Australian Government

The Treasury

The Department of the Treasury's Submission

Productivity Commission Inquiry: Natural Disaster Funding Arrangements

17 June 2014

1. INTRODUCTION

The Department of the Treasury welcomes the opportunity to provide comment on the Productivity Commission's inquiry into the efficacy of current national natural disaster funding arrangements. This submission will focus on two distinct areas:

i. the appropriateness of current disaster assistance arrangements for small business; and
ii. the role of insurance in mitigating risk.

Treasury has a particular interest in these issues due to its portfolio responsibility for small business and general insurance.

With regard to small business, the submission will focus on the appropriateness and effectiveness of the assistance available to small businesses under the Natural Disaster Relief and Recovery Arrangements (NDRRA) Categories B and C.

With regard to insurance, the submission will focus on general insurance, in particular property insurance, as this is the insurance product class most pertinent to natural disasters. Consideration is given to the role of insurance during and after natural disasters, the economic reasons behind non- and underinsurance in Australia; and possible ways to improve natural disaster insurance in Australia.

2. SMALL BUSINESS

2.1 Appropriateness of current NDRRA assistance to small businesses

Getting small businesses back up and running in regions impacted by natural disasters is essential to the recovery of local communities. It ensures that supplies can be purchased, wages are paid and the local economy can start to recover. Following a natural disaster, the physical damage to property, equipment and infrastructure are the most visible economic impacts. However, the indirect economic impacts to businesses, such as the loss of trade and income, can also affect the ability of impacted communities to recover quickly from natural disasters.

Disaster assistance currently available to small businesses under NDRRA Categories B and C is predominantly focused on providing financial support directly to individual businesses to support the recovery of those businesses and, in turn, the local economy and community. The standard types of NDRRA assistance that can be made available to small business are:

- Category B concessional loans or subsidies to *consequentially* impacted small businesses;
- Category B concessional loans or subsidies to *directly* impacted small businesses; and
- Category C clean up and recovery grants to *directly* impacted small businesses.

While these types of financial assistance may help individual businesses address short-term cash flow issues following a natural disaster, they do not necessarily lead to sustainable recovery for the local economy or community. This is because the cause of the cash flow problem is not always

addressed. Alternatively, devoting resources to broader community and economic recovery (such as repairing roads and other critical infrastructure) may be a better use of government funding.

Treasury recommends that this issue be closely investigated as part of the Productivity Commission's inquiry.

In addition to questioning the appropriateness of Category B and C assistance to small businesses, Treasury has also identified the following operational level issues and risks with each type of assistance.

2.1.1 Category B concessional loans or subsidies to consequentially impacted small businesses

The Category B concessional loans or subsidies to *consequentially* impacted small businesses were launched in late 2013 following an election commitment by the Government. Prior to the launch of this assistance, NDRRA Category B loans or subsidies were only available to small businesses, primary producers and voluntary not-for-profit organisations who suffered *direct damage* (that is, physical damage or stock losses) from a natural disaster. The new *consequentially* impacted loans scheme is designed to complement the previous Category B scheme by extending assistance to entities that have suffered a significant loss of income as a consequence of an eligible natural disaster. The loan may be used for essential working capital and may include:

- salaries and wages;
- paying creditors;
- paying rent or rates;
- procuring fodder or water for livestock or produce (primary producers);
- procuring alternative logistics solutions, such as for the transportation of livestock or produce (primary producers); and
- fuel and other supplies essential to the business.

To be eligible, entities must show a significant loss of income through, among other things, peak debt and trading loss as a result of an eligible natural disaster. Entities must also be able to demonstrate that they were viable and will continue to be viable after the disaster event. Under the Category B loan schemes for both directly and consequentially impacted businesses, state and territory governments use intermediary-lending agencies or authorised deposit-taking institutions (ADIs) to assess the eligibility of applicants and their credit worthiness.[1]

So far the new consequentially impacted loans scheme has only been activated once by the Victorian Government in February 2014 for small businesses, primary producers and not-for-profit organisations in the Morwell area that suffered a significant loss of income as a consequence of the Hazelwood Mine fire.

[1] State and territory governments have the flexibility to deliver these concessional loans in different ways: either as a direct concessional loan made by the State to the borrower or by paying an interest rate subsidy to an ADI to compensate for the difference between the market rate and the concessional rate.

During the development of this initiative in late 2013, Treasury identified a range of risk and compliance issues associated with providing concessional loans to small businesses *consequentially* impacted by natural disaster events. These risks are a result of both internal factors relating to the capabilities of small business operators, as well as external factors relating to the post-disaster environment. In particular, the post-disaster environment is highly dynamic and the timeframes for small business recovery, and in turn community recovery, vary significantly depending on the disaster event type, scale and location.

The following outlines the key risks of providing Category B concessional loans or subsidies. Consideration of the following risks, and the benefits of potential strategies to mitigate these risks, need to be balanced against the importance of not being overly prescriptive or imposing onerous regulation requirements upon business.

- Debt imposition and ability to service the loan – small businesses may be approved for loans that they do not have the capacity and/or capability to service. The inability to service loans may affect the viability of small businesses and could present a significant financial cost to the state and territory governments in terms of loan defaults. Potential risk mitigation strategies include:
  - developing a more rigorous loan approval process, with consideration being given to whether the proposed loan would ensure business viability in a post-disaster environment;
  - ensuring that the size of the loan is commensurate with the size of the small business and risk;
  - determining if the loan applicant has the skills and capabilities to implement a 'back on your feet' plan as part of the loan approval process; and
  - providing small businesses with access to business mentoring to facilitate an appropriate 'back on your feet' plan.
- Fraud (intended and unintended) – small businesses may use the loan finance for fraudulent purposes either intentionally or unintentionally. This could again reduce business viability and present a financial cost to the state and territory governments in terms of loan defaults. Potential risk mitigation strategies include:
  - pre- and post-contractual compliance obligations conveyed to applicants; and
  - implementing a compliance monitoring program to verify loan expenditure within contractual obligations.

