blocks’, coupled with a drawdown strategy that determines the amount and shape of income extracted over time³. The RIS also encapsulates the support and guidance mechanisms that trustees provide to members (box at the top-left), which interact with the retirement income solutions. These two elements comprise the entire RIS, which can be assessed using a checklist supported by quantitative assessment of the solutions being offered.

² See Section 52 of the Superannuation Industry Supervision Act 1993 (SIS Act).

³ Butt, Khemka and Warren (2021) and Warren (2022) discuss retirement strategy components and design.

Figure 1: Framing key aspects of the RIC



The assessment challenge

Assessing how effectively superannuation fund trustees are meeting the needs of their retired members will be challenging. The ongoing debate over the Your Future, Your Super (YFYS) performance test for accumulation products attests to how hard it is to develop an assessment framework. Unfortunately, assessing RIS is going to be even harder. In accumulation, wealth generation and hence returns provide a primary focal point. Past returns are readily observable – although we remind that observed returns are simply one realised outcome delivered by a management team and an investment process that may have subsequently changed. Assessment of accumulation strategies is also made easier by investment options being constrained to MySuper defaults and choice products, with tailoring to member differences occurring along limited dimensions.

In retirement, outcomes comprise income through to death, and cannot be observed until decades have passed. Under the RIC, trustees are required to address multiple objectives, consider a wide range of outcome drivers and risks, assist members to manage complex trade-offs, deal with substantial member differences, and provide guidance to members in identifying a suitable strategy. Table 1 summarises these themes, which Appendix 1 discusses in some depth. Appendix 2 contrasts the assessment of accumulation and retirement strategies.

Table 1: Issues for the assessment of RIS

Issue group	Nature and implications
1. Nature of retirement outcomes	<ul style="list-style-type: none">• Income streams realised over very long term, i.e. decades• Creates need to evaluate actions and expected outcomes rather than realised outcomes, requiring ex ante assessments
2. Multiple and opaque objectives	<ul style="list-style-type: none">• Three objectives nominated under the RIC• Success or failure with respect to each objective is difficult to measure, in part due to each not being clearly defined• Assessment should consider how objectives are being framed
3. Complex trade-offs	<ul style="list-style-type: none">• Retirees face a range of trade-offs, including:<ul style="list-style-type: none">- Investing to boost expected income vs. limiting income risk- Drawing income earlier vs. later- Longevity protection vs. flexibility- Paying for inflation hedging vs. higher expected income• Assessment needs to gauge how these trades-off are managed
4. Accounting for retiree differences	<ul style="list-style-type: none">• Strategies need to account for substantial differences in retiree circumstances, objectives and preferences• Motivates cohorting and tailoring• Assessment needs to consider whether member differences are being catered for appropriately
5. Limits to what trustees control	<ul style="list-style-type: none">• Various aspects impact outcomes that trustees do not control:<ul style="list-style-type: none">- Investment returns depend on markets- Time of death is a personal event- Decisions made by members
6. Requirement to engage and provide guidance to members	<ul style="list-style-type: none">• Trustees expected to attempt to engage all members over retirement• Trustees expected to provide assistance to members in choosing strategies and balancing objectives under the RIC• Design and Distribution Obligations (DDO) are also relevant• Trustees should hence be assessed on how effectively members are being matched to suitable RIS

Note: Appendix 1 discusses the above issues in some depth.

An example may help highlight the problems with basing an assessment on observing retirement income streams. Consider the simple choice to pay out higher levels of income earlier in retirement. This will initially appear to deliver better income outcomes to members. However, to what degree this leaves a member experiencing substantially lower income later in retirement will be unknown for some decades. Indeed, whether the strategy turns out to be beneficial for any particular member depends on when they happen to pass away. Further, the effectiveness of the strategy in aggregate cannot be known until all members involved have died. In sum, observing single income stream paths experienced by members as they unfold will not reveal if the strategy was suitable in the first place. What really needs to be addressed is whether trustees are delivering solutions to members that are appropriate given their needs and wants.

Our central theme is that the nature of outcomes during retirement necessitates largely ex ante (i.e. forward-looking) assessments designed to gauge the effectiveness by which fund trustees have developed their RIS, including both the retirement solutions offered and the guidance provided to members. Ex-post measurement may have a complementary role for specific components of the assessment, but these will not suffice on a standalone basis. A largely ex ante approach also accords with the framing of the RIC, which refers to “*expected income*”, managing “*expected risks*” and flexible access to “*expected funds*” (italics added). The focal point of assessment needs to be what trustees are doing to help members achieve their retirement goals; although this should be supported by indicators of effectiveness of a RIS where possible.

