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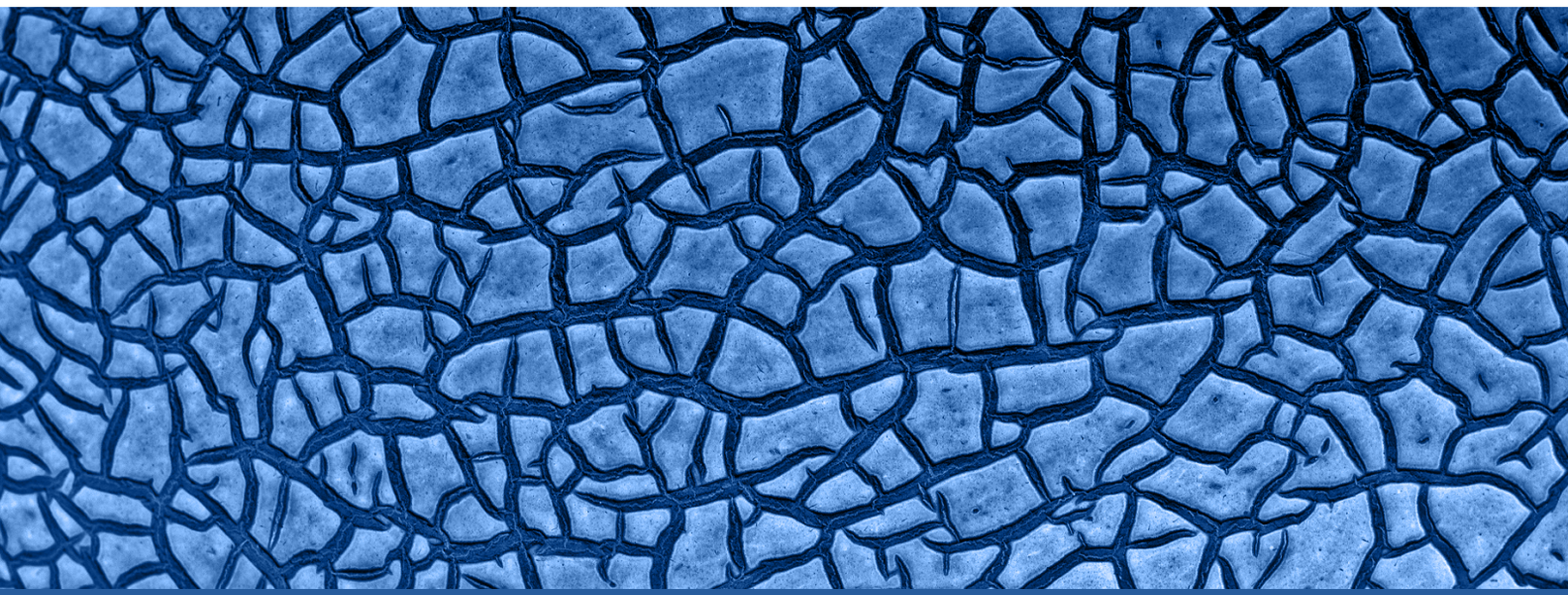

# Select Committee on the Impact of Climate Risk on Insurance Premiums and Availability

## Productivity Commission submission

**The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.**

## The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).



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# Introduction

The Productivity Commission welcomes the opportunity to make a submission to the Select Committee on the Impact of Climate Risk on Insurance Premiums and Availability. The Commission has considered these issues in several previous reports, including the inquiries into *Barriers to Effective Climate Change Adaptation* (PC 2012) and *Natural Disaster Funding Arrangements* (PC 2014). More recently, as part of its 5-yearly *Advancing Prosperity* report (PC 2023) the Commission made recommendations on the role of private insurance markets in the context of climate change. This submission draws on the analysis in those reports and other Commission work.

This submission makes three key points in relation to the roles of households, businesses and governments in managing natural disaster risks, including through insurance.

