ACTUARIAL SOCIETY OF SOUTH AFRICA

QUANTIFYING RISK, ENABLING OPPORTUNITY

Funding for life or for death

And the challenge of creating sustainable income for those retiring with insufficient assets

1 August 2016

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Why this talk?

- Treasury's retirement reform papers challenged the profession and the industry.
  - South Africans retire with insufficient assets to maintain their lifestyle;
  - retirement propositions serve commercial interests better than customer needs.
- We have spent most of our careers focused on improving customer outcomes in retirement.
- We believe that:
  - reaching retirement age DOES NOT automatically qualify a person to be a financial and mortality risk management expert;
  - by contrast, 7-plus years of actuarial studies and subsequent career should provide a measure of expertise in these disciplines.
- And therefore:
  - that the actuarial profession can do better than transfer longevity and investment risk in retirement onto the pensioner.

Why is the industry desperate to "get rid of the elderly"?

- There is a trend in society to "get rid of the elderly" by institutionalising them.
- This is also reflected in financial services:
  - the transfer from Defined Benefit to Defined Contribution in the 1990's:
    - Corporates moved from taking responsibility for providing retiring employees with a guaranteed income for life and appointing experts to manage the long term risk;
    - to "removing the volatile pension liability from the balance sheet";
    - and shifting the long term risk to the individual.
  - Insurance companies:
    - moved from providing lifelong guarantees to individuals;
    - to investment products that generate high margin asset based fees, without requiring much capital;
    - whilst shifting the long term risk to the individual.

Are actuaries still relevant in retirement?

- In that time, the SA actuarial profession has moved from:
  - 200 qualified actuaries managing the complex interaction of longevity, investment and other risks with paper-and-pen;
  - to many thousands of actuaries using high powered stochastic simulation models to manage the negligible and immaterial risks that remain in defined contribution pension funds and living annuities ;
  - whilst we leave the really complicated job of managing longevity, choosing appropriate long term investment strategies and making a pot of money last for a lifetime to our bus drivers, factory workers and electricians.

Are electricians more relevant in retirement?

"If you would not trust an actuary to change a light bulb…

….then why make an electrician manage longevity!!"

Some definitions

- "Funding for life"
  - to maximise the income available for essential expenditure over the lifetime of a pensioner and dependents.
- "Funding for death"
  - to provide for discretionary spending and residual assets available to beneficiaries at date of death.
- "Sustainable income"
  - an income increasing more-or-less in line with inflation to cover at least essential expenditure (food, accommodation, utilities, medical) for the member and dependents.
- "Insufficient assets"
  - insufficient to maintain standard of living after retirement.
- Not in scope:
  - the 6% of South Africans able to maintain their lifestyle and replace their income fully at retirement. http://www.treasury.gov.za/comm_media/...pdf (2014/07/09).
  - retirees who have assets below the threshold at which they are permitted to take their retirement savings as cash.

Pensioner needs

What do pensioners need?

- South African surveys:
  - Just Retirement survey:
    - 86% prefer guaranteed income for life;
    - 44% cannot afford to lose any of their retirement savings before it would seriously impact on their retirement plans;
    - (367 participants, age 55-85, major metropolitan areas).
  - Sanlam Benchmark survey:
    - 87% wanted the certainty of a guaranteed income for life;
    - (151 participants, major metropolitan areas).

What do pensioners need?

- International surveys:
  - UK:
    - the majority of people prefer a stable income for life rather than taking risks in managing a pool of assets and choosing how much income to draw.
    - (Making the system fit for purpose: How consumer appetite for secure retirement income could be supported by the pension reforms, International Longevity Centre – UK, January 2015. Based on a survey of 5,000 UK adults aged 55-70. http://www.ilcuk.org.uk/index.php/publications/publication_details/making_the_system_fit_for_purpose)
  - Australia:
    - 90 percent of Australians over age 50 believe that “money that lasts my lifetime” is very important.
      - (December 2013 Retirement Income Report, Investment Trends, Sydney. Based on a survey of 5,730 Australians aged 40 and older (as quoted on Page 120 of Murray Financial System Inquiry, released 7 December 2014). http://fsi.gov.au/publications/final-report/)

