National Catastrophe Insurance Scheme: Legal and Institutional Aspects

Rachel Anne Carter LLB (Hons), BA, MSyI

A thesis submitted for the degree of Doctor of Philosophy

> School of Law Deakin University Burwood, Victoria Australia

Declaration of Original Work

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed: _____Rachel Anne Carter_____On: 01 / 08 /2016

Acknowledgements

I would like to thank my family for their support, love and inspiration. Mum and dad, in particular have always encouraged me to dream big and work hard, so I can achieve these dreams. The courage inspired by my family has already seen me experience living and working in several countries. These experiences have seen me personally and professionally turning my dreams into reality.

The thesis would not be possible without the constant support, encouragement, guidance and valuable feedback of my supervisor Professor Danuta Mendelson. In addition, the assistance and frank advice provided by Associate Professor Michael Eburn was phenomenal. Professor Mendelson and Associate Professor Eburn have worked tirelessly to assist with my PhD journey. I am very appreciative that neither were dissuaded by time differences instead utilising different forms of technology to push me to my limits and to ensure that I would achieve the best results possible.

I would also like to extend my gratitude to the former Dean of Law at Deakin University, Professor Mirko Bagaric for his support, guidance and professional dialogue. My research career began partly through Professor Bargaric's belief in me and the opportunity he provided me to co-author a book.

I am deeply grateful to the Bushfire Co-operative Research Centre (now the Bushfire and Natural Hazards Research Centre) for providing me with financial support through a scholarship, conference and networking opportunities. Likewise, I wish to express my gratitude to the International Association of Wildland Fire for awarding me a scholarship that enabled me to undertake further research necessary for the thesis.

There are many other professionals and friends (particularly those in Paris, London, Sydney and Melbourne) who assisted me with technical expertise, editing and other support and I am grateful for their help. I am also grateful to Professor Roger Douglas and Balu Rao for their assistance with the early drafts of this dissertation.

Contents

Declaration of Original Work	iii
Acknowledgements	iv
Contents	v
List of Figures	ix
List of Tables	
Glossary	1
Abstract	
Introduction	
Chapter 1: Current Legal and Policy Environment and the National Catastrophe	
Insurance Scheme	18
National Catastrophe Insurance Scheme	
Scope	
Access and affordability	
Overview of Insurance and Regulatory System Governing Household Property	
Insurance	22
Reinsurance	23
Insurance obligations under the Corporations Act 2001 (Cth)	24
Interaction between obligations under the Corporations Act 2001 (Cth) and the	
Public Governance, Performance and Accountability Act 2013 (Cth)	26
Insurance Regulation, Capital Adequacy and the Cost of Compliance	28
National Catastrophe Insurance Scheme as a Direct Insurer: Structure and	
Practical Examples	32
Existing Government Programs and the Gap in Assistance for Household Building	
Damage- A case for the proposed National Catastrophe Insurance Scheme	
Lessons Learnt from Recent Australian Natural Disasters	36
Reviewing the Legal Implications arising from a Natural Disaster of Catastrophic	
Proportions in Australia	40
The Private Insurance and Regulatory System and the operation of the Proposed	
National Catastrophe Insurance Scheme	
Insurance access and affordability	
Constraints of the Private Insurance Market	47
Delays and Claims Handling after Recent Natural Disasters of Catastrophic	
Proportions	
Uncertain Government-Funding Arrangements	
Mitigation	
Role of Key Stakeholders: Commonwealth Government, State Government, Insurers	50
and Individuals	
Responsibilities of Commonwealth Government	
Responsibilities of State and Territory Governments	
Responsibility of Insurers	60
Responsibilities of Individuals under the Proposed National Catastrophe Insurance	60
Scheme	09

Chapter 2: Commonwealth Legal Power to Enact Laws for the Proposed National Catastrophe Insurance Scheme	71
Purpose of the Proposed National Catastrophe Insurance Scheme	71
Operation of the Commonwealth Constitution- Separation of Powers and Rule of Law	
Separation of Powers	. 72
Operation of the Commonwealth Constitution- Division of Powers between the	
Commonwealth Government and State Governments	73
Constitutional Validity of the proposed National Catastrophe Insurance Scheme:	
Insurance Power—s 51(xiv)	.74
National Insurance Schemes	. 74
State Insurance	. 75
National Catastrophe Insurance Scheme and States' Rights	.77
Constitutional Validity of the Proposed National Catastrophe Insurance Scheme: Trade	
and Commerce—s 51(i)	. 79
Constitutional Validity of the Proposed National Catastrophe Insurance Scheme:	
States' Rights: No Discrimination between States—s 117	.81
Chapter 3: Institutional Arrangements and Executive Power of the Proposed	
National Catastrophe Insurance Scheme.	
Institutional Arrangements of the Proposed National Catastrophe Insurance Scheme	
Scope of the Executive Power	
Nationhood and Natural Disasters	
State of Emergency	
Pape v Commissioner of Taxation Addressing Judicial Concerns of an Expansive Executive Power	
Executive Power and the Australian Reinsurance Pool Corporation	
-	.90
Chapter 4: Taxation Considerations and the Proposed National Catastrophe Insurance Scheme	91
Tax Classification of Premiums under the Proposed National Catastrophe Insurance	•71
Scheme	92
Compulsory Exaction of Money	
Charge Imposed by a Public Authority	
Charge Imposed for a Public Purpose	
Commonwealth Government's Involvement in Funding the National Catastrophe	
Insurance Scheme	.96
Collection of Premium for the Proposed National Catastrophe Insurance Scheme	98
Commonwealth Government Could Impose a Levy Utilising the Council Rates	
System	.99
Commonwealth Government Could Impose a Levy on the Land Through	
Incorporating the Premium Owed to be part of a Property Owner's Land Tax	103
Commonwealth Government's ability to Issue an Insurance Policy in the same way	
as Private Insurers	105
Offering Insurance Cover under the National Catastrophe Insurance Scheme on	
Compulsory Basis	107
Application of Fire Services Levy / Emergency Services Levy if the Premium Charged	
under the Proposed National Catastrophe Insurance Scheme Amounts to a 'Fee for	
Service'	
Goods and Services Tax (GST)	111
	111 113

Possible Tax Exemptions for Premium Income and Capital Reserves	115
Presumption that the proposed National Catastrophe Insurance Scheme is	
Constitutionally Valid	115
Chapter 5: Listed Events and Ministerial Declaration: Legal Preconditions to	
Activate the proposed National Catastrophe Insurance Scheme	
Listed Natural Disaster(s) of Catastrophic Proportions	
Suitability of a Trigger Mechanism	122
Technical Definitions in Regulations	125
Bushfire (Wildfire)	125
Flood	126
Cyclone	127
Earthquake	129
Hailstorm	131
Tsunami	132
Landslide	133
Exclusion for Volcanic Activity	
Ministerial Declaration of a Listed Natural Disaster of Catastrophic Proportions	
Using a Scientific Advisory Panel to Help Law Makers with Decisions on	
Applicability of National Catastrophe Insurance Scheme	138
Summary of Procedure to Activate the Proposed National Catastrophe Insurance	150
Scheme	141
Chapter 6: Events Limitations, Hours Clauses and Deductible Amounts Affecting	
the Proposed National Catastrophe Insurance Scheme	143
Hours Clause	
Limitations under the Proposed National Catastrophe Insurance Scheme	
Properties Covered: Temporary v Permanent Dwellings	
Monetary Limitation of the Proposed National Catastrophe Insurance Scheme	
Event cap of \$375,000	
Valuing Property under the Proposed National Catastrophe Insurance Scheme	
Rateable Value	
National Register of Repairs	
The Proposed National Catastrophe Insurance Scheme and Regulations to	155
Facilitate the National Register of Repairs	155
Potential Modifications to the National Construction Code or Building Code of	155
	156
Australia to allow for the National Register of Repairs	150
Moral Hazard and Influences on the Proposed National Catastrophe Insurance	150
Scheme- Case Study of CAT Nat (France)	
Compulsory Acquisition & Natural Disasters of Catastrophic Proportions	
International examples	
New Zealand 'Red Zoning' and Issues Associated with Compulsory Acquisition	
France: Compulsory Acquisition of Houses after the Xynthia Storm	162
United States: National Flood Information Program–Differentiating repeated-	
severe-loss properties	
Deductibles	163
Chapter 7: International Comparative- Best Practices from Existing Natural	4.00
Catastrophe Insurance Schemes	
CAT Nat and France's Caisse Centrale de Réassurance	
Origins of Insurance Coverage for Catastrophic Risks	
Regulatory Regime Governing Operability of CAT Nat	175

Plan de Prévention des Risques Naturels	177
Spain's Consorcio de Compensación de Seguros	
Scope of Coverage Provided under the Consorcio	
Funding of the Consorcio	
Legal Origins and Original Structure of the Consorcio	185
The Legal and Regulatory Regime Governing Insurance Law in Spain and the	
Consorcio	187
Enforceability of System: Juxtaposing this with the Spanish Private Insurance Regime	191
Achieving Equilibrium: Responsibilities of an Insured	193
Deductible (Franquicias)	
National Flood Insurance Program (United States)	
Suitability of International Natural Disaster Insurance Schemes as a basis for the	
Proposed National Catastrophe Insurance Scheme	196
Alternative National Catastrophe Insurance Systems Operating Globally	
Government Compensation Schemes	
-	
Conclusion	
The Proposed National Catastrophe Insurance Scheme- Key Features	
Overview and Key Findings Concerning the Legal Operation of the Proposed Nationa	
Catastrophe Insurance Scheme.	
Challenges which would Remain Notwithstanding the Potential Implementation of the	
National Catastrophe Insurance Scheme	210
Benefits Generated by the Proposed National Catastrophe Insurance Scheme and the	
Need for Further Research	211
List of Publications on Catastrophe Risk (Rachel Anne Carter)	214
Articles (English)	
Article (Spanish)	215
Books	215
Conference Papers and Seminars	215
Other	217
Bibliography	221
Articles/Books/Reports	
	221
•	
Cases: Australia	260
Cases: Australia Cases: New Zealand	260 266
Cases: Australia Cases: New Zealand Cases: Spain	260 266 267
Cases: Australia Cases: New Zealand Cases: Spain Cases: United Kingdom	260 266 267 267
Cases: Australia Cases: New Zealand Cases: Spain Cases: United Kingdom Cases: United States	260 266 267 267 267 270
Cases: Australia Cases: New Zealand Cases: Spain Cases: United Kingdom Cases: United States Legislation: Australia	260 266 267 267 270 270 270
Cases: Australia Cases: New Zealand. Cases: Spain Cases: United Kingdom Cases: United States. Legislation: Australia. Legislation: European Union	260 266 267 267 270 270 270 282
Cases: Australia Cases: New Zealand. Cases: Spain Cases: United Kingdom Cases: United States. Legislation: Australia. Legislation: European Union Legislation: France.	260 266 267 267 270 270 270 282 282
Cases: Australia Cases: New Zealand Cases: Spain Cases: United Kingdom Cases: United States. Legislation: Australia. Legislation: European Union Legislation: France. Legislation: New Zealand	260 266 267 267 270 270 270 282 282 283
Cases: Australia Cases: New Zealand Cases: Spain Cases: United Kingdom Cases: United States Legislation: Australia Legislation: European Union Legislation: France Legislation: New Zealand Legislation: Spain	260 266 267 267 270 270 270 282 282 283 283
Cases: Australia Cases: New Zealand Cases: Spain Cases: United Kingdom Cases: United States Legislation: Australia Legislation: European Union Legislation: France Legislation: New Zealand Legislation: Spain Legislation: United Kingdom	260 266 267 270 270 270 282 282 283 284 284
Cases: Australia Cases: New Zealand Cases: Spain Cases: United Kingdom Cases: United States Legislation: Australia Legislation: European Union Legislation: France Legislation: New Zealand Legislation: Spain	260 266 267 267 270 270 282 282 283 283 284 285 286

List of Figures

Figure 1: Deductibles under Nation	al Catastrophe Insurance Scheme	
------------------------------------	---------------------------------	--

List of Tables

Table 1: Deductible Amounts as Applied in Germany, Switzerland, New Zealand,	
Turkey, France and Spain	

Glossary^{*}

Caisse Centrale de Réassurance (CCR) is the compulsory government backed natural catastrophe fund in France. Although insurers have the option of using the funds provided by the CCR for their reinsurance they are not compelled to use such cover and are free to purchase alternative reinsurance if they feel this is cheaper or more suitable. For insurance covering natural catastrophes, the CCR operates with CAT Nat.

CAT Nat is the regime which operates the *assurance catastrophe naturelles* in France. CAT Nat is backed by reinsurance provided by the CCR. In order to be covered for loss arising from uninsurable events (such as natural catastrophes covered by CAT Nat), it is necessary for a homeowner or tenant to have fire insurance cover.

Compulsion in the context of the proposed National Catastrophe Insurance Scheme refers to the ability of the Commonwealth Government through the operation of the Scheme to mandate or legally require homeowners to pay a premium for coverage under the Scheme. The legal force and compulsion would enable the Commonwealth Government through the National Catastrophe Insurance Scheme to impose consequences (as determined in the governing regulations) for an individual homeowner who fails to pay their premium. Although enforcement could be ensured, if non payment is the result of financial hardship, the administration within the Scheme would be able to deal with such circumstances on a case by case basis and issue an extension, a discount, or other appropriate measures.

Consorcio de Compensación de Seguros ('Consorcio' or 'CCS') is the State owned direct insurance entity that operates throughout Spain.¹ It was established in 1954 with the objective of ensuring all Spaniards have access to insurance. It is mandatory to have cover with the CCS if a homeowner obtains insurance cover for their property. Coverage is provided for extraordinary events including flooding, earthquake, seaquake, volcanic eruption, cyclonic storms, falling of astronomic bodies or meteorites and extreme fires.²

Dollars are expressed as Australian dollars (\$) unless expressly stated as US dollars (US\$).

^{*} The Glossary is provided for illustrative purposes to show how the proposed National Catastrophe Insurance Scheme could look from a legal viewpoint. Any definitions which would operate should the National Catastrophe Insurance Scheme be implemented, would be subject to legislation and regulation.

¹Consorcio de Compensación de Seguros <www.consorseguros.es>.

² Ley 21/1990 (19 December 1990) (Spain) Article 6(1)(a).

Earthquake Commission (EQC) is the New Zealand based insurance scheme governed by the *Earthquake Commission Act 1993* (NZ). It is a first loss insurance scheme covering up to \$100,000 of losses for each event listed in the legislation (earthquake, floods and volcanoes).

Flood means the covering of normally dry land by water that has escaped or been released from the normal confines of any of the following: a lake (whether or not it has been altered or modified), a river (whether or not it has been altered or modified), a creek (whether or not it has been altered or modified), a creek (whether or not it has been altered or modified), a reservoir, a canal, a dam.³

FONDEN (Mexican Fund for Natural Disasters) was created in 1996 to increase the resources of the Mexican Federal Government to pay for natural disaster losses. FONDEN is a mechanism under which funds can be made available after a natural catastrophe, 'delivered in a transparent way, with no political conditions or favouritisms of any kind.⁴ FONDEN is quite revolutionary in the way it is structured as a catastrophe scheme as part of its funding model involves catastrophe bonds. It is the only natural catastrophe scheme to utilise catastrophe bonds as part of the scheme's capital reserves.

Full replacement / replacement value refers to 'an insurance policy that replaces an insured item with a similar new item, or provides the insured funds to do so.'⁵

Group 20 (G20) is a group of governments and leaders from 20 of the world's largest economies who engage in multilateral meetings to pursue matters which are of mutual interest to all of the leaders.⁶

Household in the context of the proposed National Catastrophe Insurance Scheme refers to an inhabited building including standalone houses, terrace houses, flats, apartments and permanently affixed cabins. The mere existence of a home office would not prevent a house being covered by the Scheme. However, those who are using the building must also use the property as a primary place of residence or as a holiday home rather than a commercial enterprise. In this way the National Catastrophe Insurance Scheme (as proposed) excludes

³ Flood, as covered under the Scheme, utilises the definition of flood in s 37B (1) of the *Insurance Contracts Act* 1984 (Cth) as outlined in s 29D(1) of the *Insurance Contracts Regulations* 1985 (Cth).

⁴ Carlos Bayo Martinez, 'Natural Disaster Fund (FONDEN)' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publishing, 2005) 321, 322.

⁵ New Zealand Government (Treasury), New Zealand's Future Natural Disaster Insurance Scheme: Proposed Changes to the Earthquake Commission Act 1993 (Discussion Document, July 2015) 5.

⁶ G20 <www.g20.org>.

properties which are used in a commercial setting or owned by commercial entities – for these properties insurance cover could be obtained from the private insurance market. A household could be insured under the National Catastrophe Insurance Scheme regardless of whether the property is freehold or under strata title.

Household structure (or household building or home) refers to 'the physical state or integrity of the structure or materials that comprise the body of the house erected on the land and including its foundations.'⁷ Under the proposed National Catastrophe Insurance Scheme this could include bricks, wooden frames, outdoor rendering, weatherboard materials, steel or household foundations. It also could include doors, windows, skylights, roofs, gutters, verandas/porches, chimneys, walls, solar panels, fixed tanks, fixtures, garages or sheds.

Household structural loss (or household building loss) is damage occurring to a household structure caused by a listed natural disaster of catastrophic proportions triggering the proposed National Catastrophe Insurance Scheme. The damage must be causally linked to the declared natural disaster of catastrophic proportions.

Insurance is an *ex ante* strategy with the 'primordial objective to provide monetary compensation for damaged assets or lost income'. Other objectives of having insurance centre around 'the establishment of safer building practices, the dissemination of risk information and the promotion of financial responsibility...Recent scenarios in which insurance has proved most successful suggest strong synergistic effects with other risk mitigation strategies, such as construction regulation and socioeconomic policy'.⁸

Mitigation in the context of the proposed National Catastrophe Insurance Scheme refers to the reduction in potential losses to a household structure should a natural disaster occur. The object of such mitigation is 'to help achieve important goals for society such as the establishment of safe building practices, the dissemination of risk information and the promotion of financial responsibility.⁹ This definition is consistent with the Productivity

⁷ Earthquake Commission v Insurance Council of New Zealand [2014] NZHC 3138 [87].

⁸ Guillermo Franco, 'Earthquake Mitigation Strategies through Insurance' (25 March 2015) *Encyclopaedia of Earthquake Engineering* 1.

⁹ Ibid.

Commission who defined mitigation as 'measures taken in advance of disaster to reduce their impact'.¹⁰

Natural disaster of catastrophic proportions under the proposed National Catastrophe Insurance Scheme would be confined to an event listed in the enabling legislation and which would satisfy the procedure (declaration by the Minister or Attorney-General), that in turn would oblige the National Catastrophe Insurance Scheme to pay compensation to insureds.

