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**Social Justice and the Future
of Fire Insurance in Australia**

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ABOUT US

The report forms part of the research of the Practical Justice Initiative at UNSW led by Professor Jeremy Moss. For more information on the research program, climate justice, discussion of carbon majors and Australia's fossil fuel exports see:

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KEY FINDINGS

- The frequency and severity of climate extremes—including those that initiate and exacerbate bushfires—is increasing at an alarming rate. Because of this, 1 in 20 Australian homes could be uninsurable by the end of the century.
- Australia can no longer operate its bushfire insurance regime according to a purely market-based distribution of risk model.
- Bushfire insurance should be more like medicare than current home insurance.
- There are intergenerational unfairness implications for market based insurance models.
- The best approach for the Australian bushfire insurance regime is a model based on fairness as social justice.
- Ensuring that a bushfire insurance regime is both just and practicable will require the simultaneous creation of additional supportive policies and potential limitations on insurance coverage.



I. Background

The 2019-20 Australia megafires burned through 10.7 million hectares of land—an area the size of Scotland and Wales combined.¹ Tangible costs have been estimated at over \$100 billion,² while the inclusion of intangible costs (such as the social costs of mental health problems and unemployment and increases in suicide, substance abuse, relationship breakdowns and domestic violence) may bring this total closer to \$230 billion.³

But the impact of these megafires goes beyond their physical damage and enormous financial costs. They also pose a systematic risk for insuring people's homes. According to the [Australian Actuaries Climate Index](#), the frequency and severity of climate extremes—including those that initiate and exacerbate bushfires—is increasing at an alarming rate.⁴ Because of this, **more than 445,000 Australian homes are predicted to be uninsurable within thirty years, with this number rising to 718,000 by 2100.**⁵

This raises significant social justice issues for Australia. We should want to avoid vulnerable groups bearing an unfair share of the burdens of climate change, and the potential loss of home values is one such burden. If we are to have a fair climate transition, then this is an issue that must be addressed. Consider the specific case of Townsville. Insurers typically use the one-in-100-year flood zone to set the boundaries of high risk—but by the end of the century, the risk of a one-in-100-year flood in Townsville will have increased by about 130 per cent.⁶ As a result, Townsville residents like Sarah Little have seen their annual insurance premiums more than double (in Little's case, from around \$2200 to more than \$5000) in the last three years.⁷ As Climate Risk analyst Karl Mallon notes:

“If you build a house now, by the end of its operational life that risk will have significantly more than doubled... So what used to be the one-in-200-year flood zone is the new one-in-100-year zone... These are the properties that will become uninsurable.”⁸

“more than 445,000 Australian homes are predicted to be uninsurable within thirty years”





A similar crisis is now developing with bushfire insurance. In Adelaide, for example, increased risk from fire and drought will see the number of uninsurable addresses rise 10-fold to 15,000 by 2100.⁹

Owning an uninsurable property doesn't just impact the owner. Mallon says that dramatic hikes in insurance premiums—combined with tighter bank lending in response to climate risk—could trigger a property market crash:¹⁰

“If the industry doesn't step up, we'll all pay—both as taxpayers picking up the bill for the recovery... or because of the impact on our communities and our economies... This is a cost that is avoidable and we shouldn't be walking into this but we are. We absolutely are.”¹¹

And it is not only uninsured homes that are of concern. There are also those that are underinsured. Despite paying her exceedingly high premiums, Little's insurance only covers the cost of reconstructing her home up to its original 1930s specifications—around \$140,000. More stringent modern building standards mean that the true cost of reconstruction is around \$200,000. All of this means that, as of yet, Little has been unable to rebuild her home after it was almost entirely

destroyed in the 2019 Townsville¹² flood. Similar cases are now emerging in the wake of the megafires, with couples like Wayne and Christine Marmont finding their elected insurance coverage insufficient to rebuild their home as it was.¹³

