ARC CENTRE OF EXCELLENCE IN POPULATION AGEING RESEARCH

Financial decision making for and in old age

Things that policy can affect: What works? What doesn't? What next?

Professor Hazel Bateman, School of Risk & Actuarial Studies, UNSW & CEPAR

October 2022

Financial decision making in old age

- What can policy do?
- What does the academic research tell us?
- What next?

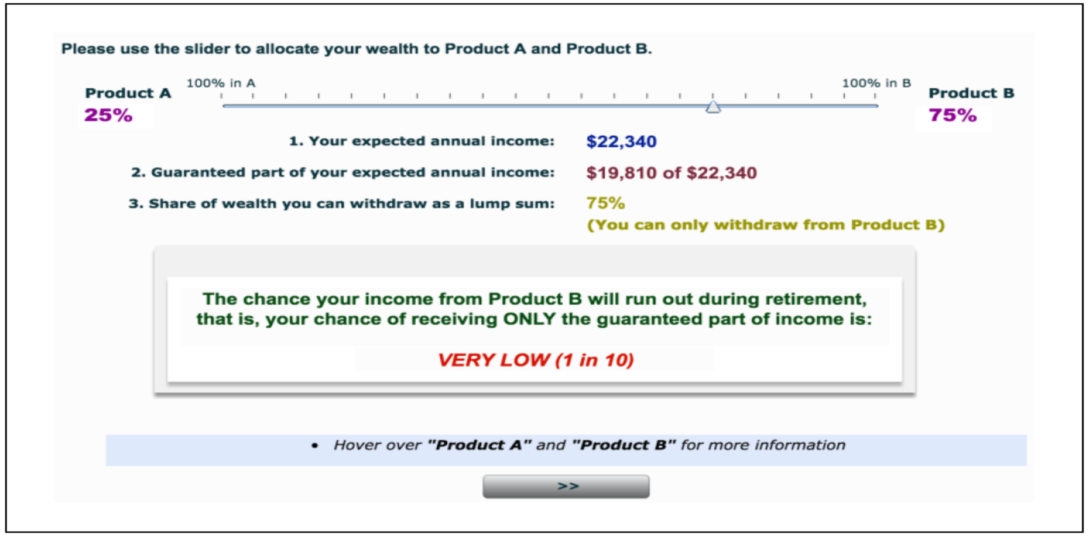
What can policy do?

- Set the choice architecture (mandates, defaults, implied endorsement, incentives, free choice)
- Regulate information provision
  - Compulsory (eg Product Disclosure Statements, Fact Sheets)
  - Voluntary (eg superannuation forecasts → retirement estimates, calculators)
- Financial education to improve financial literacy
- Regulate financial advice
- Regulate financial market participants (eg Superannuation funds → Retirement Income Covenant → Retirement Income Strategy)
- Policy simplification

What does the academic research tell us?

Defaults

Product A (lifetime annuity) vs **Product B** (account-based pension)



[Bateman et al (2017) AJM]

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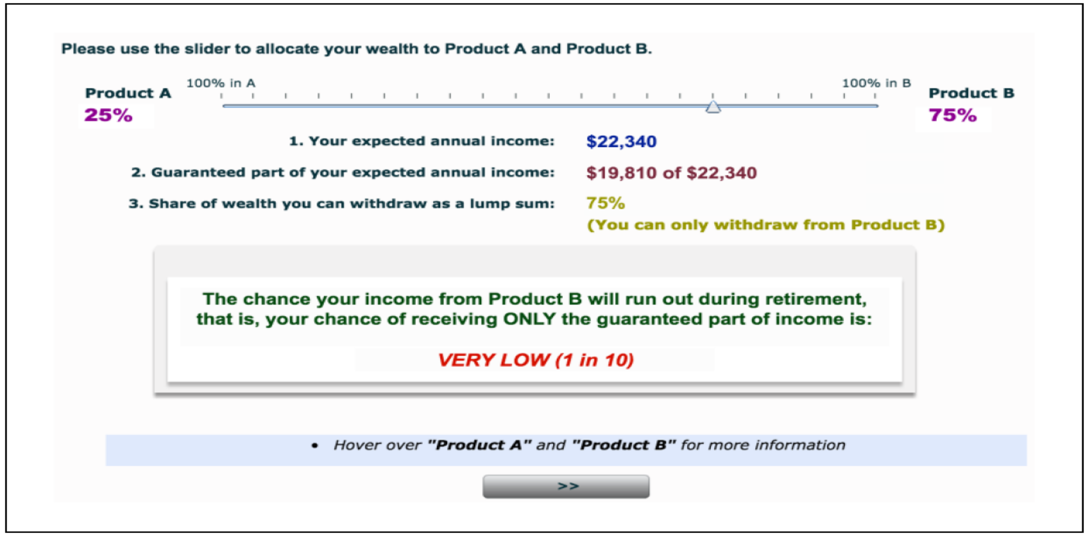

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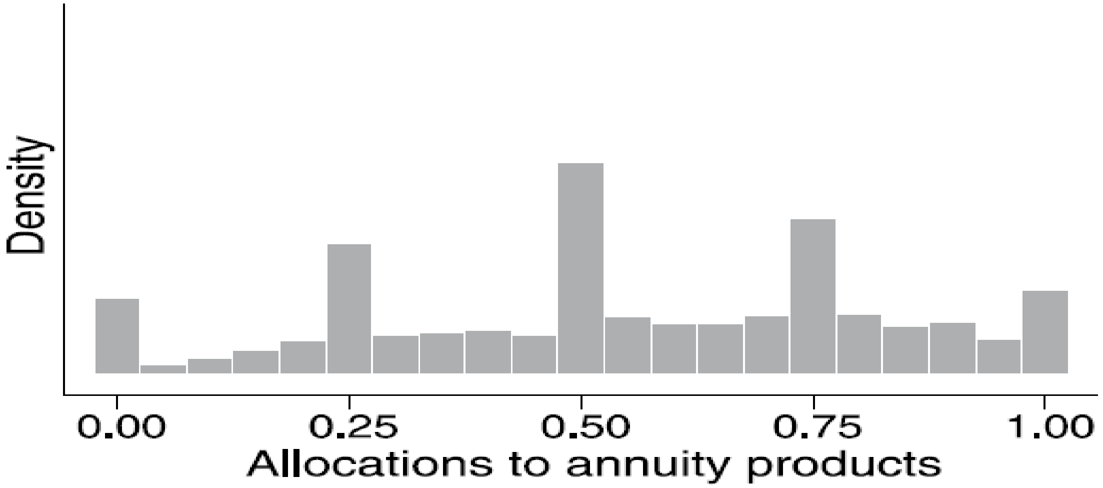

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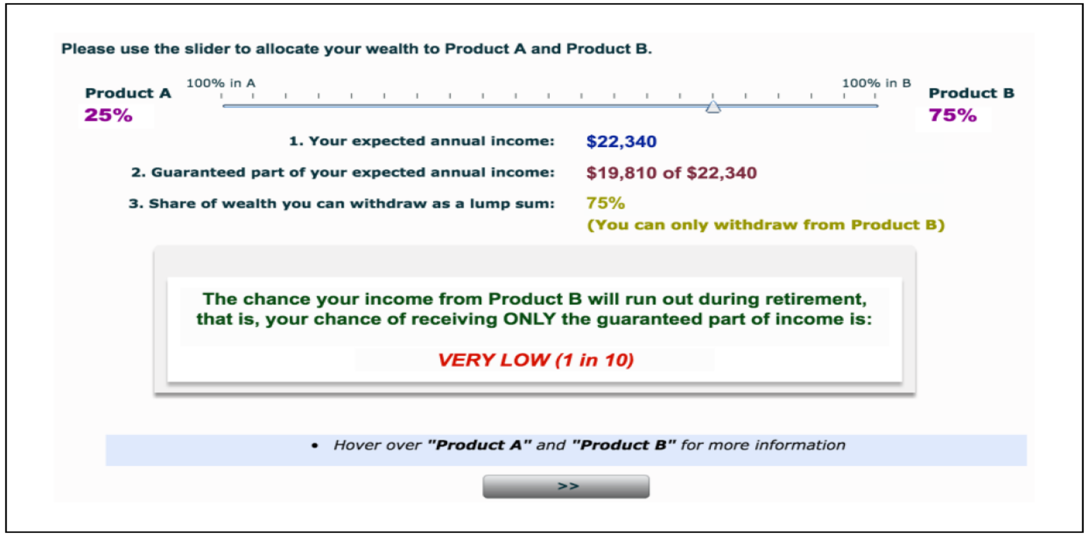

