



SUBMISSION TO THE SENATE STANDING COMMITTEE ON ENVIRONMENT  
AND COMMUNICATIONS INQUIRY INTO RECENT TRENDS IN AND  
PREPAREDNESS FOR EXTREME WEATHER EVENTS



29 January 2013

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# EXECUTIVE SUMMARY

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## 1. EXECUTIVE SUMMARY

IAG believes a co-ordinated and collaborative approach is needed on a national level to effectively manage the risk associated with extreme weather events. The economic cost of natural perils in Australia has increased substantially over the past few years. Although the science on the exact frequency and projections of localised extreme weather events remains unclear, the insured losses associated with these events are clearly increasing as a consequence of increases in population, increasing building costs and construction of buildings that are not resilient to natural hazards.

We believe the primary role of government in this area is to reduce community vulnerability to extreme weather events with a policy framework that promotes stronger building codes, risk appropriate land use planning and preventative infrastructure investment. In relation to affordability of insurance, Governments should be aware of the impact on premiums of insurance taxes, as well as the flow on consequences of under and non-insurance.

Despite recent natural disasters, the insurance industry in Australia has remained highly competitive both in the pricing and availability of products. In general, insurance is available and accessible to the wider community. Rather than a widespread problem, the issue of affordability is limited to specific consumer groups: the financially excluded, and those who live in areas subject to a very high risk of extreme weather events.

IAG considers that the solution to the problem of affordability requires a long term strategic approach by Government, the insurance industry and the broader community. The insurance industry acknowledges that more can be done to improve the affordability of insurance in the Australian community. We have an important role to play in financial literacy, community education and premium incentives to reduce risk. Ongoing review of product design, coverage, pricing and payment options is also necessary to ensure that insurers remain responsive to the needs of consumers. IAG has been looking at ways to increase our contribution in all these areas.

However, for the small portion of homes in extremely high risk locations, we acknowledge that these measures will not enhance the affordability of insurance and government subsidies may be required. Any financial assistance provided, however, should be targeted, means tested and accompanied by mitigation strategies so as not to undermine long term risk disaster resilience measures. Importantly, these initiatives should not undermine the role of insurance prices and availability in creating an incentive for individuals, businesses and governments to reduce their exposure to weather related risk.

Government also has a responsibility to educate the community and equip individuals with the knowledge to understand the risks they are insuring themselves against and the options available to reduce their risk. It is paramount that property owners be provided by Government with information regarding the natural perils risks in their locality. The insurance industry can also play a role in this.

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# INTRODUCTION

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## 2. INTRODUCTION

### 2.1 WHO IS INSURANCE AUSTRALIA GROUP (IAG)

Insurance Australia Group (IAG) is the parent company of an international general insurance group, with operations in Australia, New Zealand, the United Kingdom and Asia. IAG has more than 808,000 shareholders (as at August 2012). IAG's register is the third largest in Australia. IAG employs more than 13,600 people of whom around 9,000 are in Australia. Its current businesses underwrite over \$9 billion of premium per annum and pay over \$6 billion in claims per annum. Across our portfolio of brands IAG insures 7.7 million cars, 2.9 million homes, 103,000 farms, 117,000 employers and nearly 400,000 businesses. IAG had more than 16.1 million policies in force in financial year 2012.

Within Australia, IAG's Direct Insurance business provides personal insurance products as well as business insurance packages targeted at sole operators and smaller businesses in New South Wales (NSW), Australian Capital Territory (ACT), Queensland and Tasmania primarily under the NRMA Insurance brand. SGIO is the primary brand in Western Australia, and SGIC in South Australia. In Australia, IAG also has a distribution agreement with RACV (underwritten by Insurance Manufacturers of Australia – owned 70% IAG; 30% RACV) in Victoria. Products are distributed through branches, call centres, the internet and representatives.

Also within Australia, IAG's intermediated insurance products are sold nationally, primarily under the CGU Insurance and Swann Insurance brands through a network of more than 1,000 intermediaries, such as brokers, agents, motor dealerships and financial institutions. CGU is also a leading provider of workers' compensation services in Australia.

### 2.2 IAG'S INTEREST IN THE INQUIRY

Managing weather and climate are "core business" for the insurance industry. General insurers underwrite weather related catastrophes by calculating, pricing and spreading the risk and then meeting claims when they arise. Extreme weather events and climate volatility can have a very significant impact on our customers and our business - not only in terms of insured losses but also our staffing resources, claims costs and ability to deal with 'business as usual'. Our exposure to the impact of weather events means we have a commercial interest in reducing the risk faced by the community. IAG also supports improving the community's resilience to extreme weather given the broader economic and social impact outlined in this submission.

This inquiry provides us with an opportunity to advocate for a more sustainable and comprehensive national approach to the complex issue of managing weather related risks. We will also explain how insurance is priced, how extreme weather events are

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# INTRODUCTION (CONTINUED)

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relevant to pricing, the pressures driving premiums and explore options to improve the affordability of insurance.

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# INQUIRY TERMS OF REFERENCE

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## **3. (A) RECENT TRENDS INTO THE FREQUENCY OF EXTREME WEATHER EVENTS, INCLUDING BUT NOT LIMITED TO DROUGHT, BUSHFIRES, HEATWAVES, FLOODS AND STORM SURGES**

### **3.1 SCIENTIFIC EVIDENCE**

Over the past decade many commentators have claimed that we have seen a large number of extreme weather related catastrophes around the world. However from a scientific standpoint, it is difficult to determine whether these events have become more extreme or destructive, whether their frequency is increasing and whether any changes in these events are being driven by climate change.

The very nature of extreme events makes quantifying changes in their frequency difficult to measure in a statistically rigorous manner. This is particularly so for those events where there is no simple instrumental measurement available and where the historical records of severe weather events such as hail storms, tropical cyclones and bushfires are inadequate for making such assessments.

For example, there are extremely few measurements of the intensity / central pressure, eye size and radius of storm force winds and storm surges of tropical cyclones, despite their potential to inflict extreme damage on communities near their paths. In the USA there is a routine program of aerial reconnaissance to quantify the physical size and intensity of these systems but there is no similar program in Australia. That said the occurrence of high category tropical cyclones at latitudes well south of where high intensity cyclones normally occur in the Australian region such as Tropical Cyclone Bianca (west coast - January 2011) and Tropical Cyclone Hamish (east coast – March 2009) serves as indicators that the risks posed by tropical cyclones in the Australian region are changing and extending southwards.

Similar problems arise with respect to river floods. The flood Average Recurrence Intervals used for urban planning and infrastructure design for many important river systems across Australia do not adequately take into account changes in the characteristics of the river basins (vegetation cover, river channel modifications, infrastructure effects, etc) and effects of coastal sea level changes through the historical period to date, let alone the impacts of future climate change related alterations to rainfall.

Natural variability of climate is a significant source of uncertainty in understanding the true frequency of extreme events. Additionally the climate science is still developing and how climate change manifest itself is not yet known.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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## 3.2 INSURED LOSSES

The costs associated with extreme weather related events can be more easily quantified and patterns identified. There are very clear trends that the costs of natural disasters have been increasing internationally and in Australia in recent years.

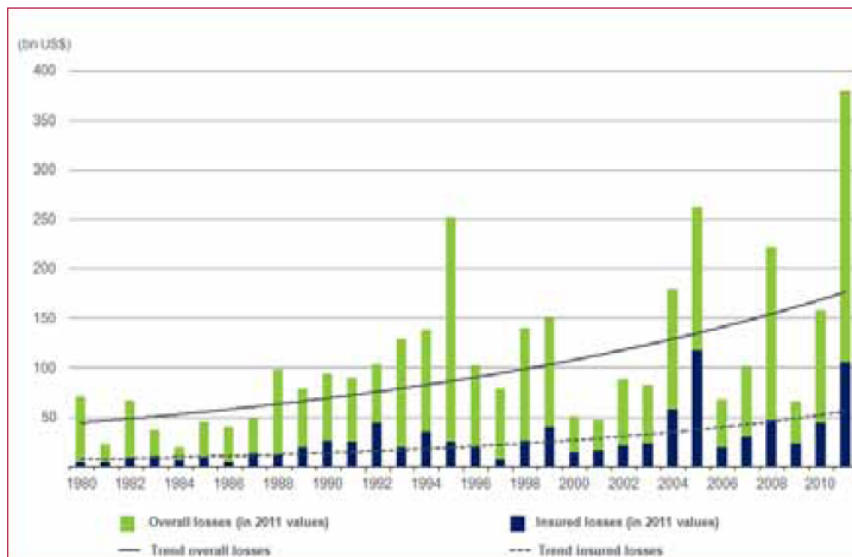
### *Internationally*

The Geneva Association (2012) Risk and Insurance Research report *Extreme events and insurance: 2011 annus horribilis* notes that 2011 set a new record both in terms of economic losses and insured losses caused by natural catastrophes. The Geneva Association (2012) notes ‘in the last 31 years the global number of loss-relevant events has increased from about 400 per year to about 1,000’(p.10) and “.. the economic losses in 2011 have exceeded the previous record of 2005 by 46 per cent” (p.11).

Details are outlined in Figures 1 and 2 below.

**Figure 1:** Economic and insured losses caused by natural catastrophes 1908 -2011

*Annual total economic and insured losses caused by of natural catastrophes globally from 1980–2011*



Source: © 2012 Münchener Rückversicherungs-Gesellschaft, Geo Risks Research, NatCatSERVICE – as at January 2012

Source: Geneva Association (2012), *Extreme events and insurance: 2011 annus horribilis*, Risk and Insurance Research, No.5 March 2012. “Characteristics of the extreme events in 2011 and their impact on the insurance industry”, Peter Hopper and Patra Low



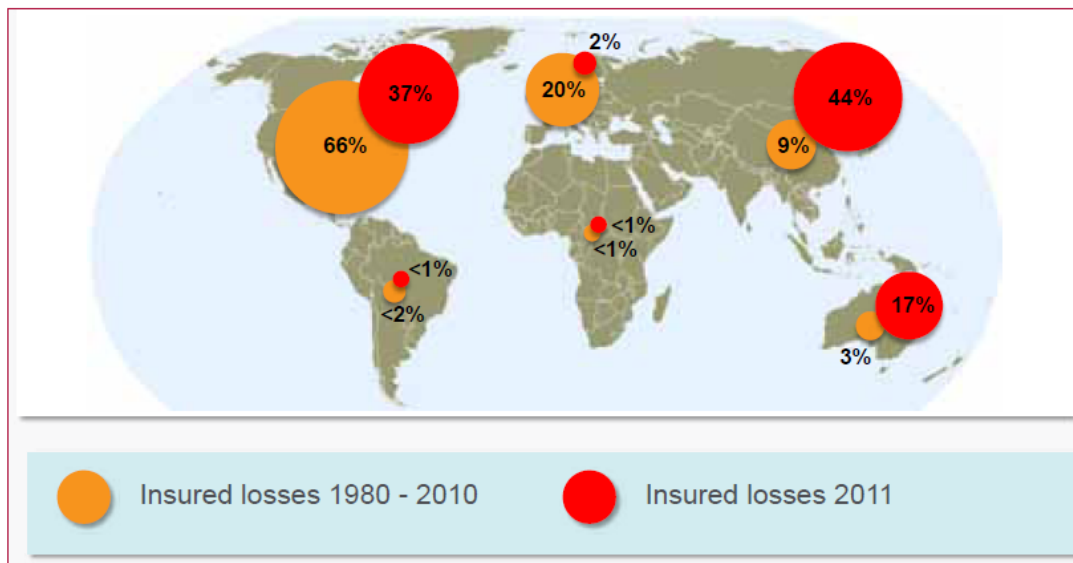
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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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**Figure 2:** Comparison of distribution of insured losses per continent

*Comparison of relative distributions of insured losses per continent in 2011 versus the long-term (1980-2010) averages*



Source: Munich Re, NatCatSERVICE, as at January 2012

Source: Geneva Association (2012), *Extreme events and insurance: 2011 annus horribilis*, Risk and Insurance Research, No.5 March 2012. "Characteristics of the extreme events in 2011 and their impact on the insurance industry", Peter Hopper and Patra Low

It can be seen from Figure 2 above that insured losses increased in the Asia-Pacific region (including Australia) as a proportion of total global losses. The 17% contribution to total insured losses should be compared with the 3% contribution of Australia and New Zealand to global GDP signifying that insured losses are a greater economic burden on Australia relative to the rest of the world.

## *Australia*

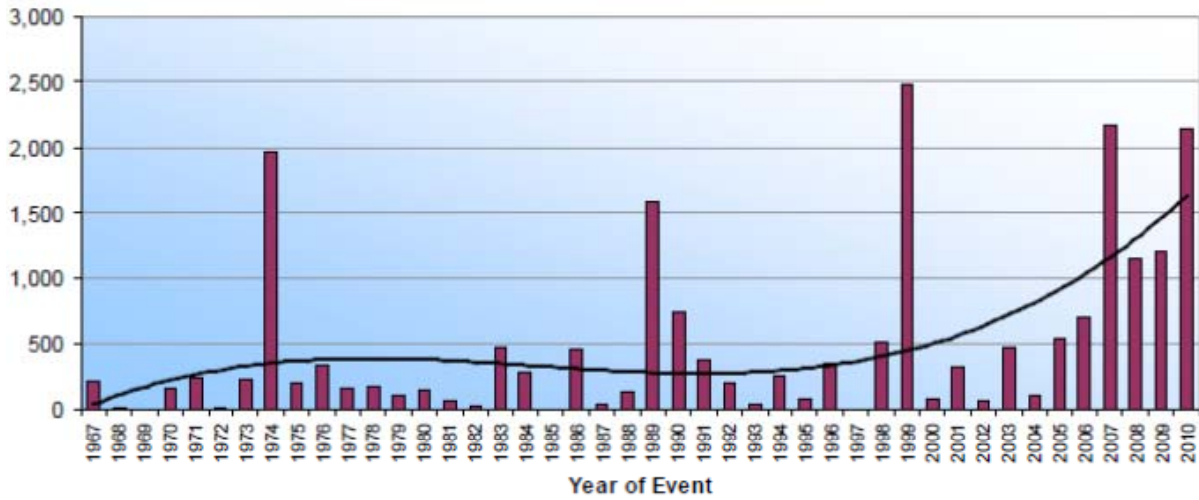
In Australia there has been an upward trend in natural disaster costs, particularly since 2000 (Figure 3). Importantly, there are a number of factors contributing to the increased economic and community impact of natural perils. We are seeing marked increases in population density generally and especially in areas that are prone to natural disasters (particularly around coastal areas), leading to more damage producing natural disasters of all types. In addition to the growing number of properties, the increasing value of building and contents and risk inappropriate construction play a role.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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**Figure 3:** Australian insured losses, historical disaster statistics (\$m, 2010 dollars)



Source: Chris Latham, Pater McCourt & Chris Larkin, *Natural Disasters in Australia: Issues of funding and insurance* November 2010.

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# INQUIRY TERMS OF REFERENCE

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## **4. 3(B) BASED ON GLOBAL WARMING SCENARIOS.... (I) PROJECTIONS ON THE FREQUENCY OF EXTREME WEATHER EVENTS, INCLUDING BUT NOT LIMITED TO DROUGHT, BUSHFIRES, HEATWAVES, FLOODS AND STORM SURGES,**

There is a consensus of scientific opinion that climate change is underway. What is less clear is how the changes in the broad climate will affect either the frequency or the financial impact of severe weather at a regional level now or, more importantly, in the future. Climate modeling has shown that it only takes small changes in the mean climate to generate large changes in extreme weather and this will have profound implications for the insurance industry.<sup>1</sup>

In Australia, climate change-induced alterations to temperature, humidity and wind, together with changes to regional weather patterns, have resulted in a warming trend across the continent. This is predicted to increase in the coming decades and therefore to potentially increase the danger of bushfire, more severe and frequent storms, and other weather events such as dust storms.

It may be premature to attribute the recent insured losses entirely to climate change. For example, a range of societal factors, such as bigger and more expensive houses and cars, are also contributing to the increase in insured losses. Nevertheless, there is no dispute that a major consequence of climate change is to make the understanding of weather-related risk more complex.

A number of factors make Australia particularly vulnerable to the increased threat posed by climate change. For example, more than 80 percent of Australia's population resides within 50 kilometres of the coast and about one quarter of Australia's population growth occurs within 3 kilometres of the coastline. These communities are particularly exposed to some of the most damaging extreme weather events, such as tropical cyclones, storm surges, windstorms, hailstorms and coastal river flooding (Figure 4 for the historical context).

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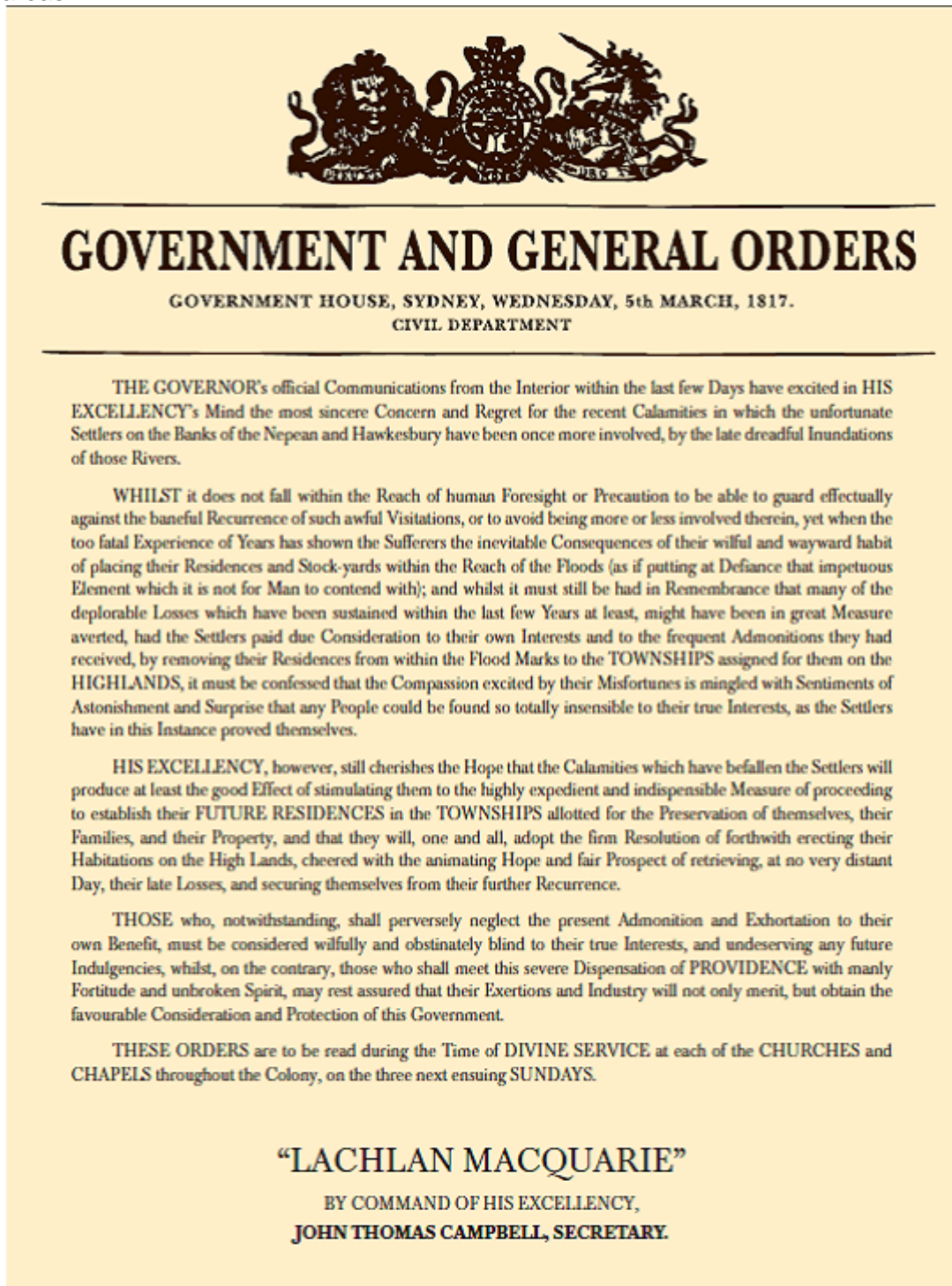
<sup>1</sup> The Need for a Multi-Level Approach to Climate Change—An Australian Insurance Perspective, Michael Wilkins, The Geneva Papers, 2010, 35, (pps.336 – 348)

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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**Figure 4:** Governor Macquarie's order regarding establishment of residences in coastal areas



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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The changes in geographical distribution of extreme events and changes in their severity / intensity should be considered as these could be as important as, or more important than, frequency alone. It should also be noted that current trends in greenhouse gas emissions are being observed towards the upper end of the range of climate change emission scenarios, rather than the more conservative mid-range projections that are often used as a basis for decision making.

The current projections of the frequencies and distributions of some extreme events, notably those of hail storms, are limited and incomplete.

## 4.1 FLOOD

Projections on the frequency of floods are difficult to provide. Analysis of rainfall events suggest an increased frequency of major river flooding in a fairly large area of central Western Australia and central South Australia-South West Queensland - inland New South Wales for the warmer part of the year in the future.<sup>2</sup>

There is currently no complete and comprehensive measure of the number of properties currently exposed to flooding beyond the National Flood Insurance Database (NFID). Created for the Insurance Council of Australia and its members, the NFID is made up of a non-uniform collection of mapping and flood risk information. The NFID is not complete due to out-dated flood mapping, inconsistent approaches to the determination of flood risk, refusal or inability of a large number of councils to release mapping, lack of consideration given to the effects of climate change or an absence of flood mapping being undertaken at all. Consequently, the number of properties at risk of flooding identified in Figure 5 below is likely an underestimate.

**Figure 5:** NFID modelling the number of 'at risk' residential addresses (out of 5 million)

	Extreme Residential Addresses >1:20	High Return Period 1:20 – 1:50	Medium Return Period 1:50 – 1:100	Low Return Period 1:100 - PMF
NSW	3,860*	68,913	24,929	16,874
QLD	51,506*	8,794	18,610	17,912
VIC	10,239*	3,860	5,757	4,297
SA	49,576*	1,927	787	7,848

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<sup>2</sup> [http://www.climatechangeinaustralia.gov.au/documents/resources/TR\\_Web\\_Ch5i.pdf](http://www.climatechangeinaustralia.gov.au/documents/resources/TR_Web_Ch5i.pdf)

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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WA	10,000*	206	124	171
TAS	4,100*	110	89	15

\*Low confidence numbers as some jurisdictions do not map the PMF risk

## 4.2 COASTAL HAZARDS

Storm surge, coastal erosion and sea level rise have many similarities to the issues related to damage produced by the flooding of rivers. In Australia, there are over 711,000 properties within 3 kilometres of the coast and below 6 metres elevation which are vulnerable to coastal hazards, of which 60 percent are located in NSW and Queensland<sup>3</sup>. It is important to note is that these addresses are not simply properties facing the ocean, they are adjacent to sea connected coastal waters, near lakes, lagoons, river banks and estuaries.<sup>4</sup>

A storm surge is a rise above the normal water level along a shore due to strong onshore winds and /or reduced atmospheric pressure. This causes water to release as a powerful rush over land, which can damage buildings, wash away roads and cause significant inundation<sup>5</sup>. Storm surge risk is of particular concern with the point risk of storm surge expected to rapidly increase over the coming decades due to the effects of climate change linked increases in sea levels.<sup>6</sup> The major impact of Hurricane Sandy on the US coastline and its infrastructure has highlighted the importance of understanding and preparing for the potential impact of storm surge on heavily populated coast centres.

However, the threat of storm surge for most parts of Australia has been limited to simple sea level rise scenarios rather than taking into account potential changes in the weather systems likely to produce a storm surge and the detailed bathymetry and coastal zone features that will modify and, in some cases, increase the threat of storm surge in coastal regions.

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<sup>3</sup> Insurance Council of Australia Response to the Report to the Council of Australian Governments on Natural Disasters in Australia, March 2006

<sup>4</sup> <http://www.climatechange.gov.au/publications/coastline/~/media/publications/coastline/5asections511512.pdf>

<sup>5</sup> [http://www.bom.gov.au/info/cyclone/storm\\_surge/storm\\_surge.shtml](http://www.bom.gov.au/info/cyclone/storm_surge/storm_surge.shtml)

<sup>6</sup> (Haigh, I.D., Pattiaratchi, C., 2010. 21st century changes in extreme sea levels around Western Australia. Proceedings of the 17<sup>th</sup> National Australian Meteorological & Oceanographic Society Conference, Canberra, Australia.



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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There is a need to more accurately quantify the risks facing properties in coastal and estuarine regions, particularly in locations where there is a merging of the riverine floods with coastal storm surge effects. It should be noted that losses from sea level rise and coastal erosion are not covered by insurance in any country.

## 4.3 SEVERE THUNDERSTORMS

Hail storm and flash flooding accounts for a majority of the insurable damage across Australia with Sydney (1999), Western Sydney / Blacktown (2007), Brisbane (2008), Melbourne (2010 and 2012) and Perth (2010) all having experienced new extreme events over the last decade or so.

IAG has a dedicated meteorology team which has undertaken research into the future climate impacts on severe hail storms in the Sydney region. Our research team believes we could see a doubling of hailstorms with hailstones greater than 10 centimetres in diameter in the greater Sydney region over the next 50 years.<sup>7</sup>

However, apart from this research – and although a very common and recurring cause of damage across Australia – there have been no thorough investigations into likely changes in the distribution or seasonality of these severe storms in the future<sup>8</sup>. There are currently no suitably reliable projections of likely future hail storm risks for cities such as Brisbane, Melbourne, Adelaide and Perth.

This research, with the involvement of the insurance industry, is very important if our major urban centres are to be made more resilient to the impacts of these storms in the future.

## 4.4 WIND STORMS AND CYCLONES

The IAG Research Team has also undertaken research which highlights that over the next 50 years, the number of the most destructive category 4 and 5 tropical cyclones forming in waters off Eastern Australia could increase and track further south. This is

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<sup>7</sup> ([http://www.iag.com.au/news/presentations/20111129\\_Wilkins\\_AmCham\\_Syd.shtml](http://www.iag.com.au/news/presentations/20111129_Wilkins_AmCham_Syd.shtml))

<sup>8</sup> Leslie, L.M., M. Leplastrier & B.W.Buckley (2008) Estimating future trends in severe hailstorms over the Sydney Basin: A Natural Perils Risk Assessment 14 IAG submission to productivity inquiry into regulatory and policy barriers to effective climate change adaptation. Climate modelling study. Atmos. Res Pp 37-51

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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likely to have an impact on the heavily populated areas of southern Queensland and northern NSW. There are also major impacts along the NSW coast from intense low pressure systems called East Coast Lows<sup>9</sup>.

## 4.5 BUSHFIRES

The Climate Commission issued a paper in response to the extreme heatwave experienced across Australia in early January 2013 and the associated bushfires - *“Off the charts: Extreme Australian summer heat”*.<sup>10</sup> The Paper notes that “[a]lthough Australia has always had heatwaves, hot days and bush bushfires, climate change is increasing the risk of more frequent and longer heatwaves and more extreme hot days, as well as exacerbating bushfire conditions.” The Commission went on to conclude that “Climate change has contributed to making the current extreme heat conditions and bushfires worse”. The projections relating to bushfire need to extend beyond that of frequency to include intensity as it is the intensity of the bushfires that determines the extent to which the fire fighting agencies can combat wildfires.

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<sup>9</sup> A recent example of one such extreme event is found here: Verdon-Kidd, D.C., Kiem, A.S., Willgoose, G. and Haines, P. 2010. *East Coast Lows and the Newcastle/Central Coast Pasha Bulker storm*. Report for the National Climate Change Adaptation Research Facility, Gold Coast, Australia.

<sup>10</sup> [http://climatecommission.gov.au/wp-content/uploads/CC\\_Jan\\_2013\\_Heatwave8.pdf](http://climatecommission.gov.au/wp-content/uploads/CC_Jan_2013_Heatwave8.pdf)



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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## 5. (II) THE COSTS OF EXTREME WEATHER EVENTS AND IMPACTS ON NATURAL ECOSYSTEMS, SOCIAL AND ECONOMIC INFRASTRUCTURE AND HUMAN HEALTH.....

The natural disasters of the past five years in Australia have caused billions of dollars of damage to private property and public infrastructure. The Australian and Queensland Governments have incurred over \$7.5 billion in reconstruction and recovery costs related to the 2010-11 Queensland floods and Cyclone Yasi<sup>11</sup>. Insurers have paid out more than \$3.7 billion to policyholders for the same events. Even before the events of the last five years Australia's annual average insured losses due to natural perils was estimated at around \$1 billion.<sup>12</sup>

The economic cost does not provide a complete picture of the impact natural disasters have had on the Australian community – there are also social and community costs. An affected community will include people directly affected by the disaster in terms of injury, death, possessions or accommodation. There will also be people in a community who, although not appearing to be obviously affected, may be experiencing consequences from the disaster such as those who have witnessed an event, helped others affected, become distressed by hearing information about the emergency or felt they were at potential risk of the emergency.<sup>13</sup>

IAG has had firsthand experience of the impact on our customers during our disaster response activities following natural disasters, most recently in the NSW and Victorian bushfire of January 2013. To help make the claim as easy as possible for our customers in times of major natural events, IAG deploys two assessors to each claim, allowing one assessor to manage the procedural requirements, while the other provides emotional support to the customer. Although we use this strategy in a range of claims, we find it most beneficial when dealing with bushfire claims as the rapid effect of fire means people often vacate their homes with minimal possessions, leaving customers understandably very shocked and emotional.

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<sup>11</sup> Queensland Reconstruction Authority Strategic Plan 2012 <http://www.qldreconstruction.org.au/u/lib/cms2/strategic-plan-2012.pdf>

<sup>12</sup> Ryan Crompton and John McAneney; The Australian Journal of Emergency Management, Vol. 23 No. 4, November 2008

<sup>13</sup> "Australian emergency management handbook: Community Recovery"  
<http://www.em.gov.au/Publications/Australianemergencymanualseries/AustralianemergencyhandbookCommunityrecovery/Pages/default.aspx> Ch 6

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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A significant proportion of post-disaster Australian and State Government funding has been directed toward addressing the social and/or community impact of extreme weather in recent years. The Natural Disaster Relief and Recovery Arrangements (NDRRA) specifically cover social impact costs including personal and financial counselling aimed at alleviating personal hardship arising as a direct result of a natural disaster.<sup>14</sup> The NDRRA also provides for the development of a community recovery fund in circumstances where a community is severely affected and needs to restore social networks, community functioning and community facilities.<sup>15</sup> Similarly, the Queensland Reconstruction Authority identified 'human and social' recovery as one of the six lines of reconstruction following the Queensland floods.

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<sup>14</sup> The Australian and State Governments will split the cost of these support services 50:50 for any disaster that exceeds the small disaster threshold

<sup>15</sup> The Australian Government will contribute up to 75% of the cost of a fund provided for under Category C of the NDRRA.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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## **6. (III) THE AVAILABILITY AND AFFORDABILITY OF PRIVATE INSURANCE, IMPACTS ON AVAILABILITY AND AFFORDABILITY UNDER DIFFERENT GLOBAL WARMING SCENARIOS, AND REGIONAL SOCIAL AND ECONOMIC IMPACTS**

### **6.1 THE VALUE OF INSURANCE TO SOCIETY**

Insurance brings significant benefits to society and the economy by promoting financial stability, helping relieve the burden on governments for providing social protection of citizens via welfare, encouraging loss mitigation, and generally making people more aware of the reality of risks and their consequences through information and pricing signals.<sup>16</sup>

The most significant contribution of insurance to society is the provision of risk sharing, risk transfer abilities and loss prevention measures. General insurance products allow individuals to avoid the financial burden of incurring damage resulting from a specified event. Insurance supports the individual by keeping his/her financial situation stable by decreasing the level of unnecessary (individual) precautionary savings which enables capital to be allocated to higher-return projects. Thus, insurance stimulates investment and consumption by reducing the amount of capital tied up in relatively unproductive areas such as a traditional banking product.<sup>17</sup> Additionally, unlike insurance, savings may not be sufficient to cover losses following an insurable event in which case governments may be called upon to cover the costs.