Two complementary approaches for assessment

We propose two approaches to kick-off the assessment of RIS, which we envisage being used in parallel. The first is a checklist approach that examines how effectively trustees are designing and delivering RIS to their members, with the aim of assessing how well they are meeting their obligations under the RIC. The checklist would consider the RIS in full, including the resources and capabilities applied to designing, implementing and refining it. The second approach is quantitative and involves modelling the potential outcomes that the retirement solution might deliver looking forward, then assesses those outcomes versus stated objectives.

The presentation below is high level and preliminary, with the aim of setting the scene for further deliberation and development. For additional detail, refer Appendix 3 for a comparison of the key features of each approach; and Appendix 4 for perspectives on how various industry participants might implement the two approaches differently.

Approach 1: Checklist applied to RIS

The checklist approach is based around assessing the various activities that trustees *should* be undertaking in designing RIS and delivering them to members. The assessment might address the following three elements, which dovetail with the obligations placed on trustees under the RIC:

- (a) *Suitability of the **set of retirement solutions** being offered to members*
- (b) *Whether those retirement solutions are being **managed effectively***
- (c) *Provision of appropriate **guidance** to members in identifying a suitable retirement solution*

Assessing these three elements requires a holistic examination of trustees have designed and offered their retirement solutions to members, including the guidance provided. The checklist would capture the range of structures, processes, capabilities, products and services that a superannuation fund should have in place to ensure a strong likelihood of good member outcomes. Assessments would be largely qualitative, but informed by some ex post metrics where relevant. We envisage a similar assessment process to that undertaken of investment managers by asset consultants and research houses.⁴

Table 2 illustrates how the assessment might proceed. The idea is to create an assessment structure comprising a range of *indicators* that speak to the three elements listed above, ideally covering off on all aspects that matter for delivering better outcomes for retired members. The overall *findings* might be presented as a subjective but simple grading – we have used unsatisfactory, satisfactory, good and excellent for illustrative purposes – although this is open for discussion. Grading might be provided for each indicator and element, as well as overall.

The checklist might be seen as a ‘to do’ list for trustees. The aim is not only to assess the efficacy of the RIS as currently being offered. The checklist assessment can also help to highlight any gaps and weaknesses. In this way, it can act as a tool to assist fund trustees in improving their RIS. The checklist should be viewed as a device to improve member outcomes, and not a ‘box-ticking’ exercise.

⁴ Manager research aims to assess if a manager is likely to deliver reliable future performance given their mandate.

Table 2: Checklist for RIS assessments: indicative considerations

Element	Indicators	Grading
Suitable set of strategies	<ul style="list-style-type: none"> • Member cohorting process • Member information and data* • Incorporating relevant member characteristics (see Appendix 2) • Framing of objectives and associated trade-offs • Tailoring of RIS to members or cohorts • Suitability of retirement solution components: <ul style="list-style-type: none"> - Investment and/or product building blocks – adequate scope to support RIS, inc. longevity protection; competitive fees/prices** - Aggregated solution – three objectives under RIC addressed; drawdown strategy design; Age Pension properly incorporated - Flexibility to adjust to change in market circumstances - Member usage of strategies and products** 	<input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory <input type="checkbox"/> Good <input type="checkbox"/> Excellent
Effectively managed	<ul style="list-style-type: none"> • Governance structure around RIS • Staffing – adequately resourced; capabilities • Administration and systems • Portfolio construction and risk management processes • Investment performance of market-exposed building blocks** • Management of providers (in-sourced and out-sourced) • RIS review and development cycle 	<input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory <input type="checkbox"/> Good <input type="checkbox"/> Excellent
Member guidance	<ul style="list-style-type: none"> • Attempts to engage all members about retirement** • Advice or other assistance for identifying suitable strategy* • Tools, i.e. calculators, etc – suitability; member usage** • Education and information, inc. accessible and understandable • Processes to deal with change over time, inc. cognitive decline • RIS take-up rates** • Member experience, e.g. surveys**; complaints**; call centres 	<input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory <input type="checkbox"/> Good <input type="checkbox"/> Excellent
OVERALL ASSESSMENT		<input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Satisfactory <input type="checkbox"/> Good <input type="checkbox"/> Excellent

* Subject to what superannuation funds can do and provide under the financial advice rules

** Quantitative indicators; ex post assessment envisaged

Approach 2: Quantitative assessment of retirement solutions

While the checklist approach ensures no blind spots with regards to the structures, processes, capabilities, products and services required to deliver a well-designed RIS, it enables only a limited comparison through an outcomes-based lens. Quantitative assessment can help address this shortcoming, although does bring its own problems.⁵ Nevertheless, some form of quantitative