Maslow’s hierarchy taken into retirement

Model based on *http://www.nextavenue.org/article/2014-04/determine-your-hierarchy-needs-retirement* *(2003) Mitch Antony*

Different need = different core solutions

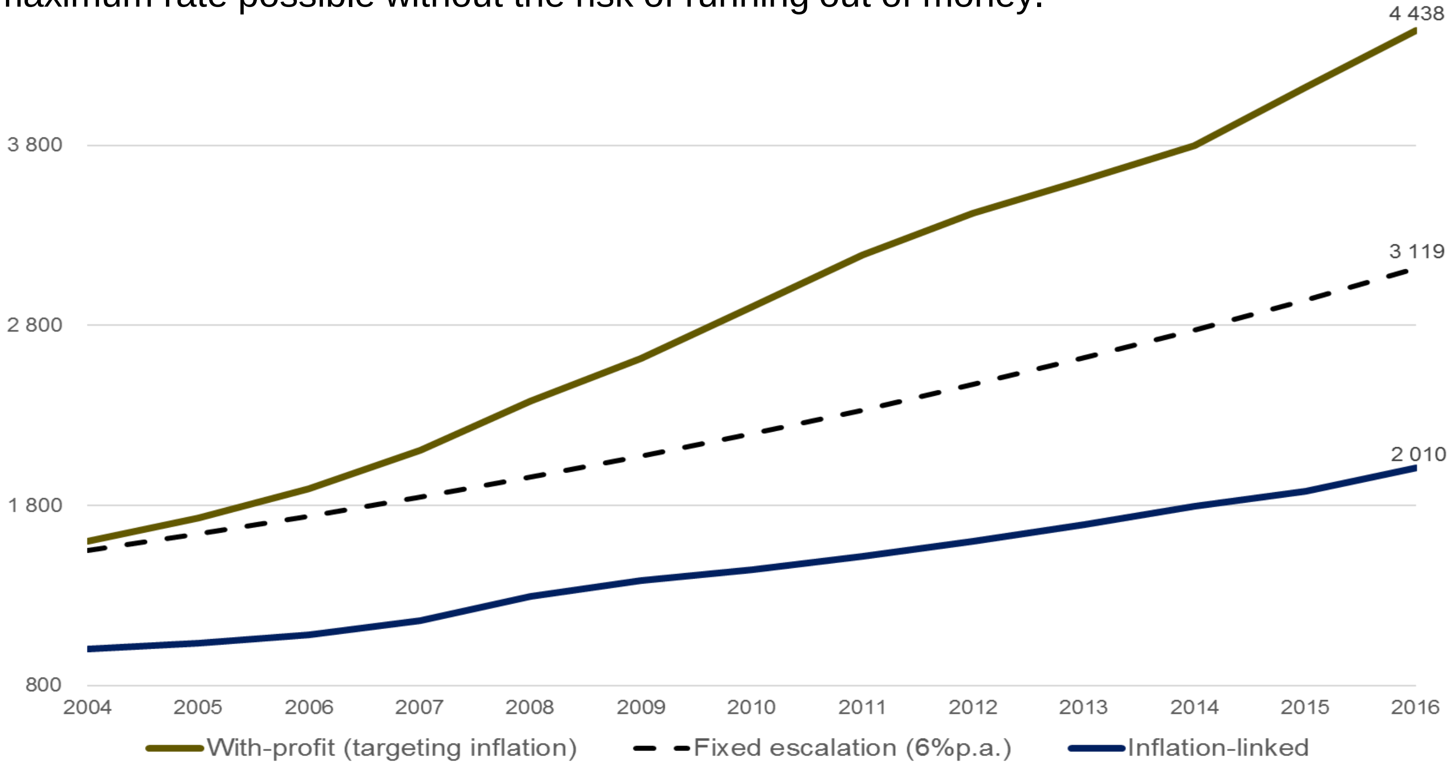
Funding for life	Funding for death
Physical survival Essential expenses Food, accommodation, utilities, medical	Discretionary expenses
Matched with a guaranteed income for life Increasing more-or-less in line with inflation	Flexible investments Flexible income drawdown Scope for tax planning
	Tolerance for volatility depends on where the pensioner sits on the hierarchy of needs