The affordability of insurance is an important social issue. Private insurance policies aren't just a safety net for businesses and individuals; they are a safety net for the taxpayer. When someone drops out of the safety net or is underinsured, there is a potential economic impact on the rest of us. Annually, the private insurance industry injects \$20 billion in claims payments directly to those in need following an adverse event. Following an extreme weather event, claims expenditure flows throughout the economy providing an important impetus to recovery in the longer term, especially by supporting employment and businesses continuity. Clearly it is in our national economic interests to create the conditions to encourage Australians to take

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<sup>16</sup> The Social and Economic Value of Insurance, Grant E, The Geneva Association, 2012

<sup>17</sup> The Value of Insurance to Society, Hoppe K, Geneva Association, 2012

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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responsibility for their own personal risks via insurance and it has been recognised that the private sector is the most efficient provider of general insurance and ‘Government intervention and financial support of the insurance market is only warranted in cases where there is a clearly identified market failure’.<sup>18</sup>

In order to examine the availability and affordability of private insurance - and develop options to address any problems identified it is necessary to have an understanding of how insurance is priced and the factors driving premiums.

## 6.1.1 Which weather related events do insurance cover?

Insurance is a community product, spreading risk to protect customers when risk becomes reality. In addition to natural perils covered by home and contents insurance, insurance policies can cover a range of loss causing events such as water and oil leaks, theft and vandalism.

Damage that is covered by home building and contents insurance that is related to extreme weather events include:

- Storm - covers violent wind, cyclone and tornado, thunderstorm, hail, rain or snow and the sudden excessive run-off of water as a direct result of a storm in your local area;
- Flood - the covering of normally dry land by water that has escaped or been released from the normal confines of any lake, or any river, creek or other natural watercourse, whether or not altered or modified; or any reservoir, canal, or dam;
- Lightning;
- Bush/ grass fire; and
- Storm surge (cover is offered by some but not all insurers).

## 6.2 HOW IS INSURANCE PRICED?

At its simplest, insurance is about pooling resources to share risks. Our aim is to manage the pool and ensure there is enough money coming into it to through premium payments to meet the cost of future claims as they arise. To do this, an insurance company has to put a price on the likelihood of someone making a claim from the pool. This is done by estimating the chance a claim will be made and multiplying this by the average value of a claim.

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<sup>18</sup> speech by Jim Murphy Keynote Address to the Annual General Insurance Exchange Jim Murphy, Executive Director | Markets Group, 19 March 2012

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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For home insurance, the premium is calculated by combining:

- Pricing factors (the likelihood of a claim being made)
- Discounts
- Policy options
- Cost of choosing to pay by the month
- Government charges

Our Premium, Excess and Discounts Guide provides more detail about how we calculate a customer's premium.

*(Refer to Appendix 2)*

## **6.2.1 Pricing Factors: address level or household pricing**

Pricing factors are indicators of the possibility that a claim will be made. IAG assesses an individual customer's personal circumstances to ensure their premium reflects their risk. This takes into consideration a property's exposure to uncontrolled events like storm, flooding and bushfire. Insurance premiums should reflect the risk to signal to individuals and the community the degree of risk in their locality – this provides an incentive to implement preventative and protective measures to reduce their vulnerability.

Household pricing recognises and rewards our customers as individuals, each with their own risk profile, instead of treating them as a postcode, demographic group or risk factor. We are focusing on making our pricing increasingly more granular and dynamic –this includes individual street addresses through geocoding and data on individual risk factors. This will ensure we are targeting the right risks for the right price.

IAG deploys pricing at a household level for many types of cover including extreme weather events, theft and single house fires. For example, the distance from a fire station can impact the size of a fire claim and is therefore relevant in calculating the premium. Similarly, although a customer may live in an area at risk of flooding their house may be elevated to a height that significantly reduces the potential damage that would be caused by a major flood.

Some of the things we look at for motor insurance include where the motor vehicle is kept, the claims history, chosen excess, age of the insured driver, whether the motor vehicle is privately or commercially used and the type of motor vehicle.

*(Refer to Appendix 3 – Section A)*

# INQUIRY TERMS OF REFERENCE (CONTINUED)

**Figure 6 : Common risk rating factors**

MOTOR	HOME	BUILDING	CONTENTS
The address where the vehicle is kept	The location of your home	√	√
Age and gender of the owners and drivers	The amount your home and contents are insured for	√	√
The vehicle, security features and its fuel efficiency	The age of the insured	√	√
Whether the vehicle is financed and the type of finance	Who occupies the home (e.g. owner or renter)	√	√
The number and type of claims and incidents that all owners and drivers have had in the last 5 years	The basic excess amount	√	√
The amount the vehicle is insured for	The way you use the home (e.g. residential or business use)	√	√
If the premium is paid by installments	The flood risk of your home	√	√
The way the vehicle is used (private, business, driving school)	The construction material of the home and roof	√	√
	The year the home was built	√	X
	The type of alarm fitted	X	√

## 6.2.2 Premium components

In addition to pricing factors, there are a number of other business related costs built into the premium. These include:

- Reinsurance – buying cover from other insurance companies to spread the risk from large major event claims;
- Expenses – cost of estimating, collecting and managing each insurance policy, government taxes and charges;
- Cost of capital; and
- Shareholder return.

Other considerations that may influence the final premium include:

- Portfolio objectives (growth or profit)
- Competitive position
- Volatility (normally measured by risk of natural perils and deviation of underlying risk)

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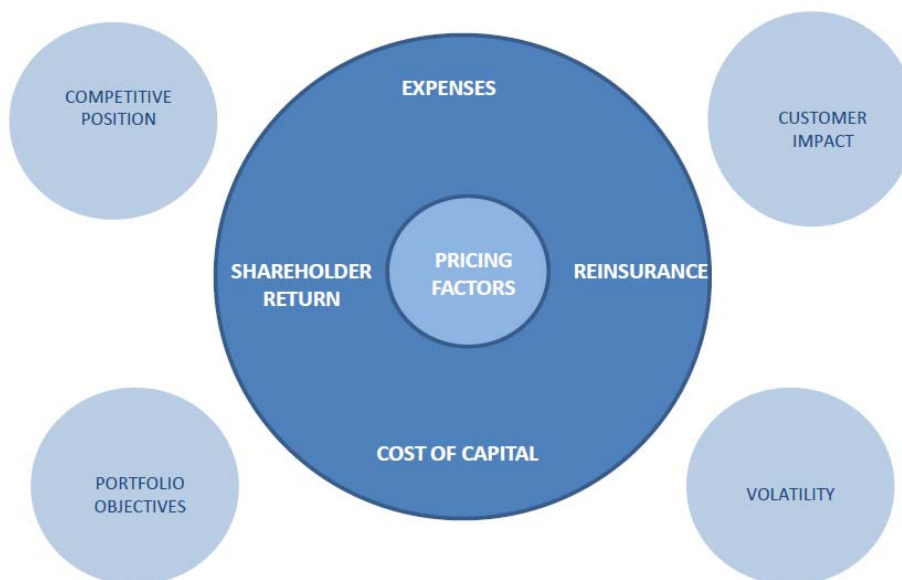
# INQUIRY TERMS OF REFERENCE (CONTINUED)

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- Customer impact (for example insurers may choose to move pricing over time based on individual customer impact by applying a cap to the level of premium increase).

*(Refer to Appendix 3 – Section B)*

**Figure 7:** Premium components



## 6.2.5 What factors drive up premiums

*(a) Frequency of natural disaster/ extreme weather events*

There have been a number of recent major disasters in Australia, such as the flooding, storms and cyclones in Queensland, flooding and storms in Victoria, New South Wales and South Australia, and bushfires in Western Australia. These events have led to a significant increase in claims costs for insurers across Australia and this has resulted in the need review risk ratings and increase premiums.

*(Refer to Appendix 3 – Section B)*

*(b) Reinsurance*

As a consequence of the major natural events, insurers have also experienced increases in the cost of their reinsurance. Reinsurance is a premium that insurance

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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companies pay to global reinsurance companies to cover a portion of our risks. This means that when major disaster strikes the hundreds of millions of dollars that it costs to pay claims is shared between IAG and the reinsurance company.

Australian insurers are paying more for reinsurance. The nature of reinsurance is that it is based on what might happen in the future taking the past into consideration. Given the number of disasters we have had reinsurers now believe Australia is more risky for these sorts of events. While flood is a risk that affects a small proportion of the Australian population, other natural disasters such as hailstorm can strike almost anywhere in Australia.

*(c) Increased claims cost (post disaster inflation)*

In addition to the cost of the actual claim, in the case of large catastrophes, claims are subject to post loss inflation. This is where a large scale loss leads to supply and demand led inflation of costs. This can become a significant factor in customers being able to rebuild their home using their insurance payout. While it might be argued that Total Replacement Cover could overcome this problem, the reinsurance for this type of cover is being progressively withdrawn. Total replacement cover includes all the costs to rebuild a customer's home to the standard it was prior to an event. Sum-insured cover is more common and will cover the customer up to a set amount.

*(d) Lack of certainty/ ability to predict disasters*

Lack of clear data or uncertainty about risk generally leads to a more conservative approach to pricing; that is, insurers will be likely to place risk at the higher end of the spectrum and price accordingly. Having comprehensive and accurate data means insurers will be able to be more certain about the extent of risk they are taking on and can price more appropriately.

It should also be noted that a changing, less predictable climate affects insurers ability to rely on historically derived data and therefore has the potential to reduce an insurer's capacity to accurately assess, price and spread weather-related risk.



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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*(e) Lack of adaptation to weather related risk*

Given IAG's household pricing approach explained earlier, individuals pay a premium that reflects their risk. A failure to reduce natural hazard risks with effective disaster mitigation has contributed to higher premiums.

As noted above, the understanding of natural peril risk at both the government and community level has been undermined by a lack of national, comprehensive natural peril data and mapping. This has itself contributed to poor planning decisions leading to development in areas of unacceptable risk. We have also seen widespread inappropriate building design and construction leading to a built environment that is susceptible to damage. For example hail storms produce significant vegetation debris that then blocks poorly designed or maintained drainage systems that then exacerbates flash flood related damage. Local, state and national governments have failed to make adequate investments in strategic disaster mitigation initiatives and infrastructure. Finally, and perhaps most importantly, our national perspective on natural perils has been focused on responding and rebuilding after an event rather than preparation and mitigation.

*(f) Flood premium drivers*

Flood is quite different to other risks in that flood can be quite predictable in some locations. Floods also affect a relatively small number of properties and can cause severe damage to property depending on the height it rises to.

Flood is inevitable for a small percentage of residents. In certain locations – on floodplains or around watercourses - riverine flooding is a guaranteed event every few years.<sup>19</sup> This is quite different to other risks, such as storms, which tend to be more random.

Risks such as storm also affect a wider spread of the population, who can share the cost of the risk. The number of properties likely to be affected by flood is small, meaning that cross subsidisation, or spreading of the risk between all other customers is not possible. If we shared the cost of flood cover across all our customers' policies, they would be paying a significant premium for something most will never need which goes against our household pricing approach explained earlier.

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<sup>19</sup> The Bureau of Meteorology's records for the Bremer River in Ipswich, for example, show there have been 11 major floods of over 15 metres there over the past 170 years.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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When major flooding occurs the damage to property is severe, as seen in Brisbane and more recently in northern NSW. For example, just half a metre of water through a home is likely to damage flooring, carpets, skirting boards, kitchen and bathroom cabinets, walls, the electric wiring, and can also result in structural damage costing thousands of dollars to repair. The cost of the damage increases rapidly according to the depth of the water from the floor and can mean the difference between replacing just carpets, to replacing entire kitchens, contents and a substantial structural rebuild. A similar position applies in respect of storm water run-off (sudden, excessive run-off of water as a direct result of a storm in a customer's local area).

This cost of damage is what determines the insurance flood premium, which needs to reflect the risk. Calculations will vary depending on any mitigation measures undertaken, for example, elevation of the dwelling above flood height, use of water proof building materials, or external mitigation activities such as levees (refer Appendix 2, Section E). If the height a flood will rise to is known, calculations on costs to repair damage affected by flood can be done by insurers. It is important to note that governments, planners, developers, architects and home purchasers all make decisions that contribute to this cost, that is ultimately passed on to the consumer.

Using a specific example, consider a house on the Bremer River flood plain (sub-catchment of the Brisbane River) and conservatively assume that the cost of significant repair to the house's structure and total loss of contents after each of the major floods referred to above is about \$150,000 in today's terms. Nominally, the annual expense of the flood risk alone for this conservative example is well over \$5,000 before adding for theft, fire, state government taxes or other considerations.

It is clear that the cost of repairing flood damage can be extremely expensive. This potential cost needs to be reflected in premiums if insurers are going to be able to provide cover for flood without exposing themselves to unsustainable losses should a major flooding event occur.

*(Refer to Appendix 3 – Section D)*

## *(g) Strata premium drivers*

During the last few years, there has been an increase in insurance premiums in far north Queensland; strata insurance premiums in particular. In the recent Australian Government Actuary (AGA) report 'In the Wake of Disasters Volume Two: The affordability of residential strata title insurance', the AGA claimed that a convergence of events had led to higher premiums. The AGA concluded that the main contributing

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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factors included: historical under-pricing; recent losses caused by natural disasters; and the recent trend for insurers to allocate the cost of reinsurance to particular insurance policies on a risk-weighted basis rather than by simple apportionment. The AGA found no evidence of price gouging on the part of insurers.

For some insurance business segments such as strata insurance, it is often only possible to obtain quite poor estimates of the cost of the product being sold. This makes 'accurate pricing' of these segments difficult.

## 6.3 THE AVAILABILITY AND AFFORDABILITY OF INSURANCE IN AUSTRALIA

### 6.3.1 The Australian Market

General insurers are commercial organisations that have a profit incentive to ensure that risk is assessed and dealt with objectively.<sup>20</sup> There were 122 insurers licensed to conduct general insurance business at 30 September 2012. Of these 110 were direct insurers and 12 were reinsurers. The annual net earned premium for direct insurers was \$26.9 billion and net incurred claims were \$18.2 billion, up 4 per cent from the previous year.<sup>21</sup>

The general insurance industry in Australia is considered by most industry experts as a competitive and dynamic sector with ever increasing transparency of pricing and policy features.<sup>22</sup> The industry is highly regulated, with general insurers subjected to the corporate regulatory regime that applies to Australian incorporated businesses generally, as well as a range of industry specific regulations at Federal (eg *Insurance Act 1973*, *Insurance Contracts Act 1984*), State and Territory levels. The general insurance industry also self-regulates with the Insurance Council's *General Insurance Code of Practice*.

The Australian general insurance industry is viewed as having low barriers to entry in short-tail classes of insurance - limited to the national regulatory requirements, including APRA's minimum capital and solvency requirements and Australian Securities and Investment Commission (ASIC) licensing requirements.

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<sup>20</sup> The Social and Economic Value of Insurance, Grant E, The Geneva Association, 2012

<sup>21</sup> APRA, Quarterly General Insurance Performance Spetember 2012 (issued 29 November 2012)

<sup>22</sup> KPMG 25<sup>th</sup> General Insurance Industry Survey 2011

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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## 6.3.2 Affordability and Availability

In general, private general insurance is available and affordable to the majority of the Australian community. Historically, home insurance premium increases have been lower than CPI with increase above the CPI in the last few years (*Refer to Appendix 3 – Section E*). Although there has been a significant increase in premiums in the last few years, the average home insurance premium when compared to other household expense remains relatively affordable (\$11.33 compared with total household weekly spend of \$1236.28).

**Figure 8:** ABS Household Expenditure 2009-2010 (*latest available*)

Expense (sample)	Home Insurance	Home Repairs	Fuel & Power	Food	Alcohol	Tobacco	Household Services	MV insurance	Personal care
\$per week	11.33	23.04	32.52	204.20	32.35	12.57	67.93	12.31	24.06

Source: ABS: 6530.0 Household Expenditure Survey, Australia: Detailed Expenditure Items, 2009-10

While flood cover was extended to the market during the same period, the overall cost impact of this industry wide development across all insureds was minimal. However, premiums have risen sharply for those in areas of high or extreme flood risk (an issue considered further below).

Although non-insurance has been a chronic problem with little improvement over the last 10 years, the reasons for non-insurance and underinsurance cannot be entirely attributed to affordability. A consumer survey on household insurance in 2012 indicated that non-insurance is highly correlated with non-insurance of parents and also family and friends, suggesting that cultural factors (and, possibly, language barriers) are contributors to non-insurance.<sup>23</sup> A comparison with motor insurance also demonstrates that affordability is not the only consideration when purchasing insurance. Although motor insurance is more expensive (home insurance as a proportion of AWE remains less than motor insurance), consumers have less underinsurance on their motor vehicles compared to their most valuable asset - indicating a lack of understanding of risk management.

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<sup>23</sup> Dr Richard Tooth (2012), Sapere Research Group - Australian Household Insurance: Understanding and Affordability, February 2012.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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However, it is clear that there are segments of the population where affordability is the primary barrier to accessing insurance. There is a proportion of the Australian population that has long been excluded from mainstream financial services, including insurance. In 2011 approximately 17.2 percent of the adult population were excluded from financial services with 18.9 percent not having access to general insurance (home contents and comprehensive motor).<sup>24</sup> A 2011 study by the Brotherhood of St Laurence also demonstrated that levels of non-insurance among low-income Australians are well above the national average.<sup>25</sup>

Recently there has emerged a second group that are unable to access insurance due to cost. As a consequence of recent natural disasters, there are now high risk areas where coverage for certain weather related perils, notably flood and storm water run off has become prohibitively expensive to many property owners living in those areas. Geographical pockets such as strata in far North Queensland and stormwater coverage in the Illawarra region that have attracted recent media attention are examples of this.

## 6.4 OPTIONS TO INCREASE AFFORDABILITY/ POSSIBLE SOLUTIONS

Insurers must continue to innovate and ensure they have products that adequately reflect new and emerging risks. If insurers lose touch with the risks affecting their customers, more people will take the risk by opting out of insurance which would have an economic impact beyond the insurance industry and would ultimately harm the economy. As a consequence, governments would be increasingly pressured to intervene following disasters – an incredibly inefficient use of taxpayer resources.

IAG's businesses are addressing the issue of affordability and emerging risks on multiple fronts. We expanded flood cover to all our home and contents customers across Australia in 2012. NRMA Insurance and CGU introduced product covers, flexible excesses and payment options, such as a suite of motor products from basic covers through to mid-tier and premium products. These are providing practical solutions for customers while ensuring we maintain the most appropriate price for the risk. More broadly, IAG believes that we must proactively seek to understand how the risk environment is changing, so our products are appropriately designed and priced.

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<sup>24</sup> Measuring Financial Inclusion in Australia, The Centre for Social Impact for National Australia Bank, May 2012

<sup>25</sup> Collins D 2011 *Reducing the Risks, Improving access to home contents and vehicle insurance for low income Australians*, Brotherhood of St Laurence

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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## 6.4.1 Improving community resilience to extreme weather events

Extreme weather events are driving up prices – quite significantly in some areas – but this is largely because of where we build our houses and how we build them. Although there are some things the industry could do to put downward pressure on premiums, the only truly effective way to tackle the issue is through a nationally coordinated and well-resourced disaster resilience program that reduces the impact of extreme weather events.

In February 2011 the Council of Australian Governments endorsed the National Strategy for Disaster Resilience and agreed to actions to implement priority outcomes. Yet we still see Governments' relationship with these issues oscillating between a lack of ownership and possessiveness. We require leadership and co-operation at all levels of government as we need to prioritise and plan in a co-ordinated way.

IAG believes there is a need for greater emphasis by governments and in particular the Australian Government on community adaptation to extreme weather events, including stronger building codes to protect structures from extreme weather, more risk-appropriate use of land and greater emphasis on hazard mitigation infrastructure.

IAG recognises the crucial role of government in providing a comprehensive and clearly-defined regulatory framework that promotes community resilience to risk and facilitates more affordable premiums and more predictable claim costs. Government has a particular role in encouraging and regulating risk-appropriate development of the built environment and providing an appropriate emergency services framework.

Further, future uncertainty over the changing climate has the potential to increase the frequency and severity of weather related losses in Australia. Without appropriate risk assessment, mitigation and adaptation measures to offset these uncertainties the cost of insurance is very likely to rise, with some locations becoming too expensive for consumers to bear the cost of insurance or leading to some insurers withdrawing in part or totally from that market. As the affordability of insurance decreases and insurers withdraw from the market it is governments who will be called upon to fill the economic void and cover the cost of repair and reconstruction currently met by insurers.

It is also important that policy and funding decisions around extreme weather resilience measures are based upon the most likely changes in climate and severe weather. From an infrastructure perspective, the designs utilized should reflect the climate change projections relevant to the life-cycle of the structures / infrastructure being planned.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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IAG suggests that key elements of an effective weather risk resilience strategy are:

*(a) Understanding the risk including access to flood mapping and related data*

Private insurance can be kept more affordable if the insurance industry is provided better access to the datasets that help to quantify where and what the risks of damage are. With respect to floods there is little centralised information on the location and extent to which levee banks and similar structures can protect communities from the risks posed by floods.

Reliable knowledge of the types and levels of risk enables appropriate mitigation and retrofitting works to be implemented across the highest risk areas and properties in many cases, thereby reducing the risk and extent of damage for given types of severe weather events. This requires a comprehensive knowledge of the status of the built environment – such as building locations and attributes, high resolution digital elevation data and comprehensive vegetation / bushfire fuel estimates, including information concerning the status of mitigation activities such as fuel reduction burns.

This information can also assist in modifying building codes and developing regionally specific stringent codes in sub-regions found to be particularly vulnerable to certain types of damage, such as by bushfire, river flood or storm surge.

The availability of high-level and comprehensive data is particularly important for accurately pricing flood insurance. Floods don't affect regions uniformly and can damage the same area repeatedly over time, while not affecting other land very close by. Further, the impact of flooding will vary greatly depending on the specific attributes of a building (the materials it is made from and its design) as well as the nature of the flood including its depth and velocity. Consequently understanding building and content vulnerability to flood, and the likely cost of repairing flood damage, is very complex. Having the best available data – particularly flood surfaces, digital elevation data, building attribute information and floor heights – improves the accuracy of this assessment and reduces the risk of overpricing or under-pricing flood insurance premiums.

In the absence of any external risk or price mitigation measures, more accurately pricing flood insurance premiums on an address level is very likely to exacerbate the affordability issue for those at high risk of flood. However, doing so will more precisely identify those properties/individuals that should be the focus of any measures aimed at addressing affordability at least where flood premiums are concerned. Further, there



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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will also be many properties where the availability of more accurate data leads to a downgrading of their risk and reduced premiums.

As part of its response to the Natural Disaster Insurance Review (NDIR) the Commonwealth announced it would commit \$12million to develop a flood risk information portal, hosted by Geoscience Australia, to provide a single national access point to existing flood mapping data. The Government also announced the portal would be complemented by the development of national guidelines, covering the collection comparability and reporting of flood risk information. State and Territory Emergency Management Ministers have expressed their support for these initiatives.

IAG is encouraged by the progress made toward implementing this commitment including the launch of the first phase of the online National Flood Risk Information Portal (NFRIP) on 19 November 2012. However, we are concerned by the inconsistent and often non-transparent approach to sharing flood risk information still prevalent among some local and state authorities. While we understand the NFRIP project is aimed at addressing these issues we believe leveraging NPA funding for flood risk studies and mapping to ensure State and local authorities make all their flood risk information – including digital and geospatial data – available is vital to the success of the project.

As noted in our submission to the Productivity Commission's Draft Report Draft Report – Barriers to Effective Climate Change Adaptation the Commonwealth Attorney-General confirmed a review of the NPA was being undertaken before it expires on 30 June 2013. We submit that any new NPA should include a requirement that states and territories provide the Commonwealth with all flood risk studies and related information (including geospatial data and digital elevation data) funded under the National Partnership Agreement (NPA). The states and territories would therefore need to ensure funding agreements with local authorities facilitated the collection of this information. Further, the Commonwealth should impose as a condition on the commencement of a new NPA that the states and territories provide the Commonwealth with all existing flood risk information funded under the existing NPA that is in their control or that they can obtain from local authorities.

In addition to the NFRIP, IAG also strongly supports the development of a national database of floor heights as mandated by state or local building codes or development controls for flood prone areas. Currently, we rely on individual customers to provide us information about the floor height of their properties in order to build this into their premium. Quite often we do not receive this information until the customer has been offered a higher premium based on an assessment of flood risk at 'ground level'. A national database of mandated minimum floor heights would enable insurers to overlay



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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this information into all of our premium calculations at the outset. For example, if we know that all properties built in a certain suburb after 2005 are required to have a minimum floor height above the 1:100 flood level we can presume that all properties in that suburb will meet that requirement.

## *(b) Building Standards*

IAG's post-event analysis of building damage after a number of major natural disasters indicates there is a crucial role for government to support community resilience by ensuring that new buildings in "at-risk" areas are constructed to withstand hazards such as tropical cyclones, storm surge, severe storms, hailstorms, bushfires and flood.

Until now, building code standards have focused in principle on protecting life and safety. IAG suggests there is scope to enhance building standards so that they also cost-effectively protect the property itself. It is important that building standards are adjusted to withstand extreme weather events based on post natural disaster research.

In July 2012 the Australian Building Codes Board issued a Consultation Regulatory Impact Statement (RIS) on a proposed standard to address the risk of floods to new residential buildings to be incorporated into the National Construction Code (NCC). While IAG supports the effort to create a national standard the proposal remained focused on life and safety objectives. Our submission on the RIS emphasised that reducing the extent of damage and the costs of re-instating a property following flood should be an objective of any standard included in the NCC.<sup>26</sup>

Building codes need to be extended beyond the normal principal place of residence and commercial buildings to include all forms of outbuildings and structures above an agreed size, such as garages, pergolas, sheds and anything else that could turn into a projectile in a tropical cyclone or other severe storm. Externally fitted structures such as air conditioners and solar panels should also have a building code to ensure at least a basic level of structural integrity in the event of a major storm - including hail storm.

One potentially useful approach could be to develop a form of resilience rating given to buildings, and especially external claddings and internal walls in flood prone areas - similar to the star ratings systems used for energy efficiency and water use. A five star cladding, solar panel or air conditioner should be able to withstand the wind effects of a Category 5 cyclone, for example. Once resilience ratings were widely in use there

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<sup>26</sup> See IAG Submission on Consultation Regulatory Impact Statement for Proposal to Address the Risk of Floods to New Residential Buildings 17 August 2012

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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would be scope for the insurance industry to offer lower premiums to those people in more resilient buildings compared to those in unrated buildings, thereby providing a financial incentive for individuals to try to self protect and a tool for the construction industry to offer more resilient buildings to clients.

## *(c) Planning Codes*

Government has a crucial role to play in risk-appropriate land use planning and zoning. Land that is, or becomes, an unacceptable risk from hazards such as tropical cyclones, severe storms, hailstorms, bushfires and flood should not be zoned for residential or commercial use. Without sound and consistent government controls, there is little to prevent ongoing building in locations of extreme vulnerability.

Improved land-use planning will involve a commitment by Government to develop national land use planning criteria that prohibits inappropriate land-use in Australia. This is a particular challenge for Local and State Government if not supported by a consistent Australian Government approach to such matters. The example of the New Zealand Government offering to purchase land in the “red zone” of Christchurch is particularly relevant. A critical element of land use planning will be to ensure that the expected impact of climate change on the level of risk in a location is included the assessment of the vulnerability of an area before it is zoned for construction. Assessment of the current level of vulnerability is likely to be insufficient over the lifetime of a building under many climate change scenarios.

Some of the strategies focusing on protecting life and built property are achieved through land use planning and zoning instruments. Strategies include deep setback of buildings from rivers/shorelines; relocation of buildings or infrastructure (including capacity for emergency relocation of demountable buildings); and enhanced monitoring, emergency warning and evacuation procedures. Additional measures available include investment in permanent engineering structures such as flood barriers, canals, dykes, pumps, levees, and importation of fill; plantings (such as dune grasses, mangroves) to absorb water and/or stabilise erosion-prone surfaces; sacrifice of land and land buyback schemes.

## *(d) Hazard mitigation infrastructure funding/ investment*

All levels of government – led by the Australian Government – must place greater emphasis on building community resilience to extreme weather events and significantly boost their investment in natural hazard mitigation infrastructure including levees,

# INQUIRY TERMS OF REFERENCE (CONTINUED)

barrages, flood gates and improved drainage that will protect assets like homes and businesses, and lower the cost of risk (*Refer to Appendix 3 – Section F*).

While the insurance industry is well placed to continue to play a leading role in encouraging action on adaptation, to make our communities stronger and better able to withstand catastrophes, there needs to be a focus on increasing the level of investment in disaster mitigation and resilience strategies. For example, the \$27 million per annum allocated for mitigation works under the National Partnership Agreement on Natural Disaster Resilience is inadequate. Additional funding is needed to allow additional protective works including barrages for unusual tides, levee banks, sea walls, properly maintained fire breaks and access trails, improved drainage and dams. Infrastructure investment has the double advantage of being a down-payment for future resilience and an economic generator.

The emergency management community generally accepts that one dollar spent on mitigation can save at least two dollars in recovery costs. Australian Government spending on mitigation initiatives represents around only 3 percent of what it spends on post-disaster recovery and reconstruction.

**Figure 9:**

FY	Mitigation and resilience*	Recovery and reconstruction**
09/10	\$21.6M	\$402M
10/11	\$25.2M	\$997M
11/12	\$25.7M	\$3.8B
12/13	\$26.1M	\$451.3M
13/14	\$21.6M	\$1.94B
14/15	\$21.6M	\$1.16B
15/16	\$21.6M	n/a

\*Funding provided to States and Territories for disaster resilience initiatives under the National Partnership for Natural Disaster Resilience

\*\*Funding provided to States and Territories for recovery and reconstruction under the Natural Disaster Relief and Recovery Arrangements.

Source: Australian Government Budget Papers.

Based on these figures, and the decision to impose a flood levy on Australian taxpayers to meet the cost of rebuilding Queensland, it is arguable that the Government's funding of disaster recovery and reconstruction is unsustainable in the medium to long term. However, the 2012-13 Australian Government Budget did not provide additional funding for disaster mitigation despite Government statements in support of improving disaster resilience and the growing body of evidence that investment in mitigation strategies reduces the cost of reconstruction.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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*(e) Post disaster financial incentives for more resilient repairs*

Consideration needs to be given to an economically viable mechanism to encourage people affected by a natural disaster to have repairs completed that will reduce the chances of a recurrence of similar damage in a subsequent severe weather event. Currently typical insurance policies replace like with like and so a damaged insured building is returned to the same level of vulnerability as it was previously. A financial mechanism needs to be developed to encourage people to repair their property following a natural disaster to a higher, more resilient rating. Repairs could take a number of different forms which would need to be tested for their viability and effectiveness, but could include strategies such as a co-contribution from government funds on top of the insurance funds, or tax offsets given to the individual, or some other financial incentive, to ensure the building was rebuilt in a manner more resilient to flood, fire or storm damage.

Improving the disaster resilience of a building and decreasing the risk of damage and/or the cost of reinstating a building and its contents after a disaster should flow through to reduced premiums. However, retro-fitting existing buildings can be prohibitively expensive. The need to access potentially very large lump sums undermines the ability of this option to improve the affordability of insurance.

