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Retirement Income Covenant – Stage 1 of the Retirement Income Framework

Please find enclosed our submission in relation to Stage 1 of the Retirement Income Framework.

This submission has been prepared by our Chief Investment Officer, Mr David Bell and our retirement specialist Ms Estelle Liu. I advise that Mine Super can provide copies of any modelling or discuss specific issues raised in the submission if requested.

Should you require further information, please do not hesitate to contact me on (02) 4948 3691 or adam.shultz@mine.com.au

Kind regards,

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Retirement Income Covenant

Stage one of the Retirement Income Framework

Submission by Mine Super

June 2018

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About Mine Super

Mine Super is a profit to members, public offer superannuation fund dedicated to serving the retirement needs of all Australians. Mine Super (formerly known as Mine Wealth + Wellbeing and AUSCOAL Superannuation) has been delivering exceptional retirement outcomes to members for 75 years. Mine Super offers its members a comprehensive range of superannuation and pension products in addition to insurance and access to financial advice. Mine Super was awarded a Platinum rating by SuperRatings along with Chant West's Five Apples for both super and pension products in 2017. Mine Super employs over 175 staff and manages approximately \$11 billion in assets for more than 63,000 members.

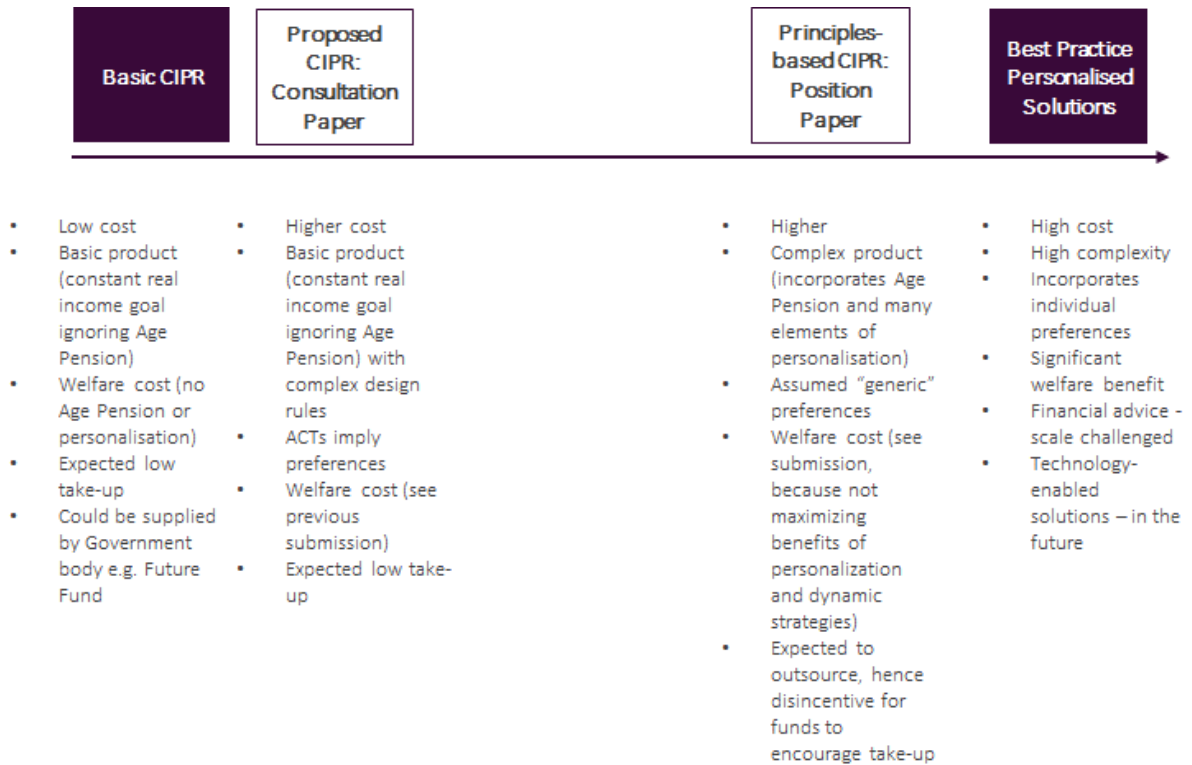
Executive summary

Mine Super welcomes the opportunity to provide a submission to Treasury (**Treasury**) in its position paper "Retirement Income Covenant – Stage one of the Retirement Income Framework (**Position Paper**). We hope that this submission (**Submission**) is afforded adequate consideration and assists in its development. Mine Super extends an offer to provide further feedback and share our modelling, if so requested.

The following is an outlined of the key points contained in this submission:

- Treasury has incorporated much of the feedback provided in the first round of submissions. Mine Super supports a principles-based approach over a prescriptive approach and is encouraged to see the consultation process having good effect.
- However, Mine Super believe there remains a significant way to go before we land on a solution that represents a positive cost-adjusted welfare benefit.
- The principles-based solution introduces degrees of personalisation, hence the cost structure of personalisation, without allowing super funds to provide the full benefits of personalisation.
- Mine Super acknowledge how frustrating retirement policy design is in Australia and the complexity created by a means tested Age Pension. However, we believe that Treasury needs to be explicit on the design issues of real or nominal income, and whether to incorporate the Age Pension. From there the trustee owns design decisions; the flexibility needs to be far greater than 2.5% of first year income. For the record, we believe that real income and incorporating the Age Pension are the right choices.
- Mine Super acknowledges Treasury's objective of disclosing an increasingly complex CIPR design in a simple manner. We believe that CIPR design and CIPR disclosure (or at least disclosure principles) need to be designed at the same time, otherwise unintended consequences and costs may be incurred.
- Finally, we summarise the progression of CIPR development from the consultation paper to the position paper in the diagram below. Through the lens of industry cost, consumer take-up, and consumer benefit, Mine Super suggest that a Basic CIPR has some merit (as it has the least industry cost and impact), but Best Practice Personalised Solutions are where we need to get to as they have the potential to provide significant welfare benefits. We have concerns that any solution between these two ends of the spectrum will incur unattractive (negative) cost versus benefit outcomes. Mine Super acknowledge that the Best Practice Personalised Solution at the far right of the diagram would fall outside the concept of a CIPR, and

implementation could be assessed, and indeed driven, through regulators such as APRA and ASIC.



Introduction

The purpose of this paper is to provide feedback on the position paper.

The development of a retirement income framework has been an area of significant focus for policymakers. Mine Super has actively contributed through:

- two submissions in response to Development of the framework for “Comprehensive Income Products for Retirement - Discussion Paper” (2016);
- a submission in response to “Treasury Laws Amendment (Innovative Superannuation Income Streams) Regulations 2017”; and
- a submission to the Department of Social Security (DSS) in response to “Social security means testing of lifetime retirement income streams” (2018).

Throughout this process, Mine Super has engaged and shared models with members of Treasury and the DSS.

The position paper focuses on the Retirement Income Covenant which addresses:

- Covenant principles
 1. Retirement income strategy
 2. Engagement
- Supporting principles
 3. Definition of a Comprehensive Income Product for Retirement
 4. Offering a flagship CIPR
 5. Third party products
 6. Consent
 7. Offering an alternative retirement income product through advice
 8. Exception for individuals for whom CIPRs are unsuitable

In this submission, we address many of the above outlined points and raise some additional issues.

Retirement Income Covenant

As part of the Government’s More Choices for a Longer Life Package in the 2018-19 Budget, the Government has committed to introducing a retirement income covenant as the first stage of the proposed retirement income framework. This will codify the requirements and obligations for superannuation trustees with respect to the retirement income experience of their members.

Mine Super support the creation of a retirement income covenant; at a minimum it removes any ambiguity which may exist amongst super fund trustees regarding their obligations.

Developing retirement income objectives

Our interpretation of the Covenant principles section is that to develop a retirement income strategy, super funds will be required to develop a retirement income objective. We believe this is important. Further we believe that super funds should work to create a quantifiable objective. Otherwise we question how a fund can objectively choose between an infinite set of possible solutions. We believe a quantifiable retirement income objective can form a powerful agent of change within super funds, a lens through which many competing projects, products and services can be compared.

One framework for establishing an assessable objective is a balanced scorecard approach. This fails to consider the trade-off between competing factors. Utility functions are well placed to form the basis of a quantifiable retirement income objective.

We provide a case study in the form of The Member's Default Utility Function (MDUF). MDUF v1 forms the basis of many of the calculations presented in this submission.