⁵ Quantitative assessment frameworks are heavily reliant on subjective modelling choices, including objective function, assumptions, inputs and method. Models generate significant complexity – although we advocate that this level of sophistication is needed. Not all relevant factors can be incorporated within a model of the type envisaged. Aspects such as organisational capability, cost, regulation and member behavioural responses can (and should) influence the retirement solutions that are offered to members. Flexible access to funds is tricky to incorporate within models designed to analyse income, i.e. trade off expected income against income risk.

analysis seems required for a thorough assessment.⁶ Our aim here is to frame up a possible quantitative approach in general terms, acknowledging that it will evolve over time. The approach considers assessment both internally by trustees and by external reviewers such as research houses, consultants and regulators.⁷

The quantitative approach would be underpinned by a stochastic model that simulates potential outcomes from retirement solution that is offered by trustees, so that it can be assessed against assumed objectives for the representative 'test' member to which the solution might be offered. Internal assessment by trustees might be framed around the member types for which solutions are being designed, in accordance with their particular cohorting method.⁸ External assessors might specify a smaller set of test members that represent important member types, in order to make the analysis manageable and support some degree of comparability across funds. The solution assessments might be aggregated into an overall fund level assessment.

Figure 2 (see over) outlines a process for ex ante assessment of a particular retirement solution, which would be applied to the test member for which the solution is most suitable. The process involves first specifying two strategies (default and the solution), each comprising a joint allocation and drawdown strategy.⁹ The default could be a baseline strategy that reflects existing practice, e.g. an account-based pension applying minimum drawdown rules¹⁰, which provides a benchmark for assessment. Member outcomes are represented by simulating a series of potential retirement income 'paths' for both strategies, including Age Pension entitlements. These outcomes may be evaluated against objectives using two potential methods, ideally used in tandem. First is applying an 'objective function' that reflects the assumed objectives and risk tolerance of the test member. The objective function might be a utility function¹¹, or selected metrics with a mechanism to trade-off expected income against income risk and access to capital. The objective can be used to generate an overall 'score' to gauge the additional expected benefit that the solution delivers over the default. Second would be a balanced scorecard of metrics that is designed to convey how the solution addresses the three objectives under the RIC.

A useful extension might be to consider a third 'optimal' strategy as an aspirational benchmark, bearing in mind that this strategy would only be optimal under the quantitative model and could be unattainable or undesirable in practice. Nevertheless, it may indicate changes that might improve the solution offered, and the upside potential available if the strategy was achievable.

⁶ Funds should be developing the modelling capability for quantitative assessments, as this can also be used in solution design. The scope and nature of modelling by external assessors is a topic for further investigation.

⁷ The issue was raised during consultation over this article of the difficulty and danger of standardising the quantitative assessment framework, given the wide number of approaches that trustees may adopt in designing RIS under the principle-based RIC and the related need to accommodate innovation. Nevertheless, some degree of comparability across funds will ultimately be required for external reviewers. Both flexibility and a level of selective standardisation should be catered for within the assessment framework.

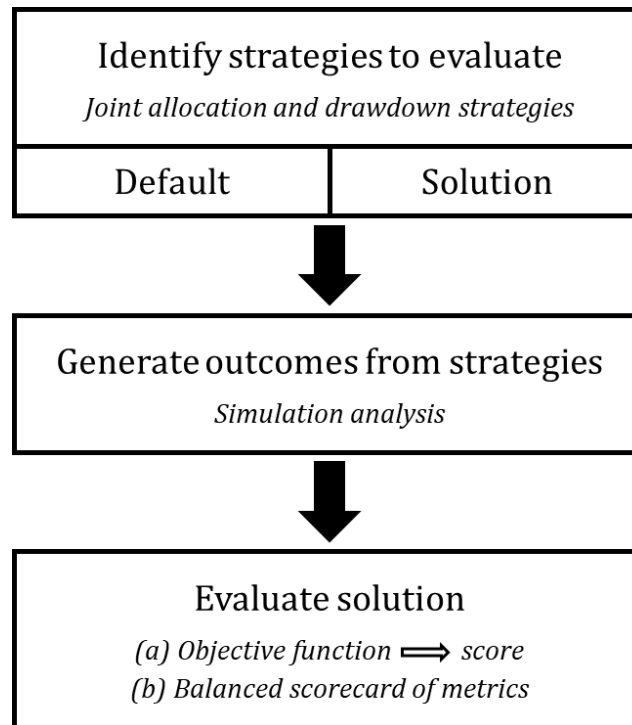
⁸ A review of the first generation of RIS suggests that trustees are forming cohorts based on differing member characteristics, with some referencing behavioural aspects such as how members engage with retirement decisions in segmenting members.

