



Australian Government

The Treasury

Northern Australia Insurance Premiums Taskforce

INTERIM REPORT

2015

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CONSULTATION PROCESS

Request for feedback and comments

Interested parties are invited to comment on the issues raised in this interim report.

While submissions may be lodged electronically or by post, electronic lodgement is preferred. For accessibility reasons, please submit responses sent via email in a Word or RTF format. An additional PDF version may also be submitted.

All information (including name and address details) contained in submissions will be made available to the public on the Treasury website unless you indicate that you would like all or part of your submission to remain in confidence. Automatically generated confidentiality statements in emails do not suffice for this purpose. Respondents who would like all or part of their submission to remain confidential should provide this information marked as such in a separate attachment.

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Closing date for submissions: Monday, 14 September 2015

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ACRONYMS AND GLOSSARY

ABS	Australian Bureau of Statistics
AGA	Australian Government Actuary
AGDRP	Australian Government Disaster Recovery Payment
APRA	Australian Prudential Regulation Authority
ARPC	Australian Reinsurance Pool Corporation
BOM	Bureau of Meteorology
Catastrophe reinsurance	Insurance purchased by insurers on the global market to protect insurers from large losses due to a catastrophe. Under the contract the insurer will meet the first portion of claims and claims above this level are refunded by the reinsurer.
ICA	Insurance Council of Australia
NDRRA	Natural Disaster Relief and Recovery Arrangements
Retention or attachment point	In the event of a catastrophe causing the insurer to claim on a reinsurance contract, the retention is the amount that must be paid by the insurer before the reinsurer will refund further amounts. This amount is often called the attachment point of the reinsurance.
Retrocession	Where a reinsurance company insures another reinsurance company by accepting risk the other company has underwritten.
TIO	Territory Insurance Office

OVERVIEW

Purpose and approach of the Taskforce

The Taskforce is charged with exploring the feasibility of options that use the Commonwealth balance sheet to reduce home, contents and strata insurance premiums in those regions of northern Australia that are experiencing insurance affordability concerns due to cyclone risk.

The background to this task is concern over the impact of the significant increase in insurance premiums in parts of northern Australia, particularly in northern Queensland, that has occurred in recent years. The rapid increase in premiums is causing hardship for individuals and may be influencing the growth and development of the areas affected.

There have been a number of reports on the rise of insurance premiums in northern Australia. These include: the 2012 report by the House of Representatives Standing Committee on Social Policy and Legal Affairs, *In the Wake of Disasters, Volume Two: The affordability of residential strata title insurance*; three reports by the Australian Government Actuary; and the Australian Government's 2014 discussion paper *Addressing the high cost of home and strata title insurance in northern Queensland*. In addition, there have been other reports that are relevant to the work of the Taskforce. These include the recent Productivity Commission Inquiry Report on Natural Disaster Funding Arrangements and the 2011 report of the Natural Disaster Insurance Review.

The Taskforce will not be 'reinventing the wheel', but is drawing on all this previous work in undertaking its assignment.

The specific task set for the Taskforce is to explore the feasibility of two options — a mutual cyclone insurer and a cyclone reinsurance pool — along with other options that are put forward in the course of consultations (Terms of Reference are at Appendix A). These options are to be evaluated having regard to: the potential reduction in consumer premiums; the likely cost and risk associated with using the Commonwealth balance sheet to lower the cost of insurance to consumers; the potential effect on the operation of the insurance and reinsurance markets, particularly the likely effects on competition; and how the role of the Government can be gradually reduced over time.

Consistent with its terms of reference, the following principles underpin how the Taskforce is approaching its work:

- The options should be responsive to the concerns of individuals experiencing acute affordability issues associated with cyclone risk.
- The options should, as far as possible, be targeted to have the greatest impact on consumers experiencing insurance affordability issues resulting from cyclone risk without discriminating between states or parts of states.
- The options should, as far as possible, support a competitive private market for insurance.
- Incentive structures should be appropriate, in particular, the incentive for people to reduce the vulnerability of their property to cyclone damage.
- The objective should be to achieve the biggest reduction in consumer premiums for the least cost and risk to the Commonwealth balance sheet.

In conducting its review, the Taskforce has been consulting widely and has drawn on its Reference Panel of stakeholders for advice and guidance. The members of the Reference Panel are listed in Appendix B and the organisations consulted to date by the Taskforce are listed in Appendix C.

The Taskforce has sought to update information on the movement of insurance premiums in northern Australia and gain a better insight into the diversity of the rise in premiums faced by individuals. The Australian Government Actuary was commissioned to update and extend the previous reports he has prepared on home and contents and strata title price rises in northern Queensland and other parts of northern Australia. In addition, the Taskforce is drawing on the reports of insurance price rises that have been raised with it during the course of its consultations.

A particular focus has been consultations with consumers and consumer groups, recognising that the rise in premiums has caused significant concerns for many consumers and the circumstances individuals face can differ significantly. The Taskforce is conscious of the importance of ensuring that the options respond to the major concerns of consumers. The Taskforce has also sought to gain an understanding of the extent to which the rise in premiums has impacted on economic activity in northern Australia.

The options the Taskforce is specifically evaluating to lower premiums involve carving out 'cyclone risk' from existing arrangements — the risk of cyclones is attributed as the main factor as to why insurance premiums in northern Australia are significantly higher than those in the rest of Australia. However, existing insurance and reinsurance arrangements do not have a separate, defined category of 'cyclone risk' nor is there a 'cyclone policy' that consumers can purchase. As such, it is important to clearly define what risks may potentially be shifted from insurance and reinsurance companies to the Commonwealth balance sheet. This involves clearly defining a cyclone and the damage caused by a cyclone for the purpose of the options. For example, uncertainty on this issue could result in significant confusion for consumers and they may end up not being insured for certain risks. Similarly, a lack of clarity over coverage of 'cyclone risk' can cause uncertainty for insurance companies with their reinsurance arrangements, which may reduce the benefits of any reduction in premiums.

Given the complexity of the issues raised with the options being evaluated, the Taskforce is consulting widely with industry experts in insurance and reinsurance. The objective of these consultations is to assess how the options could mesh with existing insurance arrangements and whether they would achieve the outcomes sought by the Government, namely a reduction in premiums for consumers while taking into account the impact on the market. A number of the issues that require consideration are outlined in this interim report and the Taskforce would welcome comments on these issues. The Taskforce will continue to consult widely as it prepares its final report.

An important part of the consultations is an assessment of the competitiveness/contestability of the insurance market in northern Australia. A competitive market will best serve the long-term interest of the consumers in northern Australia and it is important that the options being considered support competition. In addition, competitive pressures will be an important factor in determining whether some of the options for Government intervention in the insurance market will flow through to a reduction in premiums for consumers.

The Taskforce has focused on the issue of mitigation, particularly to ensure that there are appropriate incentives for individuals to reduce the vulnerability of their property to cyclone risk. An important incentive should be the prospect of lower insurance premiums. The Taskforce is consulting with experts in cyclone mitigation and with the insurance industry to see if the incentive structures for mitigation are as effective as they could be.

The feasibility of the options being assessed will also depend on whether they are consistent with Australia's regulatory standards for insurance. With this in mind the Taskforce is consulting with the Australian Prudential and Regulatory Authority (APRA).

Some of the options to reduce premiums to consumers involve the federal Government taking the risk of losses due to cyclones onto its balance sheet. The Taskforce will be commissioning specific modelling to estimate the possible risk to the Commonwealth balance sheet from the options being assessed. This includes not only taking into account insurance losses from past cyclones, but assessing the probability and likely impact of future cyclones. As a first step in gaining an insight into this exposure, the Taskforce has commissioned modelling to assess the magnitude of the likely total insurance loss of cyclone events in Australia. This work will provide an upper bound of likely losses. The amount that will be covered by the Australian Government will depend on the design of the options.

The Taskforce will continue with this approach in completing its final report by the end of November 2015, and in doing so will draw on the comments it receives in response to this interim report.

Focus questions

As noted, this report canvasses a number of issues that need to be considered in assessing the feasibility of the options to lower consumer premiums. Following is a list of the specific questions raised through the report and on which comments are invited.

Option 1: A mutual insurer offering cyclone cover to individuals

1. What are the advantages and disadvantages of a cyclone mutual insurer, supported by the Government, with the objective of lowering consumer premiums for home, contents and strata title insurance for people experiencing affordability problems due to cyclone risk? What form of Government support would likely be required?
2. How can a cyclone policy be sufficiently defined to fit neatly with a consumer's 'non-cyclone' policy purchased from a private insurer so there are no gaps in coverage?
3. How should a cyclone mutual insurer price its policies?
4. Should insurance from a mutual be open to all or should eligibility be limited, such as to consumers on lower incomes or consumers who take mitigation action?
5. What would be required for private insurers to be an agent for a cyclone mutual insurer and sell its policies and manage claims against those policies?
6. What would be a suitable organisational and governance structure for a mutual insurer — a discretionary fund or an APRA regulated entity?
7. What are the advantages and disadvantages of putting a cap on the payout from the cyclone policy offered by a mutual?
8. When and how could the Government reduce support for a cyclone mutual insurer?

Option 2: A reinsurance pool for cyclone risk

9. What are the advantages and disadvantages of a cyclone reinsurance pool, supported by the Government, with the objective of lowering consumer premiums for home, contents and strata title insurance for people experiencing affordability problems due to cyclone risk? What form of Government support would likely be required?
10. How should a cyclone reinsurance pool be designed to best fit with insurance companies' existing arrangements, including reinsurance arrangements? For example, how could cyclone and cyclone damage be defined so as provide certainty about what is covered by the reinsurance pool?
11. How should the price insurers pay for reinsurance from a reinsurance pool be calculated?
12. What are the advantages and disadvantages of limiting payouts available under a reinsurance pool arrangement?
13. When and how could the Government reduce support to the market through a cyclone reinsurance pool?
14. How could a cyclone reinsurance pool scheme be structured to provide an incentive to policy holders to mitigate the risk of cyclone damage?

Other options

15. Are there any other approaches that could lower premiums in areas where affordability is a concern due to cyclone risk?

Mitigation

16. What can be done to encourage greater efforts to mitigate the risk of damage from cyclones? Are there impediments to insurance premiums being responsive to mitigation action by property owners?
17. What are the advantages and disadvantages of establishing an independent assessment process to determine the vulnerability of a house to cyclone damage and to verify what mitigation work has been undertaken? How could such a process be established?
18. What are the advantages and disadvantages of (a) establishing a rating system for building vulnerability to cyclone damage that could be publicly disclosed at the time of sale, and (b) establishing a centralised database on building information that could be accessed by insurers?
19. What are the advantages and disadvantages of using increased excesses or policy exclusions to reduce the number of small claims following a cyclone?

PART 1: INSURANCE AFFORDABILITY IN NORTHERN AUSTRALIA

This section considers why insurance premiums have risen so strongly and outlines the status of insurance affordability in northern Australia. While this question has been covered in previous inquiries, it was evident during consultations by the Taskforce that many in the community remain unclear about what has happened in recent years to arrive at today's situation. Furthermore, the reasons behind the increase in premiums bear on the feasibility of the options to reduce premiums.

The story uncovered by this Taskforce through consultation is the same as that identified in previous reviews, including the Parliamentary Inquiry in 2012 (Standing Committee on Social Policy and Legal Affairs 2012). While cyclones have always been a feature of life in northern Australia, insurers have recently re-evaluated the extent of the risk and this has flowed through to higher premiums. However, many policyholders do not accept the outcome of this re-evaluation and, as such, do not consider the significant increase in premiums to be justified. It appears that the insurance industry has not effectively informed the public about how and why the industry has changed its practices.

Recent premium increases

Over the past few years consumers in northern Queensland have been concerned about the level of insurance premiums, the speed with which they have risen and uncertainty around the size of the next years' increase. For example, despite seeking to increase budgets to allow for rising insurance costs, some strata complexes reported that they needed to take out bridging loans to meet higher strata premiums because the magnitude of the yearly increase was beyond anything that was envisaged.¹ Box 1 contains samples of submissions provided to the Taskforce outlining the concerns of individuals over the rise in premiums.

In 2012, the Australian Government Actuary (AGA) was asked by the Australian Government to undertake an analysis of the rise in insurance premiums in northern Queensland. The AGA has since prepared three reports covering the period 2005-06 to 2012-13 for both strata and home building and contents insurance (AGA 2012, AGA 2014a, AGA 2014b). These reports compare premium rates (which mean the premium per \$1000 of sum insured) and costs in northern Queensland with other areas in Australia. For this review, the AGA was asked to update the reports to include data for 2013-14 and to look at the distribution of premium increases. At this stage the sample of insurers providing data for 2013-14 is not as extensive as for the previous AGA reports so that the more recent data are not directly comparable with the previous reports. The recent data are not shown due to confidentiality considerations.

Home and contents insurance

The previous AGA reports show that for a range of insurers, premium rates on home and contents insurance in northern Queensland rose by between 10 and 25 per cent per year from 2009-10 to 2012-13 (Figure 1). As a result, the average premium rate in northern Queensland in 2012-13 was about 1.5 times the average in Brisbane (up from 1.2 times in

¹ Submission from Margaret Shaw, 9 May 2015.

2005-06), and 2.3 times the average across Sydney and Melbourne. While caution is required in interpreting the more recent data on movements in insurance premiums, the available information suggests a rise in premiums in 2013-14 but to a lesser extent than previous years and, on the basis of very limited data, premiums appear broadly stable in 2014-15.

Box 1: Submissions provided to the Taskforce on the impact of premium increases

'My Mum is a cancer survivor and pensioner in Townsville. She owns her townhouse and can no longer afford home or contents insurance or the body corporate fees thanks to the substantial increase to insurance premiums. It looks likely that she will have to move, which means leaving her community and her friends which she has been a part of since her childhood. This is just absurd!'

'It is so foreign to the Queensland sense of fairness, when you work hard and forgo the pleasures of the 'now' to save for future security. Hard working Queenslanders are being penalised for this admirable ethic by the incomprehensible size of the rise in the insurance premiums. Yes, we understand that underwriters have abandoned the local insurance firms ... but we have to find a solution otherwise the inevitable outcome is too scary to contemplate.'

'For the first time in over 30 years we are no longer insured — the premiums went up twice since Yasi and we can no longer afford it on a pension — never been flooded — been through 2 cyclones, no house damage except carpets ruined and water damage to fridge. More than doubled the cost and half of that we were insured for we would no longer be insured for, they have changed it all — we would be paying insurance for nothing.'

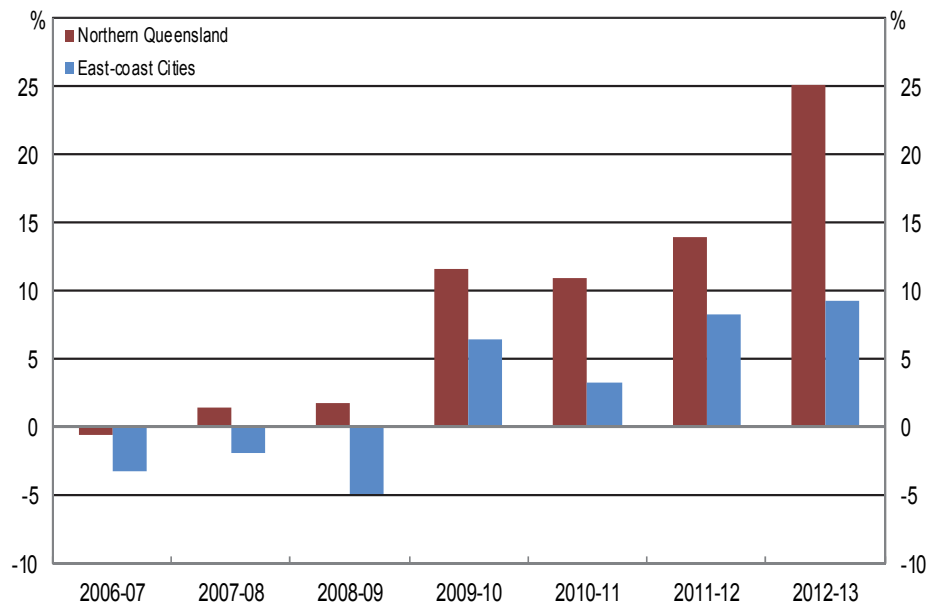
'Insurances for a modern cyclone rated 4 bedroom house has gone up 5 fold in the last 4 years. This is unjustified recoup of funds by insurance companies. I have not made a claim, yet am being punished for living in northern Queensland. I am struggling to make ends meet and with 2 autistic children will have to delay one starting schooling next year.'