- First, natural disaster risks are an inherent part of life in Australia, and managing these risks is a shared responsibility between households, businesses, community and government.
- Second, insurance is one tool available to households and businesses to manage the risks they face. Insurance serves a dual purpose: insurance payouts reduce the financial impacts of natural disaster damages and the price of insurance premiums sends a signal to property owners about the magnitude of the risks they face.
- Third, government interventions to reduce the consumer price of insurance without reducing the underlying risks will reduce the incentives for households and businesses to manage their risks and could encourage people to remain in (or relocate to) high-risk locations. Interventions to reduce some consumers' insurance premiums could also lead to insurers increasing premiums for other customers and could potentially lead to insurers withdrawing from certain markets.

The submission also identifies some measures that governments could enact to reduce the price of insurance. Specifically, governments should increase their investment in natural disaster mitigation works and should phase out taxes and other charges on insurance. The submission reiterates the Commission's previous recommendation that the Cyclone Reinsurance Pool should be phased out.

# Natural disasters cost billions of dollars each year

Natural disasters are an inherent part of life in Australia. Each year fires, floods, cyclones, storms and heat waves lead to injuries and death and cause extensive and costly damage to private and publicly-owned property. Natural disasters also lead to interruptions to businesses and significant social impacts.

Estimating the costs of natural disasters is challenging, but the total cost of natural disaster events in Australia typically runs into the billions of dollars per year. In some years the costs are in the tens of billions. For example, Australian Government expenditure on natural disaster relief (including funds provided to state and territory governments) was $5.8 billion in 2021-22 and $3.6 billion in 2022-23 (Australian Government 2022, p. 13; Australian Government 2023a, p. 11). The value of insurance claims for flooding, storms and cyclones – which account for a fraction of the private costs of climate-related natural disaster damages – was over $9 billion between January 2020 and November 2022 (ICA 2022b). These costs are increasing over time as the population and the value of assets increase. As climate change increases the frequency and/or severity of disaster events, the damage caused by natural disasters will increase further.

Geographically, these costs and risks are unevenly distributed. In particular, Northern Australia faces tropical cyclones which are forecast to increase in intensity (CSIRO 2021). Cyclone-prone areas have also

experienced population growth (QGSO 2022) and house price increases, meaning that more people and more valuable properties are exposed to harm from natural disasters. The severity of natural disaster risks in northern Australia is reflected in government expenditure data. For example, Queensland received 80% of Australian Government natural disaster funding to the states in 2021-22 and 57% in 2022-23 (Australian Government 2023a, p. 64).

## Managing natural disaster risks is a shared responsibility

Natural disasters pose *risks* to community living standards — damage that *could occur* in the future. Households, businesses, communities and governments can improve overall living standards by managing these risks by:

- identifying the parties that are responsible for managing risks (the 'risk owner')
- understanding the risks they face
- choosing the appropriate 'risk treatment'.

Risk treatment options include reducing the probability of damage and the severity of potential harm through mitigation measures (such as flood protection works), exchanging or transferring some of the risks to another party through insurance, and bearing some level of residual risk. Risk owners need to identify the combination of treatment options that will deliver the greatest net benefits – the value of the expected benefit of treating the risk compared to the costs of the treatments. This is unlikely to mean reducing natural disaster risks to zero – in most cases that would be prohibitively expensive, if not impossible.

Some aspects of natural disaster risk management are explicitly the responsibility of governments, while others are clearly the responsibility of households and businesses. Many disaster risk management responsibilities are shared.

As asset managers governments are responsible for identifying and managing natural disaster risks to assets they own or control (such as roads and other infrastructure, buildings, vehicles and public land). This could include undertaking mitigation works to reduce the impacts of natural disasters and maintaining fiscal resources to repair and rebuild assets that are damaged in disaster events. Governments are also responsible for providing emergency services to respond to natural disasters and for emergency financial (and other) assistance to support vulnerable people and maintain social cohesion in the event of a disaster.

Governments also have a role to play in identifying the risks that natural disasters pose to the community and disseminating information about the potential for future disaster events to cause harm. For example, governments provide weather forecasts, flood maps and early warnings of fire and flood events to raise awareness of the potential for natural disaster events so households and businesses can take steps to manage the risks they face. Accurate, trusted information about the potential for future extreme weather events is a vital input into effective natural disaster risk management.