Complementary policies that give people access to substantial funds for specific and restricted purposes could be considered. For instance, there is some precedent for allowing early access to superannuation to make modifications to property. Currently, a person may be eligible for early release of superannuation on specified compassionate grounds to pay for modifications to their home or car required to accommodate special needs if they or one of their dependants has a severe disability.

There would need to be clear criteria around what constitutes disaster resilience to prevent misuse for eg putting toward renovations dressed up as disaster resilience measures. In addition there are circumstances where superannuation may be accessed due to severe financial hardship. This could be expanded to include an inability to pay an insurance excess on a home or home and contents insurance policy where your residence needs to be completely or substantial rebuilt due to weather damage.

## **6.4.2 Financial literacy and community education**

Non-insurance and under insurance continues to be a widespread problem in the community, even outside the segments in which affordability is an issue. A 2012 study

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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indicated around 9 percent of home-owners were without at least one of building or contents insurance and around 39 percent of non-homeowners do not have contents insurance<sup>27</sup>. Insurance specific financial literacy education can help address the problem of underinsurance by promoting the value of insurance.

Although affordability has been cited as a primary barrier to insurance, there are a number of identified barriers that could be targeted by a financial literacy program. Negative past experiences with claims, individuals' attitudes toward risk, misunderstanding of contract terms, lack of the awareness of the level/appropriateness of existing insurance cover and language/literacy challenges could all be addressed with greater education on insurance.

The banking industry has a range of well established general financial literacy programs however existing financial literacy programs addressing insurance are limited and largely web based (such as the ANZIIF KnowRisk website and ASIC's MoneySmart website's section on insurance).

IAG has made some progress in this area with a school education program in 2004 and previous Australian Financial Review (AFR) Business Case Studies in 2005 and 2006. We have recently released online You Tube videos to educate the community on insurance terminology and are about to conduct a number of workshops in our branches for non-English speaking customers. IAG is also currently piloting an internal employee financial literacy program to educate our own people about the value of insurance within the context of their individual personal finances.

Disaster risk awareness and risk reduction education are also an important component of community education. Cross-sectoral platforms such as disaster risk reduction task forces or networks can promote a collaborative process for the creation, implementation and dissemination of risk awareness and risk reduction education programs and strategies. This was the impetus behind IAG's collaboration with Investa Property Group, Munich Re, Optus, Australian Red Cross, and Westpac Group, to form *The Australian Business Roundtable for Disaster Resilience and Safer Communities*.

The Roundtable has commissioned a fact-based, comprehensive *White Paper* (to be published mid 2013) through Deloitte Access Economics that will:

- identify opportunities where Governments can work with business, not-for-profit and community leaders in resilience-building activities;

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<sup>27</sup> Dr Richard Tooth (2012), Sapere Research Group - Australian Household Insurance: Understanding and Affordability, February 2012.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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- model the economics of mitigation activity in helping to inform risk reduction activities versus recovery spend; and
- educate the community about risks, particularly in relation to extreme weather events.

Many government-sponsored and community programs continue to place heavy emphasis on emergency response and civilian response-preparedness. While important, risk awareness and education efforts should include concrete risk reduction tools and strategies that can be adopted; moreover, to be fully effective and efficient, these efforts should take place at, and be targeted to, every level of society – at the individual, business, community, and governmental levels. Building a comprehensive education/awareness program is widely recognised as a key plank in developing more resilient societies.

### **6.4.3 Insurance products and pricing**

IAG has been investigating a number of options to increase the affordability of home insurance premiums. These include:

*(a) Flexible payment options*

In 2010 IAG introduced a monthly payment option for premiums. Customers are able to pay their premium in monthly instalments (subject to an administrative cost) rather than an annual amount. The proportion of customers selecting this payment option has been slowly increasing over a number of years but still remains well below 40 percent. CGU also offers the option of fortnightly payment of premiums.

*(Refer to Appendix 3 – Section G)*

*(b) Reduced product cover*

IAG has investigated the options for developing a new home insurance product to help address the issue of affordability that could be achieved by:

- excluding water perils, or
- providing cover for major perils above a certain threshold eg \$50 000 - \$100 000 (damage threshold policy)

i. Excluding water perils

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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The proposed product would not cover water damage caused by natural perils/events (e.g. flood, storms, stormwater runoff etc) but the 'standard' Home Buildings product would otherwise remain unchanged. Consequently, for example, the escape of water within a home (e.g. from a washing machine) would continue to be covered by the Proposed Product.

The reduced cover product would create substantially cheaper Home Buildings insurance as approximately 71 percent of total claims costs between 2009-10 and 2011-12 were attributable to water perils. ie. excluding water perils would significantly reduce the cost of the product.

IAG considers that this product would potentially expose customers most at risk to a major source of significant financial loss. We are also concerned that customers, despite clear exclusions in the contract would still be under the impression they were covered, given that water perils is one of the most basic protections normally offered under a Home Building insurance policy. It was also unclear whether the banks would consider it had sufficient security if water perils were not covered by a Home Buildings insurance policy.

Other variations on the product to exclude defined perils – eg: Flood, Storm Water Run-Off remain under consideration but present similar challenges and require a high level of understanding by the consumer. Experience has shown that many customers are not in a position to appropriately assess the risk exposure to their properties, and will make a choice to remove cover at the time of payment without understanding the consequences when a loss occurs.

- ii. Damage threshold policy (*Refer to Appendix 3 – Section H*)

*(c) Reduced Level of Cover*

IAG currently offers flexibility in payment of premiums by allowing customers to elect to pay a higher excess of up to \$5000 and reduce their premiums by up to 20 percent. By choosing a higher basic excess on the policy from a wide range of excess options, customers are able to decrease their premium.

One option could be to increase the level of excess substantially (eg up to \$50 000) to further reduce the premium. Higher excesses can assist affordability as increasing the amount of excess paid upon making a claim could substantially reduce the cost of the premium. However, this effectively means the insured must also self-insure a portion

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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of the risk and relocate the stress point to when a claim is made - which is often when the insured is already experiencing hardship – rather than when the premium is paid.

An alternative to this would be to provide total cover once the threshold has been reached. In this way any loss under the threshold is excluded, but the total damage from an event that exceeds the threshold would be payable should a significant event occur. This would remove the requirement to pay an excess at the time of the claim, however it would place financial strain for any loss under the threshold amount.

Parametric Insurance is another alternative. Parametric insurance is a type of insurance that does not cover the actual loss, but the insurer agrees to make a pre determined payment upon the occurrence of a triggering event, often a catastrophic natural event. This may still leave a customer with a substantial financial shortfall in the major disaster.

#### *(d) Microinsurance*

Microinsurance may offer a solution to segments of the community that are unable to access insurance due to socioeconomic factors. Affordability is cited as the greatest barrier to holding insurance by low income earners. Additionally, the level of cover of conventional products is often inappropriate for low income earners as they are far higher than required. Payment issues including timing and method pose another barrier to this group accessing insurance.<sup>28</sup>

Microinsurance products provide risk protection for the low income population against specific perils by offering a variety of tailor made products. Products and delivery models need to fit the requirements of low-income populations rather than offer miniaturised versions of conventional products. Hence, in order to offer this product, the insurance industry would require co-operation from Government, community groups and regulatory bodies.

The International Association of Insurance Supervisors (IAIS), report advises that primary legislation should allow flexibility to respond to new innovations yet offer increased protection to this customer segment. Traditional regulatory frameworks are designed for products and services for higher income customers and the primary law should be as broad and permissible as possible to enable innovation of microinsurance products. Conversely, consumer protection needs are higher when extending access to

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<sup>28</sup> Collins D 2011 *Reducing the Risks, Improving access to home contents and vehicle insurance for low income Australians*, Brotherhood of St Laurence



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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insurance to a customer segment with low financial literacy and limited experience with insurance.<sup>29</sup>

A microinsurance product would need to be supported by accessible information and advice. Successful uptake of microinsurance would involve developing financial literacy and capability in the low income sector.

Collaboration with the community sector would also be necessary to offer alternative distribution channels and help people access clear information about suitable products to meet their needs. IAG is currently examining this option with community groups.

As with the other products discussed, given the primary driver of cost in high risk areas relates to natural perils, a microinsurance product could still result in significant financial strain if an event occurs.

## *(e) Community rating*

Community rating has been suggested as a solution involving significant cross-subsidisation. In a community rated market, the insurer may not calculate premium on the basis of the risk factors attaching to the particular person wishing to purchase an insurance contract, but rather the risk factors applying to all persons within the market as a whole. In Australia this applies to Health Insurance.

There is significant moral hazard involved with people in areas with very low risk or zero risk subsidising the high costs of those who live in areas of high risk. The vast majority of the community, that has no flood risk at all, do not feel they should cross-subsidising risks like these – when many have arisen from poor planning decisions.

Importantly, the price would not reflect the risk.

The price of insurance premiums provides an important signal that can help individuals and communities make decisions about property development and risk management. Any distortion of this signal through community rating, or hidden subsidies, will militate against good risk management, and act to discourage product innovation by insurers.

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<sup>29</sup> Application Paper on Regulating and Supporting Inclusive Insurance Markets, International Association of Insurance Supervisors (IAIS)2012

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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*(f) National disaster pool*

IAG does not support the concept of a national disaster pool. Not only does it lead to people paying for risks that are not theirs, but the cost of such a scheme to government would also balloon significantly as the incidence of catastrophes and the expense of the contents in our homes increases. A national pool would inevitably become a huge drain on government resources as evidenced by the US National Flood Insurance Program (approximately US\$19 billion in deficit) and the NZ Earthquake Commission (EQC) (NZ Government insurance liabilities for the EQC property damages were NZ\$8.33 billion as at 31 October 2012). These pools are only appropriate where there is no private solution available – such as with the terrorism pool. This is not the case for natural disasters and such a pool would ultimately hamstring our economy.

*(g) Insurance subsidies for high risk and low income consumers*

We recognise that there will inevitably be a small portion of homes – less than 2 per cent – for which the affordability of flood premiums is likely to be an issue. These are properties that have been built in the areas of high peril exposure, and a key principle of insurance is that a customer's premium must reflect their individual risk.

The government may wish to assist these people obtain insurance; however, it is critical that government financial assistance is limited, so as not to encourage further development in the areas of most risk. Government assistance must be accompanied by mitigation strategies, while remaining mindful of its impact on those people who have less risk.

IAG recommends assistance in the form of subsidies as a possible solution, as outlined in our submission to the Natural Disaster Insurance Review (NDIR) – Inquiry into flood insurance and related matters *Issues Paper* (June 2011).

Owners whose property has been identified as having extreme or high flood risk could be entitled to a subsidy (subject to a means test being applied) from government for their home and contents policy (if the policy includes flood) payable directly to insurers. Such a scheme would require an actuarial review of the premium subsidy process and oversight of the flood pricing structure behind the flood risk premium charged – to be provided as a separate item on the certificate of insurance. Additionally, government would be required to create a database of the properties affected by extreme and high flood risk. There is the potential to consider this for other significant exposures such as storm water run off, bushfire and storm surge.

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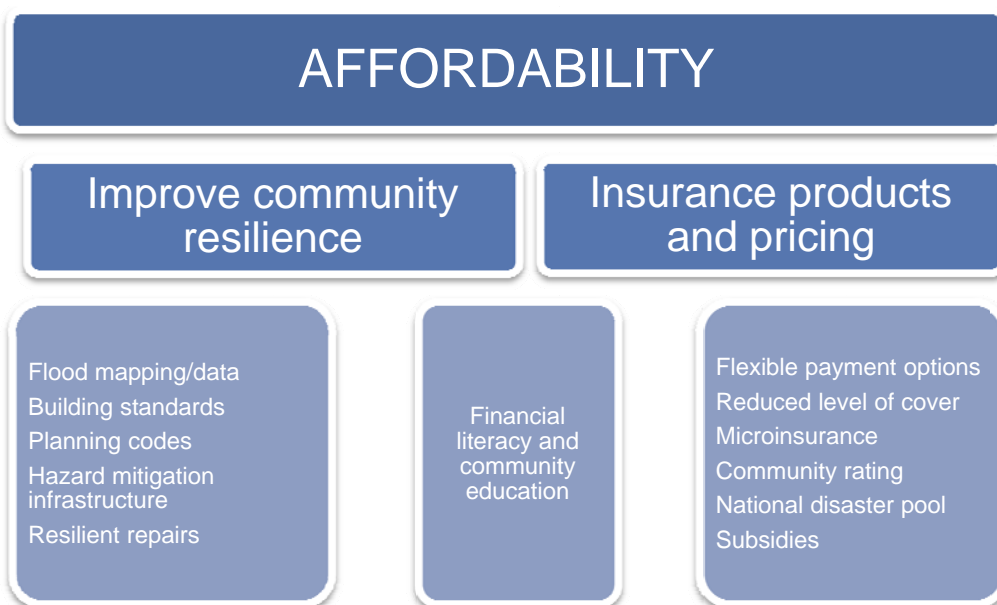
# INQUIRY TERMS OF REFERENCE (CONTINUED)

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Subsidies would need to be accompanied by measures to encourage mitigation. Premium subsidies should be funded by those who are responsible for the management of environmental hazards and planning of the built environment to provide a targeted incentive for those governments to mitigate and reduce the exposure over time. Properties built or approved after an agreed date should be excluded from the subsidy to restrict further development in areas of high risk.

In a risk-based insurance mechanism, affordability can be promoted through public investment and regulatory intervention in support of disaster risk reduction measures (e.g., building codes, land-use planning), and may be obtained through the traditional risk-pooling functions of insurers operating in a competitive environment, in which insurer portfolio diversification benefits and market forces help to reduce insurance costs. However, if some risks are very high and premium rates are unaffordable for some parties, the partial subsidisation of policyholder premium payments may be necessary to ensure adequately comprehensive insurance coverage in such a system.

**Figure 11** : Options to increase affordability



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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## **7. (F) PROGRESS IN DEVELOPING EFFECTIVE NATIONAL CO-ORDINATION OF CLIMATE CHANGE RESPONSE AND RISK MANAGEMENT, INCLUDING LEGISLATIVE AND REGULATORY REFORM, STANDARD AND CODES, TAXATION ARRANGEMENT AND ECONOMIC INSTRUMENTS**

### **7.1 TAXATION**

IAG advocates for the removal of insurance taxes to increase affordability.

IAG believes that there is a clear social and economic case for eliminating or at least reducing State insurance taxes and charges as a priority for any taxation reform agenda. Currently insurance taxation (Stamp Duty, FSL) in Australia (ex GST) totals \$5 billion. Governments need to recognise the essential benefits of insurance to the economy and community generally and implement a taxation system which encourages insurance.

A number of Commonwealth and State Government reviews and inquiries have argued for insurance tax reform - the IPART Review of State Taxes (2008), the Henry Tax Review (2009), the Victorian Bushfire Royal Commission (2009), the Johnson Report into Australia as a Financial Centre Forum (2009), Tax Forum (2011), Lambert Report (2011), ACT Taxation Review (2012) and the Productivity Commission Draft Report on Barriers to Effective Climate Change Adaptation (2012).

IAG believes the current tax regimes contribute to under-insurance and non-insurance, with consequential negative fiscal impacts when the public purse is inevitably called upon in times of climate related disasters.

IAG argues that there is a clear social and economic case for eliminating or at least reducing State insurance taxes as a priority for any taxation reform. This case is based on recognition of the essential benefits of insurance to the Australian economy and community generally and of the role of the tax system in encouraging insurance coverage.

# INQUIRY TERMS OF REFERENCE (CONTINUED)

**Figure 12:** Taxes on Insurance 2010-11

	NSW \$m	VIC \$m	QLD \$m	SA \$m	WA \$m	TAS \$m	NT \$m	ACT \$m	TOTAL \$m
<b>Insurance companies contributions to fire brigades</b>	672	544	-	-	-	16	-	-	1 232
<b>Third party insurance taxes</b>	133	147	56	57	-	4	-	-	397
<b>Taxes on insurance nec</b>	1 229	765	490	314	468	46	33	60	3 405
<b>TOTAL</b>	2 035	1 456	546	371	468	65	33	60	5 035

*nec not elsewhere classified*

Source: ABS (2012), *Taxation Revenue Australia 2010-11*, Cat.No. 5506.0, April 2012.

## Taxation Reform – A Case for Reform

The Financial Industry Council of Australia (FICA) commissioned Access Economics in 2008 to review State taxes and, especially their impact on economic efficiency. The 2008 FICA report detailed a quantitative analysis of the efficiency of individual taxes and a number of revenue neutral tax reform scenarios. The efficiency rankings reported that state stamp duty on motor vehicles and insurance are amongst the least efficient of taxes, generating significant deadweight losses. The Report is available at: <http://www.niba.com.au/tax/resource/Article13.pdf>

FICA commissioned Deloitte Access Economics in 2011 to report on the efficiency of existing State and Commonwealth taxation arrangements. The study found motor vehicle taxes (specifically, stamp duty on motor vehicles) and taxes on insurance are least efficient while municipal rates, land tax and gaming taxes are most efficient. The 2011 Report suggest that the potential gains from the reform of state taxation are large and rival the gains derived from past microeconomic reforms.

Additional research by Dr Richard Tooth (2011), *Flood insurance: economics and issues* (see Appendix 1) commissioned by IAG highlighted the effect of insurance taxes:

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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*“...is to increase the price of the insurance service for consumers and reduce consumer demand for taking out insurance. This lower demand could be seen in households either choosing not to insure; or choosing to under-insure i.e. reduce their premiums by partly self-insuring”.*

*The effect of taxes on demand has been estimated by analysing how demand has changed in responses to variations in taxes across jurisdictions and time. The estimated impact (summarised in Sullivan, 2010) of removing the non-GST taxes from insurance premiums is an increase in the number of households without contents insurance by around 300 thousand and an increase in the number of owner-occupiers without home insurance by around 69 thousand” (p.9)*

State and Territory Governments are progressively accepting that insurance taxes are inefficient and acting to remove them. The ACT Government in its 2012-13 Budget noted:

*“Inefficient taxes distort behaviour. For example, households and businesses pay a tax on insurance premiums this may – increase insurance costs – result in under insurance – create a disincentive to insure.”*

The ACT Government will abolish duty on insurance premiums over the next five years. Every year duty will reduce by 2 percentage points. From 1 October 2012, duty on general insurance premiums reduced to 8 percent. Conversely, the Tasmanian Government increased stamp duty on general insurance products from 8-10 percent from 1 October 2012, and retains a fire services levy on commercial insurance.

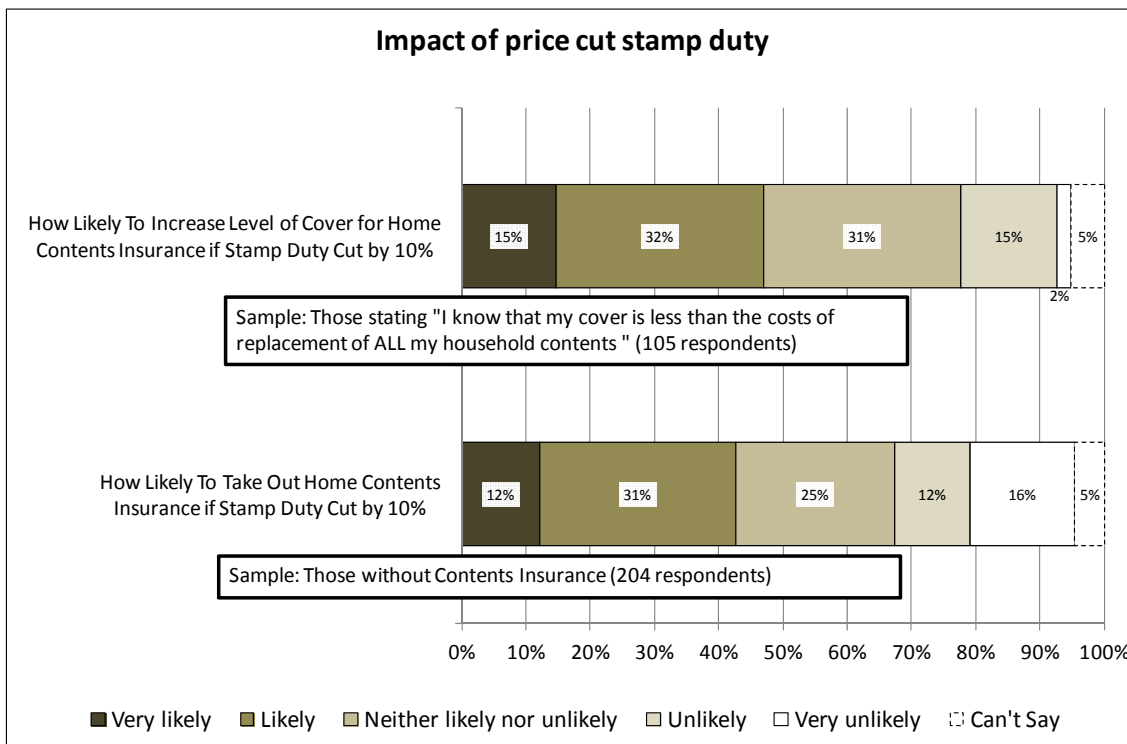
The Victorian Government is removing the requirement for insurance companies (and ultimately insurance customers) to provide funding for fire brigades from 1 July 2013, and will place the requirement on property owners. The NSW Government is considering alternative models for funding the fire brigades, in lieu of placing most of the burden on insurance companies. We support these Government initiatives to remove inefficient insurance taxes.

IAG commissioned research (Sapere Research Group and Roy Morgan Research - *Australian Household Insurance: Understanding and Affordability - February 2012*) looking at the level of understanding of insurance and affordability also highlights the case for reform. The survey (1,200 households) seeks to understand household attitudes to insurance, their likely decisions around how they insure in response to affordability pressures and associated outcomes for under and non-insurance (see Appendix 1). Results indicate:

# INQUIRY TERMS OF REFERENCE (CONTINUED)

- 12 percent of those without contents insurance thought it ‘very likely’ they would take out Home Contents insurance if stamp duty was cut;
- Another 32 percent thought it ‘likely’; and
- Of those who knew their cover was insufficient, around 15 percent thought it ‘very likely’ they would increase their cover.

**Figure 13:** Response to cut in stamp duty



**Base:** Those with home contents insurance (975 respondents). Household weights used.

**Source:** IAG commissioned research - Sapere Research Group – Australian Household Insurance: Understanding and Affordability (2012).

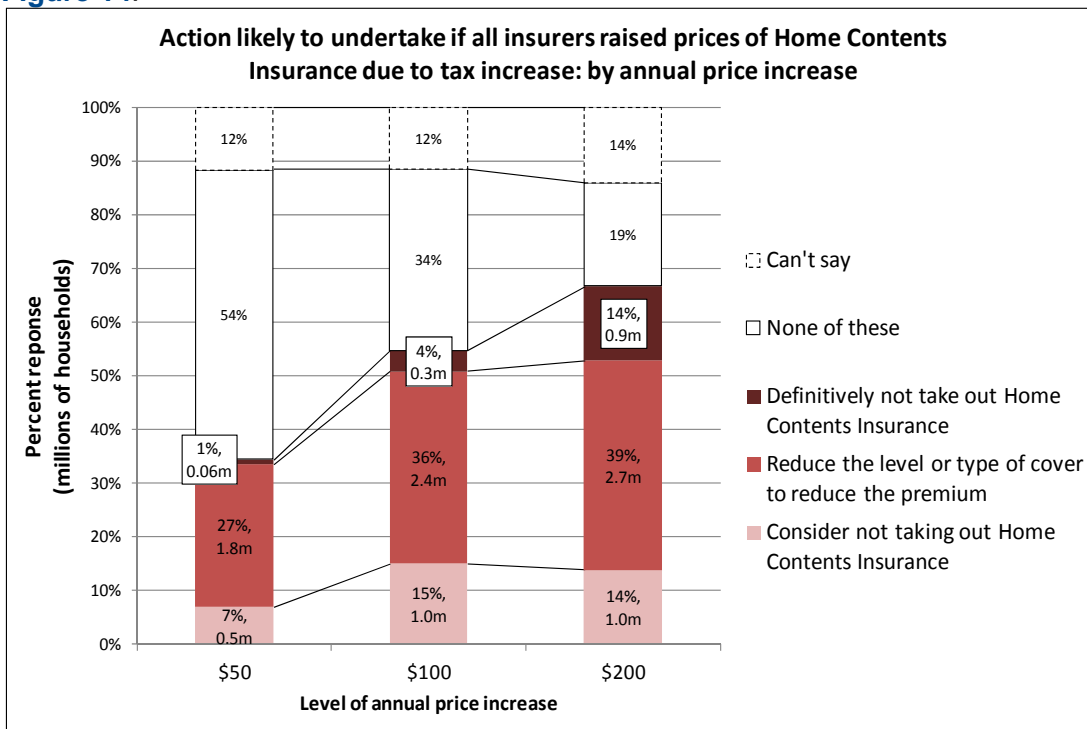
To assess the impact of increased taxes on premiums, respondents with contents insurance were asked what their likely actions would be to different price rises. Results indicate a small price increase would lead to a significant response. For an increase of \$50 per year — in the order of 10 percent of the average home contents insurance

# INQUIRY TERMS OF REFERENCE (CONTINUED)

premium<sup>30</sup> — the results suggest an estimated 27 percent of insured households would choose to underinsure and between 1 and 8 percent would choose to not insure. Predictably a larger yearly price increase yielded a more extreme response. See results below.

## Response to tax increase

**Figure 14:**



**Base:** Respondents with contents insurance from Full Sample. Household weights are used

1. Respondents could only choose one action.
2. Results are largely insensitive to sample used.

Source: IAG commissioned research - Sapere Research Group – Australian Household Insurance: Understanding and Affordability (2012).

<sup>30</sup> No exact percentage can be calculated as home contents and home building insurance premiums are typically combined. Information from the ABS SIH 2009/10 indicates the average household premium was around \$885 per annum. With some premium inflation and assuming the home contents insurance component is of similar magnitude to home building, the home contents insurance premium component is in the order of \$450 to \$500.



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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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In relation to **stamp duty on insurance** IAG believes it is appropriate for the Federal and State Governments to examine a new set of undertakings beyond the current *Intergovernmental Agreement* to assist further reform of State taxation. A strong case can be made that reform of insurance taxes should have a high priority.

## **Commonwealth – State Government Financial Relations**

As noted previously in this submission the Australian Attorney-General has confirmed a review of the National Partnership Agreement (NPA) underpinning the Natural Disaster Resilience Program is underway<sup>31</sup> and the Productivity Commission's *Draft Report* recommended a review of the NDRRA. (recommendation 10.1). Conducting simultaneous reviews of the NDRRA and the NPA would facilitate a comprehensive assessment of whether the existing national arrangements promote the most effective use of Commonwealth and State Government funding for disaster mitigation, recovery and reconstruction.

The NPA is a partnership with states and territories where jurisdictions provide direct administration of the funding and submit an annual implementation plan to the Attorney-General. For the most part funding is then allocated by each jurisdiction via competitive grants programs. This means there is very little, if any, capacity for this funding to be directed toward larger scale disaster mitigation infrastructure projects of local, state or national significance. Further it is arguable that this arrangement encourages a piece-meal approach to disaster mitigation rather than one that focuses on long-term, strategic priorities. As the *Draft Report* notes, local governments can access other sources of funding (such as the Regional Development Australia Fund) that could potentially be used for disaster mitigation infrastructure. Yet these programs are not specifically designed to promote disaster resilience and adaptation meaning mitigation projects do not frequently receive funding. While IAG maintains that disaster mitigation funding needs to be increased, the framework for distributing these funds must encourage investment in priority mitigation infrastructure projects.

Likewise, an independent, public review of the NDRRA is warranted to assess whether the current arrangements are financially sustainable and meet the needs of Australia's disaster risk profile in light of likely increased climate volatility. In their current form the NDRRA are not explicitly linked to the National Strategy for Disaster Resilience adopted by COAG in February 2011. The NDRRA's betterment provisions, which seek

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<sup>31</sup> Speech at National Disaster Resilience Program Annual Stakeholders Meeting, 28 March 2012  
<http://www.attorneygeneral.gov.au/Speeches/Pages/2012/First%20Quarter/28-March-2012---National-Disaster-Resilience.aspx>

Under clause 14(b) of the NPA the Commonwealth is required to undertake a full evaluation and review of the NPA in partnership with States and Territories with input from key stakeholders by 31 December 2012.

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# INQUIRY TERMS OF REFERENCE (CONTINUED)

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to encourage disaster resilience in rebuilding or replacing disaster damaged public infrastructure, are poorly understood and rarely used. Consequently, it is arguable the NDRRA do not offer sufficient incentives for communities to rebuild in a more disaster resilient way or consider alternatives to rebuilding. The Australian Government has used Category D of the NDRRA to fund new disaster mitigation or resilience building projects that would not otherwise fall within the remit of the scheme.

This includes \$10 million for flood mitigation works in Toowoomba and up to \$18 million to assist in the relocation of Grantham to higher ground. While we believe these are positive initiatives we are concerned that disaster mitigation funding is not being prioritised on a national basis according to transparent, consistent and coherent criteria.

Finally, we note that since December 2010 the Australian Government has spent over \$800 million on post-disaster recovery payments to individuals including the Australian Government Disaster Recovery Payment (AGDRP). In contrast the 2012-13 Federal Budget allocated only \$26 million to disaster mitigation under the NPA for the 2012-13 financial year with no increase in the forward estimates. The eligibility criteria for the AGDRP are broad and not sufficiently targeted. The payments overlap with personal hardship grants and other support jointly funded by the States and Commonwealth under the NDRRA. Further, the payment cannot, and is not intended to, compensate those who have been most severely impacted by a disaster. Given these factors, it is arguable this funding could be better directed to pre-disaster mitigation initiatives that reduce the risk of damage to individual households and improve the resilience of those most at risk. The end result being an increase in community resilience and a reduction on reliance.

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# APPENDIX

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## APPENDIX

### APPENDIX 1

Dr Richard Tooth (2012), Sapere Research Group - Australian Household Insurance: Understanding and Affordability, February 2012.

Dr Richard Tooth, (2011), Sapere Research Group – Flood insurance: economic and issues July 2011.