Natural disaster is defined consistently with the Productivity Commission Inquiry Report: Disaster Funding Arrangements. It refers to 'naturally occurring rapid onset events that cause a serious disruption to a community or region, such as flood, bushfire, earthquake, [hail] storm, cyclone...landslide or tsunami'.¹¹ For the purposes of the proposed National Catastrophe Insurance Scheme, damage arising from volcanic activity is not a natural disaster to be covered by the Scheme.

Normalised loss 'refers to the estimated insurance cost of historical hazard events if they were inflicted upon current society. The normalisation adjusts original losses for changes in building numbers; the average nominal value of new buildings since the time of the original event; and for the increased resilience of newer buildings in tropical cyclone-prone parts of the country.¹²

OECD- Organisation for Economic Cooperation and Development¹³

Ownership for the purpose of the proposed National Catastrophe Insurance Scheme would include properties owned by an individual owner or jointly owned, provided that the ownership is by real people not corporations. Property which is owned by corporations, the Commonwealth Government or any State / Territory Governments would not be covered by the National Catastrophe Insurance Scheme.

Physical property damage / Physical property loss (to residential buildings/ household structures or household buildings) for the purpose of the proposed National Catastrophe Insurance Scheme would be confined to losses to household structures or household

¹⁰ Commonwealth, Productivity Commission Inquiry Report: Disaster Funding Arrangements (Commonwealth Government, Productivity Commission, Canberra, September 2014) xiv.

¹¹ Productivity Commission Inquiry Report: Disaster Funding Arrangements, above n 10, xiv.

¹² John McAneney et al 'Government-sponsored natural disaster insurance pools: A view from down under' (2016) 15 International Journal of Disaster Risk Reduction 1, 2. ¹³ http://www.oecd.org/daf/fin/insurance/

buildings.¹⁴ The clarification of the term 'physical loss' or 'physical damage' ensures compensable loss or damage that affects the integrity of the building as the proposed Scheme does not insure against pure economic loss.¹⁵ The interchangeability of terms 'property loss' and 'property damage' would enable compensation where 'a house [is] permanently buried by a landslip or volcanic eruption, or swept away in a tsunami.¹⁶

Physical loss to residential property / **Physical damage to residential property** refers to a 'disturbance to the physical integrity of the land [such as but not exclusively through] reducing it in volume and leaving the body of land in a changed physical state. The changed physical state results in the land being more vulnerable to [one or more natural catastrophes] thereby adversely affecting its use and amenity'.¹⁷ The physical loss would centre on physical changes which make the land less suitable for being a platform upon which a residential building / household building or household structure could be built and in which that land could continue to host a household building.

Residential building has the same meaning as household building or household structure.

Residential building loss has the same meaning as household building loss or household structural loss.

Residential land is the 'platform for residential building'¹⁸ (household building or household structure). The term residential land refers to the physical body of land and its physical state.

Turkish Catastrophe Insurance Pool ('TCIP') is a compulsory insurance cover which provides protection against losses sustained from earthquake and resultant fires, explosion, tsunami and landslide caused directly by the earthquake. Property owners may be forced to show they have coverage from TCIP to have essential services provided to their home. The tariffs payable for cover by the TCIP are based upon a tariff fixed by zone and the construction materials of the property.¹⁹

¹⁴ See also definition of household structural damage.

¹⁵ Kraal v Earthquake Commission [2014] NZHC 919 [39], [68].

¹⁶ Ibid [38].

¹⁷ Earthquake Commission v Insurance Council of New Zealand [2014] NZHC 3138 [79].

¹⁸ Ibid.

¹⁹ Turkish Catastrophe Insurance Pool <http://www.tcip.gov.tr/index.html>

Abstract

The thesis is based on the premise that the National Catastrophe Insurance Scheme, as designed by the candidate, has been enacted by the Australian Parliament but is yet to be implemented. It then examines legal aspects of this novel scheme to see which aspects of it may be vulnerable to successful challenge on constitutional grounds. The National Catastrophe Insurance Scheme is a compulsory first loss all-peril insurance scheme that operates nation wide. The Scheme seeks to provide household structural cover amounting to a maximum of AU\$375,000 per household building per event. The Scheme is applicable to all Australian citizens and residents who own permanent household structures / household buildings including properties which are under either freehold or strata title. It excludes commercial premises in totality and household structures under construction. The Scheme is designed to operate as a Public Financial Corporation and run in a similar way to the Australian Reinsurance Pool Corporation. Consequently, the Scheme would likely have a similar interaction with, and accountability to the Commonwealth Government as the Australian Reinsurance Pool Corporation. The Scheme would seek co-operation from all stakeholders (State Governments, insurers and individuals).

The listed natural disasters covered by the Scheme include bushfire, flood, cyclone, earthquake, hailstorm, landslide and tsunami. The legal procedure required for declaring an event would be by way of a declaration by the Minister or Attorney General which becomes a legislative instrument. Before the Scheme is implemented, actuarial calculations must be made to determine the point at which household loss or economic loss characterises an event as catastrophic. In addition to actuarial guidance, the Minister or Attorney General can seek the guidance from the Scientific Advisory Panel. The Ministerial Declaration, once made, would need to be tabled in the Senate and the House of Representatives to enable the disallowance of the declaration within six parliamentary sitting days. The Scheme would pay for any damage to household buildings from its reserves. However, if the Scheme's reserves are insufficient to fully cover all of the liabilities from an event or where several natural disasters of catastrophic proportions occur within close succession, the Government Guarantee may be called upon.

To establish institutional viability of the scheme, the candidate uses as comparators national schemes in other countries. It examines the Earthquake Commission (New Zealand), the *Caisse Centrale de Réassurance* and CAT Nat (France), the *Consorcio de Compensación de Seguros* (Spain) and the National Flood Insurance Program (United States). The analysis and, where appropriate, adaptation of aspects from national schemes of other countries takes into account differences in legal systems, cultural practices and risk profiles. The design of the Australian National Catastrophe Insurance Scheme incorporates several key operational and procedural aspects of the *Consorcio de Compensación de Seguros*; and to a lesser extent, certain practices from the Earthquake Commission and *Caisse Centrale de Réassurance* and CAT Nat.

In establishing legal validity and institutional competence of the scheme, the candidate examines its major legal aspects and posits that such a Scheme would be constitutionally valid. The following sections of the *Constitution of the Commonwealth of Australia* are tested:

- trade and commerce—s 51(i)
- taxation—s 51(ii)
- insurance—s 51(xiv)
- executive power—s 61
- rights of residents in States—s 117.

The Scheme is enacted with respect to insurance and compliant with s 51(xiv) *Commonwealth Constitution.* The Scheme satisfies the test outlined by Justice Gleeson in *Attorney-General (Victoria) v Andrews* [2007] HCA 9 which looks at the fiscal relationship of the insurer and the relevant State to ensure the insurer is not a 'state insurer'. The Scheme is funded by premium income and any additional funds would be provided by the Commonwealth Government and thus it it is not a 'state insurer' as it is not owned or controlled by a State and has no fiscal relationship to State Governments.

The Commonwealth Government could implement the Scheme with constitutional legitimacy under s 51(xiv), however, an alternative source of constitutional legitimacy is the executive power under s 61 of the *Commonwealth Constitution*. The executive power under s 61 could be exercised in respect of matters which require a national response. The national nature of the Scheme and the fact that it would only be activated after a listed natural disaster of catastrophic proportions elevates it to operating during a 'national emergency' requiring a 'national response'.

Notwithstanding its national application, the protection afforded under s 117 of *Commonwealth Constitution* ensures discrimination between States does not occur. All Australian residents would receive the same coverage.

The Scheme would be unlikely to rely upon the Commonwealth Government's power in relation to trade and commerce under s 51(i) of the *Commonwealth Constitution*. The trade and commerce power under s 51(1) was examined in the *Bank Nationalisation* case. Applying the *Bank Nationalisation* case, the Scheme will not take over any insurance companies or insurance entities to support its implementation or position nationally and thus it complies with s 51(i). Further, the fact that the scheme would exist as a monopoly supported by the Government would not of itself invalidate the scheme. The operation of the Scheme by its nature would be likely to take away some products which are currently offered by the insurance market and this may cause tension. However, the limited scope of the Scheme's operation means it is unlikely to be seen as 'aggressive and obnoxious'. However, is likely that insurance would be considered as the moving of economic risk through the medium of legally enforceable promises (insurance contract) and thus not fall within the power vested in the Commonwealth Constitution under s 51(1).

In addition to having constitutional legitimacy, the operation of the Scheme would be affected by the constitutional application of the taxation power under s 51(ii) of the *Commonwealth Constitution*. The key taxation issues affecting the way the Scheme would be implemented concerns the categorization of the premium income as a tax or a 'fee for service' and the operability of taxation exemptions on the premium income of the Scheme. It is likely the Scheme would be able to access the same taxation exemptions relating to premium income as those currently utilized by the Australian Reinsurance Pool Corporation.

The National Catastrophe Insurance Scheme would be constitutionally valid – it could rely on the operation of one or more of the following constitutional powers: insurance power (s 51(xiv)), taxation (s 51(ii)), or rights of individuals within the States (s 117) in conjunction with the executive power (s 61).

Introduction

I love a sunburnt country, A land of sweeping plains, Of ragged mountain ranges, Of droughts and flooding rains. I love her far horizons, I love her jewel-sea, Her beauty and her terror, The wide brown land for me!

Dorothea Mackellar

- [1] Natural disasters are a reality in the Australian landscape. Since European settlement in the late eighteenth century, the nation's history has been marked by natural peril events such as bushfires, floods, storms, earthquakes and tropical cyclones. Given the increasing exposure by virtue of population growth and wealth accumulation, the country faces the prospects of increasing disaster costs. Climate change may amplify the impact of some of these perils.²⁰
- [2] In Australia, problems arising from natural disasters include the loss of property and the loss of human life. These losses not only affect the people directly involved in the disaster but they also have economic repercussions for Australian society generally. The vulnerability of buildings and infrastructure to certain risks²¹ can exacerbate the consequences of natural disaster damage. This thesis will examine the issue of structural losses to household buildings²² caused by natural disasters.²³

²⁰ John McAneney, Macquarie University (Risk Frontiers), Personal Communication to Rachel Anne Carter, 2015.

²¹ The risks posed by natural disasters of catastrophic proportion to buildings and infrastructure takes into consideration the multivariate function of the hazard. This incorporates analysis of the frequency and potential magnitude of an event, the exposure of the property, the spatial distribution of the assets and the value of infrastructure at risk. The risk will also assess the potential vulnerability and how that is likely to have a relationship with the damage cost as a fraction of the replacement cost or insured value in relation to the hazard intensity at a certain location. See McAneney, above n 20.

²² Insurance of personal property and household contents is outside the focus of this thesis. The National Catastrophe Insurance Scheme would insure on an indemnity basis (insured must establish actual losses to be compensated and thus would be compensated up to the amount of their loss- subject to a limit assumed here to be a \$375,000 per household. The exact limit would require political, actuarial and/or economic assessments that lie outside the scope of this thesis.

- [3] There are currently four attributes which distinguish the Australian insurance market in respect to natural disaster losses from those in some other parts of the world:
 - 1. 'Australian insurance premiums are increasingly risk reflective
 - 2. Insurance premiums have not been subject to governmental interference to this juncture
 - 3. Home (and contents) insurance policies tend to explicitly cover most natural hazards except for landslides and 'actions of the sea' and until recently riverine flood
 - 4. National insurance carriers cover a wide range of natural perils with six different hazards contributing to the top ten ranked normalised losses.²⁴
- Cumulatively these factors together 'with improving technology such as GIS, remote [4] sensing and simulation modelling,²⁵ suggest that in the future insurers may be more selective in their offerings and may choose to avoid certain areas or only offer insurance at prices unaffordable to certain homeowners. If this were to happen it would leave large numbers of people without cover for certain perils (such as, for example, flood cover). With significant numbers of individuals without cover, the Commonwealth Government may be compelled to step in and fill the gap in insurance availability.²⁶ The thesis will examine how a National Catastrophe Insurance Scheme could operate. The focus will be on analysing the legal and regulatory requirements that would need to be satisfied for such a scheme to be implemented.²⁷
- [5] Since at least 1929, there was debate and reporting on the merits of implementing an Australian National Catastrophe Insurance Scheme, uniform in nature due to taxation considerations.²⁸ Sir Robert Garran provided evidence to the Report of the Royal *Commission on the Constitution*, stating:

National emergencies are so unknown and unforeseeable that the framers of the Constitution decided to give an unlimited power of taxation to the Commonwealth

²³ Natural disasters (see glossary) refers to bushfire, flood, cyclone, earthquake, hailstorm, landslide and tsunami. The only natural disasters excluded is damage arising from volcanic activity. This is based upon a low risk of volcanic activity in Australia and the fact that there are currently no active volcanoes in Australia. The Scheme is targeted at assisting individuals to deal with natural disasters that currently affect different parts of Australia and are likely to cause structural damage to houses. ²⁴ McAneney, above n 20.

²⁵ Ibid.

²⁶ Ibid.

²⁷ The thesis proceeds on the basis of a hypothetical National Catastrophe Insurance Scheme to facilitate analysis of the legal issues.

²⁸ Australia, *Report of the Royal Commission on the Constitution* (Minutes of Evidence, Sir Robert Garran), Part

^{1, 72} quoted in JJ Gummow, Crennan and Bell in Pape v Commissioner of Taxation (2009) 238 CLR 1, 86.

Parliament [...] once you have the power of raising the money, the power of spending it is one with which you may very easily entrust the parliament.²⁹

- [6] This thesis examines how a National Catastrophe Insurance Scheme could operate within the existing legal and regulatory confines on the assumption that the Scheme has been implemented. Although the focus will be on the legal and regulatory aspects of an insurance scheme for natural disaster of catastrophic proportions, policy, economic and some catastrophe modelling considerations will be briefly addressed.
- The National Catastrophe Insurance Scheme is not a novel mechanism for insuring risk [7] in Australia. In December 1976, a discussion paper was tabled in the Australian Parliament proposing a National Disaster Insurance Scheme for Australia.³⁰ This proposed scheme was the consequence of the announcement in March 1976 by the then Treasurer 'that the Government had decided in principle to introduce a natural disaster insurance scheme and had approved the establishment of a working party of officials to formulate a detailed scheme in consultation with the insurance industry.³¹ The 1976 Scheme was to be a Commonwealth Government sponsored Scheme that provided insurance cover for earthquake, flood, tropical cyclone and storm surge. The scope of the Scheme largely reflected the big natural disaster events of the time (Brisbane Floods of January 1974 and Cyclone Tracy which occurred on Christmas Day 1974). However, the Scheme was not introduced due to a change in political emphasis, most likely based on the then relative infrequency of natural disasters of catastrophic proportions, and public acceptance of increases in the cost of insurance.³² 'So, when John Howard became Federal Treasurer in 1977 he abandoned the proposal.'33

²⁹ Ibid.

³⁰ Commonwealth, 'A Discussion Paper Tabled by the Minister Assisting the Treasurer in the Commonwealth Parliament' (December 1976).

³¹ Ibid 1.

³² In the United States, Howard Kunreuther suggested the National Flood Insurance Program (NFIP) was established at least partly on sociological and psychological factors as opposed to economic factors. In his analysis of factors affecting the decision to purchase insurance and the level of insurance, one of the key findings was that 'people do not buy insurance voluntarily unless there is pressure on them from one source or another...The principal reason for a failure of the market is that most individuals do not use insurance as a means of transferring risk from themselves to others.' Kunreuther found 'insurance is likely to have both private and social benefits even if it is subsidised.' Although Kunreuther's research was US based, the broad concept of having a government backed disaster insurance program encompassing sociological and psychological concerns has merit for Australia. See Howard Kunreuther, *Disaster Insurance Protection Public Policy Lessons* (John Wiley and Sons Inc., 1978) 248 - 250.

 ³³ C. Latham, P. McCourt and C. Larkin, 'Natural Disasters in Australia: Issues of Funding and Insurance' (Paper presented at Institute of Actuaries of Australian 17th General Insurance Seminar, Gold Coast, 7–10

- [8] Although the 1976 National Catastrophe Insurance Scheme was not implemented, the need for such a Scheme did not disappear. The thesis assumes that the National Catastrophe Insurance Scheme has been enacted; in doing so, it examines the similarities between the National Catastrophe Insurance Scheme and the operation of the Australian Reinsurance Pool Corporation. Since the Australian Reinsurance Pool Corporation is yet to be constitutionally tested, the thesis will consider constitutional implications of operating a catastrophe scheme in Australia. Parliamentary considerations in passing the *Terrorism Insurance Act 2003* (Cth) will be discussed based on their potential applicability to the Scheme. The legal and operational structure of the proposed National Catastrophe Insurance Scheme could be based broadly on the Australian Reinsurance Pool Corporation.
- [9] Natural catastrophe risk schemes exist in many countries. The thesis examines the examples of catastrophe schemes currently operating in New Zealand (Earthquake Commission), France (*Caisse Centrale de Réassurance* 'CCR'), Spain (*Consorcio de Compensación de Seguros*), the United States (National Flood Insurance Program 'NFIP') and there is a lesser focus on Mexico (Natural Disaster Fund 'FONDEN'). The *Caisse Centrale de Réassurance* and *Consorcio de Compensación de Seguros* are analysed in particular depth to determine whether they provide suitable options or infrastructure that could be replicated to support a National Catastrophe Insurance Scheme in Australia. The differences in the legal systems and cultures will, however, be addressed when considering the appropriateness of several aspects of these natural catastrophe schemes. Particular consideration is also given to the Earthquake Commission due to the geographical proximity of New Zealand to Australia and the existence of similar legal and political systems.
- [10] The Australian High Court has referred to the Organisation for Economic Co-operation and Development ('OECD') and other international bodies such as the International Monetary Fund, World Bank and Group 20 ('G20') in judgements. For example in *Pape v Commissioner of Taxation* ('*Pape'*),³⁴ a case analysing an economic stimulus package provided during the global financial crisis, Justice Hayne and Justice Kiefel analysed international approaches to dealing with the Global Financial Crisis to

November 2010) 24.

³⁴ (2009) 238 CLR 1 [14] – [17], [21] – [29].

contextualise the options available to Australia.³⁵ Such an approach justified the use of international examples to guide the function and structure of the scheme to be adapted to the Australian legal environment.