Case Study: The Member's Default Utility Function

Member's Default Utility Function (MDUF)¹ represents an attempt to quantify a sensible set of preferences for a trustee to assume on behalf of default fund members, members they know little about. It is a highly credible metric developed by a panel of academics and industry professionals. The work represents 18 months of work by 14 people. The work is free for all to access (AIST and ASFA are custodians of this work; papers, models and presentation materials can be found on their respective websites).

In developing MDUF we ignore behavioural biases which may exist as a view was taken that it is potentially dangerous for a trustee to cater to behavioural biases, some of which may be irrational and threaten a sustainable retirement outcome.

MDUF reflects five preferences of a retiree that we believe are appropriate for a trustee to assume on behalf of a default fund member:

- Members prefer higher than lower income;
- Members prefer smoother than volatile income;
- Members do not want to outlive their retirement savings;
- Members place some value on residual benefit at death; and
- Members are economically risk averse.

These preferences are then mathematically represented via a metric known as a utility function. MDUF is parameterised, establishing a sensible trade-off between the preferences.

The use of a utility framework encourages the use of stochastic modelling, typically a lifetime simulation framework. MDUF considers the risk faced by members and will heavily penalise poor retirement outcomes even if they have small possibilities of occurring. It is a much more powerful measure than the actuarial present values and we use it as one of the key measures in this paper.

We define the following MDUF related measures used in the paper:

- **Risk-Adjusted Income (\$):** the constant level of consumption which delivers an equivalent level of consumption utility. Consumption utility is the expected utility with the residual benefit component set to zero. This measure focuses on the income component only.
- **Risk-Adjusted Residual Benefit (\$):** the constant level of residual benefit which delivers an equivalent level of residual benefit utility. Residual benefit utility is the expected utility with the consumption component set to zero. This measure focuses on the residual benefit component only.

¹ Member's Default Utility Function (MDUF) is an open-architecture metric to assist the industry to design retirement outcome solutions. The related materials can be accessed through AIST website via [http://www.aist.asn.au/policy/member%E2%80%99s-default-utility-function-\(mduf\).aspx](http://www.aist.asn.au/policy/member%E2%80%99s-default-utility-function-(mduf).aspx) and ASFA website via <http://membersdefaultutilityfunction.com.au/>

- **MDUF Score:** the constant level of consumption (considering the trade-off against residual benefit) which delivers an equivalent level of expected utility. This is the overall measure that considers both income and residual benefit. The MDUF Score is equivalent to the Risk-Adjusted Income when the residual-benefit motive is zero.
- **Welfare Gain (\$):** the additional initial wealth required for an inferior solution to achieve the same expected utility as a superior solution. Welfare loss is effectively a negative welfare gain.

Features of a CIPR

Treasury’s previous CIPR consultation paper contained highly prescriptive Actuarial Certification Tests which in effect implied a set of preferences for an individual’s retirement. Mine Super raised concerns in our submission around whether these implied preferences would match up with the preferences trustees would assume on behalf of their members. In our first submission we provided strong feedback on these implied preferences. Overall, we see a greater degree of permitted flexibility. Our feedback is that Treasury should consider even greater flexibility than what is proposed but make trustees strongly accountable for their CIPR design.

Below we discuss a number of the individual issues raised in the position paper.

Broadly Constant Income Requirement

CIPRs are required to provide “broadly constant” annual income in expectation to members considering average investment returns and longevity outcomes. Trustees would have the flexibility to decide whether the “broadly constant income” is in real terms or nominal terms, and whether to incorporate expected Age Pension income. There is also an allowance for some flexibility in retirement income, with the term “*broadly constant*” used to describe an expected income profile which is within “*a narrow band of +/- 2.5% from the income in the first year*”.

Real or nominal income

Providing income in real terms, nominal terms or somewhere in between could result in significant differences in the lifetime income profiles to members.

Targeting nominal rather than real income introduces two effects:

1. Large expected drop in real income over the long term.
 - a.
 - b. **Figure 1** shows that this is expected to be over a third drop over the first 15 years of retirement. We note that the Age Pension may dilute the size of this impact, but the size of the impact is inconsistent and depends on individual circumstances.
 - c. We note that the flexibility to choose between nominal and real constant expected income levels would make comparisons between CIPR’s extremely difficult.
2. Potential for large variability in real retirement outcomes, as this risk has been transferred from the super fund to the retiree.
 - a. **Figure 2** shows the historical inflation rate for the past 20 years and **Figure 3** shows that constant nominal income in real terms with realised inflation could be much more volatile than the narrow +/- 2.5% band defined for expected nominal income.

We believe that the base case for income targeting should be real income. From here the trustee should be provided flexibility and be fully accountable for determining an appropriate expected income profile. For example, if a trustee believes members’ retirement spending follows a decreasing

pattern, then this should be explicitly considered rather than assuming expected nominal income would match the pattern in real terms. This ensures that a trustee is fully accountable for the design decisions around the retirement income stream objective.

We recommend that inflation risk should be managed by the Trustee. It is a difficult risk to understand and manage by members.

We observe that 2.5% flexibility around the first year of income is irrelevant compared to the variability which arises from the nominal versus real income decision.

Figure 1: Inflation-linked life annuity and expected nominal life annuity income profiles in real terms for a male member with \$500K in superannuation and no other assessable assets.

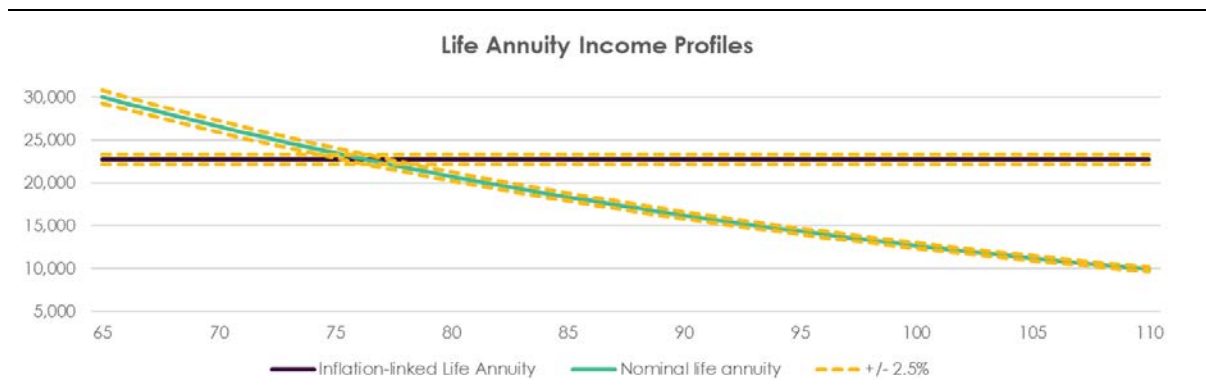


Figure 2: Past 20 years historical rolling annual inflation

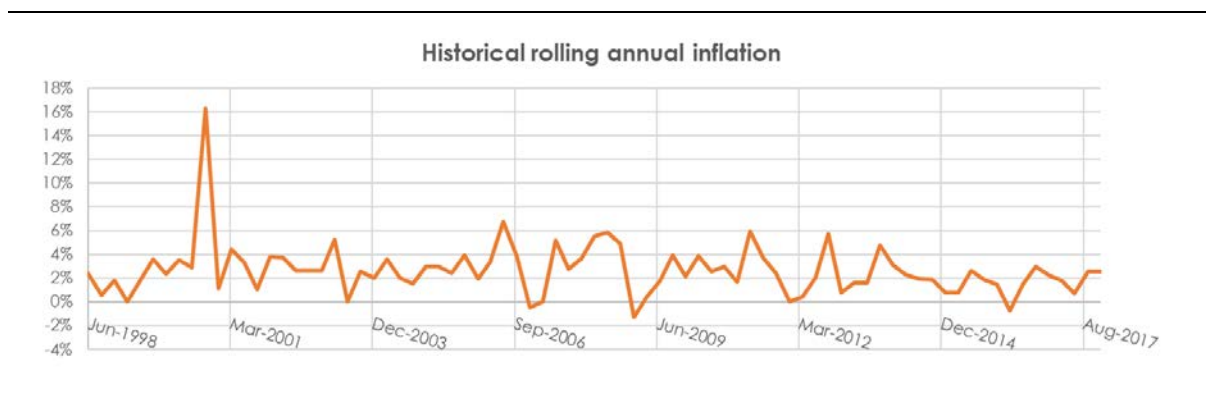
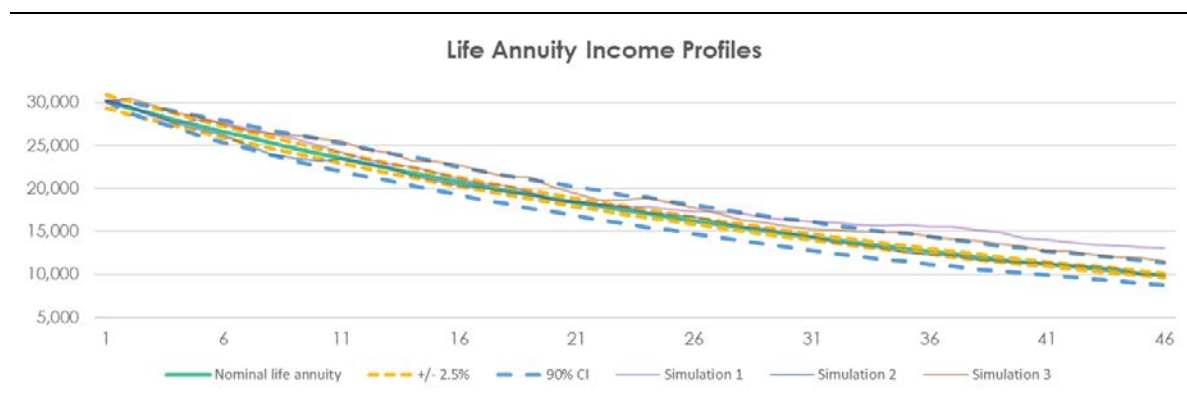