As outlined above, state and territory governments use intermediaries to assess the eligibility of applicants and their credit worthiness under both Category B loan schemes. Accordingly, the risks associated with fraud, misuse, and non-repayment of concessional loans to *consequentially* impacted small businesses are currently subject to the same risk mitigation strategies employed by those intermediaries for the concessional loans to *directly* impacted small businesses. However, the

risks associated with loans to directly impacted small businesses are related to more tangible expenditure of loan funding and are therefore less complex to assess. That is, the risks associated with the use of loan funding to address *direct* impacts, such as repairing physical damage or replacing stock losses, are less complex to assess than the risks associated with the use of loan funding to address *consequential* impacts, such as paying salaries, wages, creditors, rent or rates, procuring fodder or water for livestock or produce, alternative logistics solutions, and fuel and other supplies essential to the business.

The financial risk associated with any unrecoverable loans falls more onto the state and territory governments as they will still be required to repay the loan from the Commonwealth. However, there is also the potential risk of reputational damage to the Commonwealth as a party to the availability of the assistance.

2.1.2 Category B concessional loans or subsidies to directly impacted small businesses

The concessional loans or subsidies to directly impacted small businesses also pose the risk of debt imposition and ability of a business to service the loan. However, this risk is largely mitigated by state and territory governments' use of intermediary delivery agencies and ADIs – such as the Queensland Rural Adjustment Authority – to administer the concessional loans to directly impacted small businesses and assess the associated risks. Importantly, the risks associated with the loans to directly impacted small businesses are related to more tangible expenditure of the loan funding (as outlined above).

2.1.3 Category C clean up and recovery grants to directly impacted small businesses

On 18 December 2012, the Commonwealth Attorney-General released the NDRRA Determination 2012, *Guideline 9: Category C assistance: Interim assessment framework and forms* (the framework), which was tested over the 2012-13 and 2013-14 disaster seasons. During these times, the framework was used only in relation to Category C recovery grants for primary producers, small business and not-for-profit organisations.

The framework contains the following threshold measure relating to average levels of losses according to the Category C formula.

In determining the severity of impact on the region, community or sector, the state must demonstrate the following impacts for the Commonwealth to agree to cost sharing Category C measures:

Small business 'Severity of impact' measures currently included in Guideline 9 (page 5)

(c) Standard recovery grants (i.e. up to $10,000) to a small business sector:

- *more than 15 per cent of small businesses in the sector are directly affected,*
- *average individual small business losses of at least $45,000, and*
- *the community is at risk of losing essential businesses as a direct result of the disaster.*

(d) Exceptional circumstances recovery grants (i.e. up to $25,000) to a small business sector:

- *more than 33 per cent of small businesses in the sector are directly affected,*
- *average individual small business losses of at least $75,000, and*
- *the community is at risk of losing essential businesses as a direct result of the disaster.*

Anecdotal stakeholder feedback and analysis of small business sector characteristics has suggested that the small business indicator thresholds regarding 'average individual small business losses' may be too high. However, as NDRRA Category C was only activated for two disaster events during the 2012-13 disaster season, Treasury considered there to be insufficient data available at that time to accurately determine whether these thresholds were appropriate. Noting that NDRRA Category C guidelines are 'pilot' guidelines, Treasury recommended at the time that the pilot trial be extended using the same thresholds, and be reviewed again at the end of the 2013-14 disaster season.

Treasury recommends that this issue be closely investigated as part of the Productivity Commission's inquiry.

3. INSURANCE

3.1 The role of insurance in mitigating natural disaster risk

Insurance provides a mechanism to protect the financial wellbeing of individuals, households, communities and governments. Insurance does not reduce the level of risk faced by any one entity, but instead provides a means of spreading the financial impact of losses across different parties and transferring it to parties that are better able to bear those losses. It reduces the costs of self-insurance and enables productive activities to be undertaken on the understanding that financial recovery will be available in the event of loss or misadventure.

Insurance also provides an indication of risk, as prices (and availability) reflect to a large extent the insurance industry's assessment of the level of risk involved in a particular circumstance. The price signal provided by insurance can therefore be an effective tool to encourage risk mitigation. Measures that significantly distort insurance prices, such as the imposition of state taxes, duties and levies, or government policies that mandate changes to private insurance arrangements (including subsidisation of insurance) can impact on the incentives for individuals, households, businesses and governments to undertake appropriate risk mitigation and/or purchase insurance as part of their risk management strategy.

In the context of natural disasters, arrangements are in place to offer government support to affected parties who experience financial losses, even though they may have been able to purchase insurance against such losses. It is important to recognise that this support can affect incentives to avoid or mitigate future disaster costs, including decisions on the amount of insurance to purchase, if any. This can have significant consequences, as communities with adequate levels of insurance cover will be in a far better position to recover from a natural disaster than ones with inadequate cover.

There are other factors that can impact on the insurance purchase decision and affect the level of insurance cover across Australian communities. These include the cost and availability of insurance, and the awareness of the importance of insurance as a risk management tool. These issues have contributed to the levels of non- and underinsurance against natural disasters observed across Australian communities. Non- and underinsurance are considered in section 3.4 of this submission.

3.2 Natural disaster insurance in Australia

Australia has sophisticated and well-regulated insurance markets, with profitable[2] and well-capitalised insurers[3] offering a suite of products covering a range of natural disaster risks. However, natural disasters present a unique challenge for the industry as insurable losses tend to be confined to certain geographic areas.