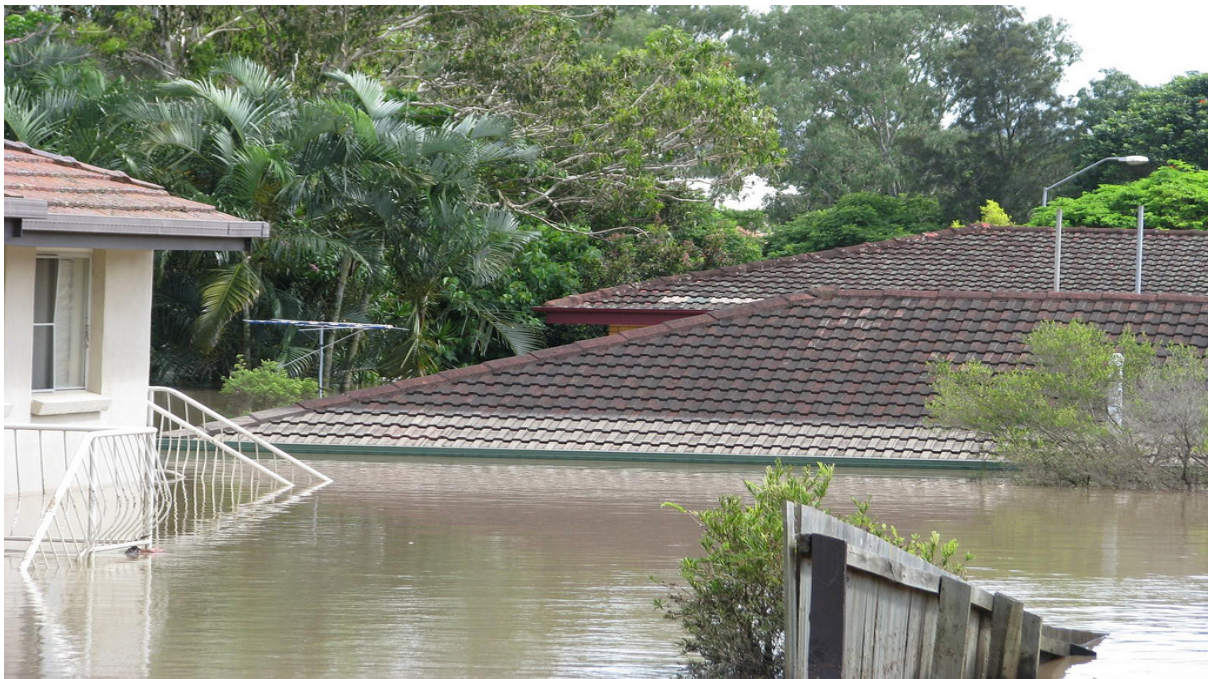
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# Australian Household Insurance: Understanding and Affordability

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*Dr Richard Tooth*

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February 2012

## About the Author

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Dr Richard Tooth is a Director with the Sydney office of Sapere Research Group. He has worked directly for, and consulted to, the insurance industry. He has undertaken a number of studies on the consumer demand for general insurance. In 2010 he provided testimony to Victorian Bushfire Royal Commission in relation to the impact of the Fire Services Levy on insurance. More broadly, he works on public policy, competition and regulatory issues across a number of industries including water, energy, transport and financial services. Dr Tooth has a PhD in Economics, a Master in Business Administration and a Bachelor of Science.

## About Sapere Research Group Limited

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Sapere Research Group is one of the largest expert consulting firms in Australasia and a leader in the provision of independent economic, forensic accounting and public policy services. Sapere provides independent expert testimony, strategic advisory services, data analytics and other advice to Australasia's private sector corporate clients, major law firms, government agencies, and regulatory bodies.

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**Cover photo** by Bev Carter.

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## Glossary

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ASIC	Australian Securities and Investments Commission
ABS	Australian Bureau of Statistics
HES	The ABS Household Expenditure Survey
IAG	Insurance Australia Group
ICA	Insurance Council of Australia
SIH	The ABS Survey of Income and Housing

# Executive summary

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## Introduction/ Background

The insurance industry has been the subject of intense scrutiny following an unprecedented number of catastrophes across Australia in 2011, including floods in Queensland and Victoria, two bushfires in Western Australia, major storms in Victoria and a cyclone in Far North Queensland. Insured losses from major disasters in the year were around \$4.3 billion, making 2011 the worst year on record.

The disasters have sparked no fewer than ten government reviews and inquiries into the industry with the likely outcome that the industry will be asked to undertake a number of reforms. This will come at a time where there is increased financial pressure from higher claims costs and reinsurance costs which will ultimately lead to higher consumer premiums.

In this environment, Insurance Australia Group (IAG) is seeking to understand how these issues are combining to impact the affordability and understanding of insurance and the associated contribution to under and non-insurance. In addition to the private consequences, under and non-insurance can have financial impacts on Governments and communities, who, in times of disaster, are called on to assist the non-insured.

This report analyses the results of a survey of 1200 households, which was conducted online in December 2011 on home building and home contents insurance. It seeks to understand household attitudes to insurance, their likely decisions around how they insure in response to affordability pressures and associated outcomes for under and non insurance. The survey was designed to examine a number of topical issues and to enable comparisons with a similar study undertaken for IAG in 2001. A feature of the survey was the selection of 300 households (the High Risk Sample) from areas which were determined to be of particularly high risk of flood, storm surge and cyclone.

## Findings

### Levels of insurance and cover

Non-insurance is still a significant problem. The extent of insurance cover hardly changed from a survey conducted 10 years prior. Around 9 percent of home-owners were without at least one of building or contents insurance. Around 39 percent of non-homeowners do not have contents insurance.

Under-insurance is also still a concern with regard to home building cover. Although few respondents (6 percent) expressed concern that they were not adequately covered, it appears that many households may be at risk in how they have approached obtaining adequate cover. Of note:

- 29 percent of households relied solely on their own estimate in determining the level of building insurance cover.
- Only 12 percent of households reported using a website calculator.

- A number of households indicated they had total replacement cover despite this option not being offered by their nominated insurer.

Under-insurance is also a problem with contents insurance. Although almost 80 percent reviewed their cover in the last 5 years, there are indications of concern. Around 10 percent of policyholders (representing around 0.7 million households) stated they were underinsured and another 34 percent indicated they were unsure. Avoiding higher premiums was the most common reason given for underinsurance.

The results confirm that a lack of flood cover and understanding of flood cover is a common problem. Between 40 and 50 percent of respondents could not say whether they were covered for flood (for both building and contents cover). Of the remainder around 30 percent indicated they were not covered. Awareness was much better in the high risk areas but the extent of cover did not differ greatly. Furthermore, based on their stated insurer, it appears a number of respondents were mistaken about their flood cover; Some thought they were covered when their insurer (currently) does not provide flood cover and others indicating they are not insured although flood cover is standard with their insurer.

The survey examined non-insurance in holiday homes (or second homes) and rental properties. Consistent with some anecdotal evidence, the rates of non-insurance for second properties is relatively high with around 20 percent without building cover and over 40 percent without contents cover.

## **Understanding of risk**

The survey tested the extent to which people understood the risks associated with flood, bushfire, cyclone, storm surge and theft prior to choosing to live in their present location. Around 12 to 14 percent of the sample indicated they did not understand the risks. Of concern, for flood risk, the proportion is higher in cases when the self-assessed risk from flood is significantly greater.

## **Influences on insurance decisions**

The survey examined a number of potential influences on insurance decisions not previously examined. Households were less likely to take out contents insurance if:

- their parents did not have and other family/friends do not have insurance;
- their main language is not English; however further analysis suggests this may reflect other common influences; or
- they have had a claim denied.

Insurance choices were also examined against perceptions of risk. Of note:

- The take-up of insurance was higher among those who felt more exposed to bush-fire risk; this was not found with other perils.
- Those who felt they were of very low flood risk were less likely to be covered for flood.

## **Choice of insurer**

The results indicate a reasonable level of ‘shopping around’ with over 60 percent indicating they shopped around for another quote in the last 5 years and 11 percent indicating they switched insurers. Price and brand/reputation were the most important factors in the

insurance decision; significantly greater than the ‘coverage options’ offered. Coverage of flood was however an important factor in many cases; in particular with those who thought they were relatively highly exposed to flood.

## **Cost of insurance**

The price of insurance was found to be a key influence in insurance decisions. These results provide increased support for removing taxes on insurance. Key findings include that:

- Around 22 percent of households reported that they had increased their excess and 10 percent had reduced the level of cover to reduce the insurance premium.
- In response to a 10 percent price reduction from the removal of stamp duty:
  - 12 percent (equivalent to 180,000 households) of those without contents cover said they’d take out insurance
  - 15 percent of those who know their contents cover is insufficient thought it very likely they’d increase their cover.
- Many respondents indicated they would not insure or under insure in response to increased taxes on insurance. The number indicating they would not insure increases dramatically with a suggested tax increase. For \$50, \$100 and \$200 tax increases the percent of households with contents cover who think it would be likely they would no longer insure is 1% (at \$50), 4% (at \$100) and 14% (at \$200). At a \$100 price increase, around 55% indicated they would ‘likely reduce’ or ‘consider reducing’ their cover.

Respondents were also asked about price increases due to greater risk. A significant proportion (38%) of households indicated they would consider reducing the level of cover; however around 10 percent indicated they would consider increasing their level of cover. The disparity is consistent with households working to an insurance budget.

## **Attitudes to insurance**

Respondents were generally positive about their own insurer but less so with the insurance industry in general.

- Six times as many agreed than disagreed with a statement that they trusted their insurer to pay claims.
- A roughly equal number agreed and disagreed with the statement that insurers in general are fair and reasonable.
- Confidence and trust in the industry is on average greater among those who have made a claim. It is less among those who have had a claim denied but this is a relatively small number. Confidence and trust was also less among those who spoke a second language.

Respondents were largely against additional financial assistance to the non-insured.

- Over four times as many respondents agreed as disagreed with the statement “Insurers should not pay claims which are clearly not covered by the policy”
- Over four times as many respondents disagreed than agreed with the statement “Assuming the government provides financial assistance to households following a disaster, households who chose not to insure should get more assistance.” Those who agreed with this statement were more likely to be insured.

## Conclusions

This survey has reaffirmed that issues around non-insurance and under-insurance continue. The survey has added greater support of the impact of price on these issues, and provides further support for the argument against taxation of insurance.

The survey has also highlighted a number of new issues including non-insurance of second properties and particularly low insurance rates among those who use another language. Analysis in this report highlights that a household's decision to insure is correlated with decisions of friends and family.

# 1. Introduction

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It is difficult to overstate the importance of home insurance. Home building and home contents insurance provides protection from what can be devastating financial consequences and provides peace of mind even for those who do not claim. However, there are concerns that many households do not have insurance, are not covered for some significant events or have an insufficient level of cover (i.e. are underinsured).

The insurance industry has been the subject of intense scrutiny following an unprecedented number of catastrophes across Australia in 2011, including floods in Queensland and Victoria, two bushfires in Western Australia, major storms in Victoria and a cyclone in Far North Queensland. Insured losses from major disasters in the year were around \$4.3 billion, making 2011 the worst year on record.<sup>1</sup>

The disasters have sparked no fewer than ten government reviews and inquiries into the industry (see Box 1 below) with the likely outcome that the industry will be asked to undertake a number of reforms. This will come at a time where there is increased financial pressure from higher claims costs and upwards pressure on reinsurance premiums which will ultimately lead to higher consumer premiums.

In this environment, Insurance Australia Group (IAG) is seeking to understand how these issues are combining to impact the affordability and understanding of insurance and the associated contribution to under and non-insurance. In addition to the private consequences, under and non-insurance can have financial impacts on Governments and communities, who in times of disaster, are called on to assist the non-insured.

To help better understand consumer demand, behaviour and attitudes, IAG commissioned Sapere Research Group and Roy Morgan Research to undertake this consumer survey on home insurance. It seeks to understand household attitudes to insurance, their likely decisions around how they insure in response to affordability pressures and associated outcomes for under and non-insurance. The survey was designed to examine a number of topical issues and to enable comparisons with a similar study undertaken for IAG (then NRMA Insurance Limited) in 2001. A feature of this survey was the selection of 300 households (the High Risk Sample) from areas which were determined to be of particularly high risk of flood, storm surge and cyclone

The rest of the paper is organised as follows. The following section (Section 2) provides a background to the issues of home insurance demand and the method used in the study.

Section 3 presents the findings of the study. These are presented in a number of themes which incorporate:

- Extent of insurance cover (both the take-up of insurance and the adequacy of cover);
- Influences on insurance decisions;
- Consumers understanding of risks to the home;

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<sup>1</sup> Source: ICA (2012).

- Their choice of insurer;
- The importance of price; and
- Attitudes towards insurance.

Section 4 concludes.

**Box 1: Recent relevant government inquiries and reviews**

- The Federal Parliamentary Inquiry into the operation of the insurance industry during disaster events;
- The Federal Parliamentary Inquiry into Residential Strata Title Insurance;
- Treasury Consultation Paper Reforming Flood Insurance: Clearing the Waters.
- The Queensland Floods Commission of Inquiry;
- The Federal Government's Natural Disaster Insurance Review;
- The Federal Government's Consultation Paper - *Unfair Terms in Insurance Contracts*;
- Productivity Commission Inquiry into Regulatory and Policy Barriers to Effective Climate Change Adaptation;
- The Federal Government's Consultation Paper, *Reforming flood insurance: A proposal to improve availability and transparency*;
- The House of representatives Economics Committee Review of the Insurance Contracts Amendment Bill 2011;
- Consultation Paper: Proposal for a flood reinsurance pool and system of discounts (pending in 2012)

Source: IAG.

## 2. Background and method

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### 2.1 Background

This subsection provides some background research into a number of the key issues associated with home building and contents insurance that are discussed in this report.

#### Extent of cover

The extent to which people have insurance cover for their building and contents is an important policy issue and often a significant source of debate following a major disaster. Under common assumptions,<sup>2</sup> households would be expected to be insured if insurance was available and affordable.

The extent to which households are not covered is difficult to determine with accuracy as industry participants only have information on those who have taken out insurance. To assess non-insurance, a number of studies have employed residential surveys. These include a 2001 study commissioned by IAG (MJ Powling 2001, hereafter referred to as the 2001 Study) of households and Tooth and Barker (2007) who used Roy Morgan Single Source (a syndicated consumer survey) and the ABS HES/SIH surveys<sup>3</sup> to examine levels of cover.

In addition, there have been investigations following major disasters that have shed light on non-insurance and under-insurance.

- The 2003 Canberra bushfires prompted an investigation by the Australian Securities & Investments Commission (ASIC) into building under-insurance (ASIC 2005). They found “between 27 per cent and 81 per cent of consumers were underinsured by 10 per cent or more against current rebuilding costs.” A key concern was that policyholders had simply incorrectly estimated their sum insured. ASIC recommended greater use of total replacement policies (policies that did not rely on a sum insured) and greater use of and improved use of tools (i.e. website calculators) to estimate rebuilding costs.
- The 2009 the Victorian bushfire disaster prompted a review in fire services funding arrangements and the impact on insurance. Data from this review<sup>4</sup> suggested very high non-insurance rates that were possibly a result of many houses being second properties.

#### The affordability of insurance

The affordability (and availability) of insurance was a particular focus of the recent National Disaster Insurance Review. This review highlighted the very high cost of premiums for people living in a flood-zone.

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<sup>2</sup> See Tooth and Barker (2007).

<sup>3</sup> ABS HES refers to the Australian Bureau of Statistics (ABS) Household Expenditure Survey (HES) and the Survey of Income and Housing (SIH). The HES/SIH (the two surveys were combined as of 2003/04) is a large comprehensive study (encompassing around 7000 households).

<sup>4</sup> See VBRC (2010) and discussion by Tooth (2010).



A long-running concern for the insurance industry is that insurance is made less affordable as a result of a number of insurance taxes. In addition to GST, insurance premiums are subject to stamp duty<sup>5</sup> and in some locations a fire services levy (FSL).<sup>6</sup> Relative to the GST, stamp duty and fire services levy are particularly significant as they are applied to both the service of insurance and the funds that are redistributed.<sup>7</sup> Taxes on insurance have been widely recognised as being inefficient (e.g. see Henry Tax review, AFTS 2009). Using multivariate analysis, Tooth (2008) estimated that around 300 thousand more households would be insured if the taxes were removed.

There have been some moves to remove insurance taxes. Most significantly some jurisdictions have removed the fire-services levy; Western Australia did so in 2003/04 and Victoria aims to phase out FSL over 2012/2013. While these developments have been welcomed, there has been concern of new taxes; the recent National Disaster Insurance Review proposed an insurance pool arrangement which would have had the effect of taxing a large number of households to fund subsidies to other households with large insurance premiums.

### **Other influences on the demand for insurance**

The finding that many households do not have insurance has prompted research into why. While there are many factors correlated with non-insurance, some care is required in attributing to any one factor as many factors are related. For example, as people age they acquire more insurable assets, achieve higher incomes and become more likely to own a property. To analyse the effect of a particular factor on insurance decisions it necessary to either:

- use a very large sample and ensure analysis is undertaken on a sub-samples with similar characteristics (approach adopted in Tooth and Barker 2007); or
- use multivariate regression analysis on a sample (approach adopted in Tooth 2008).

The results of the aforementioned studies in Australia have found the following associations with the take-up of insurance:

- **House tenure** — Owners and particularly mortgage holders are more likely to be insured.
- **Age** — The take-up of insurance is lowest among the young; this is consistent with younger people having fewer assets to insure
- **Income** — Take-up of insurance is greater for higher incomes, consistent with these households having more assets to insure. The relationship between income and insurance is however complex; while richer households have a large budget to afford

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<sup>5</sup> Stamp duty rates vary by state. Current rates are 7.5% in Queensland; 8% in Tasmania; 9% in NSW; 10% in ACT, Victoria, Western Australia and Northern Territory; and 11% in South Australia.

<sup>6</sup> NSW and Victoria apply a fire services levy on insurance; current rates are 18% in Metropolitan Victoria, 35% in regional Victoria and 20% in NSW.

<sup>7</sup> In contrast, GST is a tax on the value added service of insurance; insurers receive input tax credits for costs incurred in providing

insurance, they also have a greater ability to self-insure by taking our higher excesses or simply not-insuring.

- **Cultural factors** — Both Tooth and Barker (2007) and Tooth (2008) found evidence that those born into non-English speaking regions were less likely to insure.

## Understanding of risk and cover

Following the recent floods, some households without flood cover claimed that they had not realised that they were not covered.<sup>8</sup> This prompted, the Commonwealth Government<sup>9</sup> to put forward two proposals in 2011 designed to provide greater clarity around home insurance, including:

- a standard definition of flood, for use in insurance policies;<sup>10</sup> and
- short, simple, key facts summaries for insurance policies to be made available to consumers.

A related issue is the extent to which people had an understanding of risks prior to moving to their present location. A particular concern is that many people have unknowingly bought into a high flood risk (or other risk) area and only later discovered difficulties in obtaining affordable insurance. To date there is limited research information on this issue.<sup>11</sup>

## 2.2 Data and method

The survey was designed in conjunction with IAG and Roy Morgan Research. The survey was implemented online by Roy Morgan Research in mid-December 2011.

The questionnaire was designed to broadly follow the residential survey conducted in 2001. Similar to the 2001 residential survey, the total survey sample was around 1200 households and asked respondents similar questions the level home building and contents insurance cover.

This current survey has a greater focus on home insurance and more contemporary issues. Most notably the new survey has sought to also examine:

- The extent of insurance cover for second homes
- Insurance coverage in areas with a high risk of flood
- Consumers' understanding of risks
- Issues around trust of insurers

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<sup>8</sup> Unlike most perils (e.g. bushfire, theft), full cover against flood risk is not standard in most insurance policies. In many policies there is cover for some types of water inundation.

<sup>9</sup> Consultation Paper – Reforming Flood Insurance: A Proposal to Improve Availability and Transparency

<sup>10</sup> Of note, the industry has for some time sought to obtain a standard definition of flood. In 2008, authorisation for a standard definition of flood sought by the Insurance Council of Australia was denied by Australian Competition and Consumer Commission (ACCC).

<sup>11</sup> Chivers and Flores (2002) report evidence from a survey in Boulder, Colorado on the extent to which house buyers understood the flood risk at the time of purchasing a house. They found that the large majority were not aware of the flood risk or the flood insurance premium prior to price negotiations.

To keep the survey length manageable, some questions from the 2001 survey, primarily with regards to motor vehicle insurance, were removed.

A total of 1200 households (the Full Sample) were surveyed. To support the examination of households in high risk areas, 300 households (the High Risk Sample) were selected from a discrete set of 50 postcodes determined by IAG as being of high natural peril risk to bushfire, cyclone, flood, hail and earthquake. The High Risk Sample predominantly included households from Queensland and Victoria (see Table 7 in the Appendix). The remaining 900 households (the Main Sample) were selected from the remaining household population. For the Main Sample, quotas were conducted based on region (state), age and gender.

To ensure that survey recipients had an understanding of their household's insurance cover they were asked:

*Are you involved, either partially or fully, in deciding whether or not to have a Home Insurance policy for where you live?*

The results of this question are shown in Table 1 below. The survey was only conducted on the 82 percent of respondents who selected 'Yes fully involved' or 'Yes partially involved'.<sup>12</sup>

**Table 1: Involvement in Insurance Policy Question**

	Main Sample	High risk Sample	Full Sample
<b>Fully involved</b>	626 (58%)	226 (59%)	852 (58%)
<b>Partially involved</b>	274 (24%)	74 (21%)	348 (24%)
<b>Total in sample</b>	<b>900 (82%)</b>	<b>300 (79%)</b>	<b>1200 (82%)</b>
<b>Not at all involved</b>	199 (15%)	54 (18%)	253 (15%)
<b>Can't say</b>	29 (2%)	10 (3%)	39 (2%)
<b>Total contacted</b>	<b>1128 (100%)</b>	<b>364 (100%)</b>	<b>1492 (100%)</b>

A profile of the respondents is included in Appendix 1.

For most analysis weighted averages are reported. Applying weights is appropriate to address the risk of non-random sample selection. Specifically, this is required to conduct analysis that incorporates both the Main Sample and the High-Risk Sample.

For the majority of analysis a household weight was applied. The household weight was determined on the basis of location and household size. In a small number of cases (12

<sup>12</sup> Respondents who worked in insurance and/or market research were also excluded from the survey.

respondents) the household size was not provided; in which case, data would be excluded from analysis.

For some analysis a population weight — based on age, sex and location — was applied. A population weight was used when an estimate of the population average was desirable; for example, when considering the attitudes of those surveyed.

The sensitivity to the weighting applied was examined. In general the weighting had little effect on results.

For most responses, there are a range of important factors that are often covariant. For example, the decision to insure is closely related to the value of assets that need to be insured, which in turn may be a function of home ownership, age, income and life stage — all factors that vary together. To isolate the effect of individual factors, multivariate regression analysis was undertaken on some responses.<sup>13</sup>

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<sup>13</sup> Most often these involved examining the relationship between dichotomous variables (e.g. have insurance or not).

## 3. Findings

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### 3.1 Extent of insurance cover

#### 3.1.1 Non-insurance

##### Levels of non-insurance

Respondents were asked whether their home is covered by building insurance; and or contents insurance. A summary of the results are shown in Table 2 and Table 3 below, including the results from the 2001 study. The top-line results, reporting level of insurance cover were almost identical to those recorded in 2001.<sup>14</sup> Of note:

- 9 percent of home-owners were not covered for building or contents insurance cover (8% in 2001 study); and
- 39 percent of non-home owners were not covered for contents insurance (39% in 2001 study).

The levels of non-insurance estimated from this survey (and its 2001 predecessor) are less closely aligned to those computed from the Australian Bureau of Statistics (ABS) Household Expenditure Survey (HES). A comparison with these is shown in Table 4 below. The differences with the ABS HES results for contents insurance are significant. There are a number of possible reasons:

- The HES results could over estimate non-insurance where a third-party (e.g. parent) has paid for the insurance coverage.
- The online survey results (and the previous phone survey) could under estimate non-insurance if there is some selection bias in attracting respondents; an issue that is more easily addressed by the process undertaken with the HES.

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<sup>14</sup> Full details of the 2001 survey were not available for a detailed comparison. Care should be taken in comparing results from the two studies as they were undertaken using different techniques.

**Table 2: Incidence of home building and contents insurance for home-owners**  
**(From current study and 2001 study)**

	Dwelling type			
	Total	Separate house	Flats/unit	Semi-detached
<b>Have both Building and Contents Insurance</b>	<b>88%</b> <b>(90%)</b>	<b>90%</b> <b>(92%)</b>	<b>72%</b> <b>(75%)</b>	<b>83%</b> <b>(85%)</b>
<b>Total without Building or Contents Insurance</b>	<b>9%</b>	<b>6%</b>	<b>26%</b>	<b>16%</b>
Have only Building Insurance	5% (5%)	4% (5%)	11% (7%)	10% (11%)
Have only Contents Insurance	2% (1%)	0% (1%)	11% (6%)	2% (-)
Have neither Building nor Contents Insurance	2% (2%)	1% (1%)	4% (1%)	4% (4%)
<b>Can't Say (either Building or Contents)</b>	<b>4%</b> <b>(2%)</b>	<b>4%</b> <b>(1%)</b>	<b>1%</b> <b>(11%)</b>	<b>2%</b> <b>(-)</b>
<b>Respondents</b>	<b>822</b>	<b>684</b>	<b>86</b>	<b>52</b>

**Source/ Base:** Weighted results from Full Sample of home owners (with or without a mortgage); Excludes building type 'Other' and "Can't say". Results from the 2001 survey are shown in brackets.

**Table 3: Incidence of home contents insurance for all households**  
 (From current study and 2001 study)

	Owners				Non-owners		
	Total	No mortgage	With mortgage	Sub-total	Renters	Other	Sub-total
Have contents insurance	<b>81%</b> (81%)	90%	92%	<b>91%</b> (93%)	56% (45%)	84%	<b>58%</b>
Do not have contents insurance	<b>18%</b> (16%)	9%	7%	<b>8%</b> (7%)	41% (52%)	16%	<b>39%</b> (39%)
Can't say	<b>2%</b> (3%)	1%	2%	<b>1%</b> (1%)	3% (3%)	0%	<b>3%</b>
Respondents	<b>1198</b>	<b>402</b>	<b>434</b>	<b>836</b>	<b>336</b>	<b>26</b>	<b>362</b>

Source/ Base: Weighted results from Full Sample. Excludes respondents who responded “Can’t say” to tenure type. Results from the 2001 survey are shown in brackets.

**Table 4: Comparison of ABS HES and Survey results on non-insurance**  
 Incidence of non-insurance: rate and number of households

	Owned house without building insurance	All households without contents insurance
ABS SIH/HES – (2003/04)	4.1% (0.2m)	28% (2.2m)
ABS SIH – 2009/10	3.8% (0.2m)	29% (2.5m)
Prior survey – 2001	3% + 2% can't say	16% + 3% can't say
This survey - 2011	3.5% (0.2m) + 4% can't say	18% (1.5m) + 2% can't say

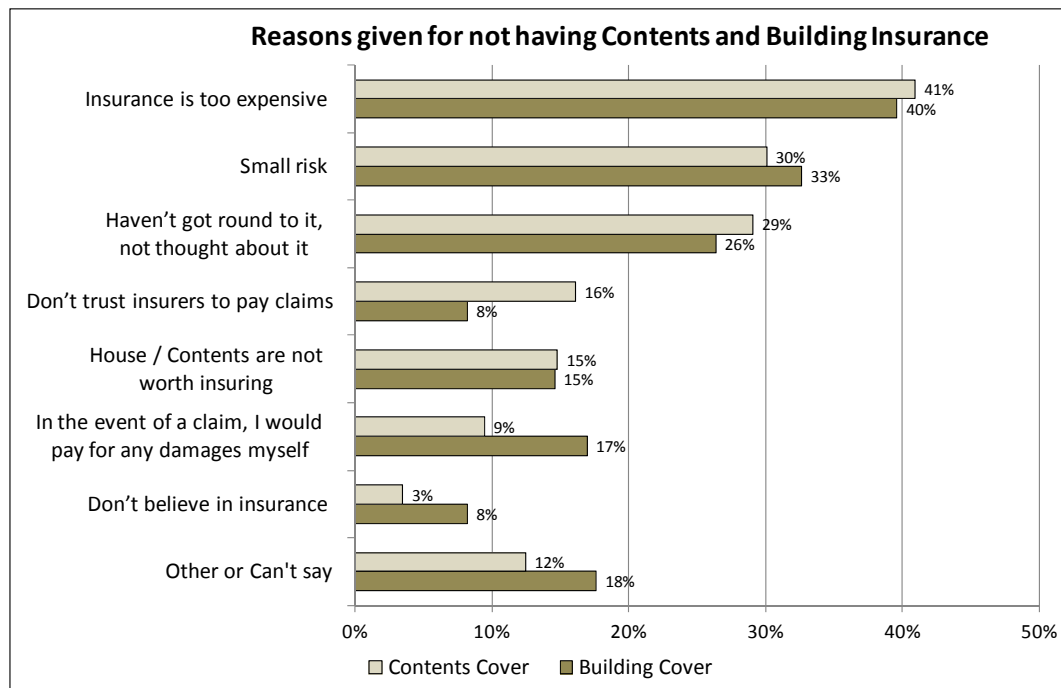
Note: The Insurance Council of Australia provided results from the 2009/10 ABS SIH.

## Reasons for non-insurance

Respondents who were non-insured were asked their reasons for not having cover. A summary of responses for both building and contents cover are provided in Figure 1 below. The results are almost identical for both building and contents cover and ‘Insurance is too expensive’ was most commonly nominated as a reason in both cases. There was little variation of results across different demographic groups, however for those not having contents insurance:<sup>15</sup>

- Older respondents were relatively more likely to nominate ‘Insurance is too expensive’ as a reason.
- Younger respondents were relatively more likely to nominate “Haven’t got around to it, not thought about it” as a reason.

**Figure 1: Reasons for non-insurance**



**Base:** Building Cover (16 respondents) — those without building cover but with reason to purchase directly (i.e. home owners not in flats/apartments). Contents Cover (204 respondents) — all respondents without contents insurance. Household weights used.

1. Respondents could choose multiple reasons and so options add to more than 100 percent.

<sup>15</sup> Variation was examined across age, income and living arrangement. No further analysis was undertaken on the reasons for the lack of building cover due to the small number of respondents without building cover.



## Non-insurance at other properties

This survey sought to address a gap in the understanding of insurance held for other properties. Data sources used in previous studies, including the ABS HES, have insufficient information to examine non-insurance for second homes.

Respondents were asked 'Do you or your household own any other properties?'. Those who reported as having another property were then asked for each of the 'Holiday home (or second house)' and 'Rental house' categories:

- the number of properties owned,
- the number covered by building insurance; and
- the number covered by contents insurance.

Around 15 percent of respondent households reported holding another property; of which 5 percent recorded having one or more 'Holiday home (or second house)' and around 11 percent recorded having a 'Rental house'. Some households reported having more than one additional property; the average number of additional properties owned by households with another property was 1.5 for 'Holiday home' and 1.7 for 'Rental house'. The results are comparable with other data sources including information on implied rates of second ownership<sup>16</sup> and the implied numbers of holiday homes<sup>17</sup> and rental properties<sup>18</sup>.

The incidence of non-insurance was simply estimated as the difference between properties owned and properties insured. The implied rates of non-insurance are reported in Figure 2 below. These are notably higher than for the main household but are not unexpected; people may be less likely to take out insurance on holiday homes because:

- the value of the assets (building and contents) is less than for the main home; and
- they are more able to self-insure; that is, they are more able to live through the consequences of losing a holiday home compared to the main home.

The rates are also consistent with other anecdotal evidence. Based on reported data on non-insured properties following the Victorian Bushfires, Tooth (2010, para. 31 to 35) estimated the rate of non-insurance for holiday homes to be in the order of 30 percent.<sup>19</sup>

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<sup>16</sup> Based on ABS SIH 2009/10 data (provided by the ICA) 17.5% of households owned a second property of which 11.8% were rented out.

