



SIAS AGM + SIAS Talk: New ways to approach the greatest challenges

Staple Inn, 26th February 2026





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Staple Inn Actuarial Society Limited

Income Statement for the Year Ended 30 June 2025

	Income	Expenditure	2025	Income	Expenditure	2024
Subscriptions and other income						
Membership Subscriptions	95,837	-	95,837	90,456	-	90,456
Investment income and interest	1,813	-	1,813	13,398	-	13,398
Conference and programme income	42	-	42	116	-	116
Available to provide services to members	97,692	-	97,692	103,970	-	103,970
Services to Members						
Social events	62,693	(109,872)	(47,179)	65,142	(97,948)	(32,806)
Professional charges	-	(6,519)	(6,519)	-	(6,000)	(6,000)
Programme event costs	-	(31,686)	(31,686)	-	(15,135)	(15,135)
Administration expenses	-	(13,532)	(13,532)	-	(19,394)	(19,394)
Bookkeeping	-	(17,903)	(17,903)	-	(16,275)	(16,275)
Sponsorship and prizes	-	(34,353)	(34,353)	-	(32,010)	(32,010)
Amortisation of intangible assets	-	(1,465)	(1,465)	-	(1,636)	(1,636)
Irrecoverable VAT	-	1,830	1,830	-	5	5
Total cost of providing services to members	62,693	(213,500)	(150,807)	65,142	(188,393)	(123,251)
The Actuary Magazine						
Income from The Actuary			18,095			20,875
Net surplus/(deficit) on The Actuary			<u>18,095</u>			<u>20,875</u>
Unrealised Gain on investment			12,341			55,277
Realised Gain on investment			25,041			-
Net investment gains			<u>37,382</u>			<u>55,277</u>
Surplus before taxation			2,362			56,871
Corporation Tax						
Current year			-			-
Prior year			-			-
Surplus after taxation			<u>2,362</u>			<u>56,871</u>

SIAS Financial Movements Summary

Surplus: The reduction in surplus is in line with our objective to reinvest this back into our members and events through providing more in person events, subsidising prices for members and increasing our charitable contributions.

Income: Subscription income grew as more student members progressed to Fellowship, with continued focus on boosting new member growth.

Expenditure: Costs increased due to enhanced social events (SIAS Ball & Boat Party) and hosting the joint CAN-IAN in-person programme event.

Investments & Cash: Investment portfolio fell modestly by £8.6k, but cash strengthened from £177k to £192k; SIAS plans to shift to a fully equity-based strategy, supported by strong reserves and recurring income.



New Ways to Approach the Greatest Challenges

Colin Wilson, Matthew Edwards, Dermot Grenham, Craig Turnbull

Staple Inn, 26th February 2026



Agenda

1. Introduction (Colin Wilson)
2. Models, perspective and judgement (Matthew Edwards)
3. Demographic challenges (Dermot Grenham)
4. Economic and fiscal challenges (Craig Turnbull)
5. Discussion



1. Introduction

Why are we here?

Colin Wilson



Origin

- Conversations amongst intellectually curious and caring
- Desire for time for shared reflection
- Aim to discuss ideas on how actuaries can approach long-term problems in a world where long-held assumptions are questioned
- Context of significant challenges:
 - Demographic change, fiscal sustainability, intergenerational fairness, climate change, ...

Paper

Actuaries in a world of contested narratives

Redington revisited: A call for courage, judgement and imagination

Charles Cowling, Matthew Edwards, Dermot Grenham,

Tan Suee Chieh, Craig Turnbull, Colin Wilson

A word on conclusions

- No answers
- But thoughts on how to approach issues
- *“Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?”* (T.S. Eliot)
- Perhaps today we might add *“Where is the information we have lost in data?”*
- Current ways of thinking may need to change
- And must recognise that world views differ