⁹ The solution should be one that the test member is reasonably likely to be directed to, whether offered by trustees as a comprehensive strategy, or arising under guidance where the member receives a recommendation from (say) a calculator on how to combine available products and drawdowns.

¹⁰ This approach was used by the Retirement Income Review, who applied a 58/42 growth/defensive mix in their modelling as representative of the typical weighting held by retirees (see RIR, 2020, page 516).

¹¹ The use of utility functions is addressed by Bell, Shao and Liu (2017a, b) and Warren (2019). Warren also outlines the advantages of using utility functions over metrics. One advantage is that utility function output can be presented as a certainty equivalent (i.e. risk-free income stream providing the same expected utility as the risky income stream generated by the retirement solution), which helps to make the output interpretable and facilitate cross-cohort comparisons and aggregation.

Figure 2: Quantitative assessment of a retirement solution for a test member



Trustees might develop quantitative models for internal assessment with the aim of gauging the extent to which the solutions being offered by the fund are suitable for the individuals or cohorts to which they are being offered, and thus inform RIS development. For instance, the model might be used to gauge the potential member benefit from adjusting cohort definitions, adding additional investment options, finessing the drawdown strategy, or enhancing the matching of members to solutions through greater personalisation or investing in advice tools. External assessors should also be able to acknowledge and incorporate some of this nuance over time.

In summary, quantitative models may perform a number of roles, including assessing the benefit generated by a solution versus a benchmark default, comparing against an aspirational 'optimal' strategy for reference, identifying areas for solution improvement, and gauging whether member benefit is improving over time.¹²

Concluding comments

RIS assessment will be challenging. Major hurdles include that retirement income unfolds over decades thus making it impractical to observe outcomes; along with the fact that a RIS needs to address multiple objectives, complex trade-offs and significant member differences. These issues make it ***necessary to undertake ex ante analysis*** that focuses on whether trustees are offering a suitable set of solutions and appropriate assistance to help members achieve their retirement goals. We have outlined two complementary approaches to ex ante assessment: a qualitative checklist, and quantitative modelling.

The concept of ex-ante frameworks is confronting. Nevertheless, something needs to be done, and ex ante approaches are unavoidable given the nature of retirement outcomes. An assessment

¹² The modelling might also be enhanced to better gauge the risk to member outcomes. For instance, robustness to key assumptions might be stress-tested, such as investigating potential changes in the policy or the market environment.

framework is needed for strong accountabilities. Waiting for the perfect framework that doesn't exist will only result in never creating any structures of assessment. A start is required.

Development of RIS assessment should be approached as an **evolutionary process**. Initially it should be treated as an opportunity to learn about the interaction between RIS and their assessment. As the assessment process becomes more 'seasoned' and funds have had time to adapt, the consequences of a poor assessment might become more meaningful. The aim would be to initially foster innovation and continual improvement, before potentially turning the assessment into more of a rod at a later stage.

The efficacy of the ex ante approaches we have suggested should be judged through a **broader lens** than just how well they assess current 'performance'. Assessments incentivise behaviours, as summed up in the Peter Drucker adage "*what gets measured gets managed*". By encompassing everything that trustees should be doing, assessments can provide both an incentive and compass for ongoing improvement. A well-designed checklist can be particularly useful for this purpose, provided that it is approached as a tool to use and not a box-ticking exercise. The quantitative approach may further support continual improvement by providing funds with a means to measure the potential impact of initiatives, and hence decide where to allocate resources. Finally, the act of doing assessments can help to build member confidence by providing comfort that there is a process to guard against poor practices.

The development of frameworks for assessing RIS should begin now. Waiting will only delay the learning cycle that needs to occur, and would increase the risk of inappropriate RIS being built and offered to members as a consequence of not being properly scrutinised. Some initial guiderails are also needed to limit dispersion in fund RIS that may make it harder to introduce assessment at a later date without being too disruptive to the industry; although the need for guidance needs to be balanced against the risk of inhibiting innovation. Both the checklist and quantitative approaches should be implemented expeditiously with a view to progressing them towards becoming effective devices for linking assessment to the development of better retirement solutions for members.