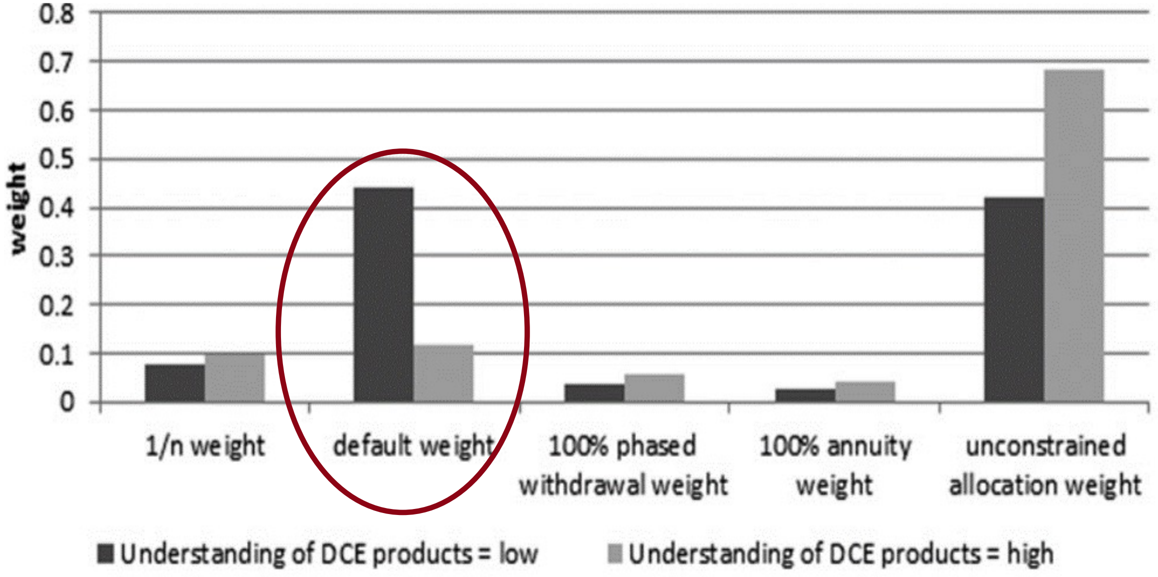

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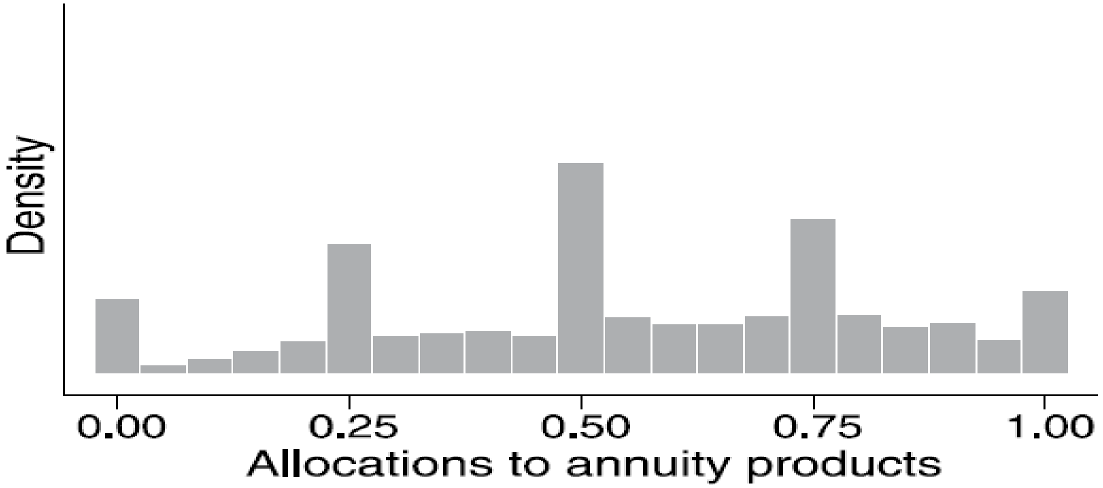

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Defaults – sticky (often for the less skilled)

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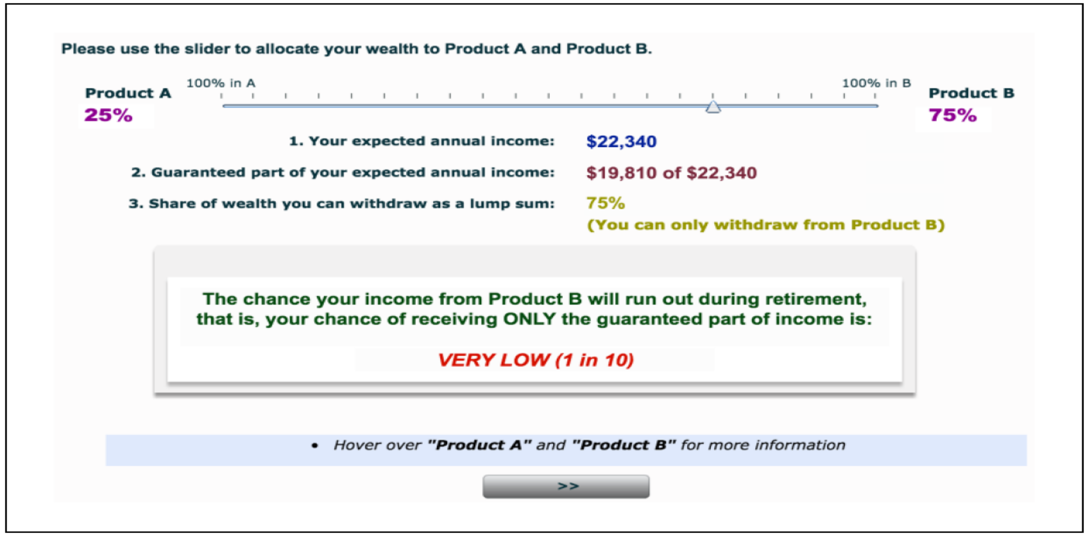