- [11] The High Court's approach of individually analysing potential provisions which the Commonwealth Government could rely upon to provide constitutional legitimacy to the National Catastrophe Insurance Scheme would be adopted. The legal validity of the proposed Scheme depends on whether it falls within the following sections of the *Constitution of the Commonwealth of Australia ('Commonwealth Constitution'):*
 - trade and commerce—s 51(i)
 - taxation—s 51(ii)
 - insurance—s 51(xiv)
 - property acquisition on just terms—s 51(xxxi)
 - executive power—s 61
 - rights of residents in States—s 117.
- [12] Extensive analysis of the Commonwealth Constitution is necessary as the majority of the High Court in Victoria v Commonwealth ('AAP Case')³⁶ determined that a scheme would not be valid unless all aspects embedded within the scheme satisfactorily comply with constitutional law. In declaring that the Petroleum and Minerals Authority Act 1973 (Cth) was invalid, Justice Gibbs stated:

Where an attempt has been made to enact laws by a means which the Constitution permits to be used only subject to certain conditions and those conditions have not been satisfied, this Court is bound to declare the invalidity of the resulting product.³⁷

The research undertaken as part of this thesis illustrates that the National Catastrophe Insurance Scheme, if judicially tested, would satisfy the constitutional requirements for the operation of an insurance scheme. This analysis includes clarification that the Scheme is not 'state insurance'. The thesis will demonstrate that the National Catastrophe Insurance Scheme could provide primary insurance cover on a first loss basis up to a threshold amount. The insurance product offered by the National

³⁵ Ibid 86.

³⁶ Victoria v Commonwealth (1975) 134 CLR 338 ('AAP Case').

³⁷ Ibid (Gibbs J).

Catastrophe Insurance Scheme is limited to cover against structural damage to household buildings / residential buildings arising from one or more of the listed natural disasters which is declared to be of catastrophic proportions. Household contents insurance would not be covered by the National Catastrophe Insurance Scheme.

- [13] This thesis has seven chapters. Chapter 1 begins with a discussion of the problems natural disasters and resulting structural damage create for Australian households. It examines why the insurance of household properties against natural disasters is something the Commonwealth should manage. It will be argued that the implementation of the National Catastrophe Insurance Scheme would enable the legal system to better cater for national disasters as outlined in recent reports on natural disasters and insurance in Australia (see [73] [86]). This argument will include an analysis of existing inherent challenges in the insurance and regulatory system for insuring damage arising from natural disasters of catastrophic proportions. Lastly, the chapter will address the roles of the different stakeholders within the legal and operational framework of the National Catastrophe Insurance Scheme. This includes consideration of any new or modified responsibilities imposed on the Commonwealth Government, the State or Territory Governments, insurers and individuals.
- [14] Chapter 2 focuses on the Constitutional issue of 'state insurance' to ensure the proposed National Catastrophe Insurance Scheme would not provide cover which is prohibited by the Commonwealth Government's constitutional limitation on insurance under s 51(xiv). In illustrating this point, this chapter examines the latest jurisprudence on the Constitutional ability of the Commonwealth to legislate in relation to insurance. This chapter also discusses the ability of the Commonwealth to legislate in relation to trade and commerce under s 51(i) of the Commonwealth Constitution. This chapter concludes by discussing the inconsistency and uncertainty that currently exists between the different entitlements of residents of different States after a natural disaster of catastrophic proportions under s 117.
- [15] Chapter 3 continues to develop the legal argument that there is constitutional validity for the proposed National Catastrophe Insurance Scheme through the Commonwealth Government exercising its executive power. This chapter includes a discussion of the legal operation of the nationhood power in the context of establishing why household

property insurance for natural disasters of catastrophic proportions is best managed at a federal level. In establishing insurance for natural disaster of catastrophic proportions as a national issue, the legal exercise of the executive power under s 61 of the *Commonwealth Constitution* will be examined. The aim is to demonstrate that the Commonwealth Government's legislative power could extend to the operation of the systems to finance disaster risk and thus, specifically enable a risk-sharing mechanism that is inherent in the National Catastrophe Insurance Scheme.

- [16] Chapter 4 examines taxation law as it would apply to the National Catastrophe Insurance Scheme If the premium is deemed to be a 'fee for service' as opposed to a 'tax' under tax law, there would be additional taxation implications including the payment of the Goods and Services Tax and Stamp Duty. The second part of this chapter discusses the methods the proposed National Catastrophe Insurance Scheme could use to generate income from insurance premiums. This includes consideration of the existence of any income tax and other exemptions under the relevant tax legislation and the legal criteria for their application. Lastly, brief examination will be made of the Fire Services Levy and corresponding legislative changes removing the levy from insurance premiums in favour of its imposition on land ownership and any resultant legal implications for the proposed National Catastrophe Insurance Scheme.
- [17] Chapter 5 is procedural and addresses the legal implications of definitions under the proposed National Catastrophe Insurance Scheme and, specifically, how carefully drafted definitions and clear legal procedures could prevent future litigation should the Scheme become operational. This chapter also discusses the legal and procedural requirements for the proposed National Catastrophe Insurance Scheme's Ministerial Declaration³⁸ which may be required before the Scheme becomes liable to pay compensation to insureds. The Australian Reinsurance Pool Corporation's Ministerial Declaration was utilised in Australia in early 2015 as part of the legal process required to declare a terrorist event (Lindt Café incident in December 2014). This Ministerial Declaration was an essential procedural requirement to activate the provision of

³⁸ This Ministerial Declaration confirms a listed natural disaster of catastrophic proportions has occurred and that the event is of such magnitude that the Natural Catastrophic Insurance Scheme should provide compensation.

insurance by the Australian Reinsurance Pool Corporation.³⁹ The procedure used in carrying out this Ministerial Declaration will provide an example of existing legal procedures available to legally declare a catastrophe. Legal procedures to ensure transparency and accountability when a listed event is declared as a natural disaster of catastrophic proportions under the proposed National Catastrophe Insurance Scheme will also be analysed.

- [18] Chapter 6 focuses on the mechanics of the proposed National Catastrophe Insurance Scheme and advocates how its operation would be both practical and effective. This includes discussion of the limitations of an event (hours' clauses as this legally defines the liability of the Scheme), legal causation, monetary limits under the proposed scheme and deductibles. Embracing the need for greater mitigation, this chapter focuses on how individuals could be rewarded for actions directed towards mitigation of loss and the legal concept of betterment.
- [19] Chapter 7 provides an analysis of the different catastrophe insurance systems globally. These schemes are examined to uncover best practices that could aid the operation of the proposed National Catastrophe Insurance Scheme. In particular, the legal structures of the various schemes will be closely analysed. The international comparative aspect of the thesis encompasses a table of various natural catastrophe schemes in existence around the world and their key features.

³⁹ Australian Reinsurance Pool Corporation, 'Declaration of a Terrorist Incident under the *Terrorism Insurance Act 2003* (Cth)—53 Martin Place, Sydney, New South Wales' (15 January 2015) <http://www.comlaw.gov.au/Details/F2015L00053>.

Part 1:

Legal Need and Constitutional Ability to Implement the Proposed National Catastrophe Insurance Scheme

Chapter 1: Current Legal and Policy Environment and the National Catastrophe Insurance Scheme

National Catastrophe Insurance Scheme

- [20] The proposed National Catastrophe Insurance Scheme would be the primary insurer of damage arising from natural perils.
- [21] Any Australian citizen or Australian resident who owns a home (household building or residential building) would be insured by the Scheme. The eligibility criteria for insurance cover under the Scheme requires that the home is completed and it is not in the process of being constructed. The Scheme covers freehold and strata title properties provided they are owned by individuals or are jointly owned by two or more individuals; properties that are owned by corporations are not covered by the Scheme.

Scope

- [22] The National Catastrophe Insurance Scheme as proposed, is restricted to insuring household structures (household buildings or residential buildings) and residential land. The main justification for the limited scope of the Scheme is the prioritisation of finite funds. The operational expenditure of the National Catastrophe Insurance Scheme would be higher if contents cover was included. Contents insurance claims are more frequent and, on average, for lesser monetary compensation, and thus are administratively costlier. It is for this reason that there are a number of global natural catastrophe insurance schemes which cover only household buildings (real property) and do not cover contents insurance.⁴⁰
- [23] The National Catastrophe Insurance Scheme aims to address the greater human need for shelter. This is consistent with the parliamentary debates during the third reading of the Earthquake Commission Bill 1992 (NZ) whereby the Associate Minister of

⁴⁰ For example, in Hungary the *Wesseléyi Miklós* (Compensation Fund for Flood and Inland Waters Protection) covers otherwise uninsurable real property. In Switzerland there are separate systems in place for the provision of household building and household contents insurance. In most cantons it is compulsory to purchase building insurance for natural catastrophes upon the purchase of cover for fire insurance, however contents insurance is not generally mandatory and is administered under a different scheme in many of the cantons. See OECD, *Disaster Risk Financing: A Global Survey of Practices and Challenges* (OECD Publishing, November 2015) 62, 113.

Finance (Maurice McTigue) highlighted 'the Government's prime concern in the aftermath of a major natural disaster is a humanitarian concern. Thus, the priority should be on the provision of basic adequate housing and other amenities and the reestablishment of basic infrastructure.⁴¹ The emphasis on humanitarian concerns⁴² and the need for shelter is essential to the National Catastrophe Insurance Scheme. Although initially limited in scope, if the Scheme is economically viable, it is possible to expand its ambit and legal operation to encompass home (residential) contents insurance in the future.

- [24] The Scheme uses the model from the New Zealand Earthquake commission to separate insurance cover provided for residential buildings and that for residential land. Taking into account the New Zealand High Court judgement in *Earthquake Commission v Insurance Council of New Zealand*⁴³ the legislation which is proposed to enable the National Catastrophe Insurance Scheme separately defines and differentiates the insurance of residential land⁴⁴ and residential buildings. In New Zealand, residential buildings are defined as 'the structure or materials that comprise the body of the house erected on the land including its foundations.'⁴⁵ Thus natural disaster damage is damage caused by a natural disaster as outlined in the proposed legislation governing the Scheme, to any part of a residential building.
- [25] In examining damage to residential land, *Earthquake Commission v Insurance Council* of New Zealand⁴⁶ examined whether physical loss from a natural catastrophe included the situation where:

As a direct result of the earthquakes there has been a disturbance to the physical integrity of the land, reducing it in volume and leaving the body of the land in a changed physical state. This changed physical state has resulted in the land being more vulnerable to flooding, thereby adversely affecting its use and amenity. The primary use of residential land is a platform for

⁴¹ New Zealand, *Parliamentary Debates*, 15 December 1992, 13188 (Maurice McTigue).

⁴² For discussion on the sociological and psychological factors which influenced the establishment of the National Flood Insurance Program, see Kunreuther, above n 32.

⁴³ [2014] NZHC 3138.

⁴⁴ The final scope of the Scheme, its limits and the associated costs will need to be informed by actuaries and catastrophic modellers and as such the proposed scope may be narrowed to cover only damage to residential property (buildings) and not residential land. The reason why the proposed scope may be narrowed, centres on the technically difficult of quantifying and compensating landowners for an increased probability of flooding. Although the Earthquake Commission covers damage to residential property and residential land, the issue of

Although the Earthquake Commission covers damage to residential property and residential land, the issue of liquefaction which was problematic in New Zealand after the Christchurch earthquakes, is unlikely to be a problem for Australia.

⁴⁵ Earthquake Commission v Insurance Council of New Zealand [2014] NZHC 3138 [87].

⁴⁶ [2014] NZHC 3138.

building. Land that is materially more prone to flooding is plainly less suitable for this purpose and is less habitable. The criteria necessitates physical loss or damage. We conclude that Increased Flooding Vulnerability constitutes natural disaster damage to insured residential land.

- [26] The proposed legal test to be employed under the Scheme would require physical damage and would not cover pure economic loss (value to the land or building being reduced after a natural disaster with no corresponding physical damage).⁴⁷ If a natural disaster has the practical effect of creating vulnerability to a future natural disaster of catastrophic proportions (such as flooding), and there was a disturbance to the land itself then compensation would be available. The proposed Scheme also compensates for damage to residential buildings where the physical structure of the building or its foundations are damaged.
- [27] Considering Australia's exposure to a variety of catastrophe risks, the Scheme would operate as an all-peril scheme similar to those operating in New Zealand, Spain⁴⁸ and France. The National Catastrophe Insurance Scheme would provide insurance against losses arising from natural disasters of catastrophic proportions including flood, bushfire, hailstorm, earthquake, cyclone, landslide and tsunami.
- [28] The all-peril design of the Scheme and its first-loss⁴⁹ operational model serves Australian homeowners nationally. Legally, the amount of resources dedicated to relief and recovery efforts by a State or Territory is currently within the prerogative of that State or Territory. Unlike the recovery efforts by States and Territories, having a National Catastrophe Insurance Scheme ensures all Australian homeowners would be treated in the same way. The proposed Scheme prevents inconsistent outcomes between the rights of owners of damaged or destroyed property on the basis that all Australian homeowners would be required to have household building insurance provided by the Scheme.

⁴⁷ Kraal v Earthquake Commission [2014] NZHC 919 [39], [68].

⁴⁸ The Consorcio in Spain does not provide insurance cover against hailstorms but is still an all perils risk scheme.

⁴⁹ The first-loss model refers to losses for structural damage up to the scheme's \$375,000 limit must first be paid by the scheme. Once the losses are paid by the scheme, the insured can claim above this amount from their private insurance (if they have 'top up' cover and if they do not have 'top up' cover the individual will have to absorb any additional costs).

Access and affordability

- [29] The National Catastrophe Insurance Scheme could be compulsory in order to ensure sufficient capital for the Scheme and to resolve existing inadequacies that lead to problems associated with access and affordability. Compulsion also resolves issues associated with adverse selection as covering all Australian properties creates a diverse pool of risks. The proposed Scheme would cover not just high risk properties that are more likely to obtain insurance cover. The legality regarding the compulsory operation of the Scheme will be analysed later in the thesis.
- [30] In determining the actual cost of premiums under the scheme, for budget estimates and fiscal stability concerns, consideration will be given to whether the premiums charged would incorporate a component, which is risk reflective. Once the cost of fully or partially risk reflective premiums is determined by an actuary, a determination must then be made on how to structure the pricing of the premiums if some would otherwise be prohibitively expensive. A decision may be made to have premiums priced using a flat rate for all properties or for properties within particular zones.⁵⁰ While pricing decisions must incorporate the work of an actuary, the examination of actual pricing of the premiums is outside the scope of the thesis.

Assisting in the promotion of affordability through discounting

[31] The National Catastrophe Insurance Scheme as proposed, incorporates financial subsidies for members of the community who may need assistance. The Natural Disaster Insurance Review strongly advocated the need for discounts for low-income families,⁵¹ for those in high-risk areas,⁵² as well as other vulnerable groups (e.g. pensioners and Centrelink recipients).⁵³ The Natural Disaster Insurance Review suggested Centrelink as a mechanism through which to distribute insurance discounts.

⁵⁰ If premiums are priced using a flat rate or partial flat rate system for all homeowners, then there is no incentive to reduce risks. A risk adjusted premium in theory provides a signal to all actors about perfective risk. See John McAneney et al, 'Government-sponsored natural disaster insurance pools: A view from down under', above n 12, 3.

The exact pricing methods used by the Scheme, however, could take into account economic concerns as well as broader sociological considerations. See also Kunreuther, above n 32.

⁵¹ Natural Disaster Insurance Review (Treasury), Parliament of Australia, *Final Report: Inquiry into Flood Insurance and Related Matters* (2011), Pivotal Recommendation 3, Recommendation 4, Recommendation 5 http://www.ndir.gov.au/content/Content.aspx?doc=report.htm>.

⁵² Ibid Pivotal Recommendation 4.

⁵³ Ibid Recommendation 30.

Discounts linked to Centrelink can be means tested and attached to welfare payments. From a legal perspective, the Commonwealth Government would have the power to administer discounts using the Centrelink infrastructure.⁵⁴ The Commonwealth Government responded to the Natural Disaster Insurance Review by accepting that there was a need to assist some members of the community (e.g. recipients of government welfare) to better afford insurance cover.⁵⁵

[32] The compulsory nature of the National Catastrophe Insurance Scheme means that discounting would be a consideration to maintain the objective of affordability (which in some instances may need to incorporate a discount reflecting the socioeconomic status of the recipient). Discounting acknowledges that there are different levels of economic welfare within the community.

Overview of Insurance and Regulatory System Governing Household Property

[33] The current insurance and regulatory system covering home insurance for damage and destruction through one or more natural disasters of catastrophic proportions involves private owners of homes (whether insured or not), the insurance industry and the Australian (Commonwealth), State, Territory and Local Governments. Private insurance provides the first layer of relief and government programmes and volunteers provide secondary layers of relief.

Insurance

[34] In the context of home insurance, the term 'insurance' refers to sharing specified risks—subject to modification by the *Insurance Contracts Act 1984* (Cth)—caused by one or more expressly defined contingencies.⁵⁶ The insured pays the insurer specified consideration for cover against the particular risk/s. Home insurance in Australia generally covers damage or destruction caused by theft, fire, wind-related events, storms (including hailstorm) and in some instances, where specified in the insurance contract, flooding. After the Queensland Floods in 2011, riverine flooding was incorporated as part of the broader category of flood. Due to the operation of the

⁵⁴ Ibid Recommendation 30.

⁵⁵ Commonwealth, *Government's Response to Natural Disaster Insurance Review Recommendations* (2011).

⁵⁶ *Truta v Avis Rent-A-Car System Inc* (1987) 193 Cal App 3d 802, 811–812.

universal definition of flooding, an insurer either provides flood cover or expressly excludes flood cover (for all forms of flood). Flood is offered on an opt out basis. At present most home insurance policies in Australia specifically exclude landslides and actions of the sea. The National Catastrophe Insurance Scheme could provide household building insurance against damage caused by tsunami and landslides. The scheme specifically excludes coverage for volcanic activity and for drought.⁵⁷

[35] Although there are some constraints to insurance provided to consumers, generally insurance can cover any matters for which an insurer is willing to provide coverage at a price agreed between the parties.⁵⁸ An insurance contract for home insurance (consumer contract) must encompass (to the extent possible)⁵⁹ all legal definitions and obligations under the *Insurance Contracts Act 1984* (Cth). This seeks to protect insurance consumers and achieve equilibrium in the rights of the insurer and the insured.

Reinsurance

[36] A reinsurance⁶⁰ market provides a mechanism for insurance companies to diversify or pass on a portion of the risk assumed. Reinsurance is often provided by international reinsurance companies and thus is seen as an attractive way of ensuring part of the risk is spread to reinsurance markets outside Australia. Reinsurance is specifically excluded under s 9(1)(a) of the *Insurance Contracts Act* 1984 (Cth) on the ground that reinsurance contracts are generally between corporate entities or an insurer and a reinsurer. Legally, reinsurance is an alternative means that satisfies the regulatory obligations imposed on insurers to ensure they have sufficient reserves as required by *Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital*, whereby higher levels of reinsurance will reduce the amount of capital required (in the form of

⁵⁷ Drought is excluded on the basis that the National Catastrophe Insurance Scheme provides coverage against damage to residential properties. The impact of a drought is unlikely to have implications for the structure of a residential property, rather drought has traditionally been problematic for farmers and this is where the greatest losses arising from a drought lie.