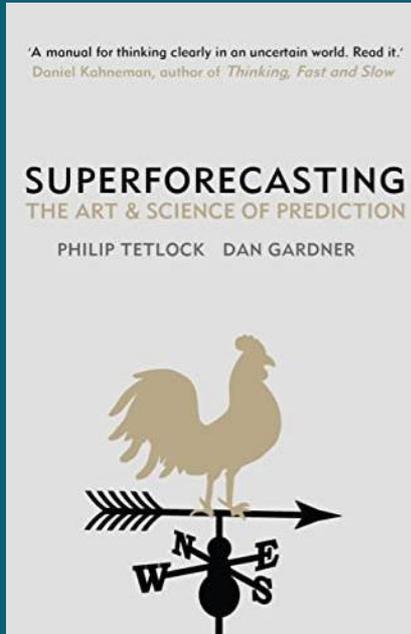


2. Models, Perspective and Judgment

Why We Prefer Certainty Over Ambiguity

Matthew Edwards





**Better prediction,
to better thinking,
to better models**

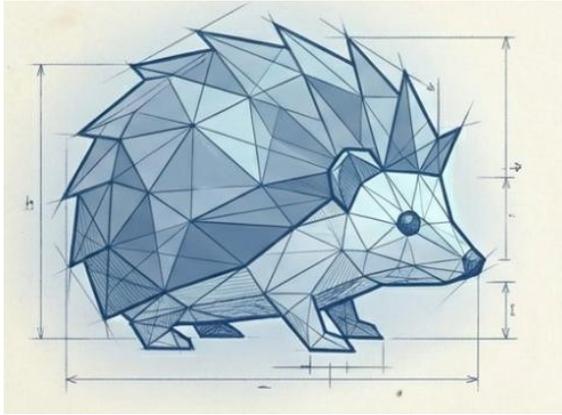


The Philosophy of Modelling

Matthew Edwards
Zaid Hoosain

Presented to the Staple Inn Actuarial Society on
26 June 2012

The Hedgehog and the Fox



- Knows one big thing
- Applies single lens to all problems
- Technically defensible, often wrong

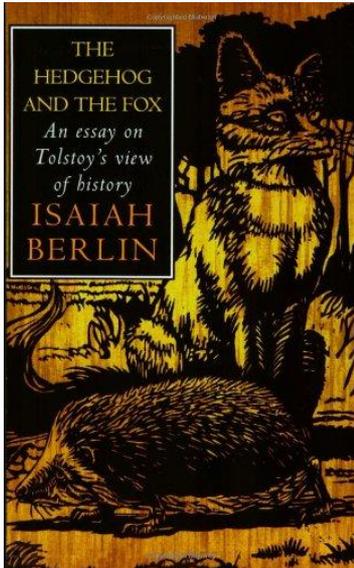


- Uncertain, messy, but closer to truth.
- Knows many things
- Accepts ambiguity and context

Tetlock's empirical research into 'superforecasters' concluded that 'foxes' make much more accurate predictions than 'hedgehogs'

Isaiah Berlin – Hedgehog, fox, values

“The fox knows many things, but the hedgehog knows one big thing.”
— Archilochus



- *“The Tragedy of Choice”*: values cannot be computed, are genuinely multiple, often incommensurable, and sometimes irreconcilably in conflict
- Values are not just different; they cannot be measured by a common standard. There is no algorithm for these trade-offs.
 - Justice vs Mercy
 - Security vs Affordability
 - Short-term vs Long-term
 - Fairness vs Fairness
 - Compulsion vs Freedom

Are We Hedgehogs?

- If foxes forecast better, why do we find hedgehog thinking so attractive?
- Why is the brain drawn toward simple, unified theories even when they mislead?



- Iain McGilchrist: The brain's hemispheres embody different modes of attention
- **Left:** grasps, categorises, counts, simplifies; prefers the map to the territory
- **Right:** attends to context, relationships, living complexity, holistic