Funding for life

Maximising income over expected lifetime

Guaranteed annuities maximise lifetime consumption

- A guaranteed annuity is the only instrument that allows pensioners to consume at the maximum rate possible without the risk of running out of money.



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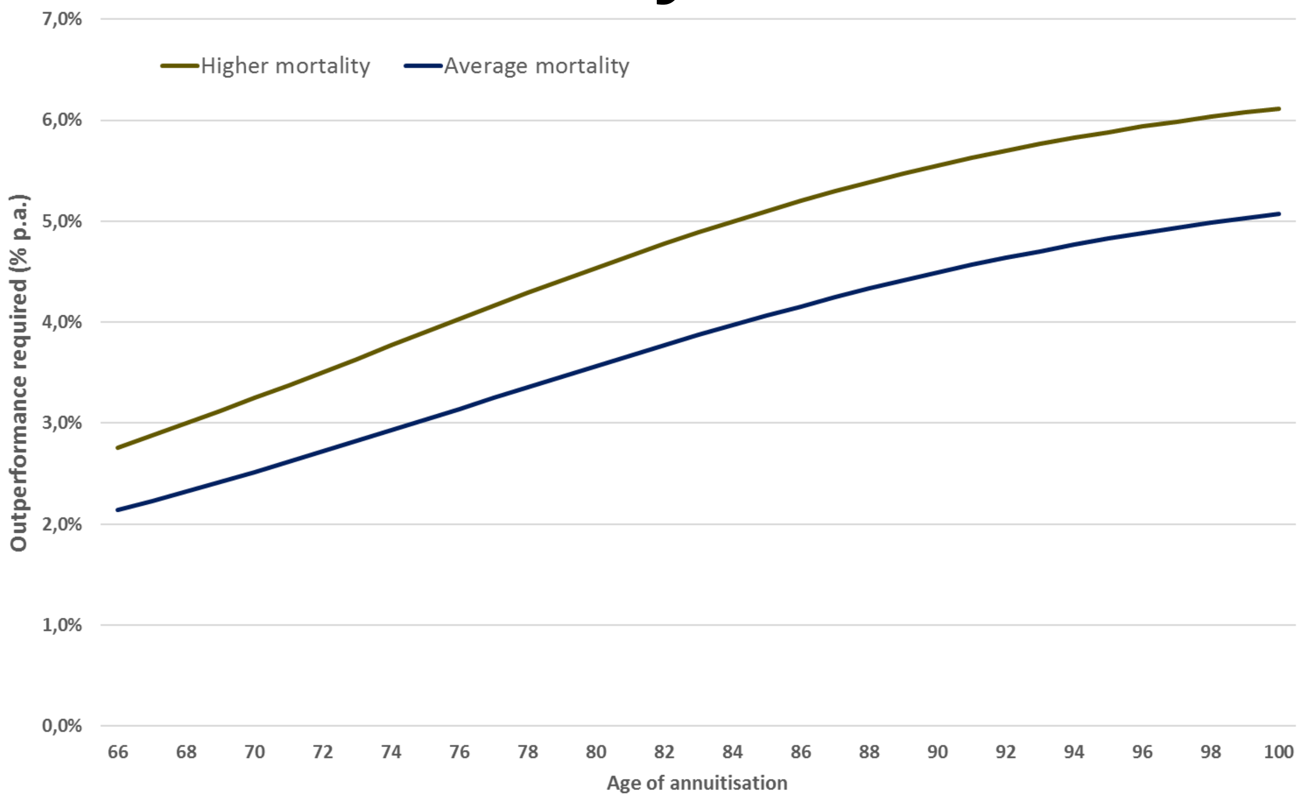
Additional risk free return in mortality credits



*Lodhia and Swanepoel (2012) Living vs Guaranteed Annuities: In search of a sustainable retirement income.