⁵⁸ Greg Pynt, Australian Insurance Law: A First Reference (LexisNexis Butterworths, 2nd ed, 2008) 4–11.

⁵⁹ The exception will exist where the National Catastrophe Insurance Scheme operates in a way which diverges from commercial insurance and thus makes adherence to the *Insurance Contracts Act 1984* (Cth) impracticable.

⁶⁰ Reinsurance is the legally enforceable agreement where the reinsurer agrees to indemnify the reinsured company against all or part of the loss that the company may sustain under the policy or policies it has issued; see Guy Carpenter, *Reinsurance Terms* (2014) http://www.guycarp.com/content/guycarp/en/home/the-company/media-resources/glossary/r.html.

cash or other assets). This is because reinsurance removes some of the cost of the risk from the insurer's balance sheet and puts the risk on the reinsurer's balance sheet.

- [37] One of the major reinsurance companies, Munich RE, described '2011 as the most expensive natural catastrophe year ever'.⁶¹ After 2011, the catastrophic insurance products in Australia and worldwide changed, not just in the primary cover offered to individuals but also in the types of reinsurance coverage available for insurers. Events from the Australasian region (floods in Queensland, Cyclone Yasi⁶² and the Christchurch earthquakes) affected the insurance industry's readiness to provide secondary reinsurance coverage, the cost at which this was provided, and the terms on which such coverage could be afforded by insurers and reinsurers.⁶³ The reinsurance markets had practical flow-on effects for consumers because insurers purchasing capital at a higher price passed this cost on to consumers.
- [38] The National Catastrophe Insurance Scheme as proposed, would cover a variety of natural disaster events and thus a decision may be made by its Governing Board and the Executive to obtain commercial reinsurance to transfer some of the risk from the Scheme's insurance book. This would provide a buffer between the reserves of the Scheme (as they accumulate) and the government guarantee. The other catastrophe insurance scheme in Australia, the Australian Reinsurance Pool Corporation (insuring against terrorism) uses commercial reinsurance and retrocession cover.

Insurance obligations under the Corporations Act 2001 (Cth)

[39] Insurers provide financial products⁶⁴ and manage financial risks. On this basis, taking into account the products offered by insurers, they are legally obliged to comply with Chapter 7 of the *Corporations Act* 2001 (Cth). The requirements which insurers must adhere to, in order to comply with Chapter 7 obligations, are outlined in s 763C of the *Corporations Act* 2001 (Cth). Insurers who offer household insurance products are

 ⁶¹ Munich RE, 'Topics Geo Natural Catastrophes 2011: Analysis, Assessment and Position' (Report, Münchener Rückversicherungs-Gesellschaft, Munich, 2012) 50–51, 54; Christophe Courbage and Walter R Stahel (eds.), *The Geneva Reports—Risk and Insurance Research: Extreme Events and Insurance: 2011 Annus Horribilis* (The International Association for the Study of Insurance Economics, 2012) 1, 17.
⁶² Eva Q Ma et al, 'Australian Floods and their Impact on Insurance' in Courbage and Stahel, above n 58, 81,

⁶² Eva Q Ma et al, 'Australian Floods and their Impact on Insurance' in Courbage and Stahel, above n 58, 81, 81–93; Robert Muir-Wood, 'The Christchurch Earthquakes of 2010 and 2011' in Courbage and Stahel, above n 58, 93, 93–107.

⁶³ Peter Höppe and Petra Löw, 'Characteristics of the Extreme Events in 2011 and their Impact on the Insurance Industry' in Courbage and Stahel, above n 58, 7, 8–15.

⁶⁴ Corporations Act 2001 (Cth) s 764A(1)(d).

required to operate with an Australian market license; the failure to do so is a criminal offence.⁶⁵ The license imposes certain conditions⁶⁶ upon insurers.⁶⁷ This includes the obligation to notify the Australian Securities and Investments Commission if there is a likelihood that the relevant insurer may breach the general terms of their license.⁶⁸ The Australian Securities and Investments Commission has the function of supervising financial markets, which specifically includes insurance markets.⁶⁹

[40] The National Catastrophe Insurance Scheme would be different to a standard insurer as the product offered is specific, compulsory and uniformly applied across Australia. Consequently, it may be possible for the Minister to issue a notice exempting the insurance products sold by the Scheme from a license.⁷⁰ The ability for the National Catastrophe Insurance Scheme to seek an exemption would be discretionary. In addition, the main caveat to the operation of the *Corporations Act 2001* (Cth) is that in order for it to apply to insurers they must be a body corporate registered under Chapter 2A.⁷¹ This means the insurer must operate as a public or proprietary company.⁷²

- b) The nature of the activities conducted, or proposed to be conducted, on the market;
- c) The size, or proposed size, of the market;
- d) The nature of the financial products dealt with, or proposed to be dealt with, on the market;
- e) The participants, or proposed participants, in the market and:
 - I. Whether those participants, in effecting transactions through the market, are, or will be, providing financial services to other persons; and
 - II. Whether those participants acquire or dispose, or will acquire or dispose, of financial products through the market as retail clients or as wholesale clients; and
 - III. Whether those participants are also, or will also be, participants in any other financial markets;
- f) The technology used, or proposed to be used, in the operation of the market;g) Whether it would be in the public interest to take the action referred to in subsection (1);
- h) Any relevant advice received from ASIC.

⁶⁵ Corporations Act 2001 (Cth) s 791A.

 $^{^{66}}$ Under s 792A a licensee has general obligations placed upon them as a condition of their license including that they must do all to ensure a fair, orderly and transparent market. The Minister has the ability to impose any conditions or to amend or make additional conditions at their discretion under s 796A(1)(a). Although the Minister has discretion to impose conditions, under s 798A(2) the matters the Minister must have regard to include:

a) The structure, or proposed structure, of the market;

The Minister may also have regard to any other matter that the Minister considers relevant.

⁶⁷ Corporations Act 2001 (Cth) s 792A.

⁶⁸ Corporations Act 2001 (Cth) s 792B.

⁶⁹ Corporations Act 2001 (Cth) s 798F.

⁷⁰ Corporations Act 2001 (Cth) s 791C.

⁷¹ Corporations Act 2001 (Cth) s 791D.

⁷² Corporations Act 2001 (Cth) s 112.

Interaction between obligations under the *Corporations Act 2001* (Cth) and the *Public Governance, Performance and Accountability Act 2013* (Cth)

- [41] Aside from being a corporation registered under Chapter 2A of the *Corporations Act* 2001 (Cth), the National Catastrophe Insurance Scheme could operate as a Public Financial Corporation subject to the governance of the *Public Governance, Performance and Accountability Act 2013* (Cth). The National Catastrophe Insurance Scheme would have additional obligations by virtue of the Commonwealth guarantee, which would be provided to the Scheme to ensure it could always pay claims for insurance under the Scheme. Per s 6 of the Public Governance, Performance and Accountability Act 2013 (Cth), the purpose of the Act is to ensure accountability regarding the use and management of public resources, which would apply to the Commonwealth Government's guarantee, if ever utilised. The National Catastrophe Insurance established under Commonwealth law. Under s 11(a), the Scheme would be classified as a corporate Commonwealth entity (one of the two types of Commonwealth entities provided for under the Act) due to its incorporation under the *Corporations Act 2001* (Cth).
- [42] To ensure that obligations are maintained under the *Public Governance, Performance and Accountability Act 2013* (Cth), the National Catastrophe Insurance Scheme would be required to establish an accountable authority. Under s 12(2), based upon the corporate structure of the Scheme, this accountable authority is set up as the governing body of the Scheme (including the Executive and Governing Board). The Act imposes general duties on the accountable authority, which in the case of the National Catastrophe Insurance Scheme would include the duties:
 - To govern the Scheme⁷³
 - To establish and maintain systems relating to risk and control⁷⁴
 - To cooperate with others to achieve common objectives where practicable⁷⁵ and

⁷³ *Public Governance, Performance and Accountability Act 2013* (Cth) s 15.

⁷⁴ *Public Governance, Performance and Accountability Act 2013* (Cth) s 16.

⁷⁵*Public Governance, Performance and Accountability Act 2013* (Cth) s 17 [for the National Catastrophe Insurance Scheme this could include the duty to cooperate with the insurance industry to seek to achieve provide

- To keep the relevant Minister and Finance Minister informed about its activities, any major decisions and significant issues.⁷⁶
- [43] There would be additional legal obligations imposed on the National Catastrophe Insurance Scheme regarding the operations of the Scheme. These include the legal obligation to prepare a corporate plan at least once every reporting period and to provide this to the responsible Minister and the Finance Minister.⁷⁷ There are obligations to provide budget estimates⁷⁸ and obligations to provide records of the Scheme's performance, including whether it has achieved its purpose.⁷⁹ The Scheme would be periodically audited to ensure compliance and that it is maintaining its account keeping obligations. Under s 22(1) of the Act, the Finance Minister has the ability to specify a government policy that would apply to the Scheme, however to do so, the Board of the Scheme must first be consulted under s 22(2).⁸⁰
- [44] The way in which the additional governance, performance and accountability standards apply to the National Catastrophe Insurance Scheme under the *Public Governance, Performance and Accountability Act 2013* (Cth) is similar to the way the Act operates in relation to the Australian Reinsurance Pool Corporation.
- [45] Insurers in Australia are responsible to the Australian Securities and Investments Commission. The Australian Securities and Investments Commission as administered under the *Australian Securities and Investments Commission Act 2001* (Cth) seeks to ensure financial markets, including insurance markets, are fair and transparent. The Australian Securities and Investments Commission aims to ensure that Australian insurers comply with existing obligations under the *Corporations Act 2001* (Cth) and the *Insurance Contracts Act 1984* (Cth). Any determinations made by the Australian Securities and Investments Commission are subject to judicial and administrative review. This ensures the process is transparent and that those making the decisions can be held accountable. The National Catastrophe Insurance Scheme (as proposed) would

all Australians with insurance protecting against damage from natural disasters of catastrophic proportions at affordable rates].

⁷⁶ Public Governance, Performance and Accountability Act 2013 (Cth) s 19.

Under s 19(4A), the legislation establishing the National Catastrophe Insurance Scheme can modify the duty to keep the Minister and the Finance Minister informed, provided it does so expressly.

⁷⁷ Public Governance, Performance and Accountability Act 2013 (Cth) s 35(1).

⁷⁸ *Public Governance, Performance and Accountability Act 2013* (Cth) s 36.

⁷⁹ *Public Governance, Performance and Accountability Act 2013* (Cth) s 37.

⁸⁰ Public Governance, Performance and Accountability Act 2013 (Cth).
be responsible to the Australian Securities and Investments Commission particularly in relation to compliance with duties outlined in the *Corporations Act 2001* (Cth).

Insurance Regulation, Capital Adequacy and the Cost of Compliance

- [46] In Australia, the regulatory burden contributes to the cost of insurance and thus adversely affects the demand for certain insurance products, especially to the extent that the uptake of such products is price sensitive. The Australian insurance market is regulated by the Australian Prudential Regulatory Authority⁸¹ as well as the standards outlined in the Insurance Act 1974 (Cth). Minimum standards are set under s 8 of the Australian Prudential and Regulatory Authority Act 1998 (Cth) to ensure the fiscal stability of insurers. It is a criminal offence for a general insurer to have less than the required minimum level of assets.⁸² The operation of the prudential requirements is clarified by the Australian Prudential Regulatory Authority under the Prudential Standard GPS 110: Capital Adequacy. Articles 24-34 of this Standard set out the economic models to be applied to each insurance company in determining capital adequacy. The permissible amount of primary insurance relative to assets and / or reinsurance coverage is influenced largely by the Australian Prudential Regulatory Authority acting under Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital. The Australian Prudential Regulatory Authority does not dictate the exact layering structure but measures the adequacy of existing fiscal systems in achieving capital adequacy.
- [47] As a general rule, insurers make their best efforts to use risk reflective pricing as this helps ensure they have sufficient capital for risks to which they are exposed. Solvency is the reason why insurers are concerned with adequately pricing risks. If an event or events occur that are beyond the calculated probable maximum loss⁸³, there is the possibility of insolvency.
- [48] Regulators take many precautions to ensure that insurers do not become insolvent and have sufficient capital to pay their insurance claims, however, this is not always

⁸¹ Under s 32 of the *Insurance Act 1973* (Cth), the Australian Prudential Regulatory Authority has the power to determine and set out prudential standards.

⁸² Insurance Act 1973 (Cth) s 28.

⁸³ Maximum loss expected at a location taking into account the natural disaster(s) which are modelled as having a probability of occurring in that locality within a period of time. This loss is generally expressed in monetary terms or as a percentage of total values. See International Risk Management Institute, 'Probable Maximum Loss (PML)' (2015) https://www.irmi.com/online/insurance-glossary/terms/p/probable-maximum-loss-pml.aspx

sufficient. 'Any natural disaster [of catastrophic proportions] can be big enough to drive an insurance company to insolvency.³⁸⁴ For example, after the Christchurch earthquakes, the New Zealand Government provided financial assistance to AMI.⁸⁵ The assistance was an ad hoc loan agreement to prevent the insurer from becoming insolvent. There was no legal compulsion on the New Zealand Government to provide financial assistance to AMI, however, it was considered the ad hoc loan agreement was preferable to AMI becoming insolvent. Part of the New Zealand Government's decision to assist AMI stemmed from the limited legal obligations on insurers for capital reserving prior to the Christchurch earthquakes. The problems with inadequate capital reserves arose out of the absence of legal compulsion to hold specified amounts of capital. This was not a problem only for AMI but also for Western Pacific Insurance Ltd that went into liquidation after the earthquakes.⁸⁶ It is exceptional for insurance companies to fail after a natural disaster of catastrophic proportions, but the Christchurch earthquake demonstrated that inadequate legal requirements regarding capital reserving coupled with a natural disaster of catastrophic proportions can result in insolvency. The Australian Scheme alleviates the risk of fiscal instability by including provisions for higher capital requirements and enables it to act as a dedicated insurer with government support for catastrophe risk.

[49] In addition, as noted in [36]- [38] once implemented, the Scheme may at the discretion of the Board, rely on some commercial reinsurance. Legally, the reinsurance arrangement of an insurer is regulated by the Australian Prudential Regulatory Authority under the *Prudential Standard GPS 230*. Insurers are required to have a Reinsurance Management Strategy which ensures the Australian Prudential Regulatory Authority is satisfied with the way the reinsurance cover is regulated (including the country regulating the reinsurer). This regulatory burden imposes additional

⁸⁴ McAneney, above n 20.

⁸⁵ AMI is an insurer operating within New Zealand. Prior to the Christchurch earthquakes, AMI had been one of the best performing insurers within New Zealand with a 35% market share in New Zealand. This meant that at the time they were the 4th largest general insurer. However, their risk portfolio was highly concentrated with approximately 1 in 3 of the properties they insured being located in Christchurch. See Reserve Bank of New Zealand and New Zealand Treasury, 'Christchurch Insurance Update' (Report T2011/391- Treasury 2024587v1, 10 March 2011); Andrew Bibby, 'Extraordinary events demand extraordinary leadership' (July 2012) 74 *International Cooperative and Mutual Insurance Federation Voice* 14, 14 – 15.

⁸⁶ Standard and Poor, Ratings Direct: What may cause insurance companies to fail and how this influences our criteria (Document 11443461300323561, 13 June 2013) 1, 10 -11.

compliance costs, but is a means of legally ensuring Australian insurers do not put themselves in positions where they may become insolvent.⁸⁷

[50] The cost of the Scheme is affected by obligations imposed under the *General Insurance Code of Practice* ('Code of Practice'). The Code of Practice was updated in 2014 with changes implemented by insurers before 30 June 2015. The Code of Practice⁸⁸ is voluntary, but it establishes industry standards.⁸⁹ Although the proposed National Catastrophe Insurance Scheme would have a unique and specific focus, to the extent possible, it would uphold industry standards as established in the Code of Practice. As with other compliance regulations, these costs would be absorbed by the Scheme.

Impact of a 'Soft Market' for Insurance

[51] Insurance tends to be cyclical, with projections that the present "soft market"⁹⁰ will harden with less capital and higher prices in the future. However, if the market remains soft, other suboptimal features may emerge, including adverse selection⁹¹ and failure to reduce⁹² moral hazard actively.⁹³

⁸⁷ Particular regard was paid to the HIH insolvency. See Commonwealth, Royal Commission on the Failure of HIH Insurance, *Final Report* (2003).

⁸⁸ http://codeofpractice.com.au

⁸⁹The changes to the Code of Practice came about through the Commonwealth Government working with the Insurance Council of Australia to reduce complaints after catastrophic events through higher standards imposed by the Code of Conduct. Many of the complaints were about delays in claims handling. Therefore, as a means of ensuring high standards within the insurance industry are obtained and maintained 'reports are being prepared on insurers' compliance with the provisions of the Code and will also be publicly released for the first time to improve transparency'. See OECD, *Disaster Risk Financing: A Global Survey of Practices and Challenges*, above n 40, 91.

⁹⁰ A soft market refers to a situation in which there are more insurance products on sale than there is demand from insurance buyers. This occurs in part due to an increase of insurance capital in the industry. The movement of capital reflects other economic considerations and the movement of capital from pension funds and hedge funds into the insurance industry. Some of the consequences of a soft market create increased competition between insurers, leading to lower premiums charged for a broader range of coverage and higher limits.

⁹¹ Adverse selection occurs when an insurance portfolio is overly represented by high exposure risk or there is a high demand for natural-catastrophe insurance products from a group of people but risks are not priced to represent the high risk. It has been suggested that adverse selection and moral hazard can operate to prohibit the effective operation of well-functioning insurance markets for natural-disaster insurance. See Paul Hudson et al, 'Adverse Selection and Moral Hazard in Natural Disaster Insurance Markets: Empirical Evidence from Germany and the United States' (Paper presented at the American Risk and Insurance Association Annual Conference, Seattle, 4 August 2014) 18–20.
⁹² Paul K Freeman and Kathryn Scott, 'Comparative Analysis of Large Scale Catastrophe Compensation

⁹² Paul K Freeman and Kathryn Scott, 'Comparative Analysis of Large Scale Catastrophe Compensation Schemes' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publishing, 2005) 187–234, 204–205; Helene Cossette, Thierry Duchesne and Etienne Marceau, 'Modelling Catastrophes and Their Impact on Insurance Portfolios' (2003) 7(4) *North American Actuarial Journal* 1.

