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Never Stand Still

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Risk and Actuarial Studies

Have the Australians got it right?

Converting Retirement Savings to Retirement Benefits: Lessons from Australia

Hazel Bateman

Director, Centre for Pensions and Superannuation

School of Risk and Actuarial Studies

The University of New South Wales, Sydney

Outline

- Introduction to Australia's retirement savings arrangements
- The market for retirement benefits
- Barriers to growth of the annuity/income streams market
- Policy proposals and current market developments
- Contributions from academic research
- Lessons for New Zealand

Overview

- Well developed private DC in the accumulation phase
- Less developed in the decumulation phase
- Very small market for retirement income products – caution by government and reluctance by industry
- Limited consumer engagement, skill level and product knowledge

Retirement Income Policy has 3 components

1. Public Age Pension

- General revenue, 27.7% average earnings, means tested (75% eligible)
- Eligibility: Residency and age → 65; 67 from 2017; 2.7% GDP

2. Superannuation Guarantee

- Since 1992, minimum 9% employer contribution (12% by 2019)
- Defined contributions, individual accounts, private superannuation funds
- Persons aged 18-70 earning >\$A450 month (7% earnings)
- Benefits from age 55 (60) – CHOICE of lump sum/income stream; tax free

3. Voluntary superannuation and other saving

- Encouraged by tax concessions, 1/3 make additional contributions of around 6% earnings; homeownership (85%), financial assets, investment property

Payouts from superannuation - 2012

- **Lump sum:** (50% retirement benefit payouts)
 - invest outside the superannuation system
- **Income stream:** (50% retirement benefit payouts)
 - **Account-based pension:** phased withdrawal from superannuation account.
[Around 98% of income streams, by assets]
 - **Annuity:**
[Around 2% term annuity, only 111 new life annuities, 2011]
 - **Hybrid longevity products:** minimum payment guarantee
[New, ready to be launched]
 - ** Reverse mortgage: around 42,000 current loans, mainly lump sums

Evaluating decumulation policies/products

Consider:

- Replacement risk
- Investment risk
- Longevity risk
- Inflation risk
- Contingency risk
- Regulatory risk
- Political risk

What is an account-based pension?

- Account stays with superannuation/pension fund, or can be moved to a different provider, individual retains control, choice of asset allocation
- Choice of withdrawal pattern – with tax concessions if follow a minimum drawdown – but considerable flexibility

Age	Per cent of account balance
under age 65	4%
65-74	5%
75-79	6%
80-84	7%
85-89	9%
90-94	11%
95 and over	14%

- No guarantee of account balance or income - does not cover for investment risk, inflation risk, longevity risk

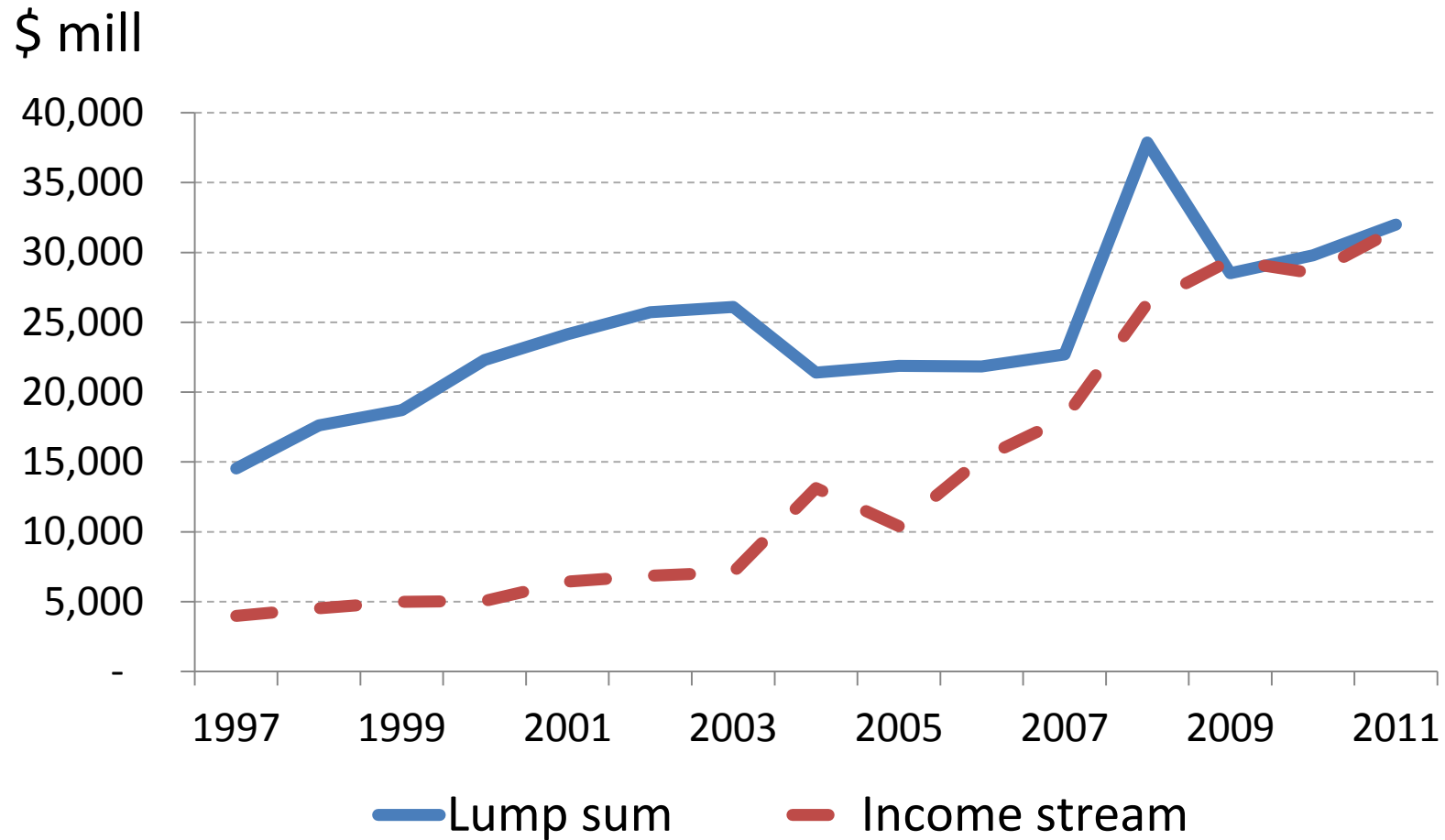
What types of annuities are available?