As property owners, households and businesses are, in general, responsible for identifying natural disaster (and other) risks to their property and for taking steps to manage those risks. This could include choosing where they locate their premises (and whether to remain in their current location); the design and materials they use when building houses and business premises; installing mitigation measures (such as smoke alarms and sprinkler systems) and taking out insurance to fund the repair and replacement of damaged assets and interruptions to business.

In many cases it is not efficient for an individual property owner to undertake risk mitigation works on their own. By definition, natural disasters tend to have spillover effects and affect many households and businesses at the same time, and their impacts can only be efficiently managed through collective efforts

(such as bushfire prevention burning and building flood protections and dams). In many cases governments are best placed to identify these risks and undertake the necessary mitigation works and to fund them through general or specific taxation. Alternatively, governments can impose conditions on property owners to require them to undertake mitigation actions and/or to take out adequate private insurance.

## The role of insurance in natural disaster risk management

Insurance helps parties to manage their residual risk by facilitating the transfer of some of the risk to another party – the insurer. The policyholder pays a premium to the insurer to take on the risk and, in return, the insurer covers the policyholder for certain losses when an agreed event occurs. To the extent that individual risks are not highly correlated, by pooling risks, insurers can diversify the risks they face, making the claims on the pool more manageable.

Insurance premiums are priced to reflect the risk the policyholder faces, which is ultimately transferred to the insurer. Where the insurance market is working well and insurers have enough information to adequately price risk, the premium provides the policyholder with a price signal, which can act as an incentive to treat and reduce their natural disaster risk and lower the cost of their insurance. Thus, insurance serves two roles in risk management. First, it reduces the financial impacts of disasters when they occur. Second, through the price of insurance premiums, it conveys information to property owners about the risks they face and the potential benefits of talking mitigation actions.

## Insurance premiums are very high in some regions

For many years, community groups and governments have been concerned that insurance has become prohibitively expensive for some households and businesses. For example, in its 2014 inquiry into *Natural Disaster Funding Arrangements* the Commission stated:

> … concerns have been raised that price increases are leading to reduced affordability and increased underinsurance and non-insurance, particularly in high-risk areas, and especially when it involves exposing vulnerable households to significant financial losses (PC 2014, p. 427)

These concerns have increased over time as the impacts of climate change, population growth and asset price inflation have combined to increase the level of natural disaster risk that households and businesses are facing in some parts of Australia. The Insurance Council of Australia has stated that currently ‘there is no area of Australia that is uninsurable, although there are some locations and industries where there are clearly affordability and availability constraints’ (ICA 2022a). Although there is no reliable data on the prevalence of under-insurance in Australia, in August 2023, the Actuaries Institute stated that 12% of households were facing ‘insurance affordability stress’ (up from 10% in March 2022). The Institute defined affordability stress as a situation where home insurance premiums exceed four weeks of income (Actuaries Institute 2023, p. 8). It is likely that the rates of insurance affordability stress have increased recently. According to data collected by the ABS to calculate the Consumer Price Index, increasing insurance premiums have been a leading contributor to inflation. In the 12 months to the end of March 2024, the price of insurance increased by 16.4% (ABS 2024). Settle and Ananyev (2023) found that households facing financial stress spend significantly less on insurance, so it is almost certain that recent premium increases have led to some households reducing or abandoning their level of insurance cover.

According to the Actuaries Institute data, insurance affordability stress was disproportionately found in northern Australia (which experiences cyclone risks) and parts of NSW that are exposed to severe flood risks.

> LGAs suffering extreme home insurance affordability pressures are concentrated in Northern QLD, the Northern Rivers region of NSW and Northern WA. In these areas, half of the population pay more than a month of gross household income for their annual home insurance premium. (Actuaries Institute 2023, p. 13)

Most of the areas that have faced increased insurance premiums are in regional Australia where household incomes are, on average, lower than in metropolitan areas. The combination of relatively low household incomes and high (and increasing) insurance premiums increases the likelihood that some households and businesses will reduce their level of insurance cover or go without insurance. In the absence of mitigation measures, those households and businesses will be left with the choice to either relocate (which could carry significant financial costs as well as intangible costs such as losing social connections) or remain and bear a greater level of residual risk.

