2023 INTERNATIONAL CONGRESS OF ACTUARIES

BRIDGE TO TOMORROW

28 MAY – 1 JUNE 2023 · SYDNEY

Actuaries Institute Australia

IAA AAI International Actuarial Association
Association Actuarielle Internationale

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Making Annuity Rates Fair

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Frederik Tietz

This presentation has been prepared for the 2023 International Congress of Actuaries.
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Making Annuity Rates Fair

Background

Current products

Fairness journey

Is it workable?

Australian Retirement System

- 3rd best retirement savings system in the world
- Large compulsory contributions (10.5% increasing to 12% from 2027)
- Significant focus on reform of accumulation phase for past two decades

Accumulation phase

- Lack of diversity and choice in retirement
- Individuals are self-insuring longevity risk
- Increasing life expectancy not catered for
- Guidance hard to come by

Retirement phase

So what's changed?

- Dropped to 6th in Mercer survey
- Legislation introduced which ensures all super funds have a strategy for retirement
- Funds aiming to launch products in the near future
- New retirement products hit the market

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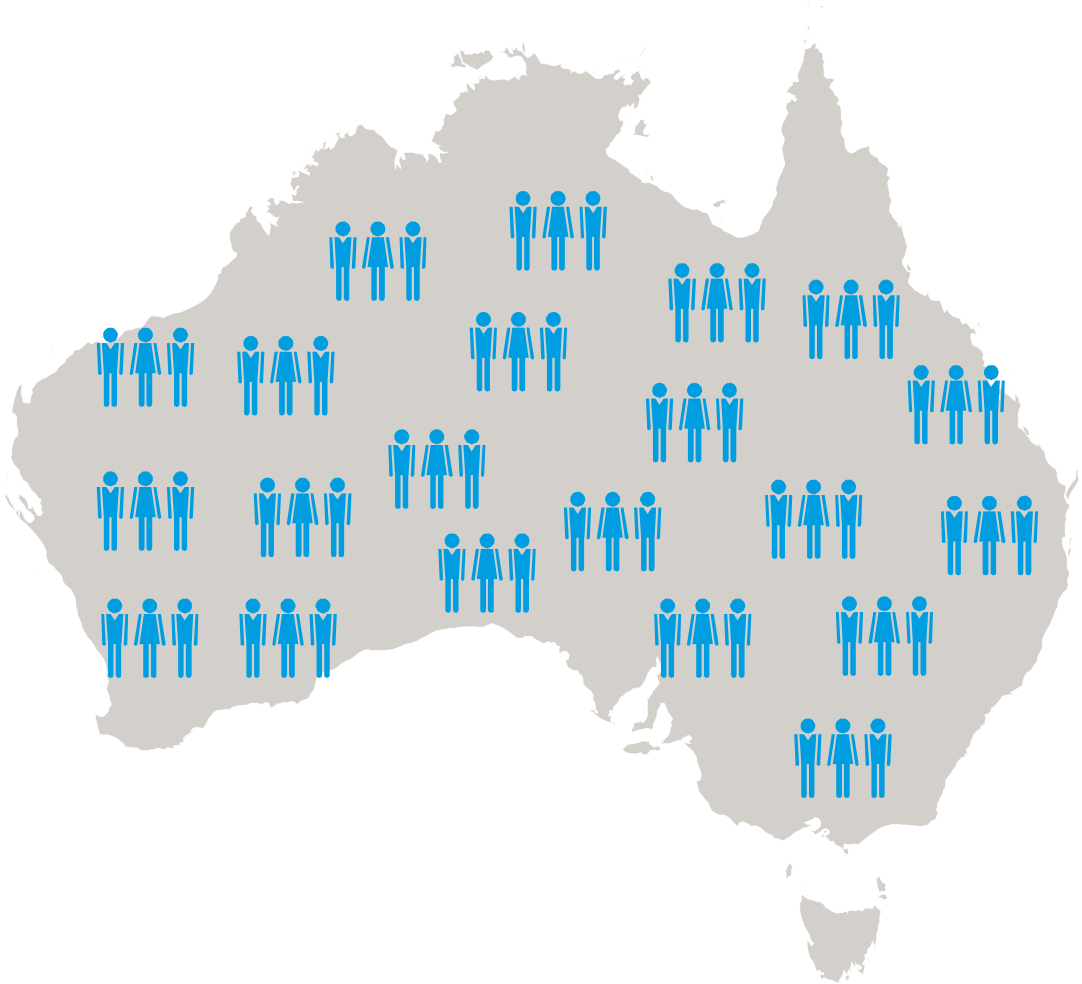
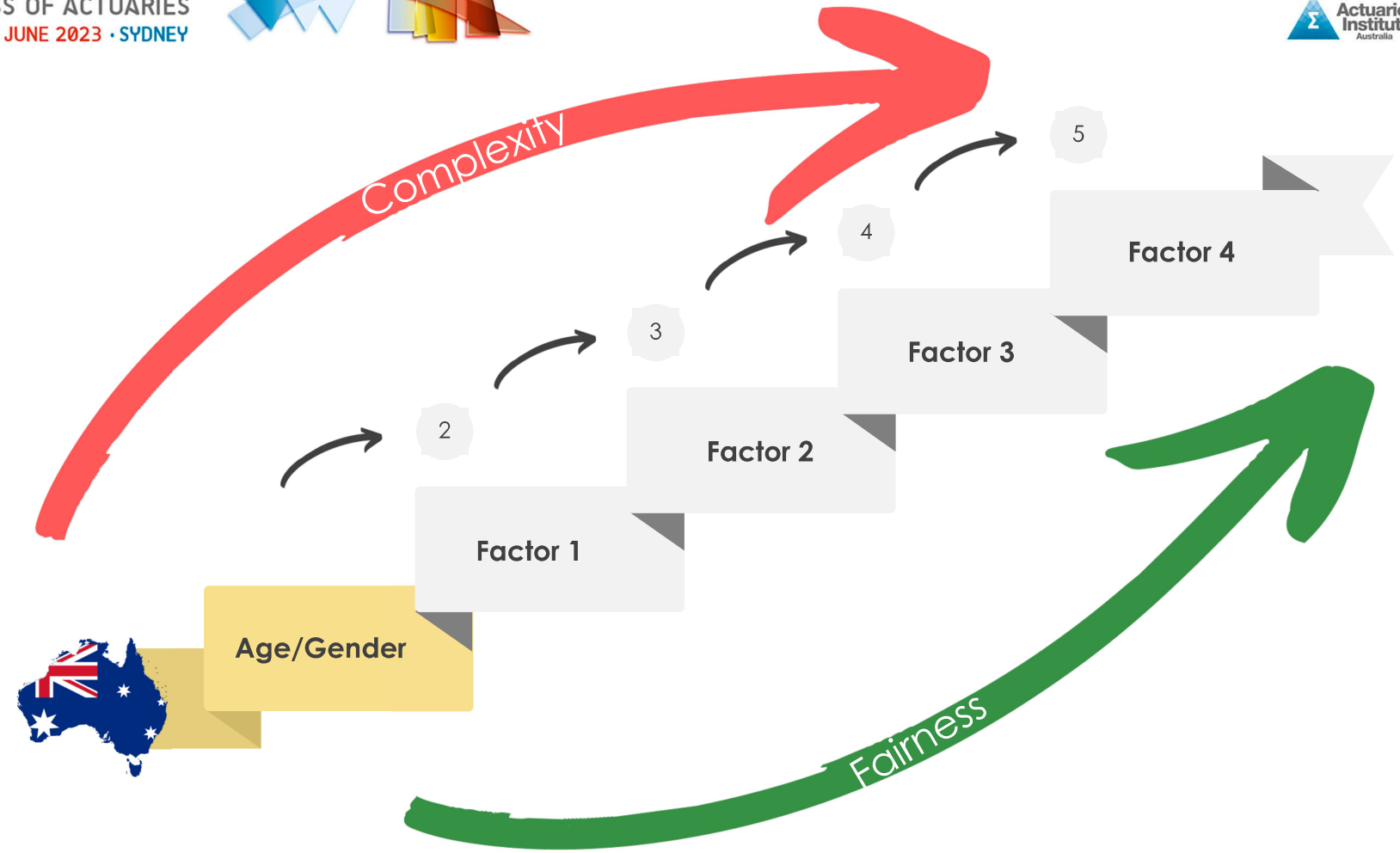
I DIDN'T CHOOSE THE RETIRED LIFE
THE RETIRED LIFE CHOSE ME