- **Term annuity:** guaranteed income for a specified period, indexed/not indexed, single/joint, reversionary, guarantee period, with return of capital
 - Cover for investment risk (and inflation risk if indexed)
- **Life annuity:** guaranteed income for life, indexed/not indexed, single/joint, reversionary, guarantee period, with return of capital
 - LIFE annuities DO cover for investment risk and longevity risk (and inflation risk if indexed)

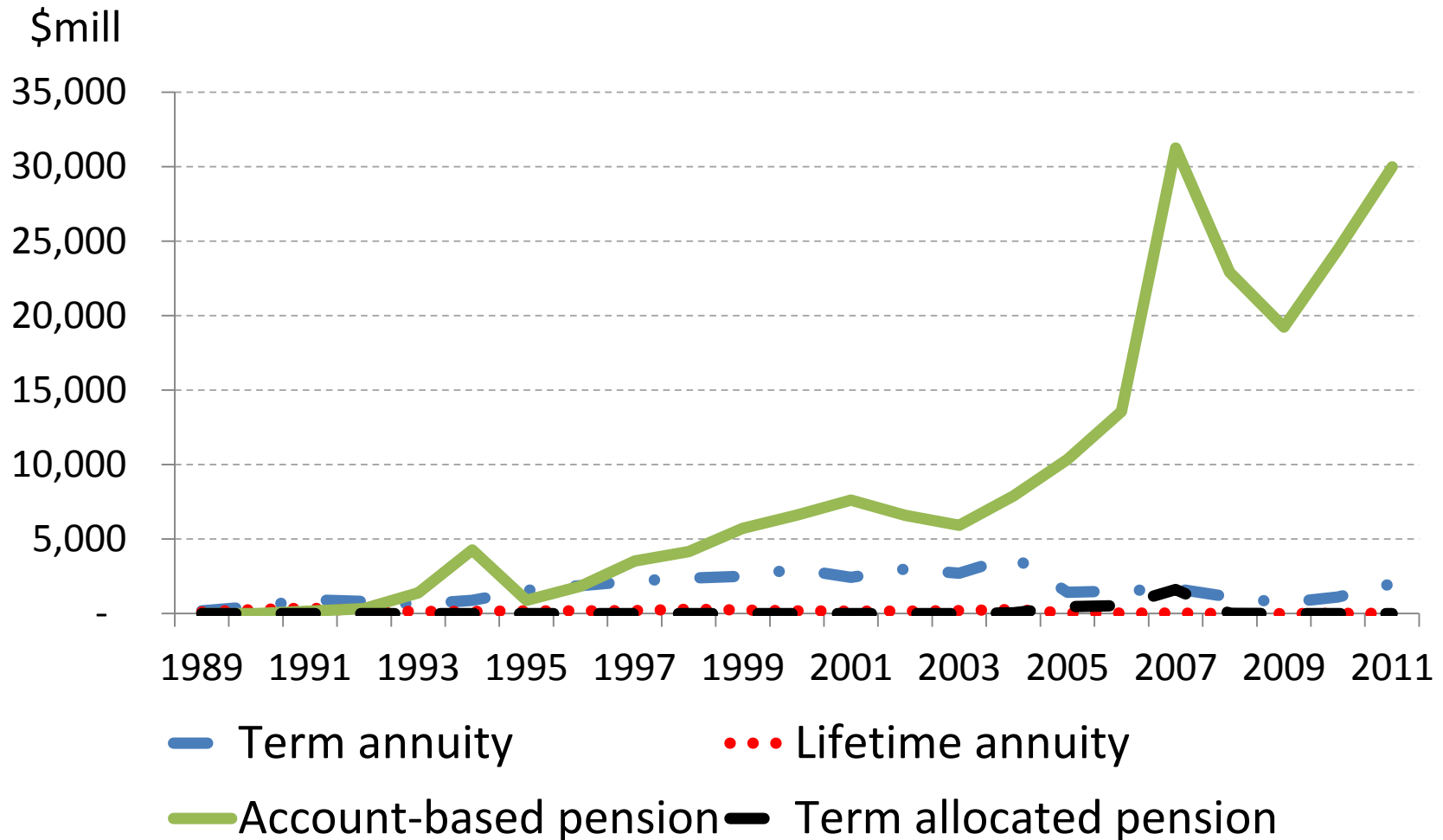
What types of annuities are NOT available?