'As an aging unit owner I'm worried that I soon will be unable to pay my levies. Skyrocketing insurance premiums and body corporate fees means it is unaffordable to live in our own home. We can't sell the property because nobody wants to buy it with the levies so unaffordable.'

'My body corporate fees have risen over 250% in the last two years. This unethical, horrific increase is simply unmanageable for me. For the first time in my life I am about to default. This is causing a major strain and stress. This increase is un-Australian. Something has to be done.'

Source: Comments on website provided to the Taskforce by Margaret Shaw

Figure 1: Annual increase in insurance premium rates — home and contents insurance
Per \$'000 of insured value, percentage change



Sources: AGA; various insurers operating in northern Queensland

A similar pattern is observed in data provided by the Western Australian Government. Home and contents insurance prices in north-western population centres² increased by an average of 34 per cent per year from 2011 to 2013.³ In 2013, on average, insurance prices in these towns were three times higher than in Perth. More recent data are not available. In contrast, the AGA's reports show that in Darwin insurance premiums for home and contents were largely unchanged over the seven years to 2012-13. Premium rates in Darwin in 2012-13 were around 0.6 times the rates in northern Queensland.

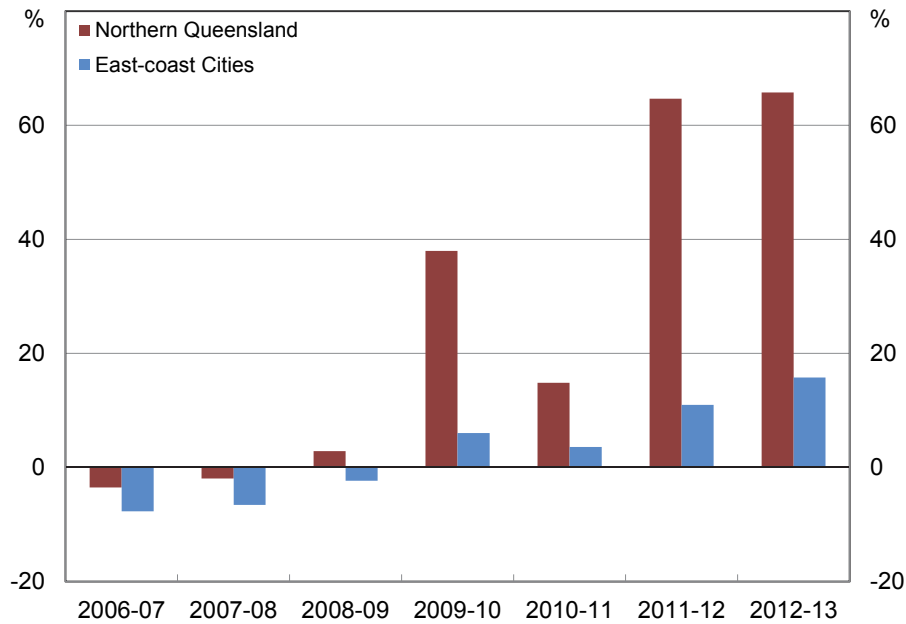
Strata insurance

For strata insurance, the AGA's reports show that the increase in premiums in northern Queensland was starker than that for home and contents insurance. Following three years of stability, the annual increase in the average strata insurance premium rate ranged from around 15 per cent to 65 per cent over the period 2009-10 to 2012-13 (Figure 2). On average, strata premium rates in northern Queensland were around 5 times those in the east-coast cities of Brisbane, Sydney, Melbourne and Adelaide. As mentioned previously, the data available for 2013-14 is limited and not comparable with that in the AGA's previous reports. However, the information available suggests that the average northern Queensland strata premium rate did not increase significantly in 2013-14.

² Towns covered were Broome, Kununurra, Karratha, Port Hedland, Carnarvon and Exmouth.

³ Premium increases in Kununurra were lower at between 3 per cent and 5 per cent between 2011 and 2013. Brokers report that Kununurra is perceived to have a lower cyclone risk than other north-western towns due to its specific location.

Figure 2: Annual increase in insurance premium rates — strata insurance
Per \$'000 of insured value, percentage change



Sources: AGA, various insurers operating in northern Queensland

The AGA indicates that the strength of the increase in strata premiums appears to be similar in northern Western Australia. Although data are limited, they indicate that the prices being charged in northern Western Australia are higher than those in northern Queensland. In contrast, the AGA reports that strata premiums have increased by only 3 per cent per year over 2005-06 to 2012-13 in Darwin, and were around 0.4 times those in northern Queensland in 2012-13.

Data covering the average rise in insurance premiums in northern Australia tells only part of the story. Some insurers have provided data on the distribution of insurance premiums in northern Queensland. In the strata market, the range of premiums rates in northern Queensland is wide, so that there are some strata complexes paying premiums rates over five times the average premium rates in east-coast cities. The range of premium rates is narrower for home insurance but still wider than that in east-coast cities.

The causes of the increase in premiums

During consultations, many consumers and business groups in northern Australia indicated that they did not understand or were unconvinced by the reasons given for the rapid increase in their premiums. Many noted that the level of risk for their property had not changed and they had not made any claims. The Taskforce also heard from consumer groups about the difficulties that a number of policyholders in northern Australia had experienced in trying to get an explanation from insurance companies about the reason for the significant increase in pricing (including in some cases decisions not to renew the policy).

Cyclones have always been part of life in northern Australia — Tropical Cyclone Tracy remains one of the most damaging natural disasters in Australian history. However, in recent years the insurance industry has reassessed the potential losses due to cyclones in northern

Australia. Previous inquiries and consultation with insurers have identified that this reassessment was prompted by:

- losses caused by a number of cyclones and storms occurring in a short space of time; and
- increases in the cost of catastrophe reinsurance. The increase was also combined with a change in the way reinsurance costs are passed on to premiums.

To some extent, these factors (explained further in Appendix D) are interrelated. Notably, none of the reasons reflect any change in the behaviour of policyholders. Indeed, some consumers indicated to the Taskforce that they had taken steps to reduce the risk of their property to cyclone damage, which should work to lower premiums. Rather the causes of the premium increases were changes in the behaviour of insurance companies — in particular, how insurance companies measure risk and price their policies. This does not make the changes any less valid, but does explain why many policyholders in northern Australia have struggled to understand why their premiums have changed so dramatically.

Other reasons for the increase in prices were also raised during consultations. Consumers expressed concern that there is a lack of competition, particularly in the northern Queensland insurance market. Further, it was suggested that insurers have difficulty incorporating individual household mitigation in premium pricing so that some households that have improved the resilience of their properties cannot obtain a reduction in premiums. In addition, several stakeholders at industry and consumer level indicated that inflated claims could be contributing to the reported high cost of cyclone damage.

The re-evaluation of potential losses due to cyclones saw a range of insurers reprice their premiums in northern Queensland sharply starting in 2010. Some insurers have also reported that they stopped offering new policies in order to limit their exposure in the region.

The AGA reports considered the causes of the premium increases in northern Queensland and concluded that the business had not been profitable for the insurance companies. Taking into account the losses made by the companies over the seven-year period 2005–06 to 2012–13, the AGA concluded that the insurance industry spent \$1.40 on claims on home and contents insurance for every \$1 of premiums in northern Queensland. Data from the Insurance Council show that while Queensland contributed 15 per cent of national insurance premiums over 2005 to 2010, it represented 25 per cent of national claims (Insurance Council of Australia 2012).

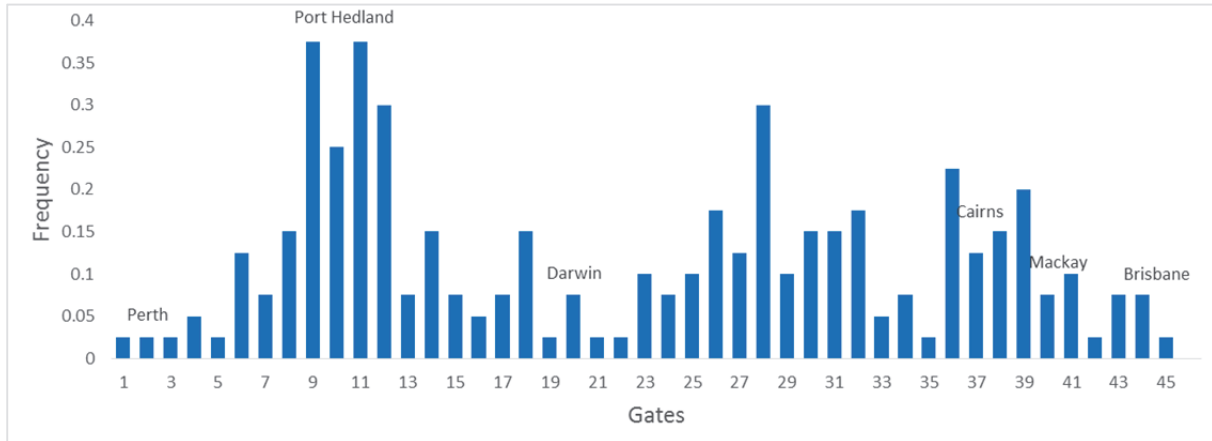
Cyclone risk in northern Australia

Irrespective of why insurance companies under-priced and then rapidly reassessed the risk of their portfolios to cyclone damage, it is a fact the risk of cyclone damage per household is very high in parts of northern Australia, particularly relative to the level of risk per household in southern Australia. Key considerations include:

1. **Cyclones are a frequent risk:** cyclones can occur multiple times per year. A list of severe cyclones that have made landfall in the Australian region since 2000 is included in Appendix E.
2. **A cyclone is more likely to hit a densely populated area in Queensland than in north Western Australia or the Northern Territory.** Figure 3 shows the frequency of cyclones crossing the coastline in different parts of northern Australia. Each bar

represents a different stretch of coastline (gate). The chart shows that the area with the highest frequency of cyclones is the Pilbara region of Western Australia followed by northern Queensland, which has a much higher population than the Pilbara region. Despite the perception created by Cyclone Tracy, the Northern Territory around Darwin has a relatively low frequency of cyclone events.

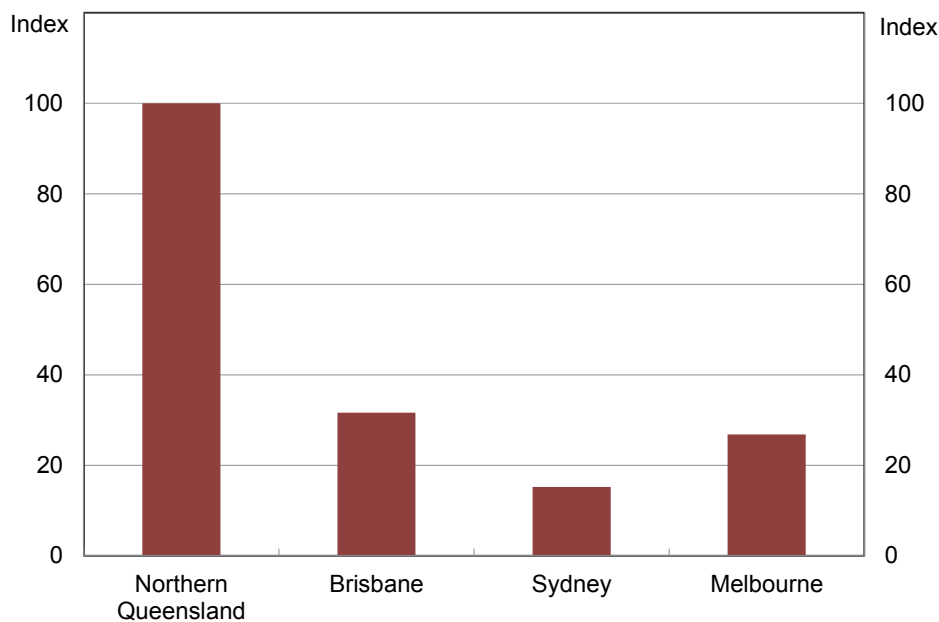
Figure 3: Annual frequency of cyclones



Sources: BOM, Risk Frontiers

- Measured per \$1000 of sum insured, claims in northern Queensland have been higher than in Sydney or Brisbane.** Consumers in northern Queensland noted during consultation that the damage caused by storms in southern Australia is comparable to the damage caused by cyclones in the north. The AGA reports noted that insurers typically pay more out on storm-related claims than on any other natural peril (AGA 2012). However, losses due to cyclones are spread across a smaller number of people than losses due to storms. Figure 4 shows claim costs per \$1000 of sum insured in northern Queensland over the period 2005–06 to 2012–13. On this basis, claims costs were around five times higher for home and contents insurance over the period in northern Queensland than in Brisbane, Sydney and Melbourne.

Figure 4: Relative claims costs across regions 2005–06 to 2012–13
Gross claims costs for home and contents insurance; index northern Queensland = 100



Sources: AGA, various insurers operating in northern Queensland

4. **Northern Australian populations and development in the region have increased over time.** While the frequency of cyclones may not have changed, as the population in northern Australia increases the potential damage that a cyclone can cause also increases.
5. **Flood cover.** The introduction of flood cover is likely to have contributed to higher premiums, as cyclones are often associated with flooding.
6. **The building code does not equate the risk of damage to buildings across regions.** The building code requires that houses in high wind areas meet higher structural standards. However, the building code is designed to reduce injury to people, so a building that meets the code may still suffer a range of damage that would trigger an insurance claim. For example, the James Cook University Cyclone Testing Station (Boughton et al 2011) highlights that buildings built in line with the improved code (post 1982) were less likely to be structurally damaged during Cyclone Yasi, but still had significant water ingress damage to carpets, plasterboard and furnishings.

During consultations by the Taskforce, a number of people in northern Queensland asked why their insurance premiums had increased so significantly while Brisbane insurance premiums did not go up by as much following the large losses caused by the Brisbane floods in 2011. Households in Australia with a high flood risk do pay significantly higher premiums for flood cover: the flood component of premiums for houses with extreme flood risk was between \$2438 and \$6777 in 2012 (NDIR 2012). However, the average premium in Brisbane will not have risen to these levels because a large proportion of houses in Brisbane are not subject to flood risk.

Competition in the insurance market in northern Australia

The extent of competition in the insurance market will be an important factor in determining the feasibility of options to lower consumer premiums in northern Australia. Some previous reports on the cost and availability of insurance in northern Australia cited concerns that a lack of competition may be a reason for premium increases.⁴ These concerns were also raised by stakeholders during the visits by the Taskforce to northern Queensland.

The strength of competition in the northern Australia insurance market has likely varied in recent years. Insurance brokers and insurers report that several insurance companies deliberately reduced their involvement in the market for home, contents and strata insurance around 2010. Those insurers who remained in the market picked up new business and their market shares (and exposure to cyclone risk) rose significantly, sometimes beyond what they considered as prudent levels. This period is likely to have been characterised by low participation in the market.

The level of competition in the northern Australian insurance markets today is difficult to assess, although conditions appear to have improved somewhat. Since 2013, a few new entrants have joined the market⁵ and new products have been developed.⁶

In the market for home building insurance, brokers report that insurance is available across the mainland regions, although the number of companies operating is limited. There are 12 insurers offering home insurance policies directly to customers in Queensland,⁷ although not all companies operate in all regions. Around 12 insurers also operate in the Northern Territory (Giles 2014). In contrast, representatives of the Indian Ocean Territories report that it is very difficult to obtain home insurance. For example, the Taskforce was advised that home insurance is not available to homeowners on the West Island of the Cocos (Keeling) Islands, or for strata complexes on Christmas Island. There are several barriers to entry to this market, including the cost and logistical challenges of servicing a very small, remote market that is known (or perceived) to have high risk exposure.