Figure 3: Nominal life annuity income profiles in real terms accounting for inflation risk for a male member with \$500K in superannuation and no other assessable assets.



(Table A7 in the Appendix provides detail of the underlying assumptions we used for modelling different retirement products in this paper. All figures are shown in real terms.)

Realistic CIPR Structure

Through the lens of “broadly constant” income, we consider how the different candidate CIPR structures are placed:

1. “The Stack”: following MDD rule will result in a broadly decreasing income pattern. As shown in Figure 4, using “the stack” structure as an example a 30% allocation to ABIS drawing down at MDD rules for life will fall outside the +/- 2.5% band.
2. “The Wrap”: experiences similar shortcomings as “The Stack” structure.
3. “The Cut”: the only structure which meets the CIPR design, unless MDD rules on ABIS are relaxed.

From here on our modelling is based on a “Cut” structure utilising an ABIS with modified drawdown rules which comply with the MDD rules (targeting a constant dollar payment over the first 20 years), complemented by a 20-year deferred inflation-linked life annuity (DLA). We will call this our “Base Case CIPR”.

To facilitate alternative structures Treasury may wish to consider allowing a change in MDD rules for ABIS used within CIPRs. On this topic, we refer to our previous submission where we wrote on the concept of a total income rule applied across all product components of a CIPR including the Age Pension.

Figure 4: Income profiles of 70% LA / 30% ABIS with MDD rule for a male member with \$500K in superannuation and no other assessable assets.



Age Pension and “broadly constant” income

Figure 5 reflects our Base Case CIPR. The first figure on the left panel illustrates “broadly constant” real income in expectation without the Age Pension. After adding Age Pension entitlements, (the second figure on the left panel) the expected income could be very far away from “broadly constant”.

If the Age Pension is incorporated in designing the “broadly constant” income (the third figure on the left panel), the income drawdown advice to members will then follow a decreasing glide path.

This simple case study shows how the dispersion in outcomes induced by the optionality of including the Age Pension significantly reduces the relevance of the “broadly constant” definition.

Figure 5: Income profiles of 20% DLA / 80% ABIS with target \$ drawdown for a male homeowner single with \$500K in superannuation and no other assessable assets.



Volatility of income

As shown in the right panel of Figure 5, under our Base Case CIPR with target income drawdown, members are exposed to income shortfall risk closer to the time before the DLA income kicks in. There is some potential that in targeting a constant level of income, the ABIS is exhausted of assets. In this case the risk is purely due to investment experience. The degree of potential shortfall risk is linked to

the degree of investment risk embedded in the ABIS. This example highlights the need to consider the range of possible outcomes and the sources of variability.

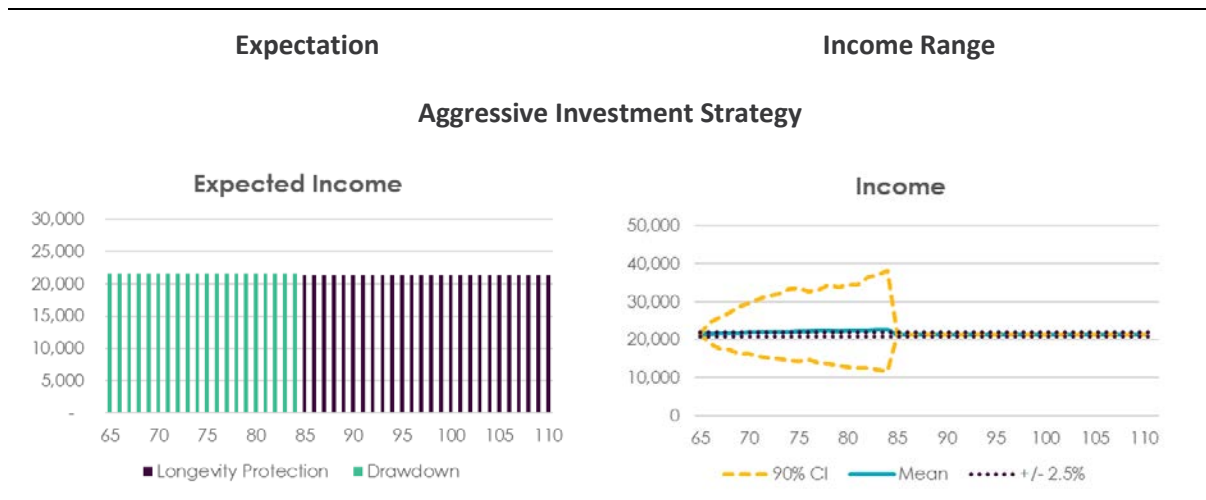
Another example is an alternative CIPR product similar to our Base Case CIPR but with a percentage drawdown designed to provide “broadly constant” real income in expectation. This design manages the risk of account exhaustion in exchange for some variation in year-to-year income.

Figure 6 shows the outcomes for two versions of this product, with each differentiated by the risk of the underlying investment strategy. For simplicity we ignore the Age Pension. In both cases we observe a large range of potential income experienced by members.

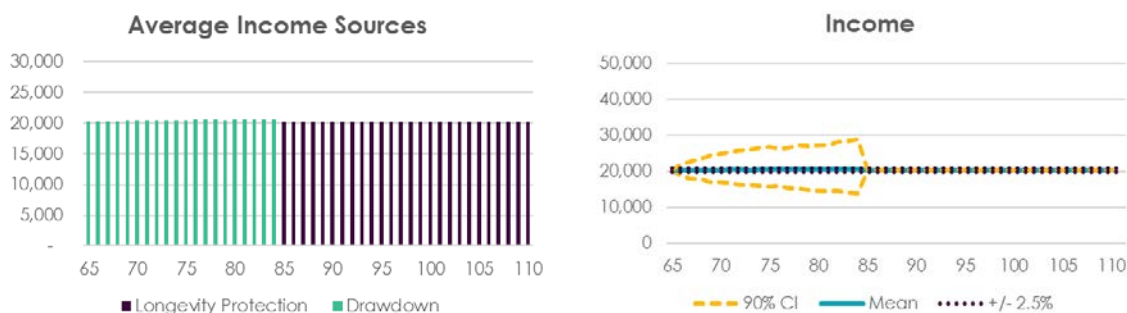
We are concerned that the position paper’s focus on broadly constant income suggests an agnostic approach to risk. We understand that this will be captured in the objective designed by each Fund.

Mine Super recommend that CIPRs should be required to provide members with a pay check for life. Instead of requiring “broadly constant” income in expectation with a narrow band of (+/- 2.5%), the focus should be requiring trustees to justify the choice of income patterns and manage the potential range of income experienced by members.

Figure 6: Income profiles of 20% DLA / 80% ABIS with % drawdown for a male homeowner single with \$500K in superannuation and no other assessable assets.



Balanced Investment Strategy



Incorporating Age Pension

Cost of not incorporating Age Pension

Retirement is a complex, multi-dimensional problem, where not all relevant information is known. Compared to the consultation paper, Treasury’s position paper encourages the consideration of a broader range of factors. The position paper outlines eight specific considerations. We support the need for broader considerations.

While the position paper notes the need to incorporate the “*expected member eligibility for the Age Pension*” when designing retirement solutions, we believe it should be mandatory under the framework proposed.