- **Deferred lifetime annuity:** As for a life annuity, but payments are DEFERRED (ie, start in the future, such as at age 85)
- **Variable annuity:** Payments linked to share market returns, but provide a guaranteed payment

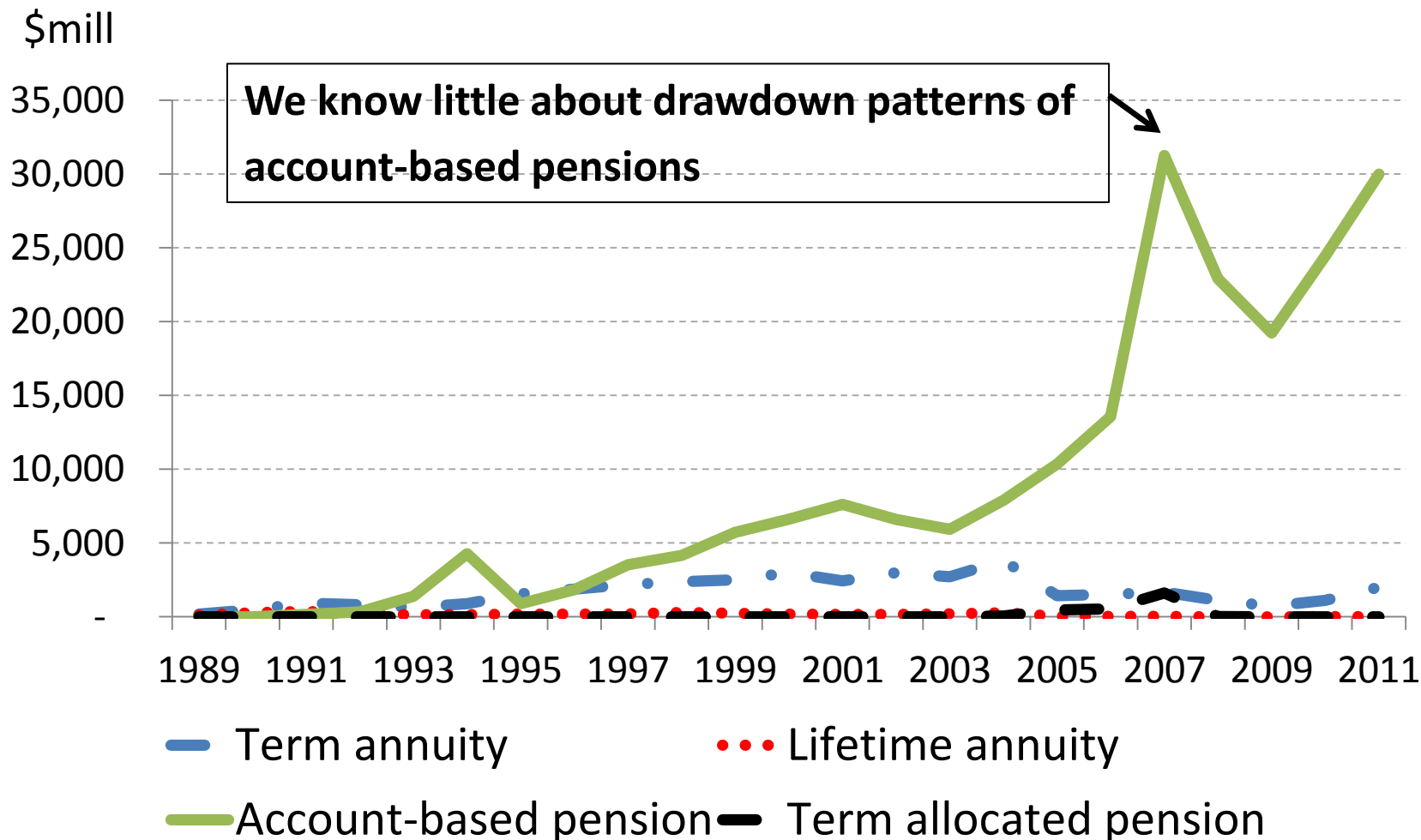
Preference shift from lump sums to income streams