Enhanced income through underwriting

- About 40% of the population qualify for an increase in retirement income of between 10% and 30%.
  - as a result of ill health, lifestyle and socio-economic factors.

Funding for life – but what if I die?

- Funding for life covers needs for pensioner and dependents whilst alive.
- Death benefits in excess of essential spending is discretionary spend.
  - fits into “gifts” in hierarchy of needs.

Funding for death

Discretionary income, residual assets.

Discretion = flexibility

- Discretionary spending is well matched with:
  - flexible investments; and
  - flexible income drawdown.
- May want some conservatism around “just in case” and “freedom” spending;
- And high equity to maximise long-term returns for “gifts” and “dreams”.

Can one size fit all?

Can a living annuity fund for life and for death?

- After all, can 90% of SA retirees be wrong?
- Typical solution:
  - flexible investment;
  - money available to beneficiaries on early death;
  - follow guidance on a sustainable drawdown;
  - use moderate equity so it is not too risky.
- Great for insurers:
  - high profit margin;
  - no guarantees;
  - low capital requirements.
- Great for advisors:
  - trail fees on income.
- So why do Treasury say:
  - "most South African retirees who purchase living annuities face a substantial risk of outliving their assets"? (Source: Enabling a better income in retirement, SA National Treasury, 21/9/2012)

What is a sustainable drawdown rate?

- 5% - ASISA
  - "when the percentage of income drawn exceeds the returns of the investment portfolio supporting the living annuity, the capital base will be eroded over time" Peter Dempsey. (ASISA, "Slow but steady decline in living annuity drawdown rates", 2016/07/27)
- 4% - Allan Gray
  - "based on the findings of US author and financial adviser William Bengen, and our own research, we found that if you structure your portfolio appropriately and draw a rand-based (rather than percentage-based) income that amounts to 4% of your savings at retirement, and only increase your rand amount in line with inflation each year, there is a high likelihood that your income could last for at least 30 years", Wanita Isaacs, 2016/03/31.
- 7% to 17,5% - National Treasury default annuity regulations
  - 7% (below age 60) increasing to 17,5% (age 85)