In our submission to the consultation paper we demonstrated the substantial welfare losses for members incurred by not incorporating the Age Pension into optimal retirement solution design. In many cases the Age Pension increases as assets are drawn down. In many cases it provides a significant amount of longevity protection.

Here we undertake a similar analysis, but use the Base Case CIPR structure outlined previously, thereby meeting the criteria of an expectation of a “*broadly constant*” income stream (and incorporating updated lifetime income stream means testing rules). **Table 1** displays the MDUF assessment for members with different balance levels, in one case incorporating the Age Pension into the design, and the other where the Age Pension is received but not incorporated into the design.

Whether or not we include the impact of residual benefits or not, the impact of not incorporating the Age Pension into CIPR design is sizable for all retirees (note that the two welfare gain measures are not directly comparable – utility-based calculations are quite complex). The welfare cost is the greatest for mid-balance retirees (which we define as \$500k at retirement). This is because incomes of the mid balance retirees will have the most varying interaction with the means tested Age Pension due to changes in eligibility from partial to full Age Pension over time (see the bottom panel of Figure 5).

Table 1: MDUF assessments of CIPR outcomes for a male homeowner single with \$200K, \$500K and \$1M in superannuation and no other assessable assets. Assuming the member’s strength of residual benefit motive is the same level as specified by MDUF v1.

| Retirement Strategy | Risk-Adjusted Income | Risk-Adjusted Residual Benefit | MDUF Score | Welfare Gain (with residual benefit motive – i.e. MDUF v1) | Welfare Gain (no residual benefit motive) |
|---|----------------------|--------------------------------|------------|--|---|
| \$200K | | | | | |
| Incorporating Age Pension (\$30K) | \$30,034 | \$27,661 | 7,228 | \$15K | \$48K |
| Not incorporating Age Pension (\$8K + Age Pension) | \$27,849 | \$25,454 | 6,652 | - | - |
| \$500K | | | | | |
| Incorporating Age Pension (\$39K) | \$37,299 | \$23,739 | 6,204 | \$8K | \$146K |
| Not incorporating Age Pension (\$20K + Age Pension) | \$30,665 | \$22,660 | 5,921 | - | - |
| \$1M | | | | | |
| Incorporating Age Pension (\$54K) | \$38,268 | \$16,018 | 4,186 | \$7K | \$35K |
| Not incorporating Age Pension (\$42K + Age Pension) | \$36,670 | \$15,036 | 3,929 | - | - |

Estimating Age Pension entitlements

We recognise that incorporating the Age Pension entitlement into the flagship CIPR design would require trustees to make assumptions on member’s Age Pension eligibility as this information is not known and traditionally has fallen under financial advice. This information include member’s:

- family status (single or couple);
- homeownership; and
- other assets.

We provide a simple analysis in Table 2 to compare the cost of CIPR design using incorrect assumptions on member’s Age Pension eligibility versus the cost of not incorporating the Age Pension completely.

For family status, if we incorrectly assume the member has a partner while he is single, we might underestimate his Age Pension entitlements because half of the couple payment rate is lower than the single rate. In this case, we have implicitly assumed his partner has the same balance as him. As a result, the CIPR design would suggest a more conservative income target to the member. This might then result in underspending and over-saving. Similarly, for homeownership, if we incorrectly assume the member does not own his family home when he does, we might overestimate his Age Pension entitlements, and this could result in overspending and outliving his savings.

As shown in Table 2, despite the uncertainty around the estimation due to the above assumptions, members are still going to be better off with a CIPR design that incorporates the Age Pension as it is much more costly to members not to incorporate it at all.

We share Treasury’s concern that *“in some cases it may be problematic due to variations in Age Pension eligibility in the cohort”*. This is where engagement and potentially moving members into an advised environment would be beneficial.

Table 2: MDUF assessments of CIPR outcomes considering Age Pension estimation errors for a male homeowner single with \$500K in superannuation and no other assessable assets. Assuming the member’s strength of residual benefit motive is the same level as specified by MDUF v1.

| Retirement Strategy | Risk-Adjusted Income | Risk-Adjusted Residual Benefit | MDUF Score | Welfare Gain (with residual benefit motive – i.e. MDUF v1) | Welfare Gain (no residual benefit motive) |
|---|----------------------|--------------------------------|------------|--|---|
| Incorporating Age Pension (\$39K) | \$37,299 | \$23,739 | 6,204 | - | - |
| Not incorporating Age Pension (\$20K + Age Pension) | \$30,665 | \$22,660 | 5,921 | -\$8K | -\$146K |
| Incorporating Age Pension (incorrect family status) (\$33K) | \$33,614 | \$46,905 | 12,256 | \$163K | -\$81K |
| Incorporating Age Pension (incorrect homeownership) (\$40K) | \$37,060 | \$22,856 | 5,973 | -\$6K | -\$5K |

Lifecycle approach to Age Pension

If trustees incorporate Age Pension in CIPR design, we suggest the Age Pension should be estimated based on a lifecycle approach. In the position paper, it states that *“allowing for three flagship CIPRs will enable trustees to design different CIPRs for people who, based on their superannuation account balance, are likely to be eligible for the full Age Pension, part Age Pension or who are ineligible for the*

Age Pension". Members' eligibility for the Age Pension changes over time and the payment amounts depend on the structure of CIPR as means-testing rules are different for account-based pension and lifetime income stream products. Members are more likely to receive higher Age Pension payments in later retirement as their asset levels become lower. Providing solutions only based on their eligibility at the time they retire would likely underestimate the lifetime value of the Age Pension received by the members.

Age Pension has some characteristics of a lifetime annuity. The lifecycle approach will provide better estimation of members' Age Pension entitlements and this should be considered when determining the allocation to longevity components in CIPR design.

Overall, we recommend mandating the requirement of incorporating the Age Pension (estimated based on a lifecycle approach) in CIPR design.

Longevity Component of CIPRs

Threshold of \$50K

The position paper outlines that trustees are not required to offer a CIPR at all to members with less than \$50K in superannuation assets in that fund. The reason is that the Age Pension is likely to provide sufficient longevity protection and the cost of administration of the CIPR could outweigh the additional income benefit to members. Hard thresholds such as \$50K might not be the best way of determining an exception. For example, trustees will still be required to offer a CIPR to a member with a balance of \$51K despite the net benefit to the member being questionable.

Not offering a CIPR means members will likely stay in the status quo which is 100% ABIS and drawing down based on MDD rules. As shown in the first panel of Figure 7, for members with a balance of \$50K, the income streams generated from ABIS is insignificant compared to the Age Pension (the ABIS payment makes up less than 10% of the total retirement income in the first year).

The second panel of Figure 7 considers the same scenario for a member retiring with \$100K. The payments from the ABIS make up about 18% of the first year's total retirement income. Would a CIPR make more efficient use of the member's retirement savings? In the third panel of Figure 7 we apply our Base Case CIPR design to the member retiring with \$100K. We can identify, as expected, a greater consistency in expected income through life. However Table 3 reveals an overall lower level of risk-adjusted income, and a lower risk-adjusted residual benefit. Overall, through an MDUF lens we calculate a welfare cost of having a CIPR rather than staying in the status quo. One reason for this is an over-insurance against longevity risk, as the Age Pension provides substantial protection to the member.

Finally, we ask ourselves is there any benefit in designing a tailored set of drawdown rules which improves the interaction between the ABIS and the Age Pension. This is illustrated in the fourth panel of Figure 7 and with the welfare assessment included in Table 3. This approach results in a lower overall level of retirement income as the investor self-insures longevity risk by drawing down conservatively and not participating in mortality credits. The benefit of such an approach is a higher expected residual benefit throughout life, resulting in a higher overall benefit when measured by MDUF.

An overall comment is that the variation in outcomes for the member retiring with \$100k is reasonably small across the three alternative strategies. The degree of variability due to strategy selection may

be less than the variability due to risk sources (investment and mortality risks) discussed previously, and a topic left unaddressed by Treasury in its position paper.