Given these observations, we ought to reflect on the values that guide our insurance-based response to climate change and ensure that they do not risk catastrophic losses for large numbers of people. The issue of climate change and bushfire insurance also raises broader issues concerning how we as a society ought to share the burdens of responding to climate change. We need to make decisions about how much risk individuals should be asked to bear and whether society ought to allow widespread 'climate disadvantage'. There are, of course, many dimensions to the problem of insurance. But understanding what foundational values we as a society employ to frame our response ought to be central. This report takes a first step in outlining the values and models for responding to this problem. It is by no means comprehensive, but simply aims to raise some important issues for public debate. As such we leave aside detailed recommendations concerning many of the other important issues such as underinsurance, rebuilding costs, and transparency of premiums.

II. Approaches to Insurance

Bushfire insurance in Australia is not the only example of climate risk having a major impact on people's well-being. California suffers from an increasingly extreme risk of wildfires, and in 2018 experienced a total of 8,527 fires that burned through 766,439 hectares of land.¹⁴ As a result, Californian insurance premiums have risen considerably—as much as 300% to 500% in some cases¹⁵—with insurers refusing to renew insurance for over 340,000 homes.¹⁶ In response, the California State Government has issued a moratorium on insurance companies dropping customers in wildfire-prone areas.¹⁷ But this is, at best, merely a stop-gap solution. How, then, should insurance regimes be modelled to address these crises?

Climate change has exacerbated the proneness of many areas to extreme flooding. In the United Kingdom, and in some ways provides a guide for Australia. Recent analysis of the UK flood insurance regime by John and Martin O'Neill identified three general approaches to insurance¹⁸—approaches which might also be applied to bushfire insurance in Australia.

Insurance Models

1) Pure Actuarial Fairness

On this approach, **insurance costs to individuals should directly reflect their risk level no matter how that risk came about.**¹⁹ Currently, most Australian home and contents insurance policies operate this way. Coverage must be individually purchased, and premiums are dictated on the basis of a number of factors including the level of cover you choose and the risk profile of your property.²⁰

This approach is based on the assumption that it's fair to make individuals bear the costs of their own risks, and that it would be unfair to ask those with lower risks to subsidise the risky behaviour and choices of those who face higher risks (such as safe drivers subsidising unsafe drivers). As a result, this approach has the benefit of encouraging

individuals to lower their level of risk in order to minimise their costs.

There are, however, three serious defects with the Pure Actuarial Fairness model:

i. It forces those who are unfortunate through no fault of their own to bear the full costs of their misfortune. It would, for example, be particularly unfair on those who bought their home in a previously low-risk area that only now—because of climate change—has become at extreme risk of bushfires.

ii. The high bushfire insurance premiums that would result from the application of this policy might be beyond the means of many. Those on fixed-pension incomes would be faced with a particularly stark choice: pay high premiums or risk losing their major asset.

iii. As bushfire risks—and insurance premiums—increase, only owners of high-risk properties may choose to purchase fire insurance while those with lower-risk properties will opt out.²¹ As lower-risk owners leave, premiums will rise further for high-risk owners, causing those owners to opt out of the regime and further raise premiums for remaining high-risk owners.

iv. There are also intergenerational implications of this model. Younger generations may be disadvantaged if their parents' property is substantially devalued.

2) Choice-Sensitive Fairness

Choice-Sensitive Fairness tries to avoid the problems above. On this approach, **insurance costs to individuals should reflect only those risks that result from each individual's choices.**²² For example, those who choose to engage in risky adventure sports would have to pay higher health insurance premiums, but those with congenital disorders would not. Personal injury compensation under NSW's Compulsory Third

Party (CTP) scheme is currently operated according to this model, with full compensation only being provided where the claimant is not at fault for the motor vehicle accident.²³

This is a version of what philosophers call ‘luck-egalitarianism’—the theory that sees inequalities as arising from either **option luck** (misfortunes resulting from deliberate and calculated gambles—like losing your car in a game of poker) or **bad brute luck** (misfortunes that do not arise from deliberate gambles—like having your car destroyed by a bolt of lightning). On this view, only inequalities resulting from bad brute luck are unjust.²⁴

There are, however, many cases in which it might seem unacceptable to limit or deny assistance to an individual, even where their suffering is a direct result of their own choices. Consider, for example, a person who injures themselves seriously while playing a social sport that they know might cause injury. If their injury is serious enough—say, a broken neck—they may be seriously disadvantaged for the rest of their life. Should we deny them medical assistance even if their disadvantage is, in one sense, chosen?