Complexity
5
4
Factor 4
3
Factor 3
2
Factor 2
Factor 1
Age/Gender
Fairness

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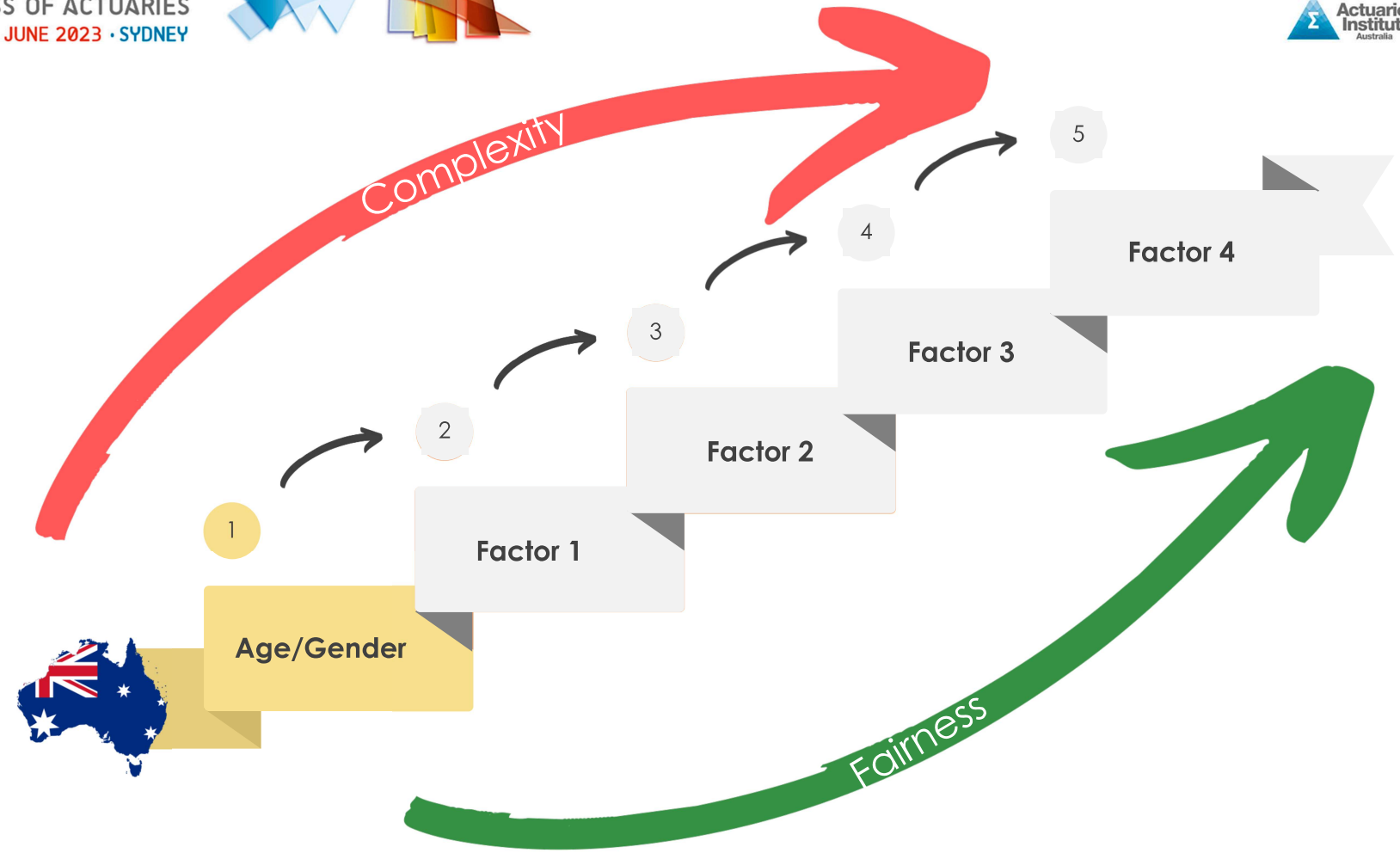
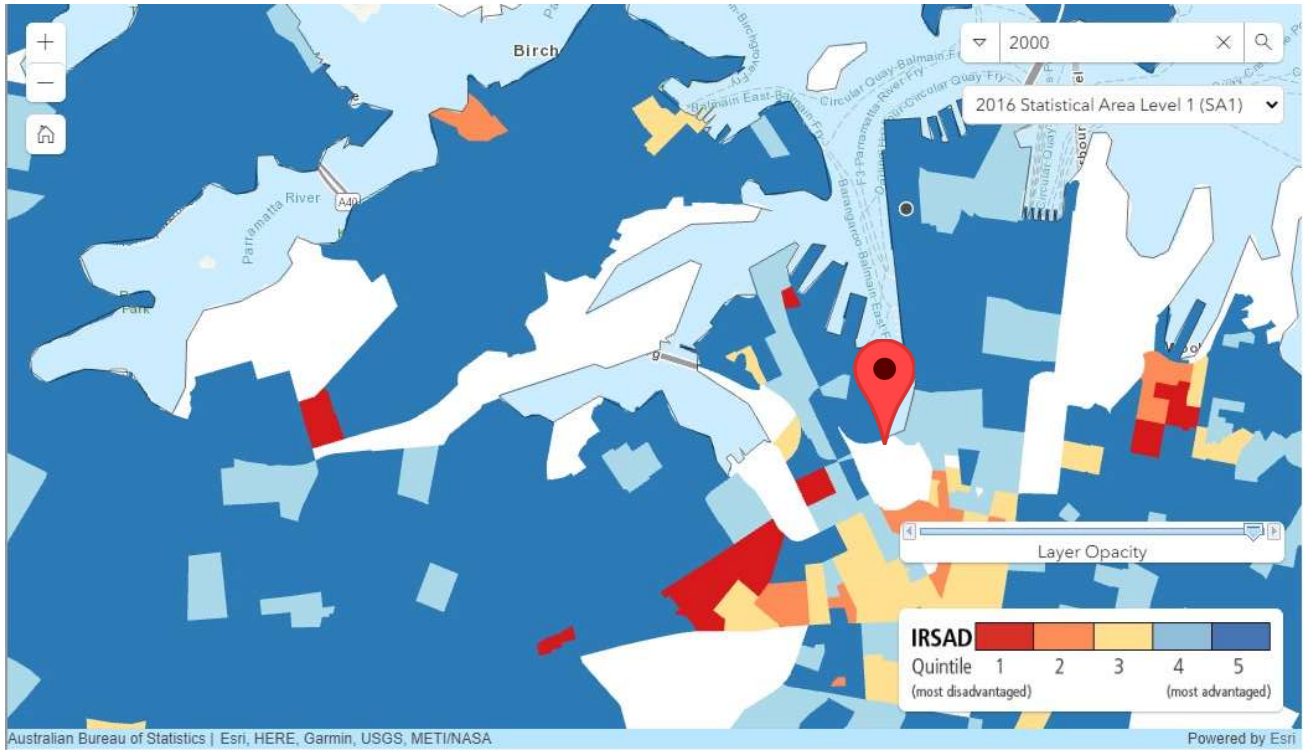
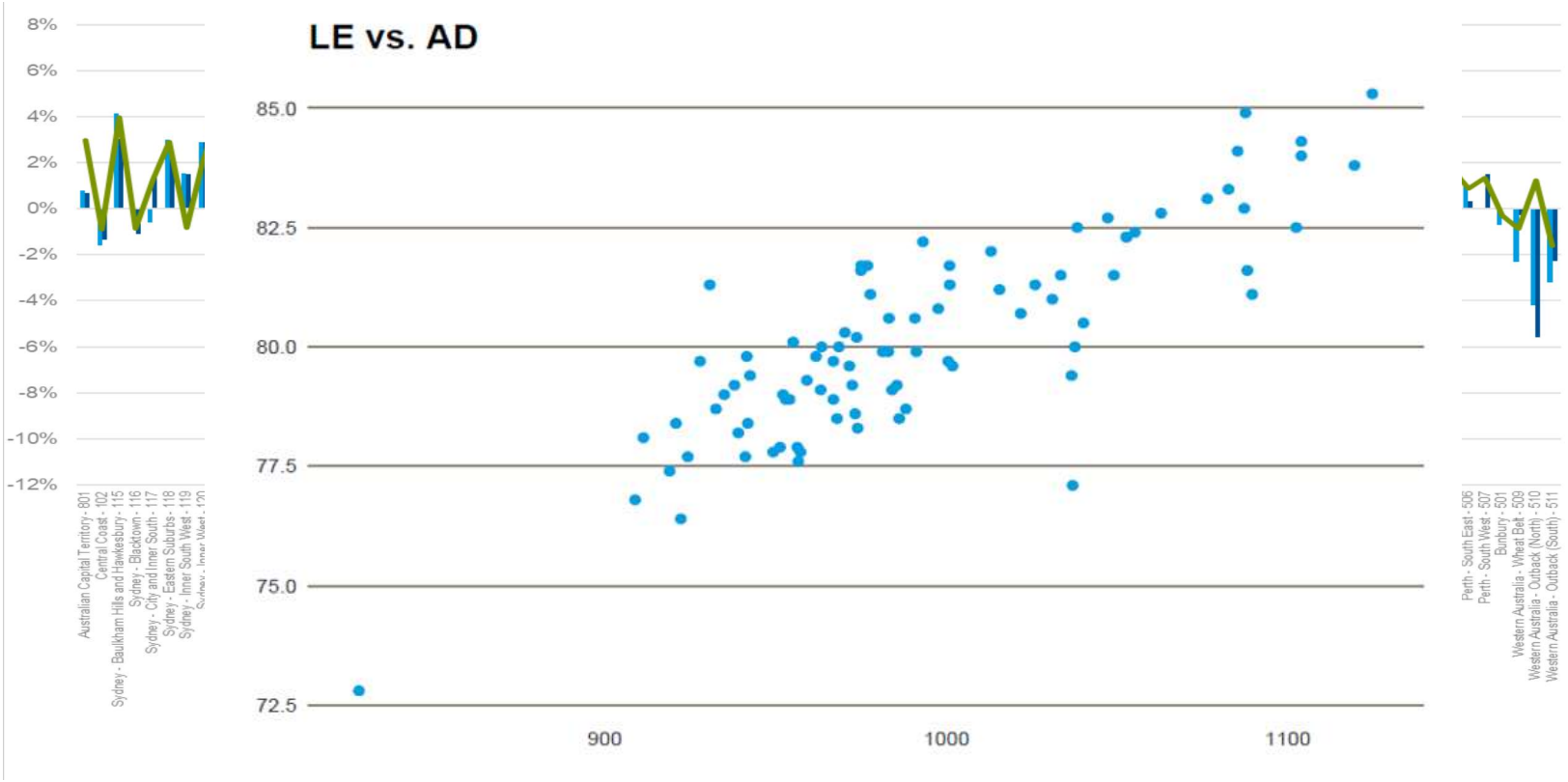