The Actuary's Divided Brain

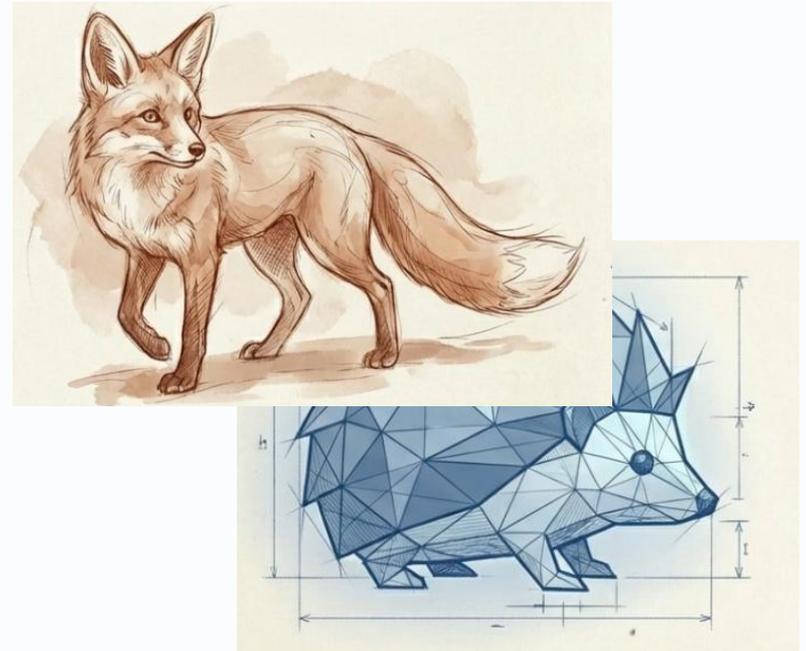
The Great Delusion

- We mistake the representation (models, metrics) for the reality we want to grasp
- We deal only with the easily quantifiable
- We become trapped in a 'hall of mirrors', just seeing our own theories reflected back

The Proper Hierarchy

- The Left hemisphere's analytics tools are essential
- But it is the 'Emissary' of the Right hemisphere, the 'Master'
- Models should inform, not decide – *the model is not reality*

Less prickles, more fur ...