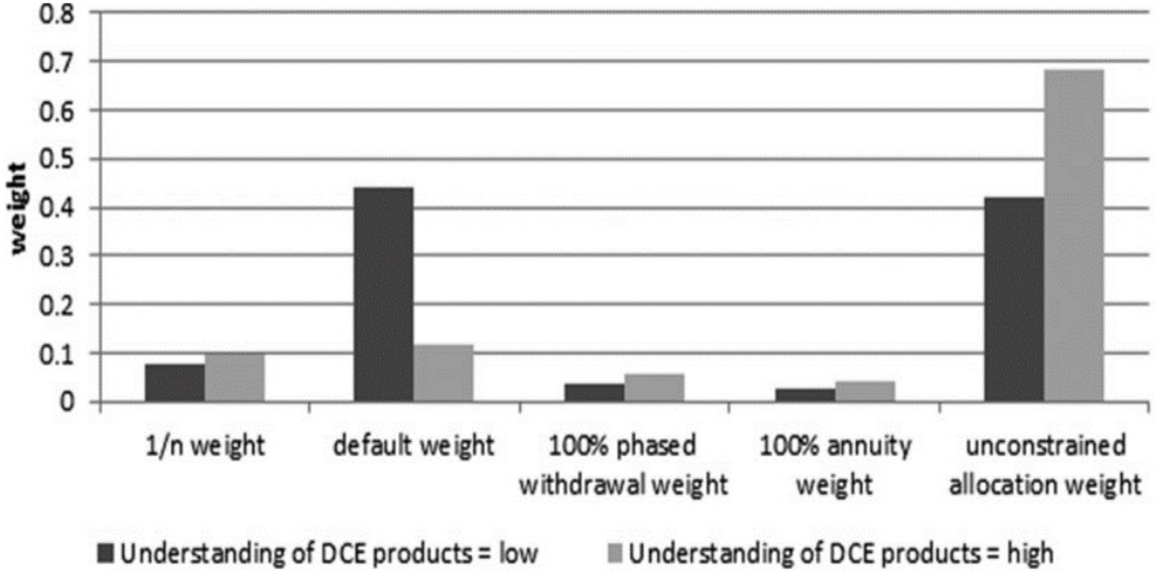

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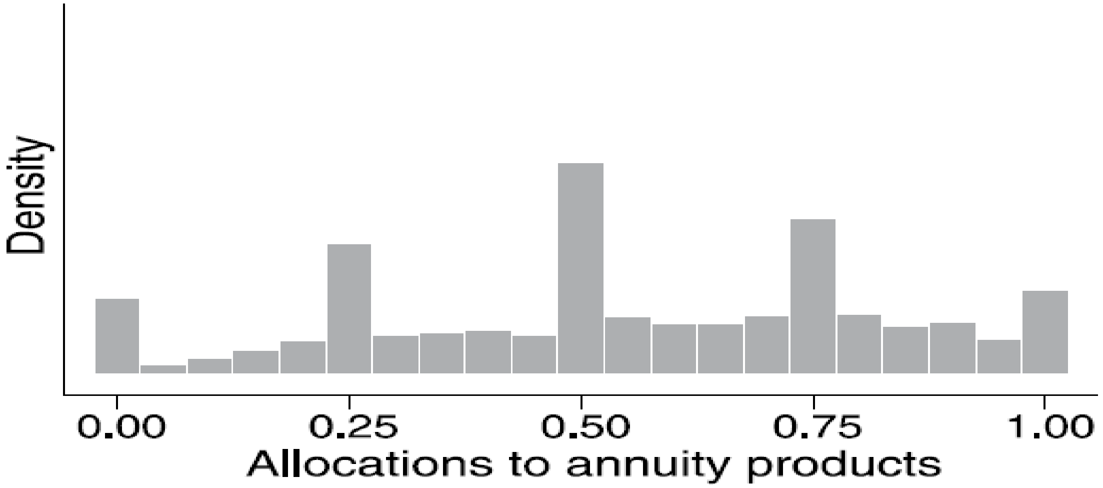


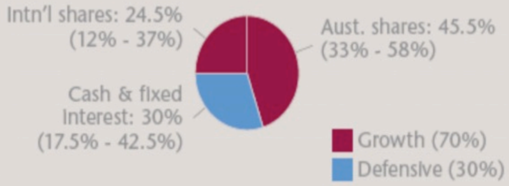
- - the 'trustingly disengaged' also default *[Deetlefs et al (2019) JCA]*

- - but defaults may have high welfare costs *[Dobrescu et al (2018), EJ]*

Regulated information - Financial product disclosure – is problematic

Short-form PDS

INVESTMENT DETAILS FOR OUR SOCIALLY RESPONSIBLE BALANCED INVESTMENT OPTION

Description of option/ Type of investor	Invests in a diversified portfolio comprising Australian and international shares that are selected on the basis of sustainable investment criteria (refer to pages 22 to 25 for further details) and in fixed interest and cash assets. Designed for investors with a high risk tolerance who are seeking a high level of expected returns.
Investment return objective*	To achieve returns (after Fund taxes and investment fees) that are at least 3.0% p.a. more than inflation (CPI).
Strategic asset allocation and ranges	
Minimum suggested timeframe for investment	Six years
Expected frequency of negative annual return	Four in twenty years
Summary risk level	High

[Bateman et al (2016) JEBO]

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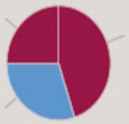
Strategic asset allocation and ranges	
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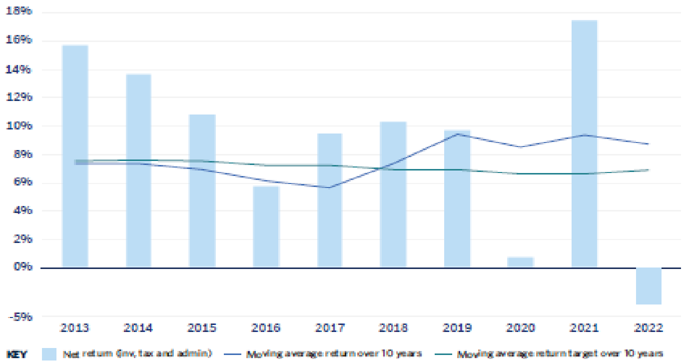
MySuper dashboard

COMPARISON BETWEEN RETURN TARGET AND RETURN*



* Graph relates to years ending 30 June. Past performance is not an indicator of future performance. Return targets are not guaranteed. Return targets and fees may change.

Return (moving average over last 10 years to 30 June 2022): 8.70%

Statement of fees and other costs: $336 p.a.

Level of investment risk: High – Four to less than six negative years in a 20-year period.^

^ Negative returns may occur more or less often than expected.

[Thorp et al (2020) JBF]

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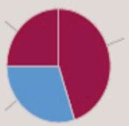
Strategic asset allocation and ranges	
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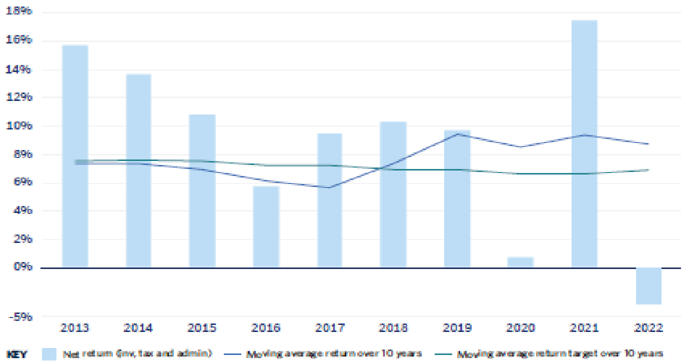

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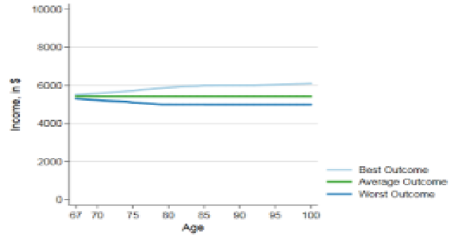
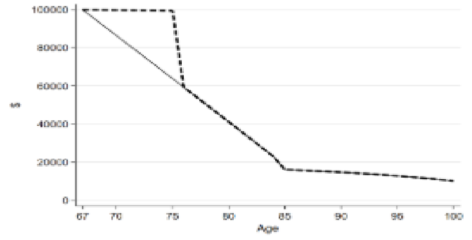
Retirement income product Fact Sheet

Product Name	Product B
Average Annual Income (net of fees and taxes)	$5,430
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation. The rating scale is from 1 (your income is not secure) to 7 (your income is secure).*	1 2 3 4 5 6 7 Average income not secure — Average income secure Product Rating 6 Elements that contribute to this product's rating This product is rated 6 because: • It provides income for life • It is designed to reduce the impact of downturns in the share market on income • Income is not CPI-indexed, so payments will not increase annually in line with inflation • Payment is guaranteed if the fund becomes insolvent
Potential Income Shape shows how your income (in today's dollars) will vary over your retirement.	
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement (the solid line).* **Death Benefit** is the amount that would be paid to your estate if you die (the dashed line).*	