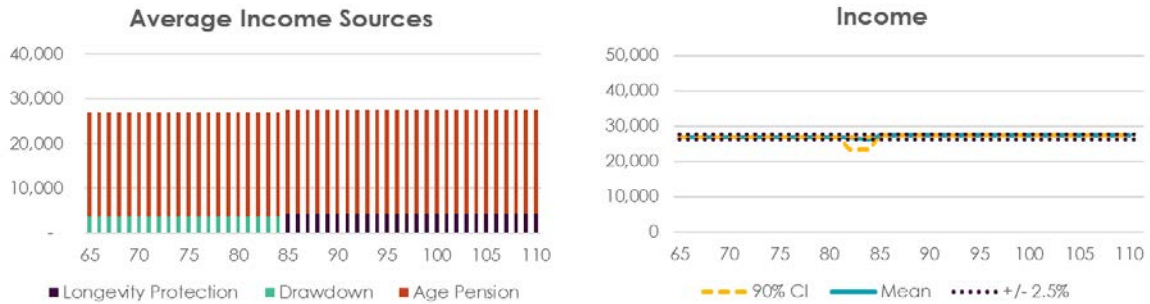
Indeed, the case of the \$100K retiree generates a lot to consider:

- comparing one source of variability (the design impact on expected income) and no other sources of variability makes the consideration of design rules difficult.
- simple cut-off thresholds are difficult to incorporate into a framework which is complex.
- clear guidance on whether to include the Age Pension has a significant impact on the design and outcomes of low balance members, leading to the recommendation of a CIPR exemption for low balance members. Yet previous sections reveal the significance of the Age Pension to mid balance members as well.

Figure 7: Income profiles for a male homeowner single with \$50K and \$100K in superannuation and no other assessable assets.



\$100K: CIPR (20% DLA / 80% ABIS with target \$ drawdown)



\$100K: 100% ABIS with target \$ drawdown

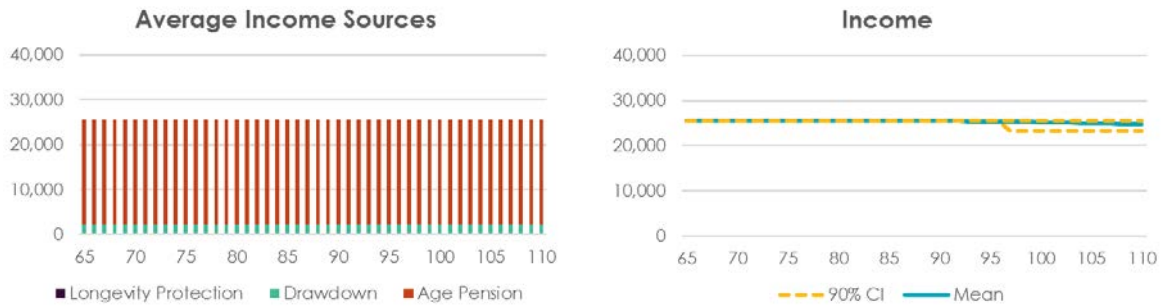


Table 3: MDUF assessments of outcomes for a male homeowner single with \$100K in superannuation and no other assessable assets. Assuming the member’s strength of residual benefit motive is the same level as specified by MDUF v1.

| Retirement Strategy | Risk-Adjusted Income | Risk-Adjusted Residual Benefit | MDUF Score | Welfare Gain (with residual benefit motive) | Welfare Gain (no residual benefit motive) |
|---|----------------------|--------------------------------|------------|---|---|
| 100% ABIS with MDD rules | \$26,636 | \$26,128 | 6,828 | - | - |
| CIPR (20% DLA / 80% ABIS with target \$ drawdown) | \$26,617 | \$26,063 | 6,811 | <-\$1K | <-\$1K |
| 100% ABIS with target \$ drawdown | \$25,493 | \$31,675 | 8,277 | \$39K | -\$25K |

Drawdown Strategies of ABIS

As demonstrated in the previous section, for lower balance members, the Age Pension provides a significant proportion of retirement income and a substantial degree of longevity protection. As demonstrated in

Table 3, offering a CIPR might not enhance the retirement outcomes of low balance members. Providing guidance on appropriate ABIS drawdown strategies can add value and is low cost. We suggest that CIPR could be better framed as three components which need to be integrated into a design:

- **ABIS:** allocation, investment strategy and drawdown strategy
- **Longevity solution:** deferral period, allocation and investment strategy if applicable
- **Age Pension:** eligibility, lifecycle projection

All three components should be considered in aggregate to determine an appropriate income goal for the members, cognisant of the risks to retirement. As a result, we recommend instead of setting a hard threshold of \$50K for CIPR exceptions, trustees should consider the appropriateness of offering a CIPR with a longevity solution depends on a member's situation. In some cases, trustees should choose not to offer a CIPR with a longevity solution to members who already have sufficient longevity protection from the Age Pension. However, a trustee should still offer guidance on ABIS drawdown for members taking into account the Age Pension.

Note that in some cases (e.g. the example shown in the fourth panel of

Table 3), a more suitable drawdown strategy of the account-based pension might result in a breach to the MDD rules. Exemptions from MDD rules would be needed for trustees to provide such drawdown guidance to members.

Personalisation

The position paper outlines that trustees could offer up to three flagship CIPRs based on balance. This would enable a fund to tailor for three categories of Age Pension eligibility: full, part, and minimal. With respect to tailoring our understanding is outlined below.

What can be tailored:

1. The split between ABIS and longevity components based on gender and age.
2. ABIS drawdown schedule based on gender and age, targeting an expected broadly constant income level.
3. The pricing of the longevity policy, whether guaranteed or non-guaranteed, based on any characteristic that affects life expectancy and can be reliably estimated: gender, age, whether a member is a smoker or non-smoker, or whether a member is a blue or white-collar worker.
4. The pricing of the longevity policy based on whether it includes a reversionary benefit (and the characteristics of that benefit).
5. The adjusted split between ABIS and longevity based on the pricing of the longevity solution, affected by (3) and (4).

What cannot be tailored:

- Underlying investment portfolio (balanced to conservative).

- Strategy to manage longevity risk (through delaying the commencement of a deferred longevity policy).

Wealth / balance and impact on longevity policy pricing

It is well known in research² that a negative relationship exists between wealth and mortality. It would be intuitive for the underwriting process of a longevity policy to consider wealth, which includes superannuation balance.

This creates a situation whereby information around balance is used inconsistently: it can be used in the pricing of longevity policies, which would then flow through to impact the split between ABIS and the longevity policy.

We recommend allowing the full incorporation of balance rather than ad hoc incorporation.

Personalisation inconsistently applied – balance is crucial

It appears, in proposed form, that a flagship CIPR allows personalisation based on gender, age and other underwriting factors for the pricing of longevity components. Only three CIPR's are permitted to account for different levels of balance, appearing a deliberate decision to restrict the ability to personalise on balance.

The existence of tailored longevity policy pricing, regardless of factor (it could be age, gender, smoking status etc.) means that the CIPR will then need to be re-cut. Consideration will need to be given to the split between ABIS, longevity policy, and the design of the drawdown rules. An important piece of reference information is balance and specifically the interaction of balance and Age Pension.

Our point is that, if we focus on retirement income in aggregate (incorporating Age Pension), the elements of personalisation and re-cutting (post longevity policy pricing) introduced by Treasury in the position paper create a fallout process which requires balance to be incorporated, regardless of whether there are three CIPRs.

The need to incorporate balance takes greater importance if we incorporate the Age Pension. **Table 4** shows the range of retirement balances for members who are likely to be initially eligible for the full Age Pension, part Age Pension and no Age Pension. There will only be one CIPR offering allowed for each of the three balance cohorts despite the wide range of balances within each cohort.

Table 4: Retirement balance cohorts for different Age Pension eligibilities. The analysis provides approximated ranges assuming 20% DLA / 80% ABIS with target \$ drawdown.

| Age Pension Eligibility | Balance Cohorts |
|-------------------------|-----------------|
| Full Age Pension | \$0 - \$250K |

² For example see *Long-Term Effects of Wealth on Mortality and Self-rated Health Status* by Anjum Hajat, Jay S. Kaufman, Kathryn M. Rose, Arjumand Siddiqi, James C. Thomas - <https://academic.oup.com/aje/article/173/2/192/99467>

| | |
|------------------|-----------------|
| Part Age Pension | \$250K - \$600K |
| No Age Pension | >\$600K |