In the strata insurance market, brokers report that there was a period where there was only one insurer in the north Queensland market, but that two additional underwriters have recently entered the market. They advise that it is now possible to obtain quotes in all regions of northern Queensland. Brokers in Western Australia report that there are around four active underwriters in the market. However, they suggest competition remains below that in Perth and that it is taking longer for the recent reduction in reinsurance costs to filter through to the northern markets compared with Perth.

4 See for example *Pivot North: Inquiry into the Development of Northern Australia*.

5 For example, Youi has joined the home insurance market in some areas of northern Queensland and Brooklyn Underwriters (a Lloyds underwriter) have become more active in the Queensland strata market.

6 For example, Suncorp launched a new strata product aimed at small strata complexes (Suncorp 2015a and 2015b) and CGU has undertaken engineering assessments of strata properties it insures (launched 1 April 2014, CGU 2014). In the home insurance market, IAG has announced a new policy type called InsureLite targeted at low cost insurance (IAG 2015).

7 Suncorp, AAMI, Apia, Allianz, CommInsure, NRMA Insurance, OnePath, ANZ, QBE, RACQ Insurance, Westpac, Youi (ASIC 2015).

There are factors that may limit active competition in the northern regions. Some insurance companies place a limit on the number of policies that they will write in each northern market in order to limit their concentration risk, which influences their capital requirements and the cost of reinsurance. Once an insurer reaches its concentration limit in the region, it may increase its price to cover the additional costs or refuse to provide a quote for a new policy.

The extent of competition in the market can also be judged by whether premiums increase beyond a reasonable level. The reasonableness of insurance premiums in northern Queensland was reviewed by the AGA, who obtained data on costs and premiums from insurance companies for the period 2005-06 to 2012–13. The AGA concluded that premiums in northern Queensland are largely unconstrained by competitive forces (AGA 2014a). However, the reports also found that the higher premiums in northern Queensland compared to east coast cities largely reflected higher losses in the region and did not represent excessive profits of insurers (AGA 2014a and 2014b).

Another issue raised by consumers in northern Australia was whether the reason for lower premiums in Darwin was the presence of the Territory Insurance Office (TIO, see Box 2). This was the view of the Joint Select Committee on Northern Australia, which recommended that the activities of the TIO be expanded to cover all of northern Australia (recommendation 6 in *Pivot North*). However, the above data suggest that the primary reason for lower premiums in Darwin is that the risk in the Northern Territory is lower than northern Queensland and northern Western Australia. During consultations the Northern Territory Government indicated that the premiums offered by private insurers were often lower than those offered by the TIO.

Box 2: Territory Insurance Office⁸

- The Territory Insurance Office (TIO) was established in 1979 to ensure Territory businesses had access to compulsory workers compensation insurance and Territory motorists had access to compulsory motor vehicle accident cover. TIO's geographic scope of operations is limited to the Northern Territory.
- At the time, TIO's operations were similar to insurance offices that had been established in other Australian states and territories (for example, the State Government Insurance Office (SGIO) in Queensland and the General Insurance Office (GIO) in New South Wales).
- The TIO's activities expanded over time to include a wide range of personal and commercial general insurance products as well as banking and financial services.
- The TIO is a dominant player in the Northern Territory insurance market. The value of assets insured by TIO is around \$30 billion (as at November 2014).
- In November 2014, the Northern Territory Government announced the sale of the insurance operations of TIO to Allianz for \$236 million. Prior to its sale, the TIO was operated as a statutory corporation with a guarantee from the Northern Territory Government.
- The reasons for the sale included that under government ownership TIO had limited capacity to diversify its risk or achieve economies of scale relative to private insurers. Further, TIO is subject to risks associated with natural disasters and financial market downturns. Under government ownership these risks were effectively borne by Northern Territory taxpayers. The sale of TIO transferred those risks to the private sector where they could be more effectively managed.
- At the time of sale, the TIO was the last insurance office that was still owned by a state or territory government.

Affordability

The sharp rise in insurance premiums in northern Queensland has led to concerns about the affordability of insurance. During consultations, consumer advocates raised concerns that a number of people within the community are finding it difficult to meet the higher cost of living caused by higher insurance prices. This was a particular concern for pensioners on fixed incomes and younger people on Newstart Allowance. A further point raised is that people on lower incomes may also be living in areas with older houses and prone to flooding. Thus, some people on lower incomes are facing some of the higher insurance costs.

A measure of insurance affordability is the proportion of a household's income needed to purchase insurance. This can be derived from the ABS Survey of Income and Housing. Importantly, the most recent available data are for 2011-12 and do not capture the bulk of the increases in insurance premiums in northern Australia that took place in subsequent years. The data for 2013-14 will be available later this year and will provide a more up-to-date indication of insurance affordability in northern Australia. This information will be incorporated into the final report from the Taskforce.

⁸ Information adapted from Northern Territory Government (2014).

Though it only captures part of the period of the significant premium increases, the data in Table 1 indicates home and contents insurance was a higher proportion of income in northern Australia relative to the national average in 2011-12. Further, a greater proportion of people in northern Queensland and Darwin spent more than two weeks' earnings on insurance compared to other regions of Australia.

Table 1: Affordability of home and contents insurance in 2011–12

Income is measured after tax, home owners only

Region	Average weekly expenditure on insurance as a percentage of weekly income (% , median)	Share of household who pay more than 2 weeks' earnings on insurance (%)
Northern Queensland	1.7	12.3
Darwin	1.4	12.0
Northern Western Australia	1.5	9.7
Southern Queensland	1.4	11.4
Southern Western Australia	1.0	4.8
New South Wales	1.2	10.2
Victoria	1.0	5.5
South Australia	1.1	5.3
Australian Capital Territory	0.7	0.8
Australia	1.2	8.0

Source: ABS

Equivalent data on insurance payments as a proportion of income are not available for strata insurance. People who live in strata units do not pay building insurance directly, instead they make body corporate payments that cover insurance and the costs of maintaining the building and its facilities. As such, the body corporate payments captured in the ABS Survey of Income and Housing for 2011–12 do not provide a reliable measure of insurance affordability.

Underinsurance and noninsurance

During consultations, the Taskforce heard claims that higher insurance premiums in northern Australia, particularly in northern Queensland, were driving increased levels of underinsurance. Underinsurance occurs when people purchase insurance to cover less than the full value of their property (whether accidentally or deliberately). Underinsurance can be difficult to quantify because it is often only identified in the aftermath of a major event. A survey conducted by the Australian Securities and Investments Commission after the ACT bushfires found that on average households were underinsured by 27 per cent (Australian Securities and Investments Commission 2005). Similar results were found after the 2013 Blue Mountain bushfires (Legal Aid NSW 2014). The Taskforce has not been able to access any data to determine whether the level of underinsurance in northern Australia is greater than the rest of Australia.

There is also the potential for noninsurance. That is, whether the property owner elects not to acquire any insurance. In some cases, noninsurance by a property owner is unlawful. For example, state and territory legislation requires body corporate managers to obtain insurance

for their complex. The Taskforce sourced data from the ABS on the proportion of owner-occupiers in northern Australia with no expenditure on insurance relative to other regions in Australia. This gives an indication of owner-occupiers electing not to purchase insurance. It does not, however, provide an indication of the level of owner-occupiers that elect to purchase insurance, but are underinsuring their properties (potentially because of insurance affordability concerns).

The information on owner-occupiers that elect not to purchase insurance is presented in Table 2 below. In summary, this data indicates most owner-occupiers in northern Queensland and Western Australia are electing to insure their properties despite premium increases. A greater number of owner-occupiers appear to elect not to insure in Darwin, although this number is estimated less precisely than others in the table, likely due to the small sample size in Darwin. Based on these data, there does not seem strong support for the idea that insurance premiums are causing a greater number of people in northern Australia to non-insure compare to the southern regions.

This data was only available for 2011-12, which is prior to the significant increases in insurance prices. The Taskforce will be seeking the most recent data prior to the release of its final report.

Table 2: Proportion of owner-occupiers without insurance in 2011-12

Region	Share of owner-occupiers with no weekly expenditure on insurance (%)
Northern Queensland	8.1
Darwin	23.7
Northern Western Australia	6.8
Southern Queensland	11.3
Southern Western Australia	7.8
New South Wales	14.6
Victoria	8.7
South Australia	7.9
Australian Capital Territory	12.7
National average	10.8⁹

Source: ABS

The other situation that can occur is where there is a gap in the market so that no insurance product is available at any price. The Taskforce has not been able to identify any part of northern mainland Australia where this occurs. However, the Taskforce has been advised that insurance has been deteriorating and is unavailable for some residents in the Indian Ocean Territories.

⁹ Reported level of noninsurance in Australia varies significantly between studies. For example, Quantum Market Research (2013) found that only 4 per cent of Australian property owners had no insurance.

Effect on economic activity

During consultations, the Taskforce heard concerns that the high level of insurance premiums is having a negative impact on economic activity in northern Australia. It was noted that increases in insurance premiums was leading to a greater instance of forced sale of properties and greater difficulties in marketing new properties (Shaw 2014). A number of submissions to the Joint Select Committee Inquiry into the Development of Northern Australia made similar representations.

High insurance premiums can contribute towards lower consumer consumption and reduced levels of confidence. Further, they will contribute to higher prices for goods and services in the region. They are likely to discourage investment, particularly in areas identified as high risk, as well as discourage people moving to these areas. Consistent with this, data from the Cairns Regional Council shows a significant decline in both employment and output in the Cairns building construction industry between 2008-09 and 2013-14.¹⁰

Economic activity is influenced by a wide array of variables. In northern Australia, activity will be heavily influenced by factors such as mining investment (in Western Australia) and tourism (in Queensland). It was raised with the Taskforce that the impact of the rise in insurance premiums was intensified because it came at a time when the region was under economic pressure and consumers had limited capacity to absorb the prices rises, as well as providing a further negative shock to the economy.

In consultations, a stakeholder reported that the lack of access to private home and contents insurance is making it difficult for the Cocos Islands in particular to attract and house small business operators. This is one of several factors inhibiting economic diversification and development on the Islands.

¹⁰ Data obtained from the economy.id website for Cairns Regional Council: <http://economy.id.com.au/cairns>.

PART 2: THE OPTIONS

Under the terms of reference, the Taskforce has been asked to explore the feasibility of a mutual cyclone insurer and a cyclone reinsurance pool. This part of the report outlines a number of issues associated with these options that were raised in the course of consultations. Comments are sought on these matters. Based on the responses received, the options will be further developed and their feasibility assessed, in keeping with the Taskforce's terms of reference. The outcome of these assessments will be provided in the Taskforce's final report.

In addition, during consultation, stakeholders have identified a range of alternative approaches and these are mentioned in this part. Stakeholders have also detailed the importance of mitigation because it would lower the risk of loss from cyclones, making insurance more affordable in the long run.

Common issues

Before covering each option, there are a number of common issues. These are outlined below.

Potential risk to the Government balance sheet

One of the elements that the Taskforce has to consider in assessing the feasibility of options to lower the cost of insurance to consumers in northern Australia is the likely cost and risk to the Government balance sheet. As a reference point in undertaking this assessment, the Taskforce sought an estimate of potential insurance losses in Australia from cyclone damage.

Using historical data on insurance losses, the cost of cyclones in Australia between 1970 and 2013 is estimated to be \$5.4 billion in 2011 dollars (Productivity Commission 2014). However, this figure does not take into account increases in the number of people living on the coast and the increased value of properties due to higher standards of living. For these reasons, a cyclone could result in greater losses today relative to the identical cyclone hitting the same point on the coast 10 years ago (even after controlling for inflation). Moreover Australia has been 'lucky' in that a cyclone has not directly hit a major population centre in northern Australia in recent decades. This limits the extent to which history is a guide as to potential future costs from cyclones.

To gain a better appreciation of the potential costs of cyclones, the Taskforce has commissioned modelling on the potential insurance losses in Australia due to cyclone damage, as explained in Box 3. The results of this modelling will be included in the final report by the Taskforce.

The losses being modelled relate only to damage to private house, contents and strata assets. They do not cover losses resulting from damage to public assets (such as schools, hospitals and courts). In this regard, any liability for the Government resulting from its involvement in the home/contents/strata insurance market would be in addition to payments made by the Government under other arrangements.

Such arrangements include:

- Natural Disaster Relief and Recovery Arrangements (NDRRA) to state or territory governments for a proportion of eligible expenditure on assistance to households and businesses, and for the restoration of essential public assets; and
- Australian Government Disaster Recovery Payments (AGDRP) to individuals who are adversely affected by a major disaster.

The majority of the NDRRA payments go towards restoring essential infrastructure (particularly roads) rather than to individuals (Productivity Commission 2014).¹¹ The payments to individuals under the AGDRP are relatively small (\$1000 for adults and \$400 for children) and not impacted by the extent to which the individual has private insurance. Assistance to uninsured individuals in the aftermath of a natural disaster is mostly provided via charitable donations from the public rather than payments from governments.

By way of example, following the 2010-11 Queensland floods and Cyclone Yasi, the Government made an estimated:

- \$5.6 billion in payments to the Queensland Government under the NDRRA; and
- \$826.1 million in payment to individuals under the AGDRP (Attorney-General's Department 2014).

While it is not possible to disaggregate the amount of the payments between the floods and Cyclone Yasi, it is likely that the payments relating to floods constitute a greater proportion of the total expenditure.

In the event of a disaster, the Government would be required to finance any liability arising from intervention in the home and strata insurance markets in addition to its existing obligations under the NDRRA and the AGDRP.

¹¹ The federal Government may make other payments to individuals if their employment is impacted by a natural disaster through the Disaster Recovery Allowance.

Box 3: Nationwide loss forecasts for tropical cyclones

The Taskforce has commissioned three modelling firms to estimate the potential losses due to cyclones in Australia in any given year. This will allow an estimate of potential claims from cyclone damage to assess the risk to the Government balance sheet if it is used to lower consumer insurance premiums in the parts of northern Australia subject to cyclone risk.

In particular, the exercise is to provide estimates of:

- An average annual loss due to cyclones. This estimate will cover the size of the expected loss to home, contents and strata due to cyclones across Australia. This is calculated based on estimates of the damage from a cyclone and the probability of that cyclone occurring.
- The probability of a very large loss in any year. Cyclone Yasi resulted in insurance losses of \$1.4 billion (Productivity Commission 2014). However, there is the possibility that a category 4 or 5 cyclone could make a direct hit on one of the larger cities in northern Australia leading to greater losses. For example, it is estimated that if a cyclone of the same magnitude of Cyclone Tracy were to hit Darwin today, the insurance losses would be \$4.1 billion (adjusted for inflation and changes in population and the value of dwellings) (Productivity Commission 2014).

These estimates will provide an upper bound of the potential risk assuming the Government covered all losses resulting from the event. The actual risk exposure to the Government will depend on the parameters of each option being assessed.

Potential reduction in premiums

Another factor that the Taskforce must take into account in assessing the feasibility of an option is the likely reduction in consumer premiums. As noted above, the Taskforce is looking for the largest reduction in premiums for a given amount of cost or risk imposed on the Government.

During consultations, stakeholders identified that the amount of any reduction in premiums could be influenced by the:

- level of Government subsidy associated with the option. That is, the extent to which the Government is willing to take on the risk of damage from cyclone without seeking a commercial consideration for taking on this risk;
- extent to which the option meshes with existing insurance and reinsurance arrangements. If the option creates uncertainty in the market or cannot be easily integrated into existing arrangements, this will create frictions and reduce potential premium reductions; and
- level of competition in the insurance market. The less competitive the market, the higher the possibility that insurance companies could capture any subsidy from the Government and not pass it on to policyholders.

New insurance concept of ‘cyclone risk’

Both options being considered by the Taskforce distinguish the risk of damage from cyclones (cyclone risk) from other causes of damage. Existing insurance arrangements in Australia do not currently distinguish cyclones as a distinct peril. ‘Cyclone risk’ will need to be clearly defined. Ideally, the definition would:

- capture the bulk of cyclone damage contributing to the affordability problem in northern Australia without casting the net wider than necessary;
- allow the relationship between cyclone insurance (or reinsurance) products and complementary (non-cyclone) insurance products to be as seamless as possible so as to avoid gaps in cover or disputes about who is responsible for paying claims; and
- be easy to understand if a cyclone insurance contract is to be sold to consumers.