3. Later, fewer, never

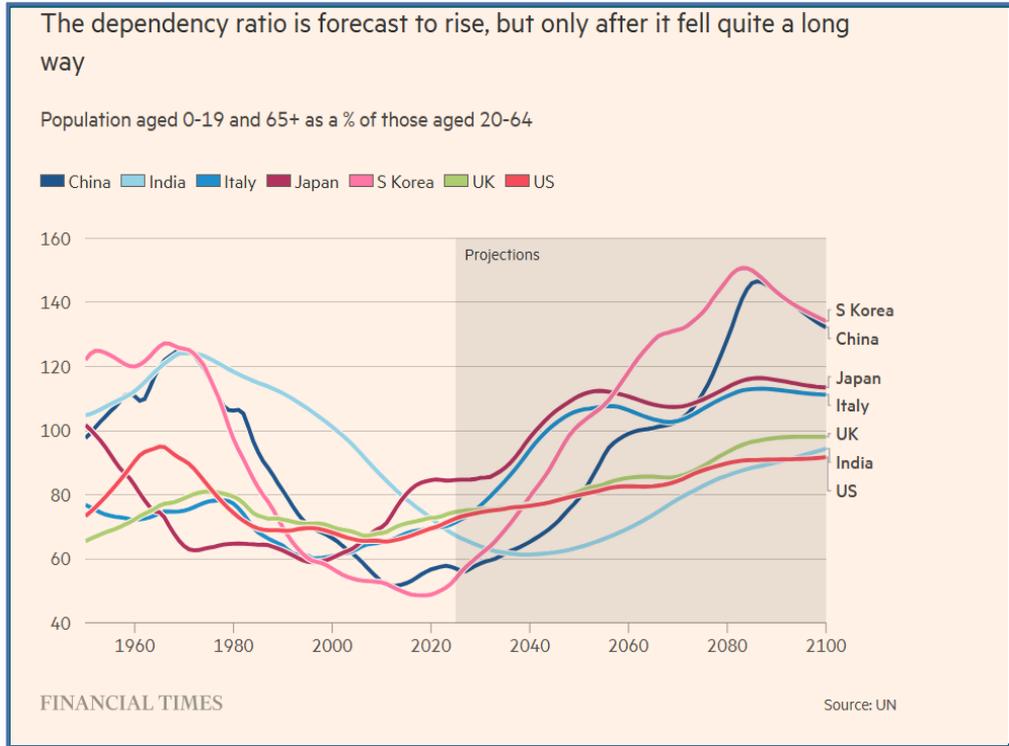


Causes and consequences of low fertility

Dermot Grenham



Lower fertility and longer life expectancy lead to higher dependency ratios

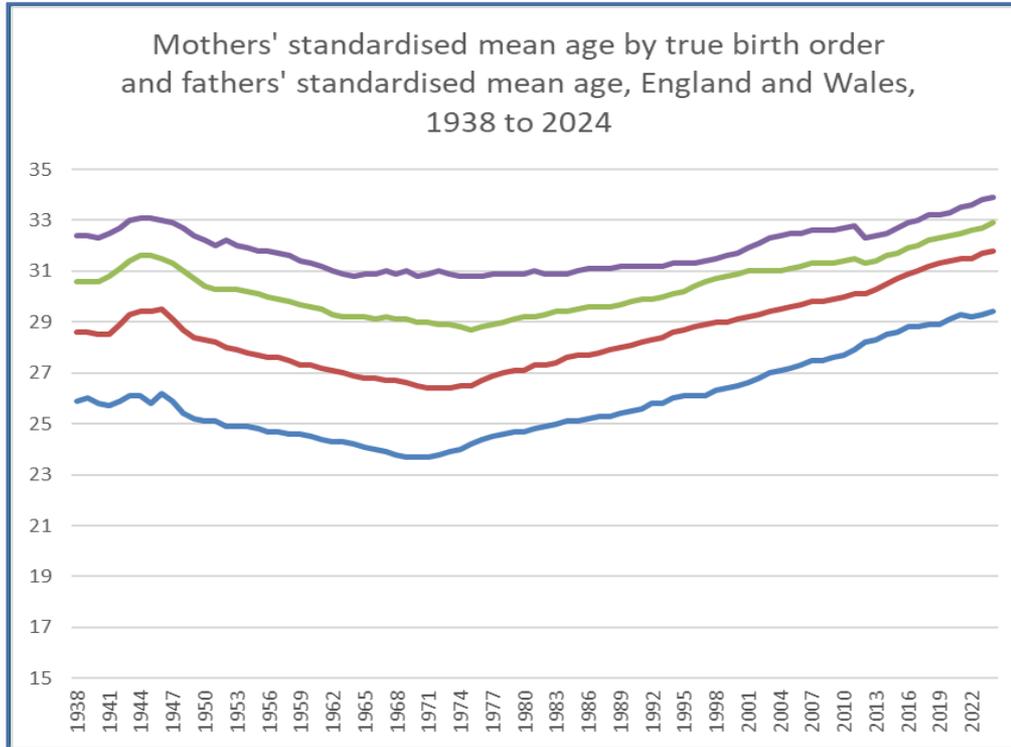


A mathematical analysis of the impact of changing demographics but is it actually something we need to be worried about?

Defining 0 – 19 and 65+ as the ages of dependency may be inaccurate.

Depends on productivity improvements and labour force participation rates

Later



Average age at child birth increasing

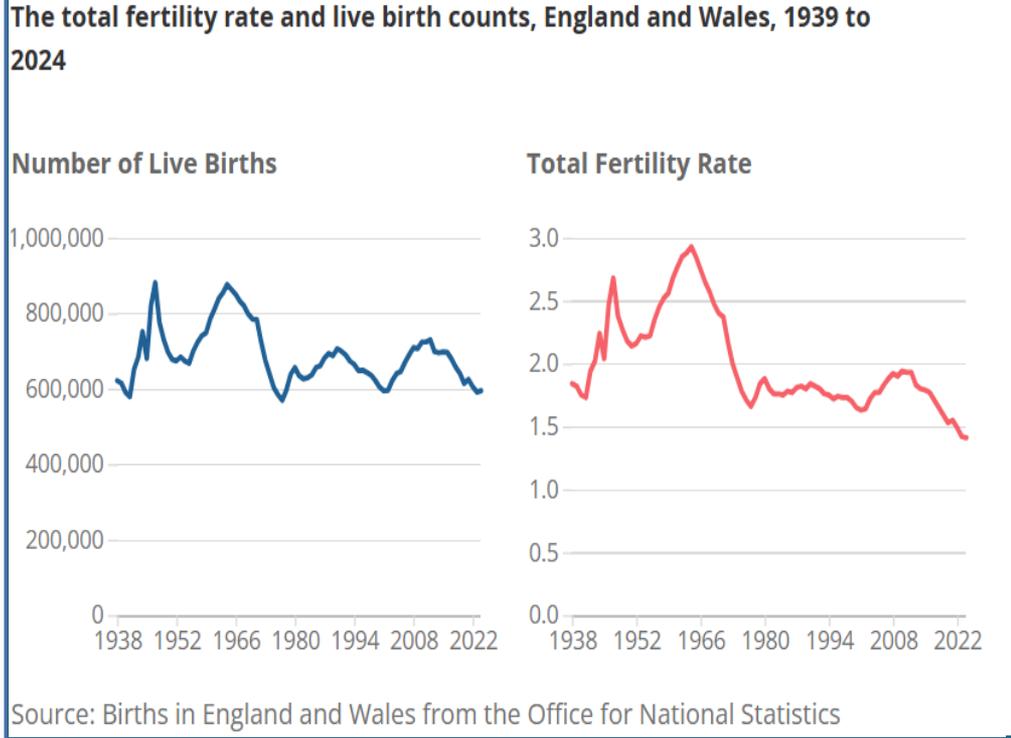
Post war reductions, "baby boom", reversed.

