



# think

Unfair by design: Should pricing models reflect the world as it is, or contribute to a more equitable society?

by **Rebecca Deegan**

# Independent thinking from the IFoA

Part of the IFoA's purpose is to promote debate within and beyond the profession, and to position our members as leading voices on the biggest public policy challenges of our time.

## We aim to showcase the diverse range of expertise and critical thinking both within and outside the profession.

Our 'think' series seeks to promote debate on topics across the spectrum of actuarial work, providing a platform for members and stakeholders alike and sharing views that may differ from the IFoA's house view. In doing this, we hope to challenge the status quo, question the orthodoxy, and shine a light on complex or under-examined issues, thereby stimulating discussion and dialogue to help tackle issues in a different way.



### Rebecca Deegan

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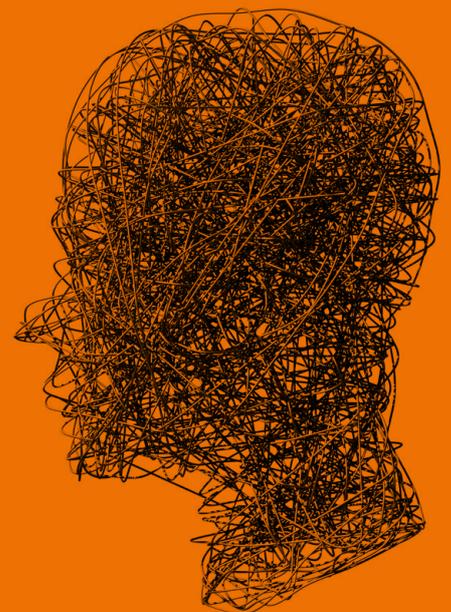
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# Introduction

Millions of people across the UK continue to be excluded from the financial services they need to build financial resilience. This has become more pressing as the cost-of-living crisis has pushed more households into financial vulnerability.

The Financial Conduct Authority's (FCA) **Financial Lives Survey 2024** found that around 13 million adults – nearly one in four of us – have low financial resilience<sup>1</sup>. This means having little capacity to withstand a financial shock without falling into difficulty.

Insurance is a crucial tool for building financial resilience, providing protection against financial shocks such as a car being stolen or being injured in a car accident.

Yet affordability issues are driving people out of essential cover. The FCA's study also reports that 15% of motor insurance policyholders reduced their cover between 2022-24, and that fewer 'renters and Black, mixed and multiple ethnic adults' are purchasing motor insurance.

Given that both of these groups are more likely to have **low incomes and pay poverty premiums**, these findings highlight the close link between affordability pressures and financial exclusion<sup>2</sup>.

This is concerning, but not surprising. Between May 2021 and June 2024, quoted premiums for car **insurance rose by 82%**, vastly outpacing the 21% rise in the price of consumer goods and services over the same period<sup>3</sup>.

The good news is that since this peak the average cost of car insurance has decreased. Sadly, that's where the good news ends. Financial exclusion is widening and deepening – one in five adults has increased borrowing to meet higher living costs, over eight million people need debt advice, and more than one in six families have no savings to fall back on<sup>4</sup>.

That's why, in this Think piece, I want to explore how we can further reduce the cost of car insurance for the growing number of people who are struggling to make ends meet.

Having a car is not a luxury. Research shows that people in financially vulnerable circumstances are more likely to **use their car to get to work**, as part of their job, and to fulfil caring responsibilities<sup>5</sup>. Helping people to access employment and take care of loved ones benefits everyone.

This Think piece explores why recent initiatives have failed to improve affordability, proposes an alternative approach to sharing risk, and finally, takes a step back to reimagine a transport and insurance system designed around social equity, rather than legacy market structures.

Achieving financial inclusion requires more than marginal fixes. It requires a willingness to rethink how we distribute risk, reward, and responsibility. Actuaries are uniquely placed to lead that conversation.

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# Policy and the poverty premium

Over the last 12-18 months, policymakers have launched several initiatives that seemed, at first sight, poised to address financial exclusion, including exclusion from motor insurance.

These recent initiatives include the UK Government's **Financial Inclusion Strategy**<sup>6</sup>, the Treasury's **Motor Insurance Taskforce**<sup>7</sup>, and the FCA's **Premium Finance Market Study**<sup>8</sup>. All have led to Government, regulatory and industry activity, most of which is positive. None, however, has made meaningful progress toward reducing the cost of motor insurance for those least able to afford it.

This is disappointing, because the Premium Finance Market Study was launched following **FCA recognition that this product creates a poverty premium**<sup>9</sup>. I will not go into premium finance further here – given actuaries' area of interest and expertise, I want to focus on risk.

Plus, the Motor Insurance Taskforce's lack of income distributional analysis, and the sidelining of motor insurance in the Financial Inclusion Strategy, gives us plenty of food for thought.

The Strategy and Taskforce both treat financial exclusion from motor insurance as being caused by factors outside of the financial services sector's control and therefore not its responsibility, such as supply chains and uninsured drivers. They also conclude that, because claims costs mirror premiums, the market is working and further scrutiny of how risk is distributed is not necessary.