If insurance arrangements are to carve out damage from cyclones from other storm/wind damage, some understanding of the nature of cyclones is necessary to work out their beginning and end, and define their geographic reach. If natural boundaries are not easy to define, workable proxies may be necessary. Cyclones cause damage in several ways, most commonly through wind, water ingress, immediate flooding, storm surge, and downstream or ‘blue sky’ flooding. Different definitions may have implications for the type of damage that is in scope. Further discussion of the nature of cyclones is at Appendix E.

Types of insurance to be covered

The terms of reference for the Taskforce specify that the options must be evaluated based on their potential for reducing premiums for home, contents and strata insurance. During consultations, stakeholders noted that the areas where people live are quite diverse and are not limited to properties covered by home and strata insurance. Examples of other areas where people can live include farms, rental properties, caravan parks and nursing homes. It was also noted that ‘strata title’ will also have to be defined, because strata buildings can be a mixture of residential and commercial uses. Some stakeholders expressed a view that any response from Government should take account of the full range of areas where people live rather than being limited to homes and strata complexes. It was also raised that small businesses should be included in any Government response.

The types of insurance covered in any action by the Government to lower premiums will be a decision for the Government. However, the Taskforce will consider what types of insurance are covered to the extent that it affects the feasibility of the options.

Constitutional limitations

Under the *Commonwealth of Australia Constitution Act*, the Commonwealth cannot give a preference to one state (or part of a state) over another state (or part of a state).¹² Depending on the circumstances, this can restrict the ability of the Commonwealth to target a policy intervention to a specific geographical area at the exclusion of other areas. The Taskforce will take into account this Constitutional prohibition when making a recommendation to Government.

¹² *Commonwealth of Australia Constitution Act*, section 99.

International experiences with government-supported insurance schemes

Intervention in insurance markets through a government-supported scheme (whether reinsurance or insurance) is relatively common internationally. Some schemes are targeted at a particular peril (such as, cyclones/hurricanes) whereas other schemes are multi-peril. The rationale for intervention is either to fill a gap in the market because the private sector does not provide adequate insurance, or to address community concerns around affordability.

Appendix F provides an overview of a sample of the schemes that are currently in place internationally. Some of the key experiences from these schemes are outlined in the material below.

Cost to Government

Many government-supported insurance schemes have imposed substantial costs on governments where the insurance scheme had insufficient capital to meet the claims associated with a natural disaster. By way of example (Productivity Commission 2014):

- The US National Flood Insurance Program had to borrow more than \$24 billion from the US Government in order to meet claims following a number of significant flooding events, in particular Hurricane Katrina.
- The New Zealand Earthquake Commission is likely to call on its Government guarantee to the extent of NZ\$1.1 billion following the Christchurch earthquake.
- The French Government had to inject 3 billion francs into the Caisse Centrale de Reassurance in 1999.
- The Government of Japan paid out ¥564 billion following the 2011 Tohoku earthquake and tsunami.

Rather than providing direct capital injections, the Florida Government provides its schemes with the ability to raise additional capital by directly imposing a levy (called an 'assessment') on all policyholders in Florida in the event of a capital deficit. However, the Florida Government did elect to make a US\$715 million payment to one of its insurance schemes following the 2004-05 storm season to reduce the quantum of the assessment passed on to policyholders (Kousky 2010).

In contrast, the Spanish Government has not been required to make any contributions to the government-guaranteed scheme, at least prior to 2008 (Consortio de Compensacion de Seguros 2008).

Where the government is required to contribute towards a supported scheme, the risk of a natural catastrophe is effectively being pooled across all taxpayers (or all policy holders in the case of Florida) regardless of their risk level.

Sub-optimal property development

An important role of the insurance market is to provide price signals about risks. As such, insurance premiums should provide an incentive for development in areas with lower risk of natural perils. To the extent that government intervention in the market dampens these signals, it has the potential to foster greater investment in high risk areas. The potential for

this moral hazard is augmented when the government providing support to the insurance scheme does not also have control for land use policies (Kousky 2010).

In order to address these concerns, governments have linked access to subsidised insurance with land use policies and other mitigation efforts to reduce the risk to the government. For example, access to the National Flood Insurance Program in the US is limited to jurisdictions that have agreed to enforce sound floodplain standards (Worthington 2015). Despite this requirement, commentators have criticised the Program on the grounds that its subsidised insurance has contributed to excessive development in flood prone areas (King 2012).

Another means by which governments have sought to address the impact of dampened price signals resulting from government intervention in the market is through mandated mitigation requirements. For example, the Florida Hurricane Catastrophe Fund and the Earthquake Commission in New Zealand assist mitigation through public awareness and research programs.

Effective claims management

Government intervention in the insurance market may result in a sub-optimal claims management experience for consumers. Government intervention has the potential to complicate the claims management experience in situations where the Government either provides insurance for a limited range of perils or provides limited coverage for a specified peril. In both these situations, consumers are then required to hold multiple policies (one from the government-supported entity and one from a private-sector insurer).

There have been some recent examples of this issue. Following Hurricanes Katrina and Rita in the US, claims assessors experienced significant difficulty in allocating property damage between wind and flood. This created uncertainty for consumers as to whether their claim would be handled under the government-support National Flood Insurance Program (if flood damage) or a private insurer (if wind damage). The complications caused by uncertainty resulted in stakeholders calling for the National Flood Insurance Program to be expanded to also cover hurricanes to avoid similar uncertainty in the future (King 2012).

A similar experience also arose following the Christchurch earthquake in New Zealand. In this situation, the government-supported Earthquake Commission provided coverage up to a maximum of \$100,000. Private insurers provided earthquake coverage above this amount. In addition, the scope of the property covered by the Earthquake Commission policy differed from the scope of property covered under any private insurance contract they held. This resulted in the need for multiple claims assessments to determine whether the Commission or the private insurer was responsible for the claim. The dual handling of claims has been identified by stakeholders as a creating unnecessary cost, confusion and complexity (New Zealand Government 2015). In response, the New Zealand Government is investigation changing the arrangements so that all claims are managed by private insurers, even if they are below the cap.

Finally, governments that setup peril-specific insurance schemes face a challenge in scaling up staff levels in a timely manner following a disaster. This is particularly problematic when the disasters are very infrequent. By way of example, following the Christchurch earthquake the Earthquake Commission had to increase in size from 49 people in September 2010 to 1064 people in February 2011. This was necessary to manage the large volume in claims (Productivity Commission 2014).

Crowding out the private sector and government exit

Government intervention in the insurance market has the potential to crowd out existing private sector participants. This will only be an issue when the Government is intervening in the market to address affordability concerns, but not if it is filling a gap in the market (that is, offering cover that the private sector is unable or unwilling to provide). In order to address affordability concerns, the government-supported scheme generally operates with a form of tax-payer funded subsidy (for example a government guarantee), tax-exempt status and/or reduced regulatory requirements.

By way of example, the Citizens Property Insurance Corporation (Citizens) is a general insurer that is supported by the Florida Government. It offers a full range of personal and commercial insurance policies in competition with other private insurers that operate in the Florida market. Citizens is a tax-exempt entity that is not required to comply with the same regulatory requirements as other insurers in the market. This provides Citizens with a competitive advantage. As at 31 December 2014, Citizens had the largest market share of the Florida general insurance market with around \$US190 billion total sum insured or 8 per cent of market share (Citizens 2014). To address concerns about the growing market share of Citizens, the Florida Government initiated a policy of 'depopulating' Citizens by allowing private insurers to directly offer policies to Citizens' policyholders on an opt-out basis. This has contributed to a substantial reduction in Citizens' market share in recent years.

Similar concerns about the potential to crowd out the private sector have also been expressed in relation to the peril-specific government-backed insurance schemes in the UK and New Zealand (Productivity Commission 2014).

The more the private sector is crowded out of the market, the more difficult it will be for the Government to exit the market.

OPTION 1: A MUTUAL INSURANCE COMPANY OFFERING CYCLONE COVER TO HOUSEHOLDS

Description of a potential mutual insurer

The Taskforce has been asked to assess the feasibility of a cyclone mutual insurer. This option was proposed by some stakeholders in the course of consultations. While the detail of the option has not yet been developed, the broad concept is the creation of a new insurance entity that would be 'owned' by the people of northern Australia and offer a retail consumer contract to cover loss caused by cyclones. The objective would be for these cyclone insurance policies to be offered at premiums below the cost of existing insurance policies. Consumers would need to seek insurance for other perils, such as non-cyclone storm, fire or theft, from other insurance companies at commercial rates.

As noted, the proposal is that consumers would obtain insurance to cover the risk of cyclones at a premium currently below existing premiums. The premium income collected by the mutual entity would be used to build a pool that could be used to pay claims. Proponents of the mutual option have suggested that a government guarantee would likely be required to assist with the establishment of the new entity.

- Government support would likely be required if the size of the pool was not sufficient to meet claims following a disaster.
- Government support would be necessary if premiums needed to be set below 'technical cost' (the break-even in the long term) in order for the premiums offered by the mutual to be below existing premiums.

An issue to be considered is whether the scheme would operate only in those areas in northern Australia experiencing affordability issues or would operate more broadly. Constitutional issues arising from the provision of Government support need to be considered.

A number of suggestions have been raised as to the structure of such an entity. Some proponents have suggested a discretionary mutual fund could be created to offer these contracts. The discretionary mutual would be owned by policyholders, although would likely require some backing from the government in the form of a guarantee. Others have suggested that a statutory corporation would provide a better governance framework than a discretionary mutual. Regulatory issues, outlined below, arise under both structures.

Proponents favour the mutual for several reasons. Key among them is that a mutual would not have a profit motive and over time may build up significant support in the community (as was reportedly the case for the Territory Insurance Office in the Northern Territory). Proponents envisage that a mutual could reinvest back into the community for the benefit of the people of northern Australia.

Another advantage of the mutual option raised by proponents was that retail prices would be set directly by the mutual, rather than relying on government intervention in the reinsurance market (outlined below in the reinsurance pool option) to result in insurers lowering the prices on their retail contracts. It was pointed out that it may also be easier to link eligibility for the scheme to mitigation efforts or affordability criteria.

Focus question 1

What are the advantages and disadvantages of a cyclone mutual insurer, supported by the Government, with the objective of lowering consumer premiums for home, contents and strata title insurance for people experiencing affordability problems due to cyclone risk? What form of Government support would likely be required?

Key issues

Consultation has highlighted that there are a range of decisions which need to be made and issues that would need to be addressed in order to assess the feasibility of this option. These fall roughly into four groups: consumer experience, governance and regulation of a mutual, risk to Government and impact on the market.

Consumer experience

Designing the insurance contracts

An issue raised in the consultations was the importance of ensuring that the mutual is designed so that the consumer does not face gaps in their coverage and experience difficulties in making a claim. Insurance policies in Australia are typically arranged so that a single insurer provides cover for a large range of perils and types of damage under the same contract. However, with a 'cyclone' mutual the consumer would have two policies: one from the cyclone insurer that covers only damage caused by cyclones and one from their primary insurer that covers all other types of damage. Consumers could be caught in a dispute between different insurance providers as to who has liability for paying a claim or be left unexpectedly without cover if there is a gap between the two policies.

Gaps would arise if what was covered under one policy did not exactly match the exemptions from the other policy. For example, consider a policy which covers damage from 'named cyclones'. If the two contracts defined the period or area covered by the cyclone differently (one policy saying what was covered under the policy and the other saying what was not covered) then there could be a gap in coverage between the two contracts. A second area of potential confusion is the definition of what kind of damage is covered under the cyclone policy. For example, if the policy covered damage caused by wind from cyclones, but not flooding, then if the consumer wanted to be covered for floods they would need to purchase flood cover from another insurer. These issues have arisen overseas in the context of state-sponsored hurricane insurance in the United States.

Another question is how the insurance contracts would be priced by the mutual. Some proponents suggest a flat price for cyclone insurance policies. Such 'community rating' would mean that the pricing is based on the average risk of the community rather than the risk each individual brings to the pool. A result of such pricing is that people with the highest risk would

receive the largest reduction in premiums and that those with low risk will be subsidising those with high risk. It is also possible that those with a low risk may end up paying higher premiums than they currently pay. One issue raised with community rating is that it reduces the price signal that encourages people at high risk to mitigate their risk.

An alternative proposal that was raised was to price the cyclone contracts on the basis of how much risk the individual brings to the pool (risk pricing), which is the standard approach in insurance markets. Any premium reduction that comes through the operation of the mutual, including by way of Government support, would then be a proportionate reduction across all policyholders in the mutual. That is, everyone would have their premiums reduced by the same proportion so people with higher risk would still pay higher premiums than people with low risk.

Focus question 2

How can a cyclone policy be sufficiently defined to fit neatly with a consumer's 'non-cyclone' policy purchased from a private insurer and there are no gaps in coverage?

Focus question 3

How should a cyclone mutual price its policies?

Eligibility to purchase a cyclone contract

One suggested advantage of creating a new retail policy for cyclone insurance and selling direct to customers is that more affordable insurance could be made conditional on undertaking mitigation. In addition, lower premiums could be limited to people on lower incomes. A further advantage raised by some proponents is that cyclone insurance could be made compulsory and this would create the largest possible pool and reduce underinsurance.

Focus question 4

Should insurance from a mutual be open to all or should eligibility be limited, such as to consumers on lower incomes or consumers who take mitigation action?

Sales and claims management

Another issue raised by stakeholders is how any new mutual insurer would manage sales and claims.

A mutual would need a way to reach out to customers to market its product. One option is for the mutual to maintain a network of branches and a sales team. However, stakeholders have indicated this would significantly add to operational expenses and this expense would need to be covered by premium income. An alternative suggestion that was raised was for the mutual policy to be sold through private insurers operating in the region, as an 'add-on' cover to a private insurer's policy, which would not include cyclone cover. This arrangement is used in the United States, for example for earthquake insurance. This approach assumes that the private insurer would be willing to act as a sales agent for the mutual. A disadvantage of this

proposal that has been noted is that 'add-on' insurance components can cause brand damage to the agent if customers have disputes with the mutual and that there may be reluctance to sell another company's insurance product. Regulatory issues may also arise.

A further issue raised by consumers and industry participants alike is how claims would be managed. Consumers need clarity around who to make a claim from in the event of an emergency. Insurers also require certainty over which elements of a claim are going to be met from which policy, along with the total valuation of the claims. As noted previously, following the Christchurch earthquakes, delays and disputes arose from multiple valuations of damages and uncertainty between the New Zealand Earthquake Commission and the private insurers over which claims should be handled by which insurer. A further issue for the mutual is that claims management requires specialised services and a large workforce following an emergency. To deal with this issue, an approach suggested by some proponents of a mutual is to have private insurers manage all claims. This would likely mean that to purchase a cyclone-insurance policy the customer would also need to hold a valid non-cyclone policy from a private insurer.

How these two issues are resolved will affect the ongoing cost of the mutual and how much premium revenue is required to keep it running. In addition, if customers always deal with the mutual though a private insurer, both in terms of sales and claims, this may diminish the purported advantage that people will identify with the mutual as a community institution.

Focus question 5

What would be required for private insurers to be an agent for a cyclone mutual insurer and sell its policies and manage claims against those policies?

Governance and regulation

There are different governance structures for mutual entities. Some proponents of a mutual argue that a discretionary mutual is a convenient method to create a pool and that it would provide confidence to the community that prices are fair because it would operate solely in its members' interests. Further, a discretionary mutual would avoid APRA's capital requirements, as existing legislation does not consider discretionary mutual funds to be conducting 'insurance business' owing to the nature of the cover they offer their members. However avoiding APRA regulation would not remove the need to ensure that the mutual was appropriately capitalised and operated in the best interest of its members. In this regard, several issues relating to governance and regulation of a discretionary mutual were raised during consultation:

- A discretionary mutual has the discretion to make payments to its members, whereas an insurance contract is a firm promise to pay a claim when loss is suffered following an event covered by the policy. One view that has been expressed is that a discretionary mutual, therefore, does not offer the customer the same level of protection as provided by an insurance policy. There are also regulatory issues, in that a policy from a discretionary mutual may not be recognised under state legislation as meeting the requirement for a strata body to hold building insurance.