3) Fairness as Social Justice

Fairness as Social Justice solves this problem by holding that **insurance in the provision of goods that are basic requirements of social justice should be provided independently of individuals’ risks and choices.**²⁵ This includes all of those things—like food, healthcare, and adequate housing—that are necessary in order for us to live in relations of equality and respect with one another.²⁶

Australia’s current medical care system is operated according to this model, with Medicare providing medical treatment to individuals at low- or no cost, regardless of their risks and choices.²⁷ This model’s focus on equality means that—while adopting a Fairness as Social Justice approach may prove more costly in the short-term—it will maximise long-term efficiency by avoiding the kind of social blight (such as an increase of inequality) that would arise from large groups of people going without the basic requirements of social justice.

One likely example of this kind of increase of inequality is where a whole area—such as the bushfire-prone Blue Mountains—were suddenly to lose their insurance cover. The effect of this kind of ‘postcode ban’ would be to drastically cut the value of major assets of all those within the postcode. Such events would create pockets of high inequality.

One concern with the Fairness as Social Justice approach is that it could see low- and medium-income people with low-risk lifestyles subsidising high-income people with high-risk lifestyles; a result that seems counter to the very notion of fairness. Further, since individuals no longer bear the costs of their choices, they may choose not to lower their level of risk. Of greatest concern will be recidivist offenders—that is, those individuals who repeatedly take risks while relying on the safety net of Fairness as Social Justice to remedy their misfortunes (such as the foolhardy motorcyclist who continually refuses to wear a helmet). This is often referred to as the “moral hazard” argument. But this argument simply highlights the care with which this approach must be implemented. We will say more on this—including practical solutions for mitigating such concerns—below.



III. The Current Bushfire Insurance Regime in Australia

In Australia, bushfire coverage—like flood coverage²⁸—is contained within standard home and contents insurance.²⁹ There are two types of home insurance: (1) total replacement cover; or (2) sum-insured cover.³⁰ The former provides full cover, while the

latter provides cover up to a chosen set amount to repair or rebuild a home. The insurance status of homes in Australia—along with the coverage that would be provided by each of the above three approaches—can be broken down as follows:

Figure 1

		Pure Actuarial Fairness	Choice-Sensitive Fairness	Fairness as Social Justice
The Uninsurable	These homes are either refused insurance or charged over 1% of the property value in annual premiums. ³¹	 No Cover	 Cover will depend on whether owner chose to purchase an uninsurable property	 Full Cover
The Uninsured	An estimated 1 in 20 homes in Australia (around 450,000) are uninsured. ³²	 No Cover	 Cover will depend on whether owner chose not to insure	 Full Cover
The Disqualified	Those whose property is underinsured or adequately insured, but who fall foul of a loss mitigation clause ³³ (such as enforcing the 20-metre buffer zone around their home). ³⁴	 No Cover	 Cover will depend on whether owner chose to fall foul of a loss mitigation clause	 Full Cover
The Underinsured	Experts estimate that around 70% ³⁵ to 80% ³⁶ of properties are underinsured. This is usually because either: (a) these properties were undervalued to begin with; or (b) in the event of total destruction, these properties would need to be rebuilt to a higher standard taking into account new regulations around bushfire risks. ³⁷	 Partial Cover	 Cover will depend on whether owner chose to underinsure	 Full Cover
The Insured	Those whose property is adequately insured, and who do not fall foul of any loss mitigation clauses.	 Full Cover	 Full Cover	 Full Cover

It is worth noting that being underinsured is—presumably—a problem exclusively suffered by those with sum-insured (as opposed to total replacement) cover. Nevertheless, total replacement cover will sometimes contain clauses that allow insurers to base payouts on the rates at which they can purchase materials and labour, rather than the actual costs of rebuilding or repairing a home.³⁸ This has much the same effect as being underinsured.