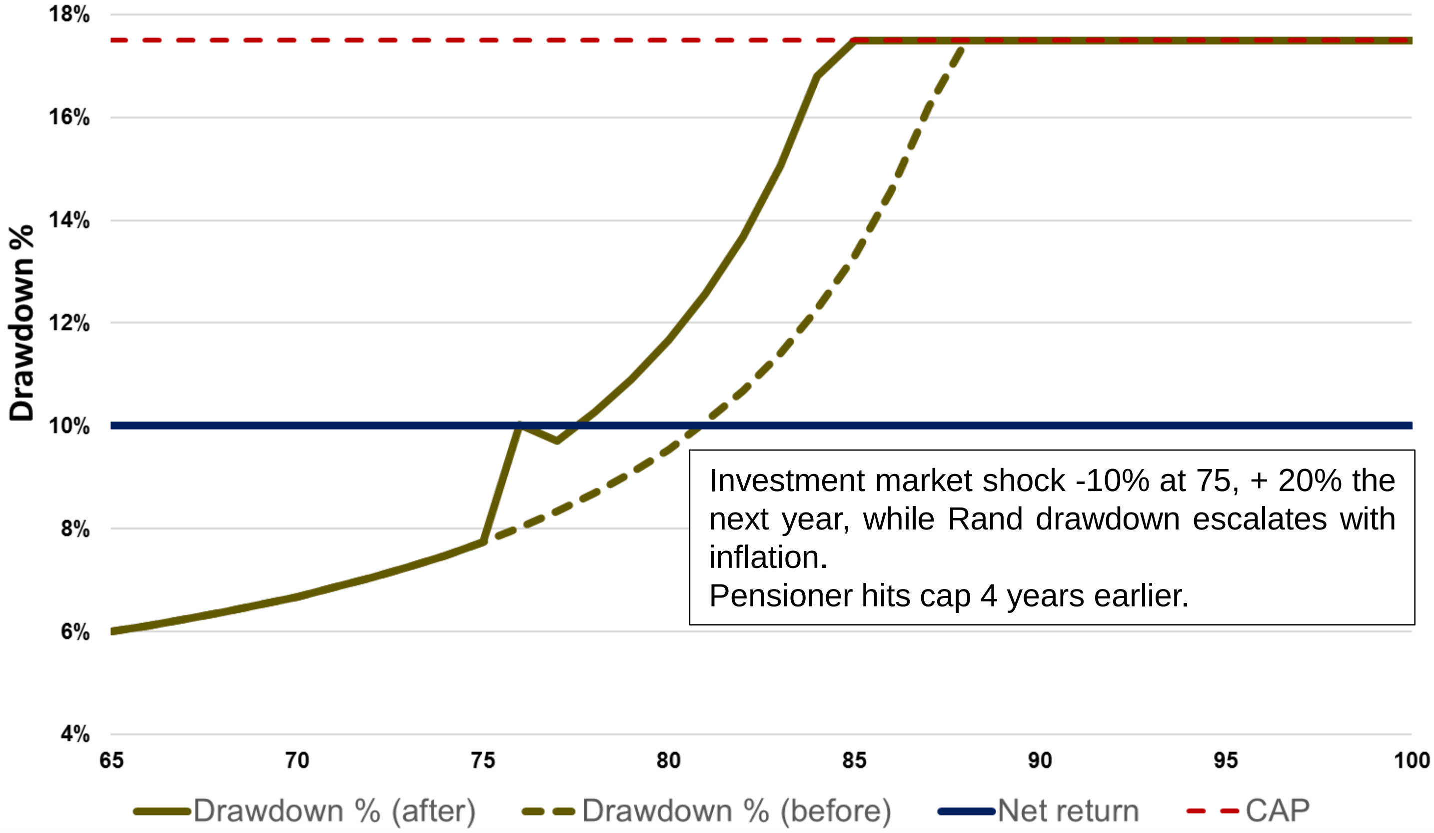
But “sustainable drawdown” is insufficient for pensioners

- Average actual drawdown rate: 6,44%
  - ASISA, “Slow but steady decline in living annuity drawdown rates”, 2016/07/27.
  - but there should actually be disclosure on drawdown rates per age, in line with Treasury’s default design.

Low equity does not mean low risk

- To reduce drawdown %:
  - Consume less; or
  - Assets need to grow faster.
- 1% p.a. additional investment return in the long term could get a pensioner closer to "sustainable" drawdown.
  - More aggressive strategy exposes pensioner to volatility;
  - but then there needs to be a way to smooth out volatility.

The perils of Rand cost ravaging in living annuities



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Consuming more

With guarantees, without volatility.