Appendix 1: Drilling into the issues of RIS assessment

This Appendix provides further detail on the six issues summarised in Table 1.

a) Nature of retirement outcomes

The primary aim of delivering an income stream over an extended period renders the assessment of RIS by observing outcomes as impractical, and gives rise to a fundamental need to rely on ex ante analysis. It is simply not feasible to wait decades to observe the income stream that is ultimately delivered and judge whether trustees have done an effective job. This conundrum is tantamount to that faced under long-term investing, which Neal and Warren (2015) discuss as an agency problem.¹³ In absence of being able to observe outcomes, the alternative is to *monitor and understand* what trustees (the ‘agent’) are doing to assist members. The basic idea is to gauge whether trustees are acting in a manner that is aligned with members, and are working effectively towards helping them achieve their retirement needs. The checklist approach would be designed to perform this function at the overall RIS level. Any quantitative assessment would also need to be forward-looking, thus suggesting our second approach based around projecting the potential range of outcomes that a solution might deliver and evaluating them versus objectives.

b) Multiple and opaque objectives

Any assessment should focus on whether objective(s) are being achieved. For RIS, the assessment is complicated by the fact that the RIC requires trustees to address three objectives, which in turn give rise to complex trade-offs (discussed next in sub-section (c)). Further complication arises from the fact that the three objectives identified are left undefined under the RIC, which has been developed as ‘principles-based’ legislation that gives trustees the scope to decide how objectives are framed. Below we discuss the implications of the three objectives for RIS assessment.

- *Maximising expected income* – The RIC leaves the definition of ‘income’ open to the trustees. Further, the way in which income should be ‘maximised’ will depend on the desired type of income stream. Under an income target, such as a replacement rate or income (i.e. spending) standard¹⁴, maximisation is achieved through *sustaining* the target income until death. An alternative objective might be to extract as much income as possible from the available assets, which implies maximising the expected *level* of income drawn. This gives rise to an additional complication of whether income should be weighted by the probability of the member being alive to enjoy it, which implies that survival weights might be applied in estimating expected income. Treatment of this additional complication is also left open by the RIC by allowing trustees to determine the meaning of “period of retirement”. The bottom line is that the expected income against which success is to be gauged has no clear or consistent definition.
- *Management of risk* – The RIC explicitly mentions managing longevity, investment, inflation and ‘any other risks’ to the sustainability and stability of retirement income. In doing so, it alludes to trading off at least three risks against each other, as well as against the other two objectives of maximising expected income and flexible access to funds. The RIC leaves it to trustees to define and measure these risks. Again there are no clear definitions, and considerable latitude for trustee interpretation.

¹³ Fund trustees might be viewed as an ‘agent’ that needs to be monitored on an ongoing basis under a situation where outcomes are distant and uncertain. This creates a large disconnect between the shorter time frames over which assessments are required, and the long horizon over which outcomes are delivered, thus giving rise to a need to monitor and understand the actions of the agent.

¹⁴ AFSA provides income standards (see <https://www.superannuation.asn.au/resources/retirement-standard>) that are based around spending budgets. Super Consumers Australia has recently released alternative standards (see <https://www.superconsumers.com.au/s/ConsultativeReportRetirementSavingsTargets.pdf>) that reflect low, medium and high levels of observed spending by retirees.

- *Flexible access to funds* – While the meaning of this objective is apparent (i.e. being able to access capital), how achievement of this objective is gauged remains unclear. The unstated implication appears to be access to ‘sufficient’ funds, but without any specific guidance. The objective also crosses into other features that may be of value to retirees, including having sufficient funds available for potential expenditures that are not covered by regular income, such as health or aged care costs and possibly bequests for those who value leaving a legacy.

The strength of a principles-based RIC is that it provides considerable latitude for trustees to decide what is best for their members, rather than imposing formulations that may not be appropriate in all situations. However, a consequence is that the objectives that trustees are supposed to achieve are ill-defined. This adds to the difficulty of formulating an assessment process, and makes it hard to establish standardised assessment methods that support comparisons across funds. The lack of clearly defined objectives and the considerable trustee latitude creates a need to assess whether trustees have framed objectives in a sensible way. The process could be assessed as part of the checklist. Quantitative assessments might then focus on evaluating outcomes against the objectives as specified by trustees.

c) Complex trade-offs

Not only are objectives not clearly defined and difficult to measure, but they also require trustees to address a range of trade-offs in designing their RIS. The main trade-offs are listed in Table 3. The key takeaway is that the trade-offs are numerous and complex, and often cut across the three objectives identified in the RIC. Assessment might be directed at establishing whether trustees are managing these trade-offs appropriately for members. An ex post analysis based on observing a single income stream can never untangle whether this was the case. However, an ex ante checklist might include an assessment of the structures and processes under which these trade-offs are managed. Quantitative analysis can support the assessment by shedding light on how solutions are positioned regarding these trade-offs.