## Subsidising insurance premiums is ineffective and unsustainable

One of the matters that the Committee has been asked to report on is 'how the pricing of risk from climate-driven disasters can be better redistributed across the economy'. This could be taken to imply that the current distribution of insurance premiums is undesirable and that government should consider policies to reduce some people's insurance premiums and increase the price of insurance for others. Unless there is clear evidence of a market failure in the market for insurance, this would have significant negative effects on natural disaster risk management and the functioning of the market for insurance.

Government intervention in markets for property insurance can have several negative effects. The first is that reducing the price of insurance for one group of property owners tends to reduce their incentives to manage their natural disaster risks. Insurers have developed detailed data sources and sophisticated analytical techniques to assess the risks faced by property owners and are increasingly able to set premiums according to the location and characteristics of individual premises. The information and analysis that insurers use to quantify the risks to individual properties can be difficult or impossible for householders to understand. Distilling that information down to a single figure – the insurance premium – conveys the information in a form that people are able to understand and act upon. High insurance premiums send a signal to the policyholder that they face significant risks and should consider mitigation measures or relocating to a less risky location. Policy measures that break the alignment between natural disaster risks and insurance premiums would obscure some of that information. This could lead to people under-investing in private measures to reduce disaster risks or undertaking building and renovation works that expose more of their property to disaster risks.

A second risk of interventions in insurance markets is to government budgets. Policy interventions that reduce the incentive for property owners to manage their natural disaster risks can place governments in the position of 'insurer of last resort'. When natural disasters cause damage to private property, governments often face political pressure to fund reconstruction works for people who were under-insured. Policy measures that reduce the private market incentives for risk management will tend to increase governments' prospective liabilities for future damages. These 'contingent liabilities' do not appear in government budgets, but they can have very real fiscal costs.

A third risk is that government interventions in the price of insurance premiums can lead to insurers withdrawing from segments of the market entirely. Insurers operating under commercial incentives are able to choose who to insure and at what price. If government intervention weakens the link between premiums

and disaster risks, households and businesses could ultimately be *over insured* for certain risks. This would increase insurers' potential exposure to payouts in the event of natural disaster events. A rational response for an insurer could include vacating these markets or placing arbitrary constraints on insurance in areas where governments have intervened to change the distribution of premiums. Conceivably, in the long run, policy interventions to reduce insurance premiums for certain parties could lead to insurers withdrawing services to those people. This would be harmful for those individuals and would have broader effects on economic activity. As the Commission has previously noted, the unavailability of insurance can have broader implications for economic growth, productivity and living standards.

> The retreat of private insurers from particular regions or activities will weigh on productivity growth, by removing one of the mechanisms by which people are able to assess and manage risk, and will leave governments vulnerable to becoming insurers of last resort for any under-insured activity that remains. (PC 2023, p. 6)

Finally, measures to cross-subsidise insurance premiums by increasing premiums in lower-risk regions to reduce premiums in higher-risk areas would have negative effects. Higher insurance premiums would lead to increased rates of under- or non-insurance and would increase the financial burden on people who maintained their level of insurance. Over time, such cross-subsidies would tend to encourage more people to locate in higher-risk areas.

There are policy interventions that governments could take, at an acceptable cost that would reduce the level of natural disaster risks faced by vulnerable households and businesses. This could lead to lower insurance premiums in some areas.

## Governments should invest more in natural disaster mitigation

Climate change is increasing natural disaster risks in many parts of Australia and would be expected to lead to higher insurance premiums in many parts of Australia. Ultimately, the only way to sustainably reduce insurance premiums is to reduce the level of natural disaster risks faced by businesses and households.

In its report into *Natural Disaster Funding Arrangements* the Commission found that the Australian Government's arrangements for natural disaster funding have a systematic bias toward relief and recovery activities at the expense of mitigation. That is, the Australia Government spends too little in disaster mitigation works and subsequently ends up spending more on relief and recovery.