- The board of a mutual would consist of members, who have an interest to lower premiums as much as possible. If the Government were to provide a guarantee to cover the mutual's losses, the mutual may have the incentive to lower premiums beyond a prudent level.
- If the entity did not have to meet prudential capital requirements then the consequence may be increased risk to the Government.
- It has also been suggested that if a new entrant to the market did not have to meet the same prudential capital requirements as other insurance providers, then it would have a competitive advantage. Feedback suggests some insurers may choose to exit the market in such circumstances. This may be the case even where the new entrant was selling a limited contract that covered only cyclone losses. Insurers have suggested that if cyclone losses were excluded from private insurer's policies, the potential revenue generated from the remaining business of protecting against fire and theft may not be sufficient to justify participation in the market.

In response to some of the above issues, some parties have suggested a statutory corporation owned by the Government would provide a better governance model. They argue insurance contracts offered by an insurer would carry the full promise of insurance. In addition, the statutory corporation would operate in the public interest, but also protect the position of the Government shareholder.

A statutory corporation need not be regulated by APRA (an example of a statutory corporation operating as a reinsurance company that does not meet prudential requirements is the Australian Reinsurance Pool Corporation, see below). However, to maintain competitive neutrality, the statutory corporation may choose to meet prudential requirements. For example, the Territory Insurance Office in the Northern Territory has voluntarily met APRA's prudential requirements since 2002.

Focus question 6

What would be a suitable organisational and governance structure for a mutual insurer — a discretionary fund or an APRA regulated entity?

Costs of the scheme and the risk to Government

Risks to the Commonwealth balance sheet

As outlined, a mutual or statutory corporation is likely to require a guarantee from the Government. The requirement for a guarantee arises because:

- claims may need to be paid in the early years of the scheme before any pool of premiums has been built up (alternatively, the Government may have to inject capital into the new entity to build a sufficient pool from the outset);
- if a cyclone leads to a large claim that draws down reserves the pool may not be large enough to meet another loss occurring soon afterwards; and
- if a premium reduction can only be achieved by setting premiums below the long-run break-even point (that is, by providing subsidised premiums), then over the long term the scheme would be expected to make a loss and require Government funding on an ongoing basis.

Providing a guarantee means that the Government would take onto its balance sheet the risk normally managed by the insurer. Given cyclones can cause large-scale damage over a wide area, the potential exposure of the Government balance sheet is significant (see Box 3).

One option raised to contain the risk to the Government's balance sheet was to limit the maximum amount payable under each policy. For example, in the New Zealand earthquake scheme the Government policy covers only the first NZ\$100,000 in losses, with claims above this amount covered by 'top-up' insurance sold in the private market.

Focus question 7

What are the advantages and disadvantages of putting a cap on the payout from the cyclone policy offered by the mutual?

Set up and operating costs

Setting up a mutual (or other entity) will require upfront expenditure to cover establishment costs and potentially a capital injection. The extent of the costs will depend on a range of factors, including whether or not the mutual:

- meets APRA's capital requirements;
- operates its own branch network for sales;
- maintains a workforce for claims management;
- is managed by an existing mutual manager or via its own internal management; and
- purchases reinsurance.

Proponents of a mutual suggest that Government funding may be required to cover initial setup costs.

Ongoing, the mutual or statutory corporation will incur operating expenses, such as staff costs, legal costs, rent and reinsurance expenses. Premium revenue would be required to cover these costs, or else ongoing external funding from the Government would be required.

Government exit

State and territory governments have successfully privatised government-owned general insurance companies (for example, TIO, SGIO and GIO) as private markets have developed. However, no Australian government has set up an insurance scheme specifically to address affordability concerns for a specific peril (such as cyclones). Hence there is no precedent of government exit from such an arrangement. Where governments overseas have set up similar bodies, there are few precedents of governments successfully exiting the market.

Focus question 8

When and how could the Government reduce support for a cyclone mutual insurer?

Impact on insurance and reinsurance markets and premiums

Two key issues outlined in the terms of reference are the potential effect on the insurance and reinsurance markets and the potential reduction in prices.

Impact on markets

Some stakeholders considered that the net effect of a mutual would be to reduce the number of private market participants and deter a competitive private sector market for insurance in northern Australia. If the cyclone insurer had a competitive advantage (such as through a government guarantee or an exemption from regulation) then the cyclone insurer would be able to set prices at a level that would crowd out private insurers. Initial feedback suggests that in such circumstances some of the existing insurers operating in northern Australia may exit the market for non-cyclone risk if it is no longer considered worthwhile competing for these lower-value risks. However, it is possible that some participants not currently in the market because of the high level of risk may be willing to return to offer non-cyclone insurance policies in northern Australia if another party was willing to hold the majority of the cyclone risk. Should this occur, the result may be that there is greater competition for non-cyclone risks, but only one provider of cyclone insurance (being the mutual).

A further risk highlighted by stakeholders is that the role of brokers would be reduced if there were a single provider of cyclone insurance. This could lead to brokers being squeezed out of the market and to customer service declining.

Impact on premiums

An advantage of the mutual is that consumer premiums could be set directly. However, it is uncertain what the impact would be on the non-cyclone premiums of private insurers if they no longer covered cyclone risks. Insurers have indicated that they have a fixed cost of sales, claims management and administration. These fixed costs would still have to be covered.

OPTION 2: A REINSURANCE POOL FOR CYCLONE RISK

Description of a potential reinsurance pool

The Taskforce has been commissioned to assess the feasibility of a reinsurance pool for cyclone risk.

Catastrophe reinsurance is insurance purchased by insurers from the global insurance market to cover the potential for a very large loss. A reinsurance pool for cyclone risk would operate by providing cover to insurers for losses due to cyclones. The goal of the scheme would be to lower the cost of reinsurance which would provide scope for insurers to reduce consumer premiums.

While the details of this model are still to be finalised, the broad outline of the scheme is that a government-supported entity would offer reinsurance to all insurers covering loss caused by tropical cyclones. The reinsurance contract would operate similar to catastrophe loss reinsurance available in the private market, except that the reinsurance would only cover damage caused by named tropical cyclones. If an insurer had claims due to a single cyclone event that exceeded a pre-specified level (that is, 'the attachment point' of the reinsurance contract), then the insurer could claim on the cyclone reinsurance policy.

Insurers would be required to pay for access to the reinsurance pool and would retain the first portion of losses up to the 'attachment point' of the reinsurance. Both the price and the attachment point of the reinsurance would be set with a view to reducing the cost of reinsurance. Lowering reinsurance costs will lower the cost base of insurers, specifically their cost of offering cover for cyclone damage, providing scope for insurance companies to reduce consumer premiums. A key issue is that the scheme relies on competition within the industry for the reduction in insurer's costs to flow through to lower consumer premiums. As noted below, some stakeholders have commented that a lack of competition in northern Australian insurance markets may inhibit the passing on of lower costs to consumers.

The most efficient structure for such contracts is still being investigated. However, a plausible starting place is that the contract would be offered on a treaty basis, such that an insurer that signs up to the policy would cede to the pool the risk of cyclone damage for all properties in the insurer's national portfolio. The treaty model reduces the risk of adverse selection against the pool, that is, when the pool only attracts high risk properties. However, a treaty model does not necessarily target the regions of Australia with the highest affordability issues.

One way to target areas where affordability is a concern is to limit the scope of the reinsurance pool to those areas. Limiting the scope of the scheme would also constrain the potential losses to the Government. However, constitutional issues arising from the provision of Government support to a pool operating in only certain regions will need to be considered.

A reinsurance pool is likely to require a Government guarantee to ensure it can pay claims.

- Premiums paid by insurers to the reinsurance pool may be used to cover claims on the pool. However, a large claim may occur before the pool has built up to a sufficient level.
- Alternatively, the reinsurance pool may use its revenue to purchase retrocession (reinsurance for reinsurers). However, the premium revenue being received from insurers

may not allow the pool to purchase enough retrocession to cover a very large loss or multiple losses.

- The premiums charged to insurers by the reinsurance pool may need to be set below technical cost (that is, below the long-run break-even level) to achieve a significant reduction in consumer premiums. If so, the reinsurance pool would be expected to make a loss over the long run and Government support would be required.

Proponents of this scheme argue that, relative to the mutual, a reinsurance pool can achieve a reduction in consumer premiums with less impact on the insurance market in northern Australia. This is because all insurers would have the same opportunity to take advantage of the scheme and as such it would be competitively neutral. Proponents further argue that additional insurers may choose to enter the market if the insurers did not have to manage the full cost of cyclone insurance.

Additionally, proponents argue that a reinsurance pool would offer a simpler framework for consumers. Consumers would continue to buy insurance and make claims from a private insurer in the same way they do now.

It was also suggested that a reinsurance scheme operated by a statutory corporation would be easier to implement and would raise fewer governance issues than a mutual insurer. An Australian Government statutory corporation already exists that offers reinsurance for terrorism losses under the *Terrorism Insurance Act 2003* — the Australian Reinsurance Pool Corporation (ARPC) — which could potentially be used to offer a cyclone reinsurance contract (although the cyclone and terrorism pools would need to be completely segregated from each other).

Focus question 9

What are the advantages and disadvantages of a cyclone reinsurance pool, supported by the Government, with the objective of lowering consumer premiums for home, contents and strata title insurance for people experiencing affordability problems due to cyclone risk? What form of Government support would likely be required?

Key issues

A range of challenges and issues were raised during consultations that would need to be addressed in assessing the feasibility of a cyclone reinsurance pool. The issues fall into several broad categories: design of the contracts; pass through of a reduction in cost to lower consumer premiums; and managing the risk to the Government.

Contract design

How will the reinsurance contracts for cyclone losses mesh with existing reinsurance arrangements?

Insurers have highlighted that it will be important that the contracts offered by a reinsurance pool mesh neatly into current reinsurance arrangements in order for the contracts to lead to lower costs and, therefore, lower prices.

Each insurer's reinsurance programs are different. A common form for reinsurance is a catastrophe reinsurance contract. Under this contract, if there is a single event causing sizeable claims, the insurer can trigger their reinsurance contract. The insurer would bear losses up to a specified amount, the attachment point, and losses above this amount would be reimbursed by the reinsurer up to the limit of the reinsurance.¹³ The initial attachment point and the total cover purchased depend on each insurer's own circumstances. A key issue for catastrophe reinsurance is whether the event causing the damage is one event or more than one event.

In contrast, some insurers have a loss-sharing agreement where the insurer agrees to pay a reinsurer a proportion of the premium earned (for example, 20 per cent) in return for the reinsurer bearing that proportion (in this case 20 per cent) of any claims. The definition of an event is less important for loss-sharing agreements, as all claims are shared.

Consultation has raised several design considerations for a proposed cyclone reinsurance pool, these include:

- the definition of 'cyclone' and 'cyclone damage';
- the ability to reinstate cover following a cyclone that triggered the reinsurance program;
- the effect that the design of the contracts would have on the capital requirements of insurers.

What would be covered

Stakeholders have indicated that the definition of the cyclone event would be a key issue for constructing a cyclone reinsurance contract. Certainty as to what is covered is important if the reinsurance pool is to reduce insurers' costs, which should in turn lead to a reduction in consumer premiums. If the definition of the risk being covered by the reinsurance pool contract is ambiguous and results in uncertainty, insurers may not be able to carve out all cyclone risk from their private reinsurance. In addition, private reinsurers may not reduce the rates that they charge if they are not confident that the risk of cyclones has been removed from the insurers' portfolios.

A suggested approach to deal with this issue is for the reinsurance pool to cover losses from 'named' tropical cyclones. That is, tropical cyclones that have been named by the Bureau of Meteorology. This definition still raises certain issues:

- When does the cyclone event finish? How can the definition draw a clear distinction between damage caused during the period of a named tropical cyclone and damage caused after a cyclone has deteriorated below cyclone status (for example, 'blue sky' flooding in downstream areas).
- What is the area affected by the cyclone?
- What types of damage are caused by cyclones (for example, wind, water ingress, flood, storm surge)? What types of damage are typically covered by insurance policies?

¹³ Typically, such insurance is sold in layers which stack on top of each other. For example, the first reinsurance contract might attach at \$50 million and offer \$50 million of cover, the second contract would then attached at \$100 million and may offer \$100 million in cover, and so on. The reinsurance stack is called the 'reinsurance program'. Reinsurance programs also usually include terms that allow the reinsurer to reinstate the program after a claim.

Focus question 10

How should a cyclone reinsurance pool be designed to best fit with insurance companies' existing arrangements, including reinsurance arrangements? For example, how could cyclone and cyclone damage be defined so as provide certainty about what is covered by the reinsurance pool?

Pricing reinsurance

A further issue is how to set the price insurers would pay for reinsurance under the cyclone pool arrangement. The price for market reinsurance depends on the risks in the portfolio of the insurer and is calculated by reinsurance companies based on portfolio data provided by the insurance company. Stakeholders have raised two considerations for pricing risks in the pool:

- Some proponents have suggested setting a single price for reinsurance based on an assessment of the national cyclone risk. However, setting a single price for reinsurance would reduce price signals and may dampen the incentive for mitigation. The alternative is to set the price for reinsurance for each insurer based on an assessment of the risk in their portfolio. This would require insurers to provide information about their portfolios to the reinsurance pool.
- If pricing is set at technical cost (that is at the long-term break-even level), it may still not lead to a reduction in insurance premiums. This is because the pool would be a concentrated risk with little diversification, so that the technical cost could be quite high.

Focus question 11

How should the price insurers pay for reinsurance from a reinsurance pool be calculated?

Reduction in premiums

The primary motivation for any scheme is to reduce the premiums faced by consumers. The reinsurance pool would lower premiums if the reduced costs faced by insurers are passed on to lower consumer premiums. The size of the potential reduction in consumer premiums depends on a number of factors:

- The extent of the reduction in insurer's costs is a key issue. It may be that in order to achieve a significant reduction in insurance costs, the reinsurance contract would need to be priced at below market rates.
- The extent to which the contract under the reinsurance pool proposals fits in with the current reinsurance arrangements of insurance companies will be an important factor. If an insurer needs to buy additional reinsurance to cover areas of uncertainty in the cyclone reinsurance contract then this will reduce the potential reduction in consumer premiums.
- How quickly reinsurance contracts can be renegotiated will determine when consumers may benefit from any new arrangements. This is an important consideration as some insurers have noted that their reinsurance programs are set for three years.

- How much the cost of non-cyclone reinsurance decreases once cyclone losses are excluded from the contracts will be a factor determining the extent of the reduction in insurers' costs. Some stakeholders have indicated that the overall cost of reinsurance would not decline, and may actually increase.

As noted previously, the degree of competition in the market will influence the extent to which a reduction in insurers' costs flows through to lower consumer premiums. Some stakeholders expressed concern that there may not be sufficient competitive pressure to force the pass through of lower costs. Others, however, suggested that if a low-cost reinsurance contract for cyclone risk was offered then new entrants would be attracted to the market, increasing competition.

Managing the risk to the Government

The Government's exposure

The reinsurance pool is likely, for the reasons outlined above, to need the support of a Government guarantee. If insurance is priced at the long-run break-even price then over the long run the scheme may expect to have a neutral effect on the Budget. However, should there be a major cyclone in a given year, the claims on the reinsurance pool may exceed its premium pool income. In such circumstances, the reinsurance pool would require funding from the Government through the guarantee. It would only be over the long run that such expenses may be recouped.

A further issue is that in order to generate a significant reduction in consumer premiums, the rates charged to insurance companies under the scheme may need to be priced at below the long-run break-even price. If so, it could be expected that in the long run the scheme would make a loss.

One option for limiting the Government's exposure is to set a cap on the payout available under the scheme. Stakeholders have raised options including a program cap, so that when total losses across all insurers hit the cap claims would be paid on a pro rata basis, and a per property cap. It was suggested that an advantage of a per property cap is that the size of the benefit would be maximised for low value housing, where affordability may be more of a concern. Under a reinsurance pool model with no cap, the size of any subsidy would increase for more expensive properties (that is, properties with a higher value of sum insured).

Another way to manage the Government's exposure is for the scheme to purchase retrocession. Stakeholders have noted that the cost to the Government to purchase retrocession for the pool could be higher than current reinsurance costs due to the lack of diversification in the cyclone pool.