Insurers seek to spread their risk as broadly as possible to ensure that risks they cover are independent (that is, non-correlated). In regards to property insurance, geographic concentration matters because an insurer with a large percentage of its (correlated) risks in one area may be unlikely to suffer losses in any given year, but would suffer significant losses if this one area was hit by a natural disaster such as a cyclone. Alternatively, an insurer with policies spread over many areas has a relatively high chance of suffering natural disaster losses in any given year but, in any one year, faces a relatively low likelihood of suffering losses on a substantial proportion of its (non-correlated) geographically dispersed policies. Having a larger concentration of risks in the one geographic area forces insurers to accept more volatility in earnings and, as a result, set aside greater reserves to cover potentially catastrophic losses from time to time.

Some insurers, however, are unable or unwilling to spread their property risk broadly enough across other geographic regions, leading these insurers to charge significant premiums to cover the potential for catastrophic losses, or alternatively, to not offer cover at all.

Despite this, insurance cover for Australian homes against a variety of natural disasters has been widely available for many years. A high proportion of Australian homeowners have cover for storms, earthquakes, bushfires and cyclones. Some less common events such as landslide, tsunami and storm surge are sometimes included when they are connected to another insured event such as earthquake in the case of tsunami, storm or cyclone in the case of storm surge, and heavy rainfall in the case of landslide.

Risk associated with flooding, however, presents a unique challenge to insurers. It is estimated that around 7 per cent of homes across Australia are subject to moderate to high flood risk.[4] Flooding is an issue which predominantly affects the east coast of Australia, reflecting the rainfall patterns, topography and river systems of Queensland, New South Wales and to a lesser extent Victoria.

[2] Annualised return on equity for the Australian general insurance industry was 18 per cent in the second half of 2013 (Reserve Bank of Australia, *Financial stability review*, March 2014).
[3] As at 30 March 2014, the industry was holding 1.89 times as much capital as the minimum prudential capital requirement (APRA, *General insurance statistics*).
[4] Natural Disaster Insurance Review, September 2011, Final Report, http://www.ndir.gov.au/content/report/downloads/NDIR_final.pdf, p. 23.

Historically, flood cover has not typically been included in home and contents, small business and crop insurance policies. Over recent years, however, the inclusion of flood cover for homes has risen sharply, from only 3 per cent of all policies in 2006 to around 83 per cent as at May 2013.[5] Most insurers offering flood cover are making it a compulsory part of their property insurance offerings, with the resulting price rises in flood-prone areas often leading to criticism from affected customers.[6] Flood cover for crops continues to be largely unavailable (see Box 1 for further information).

Treasury understands that the level of household flood cover in areas subject to medium to high risk of flooding is sometimes significantly lower than in areas not exposed to flood risk.[7] From a community risk management perspective, all households and small businesses with medium to high flood risk should ideally have access to policies which include flood cover, priced fairly taking the level of risk into consideration.

Box 1. Crop Insurance in Australia

There are a number of insurers and underwriting agencies providing crop insurance for broadacre (such as cereals, sugarcane and legumes), non-broadacre (such as viticulture and horticulture) and forestry (plantations and orchards) products. This insurance tends to be provided on a named-peril basis, whereby coverage under a policy extends only to those peril events named in the policy.

Insured perils tend to vary depending on the location and the nature of the crop/forestry product - hail, fire and windstorm are widely covered, frost may be and flood and drought are not. Take-up rates also vary significantly between crop types. A recent study by the United Nations Food and Agriculture Organisation into agriculture insurance in the Asia Pacific found that insurance take-up rates for broadacre, industrial crops (cereals, grains, legumes, cotton, sugar cane) and viticulture (75, 44 and 41 per cent respectively) were relatively high compared to orchard crops and horticulture (7 and 0 per cent respectively).[8]

A 2012 review undertaken by the National Rural Advisory Council (NRAC) of the feasibility of agricultural insurance products in Australia for weather-related production risks, found that a key factor likely to account for the high level of take-up for broadacre crops is the relatively low premiums. During its consultations, NRAC was informed that for cereal crops, premiums range from 3.5 per cent to as low as 0.1 per cent, depending on the level of excess and the peril which was being insured against.[9]

Multi-peril crop insurance (MPCI), which provides insurance cover for a range of perils, remains largely unavailable in Australia, despite the March 2014 announcement by Latevo International and

[5] Insurance Council of Australia, *Aggregated flood policy data*, http://www.insurancecouncil.com.au/industry-statistics-data/flood-cover.
[6] APRA Insight, Issue 3, 2012, p. 7.
[7] Based on data provided in confidence to Treasury by a major insurer operating in Australia.
[8] Food and Agriculture Organisation of the United Nations, 2011, *Agricultural insurance in Asia and the Pacific region*, Bangkok, http://www.fao.org/docrep/015/i2344e/i2344e00.pdf.
[9] National Rural Advisory Council, 2011, *Feasibility of agricultural insurance products in Australia for weather-related production risks*, http://www.daff.gov.au/__data/assets/pdf_file/0006/2207967/nrac-agricultural-insurance-report.pdf.