Investment in disaster mitigation works can have benefits that significantly exceed their costs. For example, in the 2023 *Intergenerational Report*, the Treasury stated:

> The Insurance Council of Australia has found that resilience funding could provide returns of $8.10 by 2050 for every $1 invested under a scenario where global temperatures remain at current levels. If global temperatures continue to rise, the returns on resilience measures could be higher. (Australian Government 2023b, p. 107-108)

In 2014, the Commission recommended that the Australia Government should increase its funding for state governments' natural disaster mitigation works to $200 million per year (with the states to provide matching contributions). The Australian Government's Disaster Ready Fund, which commenced in 2023-24, provides $200 million of funds per year for disaster resilience and risk reduction. The Fund is to run for five years and co-contributions from state governments or other 'partners' are required.

In the first year of the Disaster Ready Fund, approximately 42% of the funds ($84.2 million) are allocated to Queensland (Australian Government 2024, p. 89). Governments should monitor the effects of these projects on natural disaster risks and the availability and price of insurance.

## The cyclone Reinsurance Pool should be phased out

The Cyclone Reinsurance Pool is an arrangement between commercial insurers and the Australian Reinsurance Pool Corporation (ARPC). The ARPC, backed by a $10 billion guarantee from the Australian Government, provides reinsurance for cyclone-related damage. The objective of the pool is to reduce the costs of reinsurance for cyclone risks and hence the premiums for cyclone insurance products. All commercial insurers that provide cyclone insurance products are required to join the pool.

As the Commission observed in its 5-yearly productivity inquiry, arrangements like the Cyclone Pool risk 'subsidising the movement of individuals, households, and businesses into harm's way'. Subsidising reinsurance for certain risks changes the relative prices of managing those risks. The Pool reduces the benefits to households and businesses of undertaking cyclone damage mitigation works and tends to encourage people to remain in (and relocate to) areas that are exposed to increasing levels of cyclone risk.

The ARPC is able to provide reinsurance at a lower price than commercial reinsurers because the government guarantee transfers some of the risks of cyclone damage to Australians who are not directly exposed to those risks. The Pool exposes the Australian Government to a substantial contingent liability. In the event of cyclone damages, the Australian Government could be required to pay out billions of dollars to insurers. Under the conditions of the Pool, the liability is effectively unlimited. The ARPC has stated:

> If the $10 billion guarantee is likely to be exceeded by a single cyclone event or series of cyclone events within a single year, the Government will increase the guarantee to support the cyclone pool to meet all its obligations. (ARPC 2024)

Australians who do not live in cyclone-affected areas could face higher taxes, reduced government services and/or increased government debt to fund reductions in insurance premiums in high-risk areas.

The Commission has previously recommended that the Pool be phased out and that insurers should seek alternative, commercial reinsurance (box 1).

**Box 1 – Productivity Inquiry Recommendation 6.1**

**Avoid government subsidised insurance schemes**

Australian governments should avoid expansion of climate-related insurance sector interventions and set a medium-term time frame for the phase out of the Northern Australia Reinsurance Pool. Government interventions in private insurance markets risk subsidising the movement of individuals, households, and businesses into harm's way, and increasing overall adaptation costs. Setting a medium-term time frame for the phase out of the Northern Australia Reinsurance Pool would provide time for private insurance providers to secure alternative reinsurance services

Source: PC (2023).

# State and territory government levies on insurance should be phased out

Insurance is subject to a number of taxes including GST, and state and territory taxes and levies. State and territory governments impose duties and levies on insurance premiums. For example, the Queensland Government Insurance duty for general insurance is 9% of the premium paid, including GST. (That is, the duty is charged on the premium *and* the GST). The Insurance Council of Australia has stated that the NSW Government Emergency Services Levy 'adds up to 18 per cent to home insurance premiums and around 30 per cent to commercial premiums' (ICA 2023).

