Means Test Rules for Lifetime Retirement Income Streams

Response to DSS January 2018 Position Paper

16 February 2018



1. Executive summary

Over recent years, the Government has embarked on superannuation reforms to enhance outcomes for retirees and support fiscal sustainability. These reforms aim to help retirees manage consumption and longevity risks in retirement and ensure superannuation is used as it was intended: to provide income in retirement to replace or supplement the age pension. This would result in a higher standard of living for retirees, while improving fiscal outcomes by reducing the leakage of concessionally taxed superannuation savings in the form of bequests.

The DSS position paper on means test rules for lifetime retirement income streams highlights the importance of determining a means test treatment for all products that is aligned with these policy objectives. Ultimately, the rules should:

- encourage retirees to use their superannuation as intended in retirement (not for bequests);
- · direct resources where they are needed most; and
- help reduce the likelihood of future reliance on the age pension (retirees who can self-provide should do so through effective longevity planning).

Neutrality is the cornerstone to achieving these objectives. Retirees will choose, and advisers will recommend, the products they believe provide the best overall outcome, including age pension.

Neutrality is not easy to achieve, and no solution will be perfectly neutral for all people in all circumstances. It's also harder to achieve with a simple treatment, but this trade-off for simplicity is also very important.

The DSS proposal in its current form does not achieve neutrality between products for many retirees as they would receive more age pension and leave a higher death benefit if they chose an account based income stream. The higher the allocation to a pooled product, the more punitive the age pension outcome.

As a result, we think the proposed treatment will discourage use of pooled lifetime products, particularly for those with average and lower balances and older retirees.

It will encourage retirees to use account based income streams and rely fully on the age pension if they live longer than expected or experience a significant market shock. This leaves the Government bearing a significant fiscal risk.

Recognising the extensive work done by DSS to develop a proposal that is simple for retirees and creates a neutral playing field for all products, we believe it's possible to achieve these outcomes by adjusting the proposal. Most importantly, we think this can be done using the simple approach proposed.

Challenger has assessed reducing the proposed income test to 50% and found this treatment produces more product neutral outcomes and supports fiscal sustainability. This approach:

- improves neutrality for all cohorts including older retirees;
- provides a solution that is supportive of the MyRetirement reforms;
- results in a lower age pension cost for lifetime annuities than the current treatment; and
- results in a similar age pension cost between lifetime annuities and account based income streams.

2. Neutrality issues

It appears the proposed rules are not sufficiently neutral between products because of issues with some of the assumptions and methodology used by DSS in the product comparisons.

Charts 1a and 1b illustrate the impact on neutrality caused by three key issues with the approach taken:

 Neutrality has been assessed on an income basis excluding bequests, whereas it should be based on the total outcome;

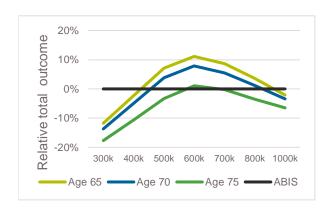
- Comparisons have been based on minimum drawdown only, which is not reflective of how many part-pensioners behave and is not desirable for policy objectives; and
- Outcomes differ significantly by the age at which the product is purchased.

These charts compare the difference in outcome for retirees at different ages and balances using the data provided with the position paper. The mid line is neutral, with points above the line representing a better overall outcome using a lifetime annuity (LA) and points below the line representing a better overall outcome using an account based income stream (ABIS).

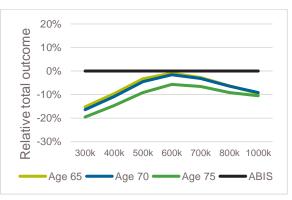
The first chart (1a) is derived from modelling for retirees aged 65 and replicates this for older ages across a wider range of balances. The proposed treatment increasingly favours the ABIS the older the retiree at time of purchase. The second chart (1b) demonstrates that when you compare to the realistic behaviour of drawing down minimum plus 2%, the proposal favours an ABIS for almost all ages and balances.

Chart 1: Actuarial present value of total outcome for LA relative to ABIS under the DSS proposal

1a: ABIS with minimum draw



1b: ABIS with minimum draw +2%pa



We discuss each of these issues in more detail below.