Table 3: Trade-offs to be addressed by RIS

Decision	Potential benefit	Risk
Investment strategy: risk / return profile	Investment in risky assets can support higher expected income	Income decreased by poor returns and sequencing risk
Drawdown strategy: income type	A) Draw income as required to satisfy income target objective, e.g. replacement rate, income standard	Assets are exhausted before death, and income dries up
	B) Draw ‘affordable’ income to satisfy income maximisation objective, and then adjust for realised returns	Income volatility
Drawdown strategy: income timing	Drawing income earlier when more likely to be enjoyed, thereby boosting expected income (i.e. survival-weighted)	Lower income is incurred upon survival to a very old age, i.e. increased longevity risk exposure
Longevity protection	Taking additional longevity risk protection (in excess of Age Pension) by purchasing lifetime income streams (i.e. annuities) or through member pooling	Reduced access to funds; possibly lower expected income
Inflation hedging	Inflation exposure reduced by investing in assets offering an inflation hedge	Lower expected income, to extent such assets offer lower returns

d) Accounting for retiree differences

Retirees can differ significantly in their personal circumstances, objectives and risk preferences, and thus their needs and wants. They may also differ in how they engage with retirement decisions. Table 4 provides a summary of the characteristics that can potentially make a substantial difference to the type of retirement solution that is appropriate for a member¹⁵. The expectation that trustees cater for member differences is apparent in the explanatory materials accompanying the RIC exposure draft¹⁶. It is also relevant under the DDO¹⁷. Many fund trustees may address retiree differences through cohorting (segmenting) their member base and designing tailored solutions for each cohort. In doing so, all the characteristics listed in Table 4 are unlikely to be accounted for, at least initially, in part because it would require information about members that may not be available. Trustees are likely to commence by designing their RIS based around a limited number of member characteristics, and expand over time. Ultimately the industry may be able to move toward individually tailored solutions.

Table 4: Retiree characteristics that matter for RIS design and assessment¹⁸

Characteristic	Why It Matters
Age	<ul style="list-style-type: none"> • Minimum drawdown rates change with age • Adjusting the strategy with age will often be beneficial
Total available assets	<ul style="list-style-type: none"> • RIS should take all available financial assets into account, not just the retirement savings account balance • Age Pension eligibility is based on all available assets
Home ownership	<ul style="list-style-type: none"> • Renters need more income than homeowners • Impacts on access to Age Pension and supplements • Can provide some flexible access to funds, if required, through reverse mortgage (e.g. Pension Loans Scheme), downsizing or sale
Gender	<ul style="list-style-type: none"> • Females have longer life expectancy and often lower balances
Partnered status	<ul style="list-style-type: none"> • Couples may share assets, e.g. multiple accounts • Couples often concerned with survival to last member • Couples require proportionately lower income than singles • Age Pension availability differs for couples and singles
Type of income stream desired	<ul style="list-style-type: none"> • RIS should differ substantially with income objective, in particular: <ul style="list-style-type: none"> A) Income target objective, e.g. replacement rate, income standard B) Objective of maximising income extracted from available assets
Need for flexible access to funds	<ul style="list-style-type: none"> • Need for access to funds can vary significantly with circumstances, e.g. exposure to risk of large medical or aged care expenses • Can influence desire to hold aside some precautionary balances • Some retirees may have strong bequest motives
Risk tolerance	<ul style="list-style-type: none"> • Willingness to accept investment risk in pursuit of higher income • Willingness to accept longevity risk by drawing more income earlier
Behavioural	<ul style="list-style-type: none"> • How a member wants to engage with retirement decisions, e.g. take financial advice; self-guided; would prefer trustee guidance • Attitudes, e.g. willingness to take investment risk; desire for certainty versus flexibility; preference for simplicity • Reaction to framing of information and engagement activities

¹⁵ Characteristics not addressed in Table 4 but may matter include bequest motives, health status, providing for aged care, potential support from the personal network (e.g. well-off parents), and ability to earn income.

¹⁶ See https://treasury.gov.au/sites/default/files/2021-09/c2021-209553-explan_memorandum.pdf, page 7.

¹⁷ The regulators view member outcomes assessments and the DDO as closely linked, see APRA and ASIC (2020).

¹⁸ This list draws on Butt, Khemka and Warren (2021), and refers to the RIC explanatory memorandum (*op cit.*).

Substantial member differences suggest that RIS assessment should cover whether a fund has in place the structures, processes, capabilities, products and services to address the differing needs of retired members. This assessment can be accommodated within a checklist approach. Further, any quantitative assessment should account for specific circumstances, objectives and ideally risk preferences, noting that what 'success' looks like can vary substantially from one retiree to the next. This suggests that any quantitative model should evaluate outcomes against the objectives and preferences of the particular retiree (or representative member for a cohort).