Complexity
1
Age/Gender
2
Factor 1
3
Factor 2
4
Factor 3
5
Factor 4
Fairness

Socio-economic classification in Australia



Life expectancy at birth and socio-economic index

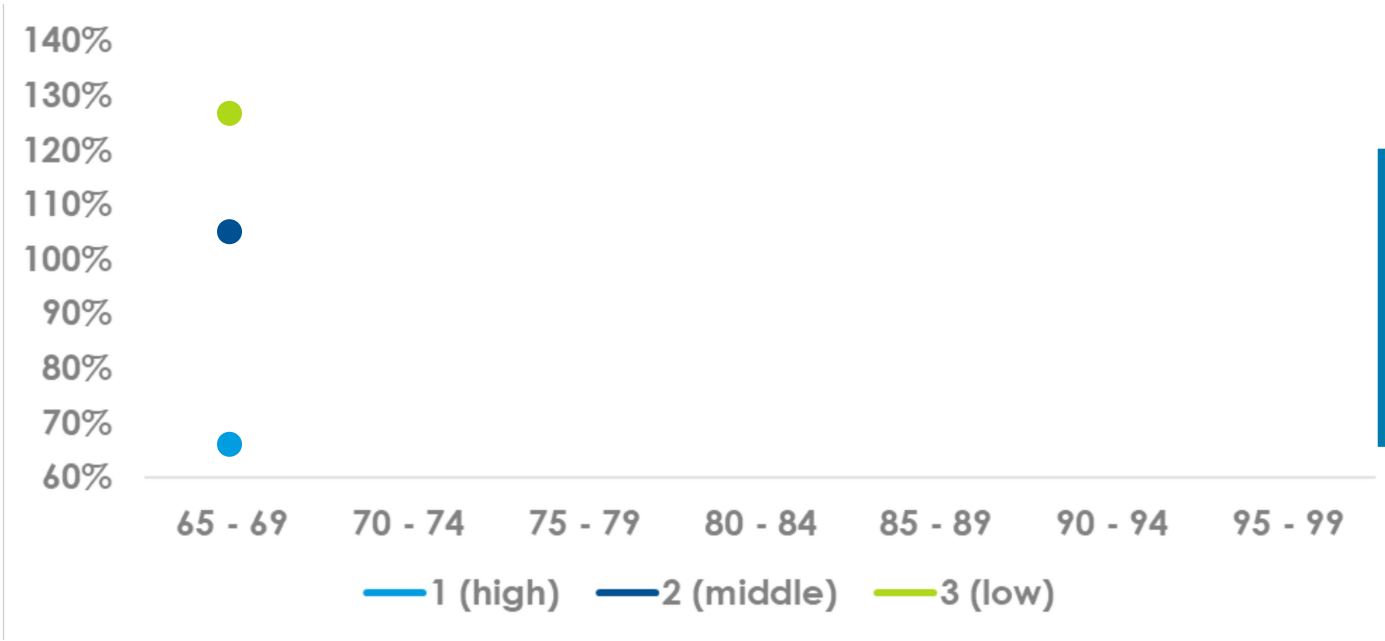


Mortality experience by wealth

The wealthier you are, the lower your mortality will be.

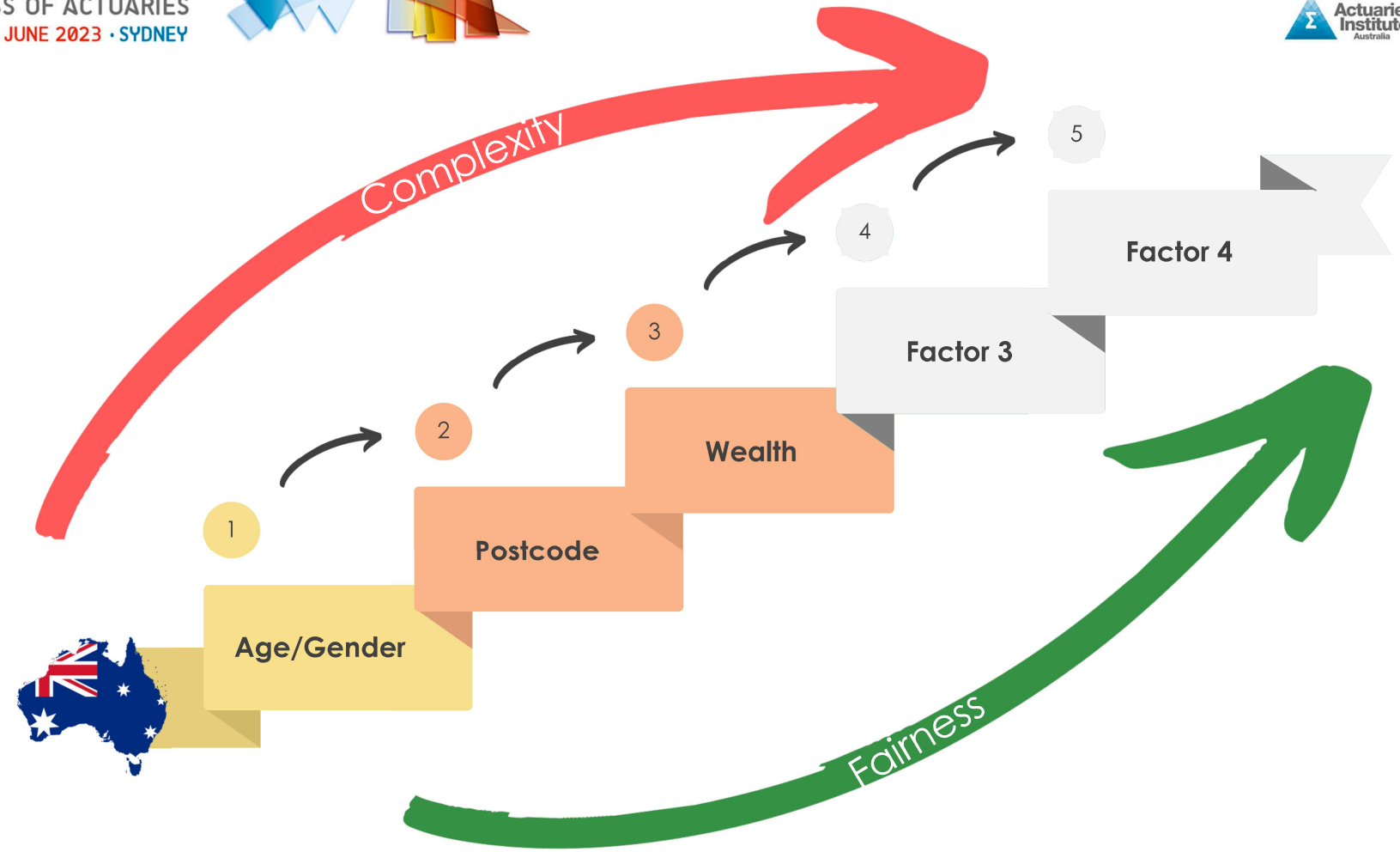
Note: Illustrative figures.