⁹³ Moral hazard occurs when individuals take fewer measures to limit risk if they expect that insurers will compensate their damage irrespective of their mitigation efforts. See Hudson et al, above n 91, 18–20.

- [52] On the demand side, the provision of household building insurance with the private insurance system and the legally entrenched system promoting a competition-driven market suggests insurance should be a sought-after product with demand reflecting need and pricing. This assumes that consumers of insurance are both rational and risk neutral. Risk neutrality implies that the consumer would only insure their home to the point to which they benefit from insurance. That is, the value attributed to the reduction in risk must equal or exceed the cost of the financial investment of purchasing insurance before the consumer would consider this purchase. In an efficient insurance market, competition between insurers would be expected to produce this outcome.⁹⁴ However, the reality that many individuals do not possess adequate insurance cover and that there is evidence of widespread underinsurance suggests that assumptions of rationality and risk aversion may be misplaced. Further, 'the lack of demand for insurance creates impediments to the economic viability of insurance coverage by the private sector given the limited potential for premium revenue and for pooling a broad spectrum of risk (which may be unevenly distributed across the economy). This is exacerbated by the potential for adverse selection, where only those likely to face losses will seek insurance, making it uneconomical for insurance companies to provide coverage.⁹⁵
- [53] On the supply side, insurers operate as commercial entities.⁹⁶ Insurers have a legal duty to their policyholders to ensure sufficient capital and that claims are paid out in an efficient and timely manner should an event occur (discussed in [92] [96]). To ensure that insurers maintain and increase their accumulated assets, they must continue to write insurance business and also generate investment income whilst ensuring that sufficient assets are available to pay claims when needed. The structuring of risk and the appetite of insurers for certain risks are commercial decisions subject to regulation and their obligation to ensure that they have sufficient capacity to pay all of their liabilities at any time.

⁹⁴ Lloyds, 'Lloyds Global Underinsurance Report' (October 2012) 7 <http://www.lloyds.com/~/media/Files/News%20and%20Insight/360%20Risk%20Insight/Global_Underinsuran ce_Report_311012.pdf>.

⁹⁵ OECD, *Disaster Risk Financing: A Global Survey of Practices and Challenges*, above n 40, 94.

⁹⁶ Patrick M Liedtke, Kai-Uwe Schanz and Walter R Stahel, 'Climate Change as a Major Risk Management Challenge: How to Engage the Global Insurance Industry' (Background Paper No 15, The Geneva Association: Risk and Insurance Economics) 1, 6.

[54] The use of a public natural-catastrophe scheme or pool overcomes several of the supply-side and demand-side problems that are characteristic of private insurance markets (as discussed above). For example, within the private insurance market there have been clusters of uninsured individuals after natural disasters of catastrophic proportions.⁹⁷ The proposed Scheme aims to resolve this problem by providing an insurance mechanism to spread the costs and prevent rebuilding and reconstruction costs being thrust on the Australian community, either directly or indirectly, through mechanisms such as the taxation system. On the supply side, there is legal scope to make it compulsory, thereby avoiding the problem of the Australian community being the insurer of last resort. The compulsion employed in the proposed Scheme also prevents adverse selection, whereby those with greater exposure to one or more listed catastrophes are more likely to obtain insurance than those with a lower risk exposure thereby causing the insured risks to be concentrated. Instead, the proposed Scheme covers all Australian household buildings and residential land, which means that the overall impact of a natural disaster of catastrophic proportions would be spread more widely in a proportionate way. The streamlining of capital adequacy and the fair handling and protection of consumers' rights under the National Catastrophe Insurance Scheme could ensure high standards are achieved and that existing insurance standards are mirrored to the extent relevant, taking into account the Scheme's specialist scope.

National Catastrophe Insurance Scheme as a Direct Insurer: Structure and Practical Examples

[55] The National Catastrophe Insurance Scheme's structure (as proposed) is that of an insurer, which means that it would deal directly with policyholders, manage all claims and handle disputes.⁹⁸ These "hands on" operational responsibilities could have adverse legal implications as demonstrated by the experience of the Earthquake Commission in New Zealand, also a direct insurer.

⁹⁷ Despite underinsurance often being caused by lack of affordability, there are many people who are able to afford insurance but decide to underinsure their properties. However, cost remains one of the greatest determinants of the level of coverage. See Richard Tooth and George Barker, 'The Non Insured: Who, Why and Trends' (Insurance Council of Australia, 2007) 4; Australian Securities and Investment Commission, *Report 54: Getting Home Insurance Right—A Report on Home Building Underinsurance* (September 2005).

For members of society who are in the lowest socioeconomic groups, the ability to access insurance is nonexistent, particularly because some people must decide between buying insurance and buying food to feed their family. See Rachel Anne Carter, 'Risk and the Decision to Insure in Australia: The Black Saturday Fires' (Paper presented at the Disasters and Sociolegal Studies Workshop, Oñati, 21-22 July 2011).

⁹⁸ This is a different role to that played by the Australian Reinsurance Pool Corporation which is a government backed reinsurer and resultantly deals with experts utilising insurers as a conduit for government funds.

After the Christchurch earthquakes, the Earthquake Commission experienced some [56] delays. The Earthquake Commission Act 1993 (NZ) stipulates under s 29, that claims should be settled as soon as reasonably practicable and with a one-year limit for determining the Earthquake Commission's liability after an event. The Earthquake Commission is a first loss insurer up to a cap of NZ\$100,000. Insureds are able to insure residential properties for a value in excess of the cap to compensate themselves for remaining damage.⁹⁹ Despite the one year limit imposed on the Earthquake Commission to settle claims, there is no legally enforceable compensation for an insured who suffers delays beyond this timeframe.¹⁰⁰ For example, in Lee vEarthquake Commission [2015] NZHC 8, 'Prior to the commencement of proceedings, the Earthquake Commission considered that its liability did not exceed the statutory cap in respect of a single earthquake event. IAG agreed with that position, and took the view that its policy was not engaged, because the natural disaster damage fell below the statutory cap. If they were to advance their claim, Mrs Lee and Mr Lu had no alternative but to issue proceedings.' Consequently, Mrs Lee and Mr Lu pursued proceedings on the basis that the damage apportioned to each event exceeded \$100,000 and thus not only was the Earthquake Commission liable for the damage caused amounting to the first \$100,000 but as the damage exceeded the statutory cap, their insurer, IAG was also liable. 'The proceedings have resulted in a re-apportionment of the amounts paid to them (Mrs Lee and Mr Lu), with the result that they can now deal with their insurer direct.¹⁰¹ This example illustrates how the Earthquake Commission was, in some instances, desperate to meet political deadlines to settle claims and potentially limit payouts. In some cases, the Earthquake Commission was alleged to have pressured claimants into accepting what some homeowners considered to be derisory amounts. This was problematic particularly in instances where the claims were close to the NZ\$100,000 statutory cap because the liability of an insurer would only be activated once losses exceeded the capped first layer provided by the Earthquake Commission.¹⁰² If the Earthquake Commission found that damage exceeded NZ\$100,000 often claims would involve two separate assessors. The experience of the Earthquake Commission illustrates that there are inherent challenges to a government-backed scheme in settling a large number of claims if the negotiations

⁹⁹ Earthquake Commission Act 1993 (NZ) s 30.
¹⁰⁰ Lee v Earthquake Commission [2015] NZHC 8 [34] - [35].
¹⁰¹ Lee v Earthquake Commission [2015] NZHC 8 [34] - [35].
¹⁰² Lee v Earthquake Commission [2015] NZHC 8 [34] - [35].

¹⁰² Ryde v Earthquake Commission [2014] NZHC 2763; Whiting v Earthquake Commission [2014] NZHC 1736.

regarding the losses are complex. Although some insureds pursued litigation, this involved further delays and costs for the insureds.¹⁰³ The *Earthquake Commission Act* 1993 (NZ) provided a legal procedure for claims, yet had no in-built legal mechanism to enable insureds who had experienced excessive delays to be compensated for these delays. The existence of legally enforceable procedures to ensure the Earthquake Commission complied with maximum legislative time-periods, including consequences for non-compliance, would have generated greater certainty for insureds. In turn, this would likely have resulted in less litigation, freeing the courts to hear other disputes.

[57] The National Catastrophe Insurance Scheme, when operational, would seek to avoid delays such as those that occurred in the aftermath of the Christchurch earthquakes through inbuilt legal mechanisms to enforce the timely resolution of claims. Insureds would be able to seek recourse should the National Catastrophe Insurance Scheme exceed its maximum legislative time period for handling claims and making payments to insureds.

Existing Government Programs and the Gap in Assistance for Household Building Damage- A case for the proposed National Catastrophe Insurance Scheme

- [58] In Australia, government programmes offering relief to the owners and occupants of household buildings are provided at the Commonwealth Government level and State or Territory level.
- [59] At the Federal level, there are two government compensation schemes. First, the Commonwealth Government has discretion to provide Disaster Recovery Allowance payments to individuals who experience a loss of income as a direct result of natural disasters. Secondly, the Commonwealth Government Disaster Recovery Payment is made to individuals to cover emergency expenditure incurred following the determination that a natural disaster has occurred. These provide relief to individuals and assist in their immediate welfare as opposed to providing financial assistance for damage to household buildings.

¹⁰³ For example, see *Ryde v Earthquake Commission* [2014] NZHC 2763; *Whiting v Earthquake Commission* [2014] NZHC 1736.

- [60] The Commonwealth Government's Natural Disaster Relief and Recovery Arrangements exist to ensure that the burden of providing assistance to individuals is shared between the Commonwealth Government and State or Territory Governments. There is an Australian federal ex-post distribution of resources between the federal and state levels of government such that the magnitude of involvement by the Commonwealth Government increases with the economic impact of the disaster. A comparison of Australia's public compensation schemes and ex-post distribution with those of a select group of other countries is incorporated in the international comparative section (discussed in [374] [441]).
- [61] Despite the existence of the Natural Disaster Relief and Recovery Arrangements and other government arrangements, the individual States or Territories must determine whether owners and occupants affected by natural disasters of catastrophic proportions will be compensated for losses to their households. Further, there is discretion in relation to the amount of compensation individuals receive (if any).
- [62] Relief for damage and destruction of state-owned assets¹⁰⁴ is the responsibility of the State or Territory concerned, including damage to essential public assets and State-based infrastructure such as schools, hospitals and roads.¹⁰⁵ Each Australian State and Territory has a discrete statutory scheme dealing with the planning for, management of, and response to, natural disasters. While this includes relief for the victims of a natural disaster of catastrophic proportions, it generally excludes household property relief.¹⁰⁶ The proposals contained within this thesis are not intended to change the State or Territory arrangements.

- Emergencies Act 2004 (ACT)
- Emergency Management Act 1986 (Vic)
- Emergency Management Act 2004 (SA)
- Emergency Management Act 2005 (WA)
- Emergency Management Act 2006 (Tas)
- Emergency Services Funding Act 1998 (SA)
- Emergency Services Levy Act 2002 (WA)

¹⁰⁴ Danuta Mendelson and Rachel Anne Carter, 'Catastrophic Loss and the Law: A Comparison between 2009 Victorian Black Saturday Fires and 2011 Queensland Floods and Cyclone Yasi' (2012) 31(2) *University of Tasmania Law Review* 31, 36–39.

¹⁰⁵Commonwealth Government, National Commission of Audit, 'Disaster Relief' (2014) http://www.ncoa.gov.au/report/appendix-vol-2/10-9-natural-disaster-relief.html>. ¹⁰⁶ See

[•] Disasters Act 1982 (NT)

[•] Disaster Management Act 2003 (Qld)

[•] Fire and Emergency Services Authority of Western Australia Act 1998 (WA)

Lessons Learnt from Recent Australian Natural Disasters

- [63] Historically, Australia has been exposed to a variety of natural disasters of catastrophic proportions. Two of the biggest events were the Black Saturday bushfires in Victoria in 2009 and the Queensland Floods from December 2010- February 2011. These events illustrated some problems¹⁰⁷ inherent within the existing insurance legal and regulatory system in Australia.
- [64] The Black Saturday bushfires¹⁰⁸ that occurred in Victoria throughout February 2009 were catastrophic both in relation to the ferocity of the fires and also due to the death and destruction caused. An extreme heatwave with temperatures exceeding 40°C during the preceding week, coupled with fierce winds, created extreme fire danger. The Black Saturday fires did not represent a single fire but rather 'many unconnected fires' that simultaneously occurred in different parts of Victoria.¹⁰⁹ The natural disaster of catastrophic proportions resulted in the loss of 173 lives¹¹⁰ and many others experiencing vary degrees and types of injury.¹¹¹
- [65] The total cost of the Black Saturday bushfires exceeded \$4 billion.¹¹² From the total financial losses sustained, only a portion of the property damage was covered by insurance. There were approximately 10,280¹¹³ insurance claims resulting in insurance payments amounting to approximately \$1.07 billion.¹¹⁴ Many individuals residing in

[•] State Emergency Service Act 1989 (NSW)

[•] State Emergency and Rescue Management Act 1989 (NSW)

[•] Victoria State Emergency Service Act 2005 (Vic).

¹⁰⁷ These problems included delays, insufficient claims handling procedures, inability for some individuals in high risk areas to obtain flood insurance and high costs associated with insurance premiums. There were also problems associated with a lack of clarity and misunderstandings regarding the ambit of cover, the operation of exclusions and the application of sub-limits. As a result of these problems, there were a number of individuals who pursued class actions after both the Black Saturday bushfires and the Queensland floods.

 ¹⁰⁸ The Black Saturday bushfires were a concentration of fires on Black Saturday (7 February 2009), or within a close time period before or after Black Saturday.
 ¹⁰⁹ Richard Thornton, 'Short Communication on Research Response to the Black Saturday (7th February 2009)

¹⁰⁹ Richard Thornton, 'Short Communication on Research Response to the Black Saturday (7th February 2009) Victorian Bushfires, Australia' (2010) 47 *Fire Technology* 295.

¹¹⁰ Victoria, 2009 Victorian Bushfires Royal Commission, *Final Report*, v-vii, 1–2 http://www.royalcommission.vic.gov.au/Commission-Reports/Final-Report.html

¹¹¹ Peter A Cameron et al, 'Black Saturday: The Immediate Impact of the February 2009 bushfires in Victoria, Australia' (2009) 191 *Medical Journal of Australia* 11, 11–15.

¹¹² Ibid 1.

¹¹³ Insurance Council of Australia, *Year in Review 2009* (2009)

<http://www.insurancecouncil.com.au/Portals/24/Year%20In%20Review%202009/InsuranceCouncil_YearInReview_PRINT2.pdf>.

¹¹⁴ Insurance Council of Australia, 'Insurance Council of Australia Historical and Current Data Statistics at 21 April 2011' (Statistics, Insurance Council of Australia, 21 April 2011)

the worst affected areas lived in caravans,¹¹⁵ temporary housing or shipping containers for a considerable period after the event. Some individuals continue to live in 'temporary' accommodation. The fires devastated 430,000 hectares of bush, which included 51 towns and 78 communities.¹¹⁶ One survivor described Kinglake (one of the worst affected towns) as being akin to a war ground 'a black smoking mess, no structures left standing [...] the trees weren't just burnt, they'd had the life sucked out of them. Fences had vanished; even the white lines in the middle of the road had melted away'.¹¹⁷

- In the context of household insurance, the Black Saturday bushfires resulted in the total [66] destruction of 2,000 homes¹¹⁸ and an additional 6,000 households suffered lower degrees of property damage.¹¹⁹ In some towns, the destruction rate amounted to between a third and half of the entire town being destroyed. For example, Murrindindi experienced destruction of 46% of the town, Churchill endured destruction amounting to 38% of the town and Kilmore East endured destruction to 32% of the town.¹²⁰
- [67] Government aid, in the form of financial assistance and recovery programmes, provided 26% of funds, followed by donations at 19% of funds to compensate the total losses.¹²¹ Initially, the victims of the Black Saturday bushfires, being the individuals, local businesses and local communities, had to absorb the remaining costs. Subsequently, for those individuals who participated in class action litigation, many have received compensation arising from an out-of-court settlement.

<http://www.insurancecouncil.com.au/IndustryStatisticsData/CatastropheDisasterStatistics/tabid/1572/Default.a

spx². ¹¹⁵ Special Report: Black Saturday—Emerging from the Ashes, Members Reflect' (2010) February *The Police* Association Journal 10, 11.

¹¹⁶ Gary Banks, 'Report on Government Services 2011' (Productivity Commission Report, January 2011) 1, 9.20 <http://www.pc.gov.au/ data/assets/pdf file/0015/105252/rogs-2011-volume1.pdf>

¹¹⁷ Jane O'Connor, Without Warning: One Woman's Story of Surviving Black Saturday (Hardie Grant Books, 2010) 96.

¹¹⁸ It has been suggested that the exact number of homes lost in totality was 2,129 with the value of these destroyed homes alone exceeding \$713 million. See Banks, above n 116, 1, 9, 20. However, the official statistics cited in the 2009 Victorian Bushfires Royal Commission suggest that 2,133 houses were destroyed by the Black Saturday bushfires. See 2009 Victorian Bushfires Royal Commission, Final Report, above n 110, 13.

¹¹⁹ Joshua Whittaker and John Handmer, 'Community Bushfire Safety: A Review of Post Black Saturday Research' (2010) 25 The Australian Journal of Emergency Management 7, 7.

¹²⁰ Joshua Whittaker et al, Research Results from February 7the Victorian Fires Second Report on the Human Behaviour and Community Safety (Report from Household Mail Survey, Bushfire CRC, January 2010) 2. ¹²¹ Ibid.