Preference for non-annuitized income streams



Preference for non-annuitized income streams



Why is annuity demand so low?

Demand issues:

- Long term practice of taking lump sums
- Lump sum is generally the 'default' option
- Consumers not familiar with and don't understand the annuity product

From a 'representative' survey of 920 superannuation fund members aged 50-75 years:

- 37% had never heard of a product called a LIFE ANNUITY
- Only 22% knew that it provided income FOR LIFE
- Only 8% knew it offered GUARANTEED income level
- (similar ignorance about account-based pensions)

Demand issues (continued):

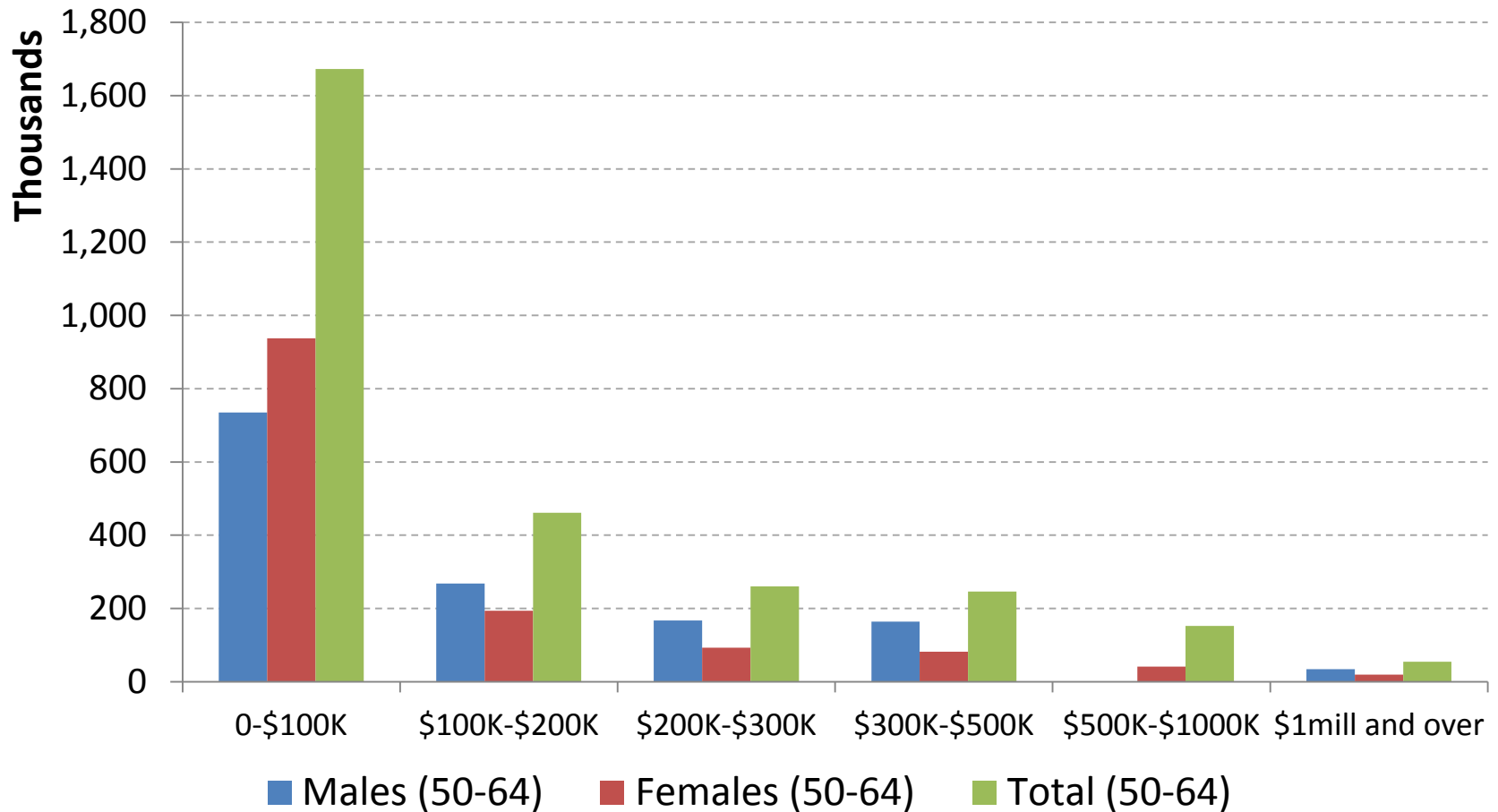
- Poor levels of financial literacy – eg, similar to many other countries many Australians have trouble understanding inflation, interest and diversification – and the benefits of annuities
- Behavioural: loss aversion (view annuities as bad investments), framing, mental accounting, desire for control etc.
- The Age Pension is a type of indexed lifetime annuity
- Previous tax and social security means test preference for life annuities were gradually withdrawn over mid 90s-07