Focus question 12

What are the advantages and disadvantages of limiting payouts available under a reinsurance pool arrangement?

Government exit over time

An issue that has to be considered is how the Government could reduce support for such a scheme over time. Stakeholders have noted that to garner interest in the reinsurance market, the scheme may need to be in place for a sufficient length of time to motivate insurers to reorganise reinsurance arrangements and to entice new insurers into the market.

Focus question 13

When and how could the Government reduce support to the market through a cyclone reinsurance pool?

Encouraging mitigation

Another issue raised by stakeholders is that any reduction in the price signal would dampen the incentive to undertake mitigation and could lead to an increase in the cost of the scheme to the Government over time. Further information on issues associated with mitigation is outlined in Part 3.

Focus question 14

How could a cyclone reinsurance pool scheme be structured to provide an incentive to policy holders to mitigate the risk of cyclone damage?

OTHER APPROACHES RAISED BY STAKEHOLDERS

In addition to assessing two specific options to reduce the cost of home, contents and strata insurance, the Taskforce is to assess other approaches that are put forward during consultations. A range of suggestions have been raised with the Taskforce in consultations to date.

Taxes and duties

Insurance is subject to the GST and stamp duty imposed by states and territories. Both are applied as a percentage of the premium and the state or territory levy is charged after the GST is applied. These taxes add either 19 per cent or 20 per cent to the cost of insurance premiums in northern Australia (depending on the jurisdiction).

During the course of consultations, stakeholders raised concerns that these taxes and duties were adding to affordability concerns, particularly during a period when premiums were rising for other reasons. Some stakeholders called for some relief from the application of taxes on insurance premiums in northern Australia. The Government is currently developing a White Paper on Taxation Reform.

Commissions to body corporate managers

Body corporate managers for strata complexes often receive a commission when they purchase a policy for a particular complex. These commissions are generally calculated as a percentage of the premium, so the dollar amount paid will increase as the cost of the premium increases. However, in some cases, the percentage commission decreases as the total cost of the premium increases. Some stakeholders have called for stricter regulation on the commissions that are paid to body corporate managers. The activities of body corporate managers are governed by legislation at the state or territory level.

Direct subsidy

Some stakeholders have called for the Government to address affordability concerns by making a payment to policyholders to help them meet the cost of insurance. Payments could be made to the policyholder either directly or via insurance companies.

It has been suggested that such a scheme could be targeted at individuals whose insurance premiums are significantly impacted by cyclone risks, and could be further restricted to low-income households.

Policy contestability and disclosure

As noted in Part 1, there is a high degree of confusion among policyholders in northern Australia around the reasons for the rapid increase in premiums in recent years. In some cases, policyholders have been unable to get a policy renewed or have experienced a significant premium increase, and the policyholder has been unable to obtain an explanation from the insurer for the change.

To help address these issues, some stakeholders have called for reforms to:

- require insurers to provide an explanation to policyholders where there has been a significant change in premiums or non-renewal of the policy;
- change the Terms of Reference of the Financial Services Ombudsman so that it can hear disputes about the level of premiums if there has been an unfavourable change to an insurance policy and adequate reasons have not been provided to the policyholder; and
- require insurers to provide disclosure on the individual components that make up the overall cost of the premium.

In this context, the Financial System Inquiry considered concerns about underinsurance and high premiums especially in disaster-prone areas. To address these concerns, the Inquiry recommended consumers be given improved guidance and disclosure for general insurance, especially in relation to home insurance.¹⁴ The Government is currently considering its response to this recommendation.

Focus question 15

Are there any other approaches that could lower premiums in areas where affordability is a concern due to cyclone risk?

¹⁴ *Financial System Inquiry Final Report*, recommendation 26.

PART 3: MITIGATION

Role of mitigation

Mitigation should be an important component of any effort to reduce insurance premiums. This was highlighted throughout the consultations, with some stakeholders suggesting it should be the main focus.

The aim of mitigation is to reduce the vulnerability of a property to damage from a natural peril. For example, an effective way of mitigating the risk of damage by flood is to build a flood levee. Insurance can play a key role in providing price signals to encourage mitigation action. Assuming mitigation is effective, it can lower the premiums required by lowering the expected claims on the insurer. Consistent with this, Suncorp has indicated that a retrofit program aimed at mitigating cyclone damage could reduce premiums in northern Queensland by up to 20 per cent (Suncorp 2015c). Many stakeholders emphasised that mitigation can achieve lower insurance premiums on a sustainable basis because it actually reduces the risk of damage from cyclones rather than transferring the risk to another party. Some stakeholders expressed concerns that any Government intervention to lower the price of premiums may dampen the incentives for mitigation.

Other stakeholders expressed concerns that insurance companies were not sufficiently responsive in adjusting premiums in response to mitigation activity. This was considered to be particularly the case when policyholders take steps to reduce the vulnerability of older properties (those built before the revised building codes) to cyclone damage. When policyholders fail to see premium reductions following mitigation action, it makes them less inclined to take further action.

Mitigation for cyclones often requires work to individual properties (for example, undertaking cyclone strapping in roofs). Insurance companies have traditionally been unwilling to rely on self-reporting of mitigation actions to individual properties due to concerns about the accuracy of the information. They pointed out that it was impracticable to inspect every property to ensure that claimed mitigation action had been taken.

To a certain extent, improved building standards provide a degree of mitigation from cyclone damage for modern properties (post-1982). Insurance premiums on post-1982 properties are generally lower than on pre-1982 properties. However, it was noted during the consultations that modern properties are still vulnerable to cyclone damage. The prime aim of building standards is to protect life during a cyclone, not to reduce damage to the structure. Research also indicates that modern structures are still likely to incur some damage, particularly from water ingress (Boughton et al 2011).

By way of example, Table 3 outlines the claims record for a major insurer in northern Queensland (Suncorp) following Cyclone Yasi for modern properties (post-1982) and older properties (pre-1982).

Table 3: Cost of claims on housing policies for Cyclone Yasi¹⁵

	Modern properties	Older properties
Percentage of properties in the region	57 per cent	43 per cent
Percentage of properties for which a claim was made ¹⁶	23 per cent	31 per cent
Percentage of properties for which a claim for severe damage ¹⁷ was made ¹⁸	0.4 per cent	0.9 per cent
Cost of claims	\$119 million	\$132 million

Source: Suncorp

This table shows that older properties were more likely to make a claim, and twice as likely to make a claim for severe damage, than modern properties. Consistent with this, older properties made up more than half of total claim costs despite making up around 40 per cent of the total properties. However, all properties (regardless of age) are vulnerable to cyclone damage. This indicates that there is the potential for all properties to benefit from mitigation action.

Steps that can be taken to reduce the vulnerability of cyclone damage ranges from securing or removing loose items around a property (such as shade sails, outdoor furniture and sheds), small-scale home improvements (such as roof strapping, re-enforcing roller doors, fitting cyclone screens to windows), and more expensive, large-scale home improvements (such as upgrading the roof structure).

Focus question 16

What can be done to encourage greater efforts to mitigate the risk of damage from cyclones? Are there impediments to insurance premiums being responsive to mitigation action by property owners?

Improving incentives for mitigation

A number of possible initiatives to improve incentives for policyholders to take mitigation action were raised during the consultations. These include:

1. mitigation assessments for houses;
2. facilitating mitigation action;
3. supporting mitigation research; and
4. promoting steps to reduce small claims.

These initiatives are aimed at both enabling premiums to be more responsive to past mitigation action and also providing incentives for further mitigation activity into the future.

¹⁵ Based on analysis of Suncorp claims data provided to the Taskforce by Suncorp.

¹⁶ Calculated by weighting the proportion of properties in each age category making a claim by the proportion of properties in the region in that age category.

¹⁷ Severe damage is defined as damage greater than 50 per cent of the sum insured.

¹⁸ Calculated by weighting the proportion of properties in each age category making a claim by the proportion of properties in the region in that age category.

Mitigation assessments for houses

As noted, insurers have traditionally been unwilling to rely on self-reporting of mitigation actions (for example, roof strapping) due to concerns about the reliability of the information. Instead, insurers generally rely on broader measures of vulnerability, such as the date of construction, building material and location of the property. While these factors are all relevant, the challenge is to adequately assess the vulnerability of each property to cyclone damage and as such take into account specific mitigation action that has been undertaken so that this can be reflected in the premium level. This is particularly important in order to take into account any improvements to the property to mitigate cyclone damage since the date of construction.

One suggestion raised during the consultations was to introduce an independent inspection process to determine the vulnerability of a property to cyclone damage. Under this arrangement, qualified inspectors could provide:

1. information on what mitigation action a property owner could take to reduce the vulnerability of their property to cyclone damage; and
2. verification of all mitigation action that a property owner has undertaken.

A challenge in introducing a house assessment program is ensuring that there are sufficient qualified inspectors.

A number of assessment initiatives are underway, particularly for strata title properties. In the 2014-15 Budget, the Government committed \$12.5 million in funding to establish a Strata Title Inspection Scheme. The Scheme will provide grants to body corporate managers for building assessments in northern Queensland. The assessments will provide better information to insurers which will enable them to set premiums that more accurately reflect individual property risks. This Scheme is to be administered by the Queensland Government. Body corporate managers will be able to use the assessment in obtaining insurance quotes from a range of providers.

CGU Insurance also has a building risk assessment program for strata properties in northern Queensland. This program has generated an average annual reduction for strata unit owners of \$150 with more than half securing a premium reduction of greater than 10 per cent (CGU 2015). Under this program, the assessments are the property of CGU.

In April 2015, Suncorp announced a program to comprehensively capture and report self-mitigation on older homes. This program is contingent on Government support, but Suncorp indicated that it could deliver a premium reduction for some properties of up to 20 per cent. Details of this program are still being developed by Suncorp (Suncorp 2015a).

The cost of an inspection service for a house assessment program could be met by policyholders. This may increase the likelihood that the policyholder would undertake mitigation steps based on the assessment. Alternatively, it has been suggested that government support could be provided under a similar arrangement to the Strata Title Inspection Scheme. This could involve government funding to help establish the assessment process.

A key element of these initiatives is the willingness of insurers to respond to the information contained in the assessment report when setting premiums. This is important to ensuring that there are appropriate incentives in place to encourage mitigation by policyholders. While it would be up to the property owner to action any of the assessment's recommendations regarding steps that will reduce the vulnerability of a property, when mitigation action has been undertaken and certified by the assessor the property owner could elect to provide that certification to insurers when seeking a quote on a policy.

An extension of house and strata assessment schemes could be the development of a rating system for building vulnerability to cyclone damage. This information could be publicly disclosed at the time of sale of a property to help inform future investment decisions. This could be similar to the existing rating system for energy efficiency.

Separate to any assessment scheme, insurance companies have indicated an interest in governments establishing a centralised database on the construction standard of buildings in an area. This information would be sourced from building plans lodged with local governments. The database would provide insurance companies with access to reliable information about buildings that could be used to determine premiums. Establishment of such a database would require local government to provide the required information to a centralised body that would collate the information and provide it to insurers.

Focus question 17

What are the advantages and disadvantages of establishing an independent assessment process to determine the vulnerability of a house to cyclone damage and to verify what mitigation work has been undertaken? How could such a process be established?

Focus question 18

What are the advantages and disadvantages of (a) establishing a rating system for building vulnerability to cyclone damage that could be publicly disclosed at the time of sale, and (b) establishing a centralised database on building information that could be accessed by insurers?

Facilitating mitigation action

An issue raised during consultations was that some home owners, particularly those on low incomes, would not have the financial capacity to undertake mitigation actions. The objective of options 1 and 2 is to lower consumer premiums in cyclone areas from current levels. To the extent that this can be achieved, it may release some funds for the property owner to take steps to reduce the vulnerability of their property to cyclone damage. Furthermore, if the government-supported scheme was only to run for a certain number of years, this may provide an incentive for the property owner to use this period to take mitigation action in order to lower premiums on a sustainable basis.

As an alternative to policyholders funding mitigation action, there is precedent for insurance companies contributing to the cost of mitigation. For example, in the context of strata insurance, Suncorp has announced it will contribute up to \$10,000 of the cost of the purchase and installation of industry recognised building enhancements that assist with improving the building's resilience to weather events (Suncorp 2015b). Strata policyholders are eligible for these payments in the aftermath of a large claim.

Supporting mitigation research

Stakeholders have indicated that there is capacity for further research to identify cost-effective methods to mitigate damage to buildings in the event of a cyclone. Internationally, a number of government-support insurance schemes are also active in promoting or funding mitigation research (see, for example, the Earthquake Commission in New Zealand). This is viewed as an important mechanism for managing the scheme's risk exposure.

Other measures to reduce small claims

Claims experience following Cyclone Yasi indicates that cyclones have the potential to generate a very high number of claims for minor damage. Across the northern Queensland coastal region that was affected by Cyclone Yasi, around one in four policyholders made a claim and 86 per cent of all claims related to minor damage (that is, damage for less than 10 per cent of the total sum insured). The source of these claims covered such things as damage to fencing, roller doors, sheds, garden furniture and outdoor fittings. While these items may be damaged, they can also be the cause of major property damage in strong winds. The Taskforce observed a number of experiments at the Cyclone Testing Centre at James Cook University which illustrated the damage that can be caused to buildings through unsecured items.

While many of the claims by individual policy holders may be relatively small, given the large number of claims collectively they can be significant and contribute to the overall large insurance losses that can occur in northern Australia as a result of cyclones. In the case of Cyclone Yasi, minor claims made up 29 per cent of the total claim costs. Insurance losses have been the main reason for the rise in insurance premiums. Consequently, to the extent that each property owner takes steps to reduce the incidence of minor losses, such as securing items around their property, this could result in a sizeable reduction in claims and in turn a benefit to all policyholders through lower premiums. Securing loose items involves time but does not require significant financial outlays.

The Taskforce was advised that some property holders do not believe they are vulnerable to damage from a cyclone because they have not experienced any damage to date and have not made an insurance claim. In response to this, the Taskforce received a number of comments that what is required is greater community awareness of the steps that should be taken by all residents to prepare for a cyclone and greater efforts were required to make sure that that awareness resulted in action. Research conducted by Suncorp found that a program aimed at increasing community awareness would be very low cost, but would yield substantial net benefits to households (Suncorp 2015d).

It was suggested that increasing the size of an excess for making a claim in the event of a named cyclone would reduce the number of small claims as well as providing an incentive for property owners to reduce the prospect of damage. For example, the standard excess for a claim under a policy could be significantly increased in the event of a named cyclone. The Taskforce understands that this approach has already been adopted for strata title insurance policies. The downside to this approach is that someone on limited income may be unable to afford the size of the excess even if the amount of the damage exceeds the value of the excess. An alternative option that has been suggested is to exclude from insurance policies items that are frequently the subject of small claims, particularly where the property owner can easily mitigate the damage to these items. Examples of such items include shade sails, garden sheds and fences.

Focus question 19

What are the advantages and disadvantages of using increased excesses or policy exclusions to reduce the number of small claims following a cyclone?

NEXT STEPS

The Taskforce is inviting feedback on the range of issues raised in this interim report. Responses are due by **14 September 2015**.

The Taskforce will draw on the responses in assessing the feasibility of options to lower insurance premiums in northern Australia. It will continue to consult widely as it further refines and develops the options and looks forward to the continued constructive assistance it has received from stakeholders to date.

Some of the future research that will be undertaken includes obtaining estimates of the risk to the Government balance sheet of the options to support a mutual insurance company selling cyclone insurance directly to customers and the cyclone reinsurance pool. The purpose of the research will be to estimate the potential costs and likely reduction in premiums stemming from alternative scheme designs. The results of this research will appear in the final report.

The final report will also cover other options put forward by stakeholders.

The Taskforce's final report will assess the feasibility of all options taking into account its terms of reference and will provide recommendations. The report is to be completed by November 2015.

APPENDIX A: TERMS OF REFERENCE

The Taskforce is charged with exploring the feasibility of options that use the Commonwealth balance sheet to reduce home, contents and strata insurance premiums in those regions of northern Australia that are experiencing insurance affordability concerns due to cyclone risk.