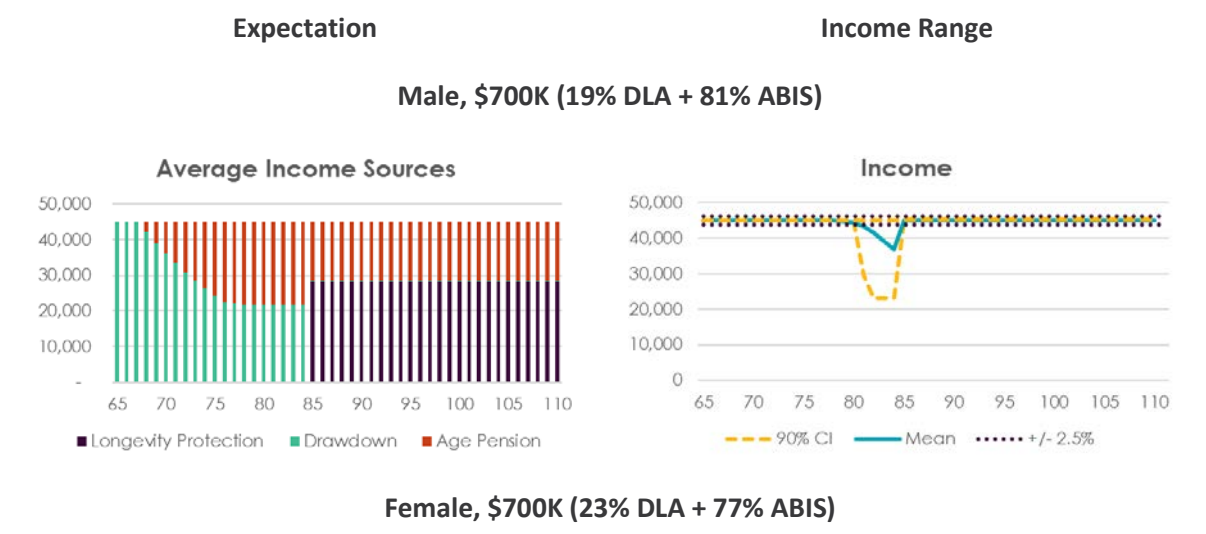
We believe the range of CIPRs should not be restricted to only three broader balance levels. This is because balance directly impacts Age Pension eligibility. Different balances would result in very different Age Pension entitlement over the member’s lifetime. This would impact the design of appropriate income targets, drawdown strategies and allocation to longevity components.

As shown in Figure 8, with the same level of retirement balance of \$700K, a male homeowner single member would need to allocate 19% to DLA to achieve a real annual income of \$45K. A female member with the same situation will need to allocate 23% to DLA due to longer life expectancy than the male which makes DLA more expensive to purchase. As a result, a slightly reduced income target of \$44K is more appropriate. Despite the differences in allocation to DLA, the overall income structures are very similar for the two. We can see the benefit of incorporating gender – there is an impact, but it is small.

On the other hand, as shown in **Table 5**, the impact of balance to member outcomes could be much more substantial, even if within the same balance cohort (as defined in **Table 4**). We can see in comparing the optimal Base Case CIPR designs for a male member with \$700K retirement balance and one with \$1.2M (top and bottom panels of Figure 8), that the allocation to the longevity policy is quite similar (19% versus 20%) but significant differences exist in the ABIS drawdown schedule.

All the above suggests that CIPR designs should allow tailoring based on member’s balance.

Figure 8: Income profiles of potential CIPRs for a homeowner single member with higher balances who are ineligible for the Age Pension at retirement. The analysis is done for different genders and balances in superannuation and no other assessable assets.



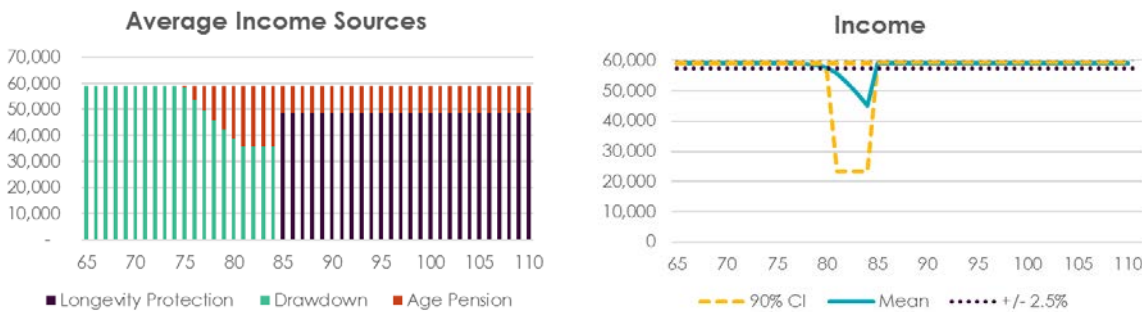
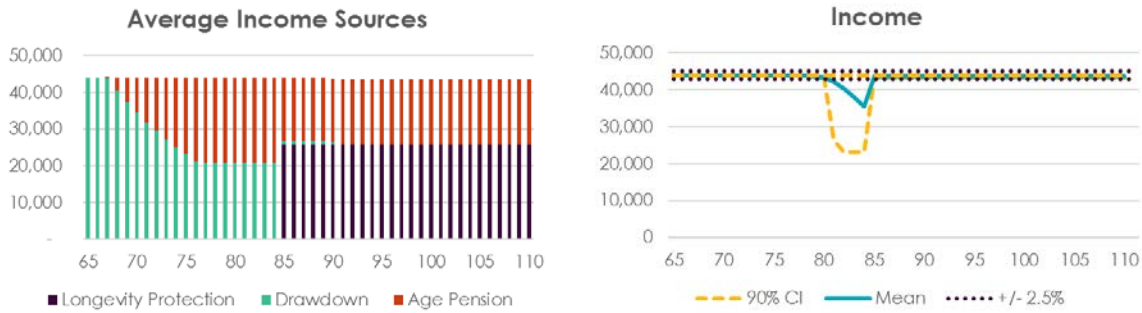


Table 5: MDUF assessments of potential CIPRs for a homeowner single male with \$700K in superannuation and no other assessable assets. Assuming the member's strength of residual benefit motive is the same level as specified by MDUF v1.

| Retirement Strategy | Risk-Adjusted Income | Risk-Adjusted Residual Benefit | MDUF Score | Welfare Gain (with residual benefit motive) | Welfare Gain (no residual benefit motive) |
|---|----------------------|--------------------------------|------------|---|---|
| Using personalised CIPR designed for \$700K | \$37,848 | \$19,591 | 5,119 | - | - |
| Using CIPR designed for Female | \$37,776 | \$18,127 | 4,737 | -\$10K | -\$2K |
| Using CIPR designed for \$1.2M | \$29,138 | \$17,627 | 4,606 | -\$14K | -\$192K |

Value of Residual Benefit

Value of reversionary benefit

The position paper states that “trustees would need to give members the option to include a reversionary benefit in the CIPR”. Including a reversionary benefit within the longevity policy would reduce the level of expected income. A reversionary benefit, conditional on balance is a component of an ABIS. With multiple sources of potential reversionary benefit, producing guaranteed and variable components, we envisage that it would be difficult for funds to communicate the reversionary benefit profile.

Mine Super believe that the decision around whether to provide this optionality should sit with the trustee. For example, a trustee may take the view that a small allocation to a deferred solution doesn’t warrant the cost and complexity of making a reversionary benefit available within the CIPR framework. The question of reversionary benefit may direct a member into financial advice.

The aggregate measure of outcomes, weighted by probability, also becomes more complex when reversionary benefits are formally considered. This is where frameworks such as MDUF v1 have great value.

Value of access to capital

One of the eight important factors listed in the position paper for trustees to consider when designing CIPRs is “providing members with access to capital”. We believe members place value on access to capital, but it is difficult to place a value on access to capital. The MDUF Working Group members spent significant time considering how access to capital could be valued, and no clear solution was identified. In MDUF it is partly, and only loosely captured in the residual benefit motive. With respect to access we are realistically left with a discretionary assessment by the trustee of what is an appropriate level of access, and the trade-off between access and other preferences.

Overall, the inability to place a value on access to capital makes it difficult to compare different CIPRs. We suggest that Treasury provide a formal age-based schedule of minimum accessibility to capital in the CIPR guidelines. We provided additional detail on this in our previous submission.

Other Considerations

CIPR Certifications and CIPR disclosure need to be designed in conjunction

The Treasury appears to have changed its approach to CIPR certifications from a more prescriptive Actuarial Certification Tests (ACTs) approach to a more principles-based approach. We found the ACTs too restrictive and are pleased they have been removed. Moving to a principles-based approach increases the responsibilities and accountabilities of trustees. It allows the consideration of features beyond the eight listed in the position paper. We believe that a principles-based approach will allow for greater product innovation (note that we reflect in a later section on whether CIPR will lead to innovation or not).

However, in removing the ACTs and adopting a principles-based approach, Treasury will reduce comparability across the different CIPRs in the marketplace. The decision around CIPR Certification needs to be made in conjunction with the approach to disclosure of CIPR income and associated

product features. There are important trade-offs to be considered by Treasury with respect to product flexibility and innovation versus ease of product comparability and associated disclosure.