Demand issues (continued):

- Third party involvement:
 - Financial Advisors unlikely to recommend – as annuities represent a ‘one off’ purchase – not a continuous flow of fees
 - Commissions banned under new legislation designed to improve the quality of financial advice

- Account balances are small, as the mandatory superannuation arrangements are still immature

Small accumulations → immature system



* Male average weekly earnings – approx \$A62,000

Supply side issues → Regulatory barriers:

- The definition of ‘annuity’ in the tax law and the social security law and the superannuation law requires that payments be ‘immediate’ and ‘fixed’
 - Deferred and variable annuities are not eligible for tax concessions or preferential treatment under the Age Pension means tests
 - Prudential regulation, reserving requirements
- ⇒ Barriers to product innovation

Supply issues (continued):

- Financial service providers reluctant to offer life annuities
- Number of providers of life annuities dropped from 14 in 1990s to 2 in 2012
- Concern about lack of products to hedge longevity risk, interest risk, inflation risk
 - Difficult to predict improvements in life expectancies

Policy proposals and government response

(Henry) Review of Tax and Superannuation system (2008-09):

- Did not support mandatory annuitization
- Recommended:
 - Change to regs to allow deferred and variable annuities
 - Government increase supply of long term indexed bonds
 - Government consider entering the annuity market

(Cooper) Review of the superannuation system (2009-10):

- Recommended life annuity be the default benefit

Government response:

- No support for the recommendations → established a 'Superannuation Roundtable' of experts to consider and review tax changes and retirement benefit proposals