The Taskforce will:

- establish which regions in northern Australia are experiencing acute insurance affordability concerns due to cyclone risk;
- outline options to reduce the cost of home, contents and strata insurance that stems from cyclone risk in these regions, including a mutual cyclone insurer and a cyclone reinsurance pool as well as other options that are put forward during consultation;
- for each option, undertake a thorough evaluation of:
 - the potential reduction in consumer premiums;
 - the likely cost and risks associated with using the Commonwealth balance sheet to lower the cost of insurance to consumers;
 - the potential effect on the operation of the insurance and reinsurance markets in northern Australia, particular the likely effects on competition; and
 - how the role of the Government can be gradually reduced over time.

In conducting the review, the Taskforce will draw on a Reference Panel of stakeholder representatives and consult extensively, including with industry experts in insurance and reinsurance.

The Taskforce will provide an interim report providing policy options for consultation before providing recommended policies in a final report to the Government by November 2015.

APPENDIX B: REFERENCE PANEL MEMBERS

Mr Dallas Booth, Chief Executive Officer, National Insurance Brokers Association

Mr Gerald Ewing, Chief Operating Officer, Regis Mutual Management

Ms Joan Fitzpatrick, Chair, Australian Reinsurance Pool Corporation

Ms Fiona Guthrie, Executive Director, Financial Counselling Australia

Ms Margaret Shaw, Northern Australia consumer representative

Mr Rob Whelan, Executive Director and CEO, Insurance Council of Australia

Mr Craig Wilson, Senior Executive Director, Department of the Premier and Cabinet, Queensland Government

APPENDIX C: ORGANISATIONS CONSULTED

Allianz Australia Insurance Ltd	Munich Re
AON Benfield	North Queensland Insurance Brokers
Archers	Northern Territory Government
Australian Prudential Regulation Authority	Plenty Real Estate
Bureau of Meteorology	Productivity Commission
Cairns Chamber of Commerce	QBE Australia and New Zealand
Cairns Regional Council	Queensland Fire & Emergency Services
Consumer Action Law Centre	RACQI
Council of Queensland Insurance Brokers	Regis Mutual Management
Cyclone Testing Station, James Cook University	Risk Frontiers
EBM Insurance Brokers	Suncorp
Financial Rights Legal Centre	Swiss Reinsurance (Swiss Re)
Finity Consulting	Thirkell Consulting Engineers
Guy Carpenter	Joe Vella Insurance Brokers
Insurance Australia Group	Western Australian Government
Indian Ocean Territories Administrator	Willis Reinsurance Australia (Willis Re)
Insight Insurance	Zurich Australia
Mayor of Townsville	

APPENDIX D: THE CAUSES OF THE RISE IN PREMIUMS

Reassessment of cyclone risk

In recent years the insurance industry has reassessed its understanding of the potential losses due to cyclones in northern Australia.

One trigger was the large losses from natural disasters in recent years, including Cyclones Larry (2006) and Yasi (2011). While the frequency of cyclones may be understood, an area where there is less information is how much damage is caused to buildings by cyclones of different strengths. Insurers have indicated that new data for these cyclones caused them to revise up previous estimates of the loss that cyclones could cause.

Global events in 2011 were another factor behind the rise in insurance premiums in northern Australia. In that year, the global insurance industry (which provides reinsurance to Australian insurance companies) recorded significant losses due to natural disasters around the world, including the Japanese earthquake and tsunami (US\$40 billion of insured losses), the New Zealand earthquake (US\$13 billion in insured losses) and the Thai floods (US\$10 billion in insured losses).¹⁹ The magnitude of losses led global reinsurers to re-evaluate the risk of natural disasters around the world. As reinsurers increased the price of reinsurance, this was passed on to consumers in higher risk areas in Australia through higher premiums. The repricing also prompted Australian insurers to re-evaluate their own estimates of natural disaster losses in Australia (Standing Committee on Social Policy and Legal Affairs 2012).

The reinsurance market is, however, highly cyclical. During consultation, the Taskforce heard that the cost of reinsurance has come down substantially since the peak post 2011. Falling reinsurance costs should reduce pressure on premiums. However, reinsurance costs, being cyclical, may rise again in the future.

The insurance industry acknowledges that, based on the information now available, they were materially under-pricing the risk presented by cyclones in northern Australia (Standing Committee on Social Policy and Legal Affairs 2012). However, the explanation of the reason for the significant increase in premiums reflects historical under-pricing has contributed to consumer mistrust in insurance companies (Standing Committee on Social Policy and Legal Affairs 2012).²⁰

Changes in insurance pricing

Another change that has led to increasing premiums in some regions of northern Australia is the way insurers pass on the cost of reinsurance to premiums.

¹⁹ Data sourced from Munich Re (2012).

²⁰ The Standing Committee on Social Policy and Legal Affairs (2012) noted, 'If companies have failed so completely in assessing the risk in the past, then it is difficult to have faith in their capacity to accurately calculate the current risk that is supposedly driving premium increases'.

This is related to a long term trend in insurance pricing. The industry has increasingly set each premium in line with the risk that the individual brings to the pool. This approach, called 'risk rating', can be contrast with 'community rating', which is where each individual is charged the same amount regardless of their individual risk. Community rating is often used when there is little information about each individual's risk. Recently competition has driven the industry to do more detailed research into risks. Insurers who used risk rating were able to attract more low-risk policyholders by charging these customers lower premiums. In contrast, insurance companies using community ratings were put at a competitive disadvantage because they were more attractive to the high-risk policyholders who were being charged more by the risk rating insurers.²¹ As a consequence, insurers using community rating would face higher claims than expected, and so need to raise premiums or face financial difficulty. An advantage of risk rating is that insurance premiums provide a better price signal to individuals and government about which properties are high risk, creating a financial incentive to make decisions that lower the risks.

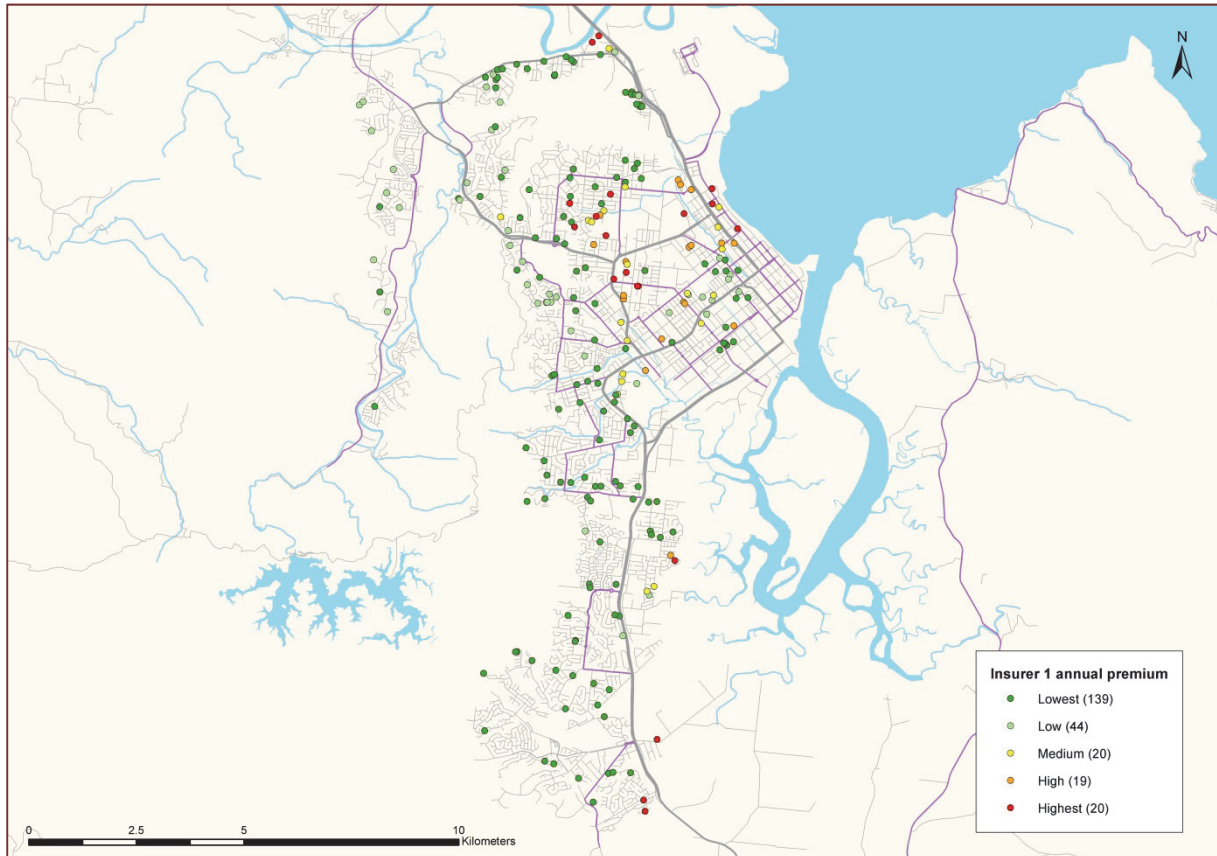
While this trend has been going on for some time, a recent change reported by insurers is that they have moved toward spreading the cost of reinsurance in line with the risk attributed to each policy. For areas affected by cyclones, this has meant an increase in premiums — because cyclone risk is seen to raise reinsurance costs, more of the reinsurance cost is now being allocated to premiums in these regions.

A concern of consumers is that they can receive a wide range of quotes for the same property, making it difficult to assess the fair value of insurance. Insurers have advised that this can come about because of different views on the risk of a property — the information available to and the criteria and models used to assess risk can differ across insurers. Commercial factors specific to each insurer, such as the insurer's desire to limit or reduce its exposure in the region, may also influence the final premium seen by the customer.

During consultations, a number of people reported concerns that postcodes are used to determine premiums, even though postcodes in northern Queensland are very large and not a good indicator of address-level risk. The insurance industry has advised that address-level pricing is the typical practice, particularly for flood risk. However, during the consultations it appeared that some insurers choose not to insure in certain northern Queensland locations (or in northern Queensland at all) in order to limit their exposure and may be using postcodes for this purpose.

The following map is of Cairns and shows premiums for a sample insurer (Figure 5). The map shows how the insurance premium (per dollar sum insured) is higher for properties closer to the bay, which has a greater risk of storm surge and flood.

21 In economic texts, this effect is called the problem of adverse selection.

Figure 5: Map of insurance prices in Cairns

Source: Finity

Excessive claims

A range of stakeholders presented the opinion that there were excessive claims made following cyclones and that insurance companies were not rigorous enough in assessing the validity of the claims. The result was that the cost of claims was higher than it should be and this was contributing to the higher premiums. Various reasons were presented to the Taskforce as to why there were excessive claims. One view was that consumers felt the very high premiums were an incentive to make claims and 'claw back' some of the cost. Another view was that when builders acted as loss assessors they had an incentive to inflate the size of the claim, working on the basis 'it was someone else's money'. A further view was that insurance companies were primarily concerned with managing the high volume of claims and did not assess each claim as rigorously as they would outside of a catastrophe period.

Appendix E: Tropical cyclones²²

A tropical cyclone is a low pressure system or cluster of thunderstorms characterised by spiralling ‘gale force winds’ — that is, sustained winds of 63 kilometres per hour or greater and gusts in excess of 90 kilometres per hour. The centre or ‘eye’ may have light winds and clear skies. It is surrounded by the ‘eye wall’, a dense ring of cloud about 16 km high with gale force winds and heavy rainfall. Winds of diminishing intensity can extend hundreds of kilometres from the eye wall.

In Australia, cyclone²³ intensity is determined by maximum wind speed, and categorised on a scale from 1 to 5 (Table 4). Anything above category 3 is considered ‘severe’ (these are called hurricanes or typhoons in other countries). The categories do not take into account flooding or storm tide. Table 5 lists severe cyclones that have made landfall in Australia since 2000.

Table 4: Australian tropical cyclone categories

Category	Maximum mean wind speed (km/hr)	Typical strongest gust (km/hr)	Central pressure (hPa)	Typical effects
1	63-88	<125	>985	Negligible house damage. Damage to some crops, trees and caravans. Craft may drag moorings.
2	89-117	125-164	985-970	Minor house damage. Significant damage to signs, trees and caravans. Heavy damage to some crops. Risk of power failure. Small craft may break moorings.
3	118-159	165-224	970-955	Some roof and structural damage. Some caravans destroyed. Power failures likely. (eg, Winifred).
4	160-199	225-279	955-930	Significant roofing loss and structural damage. Many caravans destroyed and blown away. Dangerous airborne debris. Widespread power failures. (eg, Tracy, Olivia).
5	>200	>279	<930	Extremely dangerous with widespread destruction. (e.g. Vance).

²² Except where otherwise indicated, material in this Appendix is adapted from information on the Bureau of Meteorology website (www.bom.gov.au/cyclone, www.bom.gov.au/info/ftweather/page_12.shtml, and www.bom.gov.au/state-of-the-climate/) accessed between 25-30 June 2015.

²³ References to ‘cyclone’ should be taken to mean ‘tropical cyclone’ unless otherwise indicated.

Table 5: Severe cyclones in Australia 2000 to 2015

Year	Name	Category at landfall	Landfall
2015	Lam	4	NT, passed close to Wessel and Elcho Islands, landfall between Milingimbi and Ramingining
	Olwyn	3	WA, shaved the coast from Exmouth to Carnarvon
	Nathan	4	QLD, near Cape Flattery, and NT, 40 kilometres south of Nhulunbuy
2014	Marcia	5	QLD, Shoalwater Bay, north of Yeppoon
	Ita	4	QLD, near Cape Flattery
2013	Christine	3	WA, Pilbara Coast between Roebourne and Whim Creek
	Rusty	3	WA, Pilbara Coast 10km east of Pardoo Station
2012	Lua	4	WA, Pilbara Coast near Pardoo Roadhouse
2011	Yasi	5	QLD, near Mission Beach
2010	Magda	3	WA, Kuri Bay
	Ului	3	QLD, near Airlie Beach
2009	Laurence	4; 5	WA, east of Koolan Island; and 80 mile beach near Wallal
2007	George	5	WA, 50km north-east Port Hedland
2006	Glenda	3	WA, Pilbara Coast west of Karratha
	Larry	3	QLD, near Innisfail
	Monica	3; 5; 5	QLD, south of Lockhart River; NT, small islands north of Arnhem Land; and northwest Arnhem Land
2005	Ingrid	4; 5; 4; 4; 3; 4	QLD, south of Lockhart River; NT, small islands north of Arnhem Land; Croker Island & Cobourg Peninsula; Tiwi Islands; WA, Kimberly coast
2004	Fay	4	WA, remote east Pilbara
2000	Rosita	5	WA, 40km south of Broome

Formation

Tropical cyclones form in regions where the sea-surface temperature is above 26.5°C, in locations five or more degrees from the equator where the Coriolis²⁴ effect is strong enough to sustain the wind rotation. Occasionally, a tropical cyclone moves south and undergoes extra-tropical transition, changing from a warm-cored tropical low to a cold-cored mid-latitude low.

The life-cycle of most cyclones is three to seven days, but they can last longer. Some cyclones take days to mature while others reach peak intensity in less than 48 hours. Their path is often erratic, making it hard to predict when and where they will make landfall. Their forward speed varies. Cyclones closer to the equator tend to move forward more slowly than those at higher latitudes (Atlantic Oceanographic & Meteorological Laboratory 2015). Some move slower than 10 km/h, while extra-tropical cyclones affecting the south-west of Australia can move at speeds greater than 70 km/h.

²⁴ Deflection related to the Earth's rotation. Moving objects tend to deflect to the right in the northern hemisphere and to the left in the southern.

Tropical cyclones are powered by water vapour condensation. They lose intensity when they move over land or colder waters as the supply of water vapour is cut off. Nonetheless, cyclones can travel some distance overland — for example, in 2011 Cyclone Yasi maintained a strong core with damaging winds and heavy rain before it finally weakened to a tropical low near Mount Isa. Cyclones may also lose intensity as they move south as they are broken up by other weather patterns.

Impacts

The impact of a cyclone is a function not only of its severity, but also where the cyclone makes landfall. The fact that the concentrated force of Cyclone Tracy hit a major population centre made it Australia's most destructive, measured in terms of loss.

When a cyclone makes landfall in a populated area, most damage comes from wind, water ingress, flooding, and storm surge.