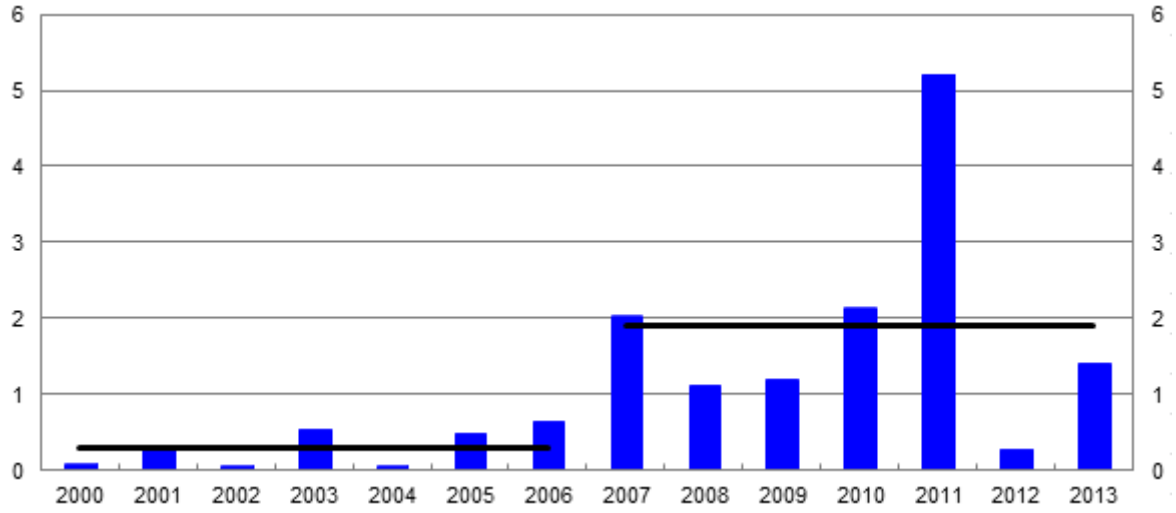
Allianz Australia, that they would commence offering MPCI to WA farmers.[10] Government subsidised MPCI is available in a number of other countries (such as the US, France, Spain, Korea, Japan and China).

According to the NRAC, international experience provides overwhelming evidence that traditional MPCI is not commercially viable without significant and ongoing government support, and that the cost of unsubsidised premiums is beyond what most farmers are willing to pay. NRAC concludes that, given the volatility of Australian agriculture, the projected increase in climatic variability and the insufficient data to underpin agricultural insurance, there is no evidence that this situation would be different in Australia.[11]

3.3 Issues with insurance availability and affordability

Over recent years, insurable losses stemming from natural disasters have run into the billions of dollars. Between 2007 and 2013, annual insured losses from natural disasters have averaged $1.9 billion a year, significantly higher than the average for the years between 2000 and 2006 of $290 million a year (see Figure 1).[12] The insured losses of the Queensland floods of 2010-11 and Cyclone Yasi in 2011 are together estimated to have totalled around $3.8 billion alone.[13]

Figure 1. Insurable losses from natural disasters ($ billion)[14]



Source: Insurance Council of Australia and Treasury

[10] Hayes, Jessica. 20 March 2014, Farm Weekly, *Multi-peril crop insurance a reality*, http://www.farmweekly.com.au/news/agriculture/cropping/general-news/multiperil-crop-insurance-a-reality/2692299.aspx.

[11] NRAC, September 2012, *Feasibility of agricultural insurance products in Australia for weather-related production risks*, p.1, http://www.daff.gov.au/__data/assets/pdf_file/0006/2207967/nrac-agricultural-insurance-report.pdf.

[12] Insurance Council of Australia, *Historical disaster statistics*, http://www.insurancecouncil.com.au/industry-statistics-data/disaster-statistics/historical-disaster-statistics. Note that data for all years except 2011, 2012 and 2013 are adjusted for 2011 costs. As such, the calculated insurable losses for 2012 and 2013 may be revised in the future, although not significantly.

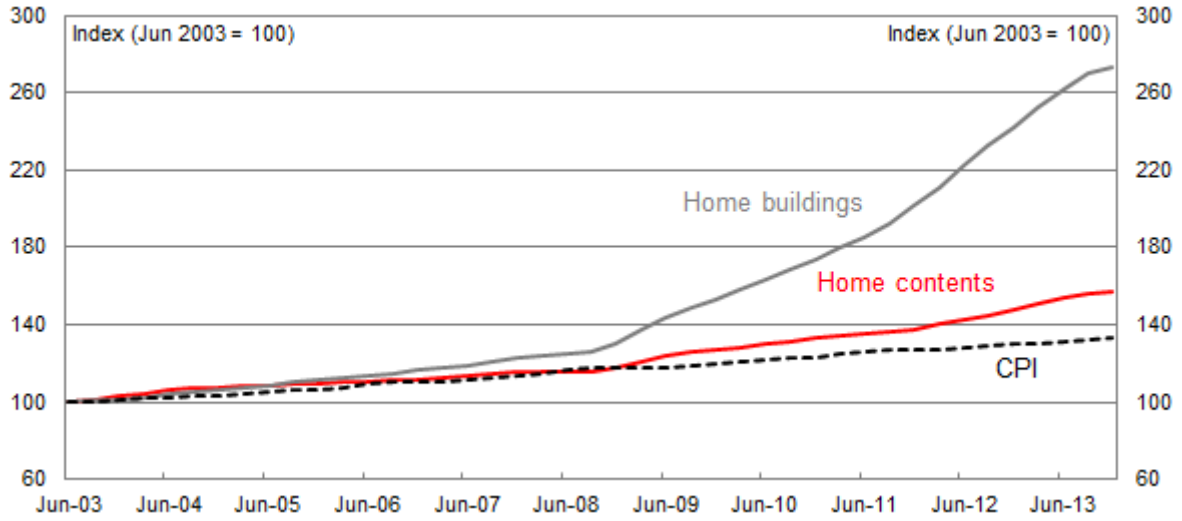
[13] Ibid.

[14] Ibid.

Insurers have responded to these significant losses by investing in their understanding of the risk of, and therefore potential losses from, such disasters. Improvements in technology and stronger competitive pressures are leading insurers to adopt more granular pricing methods; this ensures that an insurer neither undercharges for an individual risk nor overcharges (potentially losing market share to competitors which are more accurately pricing the risk). For example, greater access to better quality flood mapping has allowed insurers to more accurately determine the level of flood risk for individual properties. This has resulted in widespread natural disaster risk re-rating of properties. As a result, premiums for many households, especially those located in areas at high risk of cyclones, floods or bushfires, have increased, sometimes sharply.

Since 2009, average home contents insurance prices have risen at twice the rate of the Consumer Price Index (CPI), while home buildings insurance prices have risen at six times the rate of CPI (see Figure 2).