IV. Prevention Over Cure

The discussion above focusses purely on the extent to which individuals should be made to take responsibility for the climate risks associated with their homes. Yet local governments and the Federal Government may also bear responsibility. One way in which governments can bolster homes and businesses against severe weather events is through disaster mitigation—things like dams for floods, and hazard reduction burns for bushfires. Consider the example of Roma, QLD, where—after four floods in a five-year timespan—some insurance companies had entirely refused to provide coverage to homeowners.³⁹ The local council’s construction of a \$16 million levee subsequently managed to reduce locals’ insurance premiums by an average of 30%, and up to 80% in some cases.⁴⁰ These premiums were reduced because the risk was reduced. Insurance companies do not have the resources to fund mitigation, nor is it entirely clear that we want such services to be provided by the private sector. For this reason, the insurance industry has—for more than a decade—been asking the Federal Government to increase spending on disaster-mitigation.⁴¹ The government’s continued failure to mitigate is directly linked to the uptick in the inability of some Australian’s to insure their homes. As Rob Whelan—Executive Director and CEO of the Insurance Council of Australia—notes: “if appropriate mitigation and prevention is not done, some parts of Australia may become uninsurable in the future.”⁴² Such calls for

prevention are well made. Yet, some of these efforts might be undone where insurers continue to insure assets in the fossil fuel industry.

Currently, around 97% of all Federal funds spent on disasters are spent after a disaster occurs.⁴³ This is despite the fact that a dollar spent on mitigation tends to reap a saving of around five dollars in post-disaster damages.⁴⁴ Indeed, the Productivity Commission has noted that the Federal Government’s current approach to disaster relief is rife with ad-hoc responses and short-term political opportunism.⁴⁵ In a 2015 report, they recommended that annual Federal Government mitigation funding to states should increase to \$200 million and be matched by the states.⁴⁶ This is considerably more than the \$76.1 million currently allocated per year.⁴⁷ Similar reports by the Australian Competition & Consumer Commission,⁴⁸ the Australian Prudential Regulation Authority,⁴⁹ and The Treasury⁵⁰ have echoed this call for increased mitigation spending at the government level.

The Federal Government’s insistence on maintaining a reactive—rather than proactive—approach to disaster relief means that they are wilfully foregoing an opportunity to minimise climate risk. Given this, it seems only fair that they should bear some of the responsibility for this risk.

V. Recommendations

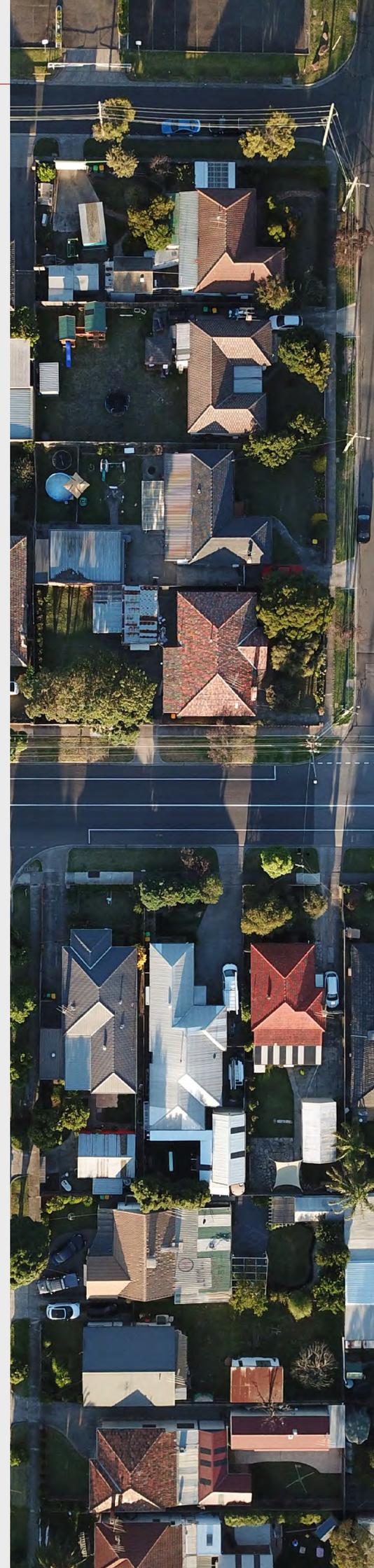
1. Australia can no longer operate its bushfire insurance regime according to the current Pure Actuarial Fairness model.