This means their recommendations and subsequent actions do not address the **poverty premium**<sup>10</sup>.

We can acknowledge that rising insurance costs are, in large part, caused by factors outside industry and individual drivers' control without shutting down discussion that goes beyond whether risk is accurately reflected. We still need to review whether risks are distributed fairly.

For years, households on the lowest incomes have faced the highest premiums, often **hundreds of pounds more per year** than households in wealthier areas, because they live in areas with higher accident rates, higher vehicle crime, and poorer infrastructure.<sup>11</sup>

These are structural risk factors caused by decades of underinvestment in highly deprived areas. Ignoring these structural determinants has real world consequences for people's mobility, employment, and wellbeing.

To address this, Fair By Design is calling for the Government to press ahead with its commitment to **introduce a Socio-Economic Duty**<sup>12</sup> (SED). This would require specific public authorities to consider how their decisions might help reduce inequalities associated with socio-economic disadvantage.

If the FCA had to abide by an SED, it would have to proactively consider the structural impact of market policies and practices on people from socio-economically disadvantaged backgrounds.

**For years, households on the lowest incomes have faced the highest premiums.**

The Consumer Duty focuses on individual outcomes and fair treatment at firm level, but it does not require market actors to examine how systemic issues like poverty or geography shape accessibility and affordability – and, crucially, prevent this leading to discrimination.

Therefore, a SED would build on Consumer Duty, as it would place greater emphasis on regulators proactively promoting the inclusion of individuals facing socioeconomic disadvantage in markets, rather than just avoiding negative outcomes for existing consumers.

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# This is more than a motor insurance issue

Poor road safety has wider consequences beyond motor claims. It contributes to worse health outcomes, disrupted employment and long term financial strain. These outcomes spill into other insurance and pension domains that require actuarial input.

The Government's **Road Safety Strategy** acknowledges the link between safer roads and lower premiums<sup>13</sup>. A promising step, but it stops short of committing to targeted investment in deprived areas, where safety improvements are most needed, meaning as it currently stands. This is another Strategy that recognises the effect of socioeconomic disadvantage but fails to commit to targeting interventions.

**Recent developments in Wales** show what is possible<sup>14</sup>. Following the introduction of a national 20mph default speed limit in 2023, Esure reported a 20% drop in vehicle damage claims, and began reducing premiums as a result.

**Esure's analysis** suggests an average potential saving of around £50 per driver per year if similar 20mph measures were adopted more widely across the UK<sup>15</sup>. This is a clear causal chain: public policy improves safety → claims fall → premiums fall.

It shows how the actuarial risk environment can change when structural conditions change.

While some 20mph limits are now being reversed following public pressure, these changes are occurring despite **clear evidence** that the original rollout significantly reduced casualties<sup>16</sup>.

Wales recorded a 25% fall in injuries on 20mph and 30mph roads, with some areas seeing reductions of over 40%, suggesting that reversing these limits is likely to erode proven safety gains.

A road safety strategy that explicitly targets inequality by improving infrastructure and addressing structural hazards in deprived areas could reduce both human and financial costs in those areas.

Actuaries can play a vital role here, by demonstrating how safety investments drive long-term reductions in claims, and by making the business case for preventative public spending and insurer engagement in road safety efforts.

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# Is Motor Re the answer?

Improving road safety is essential, but it will not fix affordability overnight. That is why motor insurance remains a strong candidate for a flood Re-style approach: a time limited levy to support households facing unaffordable premiums due to structural risks, coupled with a Government commitment to reduce those risks over the scheme's lifetime.

Flood Re isn't perfect. Building on flood plains continues, and more investment is needed in flood defences, but the principle is sound – redistribute systemic risk to prevent people being priced out of the market, without abandoning risk reflective pricing.

The IFoA **commissioned an analysis** of 'Re style' models, which highlights the complexity of applying such an approach to motor insurance, where premiums reflect intertwined factors rather than a single peril.

It recommends pursuing other routes to affordability<sup>17</sup>. I fully support the route it proposes – reducing the cost of premium finance – but that only addresses one component of the poverty premium.

In my view, the conclusion of the analysis reflects limited sector appetite for this style of intervention, and underestimates both insurers' capabilities and the need for bold system redesign. Pricing models already distinguish individual behaviour from environmental and structural risk. Therefore, complexity should not deter action.

This is precisely where actuaries can lead, by designing an equitable risk sharing mechanism that still incentivises risk reduction efforts and responds to Government efforts to reduce risks.

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# If we were designing from scratch

As a Think piece, this is a place to step back and challenge the actuarial profession. What opportunities might there be to end the motor insurance poverty premium if we do not confine ourselves by current market structures, and instead make financial inclusion the primary goal?

I am not saying throw caution to the wind. The insurance industry needs to be financially viable. It is a market, not a public service. But international examples and lessons from other lines of insurance show that it is possible to change how risks are subsidised across different groups of policyholders and that insurers can play a role in driving risk reduction efforts that extend beyond their direct control.