Destructive winds can cause extensive property damage through airborne debris. The most severe winds will be confined to a small area around the outside of the eye. Damage increases exponentially with wind speed, which means small changes in cyclone intensity cause a substantial increase in damage.

Wind driven rain can enter buildings through very small openings and even seep through walls, causing extensive property damage. Heavy rain can also cause flooding. Heavy rain and flooding due to a decayed cyclone can occur a long way from the tropical coast as the remains of a cyclone move into central and southern parts of the continent.

Storm surge is potentially the most destructive phenomenon associated with cyclone landfall. Storm surge is a raised dome of water typically about 60 km to 80 km across and about 2-5 metres higher than normal tide level, but sometimes higher.²⁵ If the surge occurs at high tide (storm tide) then sea water flooding can be extensive. Further damage may be caused by pounding waves generated by the wind. The severity of a surge depends on several factors, including local topography and whether the cyclone hits the coast head on or at an angle.

In exceptional cases other types of damage may occur, for example in 1978 when Cyclone Alby transitioned into an extra-tropical cyclone, its dry winds were associated with severe bushfires in the south of Western Australia.

Location and incidence

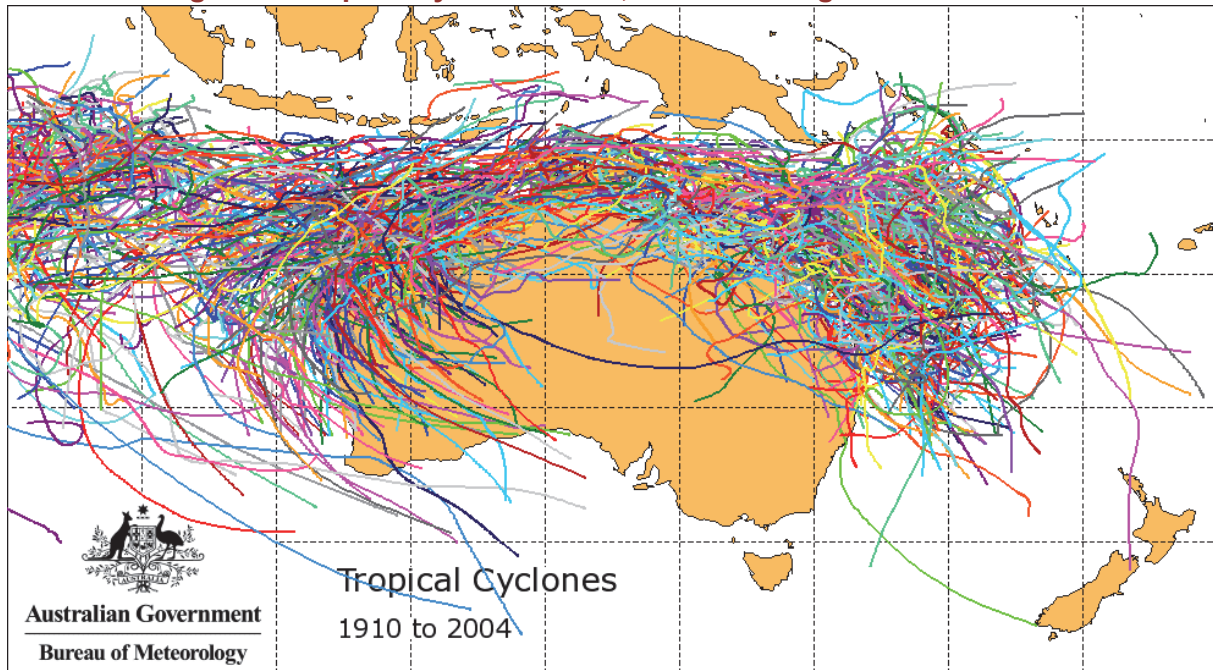
Tropical cyclones in the Australian region typically develop between 5° and 15° south of the equator and reach maximum intensity between 10° and 20° south of the equator. The north-western coast of Western Australia between Broome and Exmouth is most affected by cyclones, both in number and severity. Northern Queensland, coastal areas of the Northern Territory and Australia's Indian Ocean Territories are also affected. Cyclones occasionally affect areas south of the tropics. Between 1910 and 2004 fourteen cyclones impacted Perth

²⁵ For example, there was a 14 m storm surge 300 km north of Cairns associated with Cyclone Mahina in 1899 (Australian Geological Survey Organisation 1999; page 85).

and 13 crossed the coast within 100 km of Brisbane. The history of cyclone tracks from 1910 to 2004 in Australia is shown in Figure 6.

The Australian cyclone season officially runs from November to April. In the Indian Ocean, however, cyclones can occur all year around, although the risk in the winter months is very low. On average about 13 cyclones form in the Australian region each cyclone season — about half occur in the west. About half the cyclones in the Australian region become severe.

Figure 6: Tropical cyclone tracks, Australian region 1910 to 2004



Source: Bureau of Meteorology

Tropical cyclones are named to help forecasters communicate with the public, especially to issue warnings. Names also reduce confusion about which storm is being described, given they can often last a week or longer, and more than one storm can occur in the same region. A decayed cyclone that regenerates will usually keep the same name.

Trends

The short period of consistent records and year to year variability make it difficult to discern clear trends in tropical cyclone frequency and intensity in the Australian region (CSIRO/BoM 2015; page 49). Records go back about 100 years, but changes in observation methods mean consistent records date from around the 1970s. Research on trends is equivocal, with some studies suggesting a decrease in numbers since the 1970s and others no change.

Cyclones in the region may be influenced by long term cycles, such as variations in the El Niño–Southern Oscillation (ENSO). In general, more tropical cyclones cross the coast of Australia during La Niña years, and fewer during El Niño years, especially in the north-east (Geoscience Australia 2015). There has been speculation that damaging impacts in Queensland may be more likely during negative phases of the Inter-decadal Pacific Oscillation (IPO), a 10 to 30 year cycle of Pacific Ocean temperatures (Geoscience Australia 2001).

A study of coral deposits by Nott and Hayne (2001) suggests category 5 'super cyclones' may have been more frequent in the past. They observe that while no category 5 cyclones crossed the north-eastern coast during the 20th century, over the previous century at least five had made landfall in the region. Since their article was published in 2001 the region has experienced two category 5 cyclones, Cyclone Yasi in 2011 and Cyclone Marcia in 2015.

In essence, uncertainty about long-term cycles and possible changes in climate make both forecasting cyclone activity in the near term and predicting future cyclone activity very difficult (Finity 2012).

APPENDIX F: INTERNATIONAL EXAMPLES OF GOVERNMENT-SUPPORTED INSURANCE AND REINSURANCE SCHEMES

Insurance schemes

Scheme	Description	Government exposure	Pricing	Claims handling	Policies ceded to the scheme	Mitigation activities
Earthquake Commission ²⁶ New Zealand	The Commission provides insurance to households for earthquake and other natural disasters. It obtains reinsurance in the global market.	The NZ Government provides an unlimited guarantee for any claims unable to be met by the Commission.	Cost of NZ15 cents per \$100 sum insured.	Managed by the Commission for claims under \$100,000.	Compulsory for households that have building or contents insurance policies covering fire. Covers claims up to a maximum of \$100,000. Private insurers provide top-up cover for damage above \$100,000.	The Earthquake Commission funds research and education programs aimed at reducing the quantum of damage from natural disasters.
Citizens Property Insurance Corporation Florida ²⁷	Provides a full range of personal and commercial insurance in Florida. Insures around \$190 billion of assets (Citizens 2014). Provides wind-only or multi-peril policies, but does not provide flood cover (Citizens 2015).	Should Citizens not have enough funds to pay a claim, additional funding can be raised via a levy of Citizens policy holders or potentially all policy holders in the State (Kousky 2010).	Pricing takes into account risks (for example, each property's structural characteristics).	Managed by Citizens	Citizens is not compulsory. People can access a Citizens' policy if the Citizens policy is 15 per cent less than the policy that they can access in the private market.	No details on mitigation could be identified.

²⁶ The New Zealand Government is currently reviewing the operations of the Earthquake Commission and has released for consultation proposed changes see New Zealand Government (2015).

²⁷ Broadly similar schemes are in place in other jurisdictions in the US including Massachusetts (Massachusetts Property Insurance Underwriting Association) and Louisiana (Louisiana Citizens Property Insurance Corporation).

Scheme	Description	Government exposure	Pricing	Claims handling	Policies ceded to the scheme	Mitigation activities
National Flood Insurance Program (NFIP) US	Provision of flood and storm surge insurance policies. The program is administered by the Federal Emergency Management Agency (FEMA). Currently provides 5.6 million policies covering US\$1.3 trillion of assets (Worthington 2015). In order to be eligible for a policy, a person must be in a community that has joined the NFIP and agreed to enforce floodplain mitigation standards.	Claims in excess of capital are funded through borrowings from the Federal Government (King 2012). The NFIP has a \$24 billion liability to the US Government following a series of large claims on the program (the largest being for losses due to Hurricane Katrina).	Policy premiums vary by flood risk zone based on the Flood Insurance Rate Maps. Premiums are discounted for houses built prior to flood mapping or where mitigation is in place.	Majority of claims are managed by private insurers who sell flood NFIP policies in their own name.	Participation in the NFIP is not compulsory except for mortgaged properties with a greater than 1-in-100 year risk of flood.	FEMA runs a series of mitigation programs aimed at reducing vulnerability to natural disasters. This includes the Flood Mitigation Assistance program which provides funding aimed at reducing flood damage to buildings insured under the NFIP.
California Earthquake Authority (CEA) California	Publicly managed, privately funded entity providing residential earthquake insurance. Policies sold and serviced through participating insurance companies on a commission basis. Claims are paid first from the capital contributed by participating insurers (currently around US\$1.1 billion), then by claiming on reinsurance, and finally through the issue of bonds and a levy on insurers.	By law, State general funds are not allowed to pay for CEA claims (Kousky 2010).	Premiums are based on risk, measured by location and structural characteristics (Kousky 2010)	Managed by participating insurance companies.	Insurers must offer a minimum level of earthquake cover, either as part of their own insurance policy or by selling the CEA policy combined with their own insurance policy.	CEA provides education about earthquake risk and preparedness.

Scheme	Description	Government exposure	Pricing	Claims handling	Policies ceded to the scheme	Mitigation activities
Catastrophe Insurance Pool (CIP) Turkey	Separate State owned legal entity providing compulsory earthquake cover for municipal residential dwellings. Claims capped at US\$50,000 per policy (Worthington 2015). Policies are administered by authorised insurance companies on a commission basis. Reinsurance is provided by a consortium of international companies and the World Bank.	Reinsurer of last resort.	Premiums are based on hazard zones and construction type.	Managed by authorised insurance companies.	All earthquake policies for municipal residential dwellings (compulsory) and some commercial and non-municipal dwellings (voluntary).	The CIP engages in promotional activities to raise community awareness of the risk of earthquake.
National Disaster Compensation Scheme (CAT NAT) France	Compulsory inclusion of multi-peril natural hazards cover in property insurance sold by private insurers. Covers losses beyond those covered by private insurance where the Government has declared a national disaster.	May be backed by state-guaranteed public reinsurer Caisse Centrale de Reassurance (CCR).	Uniform 12% surcharge on insurance premiums for dwellings	Managed by private insurers	Compulsory coverage with property insurance. Around 99% of housing is insured.	A proportion of premiums go into a state managed fund for natural risk prevention (12% of CatNat funds in 2009).
Consortio de Compensacion de Seguros (CCS) (Insurance Consortium) Spain	Public corporation that insures against legally defined 'extraordinary risks' (including natural disasters) where private insurers do not offer cover or are unable to cover claims due to insolvency.	Unlimited state guarantee (CCS 2008).	A surcharge is automatically added to the premium, and credited to CCS (minus a 5% commission). Surcharge rates are applied per dollar of sum insured. Rates are uniform across the country, but vary by policy type (for example, housing, motor vehicles, businesses) (CCS 2012).	CCS manages claims. These may be submitted directly or through the policy issuer (CCS 2008).	Cover is a mandatory add on to policies relating to property damage issued by private insurers. Insurers underwrite and manage policies (CCS 2008).	Deductible of 7% of compensable loss applies to damage to goods, excluding dwellings (CCS 2012). Engages in promotion of prevention (details not available) (CCS 2008).

Reinsurance schemes

Scheme	Description	Government Exposure	Pricing	Policies ceded to the Scheme	Mitigation
Florida Hurricane Catastrophe Fund (FHCF) Florida	Provides hurricane reinsurance to insurers in Florida. Maximum payout is US\$17 billion.	Based on its 2015 Annual report, the FHCF had capital of around US\$12 billion. Any shortfall in capital is funded (up to the scheme cap) through the issuance of tax-exempt bonds. The bonds would be serviced through a levy on policyholders in the State.	The FHCF is required to charge an actuarially indicated premium for its coverage. Such premiums are lower than private reinsurance companies because of FHCF's tax-exempt status and not-for-profit status (Florida Catastrophic Storm Risk Management Center 2013).	Participation in the FHCF is mandatory for all insurers writing residential policies in Florida.	The FHCF is required to spend a proportion of its investment income (not less than US\$10 million annually) to improve hurricane preparedness, reduce potential losses in the event of a hurricane and facilitate research (State Board of Administration 2013).
Japanese Earthquake Reinsurance Company (ERC) Japan	Monopoly earthquake treaty reinsurer for the private insurance market. Retains a portion of liability, cedes remainder to insurers based on market share, and to Government. Total claims capped at ¥5.5 trillion (if the ceiling is reached then claims are prorated). Distribution of maximum liability: Government 87%, private insurers 10%, ERC 3%	Government liable for a portion of claims between ¥1.15 billion and ¥5.5 trillion, with total liability capped around ¥4.8 trillion (87% of max claim). The aggregate limit applies to individual events — consecutive major events could jeopardise solvency (World Bank 2015).	Premiums are based on risk factors including building material, date of construction, design standard compliance, and 'risk zone' location. Premium rates, calculated by the Non-Life Insurance Rating Organisation, do not have a profit loading. Up to 30% discount for compliance with earthquake resistance design standards. Discounts are offered for insurance purchased for 2-5 year periods. Excesses tend to be large.	All earthquake policies are ceded to the ERC.	No details on mitigation could be identified.
Caisse Centrale de Reassurance (CCR) France	State-guaranteed public reinsurance program for 'uninsurable' catastrophes. Payment requires declaration of a natural disaster. Also offers some traditional reinsurance not covered by government guarantee.	Unlimited reinsurance cover guaranteed by the French Government. The CCR is judged as having a high financial strength based on risk-adjusted	CCR offers proportional loss contracts (i.e. it receives a percentage of premium to cover a percentage of claims) and stop-loss contracts (which cover all claims that exceed a given multiple of premium income). See also CatNat, above.	Reinsurance with the CCR is voluntary with insurers able to seek reinsurance from other reinsurers.	See CatNat, above.

Scheme	Description	Government Exposure	Pricing	Policies ceded to the Scheme	Mitigation
	<p>Among the world's top-25 reinsurers (Worthington 2015).</p>	<p>capitalisation, operating performance, business profile, and state guarantee.</p>			
Flood Re UK	<p>Not-for-profit flood reinsurance fund, owned and managed by the insurance industry, to ensure high-risk homes can access affordable flood cover.</p> <p>The scheme is to be financed by industry, with the £10m set up costs and the expected cost of the flood element of premiums to be funded by a levy on all customers of around 2.2% of premium (notional average of £10.50 per customer).</p> <p>The scheme is a transitional measure to be phased out in 20-25 years.</p>	<p>Nil. Levy classified as a tax. Flood Re CEO is accountable to Parliament.</p>	<p>The flood element of premiums will be priced based on the council rates charged for the property, which approximately align with the property value.</p>	<p>Flood Re will provide cover for the 1-2% highest risk homes — an estimated 350,000 homes. Insurers will bear the risk of flood for all other homes. High-value homes (i.e. those paying the top council rate) are not eligible to receive cover.</p>	<p>UK authorities have committed to invest in infrastructure to improve flood risk management in the UK.</p> <p>A standard flood risk report will be provided to insurers so flood risk management can be reflected in insurance contracts.</p>

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