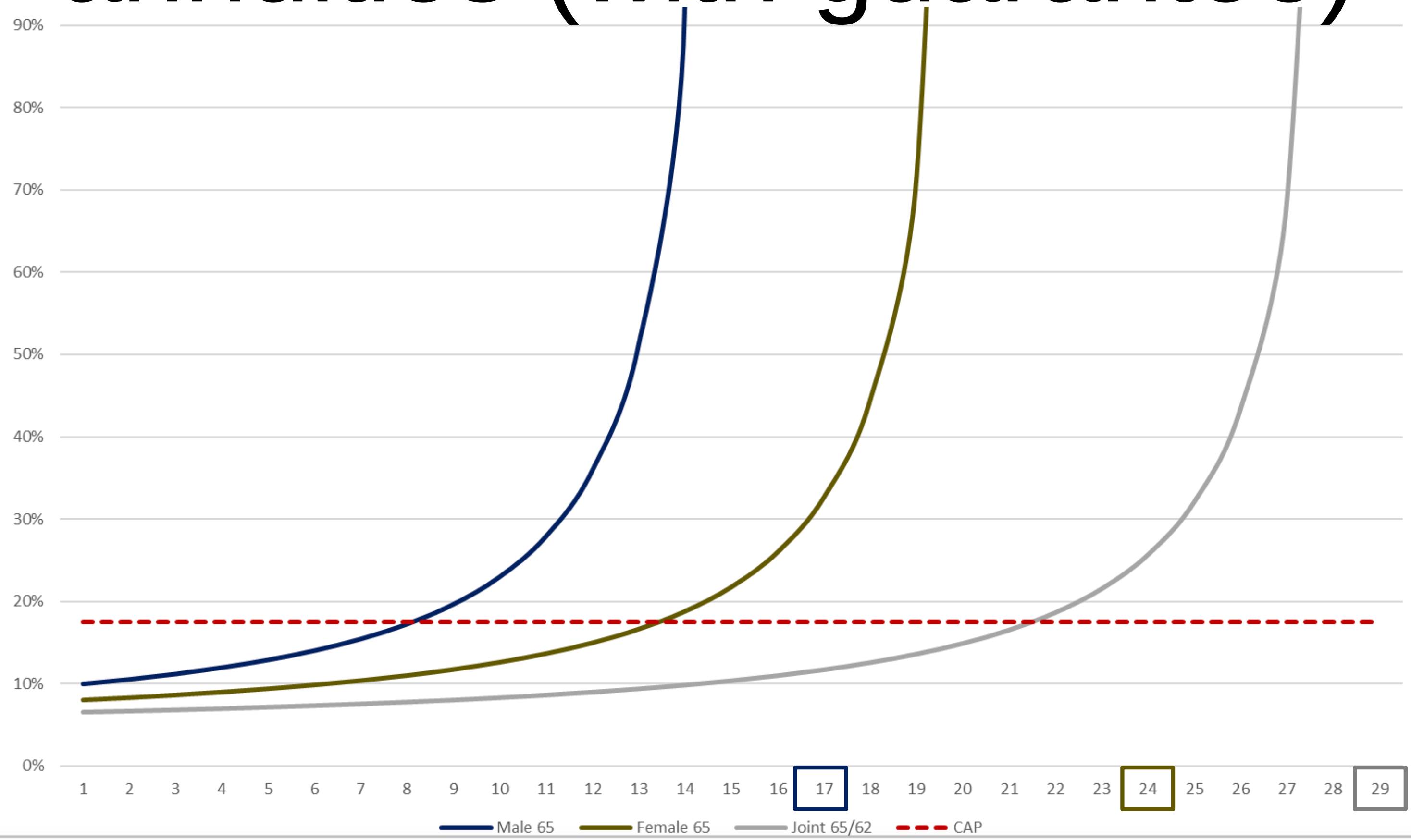
Pensioners can consume more and with guarantees

- Converting a with-profit annuity to a “drawdown rate”:
  - providing guaranteed income for life;
  - targeting increases in line with inflation.