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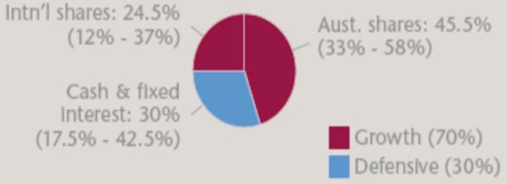
Strategic asset allocation and ranges	
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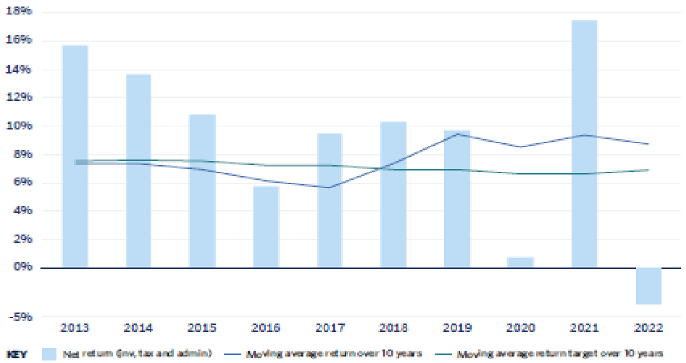

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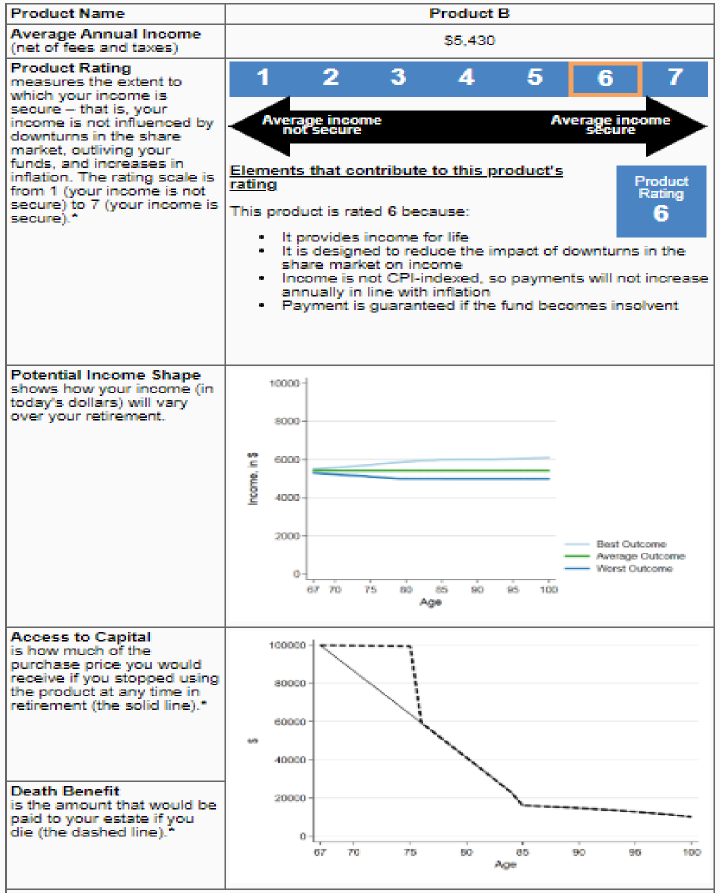

[Bateman & Eberhardt (2022) AJM]

Standard risk measure: number of negative years in a 20 year period

[Bateman et al (2016) RevFin]

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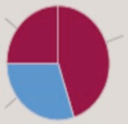
Strategic asset allocation and ranges	
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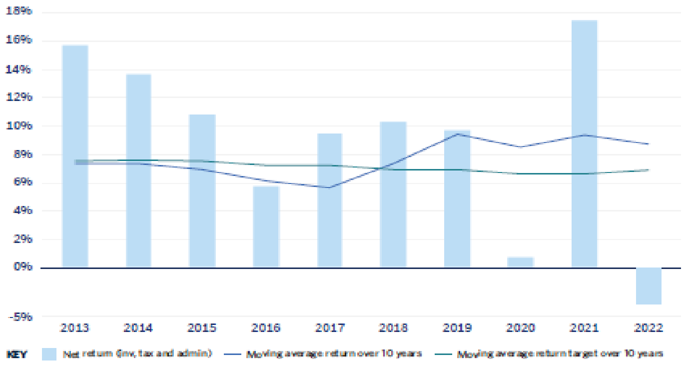

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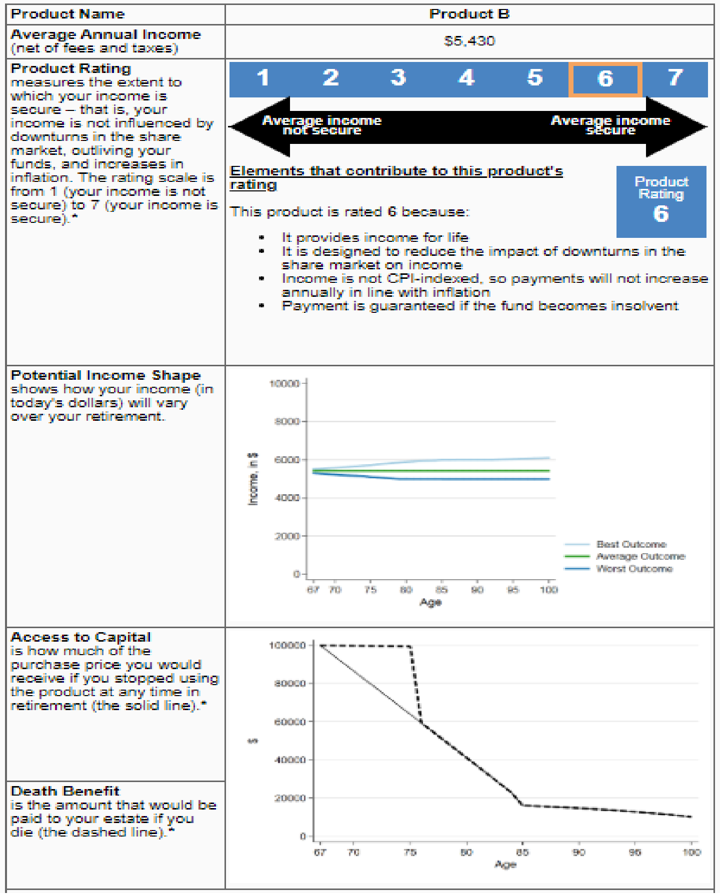

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[Bateman & Eberhardt (2022) AJM]

ASIC & AFM (2019) REP632 Disclosure: Why it shouldn't be the default

(Regulated) retirement estimates are more promising

cbus — An Industry SuperFund

Your Personal Retirement Income Estimate
Prepared 30 June 2013

Step 1. What will my Cbus account balance be at retirement?

Your account balance:
$25,000
at age 39 in 2013

Your estimated account balance:
$198,000
if you retire at age 67 in 2041

If you don't like the estimate, call the Cbus Advice Team to work out a plan for you.

What this estimate means

The projection is just an estimate, not a guarantee. The actual money you get in your retirement may be very different from this estimate.

How this is worked out

This is the super you may have when you retire, based on your account activity over the past 12 months. Your estimate is based on the contributions and deductions that occurred last financial year that we project (according to assumptions and rules defined by the Government) what you will have at age 67. The result is in today's dollars, which means it includes increases in the cost of living.

Step 2. How much income will this pay me when I finish work?

Yearly income (when retired)

See page 4 for other assumptions used to calculate this estimate.