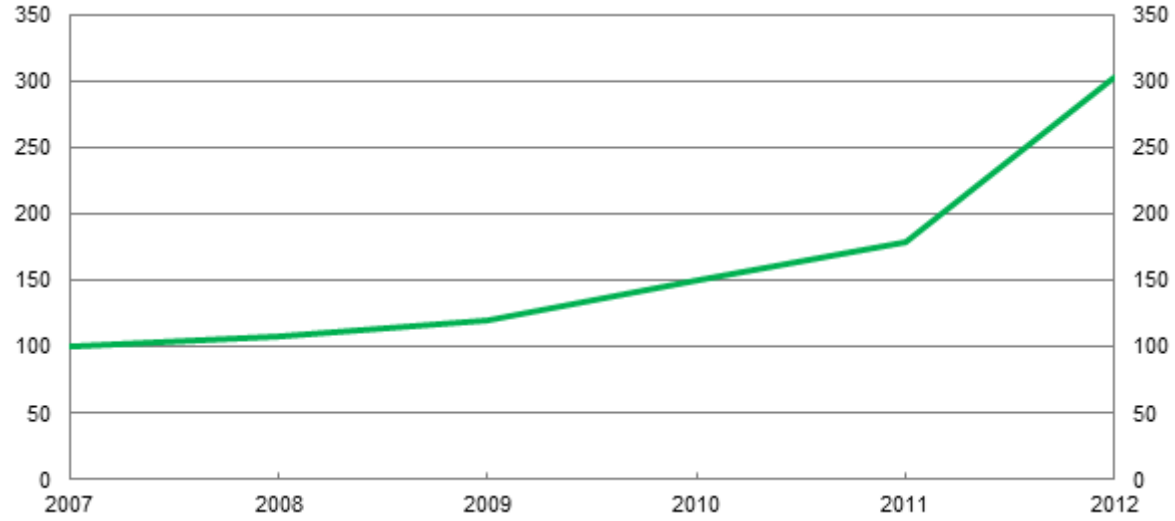
Figure 2. Insurance prices and the Consumer Price Index



Source: Insurance Council of Australia and Treasury

Increases in home building insurance prices have not, however, been uniform across Australia. Some geographical regions, such as North Queensland (which is prone to floods and tropical cyclones), have experienced larger than average increases. Average increases in North Queensland strata title property insurance prices were around 200 per cent over the period between 2007 and 2012 (see Figure 3).

Figure 3. Index of North Queensland gross strata title premium rates



Source: Australian Government Actuary, 2012

In addition to the wide-scale risk re-rating of individual properties, rising reinsurance costs have also contributed to insurance premium increases over recent years. These reinsurance cost rises have been passed through to policyholders, although not in a uniform way. Increasingly, insurers are allocating reinsurance costs in line with the underlying risk presented by each individual property, resulting in properties subject to higher natural peril risk being allocated a larger share of reinsurance costs than properties with little to no risk.

Another factor contributing to the rise in property insurance prices is the inclusion of flood cover as standard to home and contents insurance policies. For some residents with an elevated exposure to flood risk, the automatic inclusion of flood cover (where it was previously excluded) has resulted in large increases to their insurance premiums. In some cases, insurers have stopped offering flood cover to consumers in certain high-risk areas or have allowed consumers to opt out of the flood component of their policy. This exacerbates the non-insurance problem, particularly amongst those individuals and communities that are likely to need it the most.

3.4 Non- and underinsurance

Non- and underinsurance is a persistent problem in Australia. Over 83 per cent of Australian homeowners and renters are considered to be underinsured for their home and contents.[15] In 2008, 26 per cent of small businesses were found to not hold any form of general insurance policy.[16]

There are a number of reasons for non- or underinsurance. As discussed previously, for some consumers, particularly those living in areas exposed to natural disasters, the cost of insurance for property can be prohibitive. This can lead to consumers eschewing insurance (or minimising their insurance cover). For others, albeit a small number in comparative terms, adequate and appropriate insurance to cover their property may be very difficult to procure or simply unavailable.

[15] Quantum Market Research, *The Understand Insurance Research Report*, October 2013.
[16] Insurance Council of Australia, *Non Insurance in the Small to Medium Size Enterprise Sector*, October 2008.

In other cases, consumers may not fully appreciate the potential risks or likelihood of a natural disaster or the role insurance can play in protecting them from significant financial loss. This observation is frequently explained in academic literature with reference to behavioural biases that could make an individual's perceived risk differ from their actual risk. In the context of insurance, many consumers have limited information on loss probabilities and may not believe the transaction costs involved to improve their information are worth incurring.[17]

Furthermore, according to the Insurance Council of Australia (ICA), consumers often underestimate the cost of rebuilding their homes in estimating their insurance requirements.[18] Many consumers also do not update their policies over time to reflect changes such as building price increases and renovations, and do not expect the surge in building prices that often occurs after a natural disaster. (This problem is particularly pertinent to policyholders with 'sum insured' policies, as opposed to total replacement policies.) For example, following the Blue Mountains bushfires in late 2013, consumers discovered that their rebuilding costs were higher than expected given the new national building standards created after the 2009 Victorian bushfires.[19] Many were unaware of the cost of the new requirements (such as heat-resistant glass) and were faced with a large gap between their insurance payout and rebuilding costs.

It has also been found that many consumers either do not read or understand the terms and conditions set out in their Product Disclosure Statement. This leads to many consumers being unaware of what they are and are not covered for. In the aftermath of the 2010-11 floods across large parts of eastern Australia, evidence emerged that a significant proportion of homeowners whose properties were damaged had policies that did not cover flood damage.