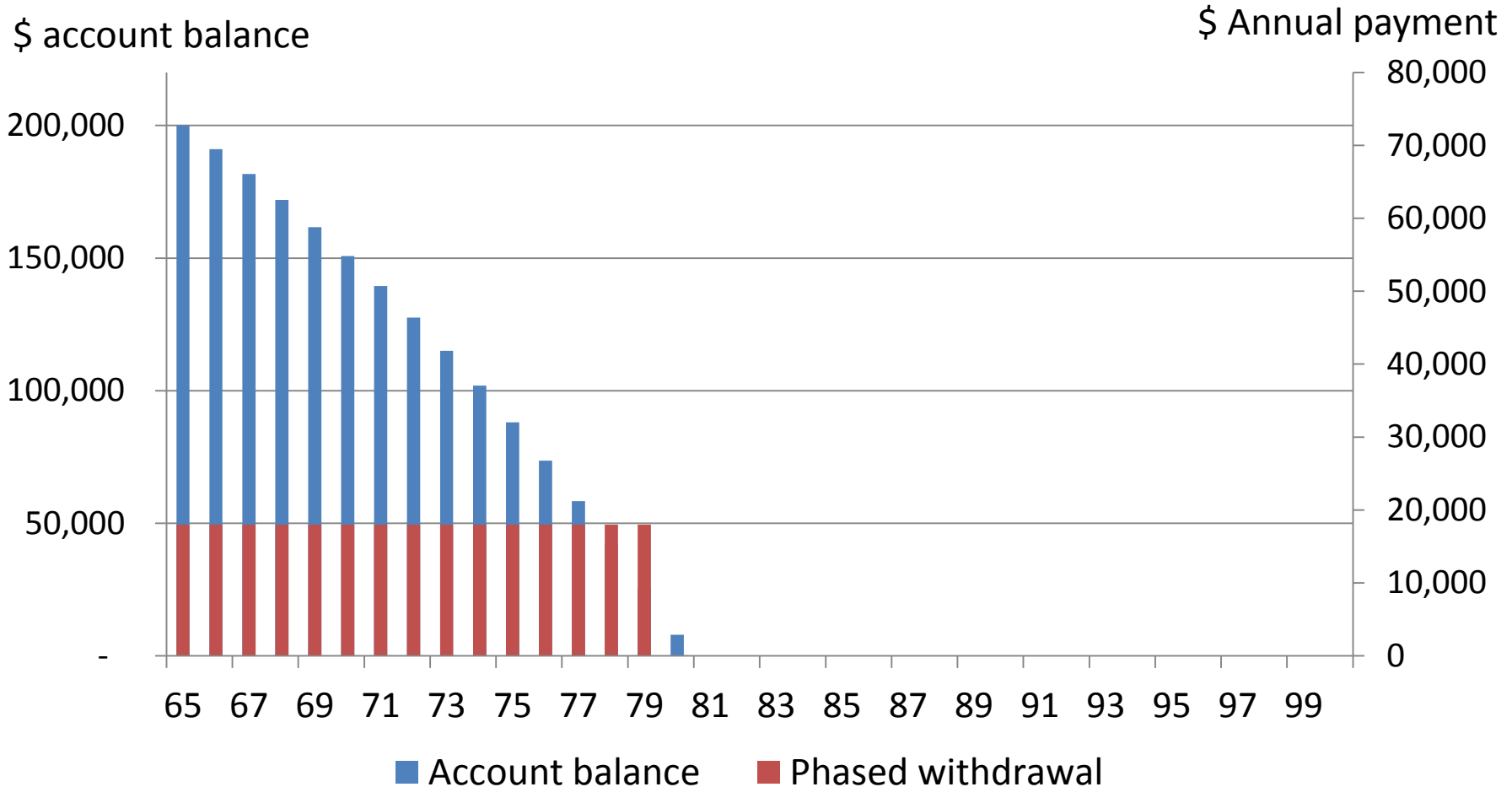
Industry response

Development of HYBRID longevity products

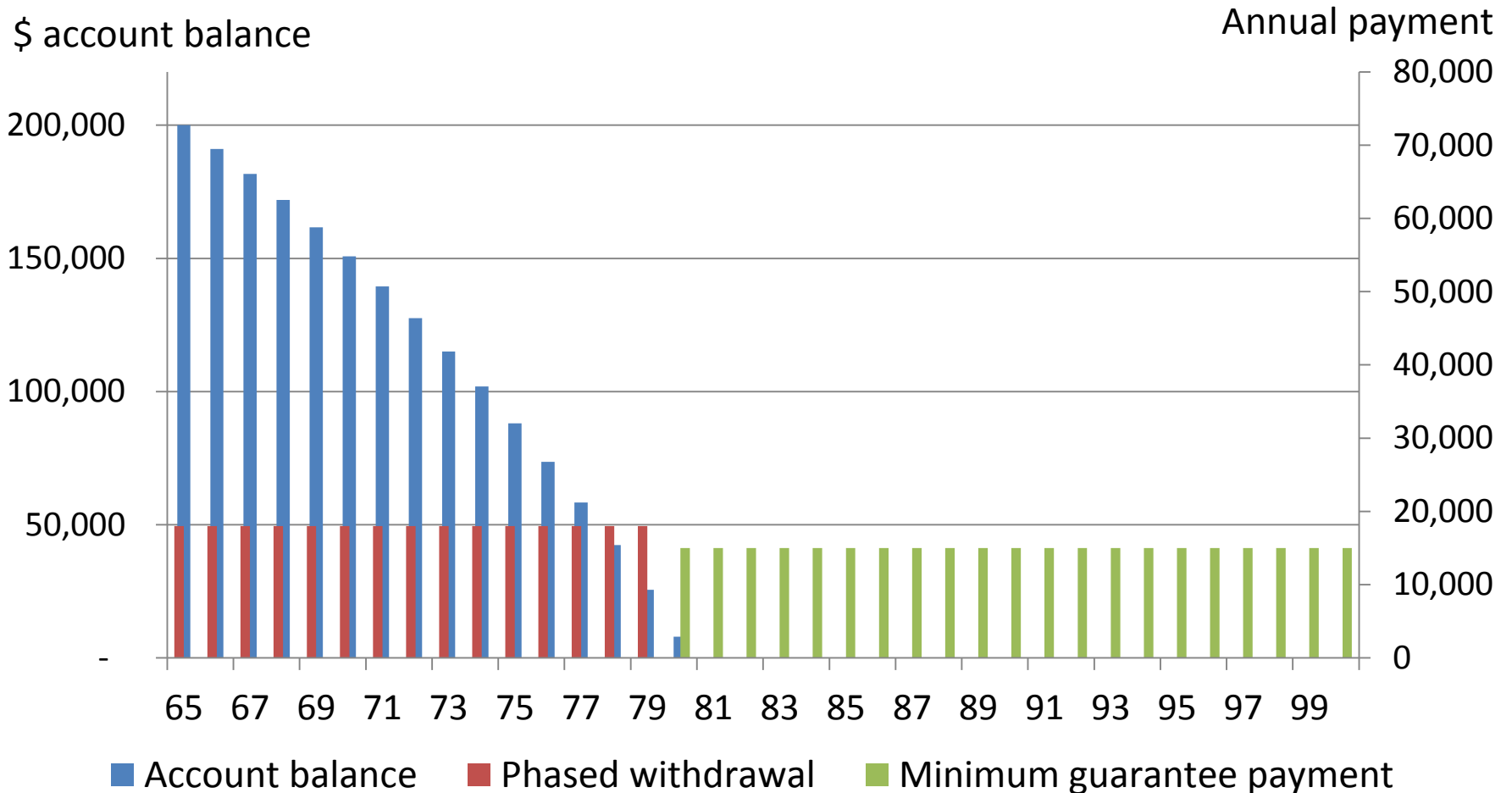
- Minimum guarantee payment for life
- Insures against longevity risk and market risk
- Payment similar to a deferred life annuity commences when wealth (retirement accumulation) is depleted due to either market conditions or longevity
- Currently such products do not receive the tax and social security means test concessions provided to life and term annuities and account-based pensions (phased withdrawal products)
- Industry ready to launch when (if) government changes regulations
- Fees?*!?