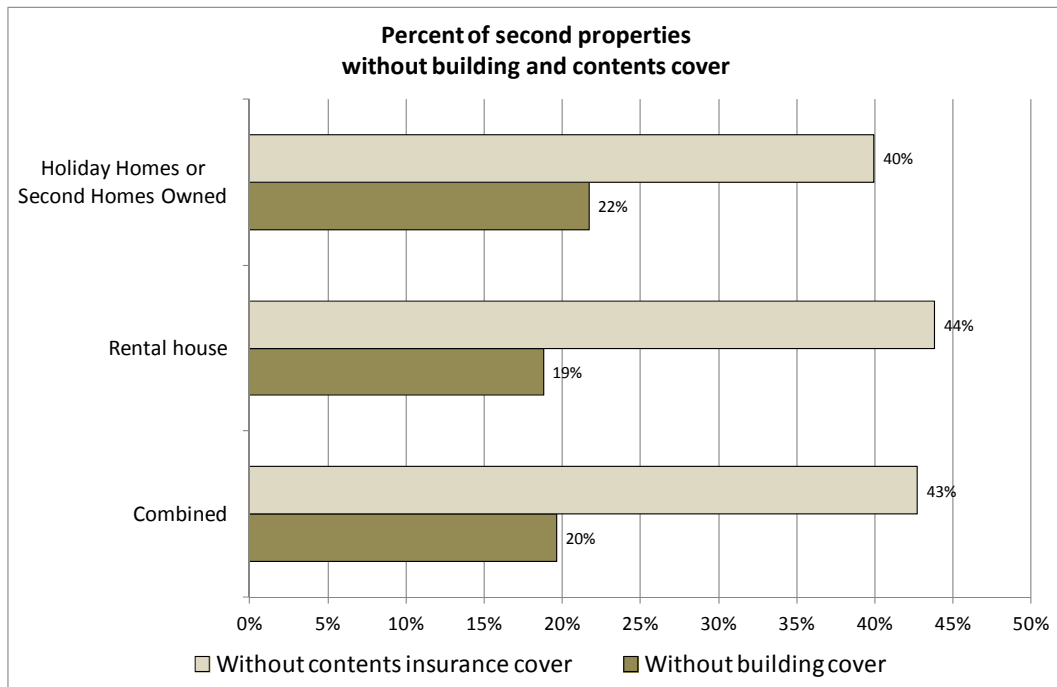
<sup>17</sup> There is very little information on the stock of holiday homes. The National Housing Supply Council's 2010 State of Supply Report (page 37, 38) incorporates some information. Based on ABS data they estimated that the Holiday Home stock comprised 2.4% of all housing stock in 1986 but recognised this was likely to have grown. The implied number from this study is higher; closer to 5%. They also note a 2010 BIS Shrapnel report that estimates that '7.8 per cent of households own a holiday home'. The implied number from this study is 5%.

<sup>18</sup> Based on ABS Housing Statistics (Housing Occupancy and Costs, 2009-10) around 2 million (23.7%) households rent from a private landlord. The implied number of private rental properties (provided by households) from this survey is around 1.65 million.

<sup>19</sup> Information captured following the bushfires included the number of properties destroyed, the number insured and the number that were a primary residence.

The rates of non-insurance for rental properties are reasonably similar to that of holiday homes but there are some slight differences. Relative to holiday homes, the rates of non-insurance are higher for contents cover and lower for building cover. This is expected. As rental properties are often rented unfurnished, contents cover may be unnecessary for the landlord. As rental properties are income generating assets, building cover may more likely be viewed as necessary for protection.

**Figure 2: Non-insurance in second properties**



**Base:** Households who reported owning a second property (59 respondents for holiday homes, 135 respondents for rental house, 179 respondents for combined). Household weights used.

### 3.1.2 Adequacy of cover

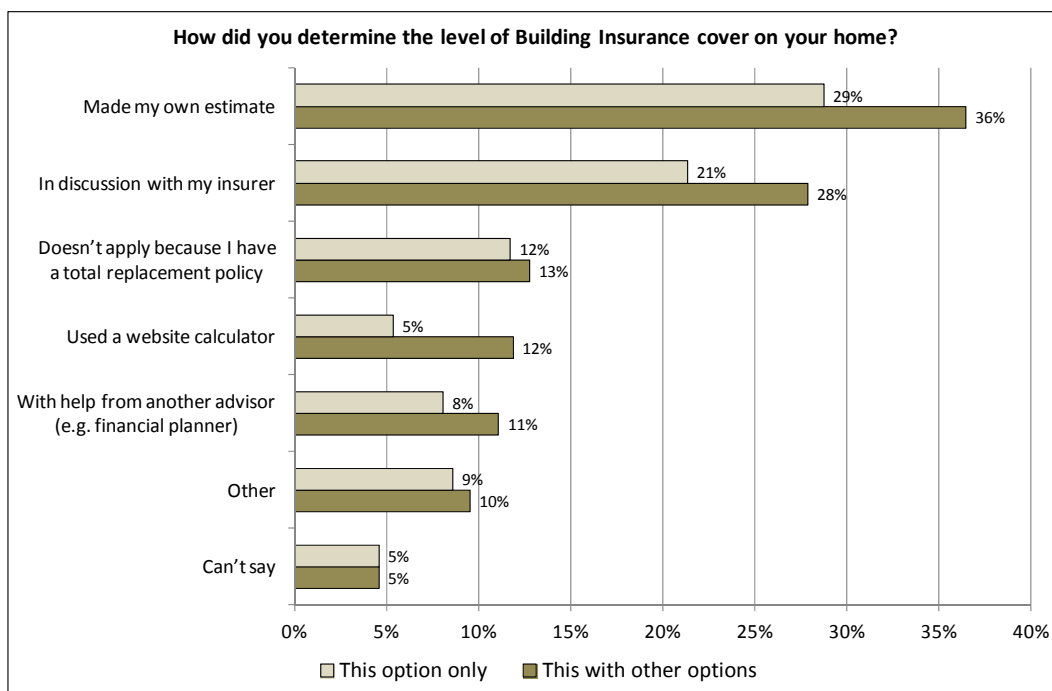
#### Building insurance

With regard to home building insurance a key concern is that many households are under-insured; that is, the level of cover is insufficient to cover a total loss. Both theory and evidence<sup>20</sup> suggests that under-insurance with regard to building cover is unlikely to be a result of people choosing an insufficient cover to reduce the premium, but rather as result of underestimating the level of cover required. It is thus of interest as to how the level of cover was determined.

Respondents with building insurance were asked ‘How did you determine the level of Building Insurance cover on your home?’ The results are summarised in Figure 3 below. Almost 30 percent of households made their own estimate without any other support. Also of note:

- The second most common method was ‘in discussion with my insurer’.
- Website calculators were used only in 12 percent of cases and often in conjunction with some other method.

**Figure 3: Methods used to determine level of building insurance cover**

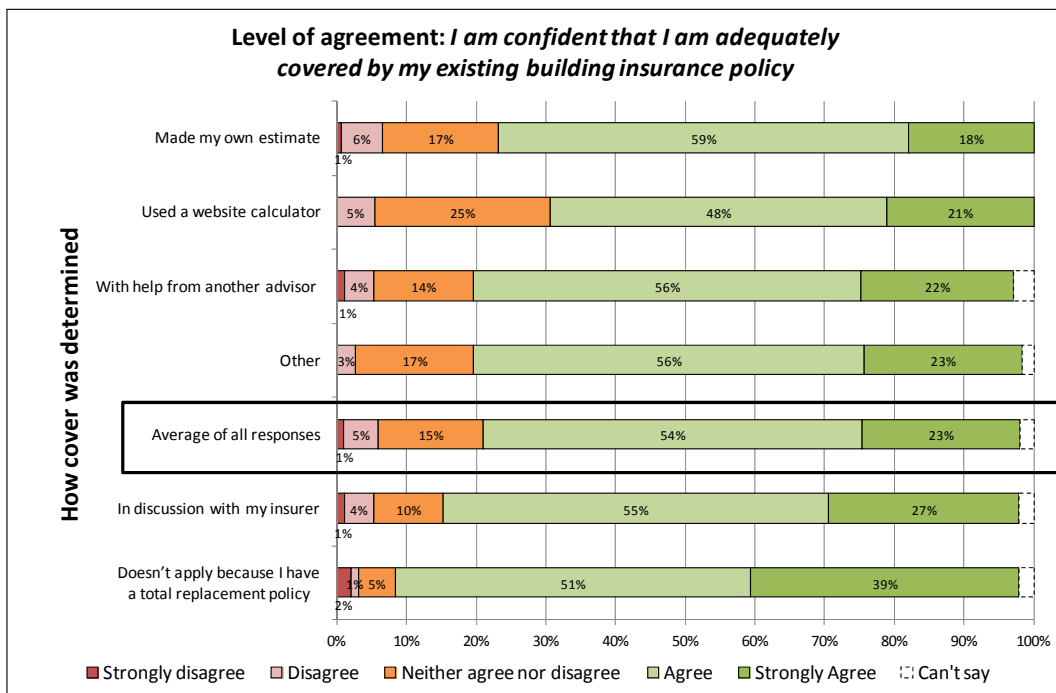


<sup>20</sup> Given the potential loss, the alternative of increasing the excess is likely to be a preferable strategy. Tooth (2008) finds evidence that the people adjust the level of contents cover to cut premiums but finds no evidence of this occurring with building insurance.

**Base:** Respondents with building insurance from Full Sample (Respondents = 875). Household weights used.

Respondents were also asked about their confidence with building insurance policy cover. The results are summarised in Figure 5 below by how the cover was determined. About 77 percent (weighted average) agreed or strongly agreed that they were adequately covered. The level of confidence in the cover varied with how the level of cover was determined; those with a total replacement policy had the highest level of confidence.

**Figure 4: Confidence in building cover**



**Base:** Respondents with building insurance from Full Sample (Respondents = 875). Household weights used.

Additional multi-variate analysis was undertaken on the respondents' level of confidence in their coverage. All else being equal, people were more likely to feel confident about their coverage if they:<sup>21</sup>

- were older and/or of higher income;
- had chosen their insurer based on coverage options or brand/reputation;
- also have contents insurance.

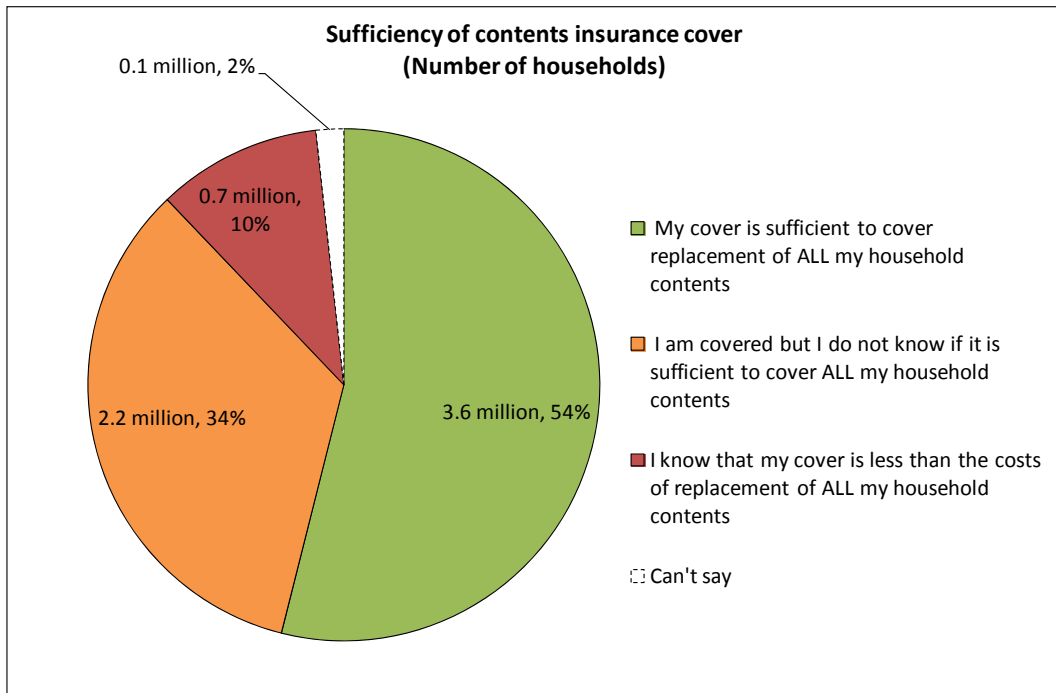
## Contents cover

Those with contents insurance cover were asked whether their cover was sufficient or not to replace all their household contents. The results are show in Figure 5 below.

<sup>21</sup> Variation measured using probit regression; only statistically significant correlations reported.

Of those with contents insurance cover, around 10 percent (77 respondents, representing about 0.7 million households) reported that they knew their cover was less than the costs of replacement of goods; a further 34 percent (representing around 2.2 million households) were unsure.

**Figure 5: Extent of contents insurance cover**

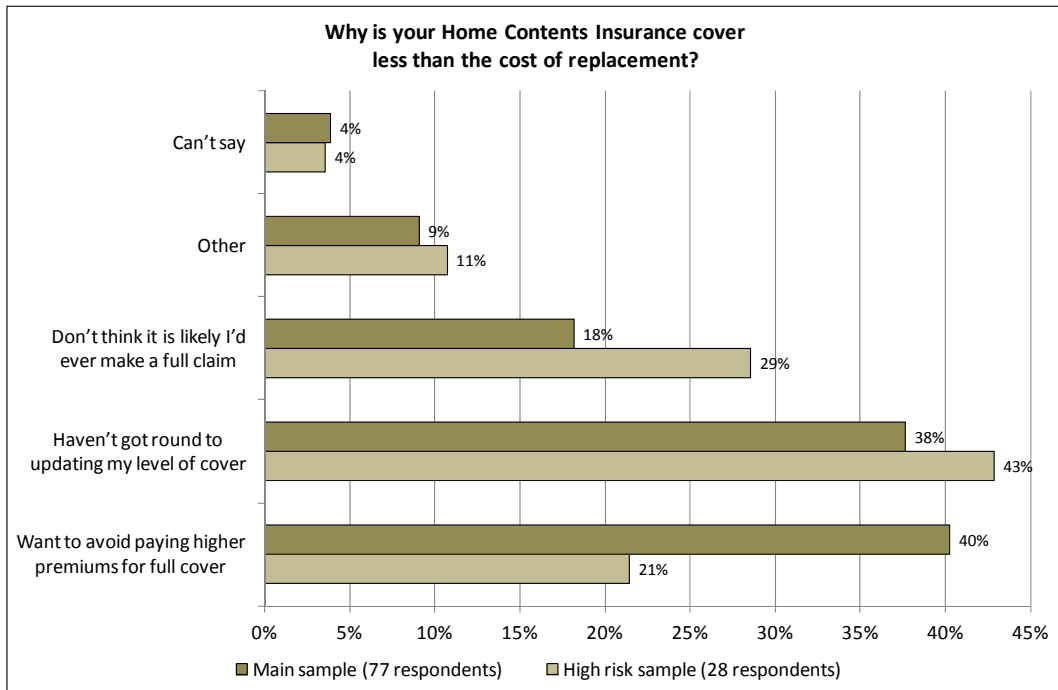


**Base:** Those with Home Contents Insurance (975 respondents). Household weights used.

Those who knew that their level of contents cover was insufficient were asked why. The results are shown in Figure 6 below. Of note there is some variation in results between the High Risk and the Main Sample with the High Risk Sample more likely to nominate “Don’t think it is likely I’d ever make a claim as a reason” and less likely to state avoid paying higher premiums.

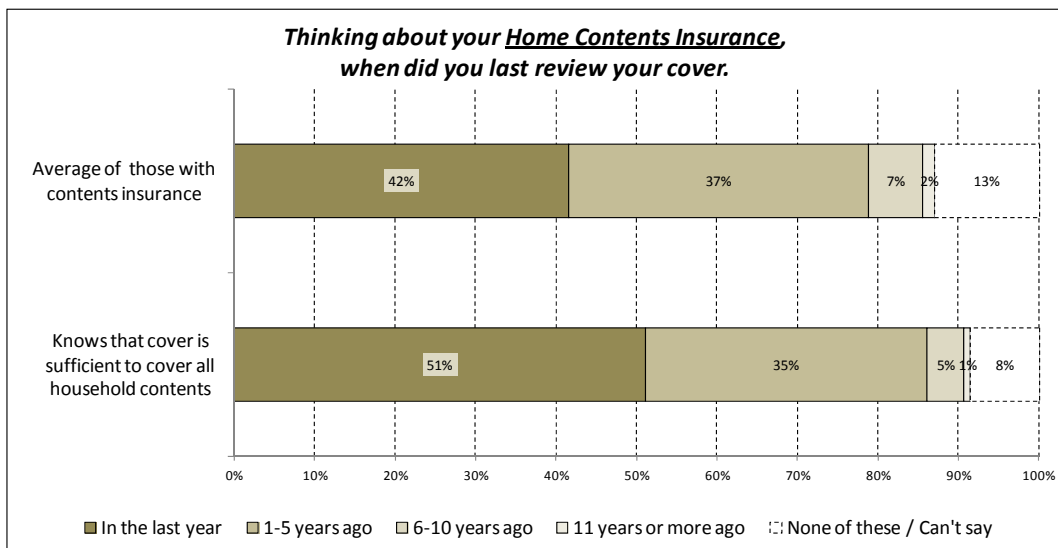
Respondents were also asked when they last reviewed their level of cover (see Figure 7 below). Almost 80 percent of households have reviewed the level of home contents insurance cover in the last 5 years. Not surprisingly, those who were confident that their cover was sufficient were more likely to have reviewed their cover recently.

**Figure 6: Reasons for under-insurance**



**Base:** Respondents reporting that their insurance cover is less than the costs of replacement. Note: Household weights used. Results do not add to 100 percent as multiple choices were allowed.

**Figure 7: When did you last review your cover?**



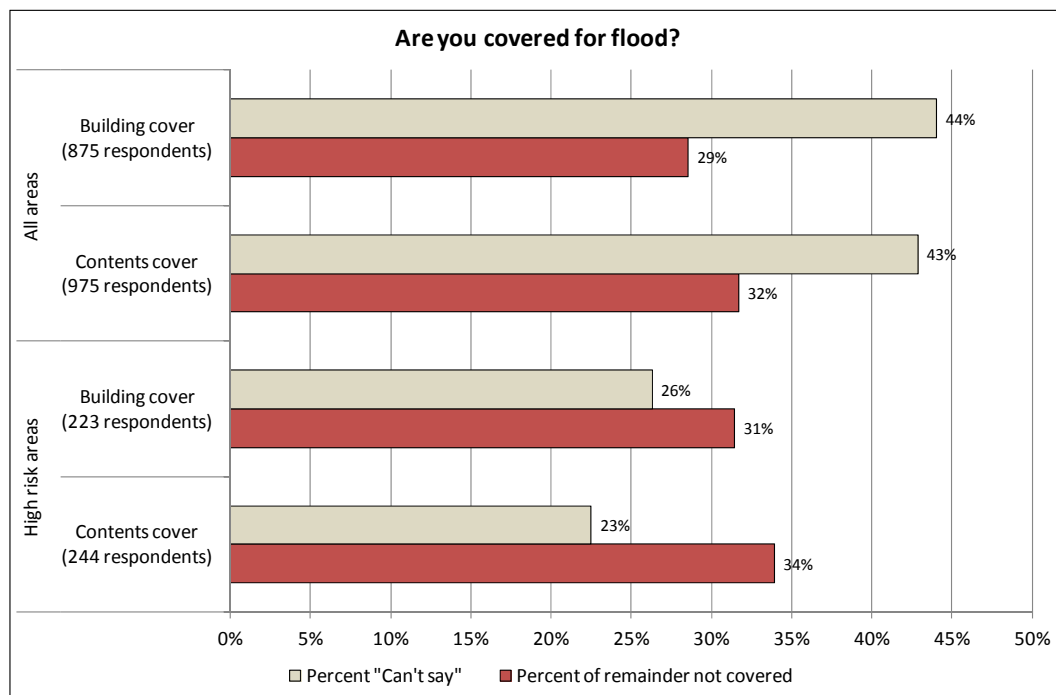
**Base:** Respondents with contents insurance. Household weights used.

## Flood cover

Those with home building or home contents insurance were asked whether they thought they were covered for flood risk.<sup>22</sup> Respondents could answer ‘Yes’, ‘No’ or “Can’t say” for each of home building and home contents insurance. A common concern is that insured are often unaware of whether they are covered for flood and thus the percent of respondents who “Can’t say” is of significant interest. The level of non-insurance among the remainder is used as an indicator of the overall level of non-insurance.<sup>23</sup>

The weighted results for Full Sample and the High Risk Sample are presented in Figure 8 below. Overall, a large proportion of households (around 44%) cannot say whether they are covered for flood. Perhaps not surprisingly, those in high risk areas (many of which are drawn from Queensland) are more likely to know whether they are covered. The relative proportion of those covered does not differ markedly between building cover and contents cover.

**Figure 8: Extent of flood cover**



**Base:** Households with home building or contents insurance. Household weights used.

The results by state/territory are shown in Figure 9 below. Of note:

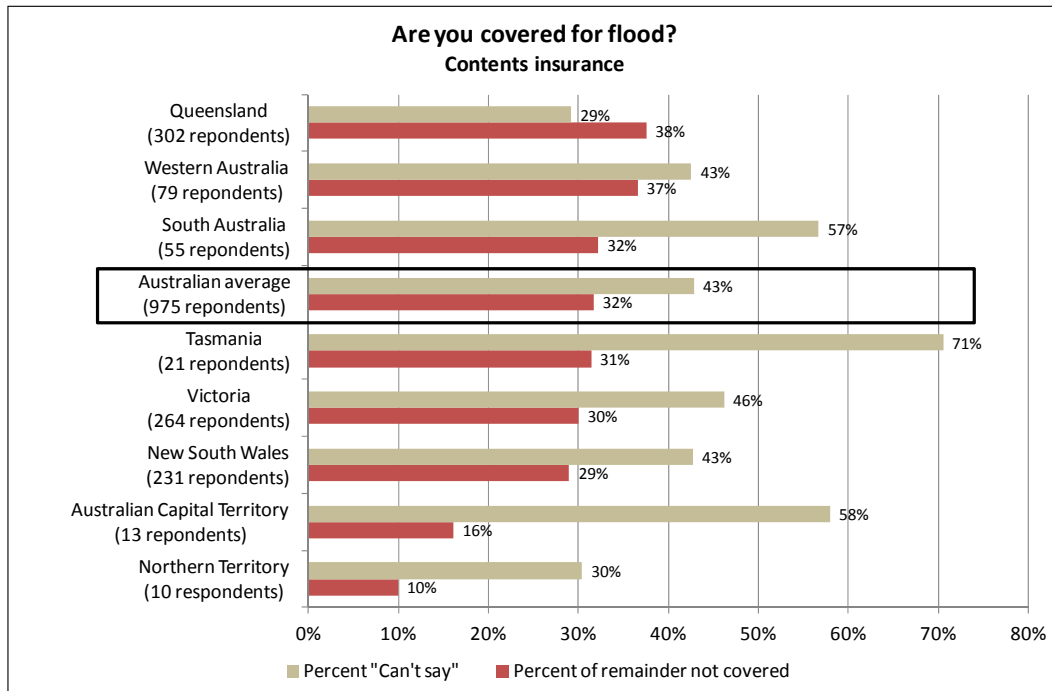
- There is a greater understanding of flood cover in Queensland

<sup>22</sup> Specifically they were asked ‘For your home, does your Home Insurance cover you for flood risk? By flood risk we mean rising water.’

<sup>23</sup> The proportion responding “Can’t say” was significant and varied significantly by group; thus the proportion stating they were not covered for flood is unlikely to be indicative of all respondents who are not covered.

- Generally more “Can’t say” responses coincided with a lower proportion of those thought they were not-covered.

**Figure 9: Lack of flood cover by state**



**Base:** Households with contents insurance. Household weights used.

The survey also asked respondents who they insured with. The extent of flood cover varies by brand. At the time of the survey, some insurers offer flood cover as standard, some provided flood cover as an option and some did not provide flood cover at all. By comparing the choice of insurer with the response to the question ‘Are you covered for flood?’, it is possible to assess in some cases (when flood is standard or never offered) whether households have incorrectly assumed they were or were not covered for flood.<sup>24</sup> The results indicate that:

- In cases where flood cover was a standard cover provided by their insurer around 14 percent (unweighted count) of households mistakenly believed they were not covered
- In cases where flood cover was not currently provided by their insurer around 16 percent of households mistakenly believed they were covered.

These results indicate that understanding of cover is still clearly a problem. A similar analysis was undertaken on respondents who thought they had replacement cover. Of those respondents who were with insurers that did not offer full replacement cover around 12 percent indicated they had total replacement cover.

<sup>24</sup> A number of insurers have begun offering flood insurance cover as of January or February 2012. These were excluded from this analysis.

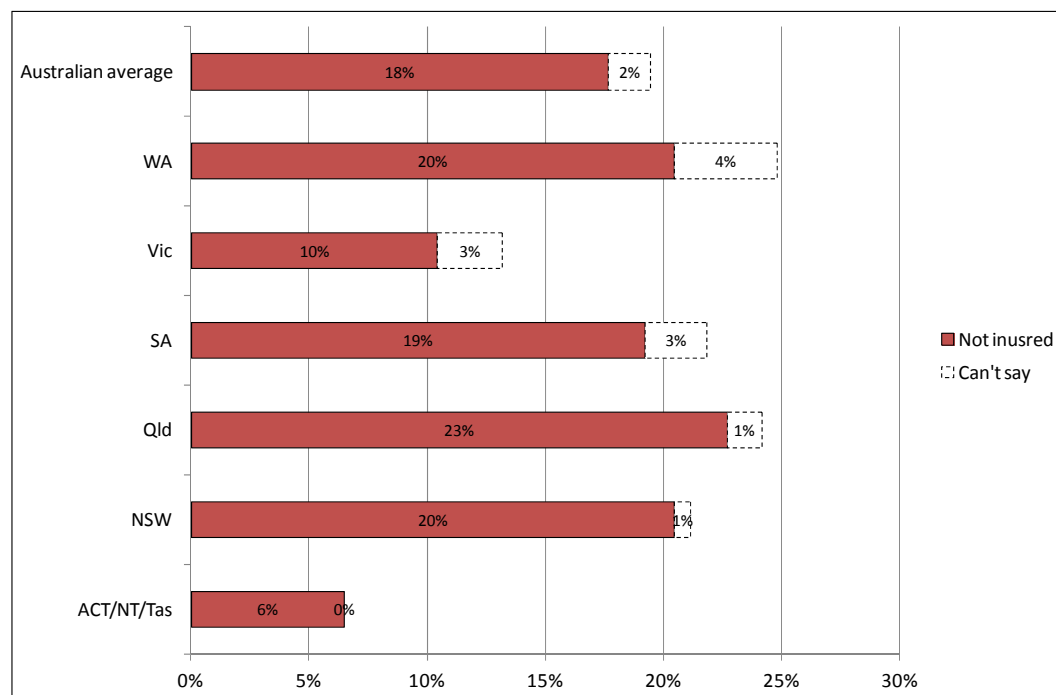


### 3.1.3 Coverage by region

A summary of the rates of non-insurance for contents insurance cover by jurisdiction is provided in Figure 10 below. However, by itself this information is of limited value. It is difficult to compare insurance coverage by location as there are many drivers of insurance demand (including income, house type, tenure and age) that vary by region. To control for these factors, multivariate analysis was undertaken.<sup>25</sup> The only significant variation detected was that households in regional Victoria had a relatively low level of non-insurance.<sup>26</sup> Consumer concern over bushfire risk is a possible reason; Victoria has experienced many of Australia's worst bushfires including the recent 2009 fires.<sup>27</sup>

Given that building insurance only applies to a subset of the sample (home owners) and the high rates of coverage, it is not practical to conduct analysis across regions on building insurance using the results of this survey.

**Figure 10: Take-up of contents insurance by region**



**Base:** Full sample. Household weights used.

<sup>25</sup> A probit model was analysed of whether households had contents insurance with controls for income, respondent age, living arrangements, house type, tenure.

<sup>26</sup> See ICA (2012) for disaster statistics.

<sup>27</sup> Tooth (2008) also found take-up of insurance abnormally high in regional Victoria.

## 3.2 Influences on insurance decisions

To build on prior work on insurance demand, a number of questions were asked about potential influences on insurance decisions. These included questions relating to:

- whether family and friends had insurance cover;
- their claims experience and that of their family/friends;
- their language spoken — a demographic factor not previously analysed; and
- their home’s exposure to risk.

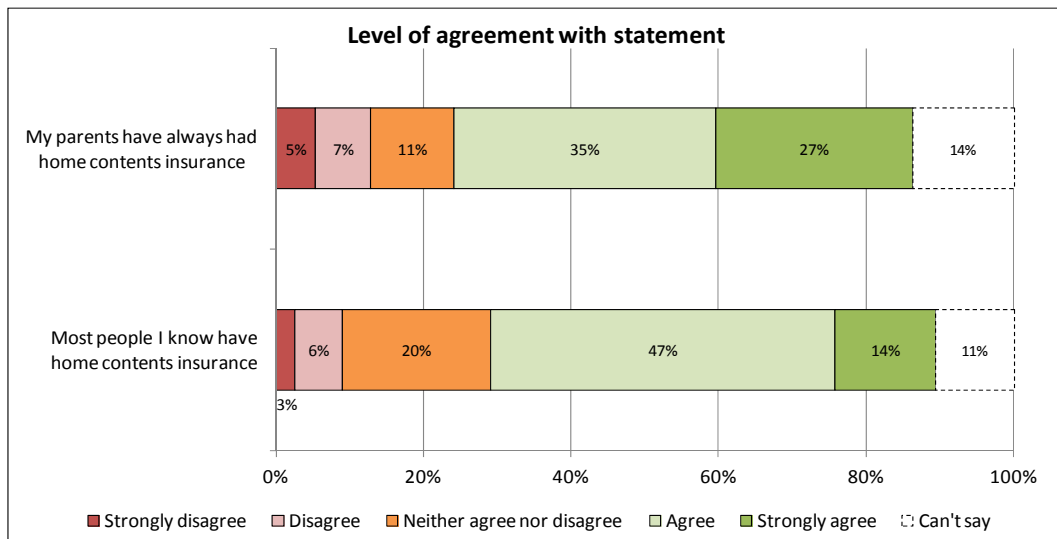
### 3.2.1 Insurance held by others

Respondents were asked about whether their family and friends had insurance cover. The results are shown in Figure 11 below. Figure 12 shows how the insurance decisions of others relate to the household’s decision to insure.

The results of Figure 12 suggest that the parent attitudes to insurance are influential on the household’s insurance decision. Similarly, people are less likely to be insured if other people they know are not insured. Further analysis found that these relationships existed even after controlling for demographic factors including living arrangement, age and income.

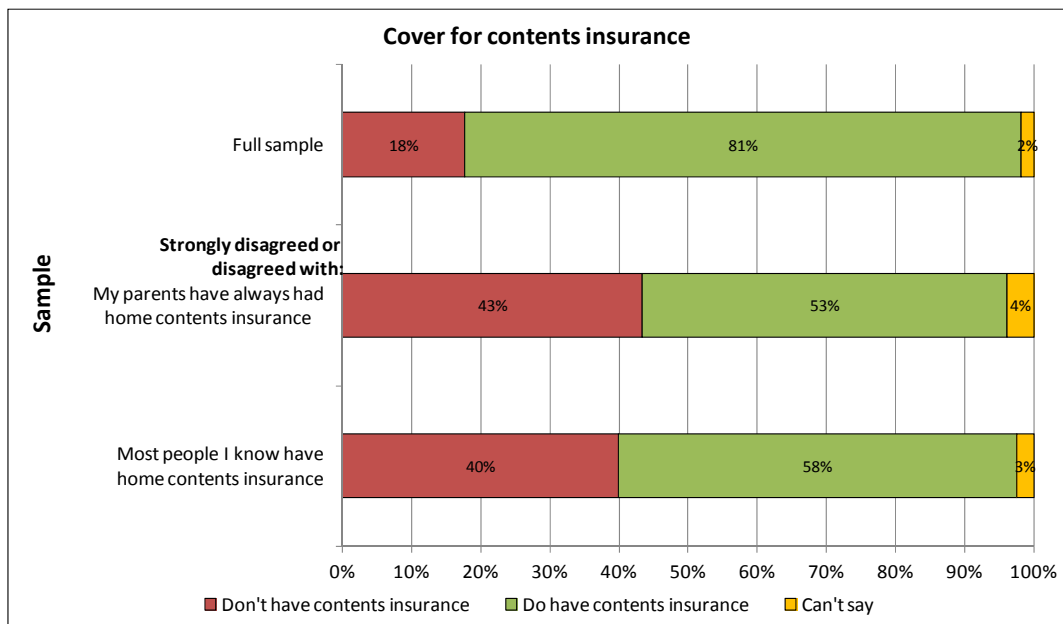
An implication is that there is a significant opportunity to increase levels of cover through greater influence.