- [68] The Black Saturday Fires illustrated¹²² the need for an insurance solution to address issues associated with delays in claims handling.¹²³ At the time of the event, the General Code of Conduct for Insurers did not apply to natural disasters of catastrophic proportions. Rule 4.2 encouraged insurers to 'respond to catastrophes and disasters in a fast, professional and practical way and in a compassionate manner.' Legally, the Code was not binding. The absence of a specifically enforceable timeframe meant that insureds could not be guaranteed legal rights in relation to delays.¹²⁴ Under s 57 of the *Insurance Contracts Act 1984* (Cth) an insurer was liable to pay interest once it was unreasonable for the insurer not to have paid the insured compensation. In the context of a natural catastrophe, this was complicated and thus likely to be subjective as insurers were overwhelmed by the volume of claims within a short period of time. The *Insurance Contracts Act 1984* (Cth) was silent on claims handing following natural disasters of catastrophic proportions.
- [69] A second recent Australian natural disaster of catastrophic proportions involved the Queensland Floods, which occurred during December 2010 and January 2011. Torrential rain and fierce winds enveloped large parts of Queensland resulting in vast flooding. The damage was widespread affecting almost every council in Queensland. Exacerbating this, Cyclone Yasi hit tropical North Queensland in February 2011. The cumulative effect was that 'since November [2010] more than 99% of [Queensland] was affected by floods and cyclones and 37 Queenslanders lost their lives as a result of nature's fury'.¹²⁵ It was stated that the '2010/2011 floods were historically unique due to their causes and wide-ranging impact'.¹²⁶ The economic implications of these

¹²² As part of the research, field work was conducted through oral interviews and written surveys in areas most affected by the Black Saturday Fires (primarily Kinglake, Kinglake West, St Andrews, Strathewen, Pheasant Creek, Flowerdale and Murrindindi). The survey responses and responses to the oral interviews indicated that delays were a major problem for those individuals affected by the Black Saturday Fires. See Rachel Anne Carter, 'Human Reaction to Insurance (Black Saturday Case Study)—Interviews and Written Questionnaires', April–May 2011 [Ethics approval granted on 16 February 2011 (Ethics Application 71/10PG)]; Shaun Campbell, 'Kinglake Residents to Help Solve Insurance Puzzle' *Diamond Valley Leader* (Melbourne) 18 March 2011.

 ¹²³ PricewaterhouseCoopers, 'Thought Leadership: Effective Disaster Recovery—What Lessons Can we learn from Australia's Black Saturday Bushfires' (Report, July 2010)
 http://www.pwc.com.au/industry/government/assets/Effective-Disaster-Recovery-Jul10.pdf.
 ¹²⁴ General Insurance Code of Practice 2012

<http://codeofpractice.com.au/assets/documents/Code%20of%20Practice%202012%20-%20FINAL%20l.pdf>

¹²⁵ Queensland Reconstruction Authority, *Operation Queenslander: The State Community, Economic and Environmental Recovery and Reconstruction Plan 2011–2013* (March 2011) <http://www.gldreconstruction.org.au/u/lib/cms2/operation-gueenslander-state-plan-1.pdf>.

¹²⁶ World Bank and Queensland Reconstruction Authority, *Queensland: Recovery and Reconstruction in the Aftermath of the 2010/2011 Flood Events and Cyclone Yasi* (World Bank, June 2011) 5.

disasters were severe, with insurance claims arising from the flooding exceeding \$2.6 billion by the end of April 2011, plus approximately \$967 million resulting from the damage caused by Cyclone Yasi.¹²⁷ The cost to Australian-based insurance companies was approximately \$1 billion¹²⁸ with the remainder of the insured losses absorbed by global insurance firms through insurance or reinsurance programs. The final damage bill exceeded US\$7.3 billion.¹²⁹

- Although the Queensland floods caused more than 58,463 homes and businesses to [70] experience inundation, a further 72,203 insurance claims¹³⁰ arose from Cyclone Yasi. In addition to insurance claims, after the event a 'total of \$31.7 million was disbursed [from the Commonwealth Government] to more than 360 households with payments ranging from \$10,000 to \$280,000 with an average payment of \$87,657^{.131}
- The Queensland Floods illustrated (in an even more profound way than the Victorian [71] Bushfires) the problem of uninsured and underinsured property. Lack of insurance was partly due to financial considerations. However, a second problem surfaced during the Floods caused by misunderstandings on the part of insureds of the extent of their cover, the definition of floods and the operation of sub-limits.¹³² The latter problem was resolved through the implementation of the Natural Disaster Insurance Review's recommendation for a uniform definition of flood (discussed in [282]).
- [72] Due to the number of individuals without cover or with inadequate cover, there was a heavy reliance upon charity. The Queensland Government's approach to the distribution of charity differed from the Victorian Government approach to distributing funds in the aftermath of the Black Saturday bushfires. The Queensland Government

¹²⁷ Insurance Council of Australia, 'Insurance Council of Australia Historical and Current Data Statistics at 25 2011' (Statistics, Insurance Council of Australia, March 25 March 2011) <http://www.insurancecouncil.com.au/IndustryStatisticsData/CatastropheDisasterStatistics/tabid/1572/Default.a spx>. ¹²⁸ Ibid.

¹²⁹ Munich RE, above n 61, 50.

¹³⁰ Queensland Flood Commission Inquiry, Final Report, 2012, 32, 288-289 March <http://www.floodcommission.gld.gov.au/ data/assets/pdf file/0007/11698/QFCI-Final-Report-March-2012.pdf>.

¹³¹ Queensland Government, Premier's Disaster Relief Appeal: Distribution Committee Report (Queensland Government, October 2011) 19.

¹³² Rachel Carter, 'Don't Blame the Insurers—Blame the System', *The Punch* (www.thepunch.com.au), 20 January 2011; Rachel Carter, 'Flood Insurance Must Be Made Accessible to All', The Australian (Sydney) 13 January 2011, 14.

took into account insurance payments to reduce an individual's entitlements to charity or other funds.

Reviewing the Legal Implications arising from a Natural Disaster of Catastrophic Proportions in Australia

- [73] In response to these events and a series of other weather related disasters within Australia, the suitability of the current insurance legal and regulatory system has come under closer scrutiny. Legal recommendations made by the following organisations will be discussed in turn:
 - Victorian Bushfires Royal Commission (Bushfires Royal Commission)
 - Natural Disaster Insurance Review (NDIR)
 - House of Representatives Standing Committee—Inquiry into the Operation of the Insurance Industry during Disaster Events
 - Productivity Commission on Disaster Funding Arrangements.

Victorian Bushfires Royal Commission

- [74] The Victorian Bushfires Royal Commission (Bushfires Royal Commission) was established on 16 February 2009 and the *Final Report* was handed down on 31 July 2010. Although the emphasis of the Bushfires Royal Commission was on fire prevention and inquiries into the deaths of 173 people during the Black Saturday fires, economic considerations, including the effect of insurance, were prominent in the final recommendations.¹³³ At a societal level, the Bushfires Royal Commission highlighted how 'community recovery after a disaster is impacted by the adequacy of insurance cover taken by individuals and businesses'.¹³⁴ From a legal and insurance perspective the issues of non-insurance and underinsurance were seen to impede the rebuilding process.
- [75] In considering the economic losses arising from the 2009 Black Saturday fires, the Bushfires Royal Commission recommended enhancing affordability through alleviating taxation burdens. To do this the legislation had to be modified to enable the removal of the Fire Services Levy on insurance premiums in Victoria¹³⁵ (discussed in

¹³³2009 Victorian Bushfires Royal Commission, *Final Report*, above n 110, 339.

¹³⁴ Ibid.

¹³⁵ Ibid 36, Recommendation 64.

[240] - [241]). This recommendation was subsequently implemented through passing the *Fire Services Property Levy Act 2012* (Vic).¹³⁶ The removal of the Fire Services Levy from insurance premiums resulted in a 35.6% reduction in the collection of taxes on insurance in the 2013–2014 year. Tax revenue collected from insurance premiums fell from \$1,628 million in 2012–2013 to \$1,049 million in 2014–2015.¹³⁷ The legislative change meant the Fire Services Levy could be collected on property rates rather than insurance.¹³⁸ In addition to lower state taxes on insurance, the *Fire Services Property Levy Act 2012* (Vic) established an independent inspectorate ensuring tax savings were passed on to consumers.¹³⁹

Natural Disaster Insurance Review

- [76] In response to the flooding and extreme weather events in Queensland during the summer of 2010, the Natural Disaster Insurance Review was commissioned. The *Final Report* was handed down on 30 September 2011.¹⁴⁰ The Natural Disaster Insurance Review comprised a Review Panel and a Working Group with representation from Treasury and other government departments. The Commonwealth Government expressed its wish to ensure that 'the appropriate national measures are in place to foster more complete sharing of risk and equitable sharing of the cost of damage and loss resulting from floods and other natural disasters throughout the nation'.¹⁴¹
- [77] The recommendations of the Natural Disaster Insurance Review have not been costed. The proposed National Catastrophe Insurance Scheme operates as a Public Financial Corporation (discussed in [41] – [45]), hence there is an obligation under s 36 of the *Public Governance, Performance and Accountability Act 2013* (Cth) to provide budget estimates (discussed in [30], [43]). This legal obligation means that in order for recommendations of the Natural Disaster Insurance Review to be incorporated into the proposed Scheme they would need to be costed for inclusion in budget estimates.

¹³⁶ Victorian Government, 'Fire Services Property Levy–Fact Sheet' (July 2014) <http://www.firelevy.vic.gov.au/pdf/Language%20Files/English/What%20it%20means%20for%20households. pdf>; Victorian Government, 'About the Levy- Why did this change?' <http://www.firelevy.vic.gov.au/why-did-this-change.html>.

 ¹³⁷ Department of Treasury and Finance (Victoria), 'State Taxation Revenue: Overview'
 http://www.dtf.vic.gov.au/Publications/Victoria-Economy-publications/State-taxation-revenue>.
 ¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Natural Disaster Insurance Review, above n 51.

¹⁴¹Ibid Terms of Reference 3.

- [78] Some recommendations by the Natural Disaster Insurance Review, were implemented through modifications to the *Insurance Contracts Act 1984* (Cth) resulting in the introduction of a uniform definition of flood¹⁴² (discussed in [282]). Additionally, a legal duty was imposed on insurers to provide an insured with a key fact sheet (to help ensure greater understanding of the insurance contract).¹⁴³
- [79] The Natural Disaster Insurance Review referenced the existing National Flood Information Database.¹⁴⁴ This database was developed jointly by Risk Frontiers and Willis Re for the Insurance Council of Australia. The maintenance of the Database is the responsibility of Risk Frontiers and Willis Re. A greater utilisation of the National Flood Information Database may have broader legal implications for the provision of insurance and potentially facilitating access and affordability.
- [80] Legally, underwriters in Australia have autonomy in writing insurance contracts and the prices charged (subject to mandatory requirements imposed under the *Insurance Contracts Act 1984* (Cth)). The National Flood Information Database has improved the quality of data enabling underwriters to better understand the flood risks to which a particular property is exposed. Due to the increased data available from the National Flood Information Database, flood insurance is available in 93% of insurance policies sold today.¹⁴⁵ However, new technology facilitates better underwriting decisions but also enables insurers greater scrutiny over risks (as permitted by the current insurance law). The additional information available to insurers through the National Flood Information Database may create a problem for individuals if insurers decide the risk of certain disaster prone areas is too significant to cover with insurance and they withdraw from those areas.¹⁴⁶ Currently there is some anecdotal evidence of insurers assuming less risk in their portfolios.¹⁴⁷ Alternatively, if insurers only offer insurance

¹⁴² Insurance Contracts Act 1984 (Cth) s 37B.

¹⁴³ Key Fact Sheet is defined in s 33B of *Insurance Contracts Act 1984* (Cth) and the obligation on the insurer to provide this is imposed under s 33C. Under s 33D there is further clarification of when an insurer has not clearly informed an insurer as per the legislative requirements.

¹⁴⁴ The Flood Exclusion Zone Database suggests that approximately two thirds of the 13 million Australian addresses are located on flood plains and thus exposed to some sort of flood risk. The Flood Exclusion Zone Database has found that there are approximately 300,000 addresses at risk to over ground flooding in the 1-in-100-year average return interval according to the National Flood Insurance Database. See McAneney, above n 20; Insurance Council of Australia, 'New Flood Database Expands Insurers' Knowledge of Risk' (2012)

¹⁴⁵ Insurance Council of Australia, 'Affordability Projects: National Flood Information Database' (2015) http://www.insurancecouncil.com.au/affordability>.

¹⁴⁶ McAneney, above n 20.

¹⁴⁷ Ibid.

products at premiums much higher than in the past (which the legal system and its promotion of the autonomy of the insurer enables them to do), the probable outcome would be an increasing number of people uninsured or underinsured when the next big flood occurs. Although this is theoretical, it could lead to similar consequences as those felt after the Queensland Floods. The National Catastrophe Insurance Scheme aims to resolve this problem by ensuring all Australian homeowners have household building insurance for listed natural disasters of catastrophic proportions. Pricing of the insurance products takes into account the issue of affordability, with discounts available to those who are less able to afford the cost of the Scheme's premiums.

House of Representatives Standing Committee–Inquiry into the Operation of the Insurance Industry during Disaster Events

- [81] In 2012, the House of Representatives undertook a formal review process to analyse how the Australian insurance industry responded in the aftermath of natural disasters, including, but not limited to, the Black Saturday bushfires and the Queensland floods. The focus of the inquiry was largely legal and procedural, examining matters such as claims handling and factors affecting claims handling.¹⁴⁸
- [82] The Australian House of Representatives Standing Committee began its report into the operation of the insurance industry during disaster events with a scathing account of the way in which insurers had dealt with recent natural disasters:

Claimants had nowhere to turn and no means of redress when they were unable to have their insurance claims resolved in a timely manner. Victims of extreme weather events all over Australia faced unacceptable delays in the assessment of their claims, misunderstandings about the scope and extent of their policies; a lack of information or communication from insurers; discrepancies or inaccuracies in damage assessment or third party reports and token efforts at dispute resolution. Those who tried to assert their rights in the labyrinth of the claims process found themselves on the wrong side of the power imbalance.¹⁴⁹

Productivity Commission on Disaster Funding Arrangements

[83] In September 2014, the Australian Productivity Commission on Disaster Funding Arrangements handed down a draft report analysing disaster funding arrangements in

¹⁴⁸ House of Representatives Standing Committee on Social Policy and Legal Affairs, Parliament of Australia. In the Wake of Disasters: The Operation of the Insurance Industry during Disaster Events (2012) vi. ¹⁴⁹ Ibid vii.

Australia.¹⁵⁰ The primary objective of the Productivity Commission was to find a solution to the problem of funding natural disasters of catastrophic proportions. The draft report noted that in Australia's recent history (since 2009), 'natural disasters have claimed more than 200 lives, destroyed 2,670 houses and damaged a further 7,680, and affected the lives and livelihoods of hundreds of thousands of Australians.¹⁵¹

[84] The Productivity Commission noted:

Insurance losses from natural disasters exceeded \$21 billion over the period 1970 to 2013 (in nominal terms), or an average of \$480 million each year. However, the bulk of these losses arose from a relatively small number of events—indeed, only 10 per cent of natural disasters accounted for 80 per cent of recorded insurance losses. Analysis of deflated insurance losses indicates that the average annual losses for the period 1970–2006 are 22 per cent of the average losses over the period 2007–2013. An implication of this finding is that policy settings and natural disasters.¹⁵²

- [85] In order to make an accurate comparison of the losses, the Productivity Commission referred to the normalised losses as carried out by Risk Frontiers. Through analysing the normalised losses, the Productivity Commission suggested 'the rising cost of natural disasters can be explained by the rising exposure and vulnerability of communities to natural disasters. For example:
 - the number of houses, businesses, infrastructure and other assets exposed to natural disasters has increased (partly in line with population growth)
 - the value and size of assets at risk has increased
 - an increasing number of people have settled in areas prone to natural disasters, such as along the coast and urban fringe.' ¹⁵³
 - [86] Apart from dealing with the number and type of natural disasters of catastrophic proportions, the Scheme also aims to promote resiliency and mitigate any potential losses to existing household buildings. Thus, the Productivity Commission focused on the legal basis in which mitigation can be incorporated into the disaster relief and recovery arrangements, including existing legal duties and responsibilities

¹⁵⁰ Productivity Commission Inquiry Report: Disaster Funding Arrangements, above n 10.

¹⁵¹ Ibid 3.

¹⁵² Ibid 6.

¹⁵³ Commonwealth, *Productivity Commission Inquiry Report: Natural Disaster Funding Arrangements* (Commonwealth Government, Productivity Commission, December 2014) 7.

for disaster management at various levels: Local, State and Commonwealth Government level.¹⁵⁴ One proposal was the requirement for future losses to be budgeted within the Statement of Risks,¹⁵⁵ resulting in expenditure on natural disasters becoming more transparent and accountable.¹⁵⁶ Accountability must be entrenched within natural-disaster policies and reporting on the outcomes of expenditure incurred in relation to natural disasters.¹⁵⁷ The Productivity Commission proposed that expenditure on mitigation increase gradually to reach the target of \$200 million annually, which would be distributed among the States on a per-capita basis. Justification for this expenditure is increased 'savings' arising from mitigation activities that alleviate disaster losses.¹⁵⁸

The Private Insurance and Regulatory System and the operation of the Proposed National Catastrophe Insurance Scheme

Insurance access and affordability

- [87] The National Catastrophe Insurance Scheme is compulsory thereby eliminating the problem of access to insurance. Although the exact price of premiums under the Scheme is outside the scope of the thesis (this would be determined by an actuary), its goal is to ensure that insurance premiums are affordable.¹⁵⁹ Additionally, a system of discounts is available to members of the community who are vulnerable and thus unable to afford the full cost of premiums.
- [88] When a natural disaster of catastrophic proportions occurs, non-insurance or underinsurance results in a significant burden on owners and occupiers of residential

¹⁵⁴ Ibid 356, 376.

¹⁵⁵ Statement of Risk refers to the range of factors that may influence the Commonwealth Governments actual budget outcome in future years. The *Charter of Budget Honesty Act 1998* (Cth) requires these factors to be disclosed in a statement of risks in each Budget and Mid-Year Economic and Fiscal Outlook. This statement outlines general fiscal risks, specific contingent liabilities and specific contingent assets that may affect the budget balances. See Commonwealth (Treasury), Statement 8: Statement of Risk, *Budget 2014–2015* http://www.budget.gov.au/2014-15/content/bp1/html/bp1 bst8-01.htm>.

¹⁵⁶ Productivity Commission Inquiry Report: Disaster Funding Arrangements, above n 10, 33, Draft Recommendation 3.3.

¹⁵⁷ Ibid 27, Draft Recommendation 3.6.

¹⁵⁸ Ibid 27, Draft Recommendation 3.2.