Consider the scenario that CIPR Certification remains principles-based but CIPR disclosure is standardised and based on an expected level of income. The dangers of such an approach quickly become apparent:

- The disclosure process is risk agnostic – greater risk-taking results in higher expected income but the consumer may be unaware that the variability in experiences may be unacceptably high.
- Features such as access to capital and reversionary benefits are not disclosed in an income only disclosure framework.
- Comparing CIPRs designed on different combinations of principles such as nominal versus real income, and incorporation versus no consideration of Age Pension will prove difficult.

We believe adequate risk management of a CIPR should be a key component of the certification requirement. This could come through onsite assessment of the design and management processes undertaken by APRA through a licensing regime.

Fee Disclosure

It is important to consider how fees would be disclosed around CIPRs, particularly in light of the complexity and operational difficulty associated with RG97 fee disclosure. In addition to fee disclosure relating to non-CIPR products (super and ABIS), consider the following:

- The potential introduction of life policy solutions for which there is typically no fee, rather a return on equity to the provider.
- Would there be a need to produce an aggregated fee for a CIPR, or is it possible to provide fee breakdowns on the individual components?
- If fees are reported at the whole-of-CIPR level, then the mix of products (ABIS and longevity policy) change through time – will there be a requirement to update fees through time?
- We have also identified the potential that CIPRs will be unique to the individual. Will there be a requirement for individual fee calculations?

Implications of members' consent

The position paper states that “members would need to explicitly indicate that they were willing to accept the CIPR in order for it to commence”. Each member will be offered one CIPR that is considered to be most suitable based on what trustees know about them. Members will then decide whether to accept the CIPR or consider alternatives such as a lump sum, ABIS or financial advice.

We identify two important implications of this opt-in basis model to the longevity components design of CIPR:

- The pricing of the longevity component will need to consider adverse selection (whereby people self-select longevity solutions because they have some insight into their own health and mortality prospects). The potential for adverse selection issues will likely make longevity products more expensive to purchase thus resulting in a higher required allocation to the

longevity products. A reframing to an opt-out may reduce the degree of expense associated with adverse selection.

- Cohort-based group self-annuitisation products would also need to consider pool size issues and the impact on a member’s outcome if sufficient scale cannot be achieved. Insufficient scale is likely to increase the volatility of a members’ income experience and result in a broader range of outcomes.

Impaired Product Safety Net

Mine Super’s submission to DSS with respect to Means Test Rules for Lifetime Retirement Income Streams proposed the need for an impaired product safety net, removing a structural impediment to fair Age Pension eligibility in the event of failure of a lifetime retirement income stream product (default in the case of a life company, or capital exhaustion in the case of a non-guaranteed pooled solution). Specifically, a “failed” product currently remains assessed based on its purchase price – we believe a failed lifetime retirement income stream product should be marked down to zero for asset testing purposes. We believe this is even more important in the case of CIPR products where there may be a less than fully informed choice made by the consumer.

This issue remained unaddressed by DSS and we raise it again in the hope that Treasury and DSS can collaborate on this issue.

Impairment would mean that the lifetime income stream product may pay little or no income from a particular point onwards. In such a circumstance for low balance members the Asset Test would become binding, and the member would not be affected. A higher Age Pension payment may result, but it may still be lower than a fair level as it is bound by the Asset Test and the asset value of the product is impaired but not recognised as such.

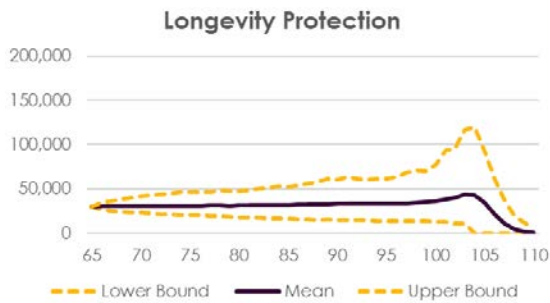
However, there are cases where a member can be affected more adversely. To illustrate our concerns **Figure 9** shows the range of lifetime incomes and the Age Pension a male homeowner with different balances would receive if he invests 100% into an immediate GSA. Members with mid to high balances are likely to experience a period where the Asset Test is the binding test. For a balance of \$600K, the Asset Test binding period is the first 3 years in retirement. During this period product impairment would mean impaired income and potentially no or only a partial uplift in Age Pension. We believe this violates the equity principle for developing the mean test rules. The Asset Test binding period is longer for higher balance members. For a balance of \$800K it is about 10 years and for \$1M it is about 15 years.

We recommend the development of consumer protection safeguards. Implementation of consumer protection safeguards could take the form of a government agent assessing the request of a product issuer, super fund trustee, or individual, to determine if a lifetime income stream product is impaired. If it is ruled to be impaired then the value of the product could be reduced by an appropriate amount, to be determined by the agency, thereby improving the Asset Test aspects of the Age Pension means tests.

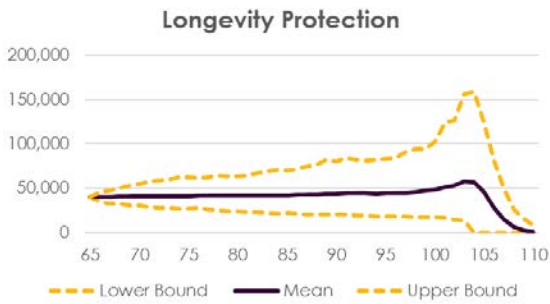
Figure 9: Age Pension entitlements assessment for immediate GSA for a male homeowner with different balance levels.

| Lifetime income streams | Age Pension |
|-------------------------|-------------|
|-------------------------|-------------|

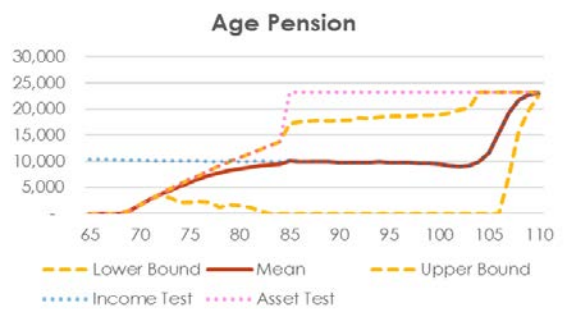
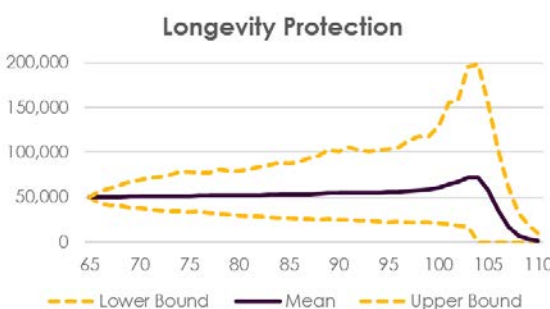
\$600K



\$800K



\$1M



Terminology: “flagship CIPR” and “alternate CIPR”

We suggest that the use of terms such as “flagship CIPR” and “alternate CIPR” will create confusion. We recommend that the term “CIPR” be reserved for the default product, and that terms “flagship” and “alternate” are not used in conjunction with “CIPR”. There already exists plenty of terminology appropriate for more tailored financial products and services.

Safe Harbour

If safe harbour provisions are to be extended, then Mine Super believes the terminology of a “CIPR” rather than “flagship CIPR” and “alternate CIPR” makes it clear where the safe harbour provisions apply.

Dynamic Strategies

We seek clarity from Treasury around whether dynamic techniques (re-evaluating and re-determining the appropriate mix of products, investment mix, and drawdown strategy through time) are permitted within a CIPR or whether they reside outside the CIPR framework.

Our research leads us to believe that more frequent re-assessment adds significantly to member outcomes.

Lifecycle Investment Strategies

We seek clarity from Treasury around whether a pre-determined lifecycle investment strategy (which might depend on factors such as age, gender and balance) are permitted within a CIPR or whether they reside outside the CIPR framework.

Industry cost and timing

Personalisation

The CIPR framework outlined in Treasury’s position paper effectively details a personalised strategy. Currently no personalised strategies exist in accumulation, predominantly for the reasons of complexity and cost. Retirement solutions are even more complex because of the combination of multiple products, interaction with the Age Pension, and the requirement to manage longevity risk. It is not just the front-end algorithms which are required: any developed model needs to be integrated across all relevant systems which serve the member. For instance, if a member called Mine Super’s service centre we would need to be able to have a CRM system at hand which could provide detail of how the personalised strategy was designed, its performance, and its updated expectation (which will change with time). All of this is complex and costly. We estimate the cost of implementing the CIPR outlined in the position paper as far greater than the CIPR outlined in the consultation paper.