Mortality experience per socio-economic group by age

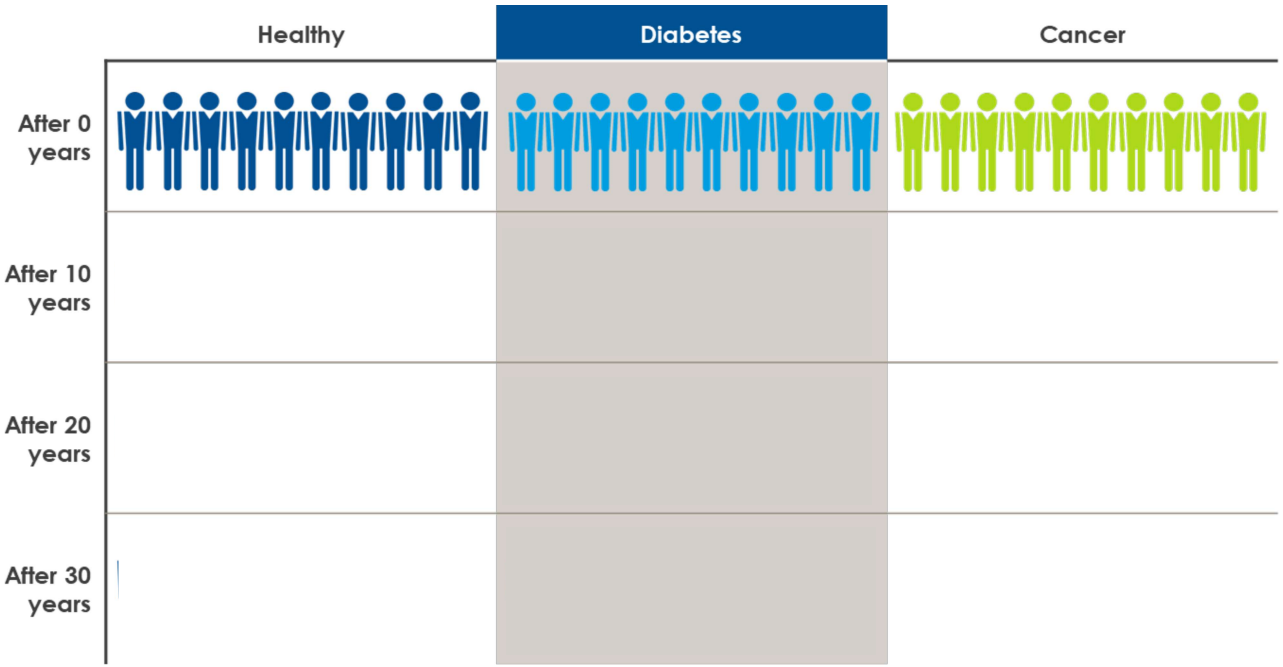


Single adjustment factors aren't appropriate for long term business.