**Figure 11: Whether family/friends have insurance cover**



**Base:** Full sample. Household weights used.

**Figure 12: Influence of others on decision to insure**



**Base:** All respondents. Household weights used.

### 3.2.2 Language

Prior studies (Tooth and Barker 2007, Tooth 2008) found evidence that those born overseas were less likely to take out insurance. One possible reason is that language difficulties led to people being uninsured. To help test this, respondents were asked what language was spoken at home. A summary of results is shown in Table 5 below. Those whose main language at home is not English are twice as likely to be not-insured. This may, however, not be due to language barriers but rather to cultural factors; as suggested by the results in the table, parents of respondents whose main language was not English were also less likely to be insured.

Once other demographic factors (e.g. income, house tenure) are controlled for, the correlation between language and the take-up of insurance is weak. After controlling for other factors, some evidence was still found of a lower take-up of insurance among those who spoke another language at home; however there was no more discernable difference between those whose main language was or was not English. These results suggest that language difficulties were not a significant issue.

**Table 5: Language spoken at home**

	Respondents	Without contents insurance	Measure <sup>28</sup> of parents non-insurance
English only	1015	15%	12%
English main but other language spoken	133	26%	22%
Other language than English is the main language spoken	47	31%	38%
Can't say	5	54%	64%
Full sample	1200	18%	15%

**Base:** All respondents. Household weights applied

### 3.2.3 Claims experience

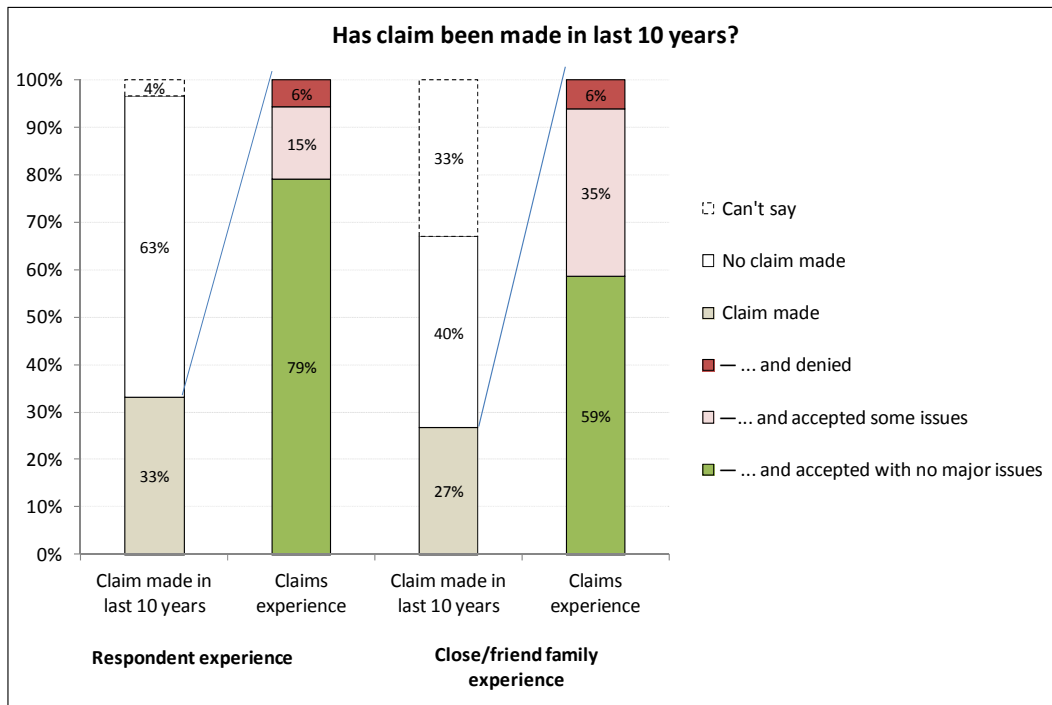
Respondents were asked about their claims experience. The results are in Figure 13. Of note, the questions were asked to help assess the extent to which claims experience influenced decisions and actions.

Claims are infrequent; only a third of respondents reported making a claim in the last 10 years. The majority of householders' claims are accepted with no issues; only 2 percent of households — 6 percent of those who had experienced a claim — reported having a claim denied.<sup>29</sup>

<sup>28</sup> Measured as 'Strongly disagreed' or 'Disagreed' with the statement 'My parents have always had Home Contents Insurance'

<sup>29</sup> Note that this survey focussed on the accumulated experience of respondents and not the number of claims. Industry experience is that participants of the General Insurance Code of Practice (most general insurers) pay 98% of claims (Financial Ombudsman Service, 2010, page 6).

**Figure 13: Claims experience**



**Base:** All respondents.

1. Respondents could choose one option. Chart should not be used to interpret total amount of claims

It was expected that people's decision to insure might be affected by their claim experience. Further analysis revealed:<sup>30</sup>

- Households who had a claim denied were less likely to be insured (Base: those who've made a claim in the last 10 years)
- Households whose friends/family had a claim accepted with no issues were more likely to be insured (Base: Households who've had a friend or family member make a claim in the last 10 years)
- Households were more likely to report being underinsured if they had not made a claim in the last 10 years.

More generally, as discussed further below, those who have made a claim (or whose friends/family have made a claim) are more likely to express trust in the insurance industry and those who express trust in the insurance industry are more likely to insure.

<sup>30</sup> Based on multivariate (probit model) analysis with controls for age and income.

### 3.2.4 Exposure to risk

A feature of the new survey was the inclusion of questions to assess householder’s level of exposure to different risks. Respondents were asked:

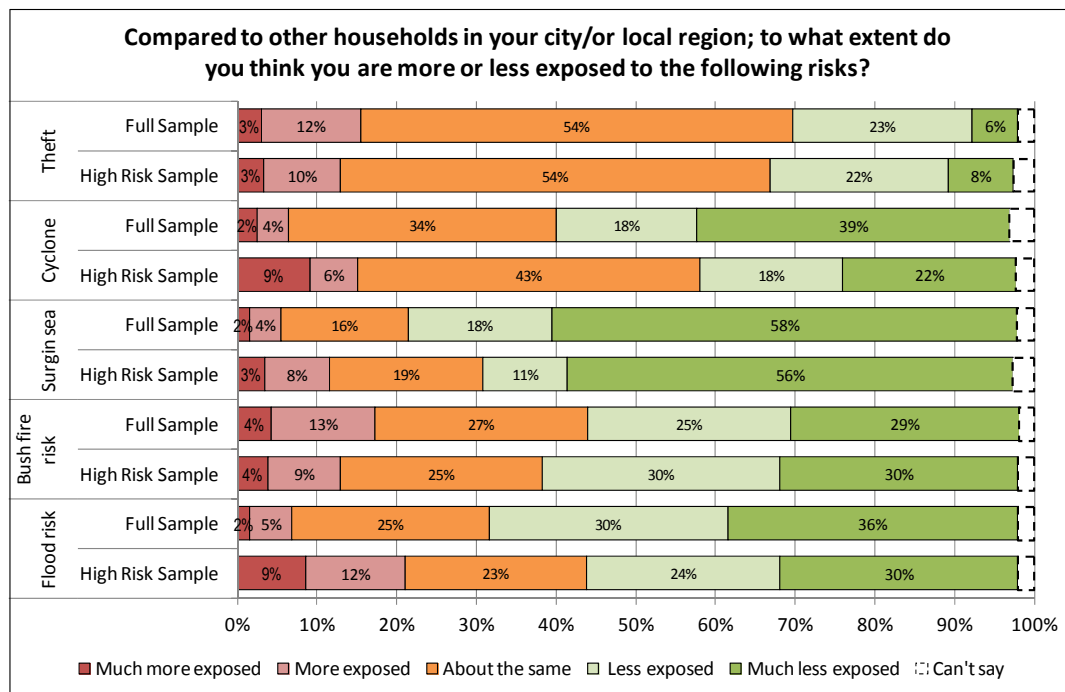
- their relative level of exposure to a range of risks; and
- the extent to which they had knowledge of the risks before moving to their location.

The risks assessed were:

- Flood risk;
- Bush fire risk;
- Surging sea water risk;
- Cyclone risk; and
- Risk of theft

To assess their relative level of exposure, respondents were asked to rate their exposure relative to other households in their city/or local region. A summary of results of the level of exposure is shown in Figure 14. In general, people felt that they were less exposed to risks compared to others within their city or local region. This response is consistent with an optimism bias of consumers but may also reflect respondents’ interpretation of ‘other households’. Consistent with the selection, those in the Higher Risk Sample were more likely to state they were more exposed to flood, cyclone and surging sea risk.

**Figure 14: Exposure to risks**



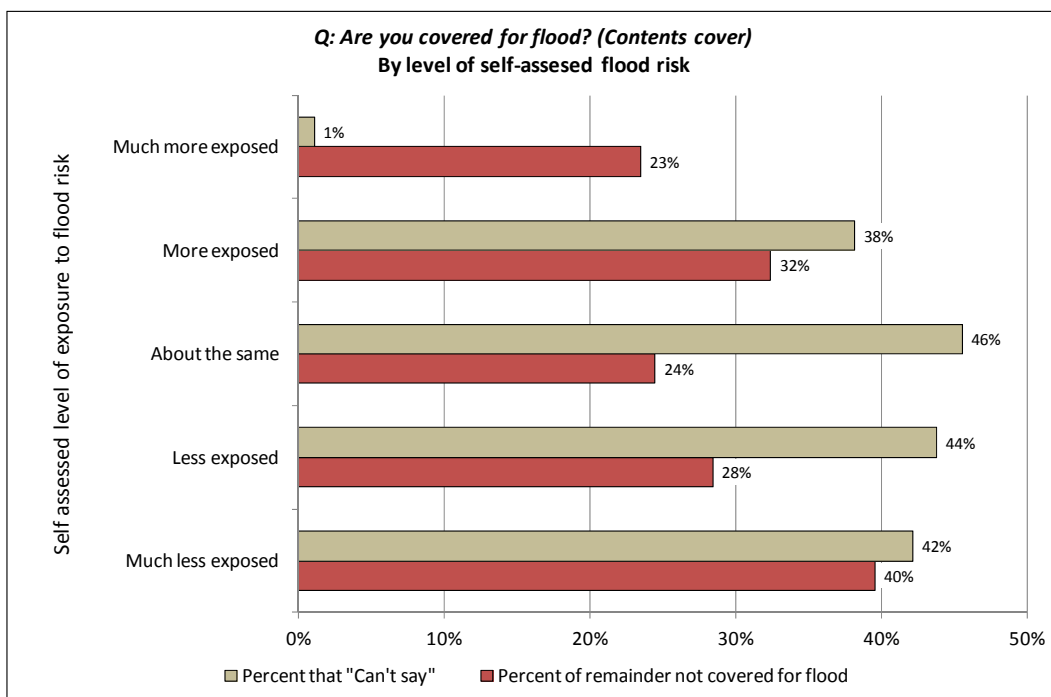
**Base:** Full sample. Household weights used.

Figure 15 compares the level of exposure against the coverage of flood risk. Two aspects stand out. First, as we would expect, those who reported being exposed to a relatively high

flood risk, were much more likely to understand (less likely to respond “can’t say”) whether they were covered.

Second, those who reported being ‘much less exposed’ to flood risk were less likely to take out flood insurance. This may be an indication of adverse selection, which can occur when insurers are unable to set premiums with sufficient accuracy. In such cases, those households who assess their flood exposure as being relatively low may opt out of flood insurance because they perceive it to be of relatively poor value. If flood insurance was priced to reflect the relative risk level then the level of exposure should have negligible impact on the decision to get flood cover.

**Figure 15: Flood coverage by self-assessed level of flood risk**



**Base:** Those with Contents Insurance. Household weights used.

Analysis was also undertaken to examine the extent to which self-assessed risk exposure influenced decisions to insure. Strong evidence was found that households were more likely to be insured if they thought they were relatively more exposed to bush fire risk. This relationship was not found with the other perils.

The link between expected bushfire risk and the decision to insure is consistent with the finding of a relatively high take-up of insurance in rural Victoria (see Section 3.1.3 above).

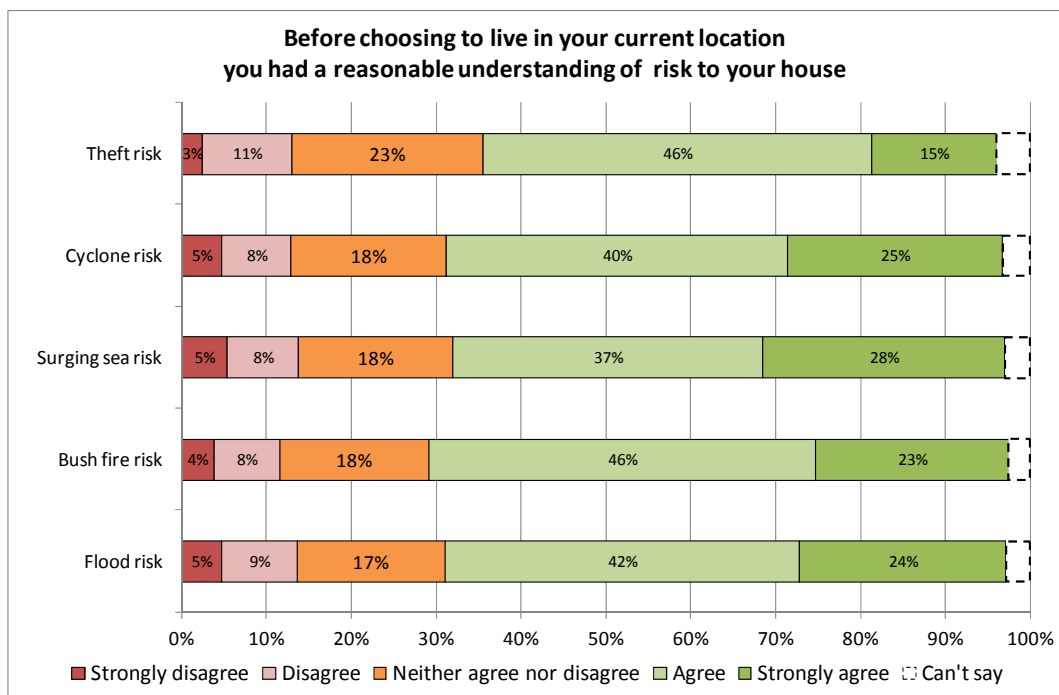
### 3.3 Understanding of risk

A common concern is that people have invested in a home, unaware of the risks to their home and the associated financial consequences. To investigate this concern, respondents were asked about the level of understanding of the risks prior to choosing to live in their current location. A summary of results is shown in Figure 16. For all risks, between 12 and 14 percent of households disagreed or strongly disagreed that they had an understanding of the risks before choosing to live in their current location.

Of particular interest is the extent to which a lack of understanding of risk was associated with people moving into high risk areas. This is examined in Figure 17, which compares the level of understanding of risk across different samples including the Full Sample, the High Risk Sample and the set of households who self-assessed that their home was relatively highly exposed. Of concern, the lack of understanding of risk with regard to flood and storm surge was greater among the High Risk Sample. Furthermore with regard to flood, storm surge and theft risk those who assessed their relative risk exposure as high were much more likely to indicate they were not aware of the risks before moving to their location. In particular, over 20 percent of respondents who assessed themselves as relatively highly exposed to flood considered that they did not understand the risk prior to choosing to live in their location.

Of note, the prior understanding of risk with regard to cyclone and bushfire risk was not greater in the higher risk exposure samples.

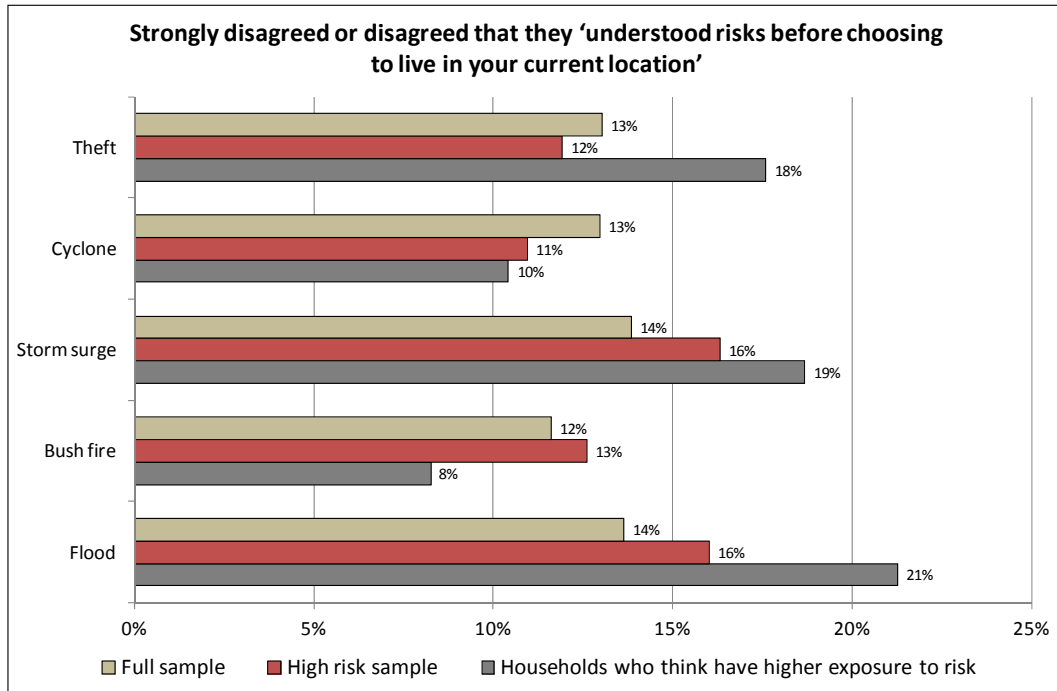
**Figure 16: Level of understanding of risks prior to moving to current location.**





**Base:** Full sample. Household weights used.

**Figure 17: Understanding of risk prior to choosing location and risk**

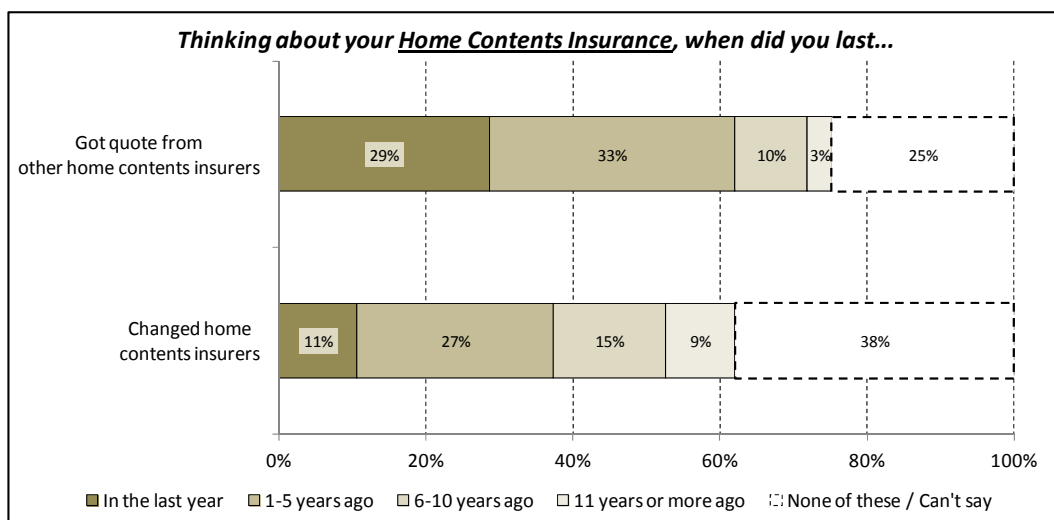


**Base:** Sample described in chart. Household weights used.

### 3.4 Choice of insurer

Respondents were asked about how often they shopped around for insurance, their choice of insurer and their reasons for choosing their insurer. Figure 18 shows when people last got a quote and switched insurers. The results indicate a healthy level of competition. The results indicate a significant amount of shopping around and switching, with around 29 percent shopping around for a quote in the last year and 11 percent choosing to switch insurers.

**Figure 18: Last reviewed insurance policy**



**Base:** Full Sample of those with contents insurance (975 respondents). Household weights used.

Analysis was undertaken on what factors were important in the choice of insurer. Price and brand/reputation are the two dominant factors for both building and contents insurance. Of note, in over a third of cases (for building insurance) the provision of flood cover was listed as a 'Very important' factor. Results are shown in a confidential appendix.

## 3.5 The cost of insurance

The survey included a number of questions to assess the extent to which households were sensitive to the price of insurance.

### 3.5.1 Actions to reduce premium of contents insurance

Respondents were asked whether in the last 10 years, to reduce the premium of their Home Contents policy they had:

- chosen to increase the level of excess; and
- chosen to reduce the maximum level of cover.

The key results are summarised in Table 6 below. Around 22 percent of households reported that they had increased the excess and 10 percent had reduced the level of cover. 5 percent of households had reported doing both and thus around 27 percent of respondents had reported doing at least one of these actions.

**Table 6: Actions taken to reduce premium**

Actions taken in the last 10 years to reduce premium of contents insurance					
		Chose to increase the level of excess			
		No	Yes	Can't say	Total
Chose to reduce maximum level of cover	No	66%	16%	2%	84%
	Yes	4%	5%	0%	10%
	Can't say	0%	0%	6%	7%
	Total	70%	22%	8%	100%

**Base:** Households with home contents insurance (975 respondents). Household weights used.

The proportion of people undertaking such actions increases slightly with age.

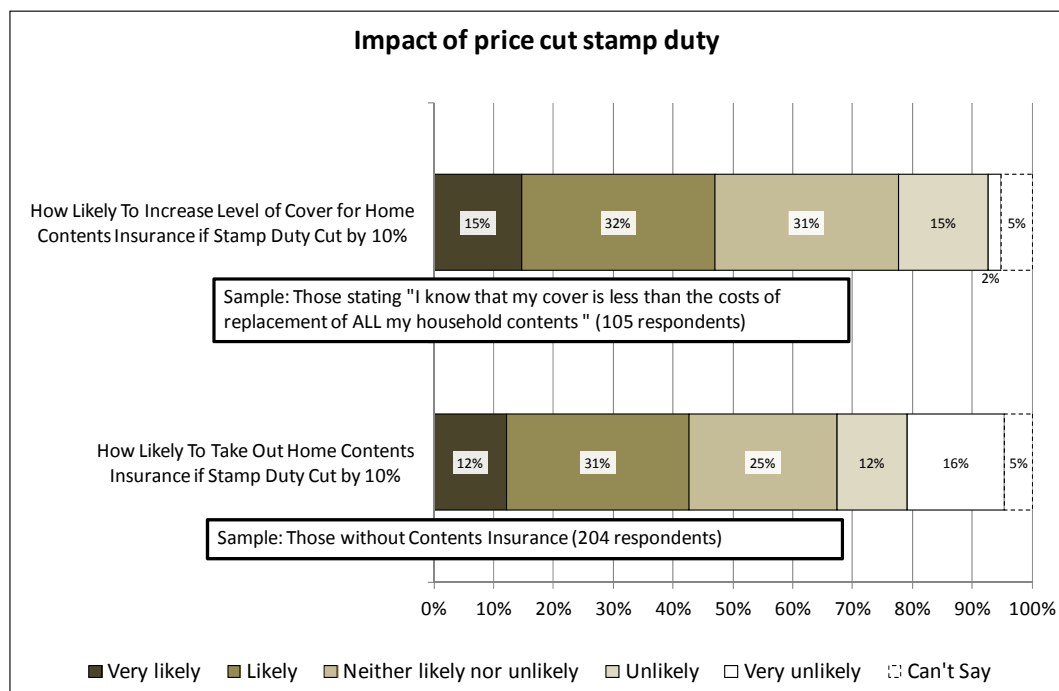
### 3.5.2 Responses to changes in tax rates

As noted in the introduction, all jurisdictions apply a stamp duty (in most cases around 10 percent but from 7.5 percent to 11 percent) of the premium. To test the effect of removing the stamp duty, respondents who did not have cover or knew they had insufficient cover were asked what actions they would likely take if the stamp duty was cut and prices fell accordingly.

As shown in Figure 19, 12 percent of those without contents insurance thought it ‘very likely’ they would take out Home Contents insurance if stamp duty was cut. This is equivalent to around 180 thousand households.<sup>31</sup> Another 32 percent thought it ‘likely’.

Of those who knew their cover was insufficient, around 15 percent (equivalent to around 105 thousand households) thought it ‘very likely’ they would increase their cover. As many respondents (around 2.2 million households; see Figure 5 above) were unaware whether their cover was sufficient, the total response may be significantly greater.

**Figure 19: Response to cut in stamp duty**



**Base:** Those with home contents insurance (975 respondents). Household weights used.

To assess the response to increased taxes on premiums, respondents with contents insurance were asked what their likely actions would be to different price rises. Specifically they were asked:

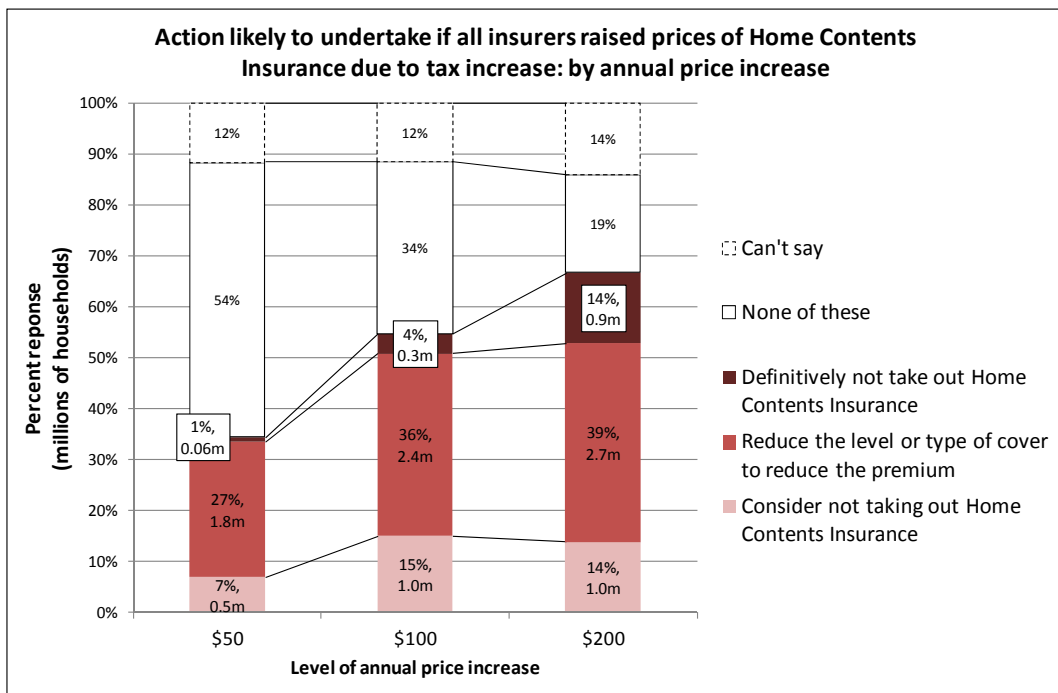
*Which of the following actions are you likely to undertake, if due to tax increases, all insurers raised prices of Home Contents Insurance by [\$50, \$100, \$200 per year].*

- Consider not taking out Home Contents Insurance
- Reduce the level or type of cover to reduce the premium
- Definitely not take out Home Contents insurance

<sup>31</sup> This result is consistent in magnitude with an estimate from Tooth (2008) based on ABS HES data. That study forecast that an additional 300 thousand households would take-up contents insurance if all state taxes were removed and around 180 thousand if just the FSL were removed.

The results, presented in Figure 20 below, indicate a small price increase would lead to a significant response. For an increase of \$50 per year — in the order of 10 percent of the average home contents insurance premium<sup>32</sup> — the results suggest an estimated 27 percent of insured households (around 1.8 million households) would choose to underinsure and between 1 and 8 percent (around 0.6 to million households) would choose to not insure. Predictably a larger yearly price increase yielded a more extreme response; the results imply a \$200 increase would result in between 0.9 million and 1.9 million households opting out of contents insurance cover. These results are similar in magnitude with previous studies.<sup>33</sup> Note that these estimates are based on existing policyholders opting to underinsure or not insure; a price increase would also dissuade new customers.

**Figure 20: Response to tax increase**



**Base:** Respondents with contents insurance from Full Sample. Household weights are used

1. Respondents could only choose one action.
2. Results are largely insensitive to sample used.

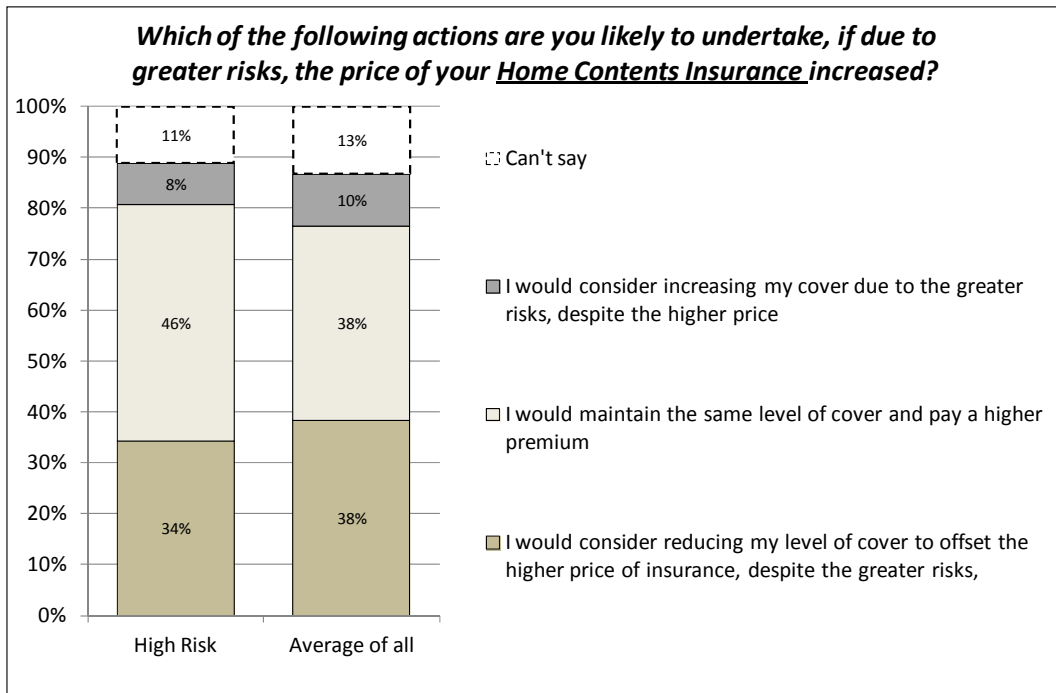
A further question of interest is how households would respond to a price increase that was due to an increase in the level of risk. In response policyholders might wish to increase or decrease their level of cover. The results of the survey are shown Figure 21 below. The

<sup>32</sup> No exact percentage can be calculated as home contents and home building insurance premiums are typically combined. Information from the ABS SIH 2009/10 indicates the average household premium was around \$885 per annum. With some premium inflation and assuming the home contents insurance component is of similar magnitude to home building, the home contents insurance premium component is in the order of \$450 to \$500.

<sup>33</sup> Tooth (2008) estimated the price elasticity of demand for the take-up of contents cover to be around -0.5 (range -0.45 to -0.6); thus a \$50 or 10% price increase would lead to around a 5% decrease in demand.

results suggest that many policyholders (around 38%) would consider reducing their cover to offset a price increase; a lesser but still significant percentage (around 10%) indicated they would consider increasing their cover. These results are consistent with many people working to a budget.