Cost

Compared with the proposed CIPR outlined in the consultation paper and defined by the ACTs, the principles-based CIPR outlined in the position paper with a number of areas of personalised features would be much more expensive to implement. Effectively the product would now be a restricted offering within a personalised framework, incurring much of the cost of a full personalisation framework. The key areas of cost include:

- establishing a retirement solutions business to design algorithms
- IT to develop mapping systems

- interface with CRM (customer relationship management systems) to support communication to members
- substantial changes to administrative systems to support an infinite number of combinations of:
 - Product components: ABIS and longevity policy
 - ABIS drawdown rules
 - Longevity policy specifications (e.g. reversionary benefit)

Pooling solutions

At present there is a dearth of appropriate longevity solutions to support the provision of CIPRs. While we are aware of further entrants into the life policy market, the development of pooling-based, non-guaranteed solutions is only at an embryonic stage. We believe at least three years would be an appropriate timeframe to allow for the implementation of these solutions.

Third party providers and disincentives

It will be quite appropriate for many funds to outsource the longevity policy component to an external provider. In the case of small funds developing their own CIPR it would be important for them to justify why they wouldn't outsource the longevity component, given complexity and pool size challenges.

Given the high potential costs, moderate expected take-up (given opt-in, and anticipated difficulties in ethically explaining the value-add relative to an ABIS), and the internal desire of many funds to engage with members at the point of retirement rather than have them default – it is not unreasonable to expect many funds to outsource their complete CIPR solution. This would likely result in a superannuation fund raising engagement efforts at the point of retirement to ensure they do not lose the member's assets to an external provider. Indeed, it is easy to envisage a superannuation fund that has outsourced its CIPR to target zero members entering its CIPR. This in turn would create a very difficult market structure for firms considering the business case for becoming a provider of outsourced CIPR solutions. This would likely flow back to a higher fee for CIPR service provision and reduced levels of product innovation.

Timing

The elements of personalisation and the potential value-add of developing non-guaranteed longevity pooling solutions, and our knowledge of the associated development complexities leads us to recommend a CIPR development timeframe of at least three years from the time that the policy is confirmed.

Overall, will CIPRs improve member outcomes?

This is a difficult question to address but it is ultimately the most important question to consider. Our answer is based on a function of estimated benefit to the individual multiplied by the number of members likely to take-up a CIPR.

First, we theoretically address the question of individual benefit:

- We assume that the focus is on real (not nominal) total experiences (i.e. inclusive of Age Pension). Our CIPR is designed accordingly.
- We use preferences described by MDUF v1.

- Our assessment is based on the Base Case CIPR solution compared with our assumed status quo case of an ABIS applying MDD.
- As shown in **Table 6**, through the lens of MDUF v1, Base Case CIPR might not be able to add value to members compared to the status quo. Base Case CIPR would add value if members preference is to focus on the income side and place no value on residual benefit, access to capital and liquidity. Note that a different set of preferences to trade-off between incomes and residual benefits would produce different results in the value-add assessment.
- Outcomes can be improved by:
 - properly designed non-guaranteed pooled solutions (assuming pool sizes are sufficient etc.)
 - dynamic solutions (if permitted)
 - lifecycle investment strategies (if permitted)
 - encouraging trustees to invest in understanding member’s preferences and incorporate them when assessing value add of a CIPR. This might mean a different set of preferences reflected to those in MDUF v1 and thus different assessment results.

Second, our estimation of overall take-up is low for the following reasons:

- The value-add argument is not compelling.
- The need to opt-in.
- The desire of funds to engage with members at the point of retirement.
- We anticipate that most of the take-up in CIPR will be amongst low to medium balance members – high balance members are more likely to pay for financial advice.

Overall, we expect low to negative system value-add would be generated by the introduction of a CIPR as outlined in the position paper.

Table 6: MDUF assessments of Base Case CIPR outcomes for a male homeowner single with \$200K, \$500K and \$1M in superannuation and no other assessable assets. Assuming the member’s strength of residual benefit motive is the same level as specified by MDUF v1.

| Retirement Strategy | Risk-Adjusted Income | Risk-Adjusted Residual Benefit | MDUF Score | Welfare Gain (with residual benefit motive – i.e. MDUF v1) | Welfare Gain (no residual benefit motive) |
|---------------------|----------------------|--------------------------------|------------|--|---|
| \$200K | | | | | |
| Base Case CIPR | \$30,034 | \$27,661 | 7,228 | -\$15K | \$9K |
| ABIS with MDD rules | \$29,612 | \$29,803 | 7,788 | - | - |

| \$500K | | | | | |
|---------------------|----------|----------|--------|---------|--------|
| Base Case CIPR | \$37,299 | \$23,739 | 6,204 | -\$105K | \$105K |
| ABIS with MDD rules | \$32,534 | \$38,686 | 10,109 | - | - |
| \$1M | | | | | |
| Base Case CIPR | \$38,268 | \$16,018 | 4,186 | -\$234K | \$15K |
| ABIS with MDD rules | \$37,581 | \$49,414 | 12,912 | - | - |

Conclusion - key issues for Treasury to consider

We identify a range of issues which we believe is most important for Treasury to resolve:

1. Resolving base case objectives (with our position underlined) around:
 - a. Real versus nominal income targeting
 - b. Whether or not to incorporate Age Pension entitlements

The variability introduced by these issues being left to the discretion of the trustee far exceeds the 2.5% degree of flexibility (relative to first year income).
2. The degree of personalisation to be incorporated into the CIPR. Our interpretation of the position paper is that the principles-based CIPR outlines many areas which require a personalisation framework, without permitting the full benefits that personalisation can provide. In this situation most of the costs of developing a personalisation strategy will still be incurred.
3. The CIPR framework outlined in the position paper allows for / requires direct personalisation based on age and gender, and indirect personalisation based on balance. We recommend that if the CIPR design continues down the path outlined in the position paper then it should be expanded to allow personalisation based on balance and remove the three flagship CIPR rule.
4. Work through the CIPR certification and CIPR disclosure process in an integrated manner. Our understanding is that the spirit of the CIPR disclosure process will be to make disclosure as simple as possible and focus on the expected level of income provided. We have concerns that this will not appropriately explain important features such as risk, access to capital, reversionary benefit, and trustee designed variability in expected income through time.
5. We encourage Treasury to assess the industry cost and possible outcomes of the principles-based CIPR framework outlined in the position paper. We have detailed why we believe the cost is high to develop a CIPR as outlined and suggest a likely scenario of a large amount of outsourcing but a market structure where there is little incentive to be the outsourced CIPR service provider.
6. We recommend that trustees be required to develop a quantifiable objective to enable them to design solutions and to assess between alternative solutions.

7. We encourage Treasury to consider practical rules and guidelines around access to capital, fee disclosure and opt-out.
8. We encourage Treasury to work with DSS to create an impaired product safety net, focused on lifetime income solutions.
9. We believe an appropriate timeframe for CIPR development, based on the principles-based CIPR outlined with some personalisation components, would be three years from the time a policy is confirmed.

Appendix 1

Table A7: Modelling assumptions for retirement products

| Retirement Products | Description | Mortality | Investment | Fee | Age Pension Treatment |
|--|--|---|---------------------------------|--------|--|
| Account-based income stream (ABIS) | Regular income drawdown from Account-based pension (ABP) that targets a certain period. Alternatively, income drawdown at the minimum drawdown (MDD) rate if stated. | N/A | 50% Risky asset + 50% Risk free | No fee | Current Age Pension Rule |
| Life annuity (LA) | An annuity product that provides guaranteed inflation-linked payments immediately after purchase and the payments will last until death. | Government Actuary Life Tables (ALT2010-12) + 25 years improvement rated down 3 years | Risk free rate | | New Means Test Rules for Pooled Lifetime Retirement Income Streams |
| Deferred life annuity (DLA) | An annuity product that provides guaranteed inflation-linked payments after a particular age is reached and the payments will last until death. | | | | |
| Group self-annuitisation (GSA) | An annuity product where participants contribute funds to a pool, the product is designed to provide inflation-linked payments immediately after purchase and the payments are expected to last until death. Actual payments are not guaranteed, they depend on investment performance and mortality experience within the pool. | Same mortality assumption as LA & DLA with a closed pool of 500 | Same investment mix as ABIS | | |
| Deferred group self-annuitisation (DGSA) | An annuity product where participants contribute funds to a pool, the product is designed to provide inflation-linked payments after a particular age is reached and the payments are expected to last until death. Actual payments are not guaranteed, they depend | | | | |

| | | | | | |
|--|---|--|--|--|--|
| | on investment performance and mortality experience within the pool. | | | | |
|--|---|--|--|--|--|