Note: Illustrative figures

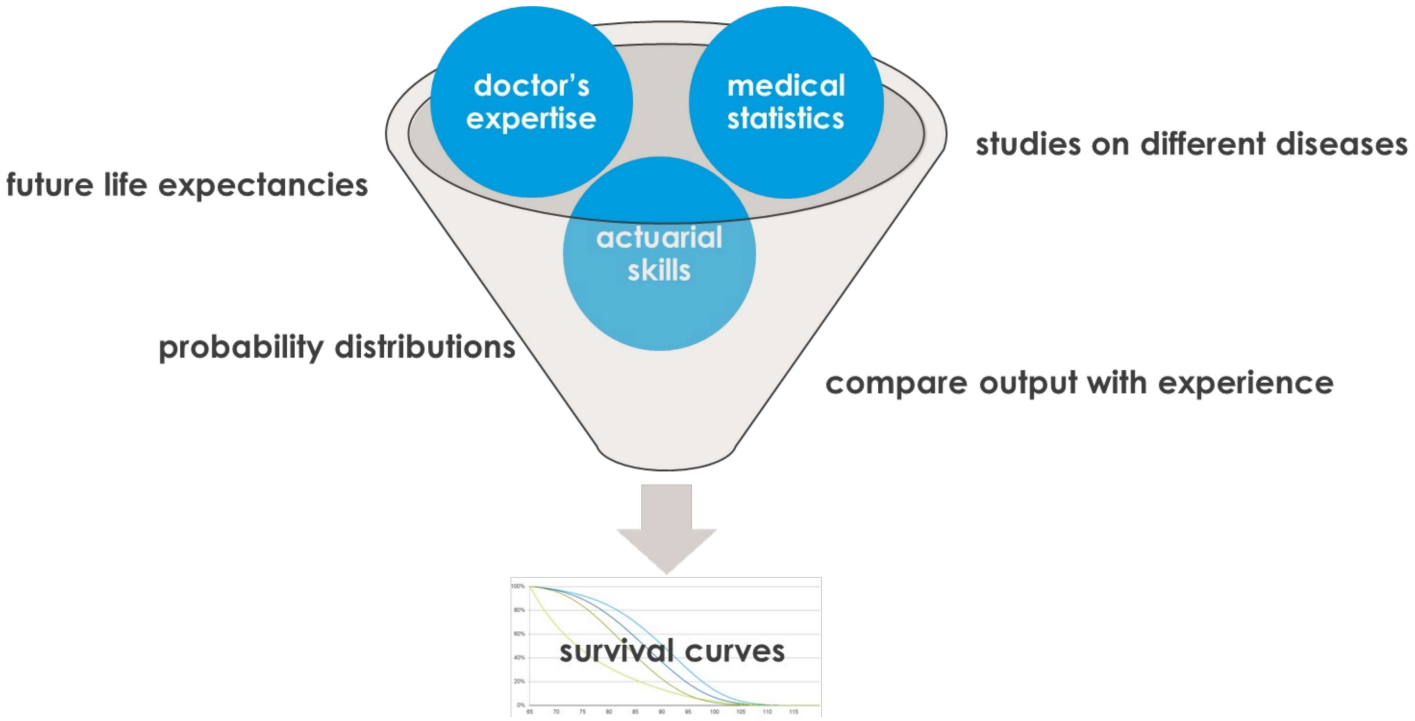

Complexity
1
Age/Gender
2
Postcode
3
Wealth
4
Factor 3
5
Factor 4
Fairness

Survival rates by health status



We need to capture the pattern of mortality for each condition.

How do you arrive at survival curves?



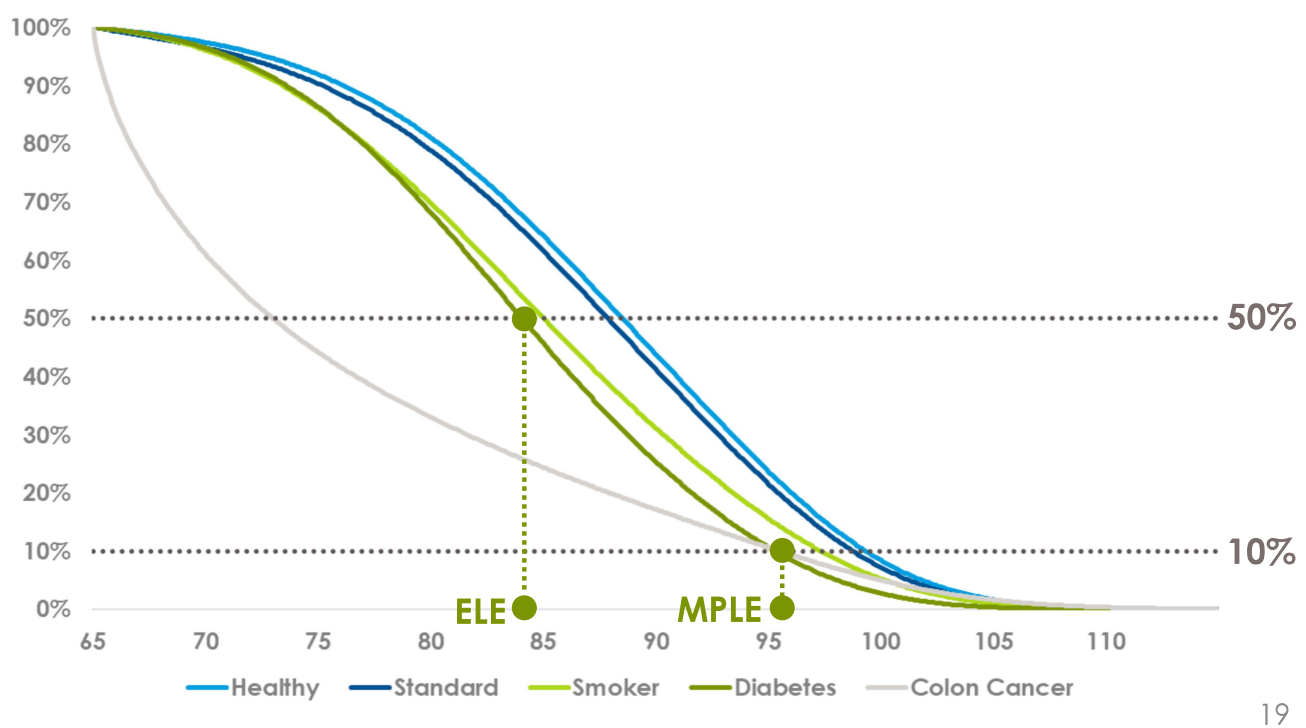
Example: Survival curves

Person aged 65, middle socio-economic group

	ELE	MPLE
Healthy	23.6	34.3
Standard	22.9	33.8
Smoker	20.1	32.3
Diabetes	19.1	30.3
Colon Cancer	8.0	30.6

ELE – Estimated Life Expectancy
MPLE – Maximum Probable Life Expectancy

Note: Illustrative figures, prepared by Hannover Re in May 2023.