¹⁵⁹ A challenge associated with the proposed National Catastrophe Insurance Scheme focusing on affordability in preference to risk reduction, is the potential for the Scheme to be insolvent. The actuaries and catastrophe modellers will need to balance economic considerations and the risk of insolvency against the Scheme's affordability to insureds. One means of achieving this could be to ensure any profits from the Scheme are invested back into the Scheme. However, the availability of profits will depend upon the losses the Scheme incurs from declared natural disasters of catastrophic proportions.

buildings, as well as on the national economy. Most significantly, unfunded relief and reconstruction efforts manifest as a strain on government finances and / or prevent the implementation of planned government programmes, which can create a drag on the national economy. Natural disasters have the capacity to affect national headline economic indicators, at least in the short term. The proposed National Catastrophe Insurance Scheme ensures there is a pre-planned system to cover the cost of repairs and reconstruction following a natural disaster of catastrophic proportions. It does this by having a financial and insurance strategy in place and ensuring funds are available to pay for such damages after a catastrophe occurs.¹⁶⁰ The determination of the scope of natural disasters that constitute those of 'catastrophic proportions' would involve actuarial calculations and catastrophic modelling coupled with the relevant legal procedure for declaring an event to be a natural disaster of catastrophic proportions. One option is to use thresholds to characterise events that are / are not catastrophic, for example \$2 billion in household building losses or \$4 billion in economic loss. The Government Guarantee would also need to be determined and quantified by actuaries and catastrophe modellers. It is most likely the Government Guarantee would be capped at \$10 billion on the basis this is the Government Guarantee which the

¹⁶⁰ Guidance provided by Dr William Gardner, an actuary and catastrophe risk modeller at Combus Pty Ltd. Dr Gardner has modelled the various natural perils affecting Australia. Dr Gardner suggests the insurance industry in Australia is well equipped to deal with events, which are categorised from a modelling perspective as not exceeding the probability of a 1-in-200 year occurrence. He has thus provided the probable insurance losses for a 1-in-200 year event in the following table (updated on 1 January 2016):

	1-in-200 year event 1-in-500 year ev		
Bushfire	\$4.5 billion	\$6.3 billion	
Severe Convective Storm	\$9.2 billion	\$12.2 billion	
Low Pressure System	\$5.5 billion	\$7.3 billion	
Cyclone	\$9.2 billion	\$30.1 billion	
Earthquake	\$13.2 billion	\$35.3 billion	
All perils	\$24.9 billion	-	

The figures provided are estimated insurance losses and thus are not confined to insurance losses pertaining only to household building cover. Using thresholds of \$2 billion for household building losses or \$4 billion for economic loss to categorise an individual event as being of catastrophic proportions (as it pertains to household building cover) is on the more conservative side of the estimates in the table above. Thus, the event threshold is likely to be exceeded during a 1-in-200 year event for all of the listed perils.

See: Dr William Gardner, Combus Pty Ltd (Actuary and Catastrophe Modeller), 'Personal Communication to Rachel Anne Carter', December 2016; Dr William Gardner, 'Impacts of Frequency Contagion on Pricing of Catastrophe Excess of Loss Reinsurance for Australian Perils' (Paper presented at Actuaries Institute General Insurance Seminar: Connecting Today and Tomorrow, Melbourne, Australia, 13 – 15 November 2016) <http://www.actuaries.asn.au/Library/Events/GIS/2016/PaperGardner.pdf>; William Gardner, *Probable Maximum Losses of Insured Assets from Natural and Manmade Catastrophes in Australia* (PhD Thesis, Macquarie University, 2006) <http://www.combus.net/docs/WillGardnerThesis.pdf>.

Australian Reinsurance Pool Corporation¹⁶¹ currently has been granted. It is therefore probable that if a Government Guarantee were sought to represent more accurately the potential losses that may arise in Australia from an average 1-in-200 year event or an average 1-in-500 year event, the outcome would be influenced by political factors as well as actuarial calculations.

Constraints of the Private Insurance Market

- [89] The National Catastrophe Insurance Scheme is designed specifically to insure household property and residential land against damage from natural disaster of catastrophic proportions. It is for this reason that the targeted insurance solution is not constrained by private market solutions, which are designed to insure against uncorrelated risks. Further, the fact that the Scheme covers all Australian residential property and could obtain commercial reinsurance (discussed in [36] [38]) ensures there is diversity within the insurance risk portfolio of the Scheme.
- [90] The private insurance system is designed to deal with standard contingencies. It is relatively effective and efficient in dealing with these standard contingencies, as they are modelled based on a concept known as the 'law of large numbers'. This refers to the fact that 'an insurer will have a portfolio with large numbers of insured assets or policies. Under the assumption of uniform exposure, by increasing the number of policies within the portfolio the insurer's expected losses will become increasingly predictable.¹⁶² The 'law of large numbers' thus predicts that as the number of policies within an insurers portfolio increases, the claims are likely to be proportionate to the market share of insurance policies pertaining to the particular class of risk. Diversifying the insurance portfolio can ensure that if a catastrophe occurs it is likely only to have a smaller proportionate impact on the insurance portfolio. The legal system for residential property under the Insurance Contracts Act 1984 (Cth) is designed to deal with losses which are uncorrelated both in terms of event type and geographical proximity e.g. household fire is unlikely to affect more than one property within the same area at the same time.

¹⁶¹ Australian Reinsurance Pool Corporation, 'The Scheme' (2016) http://arpc.gov.au/about-arpc/about/

¹⁶² Kevin M. Roche, John McAneney and Robin C Van Den Honert, 'Policy Options for Managing Flood Risk' (2010) 9(4) Environmental Hazards 369, 370.

[91] Natural disasters of catastrophic proportions result in a concentration of losses 'with the portfolio being both spatially and temporarily correlated over a large geographical footprint'.¹⁶³ Consequently, standard insurance practices that are designed to model independent risks and diversify these independent risks within a pool, generally are not feasible for catastrophe risk. Insurers have the option of avoiding problems associated with concentrated losses within their portfolios caused by natural disasters of catastrophic proportions by using reinsurers to transfer some of the risk (as discussed in [36] - [38]). As the proposed National Catastrophe Insurance Scheme would cover a variety of natural disasters of catastrophic proportions across Australia, it is likely that an individual natural disaster of catastrophic proportions would have a proportionately lower impact on their entire portfolio of risk. This is due to the law of large numbers, and the diversity of the Scheme in comparison to a scheme or insurer who had their risks concentrated in one locality or for one type of risk. This prediction is also supported by the compulsory nature of the Scheme.

Delays and Claims Handling after Recent Natural Disasters of Catastrophic Proportions

- [92] The proposed National Catastrophe Insurance Scheme seeks to provide clarity in the scope of cover, and procedures for determining what is covered, as well as the operation of any exclusions. Once the Scheme is operational, Commonwealth Government policy makers and administrators, insurers (who provide cover above the capped amount 'top up' cover), insurance intermediaries such as brokers and insureds would undergo training and be provided with information to better understand the way the Scheme operates. This would include information addressing the specific terminology used by the Scheme, the nature and the limits of the cover and the procedures involved. The Scheme should encourage information sharing by brokers and other insurance intermediaries, who have specialised insurance knowledge, which could, in turn, help minimise risk.
- [93] Once the National Catastrophe Insurance Scheme is operational, such measures could enable the Scheme to avoid a situation similar to that faced by the New Zealand Earthquake Commission in November 2015 when a group of 150 homeowners (EQC Action Group) filed a class action against it. The legal basis of the class action was to

¹⁶³ Roche, McAneney and Van Den Honert, above n 162, 370.

have a declaration from the High Court clarifying the coverage provided by the Earthquake Commission under the *Earthquake Commission Act 1993* (Cth). The declaration sought to outline specifically what the Earthquake Commission was required to pay and when repairs would be considered satisfactory (as opposed to replacement value). One of the legal standards to be clarified was how houses were to be repaired: was this to the same standard as the house had been in pre-earthquake; did parts of the property have to be repaired or reinstated to be considered 'new'; and could reinstatement be used?¹⁶⁴

On 28 April 2016, a Joint Statement¹⁶⁵ was issued by the Earthquake Commission and [94] the EQC Action Group clarifying the scope of cover and removing the potential for ambiguity or inconsistency in repairs undertaken by the Earthquake Commission. Under the Settlement Agreement,¹⁶⁶ the parties clarified that the standard applicable to repairs and reinstatement of property insured by the Earthquake Commission is to an 'as new' standard. However, any repairs or reinstatement must also be undertaken in such a way that ensure the repairs comply with current building regulations. From a practical viewpoint, this may require the Earthquake Commission to upgrade properties they are repairing or reinstating in order to ensure that the repairs accord with the latest regulations. The Joint Statement and Settlement Agreement clarifies the Earthquake Commission's obligations in relation to repairs not only covers the damaged portion of the property but also covers the undamaged portion of the property to the extent that the undamaged portion is affected by the repairs to the damaged portion. If the Earthquake Commission provides cash in lieu of repairs or reinstatement, the way in which the amount payable is to be calculated is by reference to replacement value.¹⁶⁷ Despite a successful outcome for the EQC Action Group, the requirement for the group to launch a class action and the time involved in coming to the Settlement Agreement illustrates how lack of clarity and ambiguity can contribute

¹⁶⁴ Samantha Woodhill, 'Earthquake Class Action goes to High Court' (23 November 2015) *New Zealand Lawyer (online)* http://www.nzlawyermagazine.co.nz/news/earthquake-class-action-goes-to-high-court-208842.aspx

¹⁶⁵ Joint Statement between Earthquake Action Group and the Earthquake Commission, Sch 2 http://www.eqcgroupaction.co.nz/ga/Joint-Statement-EQC-Action-Group-28-April-2016.pdf

¹⁶⁶ Settlement Agreement: EQC Action Group and Earthquake Commission, 28 April 2016 http://www.eqcgroupaction.co.nz/ga/Agreement-EQC-Action-Group-28-April-2016.pdf

¹⁶⁷ See Joint Statement between Earthquake Action Group and the Earthquake Commission, Sch 2 <<u>http://www.eqcgroupaction.co.nz/ga/Joint-Statement-EQC-Action-Group-28-April-2016.pdf</u>>; Settlement Agreement: EQC Action Group and Earthquake Commission, 28 April 2016 <<u>http://www.eqcgroupaction.co.nz/ga/Agreement-EQC-Action-Group-28-April-2016.pdf</u>>

to delays in handling claims and ensuring individuals are compensated for their losses in a timely manner.

[95] In Australia, the issue of delays in compensation was recently highlighted in a NSW Legislative Council inquiry into the causes and management of the Wambelong fire in January 2013. The inquiry reported the following:

We appreciate that the government's public liability scheme arrangements require that the government's legal liability for the losses incurred be established, and we accept that this will occur via a legal process. However, we underscore the immense strain that the length of the process and its adversarial nature are placing on those who intend to make a claim. It is already years since the fire and people are still faced with the uncertainty of whether they will be duly compensated for their losses.¹⁶⁸

The inquiry related to a public liability scheme. However, the comments regarding the strain and lengthy delays experienced by those who intend to make a claim could be applied to any other situation involving individuals who pursue compensation such as members of a class action after large-scale natural disasters of catastrophic proportions (for example the Black Saturday bushfires).

[96] To date, a number of individuals have pursued litigation in order to obtain compensation pertaining to their delays. In the aftermath of the Black Saturday Fires and the Queensland Floods, a number of individuals pursued class actions (discussed in [120] - [129]) as a means of compensating their losses when they were unable to recover all of their losses from insurance or through other, less adversarial, methods. The National Catastrophe Insurance Scheme as proposed, has the potential to reduce the appeal of pursing class actions or other litigation. Through clearly drafted legislation and well-documented procedures, individuals have greater certainty regarding the cover they have for all forms of natural disaster (discussed in [92]). Further, individuals are able to enforce their rights to timely compensation¹⁶⁹ or, alternatively, receive compensation in the form as prescribed in any enabling Act.¹⁷⁰

¹⁶⁸ New South Wales Legislative Council General Purpose Standing Committee No 5, *Wambelong Fire* (Report No 41, 20 February 2015) xiv.

¹⁶⁹ Although the Scheme proposes to minimise delays, after some events there may be reasonable periods of time before all insureds are able to receive full compensation or have their properties repaired. Prioritisation may need to occur depending upon the losses sustained by individual properties. If events involve a sufficiently large number of claims, then delays are inevitable and a desire to rush settlement could result in fraud. Further, a

Uncertain Government-Funding Arrangements

Commonwealth and State and Territory Funding Arrangements

- [97] One of the identified problems with the legal and regulatory framework for disaster relief and recovery prior to the proposed National Catastrophe Insurance Scheme was the lack of a clear division of responsibility between insurance industry, owners and occupants of homes, the three levels of government (Australian (Commonwealth), State and Local).¹⁷¹ The Natural Disaster Insurance Review considered the adequacy of funding arrangements between the Commonwealth Government and State and Territory Governments.
- [98] While it is the prerogative of a State or Territory Government to incur the level of expenditure on relief and recovery efforts that it considers reasonable, the Commonwealth Government's contribution is determined in accordance with the Natural Disaster Relief and Recovery Arrangements. To enhance this system and provide greater funding certainty, the Natural Disaster Insurance Review proposed a (re)insurance facility for flood coverage funded by the Commonwealth Government. Should a State or Territory experience a funding shortfall for engaging in relief and recovery efforts, the Commonwealth Government would advance the funding required and seek reimbursement from the State or Territory at a later stage.¹⁷²
- [99] The National Catastrophe Insurance Scheme (discussed in Error! Reference source not found. [30]) is an all-peril first loss direct insurer with a Commonwealth Government Guarantee. Insurance cover provided by the Scheme is compulsory for all Australian homeowners. The operation of the Scheme does not affect any State Government relief and recovery efforts, however if an individual receives cover under a State scheme, they cannot also be compensated for the same losses under the National Catastrophe Insurance Scheme.

desire to repair a large number of properties within a short period of time is likely to result in homeowners, the insurance market and the Scheme paying above market rates for repairs due to demand-side inflation.

¹⁷⁰ Although the likely impact of timely payments by the proposed National Catastrophe Insurance Scheme may reduce the number of class actions, there may still be some litigants with sufficient financial means or a litigation financier who pursue legal action to defray losses which are not covered by the Scheme.

¹⁷¹ Natural Disaster Insurance Review, above n 51, Pivotal Recommendation 1.

¹⁷² Ibid Pivotal Recommendation 4.

[100] The Natural Disaster Insurance Review went beyond consideration of uncertain funding arrangements to propose that the Commonwealth Government take the lead in ensuring adequate funding for relief and recovery efforts. Under the Natural Disaster Insurance Review's proposal, the (re)insurance facility would be operated by an agency that was funded by the Commonwealth Government that would 'manage the national coordination of flood risk management and operate a system of premium discounts and a flood risk (re)insurance facility, supported by a funding guarantee from the Commonwealth'.¹⁷³ Moreover, the duties of the agency would include the collection of the funds required for the reinsurance facility.¹⁷⁴ The options proposed by the Natural Disaster Insurance Review for structuring the reinsurance facility¹⁷⁵ included a first-loss¹⁷⁶ model.¹⁷⁷ The use of a pooling structure or obligatory / facultative¹⁷⁸ reinsurance was also discussed in the review.¹⁷⁹ These reinsurance structures were suggested in order to maintain a workable private insurance market. This approach has been adopted by the National Catastrophe Insurance Scheme. However, as noted above, the Scheme operates as an insurer rather than a reinsurer.

Mitigation¹⁸⁰

[101] Mitigation refers to actions taken in advance of natural disasters to reduce the impact natural disasters of catastrophic proportions may have on properties, i.e. by reducing the severity of property losses. Mitigation, or a lack thereof, has been a common theme in recent reports addressing the status of Australia's natural-disaster insurance and

¹⁷³ Ibid Pivotal Recommendation 1.

¹⁷⁴ Ibid Recommendation 25.

¹⁷⁵ An alternative insurance scheme could be a primary insurance scheme incorporating a reinsurance facility.

¹⁷⁶ Any houses covered under the Scheme that suffer structural damage as a result of a listed natural disaster of catastrophic proportions must be paid before payment from a private insurance company is made (if the homeowner has insurance).

¹⁷⁷ Natural Disaster Insurance Review, above n 51, 61 [7.32]– [7.37].

¹⁷⁸ Facultative reinsurance refers to *pro rata* reinsurance. This is the reinsurance aspect providing financial security for insurance cover under a single policy. There would be separate negotiation for each policy cession of insurance (i.e. for sharing liability, premium and loss). The term 'in excess of loss reinsurance' refers to the reinsurance of each policy, with separate negotiation for each—for indemnity of loss in excess of the reinsured's loss retention. The word 'facultative' connotes that both the primary insurer and the reinsurer usually have the option of accepting or rejecting individual submission (as distinguished from the obligation to cede and accept, to which the parties agree in most treaty reinsurance). Guy Carpenter, *Reinsurance Terms*, above n 60.

¹⁷⁹ Natural Disaster Insurance Review, above n 51, Recommendation 21.

¹⁸⁰ The term mitigation is being used in its traditional sense of reducing the potential loss which may arise to a property during an event. The way mitigation is referred to in this paragraph does not refer to efforts to reduce the number or type of catastrophic events but rather on the damage which may result.

regulatory system. Promoting mitigation as a long-term fiscally sustainable solution¹⁸¹ is one of the current problems noted by the Natural Disaster Insurance Review.¹⁸² Moreover, the Productivity Commission on Disaster Funding Arrangements highlighted that 'where governments make no explicit budgetary provision for the costs of recovery from future natural disasters there is a systematic bias against mitigation and insurance'.¹⁸³

[102] The proposed National Catastrophe Insurance Scheme provides incentives to individuals who take measures to reduce the potential losses to their home during a catastrophe. It incorporates processes to record repairs (in a national register of repairs) carried out using funds provided by the Scheme (discussed in [341] - [351]). However, this approach is potentially impeachable; the thesis discusses this issue in Chapter 5.

Role of Key Stakeholders: Commonwealth Government, State Government, Insurers and Individuals

Responsibilities of Commonwealth Government

- [103] In the context of man-made catastrophes, under s 35 of the *Terrorism Insurance Act 2003* (Cth), the Commonwealth Government is legally obliged to pay out the Commonwealth Guarantee. The preconditions to the Commonwealth Government paying the Commonwealth Guarantee is that the Australian Reinsurance Pool Corporation is unable to discharge its liabilities following a terrorism event.
- [104] Under the Commonwealth Guarantee for the proposed National Catastrophe Insurance Scheme, the Commonwealth Government would be obliged to provide compensation to insureds for damage / destruction up to a maximum of \$375,000 per residential property, per event. The Commonwealth Government would only be legally compelled to provide funds once the Scheme's capital reserves are exhausted and the Scheme is unable to pay the claims of homeowners.

¹⁸¹ For information on the long-term implications of the Christchurch earthquakes, see Jeremy Finn and Elizabeth Toomey, 'Sustainability and Disasters: The View from New Zealand' (Paper presented at the 9th International Conference on Environmental, Cultural, Economic and Social Sustainability Conference, Hiroshima, Japan, 23–25 January 2013).

¹⁸² Natural Disaster Insurance Review, above n 51, Pivotal Recommendation 1.

¹⁸³ Productivity Commission Inquiry Report: Disaster Funding Arrangements, above n 10, 33, Draft Finding 2.1.