- a. On this approach, 1 in 20 Australian homes will be uninsurable by the end of the century—leaving the owners of those properties vulnerable to destitution.
- b. More problematically, this sharp increase in uninsurable properties will bring risks of social blight, with lower income groups being filtered into those areas and more sought-after areas becoming the preserve of the rich.⁵¹

2. While Choice-Sensitive Fairness does operate successfully in other insurance regimes (such as under NSW’s CTP scheme), this is only because there is a further Fairness as Social Justice safety net in place (i.e., Medicare). A choice-sensitive approach to the CTP scheme would be far less palatable if it was the only way for the victim of a motor vehicle accident to receive medical treatment.

3. Because of (1) and (2), the best approach for the Australian bushfire insurance regime is a model based on Fairness as Social Justice.

- a. This is because adequate housing is a basic requirement of social justice that people should have access to, regardless of their risks or choices.
- b. This model is further justified on the basis that the government bears some responsibility for the bushfire risk now faced by many Australian households. This is because:
 - i. The risk has been (at least partially) caused by decades of government inaction on climate change. Australia is one of the highest per-capita emitters of greenhouse gases (GHGs) and the world’s largest exporter of coal and gas. Yet, Australia has done little to address climate change.
 - ii. The government has wilfully foregone opportunities to minimise this risk by allocating adequate funding for disaster mitigation efforts (like hazard reduction burns).



4. Because of the moral hazard argument, an insurance regime based upon Fairness as Social Justice cannot be implemented in a vacuum. Ensuring that this regime is both just and practicable will require the simultaneous creation of external related policies. These might include:

- a. Implementing higher building standards that lower the risk of a home being destroyed by bushfires.
- b. Providing incentives to encourage individuals away from building in fire-prone regions.

5. Ensuring the affordability of a Fairness as Social Justice bushfire insurance regime may require limiting coverage in certain ways. This might be done by:

- a. Limiting coverage to primary dwellings. The Fairness as Social Justice approach is justified on the basis that adequate housing is a basic requirement of social justice, but this says nothing about coverage for secondary homes. This may, however, see the degradation of communities based around holiday homes.
- b. Limiting coverage to occupied dwellings (that is, those that are inhabited for more than 183 days in a calendar year). This will be particularly important for investment properties, as while these homes may not be the primary dwelling of the owners, they are the primary dwelling of the tenants—and thus may require coverage in order to ensure that tenants are not deprived of their basic goods.
- c. Establishing a cap on annual payouts, with this budget being shared between primary and secondary dwellings.

6. The regulation and provision of Bushfire insurance cannot simply be left to the market. Fairness as social justice requires an approach that involves democratic decision making by society and its representatives.



V. Conclusion

The above are merely suggestions to show how the biggest concerns with the Fairness as Social Justice approach to bushfire insurance (particularly those based around the moral hazard argument) are capable of being remedied in practice. The alternative approaches—including the current model of Pure Actuarial Fairness—are untenable, threatening to deprive millions of Australians of adequate housing, and bring social blight to large areas of the country. A climate transition cannot simply be about reducing emissions or adapting to risk. A transition must also be just and that means our response needs to reflect a robust set of values. As this report shows, leaving our bushfire response to purely market-based allocations of risk does not meet that requirement.



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