Minimum guarantee payment benefit

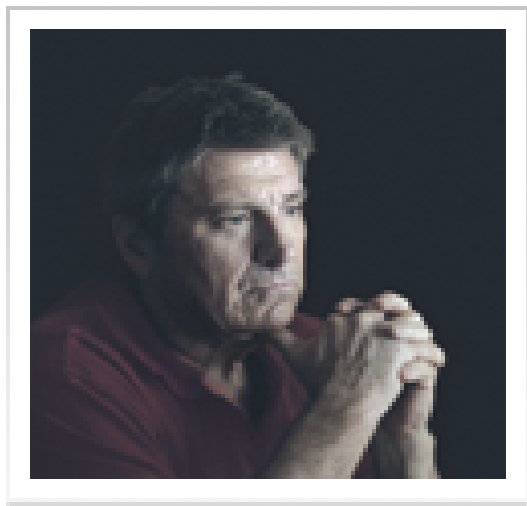
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Minimum guarantee payment benefit



One financial servicer provider is actively marketing annuities



'I should be cutting back my garden, not my spending'



'It's time for me to control my income, not the market'

The campaign commenced following the global financial crisis - the message is not that shares are bad investments, but that we need to make sure that at least some of our capital is protected by buying annuities.

<http://www.challenger.com.au/know/OurAdvertisingCampaign.asp>

Contributions from Academic Research

See: Bateman, Eckert, Geweke, Louviere, Satchell and Thorp
(2012) 'Engagement: A Partial Solution to the Annuity Puzzle',
CPS Working Paper

Retirement benefits choice experiment:

Motivated by very low demand for life annuities globally

Research questions

- How do retirement savers make retirement benefit decisions?
- What kinds of skills and demographics matter in this decision making?
 - Financial competence
 - Commercial product and system knowledge
 - Demographics
- Engagement: measurement and impact

Experimental task

- Subjects choose allocation of retirement wealth to two types of retirement benefits in online experiment:
 - Life annuity vs. Account-based pension
 - Life annuity with 15 year guarantee vs. Account-based pension
 - Repeat 4 times for each product pairing (4 levels for the risk of ruin → the probability that Product B will be depleted before the end of life):
 - 1 in 10 (LOW); 2 in 4 (MEDIUM); 1 in 2 (HIGH); 3 in 4 (VERY HIGH)
- Age Pension payments included if subjects nominate at least eligibility age or older for retirement age

EACH RESPONDENT MAKES 8 BENEFIT CHOICES

For example: income stream choice task

Please use the slider to allocate your wealth to Product A and Product B.



1. Your expected annual income: **\$26,730**
2. Guaranteed part of your expected annual income: **\$26,730 of \$26,730**
3. Share of wealth you can withdraw as a lump sum: **0%**
(You can only withdraw from Product B)

The chance your income from Product B will run out during retirement, that is, your chance of receiving ONLY the guaranteed part of income is:

Certain

For example: income stream choice task

Please use the slider to allocate your wealth to Product A and Product B.