2.1 Neutrality must be based on total outcome, including death benefit

Comparisons between products in the paper are made on the income line, ignoring the superannuation balance that remains unused (death benefit). It is clear in the examples in the position paper, that a retiree can achieve about the same income, but be left with a substantially larger bequest if they choose an ABIS. On this basis, you would expect most retirees to choose (or be advised to choose) the ABIS. This would be a poor outcome from a policy perspective as it would effectively mean that the age pension would be at least partially used to fund bequests, rather than ensuring that retirees have sufficient income throughout retirement.

Table 1 presents the data from page 16 of the updated position paper for a single retiree with \$300,000.

¹ The modelling assumptions are discussed in Appendix A.

Table 1: Total retirement outcomes: page 16 of the position paper (single retiree with \$300,000)

\$		Lifetime Ani Products	nuity	Group Self-	Annuity	Deferred Pro	oducts
	ABIS (min. drawdown)	100% LA	30% LA/ 70% ABIS	100% GSA	50% GSA / 50% ABIS	30% DLA / 70% ABIS	20% DGSA / 80% ABIS
Age Pension	395,566	369,414	392,867	356,676	381,735	394,298	398,527
Product Income	210,400	238,557	218,847	274,953	242,676	242,644	245,549
Total Income	605,966	607,971	611,714	631,629	624,411	636,942	644,075
Death Benefit / Bequest	62,929	19,957	50,037	0	31,464	25,782	22,623
Total (including bequest)	668,895	627,928	661,751	631,629	655,875	662,724	666,698

The total income amounts are similar (\$605,966 v \$607,971), but each option consumes a very different amount of capital. The bottom line indicates that the ABIS is a significantly better option for retirees under the proposed means test rules (\$668,895 v \$627,928). The position paper highlights the present value of expected total income, but assumes that retirees do not assign any value to expected capital bequests, which in some scenarios are quite substantial. This is at odds with practice, as the bequest is valued by retirees and their advisers. Similarly, the access to capital over time of the ABIS is also valued. Faced with the choice between two income products providing the same amount of income, a retiree will quite rationally choose the one with flexible access to capital and the possibility of leaving a bequest. Some advisers might regard themselves as bound by their 'best interest' duty to recommend this option, fearing liability if they do not. Fund trustees in the new MyRetirement regime might be similarly inclined.

Fully valuing the death benefit is essential to a meaningful comparison. In this, we agree with the DSS in its 2015 submission to the Senate Standing Committee on Community Affairs on the increase in the taper rate from \$1.5 to \$3 per \$1,000 of assets:

The Department considers that analysis based purely on income is fundamentally flawed as it does not recognise the capacity of people to draw down on their assets to support themselves in retirement.²

The tables in the position paper clearly show that pooled lifetime products are disadvantaged for single homeowner retirees with less than \$600,000 and couples with less than \$800,000.

2.2 Comparisons are significantly impacted by drawdown assumptions

Neutrality should be assessed based on the most realistic and representative scenarios. Assuming minimum drawdown by all part-pensioners results in a comparison between a pooled lifetime product that maximises capital drawdown, and an ABIS strategy that minimises capital drawdown. It also does not reflect actual behaviour.

² Senate Standing Committees of Community Affairs Inquiry into the Social Services Legislation Amendment (Fair and Sustainable Pensions) Bill 2015, DSS submission 5.1 page 4.

Actual consumption behaviour is quite strongly linked to superannuation balances. Those with high balances have a greater propensity to draw at minimum rates for a range of reasons (such as tax planning and having other sources of capital to fund living expenses). Retirees with less superannuation (ie in the taper rate zone) tend to draw it down at higher rates. This means that the DSS assumption does not reflect the spending behaviour of many retirees. Recent data (see appendix B) suggest it is common for part-pensioners to draw down more than the minimum rates and up to 4% above (this improves their income, maximises their age pension and enables them to still manage to their bequest goals). The data do not yet capture the change in behaviour following the recent taper rate increase. It is expected that, in response to the taper rate changes, more part-pensioners will draw higher income from their ABIS to sustain a stable lifestyle in retirement.

Drawdowns above the minimum rate

To assess neutrality, it is essential to consider the outcomes when retirees draw above the minimum rate. The table below demonstrates the improved outcomes a retiree would achieve by drawing above the minimum. This further highlights the lack of neutrality for different rates of capital consumption.