Small businesses can also face difficulties obtaining the appropriate level of cover for their needs. While larger corporations tend to have internal teams dedicated to financial and risk management, some small businesses do not have the resources to understand and purchase the types of insurance cover they require (such as business interruption insurance)[20] or may not have access to certain types of insurance cover (such as flood cover in crop insurance, see Box 1 in section 3.2). It has also been found that small business owners are often reluctant to buy insurance. A survey by Vero found that 40 per cent of small businesses did not believe they were getting value for money for their insurance.[21]

In relation to essential public assets, a review of state insurance arrangements by the Department of Finance found in 2012 found that the majority of state and local governments had insurance cover in

[17] Kousky, Carolyn & Cooke, Roger. 2012, *Explaining the failure to insure catastrophic risks*, The Geneva Papers, 37, pp. 206-227.
[18] Insurance Council of Australia, *2013: The year in review*, p. 21, http://www.insurancecouncil.com.au/assets/report/Year%20in%20Review%202013%20spreads.pdf.
[19] Curtin, Jennie. May 21, 2014, *Under-insurance leaves many owners in the lurch*, http://www.bluemountainsgazette.com.au/story/2294271/under-insurance-leaves-many-owners-in-the-lurch/.
[20] Pearson, Matt. July 2012, *Insurance Insights: After the storm. Can insurers save businesses after disasters?*, http://www.vero.com.au/vero/sites/default/files/suncorp-insurance-insight-white-paper-claims-after-the-storm-can-insurers-save-businesses-after-disasters.pdf.
[21] Vero SME Insurance Index 2012, http://www.vero.com.au/vero/sites/default/files/fm/file/VER016%20SME%20Index%20LR.pdf.

place for non-road assets. However, this was not the case for road assets – only Victoria and the Australian Capital Territory (ACT) had cover for their roads. The review found there was insufficient appetite and capacity to cover road assets across Australia in a cost-effective manner. The Australian Government Actuary (AGA) was subsequently requested to consider a consolidated pool approach whereby the Commonwealth, together with the states and territories, operates a 'road insurance pool'. The AGA was also requested to consider issues around membership, governance and funding. A copy of the final report is at: http://www.finance.gov.au/publications/review-natural-disaster-relief-recovery-arrangements/docs/ndrra-finance-report-mar-2012-appendix-d.pdf.

3.5 Addressing non- and underinsurance

Addressing non- and underinsurance is an important challenge for the Australian community. While insurance is essentially a private commercial contract between an insurer and a consumer, there are some instances where government intervention in insurance markets may help to improve market efficiency and equity. This could include through:

- the provision of natural hazard data to support better risk-based pricing;
- supporting mitigation infrastructure to reduce the impacts of natural disasters on Australian communities;
- the removal of inefficient taxes and charges which raise the price of insurance; and
- reducing information asymmetries in insurance markets.

Government-mandated risk pools have also been adopted in some countries to address insurance availability and affordability, although there are some significant risks associated with these pools.

3.5.1 Provision of natural hazard data

Information is a powerful tool for ensuring that consumers understand the risks and costs associated with the natural hazards that they may face. Improving a consumer's understanding of risk may lead them to make choices to mitigate risks, including through the purchase of insurance, undertaking mitigation works, or choosing not to live or purchase property in a region that is exposed to frequent natural hazards.

In the absence of high-quality information – for example, data which accurately identifies the natural peril risk associated with a specific location (a region, suburb, street, or individual property) – individuals, businesses and governments may make poor planning decisions, or fail to take necessary precautions to mitigate potential risks. In the case of insurance companies, a lack of high-quality data to support underwriting may lead an insurer to price conservatively or not to offer cover at all. It is not uncommon to see some insurers avoid selling policies in entire geographic regions altogether (a practice known as 'redlining').

Government can have a role in collecting evidence and providing information to assist consumers and businesses to understand and manage their risks. With access to a greater quantity and quality of data, consumers can make more informed insurance purchase decisions and insurers could be

more certain about the extent of risk they are taking on and could price more appropriately (and extensively, by covering areas previously redlined), thereby ensuring consumers are charged premiums which are commensurate with the risk they face.

The availability of comprehensive data is particularly important for pricing flood insurance. Flood damage can affect some areas repeatedly whilst leaving nearby land completely unaffected. Small differences in elevation, surface composition and drainage can have major effects. Furthermore, the impact of flooding will vary greatly depending on the specific attributes of a building (the materials it is made from and its design) as well as the nature of the flood (including its depth and water velocity). Understanding building and contents vulnerability to flood and the likely cost of repairing flood damage is therefore very complex. Having the best available data improves the accuracy of this assessment and reduces the risk of overpricing or under-pricing flood insurance premiums.

For insurance purposes, the ICA collates data in its National Flood Information Database. This database is available to ICA members for use in risk assessment. The larger and more sophisticated insurers have extensive data of their own. Information held by the ICA or individual insurers is not, however, usually available directly to the public.

In recognition of the importance of publicly available data, the Commonwealth Government established the National Flood Risk Information Portal (NFRIP). NFRIP brings together flood hazard data from sources such as local and state governments, the Bureau of Meteorology, and Geoscience Australia. NFRIP intends to provide a single access point to existing data, and to develop national guidelines covering the collection, comparability and reporting of flood information. NFRIP has collected substantial amounts of flood data and studies from around the country.

The public availability of flood and other risk data, via NFRIP and other sources, is not, however, as complete as it might be if certain impediments to the release of such information, especially by local governments, could be overcome.

3.5.2 Mitigation works and their impact on insurance prices

Natural disaster risk management is optimised when the responsibility for managing each risk is allocated to those that bear the risk. This includes individuals for their personal assets, businesses for their assets and governments for public assets.

Functioning in a competitive private market, insurance companies have developed niche capacities in risk assessment, mitigation, claims and logistics. Governments can support efforts to manage risks associated with the impacts of natural disasters by ensuring:

- financial markets are well-regulated, well-functioning and provide appropriate price signals and products such as insurance to mitigate the risk;
- regulations exist that promote effective mitigation – examples include building codes, land use planning, and standards for the design of infrastructure;
- disaster risk information (such as NFRIP) is available to support planning and risk mitigation strategies; and

- regulations, policies and taxes are appropriate and do not undermine the incentives for, or capacity of, parties to individually manage risk.