$11,200 pa
Cbus account

+

$13,600 pa
Your half of the Government age pension

+

Other potential sources

$24,800 pa
Your yearly income in retirement

This is calculated to last 25 years. This is in today's dollars.

Adding up your income

To work this out, we've brought together two 'incomes' you could get in retirement. These incomes are from your Cbus account and the Government age pension.

About the Government age pension

The Government age pension shown is half of the maximum amount a couple can currently receive. You may not be eligible for some or all of this age pension amount if you (or your partner) have income or assets in addition to this super fund. Pension rates and eligibility rules may change between now and when you retire.

Your other sources income

This estimate doesn't include any other super you may have or income you may get. This could be from shares, interest from savings or investment properties. These investments can support you in retirement.

We can help you get a clearer picture

The Cbus Advice Team can answer your questions about super and planning for retirement. Their tools can produce simple but accurate personal estimates that consider your whole financial situation, not just your Cbus account. And while they're phone based, they're fully qualified to work out a plan for you.

Step 3. What can I do to improve my estimate?

Contact the Cbus Advice Team

If you have questions, the Cbus Advice Team can give you answers you need to improve your estimate.

Call 1300 361 784
Mon to Fri, 8am to 8pm

Email
advice@cbussuper.com.au

Visit
www.cbussuper.com.au/future

How much income will I need?

Decisions you make now can change outcomes. The Government age pension provides a basic safety net in retirement. It's your super (and any other savings and investments) that helps you achieve a higher standard of living.

There are two simple ways we can help you decide if your estimated income is enough:

- **Replacement rate:** This compares a person's spending power before and after retirement (eg 60 to 70% of your working income), and
- **Budget standard:** This is based on working out income needed, on average, to live at a certain standard in retirement.

Get your own answers

Whatever your situation, the Cbus Advice Team can help you get a view of what's enough for you and your family. They can talk you through your options over the phone and provide you with all the detail you need.

Four facts that will change the way you plan for retirement

Longevity
Around one in six men and one in four women who retire at 67 years old will live longer than 25 years after retirement

Average age of retirement
Men 'retire' at 57.9 years old and women at 49.6 years old

Pension
77% of Australians over 65 years old received income support

Pension rate
Current full fortnight rate (including supplements) is $808.40 a for a single and $1,218.80 for a couple

Sources: ABS (2011) 'Retirement and retirement intentions, Australia, Commonwealth of Australia (2008) Pension Review. www.centrelink.gov.au

Some of the strategies Justin discussed
- Combining his super into one account
- Choosing a different investment option
- Adjusting his super contribution levels

Case study:
What Justin thought about

Justin, 38, works as an Account Manager in a construction company. He is married with two kids.

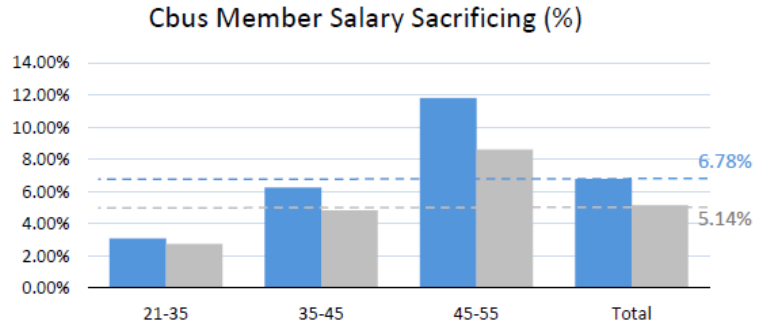
He received his Cbus Personal Retirement Income Estimate and thought he'd have more for his retirement.

Looking through it, it was clear to Justin that the estimate didn't cover his full financial position. For instance, he had another super account.

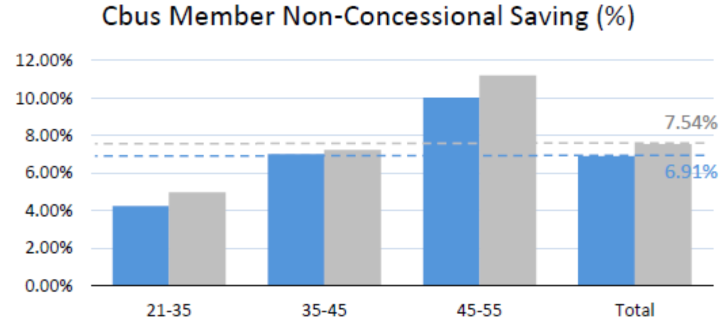
So Justin called the Cbus Advice Team to get answers to his questions. They were able to help him see his financial options clearly, and take appropriate action.

Retirement estimates motivated Cbus members to contribute more and increase interaction with the fund

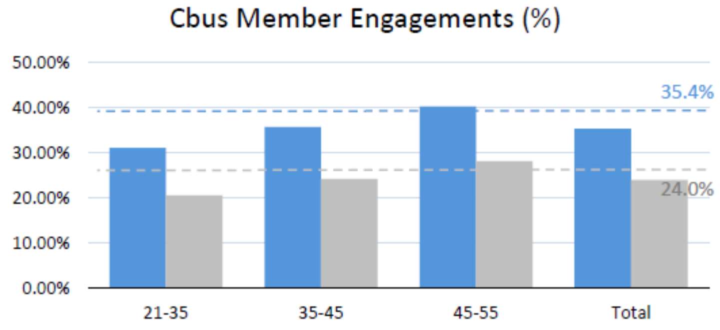
More members salary sacrificing



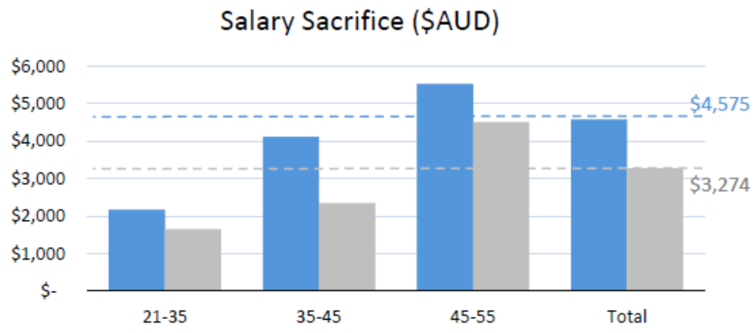
Fewer members with NC saving



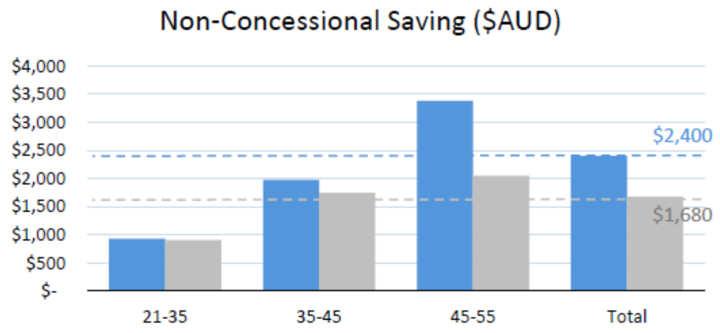
More members interacting



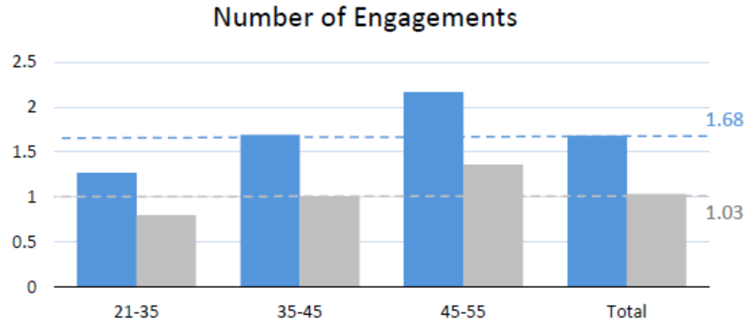
Higher salary sacrifice in ($AUD)