Table 2: Actuarial present value of ABIS with alternative drawdown strategies

\$	Minimum draw	Minimum draw +1%	Minimum draw +2%	Minimum draw +3%	Minimum draw +4%
Age Pension	340,780	354,924	364,714	371,813	377,197
Product Income	279,980	295,820	308,767	319,422	328,257
Total Income	620,720	650,745	673,481	691,235	705,454
Death Benefit	79,115	66,412	56,245	48,056	41,418
Total Outcome	699,874	717,157	729,725	739,291	746,872

This table demonstrates that retirees can significantly change their age pension, total income and total outcome by changing their drawdown amount. For this reason, it's reasonable to expect that retirees will adopt different drawdowns as appropriate to their personal situations.

To best reflect this, we have applied a mid-point assumption of minimum drawdown plus 2% as a reasonable basis for comparing the ABIS to other products. This assumption is also well supported by the data in appendix B.

To highlight the impact this has on neutrality we have reproduced the tables from the position paper, using a drawdown assumption of minimum plus 2%. We also reflect this approach through our modelling later in this paper. This demonstrates that using a realistic drawdown assumption further reduces the neutrality of treatment between product types.

Table 3: Single 65-year-old homeowner with \$400,000

\$	ABIS	LA	GSA	30 DLA /70 ABIS
Age Pension	364,714	343,190	327,054	355,145
Product Income	308,767	319,588	365,691	332,051
Total Income	673,481	662,778	692,745	687,196
Death Benefit	56,245	27,937	-	30,584
Total Outcome	729,725	690,716	692,745	717,779

Table 4: Single 70-year-old homeowner with \$400,000

\$	ABIS	LA	GSA	30 DLA /70 ABIS
Age Pension	316,841	287,364	271,399	323,345
Product Income	299,177	324,599	370,212	640,211
Total Income	616,018	611,963	641,611	32,598
Death Benefit	69,901	30,339	-	672,809
Total Outcome	685,920	642,302	641,611	637,961

Table 5: Single 75-year-old homeowner with \$400,000

\$	ABIS	LA	GSA	30 DLA /70 ABIS
Age Pension	269,072	228,502	210,402	269,463
Product Income	288,698	323,130	374,846	336,876
Total Income	557,770	551,632	585,247	606,338
Death Benefit	85,961	33,064	-	31,623
Total Outcome	643,731	584,696	585,247	637,961

2.3 Proposed rules are less neutral for older retirees

The position paper has only modelled the rules for someone who retires at 65. Given that the eligibility age for the age pension is now 65.5, heading to 67 by 2023, this does not seem the most appropriate basis to assess neutrality.

Australians are being encouraged to work for longer which can delay their selection of retirement income products. In line with this, the average age of purchase of lifetime annuities is now 70.

Replicating the analysis undertaken in the DSS paper for older ages indicates that the proposed rules are less neutral for an older retiree. Charts 1a and 1b indicate the impact of the proposed tests on older retirees who start a pooled lifetime product at age 70 or 75, rather than age 65.

The charts indicate that older retirees experience a significantly less neutral outcome across products. While for a 65-year-old there are some wealth values where the outcome for a LA is comparable to the ABIS, for older retirees, the ABIS is more favourably treated compared to a LA.

This outcome relates to the income test. Older retirees have a shorter lifespan during which to consume their capital. The annual payments from a pooled lifetime product are proportionately higher, reflecting a greater proportion of the capital returned in each payment. The proposed income test does not allow for this so is harsher for older retirees.

3. Suggested alternative approach

In highlighting the issues above, we recognise the need to propose a potential solution that will improve neutrality without compromising the other principles.

To achieve this, we have assessed other options that support the approach proposed in the position paper. Our analysis has found that the objectives and principles can be most closely met by adjusting the proposed income test to assess a lower proportion of payments as income. This works equally

well by starting at 60% with a reduction to 30% at life expectancy, or setting the test at 50% for life.³ While these approaches produce similar outcomes for immediate pooled products, the stepped approach creates a concessional outcome for deferred products, which, if deferred to life expectancy, would only ever be assessed at 30% of income. For this reason, we suggest applying a 50% income test for life. This alternative maintains simplicity and improves neutrality, particularly considering older retirees and different drawdown patterns. While a reduction in the proposed assets test could also be warranted, we think this one change to the income test will balance out impacts from the proposed assets test. In suggesting this, we are assuming that the proposed assets test would be at 70%/35%.