The insurance industry has consistently posited that additional investment in mitigation by governments would be effective in lowering emergency recovery costs and disaster assistance payments, preventing insurance availability problems, reducing insurance premiums, and decreasing the severity of interruption to regular business and societal activities. Mitigation measures include the construction of flood levees, fire breaks, stronger building codes to protect structures from extreme weather hazards, more risk-appropriate uses of land, and greater emphasis on hazard mitigation infrastructure.

Evidence supports the insurance industry's position that mitigation does improve insurance accessibility and can reduce insurance costs. For example, after suffering significant losses associated with flooding in Roma and Emerald in Queensland, Suncorp decided in May 2012 to cease offering new policies in the towns "unless clear decisions are made to build or implement improved mitigation to protect the residents of these towns".[22] Suncorp recommenced offering policies in Roma after development of a flood levee to protect the town commenced. Suncorp has stated that premiums are expected to fall on average by 30 per cent as a result of the levee.

Treasury notes that governments have the ability to enact stronger building codes and prudent land-use policies to reduce the impact of natural disaster events. Governments also have the resources and expertise to help prepare for and recover from natural disaster events. Currently, governments commit substantial funds towards disaster risk mitigation annually. However, Treasury notes that the 2014 Commission of Audit (CoA) has suggested that the potential benefits arising from natural disaster mitigation projects are difficult to assess since, although information on the impact of insured costs is readily available, estimates of the total economic costs are more speculative due to the volatility in the frequency and cost of natural disasters.

In addition, the CoA questions the role of the Commonwealth in funding mitigation activities on the basis that it has historically borne the majority of natural disaster costs and suggests that State and local Governments may be better placed to assess and fund mitigation activities in an efficient manner. Accordingly, the CoA did not reach a conclusion on which level of government should have primary funding responsibility for mitigation projects.[23] In light of the CoA's findings, the Productivity Commission may wish to carefully consider the roles of different levels of government in funding mitigation infrastructure.

3.5.3 State taxes and levies and non-insurance

General insurance in Australia is subject to a number of specific state and territory taxes including stamp duties and fire services levies. The issue of state taxes has previously been considered as part of the HIH Royal Commission and in reviews such as the Productivity Commission's inquiry into

[22] The Courier Mail, 7 May 2012*, Suncorp will not offer new policies in Roma and Ipswich as the fallout from 2011 floods continues*, http://www.couriermail.com.au/news/queensland/suncorp-will-not-offer-new-policies-to-queensland-towns-emerald-and-roma-as-fallout-from-2011-floods-continues/story-e6freoof-1226348164193.

[23] Commission of Audit Report, Appendix Volume 2, p. 95, http://www.ncoa.gov.au/report/docs/appendix_volume%202.pdf.

Barriers to Effective Climate Change Adaptation and *Australia's Future Tax System Review*. These reviews have consistently found that state taxes on insurance are inefficient and should be phased out over time.

Previous studies have found that state taxes are a significant factor leading to non- or underinsurance, and that if these were removed there would be a significant increase in the take-up of house and contents insurance and increases in the level of cover for contents insurance.[24] State taxes and levies can raise the price of insurance, driving a wedge between the 'technical' price and the retail price paid by consumers. Raising the price of insurance distorts the risk management decisions of households and businesses. Removing such taxes would improve the affordability of insurance and ensure that premiums better reflect risk levels.

Treasury notes the ACT Government has confirmed that stamp duties on insurance products in the ACT will be fully abolished by 1 July 2016. However, other states such as Tasmania and Queensland have recently increased their stamp duties on insurance.

3.5.4 Risk pooling mechanisms

Pooling has been adopted in some countries as a way to expand the availability and affordability of natural disaster insurance coverage. Pooling allows for the distribution of risks across a number of insurers and thereby avoids the concentration of risk (such as geographic risk) with any single insurer.

There are a number of different types of pool arrangements (with regard to premium pricing, scope and funding) which are in operation around the world (see Appendix for further information). Some of the best known examples are the United Kingdom's Flood Re program; the United States' long running and deeply indebted National Flood Insurance Program (NFIP); the New Zealand Earthquake Commission (EQC); and Australia's terrorism insurance scheme which is managed by the Australian Reinsurance Pool Corporation (ARPC).

A number of Government run or mandated risk pool schemes incorporate the provision of a subsidy or some form of government guarantee. In terms of the provision of subsidies for insurance, the Productivity Commission inquiry into *Barriers to Effective Climate Change Adaptation* considered the merits of providing subsidies for flood insurance. Treasury notes that the Commission argued that if governments were to subsidise flood premiums, this would only shift who bears the cost of the risk and could remove the price signal associated with flood risk. This could cause development to continue in high risk areas and reduce the incentive for property owners and state and local governments to undertake mitigation activities. As a result, subsidies could create substantial economic costs and have the effect of crowding out private sector insurance products and reducing competition.

[24] For example, see Tooth, Richard, 2008, *An analysis of demand for home and contents insurance: A report for the Insurance Council of Australia*.

3.5.5 Correcting information asymmetries in insurance markets

Information asymmetries in insurance markets can lead to inefficient outcomes for both insurers and consumers. Asymmetric information can impact on insurers through moral hazard, where consumer behaviour which is not observable to the insurer alters the risk, and therefore costs, estimated by insurers. It can also impact on consumers, where their perception of risk differs to the actual or calculated risk by insurers, or where markets lack transparency in relation to the pricing or inclusions on insurance policies.

An important role for government is in ensuring that effective and well-targeted regulation is in place to minimise information asymmetries. Requiring clear product disclosure, terms and conditions in contracts and facilitating increased competition by encouraging insurance aggregators are some ways that outcomes can be improved for consumers. Facilitating better access to information on risks for insurers (such as natural hazard data) and ensuring protections to business from moral hazard risk by consumers will benefit insurers and, ultimately, consumers.