Although not all the characteristics listed in Table 4 may be taken into account, **Age Pension** eligibility is not negotiable as the RIC expressly requires its inclusion in income. The Age Pension is a critical component of income for many retirees, especially those with modest means. It is important to evaluate whether the Age Pension (and related supplements) are being properly taken into account in RIS design as part of any assessment. One complication is that the Age Pension interacts with other characteristics, including total available assets, home ownership and partnered status. This raises the question of whether it is necessary to account for all determinants of Age Pension eligibility in RIS design. This complication, and whether it is being adequately addressed, might also be considered in RIS assessment.

e) **Limits to what trustees control**

Trustees should be assessed on what they can control. However, the solution that a member chooses and the outcomes that they receive depend on a range of factors, and not just the decisions and actions of trustees. This makes it fraught to hold trustees fully accountable for observed outcomes, even with the benefit of decades of data. Three additional elements are particularly important for determining the income that a retired member will receive:

- **Investment returns** – While trustees are responsible for making appropriate investments under uncertainty on behalf of members, there is no guarantee that markets will perform as expected. In particular, the returns from equity markets and similar growth assets can dictate the amount of income that the investments end up supporting. For instance, investing in growth assets to boost expected income may be entirely appropriate for some retired members. However, trustees cannot then be held wholly accountable for having made a poor choice ex ante if markets subsequently suffer a broad-based decline.
- **Mortality** – Time of death is stochastic, but will determine the efficiency by which available assets are converted into income. Fund trustees cannot be held accountable for (say) a member that dies in their seventies with substantial assets intact and an expired annuity, and hence ends up having used their assets ineffectively in retrospect.
- **Member behaviour and choices** – The retirement solution that a member adopts will ultimately reflect a combination of decisions made by both the trustees and members – especially given the lack of defaults in retirement. A member might choose a solution that is unsuitable for their needs, or impose their own drawdown strategy that determines the income stream they receive. For instance, the trustee should not be held accountable if the income drawn is below that affordable due to the member following the minimum drawdown rules, perhaps contrary to advice. The choices made by members may reflect a range of influences, including:
 - Existence of other objectives, such as bequest or precautionary motives
 - Personal tolerance for particular risks, e.g. income volatility; possibility of outliving the assets
 - Various behavioural effects, e.g. failing to fully understand risks; myopic focus on short-term volatility
 - Influences may exist that are unknown to trustees, e.g. other available assets; financial situation of close relatives; access to other income support (apart from the Age Pension).

The implication is that it is tenuous to assess trustees on the suitability of the solutions that members actually adopt. However, they could be assessed on whether they have provided their members with a suitable range of solutions to choose from (and appropriate assistance to identify a suitable solution – see sub-section (f) below). A checklist approach can assist in assessing these aspects. Any quantitative assessment might then be based around to extent to which a solution can be expected to deliver outcomes for the type of member for which it was designed, i.e. whether it is likely to do what it ‘says on the tin’.

f) Requirement to provide member guidance

Trustees are also required to assist members to identify suitable strategies. The RIC explanatory materials¹⁹ stated that trustees are expected to provide a “range of assistance” to members encompassing products, information and other guidance such as suggested drawdown strategies and tools, e.g. calculators. The DDO also places an obligation on trustees to offer products and hence solutions that are suitable for the member. As guiding retirees to suitable retirement solutions is an integral component of what trustees are expected to deliver, it should be included in any assessment. Important aspects include attempting to engage with *all* members around retirement at an appropriate time, the suitability and effectiveness of the assistance provided to members, and the process by which the member base is segmented for the purpose of designing and offering solutions. The guidance component might be more effectively assessed under a checklist approach; although quantitative analysis may assist by providing estimates of the benefit from improving guidance.

¹⁹ *Op cit.*, page 5.