Implementing any simple approach will produce some differences across people in different circumstances. We believe that the key to a good policy setting is to limit these differences as much as possible and ensure where slightly different outcomes do occur they do not work against the policy objectives by discouraging desirable behaviours.

Below, we assess the relative neutrality of the existing and proposed treatments by comparing the total outcome that is achieved with the retiree's original capital and any age pension that is subsequently provided.

This total outcome measure is reflected in the bottom line of the tables in the position paper. To represent a broader range of retiree situations we have created a graphical representation of this total outcome. Each of the charts compares the difference between an ABIS and either a LA or a portfolio with 30% in the LA and 70% in the ABIS. Each line represents the difference in the total outcome between the two options, measured as a proportion of the retiree's original capital. These charts all represent single homeowners.⁴

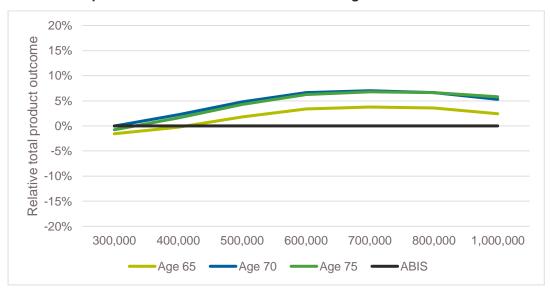


Chart 2: Comparison of LA and ABIS under the existing means test

Chart 2 shows that the existing treatment produces a slightly favourable treatment for the LA across most balances. For older retirees, the benefit is slightly higher than for 65-year-olds.

³ Appendix C describes provides other examples where the 50% level is evident.

⁴ While not included here, the same approach can be applied to non-guaranteed pooled products such as GSAs which will lead to similar results.

20% Relative total product outcome 15% 10% 5% 0% -5% -10% -15% -20% 500.000 600.000 700.000 300.000 400.000 800.000 1.000.000 Age 65 -Age 70 **-**Age 75

Chart 3: Comparison of LA and ABIS under the means test proposed in the position paper

Chart 3 indicates that under the proposed treatment, the ABIS receives a more favourable treatment than the LA for all ages and balances. The results for 70 and 75-year-olds are lower on the chart indicating an even less neutral outcome for older retirees.

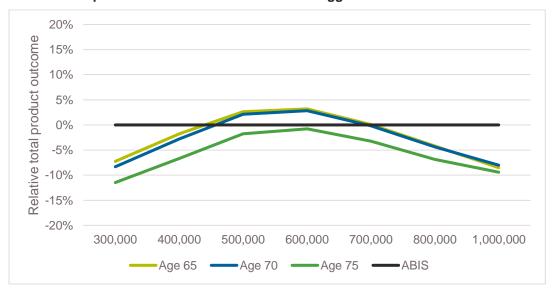


Chart 4: Comparison of LA and ABIS under our suggested alternative means test

The outcomes under our suggested alternative treatment are slightly closer to neutral than the proposed rules, but still result in a majority of situations where the ABIS is treated more favourably than the LA.

We expect, however, that few retirees will invest 100% of their wealth in pooled lifetime products. The MyRetirement reforms promote the allocation of a proportion (for example 30%) of the total portfolio to a pooled lifetime product. In the portfolio context, the interaction of the different means test treatments produces a more neutral outcome.

Chart 5 indicates that this alternative means test treatment is broadly neutral when a pure ABIS is compared to a composite portfolio (noting, however, that the more pooling included in the portfolio, the less neutral the treatment will become).

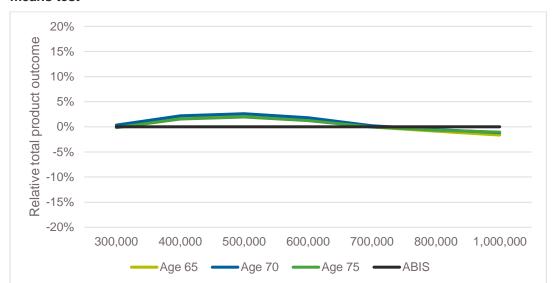


Chart 5: Comparison of 30LA/70ABIS portfolio and 100% ABIS under our suggested alternative means test

Under our suggested alternative, the outcome of a 70%/30% portfolio is broadly neutral compared to an ABIS across all wealth levels, and neutrality is improved for different retirement ages.