It is important, however, that prior to taking any regulatory actions in insurance markets, governments carefully weigh up the benefits to consumers and industry against the cost burden on business of complying with such regulation.

4. CONCLUSION

Treasury has identified a number of issues with the current disaster payments made by the Government, in particular with respect to NDRRA assistance measures for small businesses. Going forward, Treasury recommends the Productivity Commission consider the balance of broader assistance measures that focus more on disaster mitigation and the recovery of communities and local economies, against direct financial assistance to individuals and small businesses.

In respect of insurance, which provides households, small businesses and governments with the mechanism to reduce their financial risk exposure from natural disasters, the price of insurance reflects to a large degree the level of risk. As insurers have improved their risk information and adopted more granular pricing methods, consumers living and businesses operating in more high risk areas have faced steep increases in their premiums.

Charging property insurance premiums which are commensurate with the insurable risk borne by each individual property is fair and equitable. However, this process of repricing insurance has led to insurance affordability issues for certain individuals and businesses across Australia.

The question that arises for policy makers surrounds the extent to which the cost of better understood risk should be borne directly by the property and business owners in question, or whether there is a case for community or government intervention in the relevant market and the point at which the need for intervention is reached. Views have been mixed.

The risk posed is that rising insurance premiums exacerbates the level of non- and underinsurance prevalent across Australia. As evidenced from recent natural disasters, notably the Blue Mountains Bushfires of 2013, floods of 2010-11, and Victorian Bushfires of 2009, widespread non- and

underinsurance can have significant community impacts. Addressing the causes of non- and underinsurance would be a good way of ensuring Australian communities are able to recover more quickly and effectively after a natural disaster.

APPENDIX

Risk pool case studies: Flood Re, NFIP, EQC and the ARPC

Flood Re

On 27 June 2013, the UK Government announced an agreement with the Association of British Insurers to provide affordable flood insurance for people in high risk areas. The agreement will create an industry pool known as 'Flood Re' which will cover flood claims from high risk homes.

As part of the Flood Re scheme, insurers will pass the flood risk element from those households deemed to be at high risk of flooding to a separate fund. Premiums for the flood risk will be calculated based on council tax banding up to a maximum limit depending on the band. Flood Re will charge member firms an annual charge of £180 million, which equates to a levy of £10.50 on annual household premiums and represents the estimated level of cross-subsidy that already exists between lower and higher flood risk premiums.[25]

Flood Re will replace the current voluntary agreement (the Statement of Principles) between the UK Government and the insurance industry. This agreement has seen insurers keeping a lid on insurance premiums for consumers living in high flood risk areas, in return for the UK Government committing to a program of flood mitigation work.

NFIP

The United States National Flood Insurance Program (NFIP) was established in 1968 to provide cover for natural disasters (such as Hurricane Katrina in 2005 and Hurricane Sandy in 2012), combined with affordable flood insurance to communities that adopt land-use regulations to reduce flood risks. Recent reviews of the program by the US Government Accountability Office have identified a number of flaws, including the program's poor financial performance and actuarial practices.

NFIP has run at a deficit in every year since its inception. Enormous claims following large-scale disasters, insufficient revenue generated by the program, and large payments to private insurers in return for their services in writing and managing policies, have seen the program run up substantial financial losses. At present, the program is approximately US$30.4 billion in debt to the US Department of the Treasury, which has paid claims as they have arisen.[26]

In addition to criticism about its financial performance, NFIP has also been criticised for providing subsidised premiums which do not reflect actual flood risk and therefore do not discourage development in floodplains and other high-risk areas.[27]

---

[25] ABI, 2014. https://www.abi.org.uk/Insurance-and-savings/Topics-and-issues/Flooding/Government-and-insurance-industry-flood-agreement.
[26] US Government Accountability Office (GAO), *2013 High risk report*, http://www.gao.gov/highrisk/national_flood_insurance/why_did_study.
[27] Brannon, Ike & Lowell, Elizabeth. *The flood insurance fix*, Winter 2011-2012, http://object.cato.org/sites/cato.org/files/serials/files/regulation/2012/7/v34n4-5.pdf.

EQC

The Earthquake Commission (EQC) is a public entity that provides natural disaster insurance to New Zealand home owners. EQC also funds research and provides information about how homes can be made safer from damage caused by natural disasters. EQC is funded by a levy on domestic insurance policies and manages the Natural Disaster Fund, which has grown from those levies and from investment income.[28] The fund is backed up by reinsurance from overseas groups and a government guarantee.

The scheme is compulsory in the sense that if a home is insured, the insurance company is obliged to pay the EQC a premium and the EQC is obliged to insure. The premium rate is 5 cents per NZ$100 of cover and EQC insures approximately 90 per cent of New Zealand homes. The perils insured against are earthquake, volcanic eruption, hydrothermal activity, landslip and tsunami. Fire following any of these events is also covered. For residential land, only storm and flood are covered.[29]

ARPC

Australia has established its own risk pool for terrorism insurance. The Australian Reinsurance Pool Corporation (ARPC) was established in 2003 as a statutory body to provide terrorism insurance for commercial property after the complete withdrawal of terrorism cover following the 11 September 2001 attacks in the US. At the time, the complete absence of terrorism insurance raised concerns about the impact on the commercial property sector and the economy more broadly. Governments around the world introduced similar schemes for terrorism insurance cover.

[28] The Treasury, New Zealand Government, http://www.treasury.govt.nz/commercial/portfolio-entities/sector/financials/earthquake-commission/.

[29] Tarr, Julie-Anne. 2011, *Floods, earthquakes and insurance coverage: issues, problems and solutions*, Australian Business Law Review, 39(2), pp. 111-120.