State government levies and charges on insurance are inefficient taxes, with a relatively high marginal excess burden per dollar of revenue raised. The problems with insurance levies are well-established. The *Australia's Future Tax System Review* (the 'Henry Review') stated in 2010:

> Australia has high taxes on insurance, both in comparison to the taxes imposed on other products and industries, as well as compared to other countries. Imposing specific taxes on insurance adds to the cost of insurance premiums and can lead to under-insurance or non-insurance. Specific insurance taxes should be abolished. (Henry et al. 2009, p. 469)

Since the Henry Review some jurisdictions have made progress on reforming insurance-specific taxes and levies. In 2023 the Victorian Government announced plans to eliminate the state's business insurance duty within 10 years (BDO Australia 2023) and the NSW Government has announced that it will replace its Emergency Services Levy with a property levy (Insurance News 2024).

Other jurisdictions that maintain insurance levies, taxes and charges should follow suit and replace these taxes with broad-based taxes (such as property and payroll taxes). Abolishing insurance levies would immediately reduce the price of insurance for consumers.

# References

ABS (Australian Bureau of Statistics) 2024, Consumer Price Index, Australia, https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release#main-contributors-to-change, accessed 2 July 2024.

Actuaries Institute 2023, Home Insurance Affordability Update, https://actuaries.asn.au/docs/thought-leadership-reports/home-insurance-affordability-update.pdf.pdf?sfvrsn=7737bcf4_4, accessed 2 July 2024.

ARPC (Australian Reinsurance Pool Corporation) 2024, The Cycloine Pool, The Cyclone Pool – ARPC, accessed 2 July 2024.

Australian Government 2022, Final Budget Outcome 2021–22.

—— 2023, Final Budget Outcome 2022–23.

—— 2023, Intergenerational Report 2023, Canberra.

—— 2024, Budget 2024-25, Federal Financial Relations, Budget Paper No. 3, Canberra.

BDO Australia 2023, Abolition of insurance duty | Victoria State Budget 2023-24, https://www.bdo.com.au/en-au/insights/budget/articles/abolition-of-insurance-duty-victoria-state-budget-2023-24, accessed 2 July 2024.

CSIRO 2021, Regional Projection for Northern Australia, https://research.csiro.au/cor/wp-content/uploads/sites/282/2021/07/Summary-of-Regional-projections-N-Australia-v3.pdf, accessed 5 July 2024.

Henry, K., Harmer, J., Ridout, H. and Smith, G. 2009, Australia's Future Tax System: Report to the Treasurer, December, Commonwealth of Australia.

ICA (Insurance Council of Australia) 2022, Affordability, https://insurancecouncil.com.au/issues-in-focus/affordability/, accessed 2 July 2024.

—— 2022, Three-year weather bill reaches $12.3 billion, https://insurancecouncil.com.au/resource/three-year-weather-bill-reaches-12-3-billion/, accessed 2 July 2024.

—— 2023, Insurance Council welcomes NSW Government's commitment to reforming unfair Emergency Services Levy, https://insurancecouncil.com.au/resource/insurance-council-welcomes-nsw-governments-commitment-to-reforming-unfair-emergency-services-levy/, accessed 2 July 2024.

Insurance News 2024, ICA hails NSW budget's resilience, levy pledges, https://www.insurancenews.com.au/daily/ica-hails-nsw-budget-s-resilience-levy-pledges, accessed 2 July 2024.

PC (Productivity Commission) 2012, Barriers to Effective Climate Change Adaptation, Report No. 59, Final Inquiry Report, Canberra

—— 2023, 5-year Productivity Inquiry: Managing the climate transition, Vol. 6, Inquiry Report no. 100, Canberra.

QGSO (Queensland Government Statistician's Office) 2022, Population growth highlights and trends, Queensland regions, 2023 edition, https://www.qgso.qld.gov.au/issues/3061/population-growth-highlights-trends-qld-regions-2023-edn.pdf, accessed 2 July 2024.

Settle, A. and Ananyev, M. 2023, Absorbing shocks by accumulating risk: Do financially stressed households take on underinsurance risk to manage liquidity constraint?, Melbourne Institute of Applied Economic and Social Research Working Paper No. 16/2.