4. Fiscal sustainability

It is possible to assess neutrality from a fiscal perspective by assuming all other factors to be equal (returns, fees and broad cash flows) and purely comparing the resulting age pension cost for different products under different rules. Tables 6-8 compare the outcomes from a fiscal neutrality perspective using the current rules, the DSS proposed rules and our suggested alternative. The numbers represent the difference in the actuarial present value between age pension payments with different products. A positive number in these tables indicated that the age pension payments are higher for a LA than for an ABIS. A negative number means that the age pension payments are higher with an ABIS investment.

This analysis shows that the alternative means test we have suggested:

- results in a lower age pension payment compared to the current means test treatment; and
- provides the most neutral fiscal outcome between the lifetime annuity and the ABIS (significantly more neutral that the DSS proposal).

Table 6: Difference in actuarial present value of age pension payments between LA and ABIS under the existing means test by age and balance

\$	300,000	400,000	500,000	600,000	700,000	800,000	1,000,000
Age 65	-4,683	-948	8,992	20,146	26,318	28,552	24,310
Age 70	-93	9,000	24,009	39,668	49,070	53,099	53,168
Age 75	-2,303	6,376	21,273	37,642	47,520	53,055	57,780

Negative values indicate higher age pension payments for ABIS; positive values indicate higher age pension payments for LA.

Table 7: Difference in actuarial present value of age pension payments between LA and ABIS under the proposed means test by age and balance

\$	300,000	400,000	500,000	600,000	700,000	800,000	1,000,000
Age 65	-45,743	-39,009	-16,539	-5,533	-19,554	-50,244	-96,007
Age 70	-49,333	-43,617	-22,447	-9,572	-22,509	-51,737	-91,111
Age 75	-58,650	-59,035	-45,748	-34,188	-45,794	-72,838	-105,764

Negative values indicate higher age pension payments for ABIS; positive values indicate higher age pension payments for LA.

Table 8: Difference in actuarial present value of age pension payments between LA and ABIS under our suggested alternative means test by age and balance

\$	300,000	400,000	500,000	600,000	700,000	800,000	1,000,000
Age 65	-21,774	-7,051	13,325	19,167	813	-33,574	-85,145
Age 70	-24,988	-11,158	10,475	17,023	-1,146	-34,831	-80,263
Age 75	-34,415	-26,722	-8,939	-4,655	-22,799	-55,095	-94,046

Negative values indicate higher age pension payments for ABIS; positive values indicate higher age pension payments for LA.

Other considerations

5.1 Certainty for existing and future customers

The position paper notes that there is a strong case for grandfathering for customers who own pooled lifetime products prior to the implementation of the new rules. We strongly support this approach, recognising that retirees buy these long-term products with the reasonable expectation that they will continue to be assessed in the same way for the life of the product.

The paper is less clear about how this would affect retirees who buy pooled lifetime products between the announcement of the new rules and the date on which the new rules come into effect. If the new rules are applied to customers who purchase from the date of announcement, this will create a blackout period where the products cannot be purchased at all, as providers will not be ready to sell the products under the new rules.

5.2 Simplicity

The proposed rules have incorporated an estimate of life expectancy that appears to differ from the new superannuation regulations on the ability to access capital and pay a death benefit (ie the new capital access schedule). It would aid simplicity to ensure that these numbers were calculated consistently.

5.3 Implementation

There will need to be a reasonable lead time before the means test changes take effect to allow for system changes; adviser education; changes to online calculators; collateral updates and so on. Internal stakeholder feedback suggests that we would need at least six months after the new rules have been finalised to implement the necessary changes.

Means Test Rules for Lifetime Retirement Income Streams

Appendices for response to DSS January 2018 Position Paper

16 February 2018



Appendix A: Methodology and assumptions

The modelling in this submission has followed the assumptions provided by DSS as the basis for the modelling in the position paper.