We might even go one step further and ask whether it makes sense to construct a market around insuring private vehicle ownership and, by extension, individualised risk pricing.

A useful international comparison comes from South Africa, where the motor insurance market puts far greater emphasis on “open driver” or permissive use policies.

This approach allows multiple people to use a single vehicle, and a single person to use multiple vehicles. It treats the vehicle, not the individual, as the insurable unit of risk, meaning the cost of a vehicle, its upkeep and insurance can be shared.

This example shows that a more flexible and communal approach to mobility can be both actuarially robust and socially equitable.

It is widely anticipated that the shift from insuring the driver to insuring the vehicle or system will be one of the defining transformations of the motor insurance market as automation increases.

This could have positive consequences for low-income drivers if the same model is applied to all vehicles, rather than having two approaches to insuring motor risk existing in tandem.

Therefore, exploring such a model is not radical. Instead, it would help us to plan for the future.

Imagining a system based on shared mobility rather than individual or household car ownership would result in different actuarial assumptions, rating structures and distribution of risk.

And yet, because we work within the constraints of the existing market, such system-level redesign rarely enters policy conversation. It may be time for actuaries to bring these questions to the forefront of debates on financial inclusion.

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# The role of actuaries

When structural differences manifest in data, actuarial models capture them. They are then reflected in premiums. This means that while current pricing mechanisms are actuarially consistent, they can be, and in the case of car insurance are, socially regressive.[HT2.1]

Social fairness and actuarial fairness are not mutually exclusive. Driving positive behaviours through premiums, alongside legislative and regulatory interventions that ensure financial inclusion, have delivered positive results in other areas of insurance (e.g. flood) and in other countries' approaches to insurance (the approach to health and social care insurance in several countries bridges actuarial and social fairness).

Risk-based pricing must and can be balanced with moral hazard, and the broader societal impact of exclusion from essential services.

If we were to examine underwriting and pricing practices through a financial inclusion lens, the actuarial profession would be able to answer fundamental questions:

1. When the distribution of risk in society is shaped by structural inequality, should the market reflect or challenge socially unjust outcomes?
2. What could an equitable risk sharing system look like when disadvantage increases risk?

3. How can we maintain the benefits of risk-reflective pricing while promoting fairness?

4. Should pricing models reflect the world as it is, or contribute to a more equitable society?

These are not only questions about technical modelling. They are questions about the purpose, ethics, and boundaries of risk based pricing, which the actuarial profession and IFoA, with its Royal Charter and public interest mandate, are uniquely placed to address.

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# Conclusion

Financial inclusion is often presented as a matter of consumer vulnerability or product complexity. But at its core, it is a question about how we distribute risk in society, which is fundamentally an actuarial question.

The car insurance poverty premium highlights the tension between actuarial precision and social fairness. Pricing models that accurately reflect historical data can produce outcomes that exacerbate inequality.

The challenge is not to abandon risk-based pricing, but to recognise that risk itself is shaped by policy, infrastructure, and social investment, not just individual behaviours and choices.

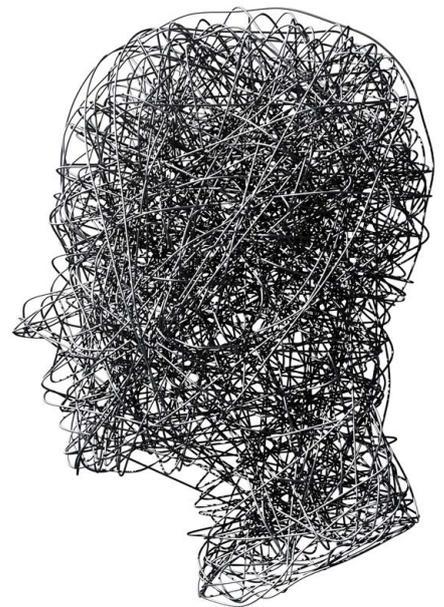
During my time working at the IFoA, I always valued the fact that actuaries are genuine 'thought leaders'. You are willing to stick your heads above the parapet and use your expertise to grapple with questions old and new in innovative ways, as changes in the external environment create new opportunities and challenges.

**If we accept that the current system is unfair by design, then actuarial insight is essential to redesigning it.**

Actuaries therefore have a vital role to play in this conversation. They bring analytical clarity, quantitative rigour, and a deep understanding of risk management. They can help reframe debates on fairness, guide regulatory reform, and contribute to the design of systems that produce both accurate and equitable outcomes.

If we accept that the current system is unfair by design, then actuarial insight is essential to redesigning it. To meaningfully improve financial inclusion, we need structural change, and actuaries have the analytical tools and professional mandate to contribute meaningfully to this shift.

By engaging with the structural drivers of risk, and by reimagining how risk is priced and shared, the actuarial profession can help build a fairer, more inclusive insurance market, and ultimately, a fairer society.



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