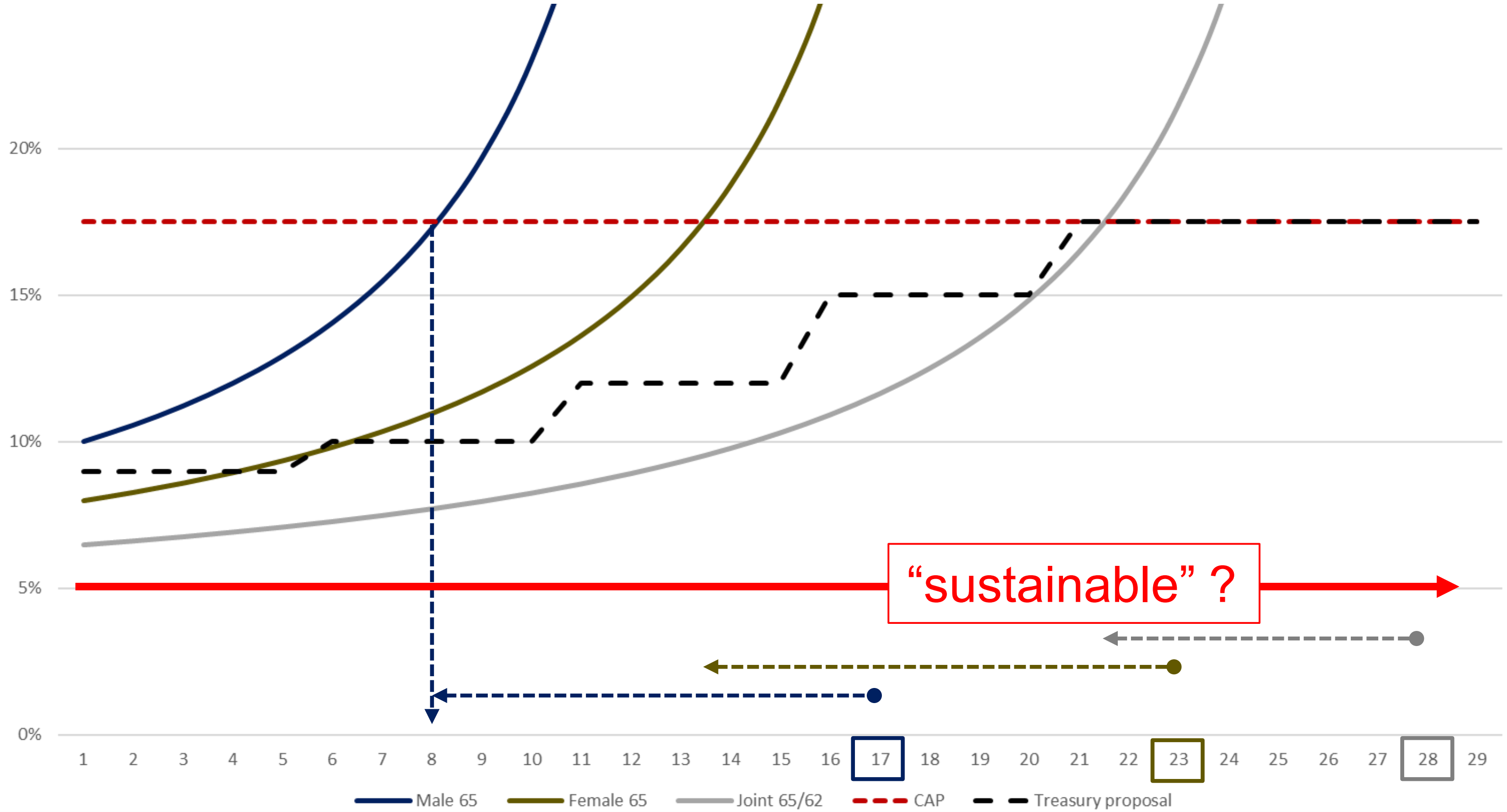
Pensioner profile	Starting pension as initial drawdown %
Male (65)	10,0%
Female (65)	8,0%
Joint (M65/F62)	6,5%

- If pensioners can’t afford a sustainable drawdown rate
  - then they can’t afford to under-consume in retirement.