Higher NC saving in ($AUD)



More engagement per member



Treatment Control

Smyrnis et al (2019, 2021)

‘Just in time’ product knowledge helps

Cannot assume people know characteristics of typical products

Pilot study of around 1,000 Australian aged 50-64 with a super account indicated ignorance of retirement benefits

- 1/3 aware of a product called a ‘life annuity’
  - 22% knew that a life annuity paid benefits ‘for life’
  - 8% knew that a life annuity offered a guaranteed income level

- 48% had heard of an ‘account-based pension’
  - 25% knew that they could choose the drawdown amount subject to a regulated minimum drawdown
  - 20% knew that they could draw down capital

Agnew et al (2013) AJAF

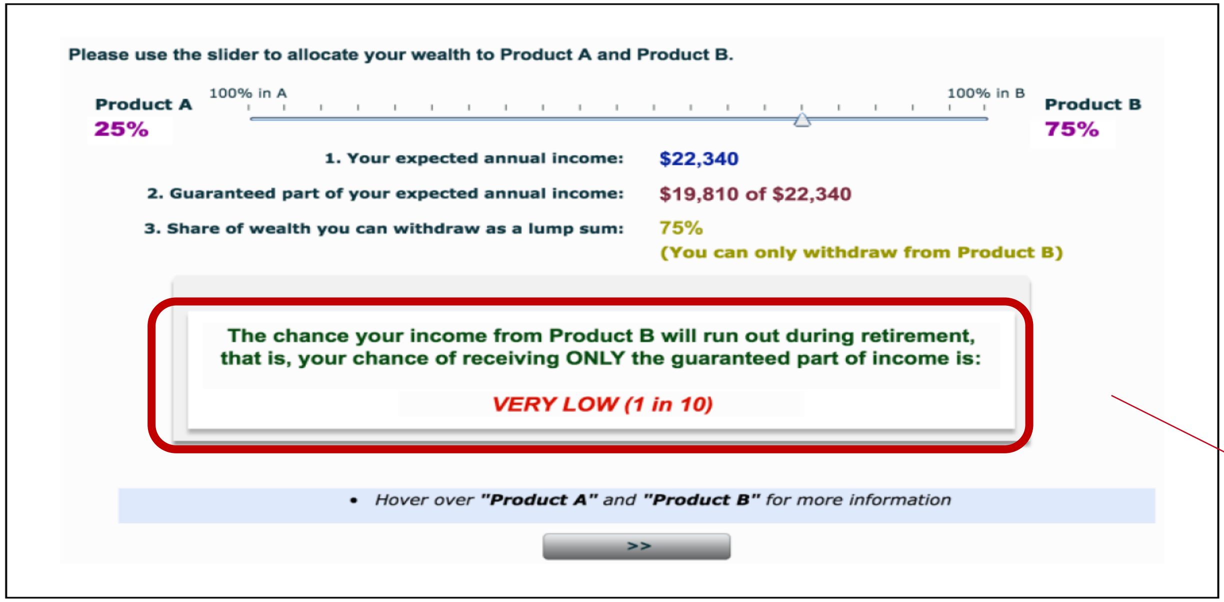
'Just in time' product knowledge assists understanding of risk management features of retirement products *[Bateman et al (2018) JRI]*

Incentivised to learn about retirement products:

- Product A (Lifetime annuity)
- Product B (Account-based pension)

Completed product quiz (Y/N)

1. I can withdraw a lump sum for unforeseen events.
2. If I die, payments stop.
3. I will receive a regular income for as long as I live.
4. My account balance will fluctuate with financial markets.
5. Payments are guaranteed to me or my beneficiaries for the first 15 years.
6. None of these apply.



Increase risk of ruin from 1/10, 1/4, 2/4, 3/4

‘Just in time’ product knowledge assists understanding of risk management features of retirement products *[Bateman et al (2018) JRI]*

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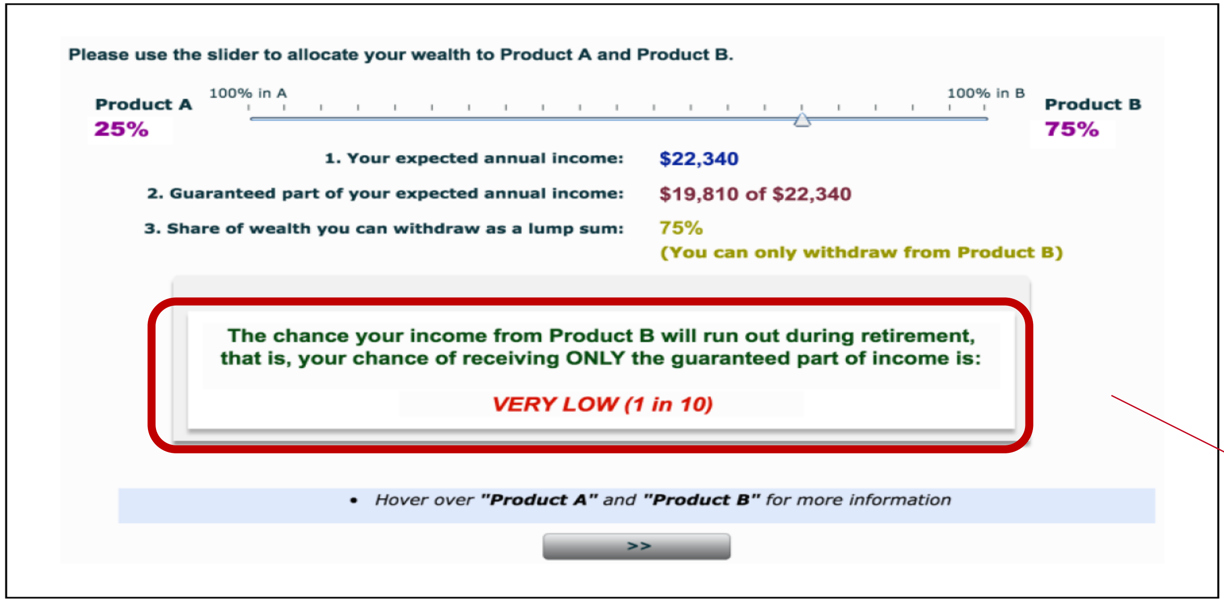

Logit model of risk insensitivity

	Choices 1–4 (*AB*)		Choices 5–8 (*CB*)	
	Strong	Weak	Strong	Weak
	Marginal Effects			
Quiz score *AB*/*CB*	−0.321***	−0.370***	−0.240***	−0.166*
Retirement financial planning	−0.102**	−0.012	−0.124**	0.012
Male	0.037	−0.010	0.008	−0.080**
Wealth	−0.017	−0.044	0.001	0.007
Retire early	0.071**	0.094***	0.045	0.070*
Numeracy	−0.098**	−0.073	−0.194***	−0.112**
Basic literacy	0.038	0.024	0.092	0.021
Sophisticated literacy	−0.013	0.110**	−0.082*	0.013
Self-assessed literacy	−0.020*	−0.012	−0.026**	−0.006
Commercial product knowledge	−0.014	−0.004	−0.033	−0.034
Quality of life above median	−0.014	−0.031	−0.027	−0.035
Subjective life expectancy	−0.001	0.002	0.000	0.001
N	854	854	854	854

Increase risk of ruin from 1/10, 1/4, 2/4, 3/4

‘Just in time’ product knowledge also assists valuation of lifetime annuities *[Alonso Garcia et al (2018) CEPAR WP]*

Incentivised to learn about retirement products:

- Lifetime guaranteed income (Lifetime annuity)
- Flexible account (Account-based pension)

Completed product quiz

Elicit WTP, WTA using iMPL

What we would like you to do is to cast your eye down the rows of the table and **select the ROW for which you prefer the combination of the two products in Option B to the combination of the two products in Option A.** You select this row by clicking 'Preferred Option B' in the column at the end of the row.