Fewer teenage pregnancies

Later marriage and later stable partnership formation.

Change in data in 2012/13

Fewer



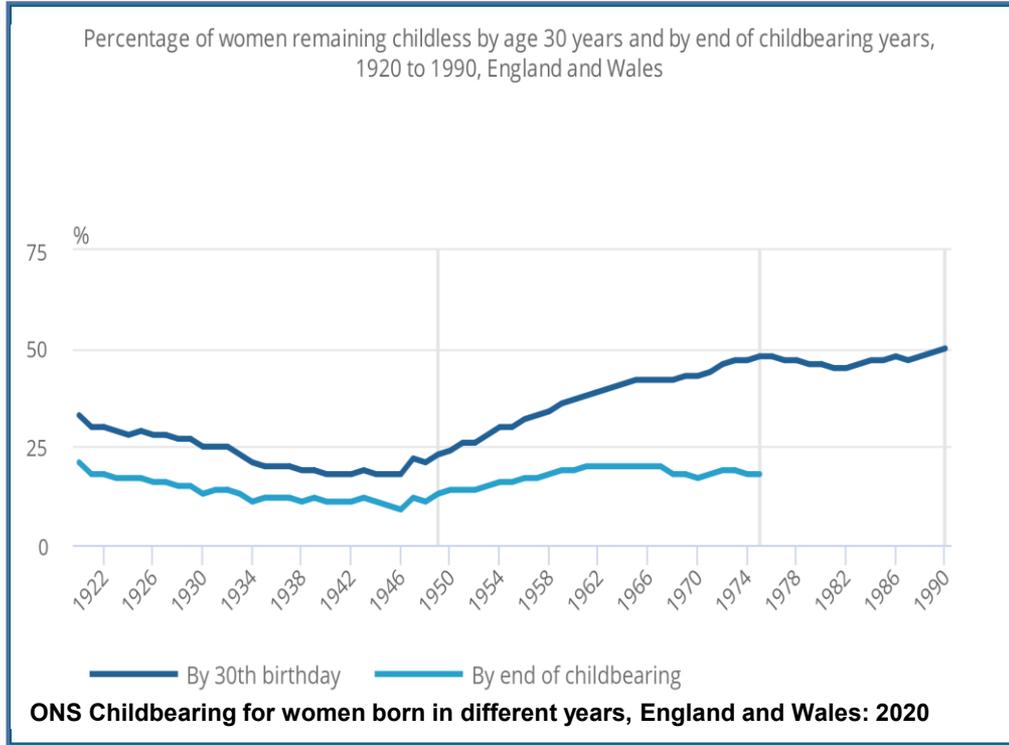
Total period fertility rate reducing but births not yet at historic lows

“Baby boom”, well passed. Major drop from 1970s (abortion, contraception and significant reduction in marriage rates)

TPFR now at lowest historic levels but due to the number of women at child-bearing ages the number of births is not yet at a historical low.

Replacement TPF rate is around 2.1

Never



Average age at child birth increasing

Increasing childlessness by age 30 although this links with increased age at first birth.

It takes longer to assess if more recent cohorts will have a higher childlessness rate.

Voluntary and involuntary childlessness.