**Figure 21: Response to increases in risk**



**Base:** Respondents with contents insurance (975 respondents). Household weights used.

1. Respondents could only choose one action.
2. Results are largely insensitive to sample used.

## 3.6 Attitudes

### 3.6.1 Attitudes towards insurers

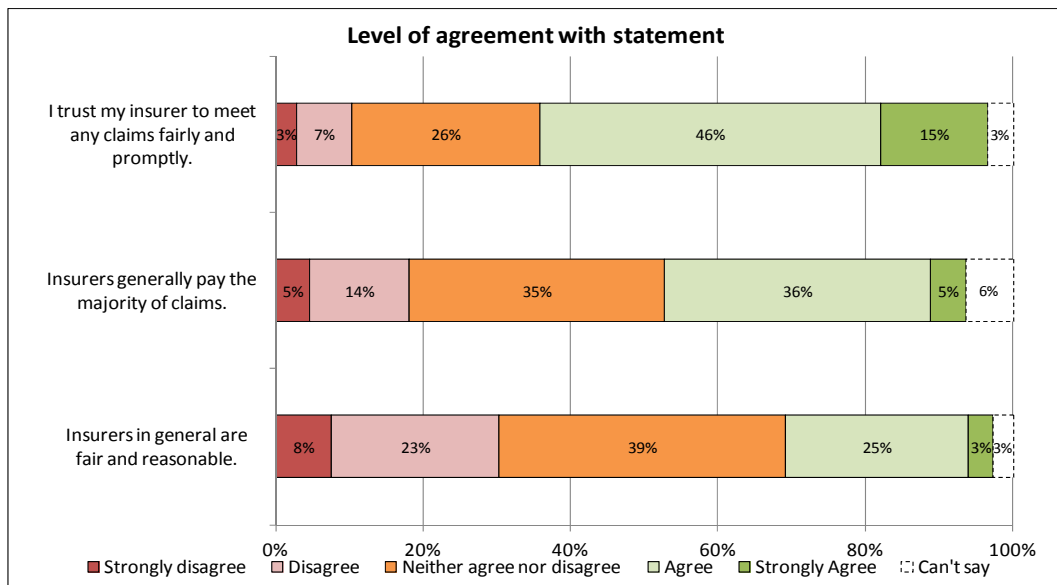
Respondents were asked a number of questions to assess their level of trust with their own insurer and the industry as a whole. Specifically they were asked:

*To what extent do you agree or disagree with the following statements?*

- 1) *I trust my insurer to meet any claims fairly and promptly*
- 2) *Insurers in general are fair and reasonable*
- 3) *Insurers generally pay the majority of claims*

The results are summarised in Figure 22 below. Respondents were generally positive about their own insurer but less so about the insurance industry in general. While it should not be surprising that consumers have a higher regard for the insurer that they have chosen, the difference with the industry in general is significant.

**Figure 22: Trust in insurers**



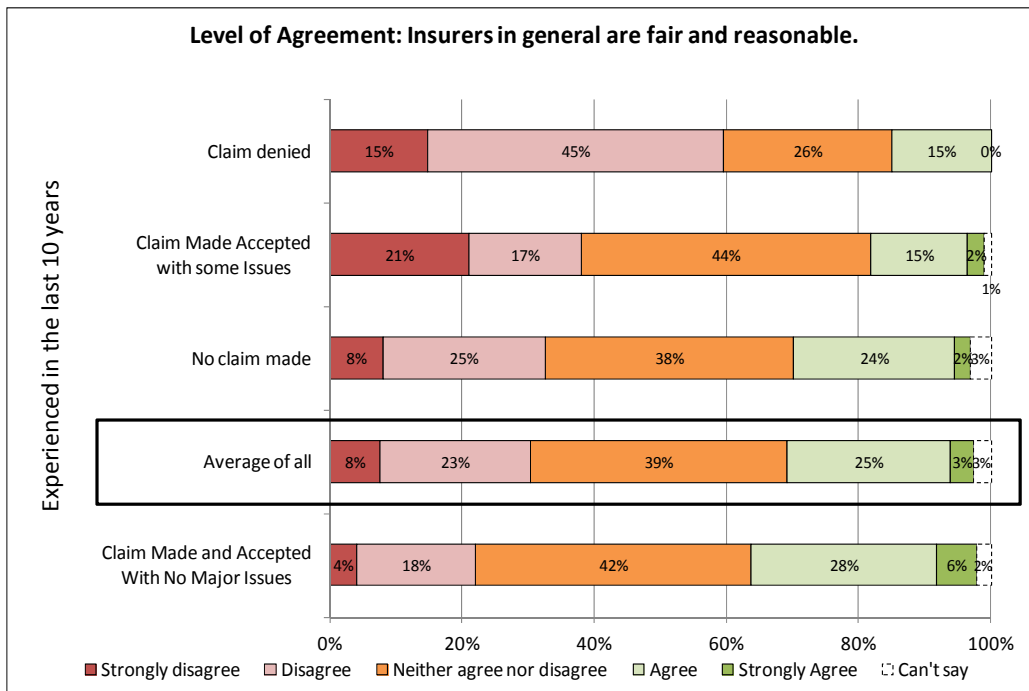
**Base:** All respondents. Population weights used.

Attitudes towards insurers varied with a number of factors. Most notably attitudes varied most significantly with claims experience. This is demonstrated in Figure 23 below. Among those who have contents insurance, people were more likely to agree with each of the statements above if they reported having a claim being accepted with no issues.

Further analysis revealed that:

- Older respondents were more likely to trust their insurer
- There was no evidence that trust in their insurer varied with income
- Trust was in insurers (their own or others) to pay claims was significantly less among those who spoke another language

**Figure 23: Impact of claims experience on levels of trust**



**Base:** Full sample. Population weights used.

### 3.6.2 Financial assistance for the non-insured

The survey asked two questions with regard to the financial support that is given to the non-insured. Following a disaster, there is often pressure for Governments to provide disaster relief and for insurers to pay ex-gratia claims (i.e. claims that are not covered by under the policy).

Two key concerns of the insurance industry are that:

- They are expected to pay for claims that are clearly not covered by a policy; and
- Government assistance targeted to the non-insured discourages ('crowds out') demand for insurance.

To test community attitudes, respondents were asked to what extent they agreed or disagreed with the statements:

*Insurers should not pay claims which are clearly not covered by the policy*

*Assuming the government provides financial assistance to households following a disaster, households who chose not to insure should get more assistance.*

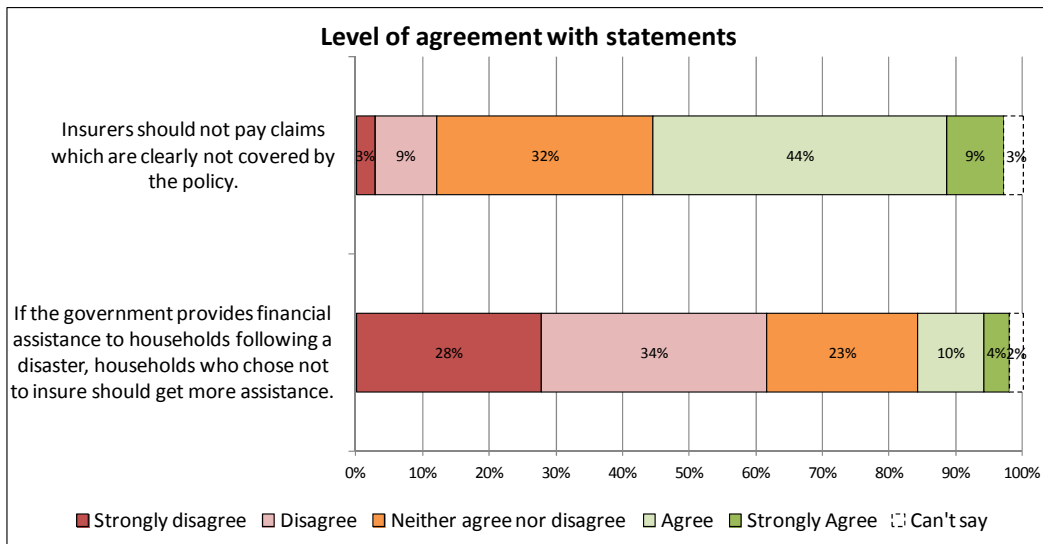
The responses are shown in Figure 24 below. Overall there was strong support of the insurance industry's position. Of note:

- About 53 percent supported (agreed or strongly agreed that) insurers should not pay claims which are clearly not covered by the policy while only about 12 percent disagreed or strongly disagreed with this statement (a ratio of around 4.5 to 1).



- About 62 percent were against (disagreed or strongly disagreed with) additional financial assistance to those who chose not to insure while only 14 percent agreed or strongly agreed (a ratio of around 4.5 to 1).

**Figure 24: On financial support for the non-insured**



**Source:** Full Sample. Population weights used.

Analysis was undertaken how these attitudes varied. Key findings:

- Those who were not insured were in support of additional Government assistance for the non-insured but also tended to agree that insurers shouldn't pay claims that were not covered by the policy.
- Those who speak another language were generally in support of assistance for the non-insured.
- Older people tended to be less likely in support of additional assistance to the non-insured.
- Support for either position did not vary much by other demographic factors.

## 4. Conclusion

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This survey has reaffirmed that non-insurance and under-insurance continue to be a problem. The rates of non-insurance are similar to those found in a survey 10 years ago. The survey has added further evidence of confusion among policyholders as to their extent of cover and the importance of price, which in turn adds support for the argument against taxation of insurance.

The survey has also highlighted a number of issues which have previously received little research attention. In particular the survey provided evidence of:

- High rates of non-insurance for second properties
- Lack of understanding of risks prior to moving to high risk locations
- How awareness of different risks affects the take-up of insurance
- Different rates of take-up of insurance and different attitudes towards insurance among people who speak other languages.

The survey highlights some opportunities. In particular, non-insurance is highly correlated with non-insurance of parents and also family and friends. This suggests that cultural factors (and, possibly, language barriers) are contributors to non-insurance and that targeted programs to encourage adoption may be effective.

## References

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- AFTS [Australia's Future Tax System Review Panel] 2009, Australia's future tax system: report to the Treasurer, Part one.
- ASIC (Australian Securities & Investments Commission), 2005, Getting Home Insurance Right – a report on home building underinsurance, September 2005.
- Chivers, J. and Flores, Nicholas E. 2002, 'Market Failure in Information: The National Flood Insurance Program', *Land Economics*, November 2002, 78(4):515 – 521.
- Financial Ombudsman Service, 2010, General Insurance Code of Practice – Overview of the Year 2009 – 2010.
- ICA [Insurance Council of Australia], 2012, Disaster Statistics, Available at <http://www.insurancecouncil.com.au/industry-statistics-data/disaster-statistics> Accessed 3-Feb-2012.
- MJ Powling Consulting (2001). Home and motor vehicle insurance: a survey of Australian households: A report for NRMA Insurance.
- Tooth, R. and G. Barker (2007). "The Non-Insured: Who, Why and Trends.", Available at [www.insurancecouncil.com.au](http://www.insurancecouncil.com.au).
- Tooth, Richard 2008, 'An Analysis of the Demand for House and Contents Insurance in Australia', Presented at the Asia-Pacific Risk and Insurance Association 2008 Conference.
- Tooth, R. 2010. Testimony given to 2009 Victorian Bushfires Royal Commission. 2009 Victorian Bushfires Royal Commission.
- Tooth, R. 2011. Flood insurance: economics and issues, Paper attached to IAG submission to the National Disaster Insurance Review.
- VBRC, [Victorian Bushfires Royal Commission], 2010, Victorian Bushfires Royal Commission Final Report <http://www.royalcommission.vic.gov.au/Commission-Reports/Final-Report>.

# Appendix 1 Survey Question Summary

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## Filtering questions

S1. Do you work in any of the following industries?

*[Advertising; Finance; Insurance; Market Research; Pharmaceuticals; Other Industries; Do Not Work]*

S2. Are you involved, either partially or fully, in deciding whether or not to have a Home Insurance policy for where you live? It could be a Home Contents Insurance or a Home Building Insurance.

1. Yes fully involved
2. Yes partially involved
3. Not involved at all
4. Can't Say

QPostcode. Please enter your postcode

QSex. Are you...

1. Male
2. Female

Qage: What is your age?

## Home and contents insurance coverage

Q1. Is your home covered by Building Insurance? *[Yes/ No / Can't say]*

Home Building Insurance usually covers your home and all the fittings, fixtures in it.

Q2. Why is your home not covered by Building Insurance?

Select all that apply.

1. Not applicable (e.g. Renting, Unit and strata managers take care of building insurance, Living in Housing Commission)
2. Insurance is too expensive
3. House is not worth insuring
4. Haven't got round to it, not thought about it
5. Small risk (e.g. I live in a safe area, I'm often at home, I've taken security measures)
6. In event of a claim, I would pay for any damages myself
7. Don't believe in insurance
8. Don't trust insurers to pay claims
9. Other
10. Can't say

Q3. How did you determine the level of Building Insurance cover on your home?  
(Select all that apply.)

1. Used a website calculator
2. In discussion with my insurer
3. With help from another advisor (a financial planner or insurance broker, mortgage provider)
4. Made my own estimate
5. Doesn't apply because I have a total replacement policy
6. Other
7. Can't say

Q4. How much do you agree or disagree with the following statement?

*[Strongly disagree/Disagree/Neither agree or disagree/Agree/Strongly agree/Can't say]*

I am confident that I am adequately covered by my existing building insurance policy

Q5. Do you have Home Contents Insurance? *[Yes/No/Can't say]*

Home Contents Insurance usually covers loss or damage to your furniture, furnishings, domestic appliances etc.

Q6. Why don't you have Home Contents Insurance? (Select all that apply)

1. Insurance is too expensive
2. Contents are not worth insuring
3. Haven't got round to it, not thought about it
4. Small risk (e.g. I live in a safe area, I'm often at home, I've taken security measures)
5. In the event of a claim, I would pay for any damages myself
6. Don't believe in insurance
7. Don't trust insurers to pay claims
8. Other
9. Can't say

Q7. In the event that you need to make a claim to your Insurance Company, which of the following best applies to your household?.

1. My cover is sufficient to cover replacement of ALL my household contents
2. I am covered but I do not know if it is sufficient to cover ALL my household contents
3. I know that my cover is less than the costs of replacement of ALL my household contents
4. Can't say

Q8. Why is your Home Contents Insurance cover less than the costs of replacement?

1. Want to avoid paying higher premiums for full cover
2. Haven't got round to updating my level of cover
3. Don't think it is likely I'd ever make a full claim
4. Other
5. Can't say

Q9. To what extent do you agree or disagree with the following statements.

*[Strongly disagree/Disagree/Neither agree or disagree/Agree/Strongly agree/Can't say]*

1. My parents have always had Home Contents Insurance
2. Most people I know have Home Contents Insurance
3. I, or people I know made an Home Contents Insurance claim in the last 3 years

Q10. Who is your insurance with? *[Choices given]*

Q11. To what extent did you consider the following factors when you selected [insurer mentioned in Q10] for your [Home Building Insurance (if applies) / Contents Insurer]?

*[For each factor one response selected from:*

*Not important at all/Somewhat important/Important/Very important/Can't Say]*

1. Brand / reputation of insurer
2. Recommendation from friend/ family
3. Price
4. Getting a multi-policy discount
5. Coverage – insurer provided flood cover
6. Other coverage options
7. Level of customer service

Q12. Thinking about your Home Contents Insurance, when did you last...

Select one answer for each.

*[In the last year; 1- 5 years ago; 6-10 years ago; 11 years or more; None of these]*

1. Change insurers
2. Get quotes from other insurers
3. Closely review the level of cover

Q13. Which, if any, of the following have you or your close friend/family experienced in the last 10 years? *[One answer selected for each of: Myself; Close friend/family]*

1. Claim made and accepted with no major issues
2. Claim made and accepted some issues
3. Claim made and denied
4. No claim made
5. Can't say

Q14. Do you or your household own any other properties? *[Yes/No/Can't say]*

Q15. How many of the following properties do you have?

*[For each property category: Number of properties owned, Number covered by Home Building Insurance, Number covered by Home Contents Insurance]*

1. Holiday home (or second house)
2. Rental house

Q16. Does your Home Insurance cover you for flood risk? *[Yes/No/Can't say]*

By flood risk we mean rising water.

1. Home Building
2. Home Contents

Q17. Compared to other households in your city/or local region; to what extent do you think you are more or less likely to make a claim for any of the following risks?

*[For each risk one of: Much less likely/ Less likely/ About the same/ More likely/ Much more likely/ Can't Say]*

1. Flood risk
2. Bush fire risk
3. Surging sea water risk
4. Cyclone risk
5. Risk of theft

Q18. To what extent do you agree or disagree that before choosing to live in your current location you had a reasonable understanding of...

1. ...the flood risk to this house
2. ...the bush fire risk to this house
3. ...surging sea water risk
4. ...cyclone risk
5. ...the crime levels in the area

*[Strongly disagree/ Disagree/ Neither agree or disagree/ Agree/ Strongly agree/ Can't say]*

Q19. In the last 10 years, have you done any of the following to reduce the premium of your Home Contents policy? *[For each option: Yes / No / Can't say]*

1. Chosen to increase the level of excess (i.e. the amount you pay when you make a claim on your policy).
2. Chosen to reduce the maximum level of cover

Q20. How likely or unlikely are you to undertake the following action, if the price of insurance was reduced by 10% (i.e. around \$50 on a \$500 premium) thanks to a stamp duty cut?

*[For each option one of: Very likely / Likely/ Neither likely nor Unlikely/ Unlikely / Very Unlikely/ Not applicable e.g. fully insured/ Can't say]*

1. Take out Home Contents Insurance *[Option for those uninsured]*
2. Increase the level of cover for Home Contents Insurance *[Option for those underinsured]*

Q21a/b/c. Which of the following action are you likely to undertake, if due to tax increases, all insurers raised prices of Home Contents Insurance by [\$50/\$100/\$200] per year

1. Reduce the level or type of cover to reduce the premium
2. Consider not taking out Home Contents Insurance
3. Definitely not take out Home Contents Insurance
4. None of these
5. Can't say

Q22. Which of the following action are you likely to undertake, if due to greater risks, the price of your Home Contents Insurance increased? (Select one answer only.)

1. I would consider reducing my level of cover to offset the higher price of insurance, despite the greater risks,
2. I would maintain the same level of cover and pay a higher premium
3. I would consider increasing my cover due to the greater risks, despite the higher price
4. Can't say

Q23. To what extent do you agree or disagree with the following statements?

1. I trust my insurer to meet any claims fairly and promptly.
2. Insurers in general are fair and reasonable.
3. Insurers generally pay the majority of claims.
4. Insurers should not pay claims which are clearly not covered by the policy.
5. If the government provides financial assistance to households following a disaster, households who chose not to insure should get more assistance.

## Background / demographics

D1. What type of dwelling do you live in? [A free standing house; Semi ;Apartment; Other; Can't Say]

D2. Which of the following best describe your situation? [Own home; paying off; Renting; Other; Can't Say]

D3. Including yourself, how many people live in your household? [Number provided for Adults and Children]

D4. Which of the following best describe your household?

1. Only English is spoken at home
2. English is the main language but another language is spoken
3. Another language is the main language but English is also spoken
4. English is hardly or never used at home
5. Can't say

D5. What best describe your current living arrangement?

1. Live Alone
2. Partner and No children
3. Partner and Children
4. Single Parent
5. With Parents
6. Boarder
7. Shared Household
8. Other

QIncome. What is your HOUSEHOLDS total annual income from all sources, before tax?

Please include all wages, salaries, pensions and other income. [Ranges given]



## Appendix 2 Description of sample

**Table 7: Respondents by location from High Risk Sample**

	Qld	Vic	Other	Total
<b>Metro</b>	98	19	5	<b>122</b>
<b>Regional</b>	107	56	15	<b>178</b>
<b>Total</b>	<b>205</b>	<b>75</b>	<b>20</b>	<b>300</b>

**Table 8: Respondents by location from Main Sample**

	NSW	Vic	Qld	WA	SA	Tas	ACT/ NT	Total
<b>Metro</b>	184	167	80	70	49	9	14	<b>573</b>
<b>Regional</b>	107	60	97	24	18	12	9	<b>327</b>
<b>Total</b>	<b>291</b>	<b>227</b>	<b>177</b>	<b>94</b>	<b>67</b>	<b>21</b>	<b>14</b>	<b>900</b>

**Table 9: Respondents by sex and age from Total Sample**

	Age of respondent					Total
	18 - 29	30 - 39	40 - 49	50 - 59	60 +	
Male	147	76	75	95	163	556
Female	83	138	131	140	152	644
<b>Total</b>	<b>230</b>	<b>214</b>	<b>206</b>	<b>235</b>	<b>315</b>	<b>1,200</b>

**Table 10: Respondents by house type**

	Count	% unweighted	% weighted
A free standing house	887	73.9%	72.0%
Semi	76	6.3%	7.6%
Apartment	217	18.1%	18.9%
Other	19	1.6%	1.5%
Can't Say	1	0.1%	0.0%
<b>Total</b>	<b>1,200</b>	<b>100.0%</b>	<b>100.0%</b>

**Table 11: Respondents by sex and age from Total Sample**

	Count	% unweighted	% weighted
Live Alone	184	15%	24%
Partner and No children	442	37%	30%
Partner and Children	359	30%	29%
Single Parent	57	5%	5%
With Parents	58	5%	5%
Boarder	4	0%	0%
Shared Household	85	7%	6%
Other	11	1%	1%
<b>Total</b>	<b>1,200</b>	<b>100%</b>	<b>100%</b>

**Table 12: Respondents by language spoken**

	Count	% unweighted	% weighted
Only English is spoken at home	184	15%	24%
English is the main language but another language is spoken	442	37%	30%
Another language is the main language but English is also spoken	359	30%	29%
English is hardly or never used at home	57	5%	5%
Can't say	58	5%	5%
<b>Total</b>	<b>1,200</b>	<b>100%</b>	<b>100%</b>

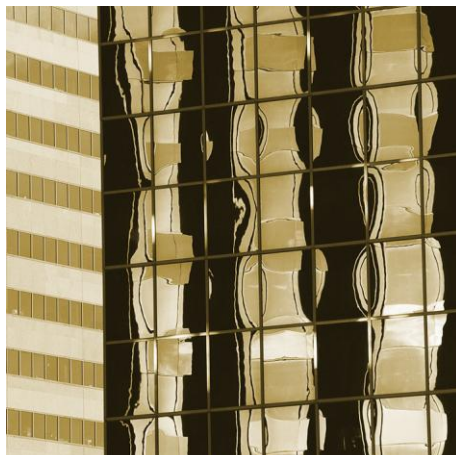
**Table 13: Respondents by tenure**

	Count	% unweighted	% weighted
Own home	402	33.5%	31.9%
Paying off	434	36.2%	36.0%
Renting	336	28.0%	29.8%
Other	26	2.2%	2.0%
Can't Say	2	0.2%	0.2%
<b>Total</b>	<b>1200</b>	<b>100.0%</b>	<b>100.0%</b>

# Flood insurance: economics and issues

Dr Richard Tooth

July 2011



## About Sapere Research Group Limited

Sapere Research Group is one of the largest expert consulting firms in Australasia and a leader in provision of independent economic, forensic accounting and public policy services. Sapere provides independent expert testimony, strategic advisory services, data analytics and other advice to Australasia's private sector corporate clients, major law firms, government agencies, and regulatory bodies.

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## Summary

### ***Introduction***

This document examines issues associated with flood insurance and considers key elements of proposals put forward in the National Disaster Insurance Review (NDIR) issues paper (Issues Paper).

It is important that policies developed reflect the nature of the insurance industry and underlying reasons for non-insurance. Some general considerations are:

- The insurance industry is a competitive industry. Any costs imposed on the industry will, over time, be passed through to consumers.
- Consumers are sensitive to the price of insurance, and as such, increased costs of insurance will lead to lower levels of cover.
- There are costs to regulation. These can include direct costs such as excessive administration requirements and many indirect costs such as unintended changes to behaviour and impacts on investment and innovation.

### ***Flood insurance – economics and issues***

#### *Adverse selection and flood mapping*

Flood insurance can be expensive. However, the high cost of flood risk does not, by itself, explain why flood risk is not universally covered.

The key difference between where flood insurance is and is not available, relates to the availability of information on flood risk. Information on flood risk is important, primarily to address the issue of adverse selection. Adverse selection can occur when insurers cannot accurately price insurance with the result that households who know they are a relatively low flood risk choose not to insure.

The problem of adverse selection can be addressed through flood mapping, which has been progressing. Of note, for purposes of addressing the adverse selection problem a high degree of accuracy is not required. Flood mapping only needs to be unbiased and provide better information than held by householders.

Flood maps are useful for a number of other public purposes. Regardless, it is efficient that the basic flood maps required for insurance purposes be government funded.

#### *Taxes on insurance*

Rather than subsidise home insurance to make it more affordable, currently Australian state governments impose taxes on home and contents insurance that make it less affordable.

In addition to GST, home and contents insurance is subject to a number of premium based taxes. These taxes include a stamp duty paid on the premium and a fire services levy (FSL) applied in NSW on insurance premiums. There is no economic rationale for

the taxes. These taxes are inequitable, inefficient and discourage the take-up of insurance. Removing these taxes would likely result in hundreds of thousands more households being covered for contents insurance and tens of thousands more for home insurance. The relative impact of taxes on the decision to take out flood insurance is likely to be particularly significant — in some cases the taxes on the flood insurance premium will be more than the average house insurance premium.

### ***The impact of an insurance pool***

This report examines the likely impact of a flood insurance pool that, as considered in the Issues Paper, subsidises flood insurance through higher premiums on other households.

In summary, the likely impact of the flood insurance pool would be to decrease overall levels of insurance. Intuitively this is because:

- The take-up of flood insurance would be limited as the subsidy is given to a small number of households, a number of who would already be insured.
- The subsidy is paid for by a penalty (akin to a tax) on a large number of insured households.

There are further unwanted complications of an insurance pool arrangement. In addition to many administrative issues, a subsidy on flood insurance can reduce incentives to lower the flood risk exposure in flood prone areas.

### ***Conclusion and Recommendations***

The most efficient and least distortive methods for governments to improve the availability and affordability of flood insurance are to:

- remove the taxes on insurance
- ensure that flood maps are available to insurers, so that they can price the insurance risk, and
- undertake community flood mitigation and promote household flood mitigation measures, which lower the cost of flood risk and thus the cost of flood insurance.

It is also appropriate that Governments consider means to improving the transparency of the flood risk for communities and consumers investing in flood risk areas.

Understandably, Governments may consider that financial support to households in flood prone zones is appropriate where households invested without a clear understanding of the flood risk. If so, this support should be provided in a way so as not to distort decisions for the efficient management of risk or the efficient workings of insurance markets.

# 1 Introduction and background

## 1.1 Purpose of this report

The recent disasters in Queensland have focussed attention on the levels of disaster insurance coverage in the community. Understandably, there is significant concern that many households are either uninsured or underinsured. Flood, unlike most other catastrophic risks, is not included as standard within a household insurance policy.

This report examines the economics of flood insurance and considers key elements of proposals put forward in the National Disaster Insurance Review (NDIR) issues paper (Issues Paper).

This report comprises four sections.

- The remainder of Section 1 builds a foundation by outlining some general points when considering regulation of home and contents insurance.
- Section 2 considers issues associated with flood insurance. The focus is on issues that are either not considered, or only lightly considered, in the Issues Paper.
- Section 3 examines the implications of a flood insurance pool as outlined in the Issues Paper.
- Section 4 draws conclusions and makes some recommendations.

In the interests of time and brevity, this report is limited in scope to focussing primarily on key issues which affect the demand, availability and affordability of flood insurance.

Of note, outside the scope of this report is the issue that there are different definitions of flood, which, along with consumer confusion in purchasing flood insurance, creates the concern that at least some consumers are inadvertently uninsured for flood risk. However, both the insurance industry<sup>1</sup> and Government<sup>2</sup> support key policy changes that

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<sup>1</sup> The Insurance Council of Australia has a ‘10 point plan to tackle disasters’ (available at [www.insurancecouncil.com.au](http://www.insurancecouncil.com.au)) that includes a standard definition for flood, improved disclosure, education and financial literacy and better advice to consumers. Of note, the industry has for some time sought to obtain a standard definition of flood. In 2008, authorisation for a standard definition of flood sought by the Insurance Council of Australia was denied by Australian Competition and Consumer Commission (ACCC).

<sup>2</sup> In April 2011, the Commonwealth Treasury released the consultation paper ‘Reforming Flood Insurance: Clearing the Waters’ which considers a standard definition of flood for use in insurance policies and short, simple, key facts summaries for insurance policies to be made available to consumers.



would help to address this issue. These changes include a standard definition for flood and improving disclosure to consumers.

## 1.2 Considerations in regulation

Some important broad considerations for regulation of the home insurance industry are as follows. First, costs imposed on (or conversely removed from) the insurance industry will, in the main, be passed through to consumers.<sup>3</sup> The insurance industry is a competitive industry.<sup>4</sup> Competition between insurers will mean that over time cost changes will be passed on to consumers and the industry will expect to receive normal returns.<sup>5</sup>

Second, consumers are sensitive to the price of insurance. There is strong evidence that the cost of insurance affects decisions about whether to insure and the amount of cover obtained. As such, any unnecessary costs imposed upon insurers will have the important and unwanted result of reducing the level of insurance.

Third, there are costs to regulation. A useful summary of the common costs of regulation is shown in Box 1 below. Regulation can impose direct costs through excessive administration requirements imposed on insurers and their policy holders. Regulation also has additional less obvious costs. It often has unintended consequences. Regulation can hinder innovation and investment by imposing, often unnecessary constraints (‘delays’) on change and creating uncertainty.<sup>6</sup> Furthermore, regulation is often subject to ‘regulatory creep’ — that is, unnecessary expansion of regulation.

For these reasons, a common guiding principle is that Governments should be cautious about regulation and should only do so where there is a clear market failure. This view is consistent with the Issues Paper’s Terms of Reference, which includes the guiding principle that (Issues Paper, page 71):

*Government intervention in private insurance markets is justifiable only where, and to the extent that there is clear failure by those private markets to offer appropriate cover at affordable premiums.*

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<sup>3</sup> There is strong evidence of this. For example, the removal of the fire services levy (FSL) in Western Australia was closely monitored. A compliance study undertaken (Sigma Plus 2008) concluded that insurers passed on the savings of removing the FSL to consumers.

<sup>4</sup> Of note, there are multiple insurers and there is significant price based competition between insurers (as evidenced by price based advertising). Furthermore, there appear to be no material barriers to entry which would prevent new brands from entering the market.

<sup>5</sup> In the short term, the cost burden may be borne by insurers. However, such regulations can increase the perceptions of regulatory risk and discourage future investment.

<sup>6</sup> A new entrant in personal insurance once reported to me that a substantial cost that had slowed their entry into Australia had been the variation in regulation by state.