Option A		Option B		Preferred Option	
Flexible Account (account balance)	**Lifetime Guaranteed Income** (per year, including Age Pension)	**Flexible Account** (account balance)	**Lifetime Guaranteed Income** (per year, including Age Pensionr)	**Option A**	**Option B**
$762,198	$23,200	$0	$45,124	●	○
$762,198	$23,200	$0	$54,205	●	○
$762,198	$23,200	$0	$67,047	○	●
$762,198	$23,200	$0	$85,209	○	●
$762,198	$23,200	$0	$110,894	○	●

Retirement Calculator

Option B refers to the FIRST ROW you prefer Option B to Option A.

	Option A	Option B
Income from ages 65 - 80	$77,665	$67,047
Income after age 80	$23,200	$67,047

The numbers in the table above are in today's dollars and calculated by assuming:

I would like to ensure the Flexible Account provides an income until age:	80
I would like to keep the following amount from the Flexible Account for inheritance or unexpected expenses:	$0
I would like to spend MORE of the Flexible Account in the first FIVE years of retirement:	○ Yes ● No
The Flexible Account provides an average annual return, greater than inflation by:	1%

‘Just in time’ product knowledge also assists valuation of lifetime annuities *[Alonso Garcia et al (2018) CEPAR WP]*

Incentivised to learn about retirement products:

- Lifetime guaranteed income (Lifetime annuity)
- Flexible account (Account-based pension)

Completed product quiz

Elicit WTP, WTA using iMPL

What we would like you to do is to cast your eye down the rows of the table and **select the ROW for which you prefer the combination of the two products in Option B to the combination of the two products in Option A.** You select this row by clicking 'Preferred Option B' in the column at the enc of the row.

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$762,198	$23,200	$0	$67,047	○	◉
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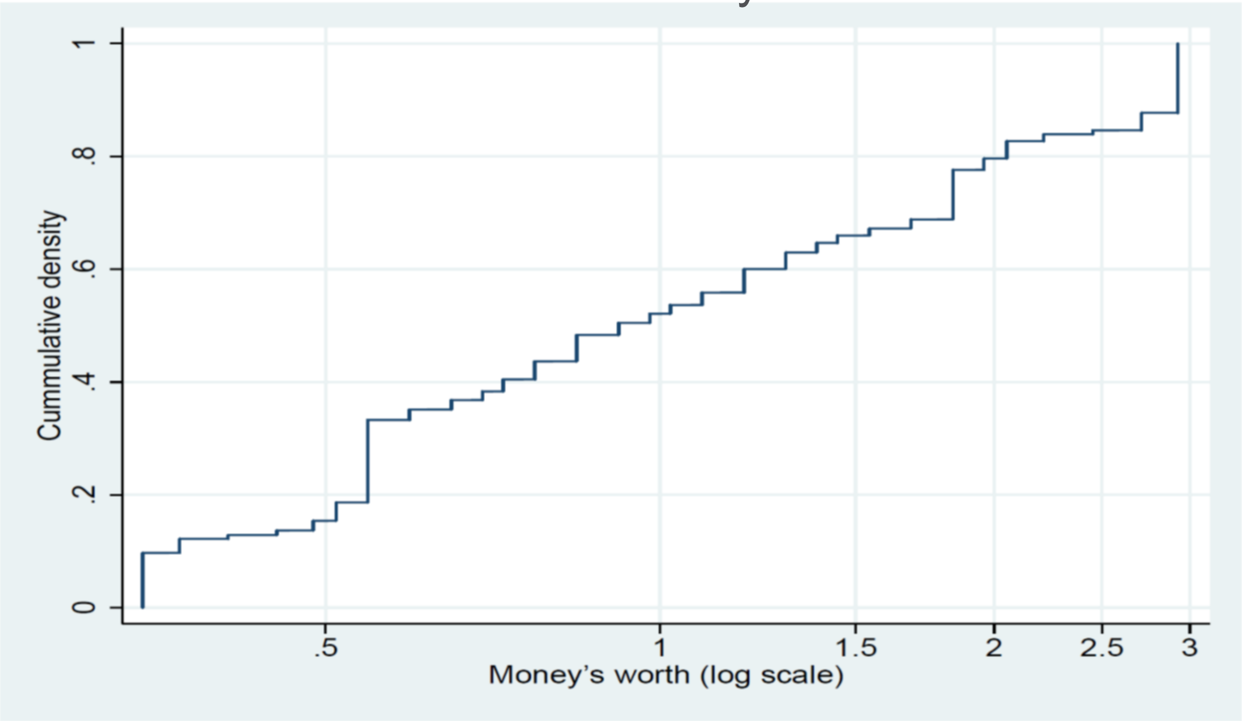
Distribution of money’s worth



WTP < WTA

‘Just in time’ product knowledge + engagement with task reduced difference between WTP and WTA from 31% to 14%

Too much of a good thing – super engaged could be worse off

Too much of a good thing – super engaged could be worse off

Online experimental survey, 1,278 accumulation members – experience market volatility

Simulated market returns	Information treatments	Each period (yr) facilitate super-engagement
1: ↑ 8%		Show market headlines
2: ↓ (16%, 24%, 40%)	Re-assuring letter	‘Click’ to view previous year performance of inv options
3: ↓ (16%, 24%, 40%)	Benefit projection	Information treatment
4: ↑ (16%, 24%, 40%)	Goal tracker	Annual statement
		Prompt to consider change inv option and/or vol contributions

[Bateman, Eberhardt, Wu & Ellis, in progress]

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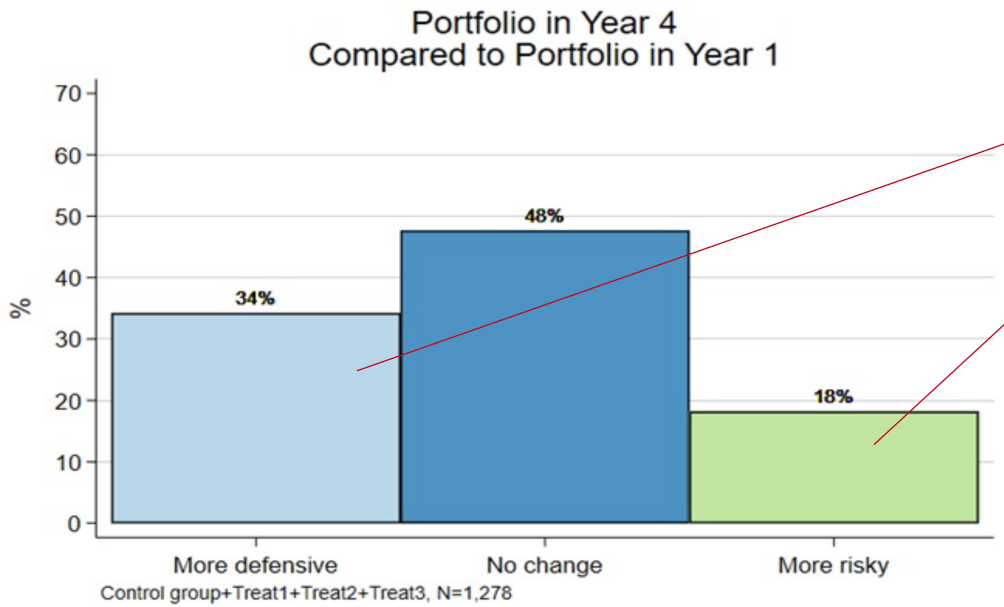


Switching associated with:

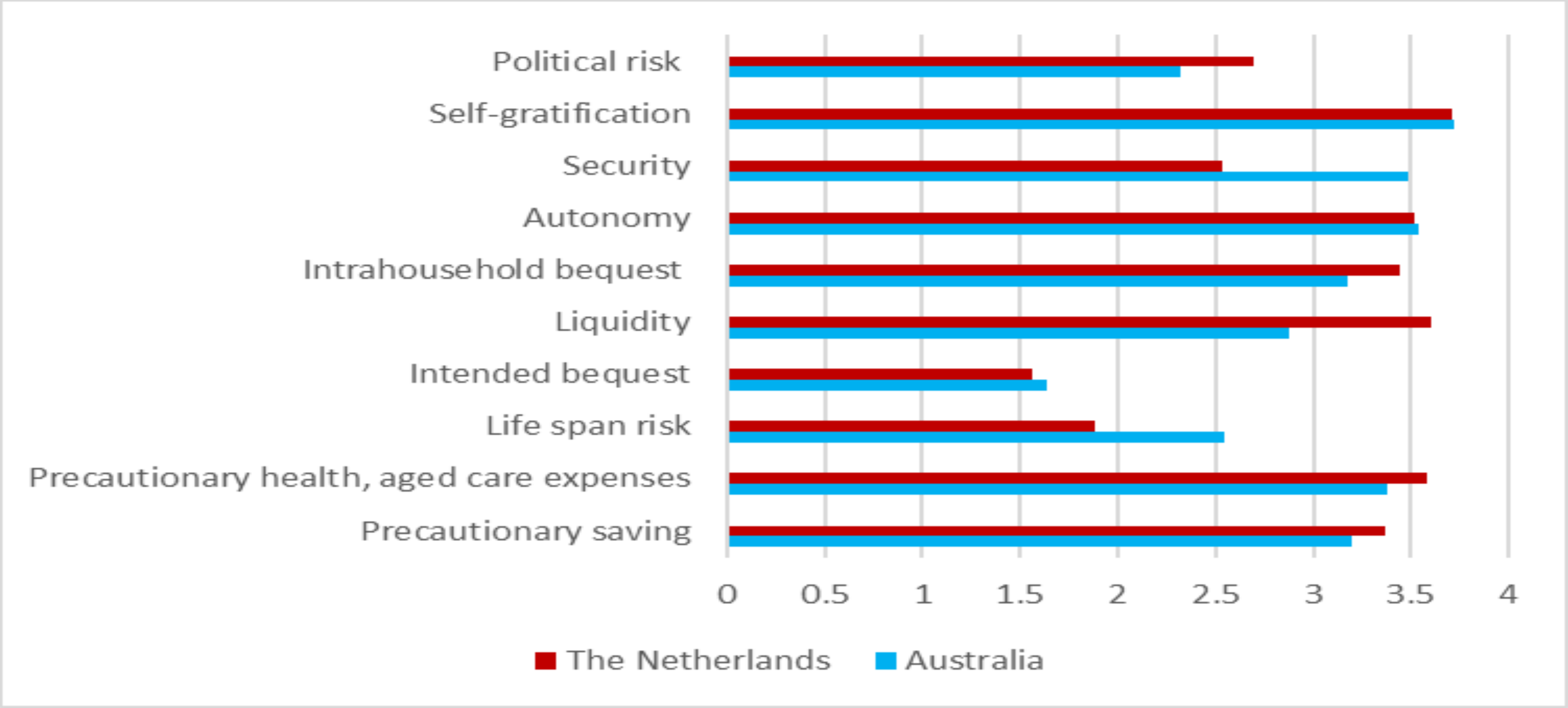
- Previously engaged (choice) members
- Click to view previous year performance
- Information treatment (engagement strategies)

Switching moderated by: financial literacy, numeracy, risk tolerance

[Bateman, Eberhardt, Wu & Ellis, in progress]

Financial decisions may by driven by ignorance of public support

Average expected importance of saving motives by country (good health treatment)



[Alonso Garcia et al (2022) JEBO]

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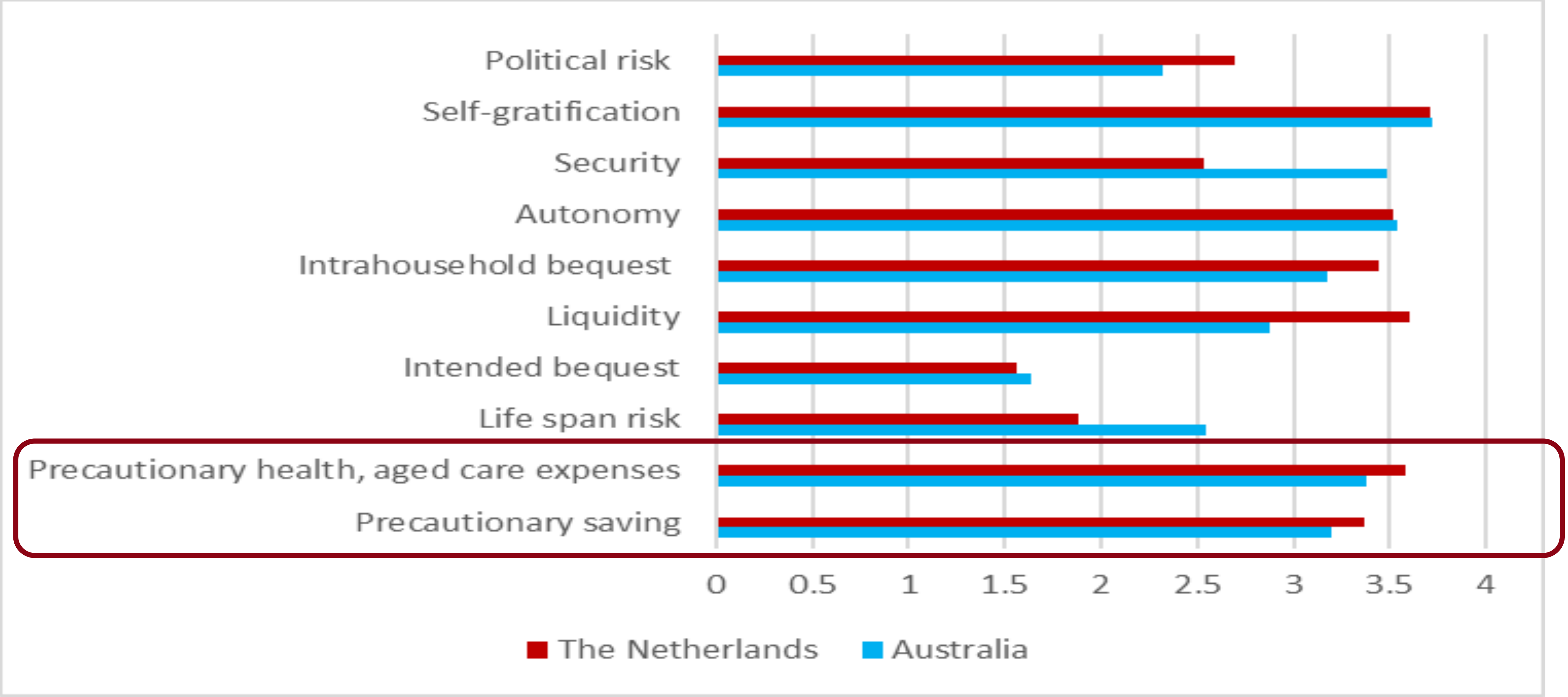

[Alonso Garcia et al (2022) JEBO]

Concluding comments

- Choice architecture can help simplify decisions – but must be carefully designed
- Financial product disclosure – likely not helpful
- Retirement income projections - more promising
- ‘Just in time’ information – facilitate product understanding
- Lack of awareness of complementary govt support → precautionary savings to self-insure

Next steps

Much more work to do:

- ✓ Joint retirement income (superannuation), housing, aged care decisions
- ✓ Cognitive decline
- ✓ Surrogate and shared decision making
- ✓ The effectiveness of digital tools

Test prior to implementation