Potential consequences of lower birth rates



- Less environmental pressure
 - More room
 - More investment in each child
 - More opportunities for women
 - Fewer workers
 - Fewer consumers
 - Fewer tax-payers
 - Cultural change
 - Lower innovation and productivity
 - Population collapse
-



Responses to lower birth rates

Accept

- Increase state pension age
- Reduce the value of state pensions
- Increase productivity including increased automation and use of AI and robots
- Immigration

Try to reverse

- Bribery (tax breaks, bonuses, cheaper child care...)
- Encouragement
- Cultural shift



4. Long-term economic challenges arising from the demographic, fiscal and financial outlook

Can we actuaries do more?

Craig Turnbull



Three notable historical contributions

- Richard Price's *Essay on Public Credit and the National Debt* (1772)
- John Finlaison's interventions in the pricing of government-issued life annuities between 1819 and 1829
- Frank Redington's Institute of Actuaries Presidential Address (1958), and the subsequent publication of the Institute and Faculty of Actuaries' booklet *National Pensions – An Appeal to Statesmanship* (1959)
 - Impactful professional interjection in public policy debate, highlighting principles of intergenerational fairness and challenging long-term realism of forecasts underlying policy proposals

Redington and pension policy

"The work of the actuary is mainly concerned with long-term obligations and in that sphere he has a professional duty to the community: to protect the future against the ravages of the present. **If he sees that happening, he should not pass on the other side.**"

Frank Redington, Presidential Address, 1958.

"What was said...[by the actuarial profession]...will have played its part in educating public opinion. **I expect and hope that you will continue to play this role of zealous and clear-tongued professional watchdog.**"

D.H. Amory, Chancellor of the Exchequer, 1959.

Some long-term economic challenges...

- Major demographic shifts create medium-term economic headwinds
 - Low fertility and the ageing, shrinking workforce
 - Increasing (unhealthy) life expectancy and increases in costs of elderly care
- Coupled with other difficult economic trends
 - The disappearance of productivity growth in 21st century high income countries
 - Retrenchment of globalisation
- Climate change and the levels of investment required to adapt to it
 - OECD estimates 7% of global GDP is required annually in climate-resilient infrastructure investment
 - An increase in government spending equal to 7% of GDP in the UK would require an increase in income tax rates of nearly 20 percentage points if funded from personal taxation
- Inadequate personal savings rates
 - Swiss Re Institute estimated UK's 2022 retirement savings gap (to fund 70% of pre-retirement income) was £13 trillion (400% of annual GDP); inadequacy of current pension contributions means that this savings gap is growing fast and is forecast to more than double by 2050.

...and their potential consequences

- These challenges arise at a time where fiscal, corporate and private debt levels in high income economies such as UK are at historically high and growing levels
 - OBR, 2024: 'Over the next 50 years, public spending is projected to rise from 45% to over 60% of GDP, while revenues remain at around 40% of GDP. As a result, debt would rise rapidly from 2030s to 274% in our baseline projection'.
- The above combination of challenges may imply lower economic growth, higher inflation, higher taxation and later retirement ages
- Points towards need to rebalance consumption / savings, reducing debt-funded consumption (at both personal and State levels); increasing saving rates would support higher levels of investment
- How can these challenges be tackled in a way that is financially deliverable (with realism and prudence) and equitable across generations?

Recent IFoA contributions

- 2019 IFoA policy briefing paper highlighted inadequacy of DC contribution rates. The paper advocated joint action by government, industry and employers to **'raise awareness of the importance of pension saving, and the potential impact of under-saving on individuals' lifestyles and wellbeing when they retire'**.
- 2021 IFoA report on transition from DB to DC pensions again highlighted the inadequacy of current pension contributions, recommending **'the government should reinvigorate its public messaging around minimum pension savings levels...to ensure that consumers are not lulled into a false sense of security on whether their pension saving will be adequate to achieve their retirement income goals'**.
- 2023 – 2026 IFoA / University of Exeter wide-ranging series on climate change

Can IFoA / actuaries do more?

- Is a call for the government to raise public awareness of the pension contribution gap enough?
- Can the actuarial profession make an impactful policy contribution to long-term economic strategy and planning?
 - Long-term realism, prudence, intergenerational equity
- Does the presence of the fiscal gap and pension savings gap mean that, today, in Redington's words, *the future is being ravaged by the present*? Can and should the *zealous and clear-tongued professional watchdog* do more? If so, what?



5. Q&A