Real earnings rate (gross of fees)	3.30%		
Inflation	2.50%		
Real discount rate	3.30%		
Age Pension Indexation	3.00%		
Mortality	ALT2010-12 with 25yr imp. rated d	own 3 yrs	
Inflation indexed immediate life annuity payment as a proportion of price (purchased at 65)			
(purchased at 70, priced off same IRR as 65-year-old ann	uity)	5.38%	
(purchased at 75)		6.24%	
Inflation indexed deferred life annuity price (20yr deferral, purchased at 65)			
Fees			
Account based pension			
GSA/DGSA			

Age Pension Means Test Thresholds

	Single	Couple		
Annual Max Rate	\$23,254	\$35,058		
Asset Test	Homeowner		Non-homeo	wner
	Single	Couple	Single	Couple
Free area threshold	\$253,750	\$380,500	\$456,750	\$583,500
Cut out	\$551,883	\$829,967	\$754,883	\$1,032,967
Taper	\$3 per fortnig	ght for every \$1,000 a	bove the relevant fr	ee area
Income Test	Single	Couple		
Annual	\$4,368	\$7,800		
Cut out	\$50,877	\$77,917		
Taper		50%		
Deeming	Single	Couple		
Thresholds	\$50,200	\$83,400		
Rate -below threshold	1.75%			
Rate -above threshold	3.25%			

Appendix B: Data on ABIS drawdowns

Data on actual drawdown strategies in an ABIS is limited. The evidence that we have been able to gather suggests that while a large proportion of people have drawn down their super at close to the minimum drawdown, there is clear evidence that many people do not. The evidence suggests that most retirees with wealth levels equivalent to a part pension are drawing above the minimum rate.

The chart below is reproduced from a paper on SMSF drawdowns from the CSIRO-Monash Superannuation Working Group.⁵ It presents the median drawdown rate for members of an SMSF in the pension phase across three bands of pension balance (ie <\$480,000; \$480,000-\$850,000 and above \$850,000). It shows that members with larger pension balances drawdown at lower rates across all ages.

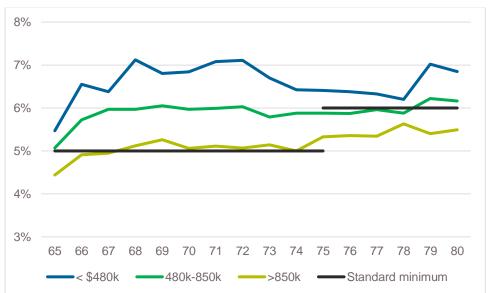


Chart B.1: Median SMSF drawdowns by age and balance, 2004-2014

If half the retiree population are spending down their ABIS at a rate higher than the assumed rate, it is important to consider the impact of the drawdown strategies.

Rothman and Wang (2013) ⁶ found that many retirees withdrew the lowest amount possible. The authors found that around 50 per cent of people under 79 years, nearly 60 per cent of people aged 80-84 years and around 70 per cent of people aged 85-89 drew down their ABIS at the minimum rate. This conclusion was endorsed in the final report of the Financial System Inquiry.⁷

The Productivity Commission subsequently considered actual retiree drawdown behaviour in its 2015 Research Paper entitled: 'Superannuation Policy for Post-Retirement' Volume 1.8 In section 4.6 of the paper, the Commission asks: 'Are income streams working well for retirees?' On pages 96-96, the Commission questioned the evidence base for conclusions on drawdown behaviour, specifically reaching a different conclusion from Rothman and Wang (2013).

The Commission pointed out that Rothman and Wang (2013) excluded people who had withdrawn more than 20 per cent of their ABIS (ie a lump sum) in a year from their calculations. The Commission

⁵ Sneddon, T., Reeson, R., Zhu, A., Stephenson, A., Hobman, E., Toscas, P. (2016). Superannuation Drawdown Behaviour. The Finsia Journal of Applied Finance, 2016 Issue 2, 42-53. Working paper available at: https://publications.csiro.au/rpr/download?pid=csiro:EP163017&dsid=DS2

⁶ Retirement income decisions: Take up and use of Australian lump sums and income streams https://treasury.gov.au/publication/retirement-income-decisions-take-up-and-use-of-australian-lump-sums-and-income-streams/

⁷ Footnote 64 in FSI Final Report Chapter 2: Superannuation and Retirement Incomes: "Most retirees draw down their account-based pensions at the minimum allowable rates. Rothman, G and Wang, H 2013, 'Retirement income decisions: take up and use of Australian lump sums and income streams', paper presented at the 21st Colloquium of Superannuation Researchers, Sydney, 9–10 July, page 19."