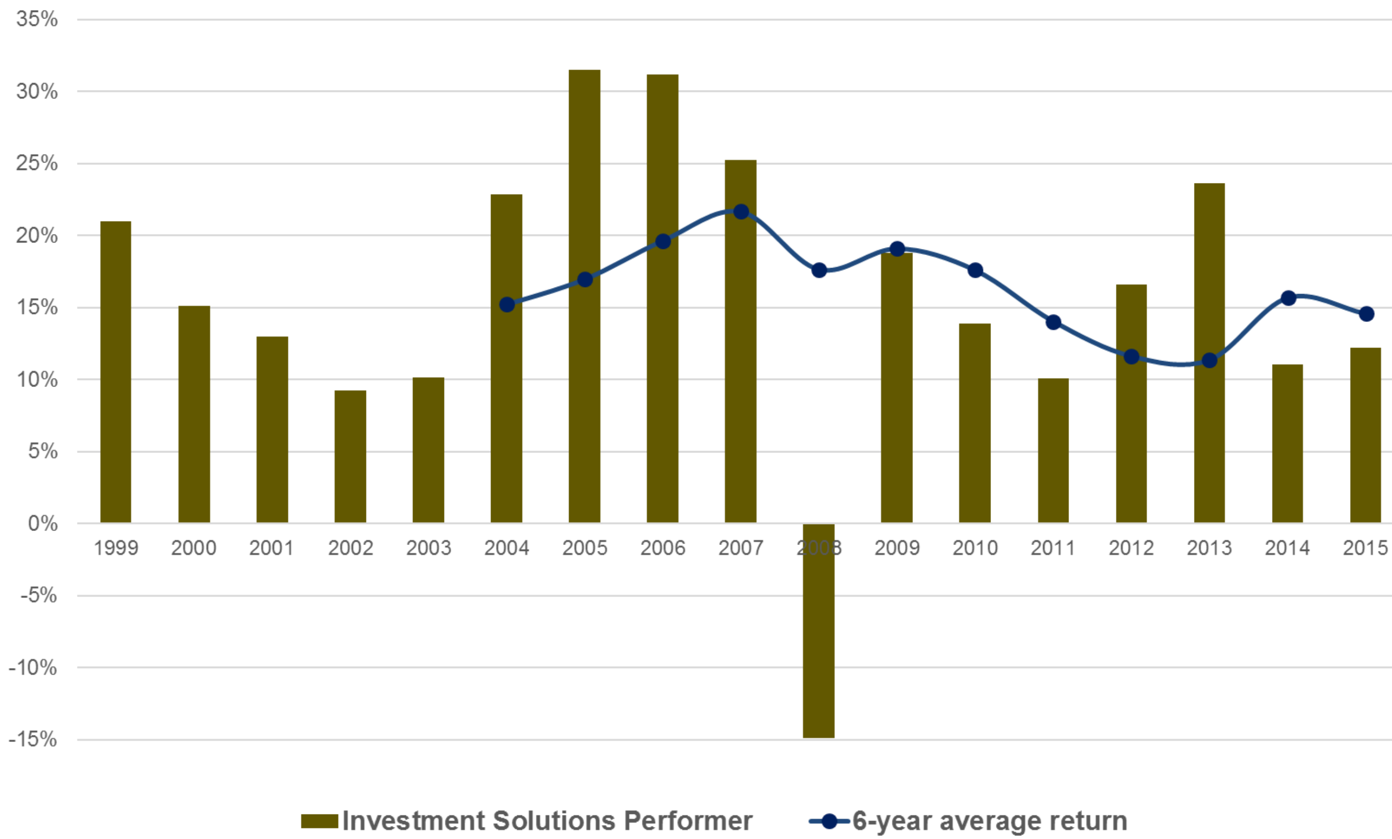
Drawdown of with-profit annuities (with guarantee)



Comparing sustainable drawdowns, with/without guarantee



Investment smoothing allows higher equity exposure



In conclusion

Funding for life and death requires different solutions

Objective	Funding for life Essential income	Funding for death Discretionary income
Criteria	Maximise consumption with guaranteed income for life	Flexible investment flexible drawdown tax planning
Investment strategy	High equity portfolio with smoothing and mortality credits	Portfolio appropriate to mix of just in case, freedom income, gifts and dreams
TCF enhancements	Enhanced income for those who qualify through underwriting	
Suitable product	With-profit annuity	Living annuity

We hope to encourage debate and innovation

- Treasury's retirement reform initiatives challenge the profession and the industry.
- Actuaries have the skills to provide relevant solutions to help pensioners manage risk in retirement.
  - the professional responsibility to do so;
  - and a Treating Customers Fairly cultural framework.
- We believe we can do better than transfer longevity and investment risk in retirement onto the pensioner.