1. Your expected annual income: **\$26,140**

2. Guaranteed part of your expected annual income: **\$18,960 of \$26,140**


3. Share of wealth you can withdraw as a lump sum: **100%**
(You can only withdraw from Product B)

The chance your income from Product B will run out during retirement, that is, your chance of receiving ONLY the guaranteed part of income is:

VERY HIGH (3 in 4)

How did subjects allocate retirement wealth between the two types of retirement benefit?

Average proportion allocated to life annuity v. account-based pension as risk of ruin increases.

Wealth	\$50K				\$125K				\$250				\$1000			
									Increasing risk of ruin							
<i>Male</i>																
Retire <65	56	45	55	59	42	56	64	62	47	51	53	62	47	49	59	59
Retire >65	52	57	60	60	44	44	52	52	53	55	65	67	53	53	55	58
<i>Female</i>																
Retire <65	56	52	58	59	54	50	61	61	47	54	63	69	47	50	52	48
Retire >65	48	47	52	57	47	45	52	52	50	54	52	60	45	45	47	50

A large minority of subjects made 'sensible' choices

- Economic theory tells us that people make sensible (rational) choices when they respond to increasing risk by allocating less wealth to risky assets.

Life annuity vs account-based pension: 44% made sensible choices (ie, stay at initial allocation or allocate more to the annuity as the risk of running out of funds due to market or longevity increases)

Guaranteed life annuity vs account-based pension: 52%

Were the respondents 'engaged' with the experimental task (ie how did they score on the recall quiz?)

	Product A % Correct	Product B % Correct
I can withdraw a lump sum for unforeseen events	77	67
If I die, payments stop	62	74
I will receive a regular income for as long as I live	60	71
My account balance will fluctuate with financial markets	75	68
Payments are guaranteed to me or my beneficiaries for the first 15 years	84	81
None of these apply	88	90

One third of respondents did not recall the product features

Engagement with the 'experimental task' increases with

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OLS estimation of task engagement (Recall quiz score at the dependent variable)	Coefficient *=10%, **=5% ***=1%
Numeracy	0.113***
Basic financial literacy	0.074***
Sophisticated financial literacy	0.064***
Commercial product knowledge	0.167***
Subjective understanding of finance	-0.010**
Planning of financial aspects of retirement (Higher = more advanced planning)	0.017***
Quality of life (Higher = better quality of life)	-0.056**
Subjective survival expectations (Higher = more optimistic)	0.001**
Gender (female = 0, male = 1)	-0.028**
Wealth sector (\$50K, \$125K, \$250K, \$1,000K)	-0.00004**
Intention to retire before age 65	0.020*
Constant	0.703***

Sensible choices are directly explained only by engagement and numeracy

Logit estimation: Dependent variable (not consistent) = 1 if subject decreased annuity % when risk increased (or did not move slider at all)

Coefficient:
*=10%, **=5%'
***=1%

Numeracy

0.501**

Basic financial literacy

1.311

Sophisticated financial literacy

1.130

Commercial product knowledge

1.034

Subjective understanding of finance

0.993

Planning of financial aspects of retirement (Higher = more advanced planning)

0.952

Quality of life (Higher = better quality of life)

0.542

Subjective survival expectations (Higher = more optimistic)

1.001

Gender (female = 0, male = 1)

1.154

Wealth sector (\$50K, \$125K, \$250K, \$1,000K)

1.000

Intention to retire before age 65

1.319

Engagement score

0.117***

Benefits choice experiment: what did we find out

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- Pre retirees have poor product and system knowledge, many not planning for retirement
- Pre-retirees do consider purchasing fairly priced annuities – when products described in terms of their features rather than commercial product names
- A large minority make ‘sensible’ allocation decisions by increasing allocation to products with longevity insurance (life annuities) when risk of ruin (ie, risk of depleting income) increases
 - More likely to make sensible benefit decisions when respondents are ‘engaged’ and have numeracy skills
 - More likely to be engaged if financial skills and product knowledge, plan for retirement, high subjective life exp..



Lessons for New Zealand

Demand issues:

- Retirement income products and annuities are complex financial products → Don't assume consumers understand the products and can make 'rational'/sensible decisions
- Low take-up should not be perceived as 'actual' demand
- In Australia – lack of evidence to support optimal drawdown patterns (but evidence of underestimation of life expectancy)

Supply side issues:

- How to (re)generate a market for retirement income products
- Innovative product design
- Mass market but personalised financial planning

Role of government:

- Likely that retirement income streams market will not develop without government support
- Minimise regulatory barriers to product development, while enhancing benefit security/solvency of providers
- Facilitate consumer understanding and engagement
- Policy simplification

Thank you