⁸ https://www.pc.gov.au/research/completed/superannuation-post-retirement/super-post-retirement-volume1.pdf

did not agree with that approach because it skewed the true picture of retirees' spending from their ABIS, and overstated the proportion of people drawing down at the minimum rate. The Commission concluded that about 15 per cent of those aged under 65 years appeared to be drawing down at the minimum rate, increasing to around 50 per cent of people aged over 80 years.

Earlier work by academics, Hazel Bateman and Susan Thorp, on the drawdown rates concluded that it was not optimal for retirees to follow the minimum rates. They concluded that a better strategy was to draw down more early in retirement. The advantages of this strategy have been reinforced by the adjustment in the taper rate for deeming income, making it more likely that part age pensioners will need to draw more capital to sustain a stable lifestyle through retirement. This is consistent with government policy.

⁹ Bateman, H. and S. Thorp (2008) 'Choices and Constraints over Retirement Income Streams: Comparing Rules and Regulations', *Economic Record*, vol 84 pp S17-S31.

Appendix C: Income component of pooled lifetime products

The alternative income test suggested in the position paper assesses 50% of the payments as income to the pensioner. This recommendation creates a more neutral total outcome for retirees using different retirement products and a more neutral cost in terms of age pension payments. Below we provide further evidence that suggests the 50% level would be more appropriate.

Deeming

ABIS are income tested by deeming a proportion of the capital balance as income at a prescribed rate. Income is assessed through deeming because payments include capital returns that are not directly identifiable and vary from year-to-year.

At current deeming rates, an ABIS that starts for someone aged 65, would have a total of 50% of its expected payments assessed as income. Retirees who buy an ABIS at older ages will see a lower proportion of their payments assessed, as shown in Table C.1.

Current deeming rates are lower than they have previously been. Table C.1 presents the different assessment percentages for deeming rates for a single male of different ages, at both the current, and an average deeming rate. The average of a 2.5% lower rate and 4% higher deeming rate reflects both:

- The average deeming rate applied since inception of just over 4%; and
- The RBA estimate of a neutral real cash rate of 1.0%.¹⁰

With a deeming rate that is typically set at a small margin above the RBA cash rate, 4% is a reasonable upper threshold for the deeming rate. The lower threshold has been set at 2.5% in line with historical settings.

Table C.1: Percentage of payments assessed as income in an ABIS by age of retireen

	Current deeming rates 1.75%/3.25%	Historical average rates 2.5%/4.0%
From age 65	50%	62%
From age 70	46%	57%
From age 75	40%	50%

At no age does the assessment of payments from deeming reach 70%. The percentages included as income are lower for females and couples. Assessing 50% of payments is consistent with this treatment over time.

Notional capital payback period

The assumption of 70% income in lifetime annuity payments represents a 71-year capital payback period (ie under the proposed DSS model, this is the length of time it would take for the initial annuity purchase price to be paid back in real terms if payments really did only contain 30% capital).

This is based on the DSS assumption of \$4,700 per annum per \$100,000 (indexed at 2.5% pa) for a lifetime annuity.

• The capital repayment is \$4,700 * 30% = \$1,410 (real) p.a.

¹⁰ See McCririck R and D Rees (2017), 'The Neutral Interest Rate', RBA Bulletin, September, pp 9–18.

¹¹ Calculated on the same actuarial present value basis which reduces the weight on the payments later in life.

• It takes 71 payments for the initial \$100,000 to be repaid, ie the retiree must live to age 136.

Even if account is taken for inflation (at 2.5%), the nominal capital return would take 41 years before a retiree could expect to receive their own capital back.

A more reasonable payback period would be achieved with an assumption of 40% income (hence 60% capital). This has a payback period of 35 years in real terms, and 25 years in nominal terms.

Our suggested alternative 50% assessment level still implies a payback in 43 years in real terms (or 29 years for the nominal amount).