Appendix 2: Assessing accumulation vs. retirement strategies

Table 5: Comparing features in strategy assessments

Feature	Accumulation	Retirement
Objective	<ul style="list-style-type: none"> • Maximise balance at retirement, subject to managing investment risk 	<ul style="list-style-type: none"> • Maximise expected income • Manage income risks (investment, longevity, inflation, other) • Provide flexible access to funds
Focus of assessment	<ul style="list-style-type: none"> • Accumulated account balance 	<ul style="list-style-type: none"> • Income stream over retirement
Primary driver of outcomes	<ul style="list-style-type: none"> • Investment returns 	<ul style="list-style-type: none"> • Investment returns • Drawdown decisions • Longevity protection • Mortality outcomes
Primary risks to manage	<ul style="list-style-type: none"> • Poor real returns 	<ul style="list-style-type: none"> • Poor real returns • Sequencing risk • Drawdown and mortality synchronisation, i.e. outliving savings vs. dying with unused assets • Inflation (cost of living) risk
Accounting for member differences in assessments	<ul style="list-style-type: none"> • Evaluating returns[#] reveals bulk of the story 	<ul style="list-style-type: none"> • Large differences across retired members and thus objectives require tailored assessments
Relevance of providing assistance to members	<ul style="list-style-type: none"> • Default arrangements plus choice framework means this assessment piece is not essential 	<ul style="list-style-type: none"> • Guidance and advice mechanisms required are expected under the RIC, and impact on member outcomes
Outcome assessment	<ul style="list-style-type: none"> • Ex post assessment feasible (providing representative return history is available) 	<ul style="list-style-type: none"> • Ex ante assessments unavoidable, given ex post assessment infeasible as income delivered over decades

The standard approach of evaluating time-weighted returns is informative of the returns generated by the provider, but not necessarily individual member outcomes. The latter requires analysis of money-weighted returns or accumulated wealth: this is a potential area for further development.

Appendix 3: Overview of checklist and quantitative assessment

Table 6: Features of checklist and quantitative approaches

Feature	Checklist approach	Quantitative approach
1. Assessment target	<ul style="list-style-type: none"> • Overarching assessment of RIS 	<ul style="list-style-type: none"> • Specific retirement solutions
2. Application and purpose	<ul style="list-style-type: none"> • Qualitative assessment of all aspects of RIS, e.g. governance, processes, resourcing, activities, solution components, etc 	<ul style="list-style-type: none"> • Assess outcomes delivered for representative test members • Comparison vs. alternative retirement solutions, using default strategy as a benchmark • Models used by trustees for internal assessment and solution development may differ from those used by external assessors
3. Measurement approach	<ul style="list-style-type: none"> • Predominantly qualitative, somewhat subjective 	<ul style="list-style-type: none"> • Largely quantitative: notionally objective, but based off subjective assumptions
4. Member focus	<ul style="list-style-type: none"> • Focus on the RIS in its entirety, including the range of structures, processes, capabilities, products and services involved in design and offering of the RIS to members 	<ul style="list-style-type: none"> • Focus on outcomes for specific solutions, i.e. case studies for defined member types
5. Measuring improvement through time	<ul style="list-style-type: none"> • Changes in scope and quality in addressing items on the checklist 	<ul style="list-style-type: none"> • Increase in member benefit associated with specific activities or defined scenarios
6. Evolution	<ul style="list-style-type: none"> • Moderate changes anticipated over time, as major new dimensions of the task seem unlikely to emerge 	<ul style="list-style-type: none"> • Likely to evolve significantly due to learning process

Appendix 4: Applying checklist and quantitative assessments

Table 7: How various participants might apply checklist and quantitative RIS assessments

Industry participant	Checklist approach	Quantitative approach
Super funds	<ul style="list-style-type: none"> • Tool for broad-ranging self-assessment, including identifying areas for improvement • Would benefit from external benchmarking and assessment (e.g. by research houses and consultants) 	<ul style="list-style-type: none"> • Quantitative model may be used to both assess existing solutions and inform solution development • Quantitative method adopted will depend on the sophistication of the fund's governance, expertise and familiarity with retirement solution modelling and assessment • Consultants may assist with the implementation
Research houses	<ul style="list-style-type: none"> • Qualitative approach has some overlap with existing assessment methods that are applied to super funds • Assist funds with external assessment around some checklist items 	<ul style="list-style-type: none"> • Quantitative approach could be developed to support comparison of retirement solutions, and build understanding of the outcomes that various solutions may deliver
Consultants	<ul style="list-style-type: none"> • Assist funds by advising on RIS design through using checklist to identify gaps in fund offerings, potentially supported proprietary qualitative insights • Assist funds with external assessment of some checklist items 	<ul style="list-style-type: none"> • Quantitative model could be used to advise funds on better RIS design through developing proprietary quantitative insights and making comparisons with competitors • Assist funds in the development of their own quantitative assessments
Regulators	<ul style="list-style-type: none"> • Checklist may be incorporated into existing monitoring and assessment structures, supported by data-analysis and frontline engagement activities • Checklist might dovetail with legislative and regulatory requirements associated with the RIC, Member Outcomes Assessment and DDO 	<ul style="list-style-type: none"> • Quantitative model might be used to better understand solutions and the outcomes that they deliver • Multiple metrics may be applied, similar to APRA heatmap • Avoiding prescribing activity is important, thus analysis based on 'optimal' solutions or single metrics should not be used

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