**Box 1****Types of Regulatory Costs (from IPART 2006)**

“[...] existing regulations commonly impose unnecessary burdens on business and the community because they lead to:

- ***Uncertainty***. Stakeholders provided many examples where regulatory requirements are uncertain, or are interpreted inconsistently by enforcement officers, or where inadequate guidance on what is required to comply with regulations is provided to the regulated community.
- ***Unintended consequences***. Stakeholders noted that the consultation and impact analysis that occurs when regulation is being developed is often inadequate, which results in regulation that produces unintended consequences or perverse outcomes.
- ***Inconsistency and duplication***. Stakeholders argued that the existing regulatory requirements of other agencies and jurisdictions are often not adequately considered when regulation is being developed, which leads to variations in requirements and/or overlapping or duplicative requirements.
- ***‘Regulatory creep’***. Stakeholders believe that the significant external pressures on and incentives for Government to regulate are resulting in more and more regulation, some of which is unnecessary.
- ***Excessive requirements***. Stakeholders face considerable information or reporting demands that can be excessive or unnecessary. These are rarely coordinated amongst different arms of government resulting in duplication, and the cumulative burdens are rarely assessed.
- ***Delays***. Stakeholders complained of a lack of timeliness of regulatory decisions or approvals creating and prolonging uncertainty for business and individuals.”

Source: IPART (2006), pages 1-2.

## 2 Flood insurance economics and issues

Any policy response to the current concerns with the flood insurance market should be based on a thorough consideration of the nature of the insurance industry and underlying factors that affect the availability and affordability of flood insurance. This section examines key aspects of the economics of flood insurance and some of the important features and issues currently surrounding flood insurance in Australia.

### 2.1 Symptoms and concerns

There are some frequently raised concerns about flood insurance. Most notably, unlike most other catastrophic risks (such as fire, storm and earthquake), it is uncommon for standard home and contents insurance policies to cover riverine flood risks.

Another concern is that there are different types of flood.<sup>7</sup> Damage from riverine flood, which generally refers to water rising up from flooding rivers and other catchments, is often excluded from home and contents insurance cover. Damage from other water inundation, such as a result of falling rains (which might be referred to as flash flood) or blocked drains, is generally covered as part of an insurance policy.

Flood insurance can be particularly expensive. The high cost of flood insurance is highlighted in Table 1 below (based on work conducted by the Insurance Council of Australia in 2006). This table shows the cost of flood risk by households organised by Average Recurrence Interval (ARI) — a measure of how often (in years) an area is flooded.

The table highlights the significance of the flood risk cost for households in areas subject to flooding. In extreme flood risk areas (ARI < 20 years), the average flood risk costs are estimated to be in excess of \$4,000 per year. In contrast the average home insurance premium is estimated to be around \$300 in 2006 prior to taxes.<sup>8</sup>

The table also highlights the high total cost of flood risk to the Australia. The estimated total cost of the flood risk in 2006 was \$370 million, equivalent to around \$50 per household.

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<sup>7</sup> In this report, flood refers to riverine flood unless otherwise stated.

<sup>8</sup> Based on the Australian Bureau of Statistics Household Expenditure Survey 2003-04 the average home insurance premium was around \$340 per year including taxes including GST, stamp-duty and fire-services levies where applicable. The \$300 amount is obtained by adjusting for the taxes and allowing for some growth in premium between 2004 and 2006.

**Table 1**

<b>Cost of flood risk per property — Home Insurance</b>							
	<u>Dwellings Exposed</u>		<u>Loss Parameters</u>			<u>Total Cost</u>	
<b>ARI Band</b>	<b>Number (000s)</b>	<b>% of total</b>	<b>Frequency of risk</b>	<b>Average cost</b>	<b>Risk premium</b>	<b>p.a. (\$m)</b>	<b>% Total</b>
Nil	6,617	93.60%					
100 to 250	280	4.00%	0.20%	\$31,600	\$60	\$17m	5%
50 to 100	53	0.70%	1.10%	\$44,100	\$500	\$27m	7%
20 to 50	64	0.90%	3.00%	\$43,400	\$1,310	\$84m	23%
<20	58	0.80%	7.00%	\$59,700	\$4,180	\$242m	65%
<b>Sub total</b>	<b>455</b>	<b>6.40%</b>	<b>1.60%</b>	<b>\$51,800</b>	<b>\$810</b>	<b>\$370m</b>	<b>100%</b>
<b>Total</b>	<b>7,072</b>	<b>100%</b>	<b>0.1%</b>	<b>\$51,800</b>	<b>\$52</b>	<b>\$370m</b>	<b>100%</b>

Source: 2006 Insurance Council Flood Analysis as presented in Andrews et al. (2008).

## 2.2 Underlying issues

The high cost of flood risk does not, by itself, explain why flood risk, unlike like other risks, is not universally covered. Flood insurance is available in some states in all locations by one insurer and in some locations by multiple insurers.

It is not realistic to expect that all households will insure.<sup>9</sup> However it is a reasonable goal to ensure that the main issues that hinder markets working effectively are addressed. This section discusses the main issues, focussing on the issues that were lightly covered in the Issues Paper. A complete review of the reasons why people do not insure is beyond the scope of this paper.

A starting point for understanding demand for insurance is that when insurance is priced ‘actuarially fair’ (that is the premium only reflects the expected claims cost) and consumers are both risk averse (i.e. they dislike losses more than they like gains) and rational (i.e. they make a considered choice that maximises their welfare), then they will fully insure a risk. There are a large range of departures from this starting point that can be used to help explain the lack of flood cover.

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<sup>9</sup> People may choose not to insurance simply due to personal preferences.

## Information on flood risk

The key difference between where flood insurance is and is not available, relates to the availability of information on flood risk. Information on flood risk is important, primarily to address the issue of adverse selection.<sup>10</sup>

Adverse selection occurs where the potential policyholders (i.e. households) know more information about their flood risk than the insurer.<sup>11</sup> Lacking detailed local information on flood risk, insurers must price flood insurance based on the expected claims cost averaged across many households with varying risk. Those households with relatively low flood risk (e.g. because their house is relatively elevated) may perceive the insurance as poor value and choose not to insure. Those with a relatively high flood risk are more likely to perceive the insurance as good value and choose to insure. This ‘adverse selection’ results in an increased average cost of providing insurance for the insured policyholders, which in turn discourages more low-risk households from insuring. Thus a vicious circle is created with the potential result that flood insurance is simply not available in some areas.

Similarly, as noted in the Issues Paper (section 8.1), landslide and actions of the sea are also not usually covered by home insurance policies. Like flood, these are risks for which local knowledge is important and thus risks for which the potential policyholder will likely know more about the risk than the insurer.

Households may know more about their risks than insurers for a number of other risks. However, as there is close to uniform coverage of house insurance, the problem of adverse selection with respect to other risks is small. This may be because the expected cost for most other risks is small and thus there is little benefit for an insured opting out of a specific risk. For flood, the potential risk premium is very high and there can be a significant financial gain to households who know that their house is a relatively low flood risk to opt-out of insurance.

The problem of adverse selection explains why riverine flood risk is generally not covered but other types of flood risk are covered. Flash floods (and other water inundation from falling rains) are sufficiently random such that the household’s local knowledge is not a significant contributor to adverse selection.

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<sup>10</sup> Improved information on risk can also help to lower the insurer’s costs. Insurance companies themselves are not risk averse. Increased uncertainty over the distribution of losses increases capital costs for insurers. Regardless of the problem of adverse selection, where there is greater ambiguity, insurers will charge a higher premium.

<sup>11</sup> This is more commonly referred to as an issue of asymmetry of information.

### **Flood mapping**

The problem of adverse selection<sup>12</sup> can be addressed by the insurer obtaining better information. With regard to flood insurance this can be achieved by insurers gaining access to flood maps that describe the locations with the greatest risk of flood. Of note, for purposes of addressing the adverse selection problem, a high degree of accuracy is not required. It only needs to be unbiased and better than the information held by householders. In discussing issues with US National Flood Insurance Program (NFIP), Michel-Kerjan (2010, page 177) noted:

*If the maps are inaccurate, but their inaccuracies are not biased toward overestimating or underestimating risk, and private information is no better, then, while insurance based on such maps may run into difficulties, the issues of moral hazard and adverse selection should still be contained.*

Sufficiently accurate flood mapping has now been achieved and made available to insurers in most locations in Australia. As a result in these locations, flood insurance is available from a number of competing insurers.

There are however some locations where flood maps are required but not available. There is also a need to make sure that the flood mapping is updated as a result of changes to the built and natural environment and changing climate and weather patterns.

As flood mapping can be expensive, an important question arises as to whom should fund the costs of creating new flood maps and updating the existing flood maps when required.

Flood maps are used for a number of purposes such as planning and development and risk management. Although it would appear that the insurance industry is a ‘beneficiary’, it is preferable insurers do not fund the flood mapping. If the cost of flood mapping was paid by insurers, then the cost would be ultimately passed on to consumers through higher insurance premiums, which can have the effect of further deterring people from purchasing insurance cover.

A single insurer would be reluctant to fund flood mapping without confidence that they would be able to recoup the value of their investment through higher insurance premiums. A key concern for insurers would be the risk that subsequent government intervention in providing maps would dilute the value of their investment.

Flood maps also have an important characteristic of a public good – the use of the flood map by one insurer does not prohibit the use of the flood map by another. Thus flood maps provided by public funds can be shared among all existing and potential insurers.

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<sup>12</sup> A related information problem to adverse selection is that of moral hazard, whereby the insured takes fewer precautions as a result of being insured. As the insurer does not know the extent of precaution the insured will take, it is difficult for the insurer to price this risk accurately. To address this issue the insurer may employ other strategies such as sharing the risk through charging an excess.

Providing access flood maps to insurers should increase the availability of flood insurance. This increase in availability (resulting in improved competition) would drive down the price of flood insurance in flood risk areas, to the benefit of consumers.

As a main driver of the need for flood mapping (for its range of uses) is urban development, it would be efficient and appropriate that new and revised mapping be funded through development charges. As it is in the community's interest that flood maps be developed and released, it is appropriate that they be funded from local public funds.<sup>13</sup>

## 2.3 Taxation of insurance

Rather than subsidise home insurance to make it more affordable, currently Australian state governments impose taxes on home and contents insurance that make it less affordable.

Home and contents insurance is subject to a number of premium based taxes. These taxes include a stamp duty (in most cases 10% but ranging from 7.5% in Queensland to 11% in South Australia) paid on the premium and a fire services levy (FSL) of 20 per cent applied in NSW<sup>14</sup> on insurance premiums.

There is no economic rationale for the taxes. These taxes are inequitable, inefficient and discourage the take-up of insurance. Successive reviews —the IPART review of State Taxes (IPART 2008), the Henry Tax review (AFTS 2009) and the Victorian Bushfire Royal Commission (VBRC 2010) — have recommended that they should be removed.

How the taxes are applied to insurance makes them particularly distortive. The primary service of insurance is to pool and redistribute funds. Unfortunately — unlike GST — these taxes are not just applied to the *service of insurance* but to the full insurance premium that also reflects contributions to the pool of funds used to pay claims. The application of the stamp duty and FSL is akin to a tax on a money transfer service that is applied not just to the service charge of conducting the transfer but also the funds transferred.

The implication can be seen in a simple example. Assuming a loss ratio (ratio of claims paid to premium collected) of around 60 per cent, the service (i.e. value added component) is around 40 per cent. Thus the impact of a stamp duty of 10 per cent is

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<sup>13</sup> There is also a practical consideration in that local governments already have a significant level of information on flood maps and greater knowledge as to changes in the built and natural environment that may affect flood maps. In Australia, flood mapping has typically been the responsibility of local government or a floodplain management authority.

<sup>14</sup> Other jurisdictions had previously imposed a form of FSL but have replaced the FSL with other funding sources. Victoria is in the process of replacing the FSL with another source of funding.

similar in effect to a GST of 25 per cent (as  $10\% = 25\% \times 40\%$ ). Similarly the current NSW FSL of 20 per cent is equivalent to a GST of around 50 per cent.

The effect of these taxes is to increase the price of the insurance service for consumers and reduce consumer demand for taking out insurance. This lower demand could be seen in households either choosing not to insure; or choosing to under-insure i.e. reduce their premiums by partly self-insuring.

The effect of taxes on demand has been estimated by analysing how demand has changed in responses to variations in taxes across jurisdictions and time. The estimated impact (summarised in Sullivan, 2010) of removing the non-GST taxes from insurance premiums is an increase in the number of households without contents insurance by around 300 thousand and an increase in the number of owner-occupiers without home insurance by around 69 thousand.<sup>15</sup> Of note, based on Table 1 above, there are only 58 thousand houses in the very high flood risk areas and 175 thousand houses where the flood risk is greater than 1 in 50 years.

The relative impact of taxes on the decision to take out flood insurance is likely to be particularly significant. The potential amounts are large. For example, for an additional risk premium of \$1,300 (the average flood risk premium of the 20 to 50 ARI band in Table 1 above) the non-GST taxes applied in NSW would be in excess of \$400 — more than the average house insurance premium. Furthermore, the effective rate of tax for flood may be larger than that for other risks, given the relatively large claims costs against which the taxes are applied.

## **2.4 Other issues**

The provision of flood maps and the removal of state based taxes on insurance are two significant issues, which, if addressed, could greatly improve the availability and affordability of flood insurance. There are, however, other factors and issues which affect the demand for flood insurance and the efficiency of insurance markets.

### **Household availability of information on flood risk**

An important concern is that households are unaware of the risk of flood and its potential cost (either in risks to their house or the cost of insurance).

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<sup>15</sup> There would also be an increase in the take-up of home insurance for non-owner occupied (primarily rented and holiday home) properties. This was not estimated due to a lack of available data. There would also be an increase in insurance coverage, particularly with regard to contents insurance. The size of the potential benefit will fall as Victoria removes the FSL from insurance premiums.



All else being equal we would expect that property values are lower where there is greater flood risk.<sup>16</sup> Conceptually it would be expected that the difference in property values would reflect the difference in insurance costs. There is some evidence of this. Bin et al. (2006) examined property values of houses exposed to flood risk and found evidence that the difference in the property values is consistent with the capitalized value of flood insurance for different levels of risk.

Lack of information by households on flood risk is concerning for a number of reasons.

- It can result in households investing in property when they are unaware of the flood risk and cost.<sup>17</sup> This may be a substantial financial risk for households and result in demands for compensation. Furthermore, households may not have budgeted for flood insurance with the result that households cannot purchase flood insurance without substantial hardship. Given the high costs of relocating, normally risk-averse households may find it rational not to insure for flood.<sup>18</sup>
- It can result in increased resistance by communities and residents for flood mapping information to be developed and released for fear of the impact on property values.<sup>19</sup>
- It can dilute the value of the price signal of flood insurance in providing incentives for flood mitigation and development.

### **Other reasons for non-insurance**

As noted in the Issues Paper (page 53) ‘even where information is available, consumers may not make optimal choices.’ Frequently raised concerns are that people do not take out insurance because they suffer from behavioural biases and/or have difficulties in making complex decisions.

Care is required in regulating on the basis of behavioural biases. While it is generally accepted that consumers do not always behave in ways that would appear to be rational, there are many different behavioural theories and thus there are risks that regulation on the basis of a behavioural theory is inappropriately formed. Behavioural economists

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<sup>16</sup> There is, however, mixed evidence as to the extent that flood risk affects property values. See Yeo (2003) for a discussion.

<sup>17</sup> Chivers and Flores (2002) report evidence from a survey in Boulder, Colorado on the extent to which house buyers understood the flood risk at the time of purchasing a house. They found that the large majority were not aware of the flood risk or the flood insurance premium prior to price negotiations.

<sup>18</sup> In effect, the household is left to choose between the risk of very severe hardship (by being non-insured and losing the house) and certain hardship (through the cost of the insurance premium).

<sup>19</sup> See Yeo (2003) for a discussion on this issue.

concerned with behavioural biases tend to favour soft paternalistic policies — policies that attempt to influence, but not restrict, choice.

It seems possible that there are benefits to soft-paternalistic policies that encourage people to take out flood insurance and engage in mitigation activities. Such policies might include highlighting the flood risk, the importance of flood insurance and the value of flood mitigation activities to constituents in flood zones.

Of note, there would also likely be benefits from increased competition among insurers in the provision of flood insurance. When faced with complex decisions, consumers often resort to simple decision rules. One simple strategy is to shop-around and accept the most attractive offer on the assumption that competition ensures that the price is fair value. Consumers may have less confidence in such a strategy when competition is restricted.

Another commonly raised concern is that government support following a disaster will provide a disincentive for households to take out private insurance. While there is general recognition that this is a potential issue, there is limited empirical evidence as to the extent of the effect. It is reasonable to expect that this crowding-out effect (also known as the ‘charity hazard’) would be more significant the larger and the more certain the level of post-disaster support.<sup>20</sup> To minimise the impact on flood insurance markets, it is important that any post-disaster government support is independent of whether people are insured.

### **Economic benefits of flood mitigation**

Another strategy to reduce the cost of flood insurance is to undertake flood mitigation thereby reducing the cost of flood losses. Competition between insurers in the provision of flood insurance will mean that a reduction in expected costs of flood risk will be passed on to consumers in the form of lower insurance premiums.

There are a large range of flood mitigation measures to reduce flood losses. These can generally be categorised into:<sup>21</sup>

- flood modification (e.g. levees, diversions)
- property modification including land-use planning and building modification, and
- response modification (e.g. warning systems).

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<sup>20</sup> Raschky et al. (2011) use a survey of people’s willingness to pay for disaster insurance in Germany and Austria to test how the design of Government relief programs impacts on crowding out. They find support that the assured partial relief scheme (in Austria) drives a stronger crowding out of private insurance than the uncertain scheme of full relief (in Germany). They also provide a useful overview of recent literature of crowding out.

<sup>21</sup> See BTRE (2002) ‘Benefits of Flood Mitigation in Australia’.

Economic studies of flood mitigation activities have generally found that flood mitigation is efficient with substantial benefits. The BTRE (2002) provides some evidence of the benefits in Australia by way of case studies. There is also some international evidence on the value of flood mitigation activities. Of note, Kunreuther (2008) estimates that structural modifications to properties would save over 50 per cent of unmitigated losses in Florida. Rose et al. (2007) examined the benefit-cost analysis of a sample of Federal Emergency Management Agency (FEMA) hazard mitigation grants across a range of hazard areas. They found that in the flood mitigation cases sampled (around 8% of flood related grants) that benefits exceeded costs and the average benefit-cost ratio was over 5:1.

There is also general recognition that households themselves can undertake significant mitigation measures to reduce potential damage. However, as noted by Kunreuther (2008) and Sutter (2008) consumer behavioural biases may contribute to a lower level of flood mitigation by households than is optimal. The behavioural biases of households may provide a justification for paternalistic policies that encourage the mitigation measures. However, the potential for the private market to address consumer behaviour should also be recognised. Through reduced insurance premiums for mitigation, insurers can provide an immediate price signal to households (see Sutter 2008).

### 3 The impact of an insurance pool

An option considered in the Issues Paper is a proposal to subsidise house insurance in high flood risk areas through an insurance pool arrangement. This section considers some of the implications of this proposed approach.

#### 3.1 Impact on the demand for insurance

An insurance pool would, subsidise the flood insurance for some and raise the cost of insurance for others.<sup>22</sup> Consequently it is useful to consider the likely implications of the introduction of such a cross-subsidy.

The significance of implications will depend on the costs of the program and the responsiveness of demand to the cross-subsidies. A rough estimate of the magnitude of the insurance pool can be drawn from work by Insurance Council of Australia in 2006 presented in Table 1 above. As noted earlier in this table, the total annual average damage across all dwellings is estimated around \$370 million (in 2006).<sup>23</sup>

The extent of the cost that would be passed on to non-flood risk households would depend on how much of a subsidy was provided and the extent of the take-up of insurance in flood prone areas. For example, if the flood risk was fully subsidised, then we might expect a near universal take-up of flood insurance in flood risk areas. In such a case the full flood risk cost would be shared across all households and, as suggested in Table 1, the average house insurance premium would increase in excess of \$50 per household,<sup>24</sup> about a 15 to 20 per cent increase on an average house insurance premium of around \$300.

The approach described in the Issues Paper is for a partially subsidised premium such that the insurance premium could be: (Issues Paper, page 20)

*either perhaps 150 per cent of the non-flood premium (that is, the same premium for all high-risk homes irrespective of the level of risk) or, as a more risk-oriented approach, 150 per cent plus some amount, perhaps a proportion of 10 or 20 per cent, of the cost of flood cover beyond 150 per cent. These homeowners will therefore receive a discount against the full cover premium.*

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<sup>22</sup> As noted in the Issues Paper (paragraph 4.18), an insurance pool ‘could have an impact on the operation of the insurance market by increasing premiums for all policyholders, potentially creating an incentive for under-insurance or non-insurance.’

<sup>23</sup> For simplicity estimates in this section are based on year 2006 estimates.

<sup>24</sup> The size of the increase depends upon how the costs are shared. If shared across all households as shown in Table 1 then the amount would be around \$50. If shared among just insured households not prone to flood risk the amount would be around \$55.

Of the two approaches considered, the risk-oriented approach involves the lowest level of cross-subsidy and thus provides a lower bound of the impact on other insured households.

Using the information in Table 1 as a basis, the risk-oriented approach is modelled and presented in Table 2. The total average (pre-tax) premium for each ARI band is estimated by adding the \$300 average house insurance premium to the flood risk premium. Using this amount, the value of the subsidy per household and the total potential subsidy is estimated. The analysis shown in Table 2 is highly simplified but provides a guide as to the overall effects. The total potential subsidy for the year 2006 would have been in the order of \$299 million.

**Table 2**

Subsidies by ARI band under a risk-oriented approach							
ARI Band	Number (000s)	Flood Risk premium	Total average premium	Receive subsidy?	Subsidised Premium	Average value of subsidy	Total potential Subsidy \$m
Nil	6,617		\$300	N/a	\$300		
100 to 250	280	\$60	\$360	No	\$360		
50 to 100	53	\$500	\$800	Most	\$455	\$345	\$18m
20 to 50	64	\$1,310	\$1,610	All	\$536	\$1,074	\$69m
<20	58	\$4,180	\$4,480	All	\$823	\$3,657	\$212m
<b>Total</b>	<b>7,072</b>						<b>\$299m</b>

Source: Adapted from Table 1. Note amounts are based on 2006 data.

The total level of the subsidy depends on the take-up of insurance. It is hard to imagine that households in the '<20 ARI' Band (average subsidy >\$3,500) not taking out insurance and benefiting from the subsidy. However the experience from the US National Flood Insurance Program (NFIP) is that some households will not take out flood insurance despite subsidies. Michel-Kerjan, (2010, page 178) estimates that in the US, despite large subsidies, 'perhaps half of residents living in floodplains do not have flood insurance'.

The extent to which the subsidy will increase the take-up of insurance depends on the current level of flood cover. Andrews et al. (2008) estimated (roughly) that around \$100 million (i.e. 27%) of the \$370 million flood risk cost was insured. It is difficult to translate this into numbers of households. If the rate of flood cover was constant across bands (i.e. at 27%) the number of households without flood cover that would be eligible for a subsidy would be around 127 thousand. However, it would be reasonable to assume that the rate of flood cover insurance is greater in the bands with the lower flood risk premium. A lower bound may be to assume the \$100 million cover is drawn from a zero per cent level of flood insurance cover in the 'ARI <20 Band' and equivalent proportions in the other flood risk bands (equal to 80%). In such a case, around 84

thousand households without flood cover would be eligible for a subsidy. As the penetration of flood insurance grows this number would fall.

If the program is successful in ensuring that all households receiving a subsidy take out flood cover, the cost of the program would be \$299 million. The level of cross-subsidisation would need to be around \$47 per insured household (estimated as 6.35 million households)<sup>25</sup> or around a 16 per cent increase on the average premium of \$300.

The impact of the cross-subsidy on the demand for house insurance can be estimated using an estimate of the price elasticity of demand.<sup>26</sup> The demand for house insurance is inelastic but not zero. Tooth (2008) estimated the price elasticity of demand for house insurance for owner-occupied housing to be in the order of -0.1.<sup>27</sup> This estimate is based on variation in taxes (across jurisdictions and over time) on insurers and thus provides a useful basis for estimating how a cost imposed on insurers results in changes in demand.

Combining the analysis above, it is possible to estimate the extent to which the cross-subsidy would reduce the demand for house insurance. Applying the elasticity estimate (around -0.1), by the 16 per cent rate increase required across the 6.35 million insured households funding the subsidy provides an estimate of between 90 and 100 thousand less dwellings covered by home insurance (covering all risks).

Thus, if the insurance pool program was fully successful — in that all households who could receive a subsidy took out flood cover — then the number of households discouraged from taking out full house insurance cover due to the cross-subsidy required would be similar to the number of additional households taking out flood cover.

However, as demonstrated in the US experience, subsidised flood insurance does not result in full coverage. Even if the impact of the subsidy is small, the level of funding required may still be significant as the subsidy would be provided to existing policyholders of flood insurance. The implication is that unless the take-up in flood insurance due to the subsidy is very large, the impact will most likely be a reduction in the number of households covered by home insurance (for all risks) that is greater than the increase in the number of household covered for flood.

In summary, the likely impact of the flood insurance pool would be to decrease overall levels of insurance. Intuitively this is because:

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<sup>25</sup> This is estimated as the 6.6 million households in non-flood zone areas less 4% to account for the number of uninsured households.

<sup>26</sup> The price elasticity refers to the responsiveness of demand to a change in price. A price elasticity of -0.1 implies that a 10% increase in price will cause a 1% decrease in demand.

<sup>27</sup> Estimates varied depending on the specification used. The two main estimates were -0.062 and -0.122 (average -0.091). Landry and Jahan-Parva (2008) estimate a higher elasticity.

- the subsidy is given to a small number of households, a number of whom would already be insured; and
- the subsidy is funded by a tax on a large number of households all of which are insured.

This indicative analysis highlights the risks of distorting the market for insurance. The following sub-section discusses further issues and complications.

### 3.2 Other considerations

In addition to the issues discussed above, there are other risks associated with the proposed regulation.

There are many administrative issues to consider. Inevitably there will be challenges, debates and costs associated with determining which properties should receive subsidies and how the funds will be recovered from other insurance policies. One issue will be how the insurance pool will interact with insurance-based taxes. For example, there is a risk that the subsidy does no more than offset the impact of state taxes.

An unintended consequence is that a subsidy on flood insurance in flood prone areas would reduce incentives to mitigate the flood risk exposure in those areas.

- Subsidies can dampen incentives to curb development in flood prone zones. While land development controls can control new development, it is more difficult to control the pace and type of redevelopment that occurs.<sup>28</sup>
- Subsidies can dampen incentives to undertake mitigation activities. For example, with subsidised flood insurance, householders have reduced incentive to make building changes that reduce the flood risk. Similarly, subsidising insurance can dampen community pressure for community based flood mitigation activities.

There are also other costs of regulatory intervention. These include the consequences of creating regulatory uncertainty and in particular the risk to investors that government intervention leads to further regulation. As summarised by Cummins (2006, page 371).

*Several types of inefficiencies can arise from government insurance programs. Provision of subsidized insurance is likely to crowd out private attempts to enter the market, permanently locking in an inefficient solution to financing catastrophe losses. Government programs tend to develop constituencies that engage in intensive lobbying to maintain government support, strengthening concerns about rent-seeking by special interests. Subsidized insurance also tends to create moral hazard problems whereby policyholders under invest in loss prevention.*

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<sup>28</sup> Kunreuther (2008) raises the concern that in the US, losses from natural disasters are increasing as a result of development in hazard prone areas.

## 4 Conclusion and Recommendations

The analysis above highlights some of the key issues associated with further Government regulation of insurance markets. The most efficient and least distortive methods for Governments to improve the availability and affordability of insurance are to:

- remove the taxes on insurance
- ensure that flood maps are available to insurers, so as they can price the insurance risk, and
- undertake community flood mitigation and promote household flood mitigation measures which lower the cost of flood risk.

It is also appropriate that Governments consider means to improving the transparency of the flood risk for communities and consumers developing in flood risk areas.

The price of insurance premiums provides an important signal that can help individuals and communities make decisions about development and risk management. Rather than distort this signal, a useful policy that would support the efficient working of insurance markets and management of flood risks, is to improve transparency of the flood risk through the insurance premium.

Understandably, Governments may consider that financial support to households in flood prone zones is appropriate where households invested without a clear understanding of the flood risk. If so, this support should be provided in a way so as not to distort decisions for the efficient management of risk or the efficient workings of insurance markets. If the primary purpose of the financial support is compensation, this may be most efficiently provided through a lump-sum amount that reflects the capitalised value of additional insurance premiums.

Governments may also consider financial support through subsidised insurance premiums as a means of encouraging greater take-up of flood insurance. While greater insurance coverage is desirable, this approach should be considered alongside other policies such as awareness campaigns that may provide a far greater return.

As has been discussed in Section 3 of this report, there are potentially significant unwanted consequences of using an insurance pool to provide financial support to subsidise insurance premiums. If insurance premiums are to be subsidised, then it is preferable funding is provided by government bodies that are best able to manage the flood risk through investment in flood mitigation activities. This would provide financial incentives for these bodies to undertake flood mitigation.



## References

- AFTS [Australia's Future Tax System Review Panel] 2009, Australia's future tax system: report to the Treasurer, Part one.
- Andrews T, Billen G, Kim H, Lui A, Pollack C, Simpson L, Smith D, Underhill S, Whittle D 2008, 'The Insurance of Flood Risks', Report presented to the Institute of Actuaries of Australia 16th General Insurance Seminar 9-12 November 2008.
- BTRE [Bureau of Transport and Regional Economics] 2002, Benefits of flood mitigation in Australia. Report 106.
- Bin O, Kruse JB and Landry CE, 2006, 'Flood Hazards, Insurance Rates, and Amenities: Evidence from the Coastal Housing Market', ECU Economics Electronic Working Paper, January 2006.
- Chivers, J. and Flores, Nicholas E. 2002, 'Market Failure in Information: The National Flood Insurance Program', *Land Economics*, November 2002, 78(4):515 – 521
- Cummins, J. David, 2006, 'Should the Government Provide Insurance for Catastrophes?', *Federal Reserve Bank of St. Louis Review*, July/August 2006, 88(4), pp. 337-79.
- IPART [Independent Pricing and Regulatory Tribunal], 2006, 'Investigation into the burden of regulation in NSW and improving regulatory efficiency: Other industries', Final report.
- IPART [Independent Pricing and Regulatory Tribunal], 2008, 'Final Report - Review of State Taxation - Report to Treasurer', 17 October 2008.
- Kunreuther, Howard, 2008, 'Reducing Losses from Catastrophic Risks Through Long-term Insurance and Mitigation', *Social Research*, Vol. 75, No. 3.
- Landry, Craig E. and Jahan-Parvar, Mohammad R. (2008): Flood Insurance Coverage in the Coastal Zone. Unpublished.
- Michel-Kerjan, Erwann O. 2010, 'Catastrophe Economics: The National Flood Insurance Program', *Journal of Economic Perspectives—Volume 24, Number 4—Fall 2010—Pages 165–186.*
- Rose, A, Porter K, Dash N, Bouabid J, Huyck C, Whitehead J, Shaw D, Eguchi R, Taylor C, McLane T, Tobin LT, Ganderton PT, Godschalk D, Kiremidjian AS, Tierney K, and Taylor-West C 2007, 'Benefit-Cost Analysis of FEMA Hazard Mitigation Grants', *Natural Hazards Rev.* 8, 97.
- Sigma Plus Consulting 2004, Emergency Services Levy, Insurance Compliance Review: Final Report. Available at: [www.fesa.wa.gov.au](http://www.fesa.wa.gov.au), accessed 1/7/2011.
- Sutter, Daniel, 2008, 'Building a Safe Port in the Storm: Private vs. Public Choices in Hurricane Mitigation' (July 2008). *Mercatus Policy Comment* No. 21.
- Tooth, Richard 2008, 'An Analysis of the Demand for House and Contents Insurance in Australia', Presented at the Asia-Pacific Risk and Insurance Association 2008 Conference.
- VBRC, [Victorian Bushfires Royal Commission], 2010, Victorian Bushfires Royal Commission Final Report <http://www.royalcommission.vic.gov.au/Commission-Reports/Final-Report>