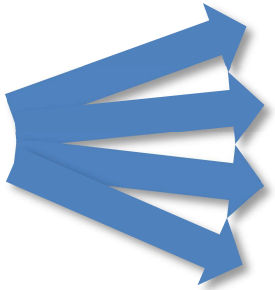


Sample rates

Valuation interest rate 4%, person aged 65, middle socio-economic group

Standard annuity rate

	ELE	Annuity
Standard	22.9	1,000



Note: Illustrative figures, prepared by Hannover Re in May 2023.

Sample annuity rates by socio-economic group and health status

Valuation interest rate 4%, person aged 65

	Low	Middle	High
Healthy	1,020	980	940
Smoker	1,130	1,070	1,000
Diabetes	1,160	1,090	1,020
Colon Cancer	1,920	1,560	1,220

Note: Illustrative figures, prepared by Hannover Re in May 2023.

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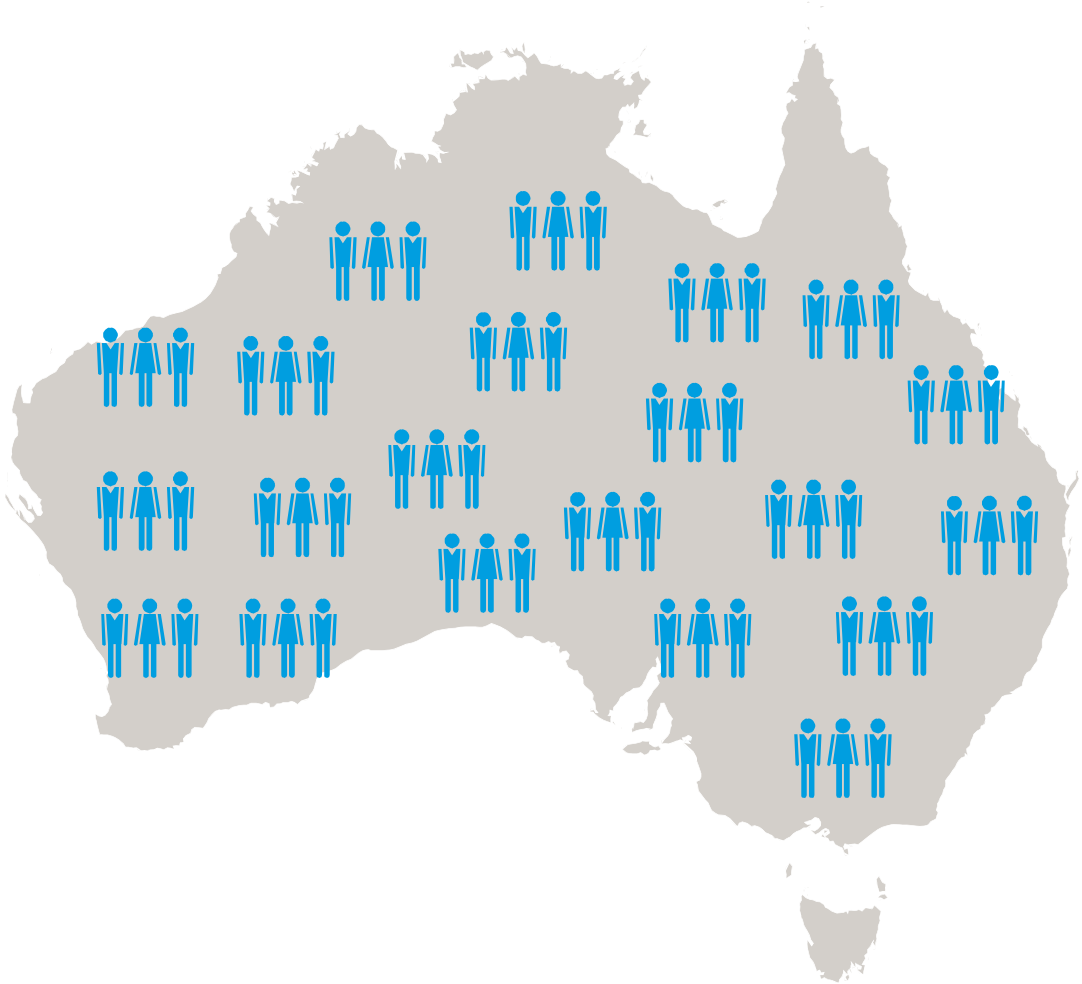

Can Enhanced Annuities succeed in Australia?

- Access to new customer segments
- Fairer rates for the entire community
- Reduces mis-selling risk
- Insights into individual health

- Requires consumer education
- Significant upfront investment without guaranteed scale

I'm Ready....
...are you READY?
meme-arsenal.ru