Commonwealth Government's responsibility under Natural Disaster Relief and Recovery Arrangements

- [105] Under the Commonwealth Constitution 'the Commonwealth collects the lion's share of revenue and then exerts fiscal leverage over the States'.¹⁸⁴ One mechanism for managing this fiscal imbalance in the context of natural disasters is the Natural Disaster Relief and Recovery Arrangements.
- [106] The Natural Disaster Relief and Recovery Arrangements operate under the Attorney-General's Department and subject to the executive power (s 61 of the Commonwealth Constitution as discussed in [184] [198]). It is just that the Commonwealth Government bear a higher proportion of the financial risk arising from natural disasters due to its fiscal leverage.¹⁸⁵ The Commonwealth Government, in comparison to households, and State Governments, has greater capacity to borrow, increase revenues via taxation and reallocate spending.¹⁸⁶
- [107] The Natural Disaster Relief and Recovery Arrangements operate as a predetermined risk-sharing framework with the actual funds sourced post event. Under these Arrangements, the Commonwealth Government and State Governments proportionately share disaster expenditure.¹⁸⁷ State Governments are required to fund

¹⁸⁴ Patrick Keyzer, *Principles of Australian Constitutional Law* (LexisNexis, 3rd ed, 2010) 258.

¹⁸⁵ G. R. Butler and D. P. Doessel, 'Natural Disaster Relief and Horizontal Equalization in Australia' (1983) *Publius* 55, 56–60; Rachel Anne Carter, 'Taxing the Taxed—Duplication of Taxation in Property Insurance and Social Implications' (2011) 6 *Journal of Tax Teachers Association* 38.

¹⁸⁶ The Northern Australia Insurance Premiums Taskforce discussed the role of Government involvement, however no ultimate conclusion was reached. The recommendations highlighted the capacity of the Commonwealth Government to provide assistance through a reinsurance facility or mutualisation but that further economic analysis was needed. The Premiums Taskforce found 'the scope of insurance to be covered in any policy measure is a decision for Government.' (p. 26) After the Final Report was handed down, there was a change in Government and no further action was taken. See Commonwealth (Treasury), Northern Insurance Premiums Taskforce: Final Report (November 2015)

http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Reviews%20and%20Inquiries /2015/NAIP%20Taskforce/Final%20Report/Downloads/PDF/NAIP_final_report.ashx

One point of differentiation between the Northern Australia Insurance Premiums Taskforce and the proposed National Catastrophe Insurance Scheme, is the proposed Scheme covers a variety of natural disaster events which collectively pose risks to all Australian properties and thus the insurance cover provided would be of relevance to all Australian households. This negates issues of equity in a single peril scheme where one State has greater exposure to a particular peril. Notwithstanding, should the issue of equity between the States arise, the Council of Australian Governments could resolve this without affecting the operation of the proposed National Catastrophe Insurance Scheme. There are existing examples of Commonwealth and State cooperation such as Goods and Services Tax.

¹⁸⁷ The threshold for the current year (2014–2015) for the operation of the Natural Disaster Relief and Recovery Arrangements is presented in the following table:

all disaster expenditure up to a threshold level. The thresholds are indexed yearly to account for inflation and changes in State revenue. Once a State Government exceeds the first threshold level, that State Government and the Commonwealth Government each pay 50% of the disaster losses incurred by that State. There is a second threshold above which the Commonwealth Government contributes 75% and the State Government 25%.

- [108] The relevant State Government affected by a natural disaster determines their disaster-related expenditure.¹⁸⁸ Consequently, there are variations in the disaster-related costs that may be claimed by one State in comparison to another State. These differences can exist even if there are several States that have experienced similar losses from a natural disaster.
- [109] Prior to the proposed National Catastrophe Insurance Scheme, the States were not obliged to provide relief under all categories listed under the Natural Disaster Relief and Recovery Arrangements.¹⁸⁹ Further, there was no predetermined proportion of

State	State Revenue	*0.225%	Fist Threshold	*1.75	Second Threshold
NSW	\$63,485,000,000		\$142,841,250		\$249,972,188
Vic	\$48,746,000,000		\$109,678,500		\$191,937,375
Qld	\$41,749,000,000		\$93,935,250		\$164,386,688
WA	\$25,469,000,000		\$57,305,250		\$100,284,188
SA	\$15,025,000,000		\$33,806,250		\$59,160,938
Tas	\$4,717,000,000		\$10,613,250		\$18,573,188
NT	\$4,787,000,000		\$10,770,750		\$18,848,813
ACT	\$4,122,000,000		\$9,274,500		\$16,230,375

¹⁸⁸ Natural Disaster Relief and Recovery Arrangements, *Disaster Assist: Victorian Bushfires (January – February 2009)- Individual Assistance* (22 August 2013).

¹⁸⁹ The Natural Disaster Relief and Recovery Arrangements provide for funding under the four following categories:

- Category A assistance may include (relief under any of the following sub-categories):
 - a) emergency food, clothing or temporary accommodation
 - b) repair or replacement of essential items of furniture and *personal* effects
 - c) essential repairs to housing, including temporary repairs and repairs necessary to restore housing to a habitable condition
 - d) demolition or rebuilding to restore housing to a habitable condition
 - e) removal of debris from residential properties to make them safe and habitable
 - f) extraordinary counter-disaster operations of direct assistance to an *individual* (e.g. operations to protect a threatened house or render a damaged house safe and habitable)
 - g) *person*al and financial counselling aimed at alleviating *person*al hardship and distress arising as a direct result of the *natural disaster*
 - h) extraordinary costs associated with the delivery of any of the above forms of assistance (e.g. costs of evacuation or establishment and operation of evacuation centres and recovery centres, being costs that exceed the costs that a *State* could reasonably have expected to incur for these purposes).
- Category B assistance (can be assistance under one or more of the following categories):
 - a) a scheme of loans assistance at a concessional interest rate to *small businesses* or *primary producers* (see also subclause 3.7.1)

spending that needed to be allocated to the different categories, rather all of these factors were discretionary. The agreements between the State involved and the Commonwealth Government after a natural disaster were made on a case-by-case basis involving arbitrary decision making by governments.

- [110] The difference in compensation available in the aftermath of two recent events is clear when comparing the Queensland floods and the Black Saturday bushfires. In the aftermath of the Black Saturday bushfires in Victoria, the Natural Disaster Relief and Recovery Arrangements were activated and the terms and conditions of individual payments were finalised. The way the funds were distributed between individuals, families, communities, businesses, primary producers and local governments was clearly outlined and documented. The grants depended on the severity of the fires, and perceived priorities of policy makers.¹⁹⁰
- [111] The Natural Disaster Relief and Recovery Arrangements were activated in the aftermath of the 2010–2011 Queensland floods.¹⁹¹ However, the allocation of funds was different to that of the Black Saturday bushfires, reflecting the discretion the Queensland Government had in relation to disaster funding. In Victoria, the grants focused more on individuals, whereas the grants provided in Queensland centred on

b) a scheme of loans assistance at a concessional interest rate to needy *individuals* or voluntary non-profit bodies (see also subclause 3.7.2)

c) freight subsidy to *primary producers* (see also subclause 3.7.3)

d) interest rate subsidy to *small businesses* or *primary producers* (see also subclause 3.7.4)

e) grants to needy *individuals* or voluntary non-profit bodies (see also subclause 3.7.5).

[•] Category C assistance (includes a community recovery package designed to support a holistic approach to the recovery of regions, communities or sectors severely affected by a *natural disaster*. The package comprises one or more of the following:

a) A community-recovery fund in circumstances where a community is severely affected and needs to restore social networks, community functioning and community facilities. Expenditure from the fund is aimed at community recovery, community development and community capacity building, and is administered by the *State* government in close collaboration with local government bodies or other community bodies.

b) Recovery grants for *small businesses* where the business sector is severely affected and the community risks losing essential businesses. Grants to *small businesses* are aimed at covering the cost of clean-up and *reinstatement*, but not at providing compensation for losses.

c) Recovery grants for *primary producers* where the farming sector is severely affected, with threats to viability and disruption of production likely to extend beyond the current season. Grants to *primary producers* are aimed at covering the cost of clean-up and *reinstatement*, but not at providing compensation for losses.

[•] Category D is an act of relief or recovery carried out to alleviate distress or damage in circumstances that are, in the opinion of the *Minister*, exceptional.

¹⁹⁰ Disaster Assist: Victorian Bushfires, above n 188.

¹⁹¹ Attorney-General's Department, *Natural Disaster Relief and Recovery Arrangement Guidelines* http://www.disasterassist.gov.au/FactSheets/Documents/Natural_Disaster_Relief_and_Recovery_Arrangement s.pdf>.

assisting with the expense of cleaning up after the floods as well as expenses to communities, small businesses and primary producers.¹⁹²

- [112] The Natural Disaster Relief and Recovery Arrangements have been an entrenched systemic solution to the sharing of disaster funding between State Governments and the Commonwealth Government. However, they did not exist under legislation and thus could not be legally enforced.
- [113] The Productivity Commission (discussed in [83]- [86])¹⁹³ criticised the operation and continuation of the Natural Disaster Relief and Recovery Arrangements. One criticism was that natural disaster recovery costs are treated as contingent liabilities and therefore excluded from the government's financial statements. As such, they do not appear as an itemised expense in the Commonwealth Government's budget.¹⁹⁴ Instead of retaining the status quo, the proposed National Catastrophe Insurance Scheme's funding could be incorporated into the Commonwealth Government's budget. If there is pre-planning and budgeting, adequate reserves could be maintained prior to a natural disaster of catastrophic proportions, rather than imposing ad hoc measures after an event.
- [114] In addition to the scope of the proposed National Catastrophe Insurance Scheme, the Commonwealth Government may decide to provide further assistance should an event be sufficiently large. However, even if this were to occur, the existence of the Scheme would mean the threshold at which the Government may intervene for losses not covered by the Scheme is likely to be much higher.

Responsibilities of State and Territory Governments

[115] The current State Government responsibilities under the Natural Disaster Relief and Recovery Arrangements remain the same (as discussed under the responsibilities of the

¹⁹² Commonwealth, (Disaster Assist), *Queensland Floods (November 2010 – February 2011)* (4 September 2013)

http://www.disasterassist.gov.au/Currentdisasters/Pages/QLD/Queenslandfloods(November2010February2011).aspx>.

¹⁹³ *Productivity Commission Inquiry Report: Disaster Funding Arrangements*, above n 10.

¹⁹⁴ Ibid 17–18.

Commonwealth Government).¹⁹⁵ The Natural Disaster Relief and Recovery Arrangements still provide listed categories and the Commonwealth Government has a legal obligation to provide assistance after the thresholds for each of the States are exceeded. Each State Government continues to have discretion over their disaster expenditure, including whether to provide relief to residents within the State in one or all of the categories provided under the National Disaster Relief and Recovery Arrangements. The proposed National Catastrophe Insurance Scheme does not provide State Governments with a greater moral / political obligation to assist individuals who have suffered household structural damage resulting from a natural disaster of catastrophic proportions. Theoretically, circumstances could arise where the State Government would supplement compensation provided by the Scheme. In this situation, an insured homeowner would be able to seek compensation from the Scheme and the State Government may provide grants for any shortfalls and claim this from the Commonwealth Government under the National Disaster Relief and Recovery Arrangements. These arrangements however cannot be changed without affecting the relations between State Governments and the Commonwealth Government (notwithstanding that the National Disaster Relief and Recovery Arrangements provide systemic moral as opposed to legal obligations).

[116] As the National Catastrophe Insurance Scheme would provide compulsory insurance cover for all Australian households, one location is not provided less generous insurance cover than another. This may create an incentive for some developers or homebuilders to construct homes in hazard prone areas¹⁹⁶ due to the ability to obtain insurance where commercial insurers would otherwise not provide cover; however, forestalling such (foreseeable) developments is a matter for planning laws in each State and Territory.¹⁹⁷ The proposed Scheme cannot differentiate between States or provide different levels of cover because if it were to do so, this would contravene s 117 of the *Commonwealth Constitution* (discussed in [181]). On this basis, there would be no

¹⁹⁵ The Productivity Commission is undertaking a review of the Natural Disaster Relief and Recovery Arrangements and has proposed three alternative models. See *Productivity Commission Inquiry Report: Disaster Funding Arrangements*, above n 10, 16–17.

¹⁹⁶ For an international example of problems associated with inadequate controlling of development in flood or hurricane exposed areas and the consequences see Christine A Klein and Sandra B Zellmer, 'Mississippi River Stories: Lessons From A Century of Unnatural Disasters' (2007) 60 *SMU Law Review* 1471 - 1530.

¹⁹⁷ As planning laws are a matter to be determined by each State and Territory Government, the Commonwealth Government can seek to work with the State and Territory Governments to prevent planning permission being granted in high risk areas.

incentive for a State Government to use the National Disaster Relief and Recovery Arrangements to improve the circumstances of homeowners in one locality at the expense of homeowners in another locality. Further, the proposed National Catastrophe Insurance Scheme contains a safeguard that a homeowner could only claim for the property damage that they actually endure as a result of a natural disaster of catastrophic proportions.

- [117] To ensure the proposed Scheme does not breach the constitutional obligation not to interfere with 'state insurance', payments provided to an insured would be reduced to reflect an amount of compensation received by a State Government through the National Disaster Relief and Recovery Arrangements or any other State insurance scheme. The reduction in payment to an insured would only operate if an individual has been already compensated for the loss. Thus, if there is a shortfall after compensation has been paid by the Scheme, it is possible for the relevant State Government to rely upon a moral / political obligation to provide additional top up cover to residents of the affected State.
- [118] The National Catastrophe Insurance Scheme would not introduce changes to the insurability of public assets or any assets that are within the responsibility of the relevant State or Territory Governments. Constitutionally, the Commonwealth Government does not have power under s 51(xiv) of the *Commonwealth Constitution* to legislate in relation to a matter over which State Governments have full legislative capacity (discussed in [163] - [167]).

State Government Responsibility and Disaster Management: Changes to Responsibility arising from Litigation and Out-of-Court Settlements

- [119] State and Territory Governments continue to have a legal obligation to partially fund and regulate emergency management and disaster management, including their State Services such as police, fire and emergency services.¹⁹⁸ These funding obligations are not affected by the operation of the proposed National Catastrophe Insurance Scheme.
- [120] In the aftermath of both the Victorian Black Saturday Bushfires and the Queensland Floods, there were a number of class actions which often involved a State entity as a

¹⁹⁸ See Mendelson and Carter, above n 104, 32, 32–35.

defendant. These class actions (which were all settled out of court with the exception of the Queensland Floods proceeding, which is ongoing, as discussed in [127] - [128]) sought to obtain damages on the basis of negligence and State Governments or State instrumentalities were often joined as co- defendants. An examination of class actions will now be undertaken culminating in a discussion on how future class actions would be limited under the National Catastrophe Insurance Scheme.

Out-of-Court Settlements: Black Saturday Bushfires

- [121] In his emergency-law blog, Dr Eburn noted that class actions in the aftermath of bushfires were operational costs for many companies, particularly insurance companies. There is a long history of bushfire litigation in Australia.¹⁹⁹ According to Dr Eburn, over time, the class of defendants has expanded to include landowners, employers, train companies, electricity companies, emergency services, firefighting authorities and government departments.²⁰⁰
- [122] After the Black Saturday bushfires,²⁰¹ class actions targeted a variety of defendants: electricity companies, the Country Fire Authority, the Department of Environment and Sustainability and Victoria Police. As such, the Victorian Government was named a co-defendant in many of the class actions despite the argument (which is developed below) that it was not legally compelled to act but rather only had a moral obligation.
- [123] No official sources provide the total cumulative value of all the class actions and the number of individuals involved; however, some of the settlements illustrate their significance.
- [124] In Perry v Powercor Australia Ltd²⁰² and Thomas v Powercor Australia Ltd,²⁰³ the settlement agreement required the defendant to pay 55% of the claimants' losses arising from the fires, penalty interest from the date of the proceedings and party-party

¹⁹⁹ For a list of cases where electrical authorities have been sued in relation to bushfires, see Michael Eburn, 'Australian Bushfire Cases: Annotated Litigation 1867-2011' < http://www.bushfirecrc.com/resources/externalresource/australian-bushfire-cases-annotated-litigation-1867-2011>.

²⁰⁰ Michael Eburn, 'Bushfires: The Price We Pay for Electricity' in Michael Eburn, Australian Emergency Law

⁽²⁰ May 2014) http://emergencylaw.wordpress.com/2014/05/20/bushfires-the-price-we-pay-for-electricity/. ²⁰¹ See Place v Powercor Australia Ltd [2013] VSC 6; Matthew v SPI Electricity (Ruling Number 16) [2013] VSC 74; Mercieca v SPI Electricity [2012] VSC 204; Thomas v Powercor Australia Ltd [2011] VSC 614. ²⁰² Perry v Powercor Australia Ltd [2012] VSC 113 [5].

²⁰³ Thomas v Powercor Australia Ltd [2011] VSC 614.

costs. In the case of *Merieca v SPI Electricity*,²⁰⁴ the agreed settlement included 45% of the losses claimed by each individual member within the affected class. The total compensation available for all of the individual members of the class action was set at \$32.85 million.²⁰⁵ In *Place v Powercor Australia Ltd*,²⁰⁶ the defendant paid 100% of the claimants' losses, penalty interest²⁰⁷ and party–party costs.²⁰⁸ *Matthews v SPI Electricity*²⁰⁹ resulted in a total settlement cost of \$494.7 million.²¹⁰ Under this settlement, SP Ausnet agreed to pay the claimants \$378.6 million, Utility Services Corporation agreed to pay \$12.5 million and parties associated with the State of Victoria, including Victoria Police, the Country Fire Authority and the Department of Sustainability and Environment agreed to pay \$103.6 million in compensation.²¹¹ On 6 February 2015 the Murrindindi–Marysville class action was settled for \$300 million.²¹²

[125] The inclusion of the Victorian State Government or State Instrumentalities as defendants suggests that the Victorian Government may be responsible for preventing losses to households, despite the efforts of firefighting services and emergency-management teams employed to suppress the fires. As these matters were settled out of court, there was no opportunity for a court to specify the basis for the legal responsibility of the Victorian Government. State (and Territory) Governments are under a duty to manage emergencies; however, unless specifically prescribed in legislation, individuals do not have a common-law or statutory duty to take an action against a State or Territory Government for failing to protect personal household property. State fire services and emergency services protect public and private infrastructure. In the context of the Black Saturday bushfires, there was no actionable

²⁰⁴ Merieca v SPI Electricity [2012] VSC 204.

²⁰⁵ *Merieca v SPI Electricity* [2012] VSC 204 [21]– [23].

²⁰⁶ Place v Powercor Australia Ltd [2013] VSC 6.

²⁰⁷ Penalty Interest Rates Act 1983 (Vic) s 2.

²⁰⁸ Place v Powercor Australia Ltd [2013] VSC 6 [6].

²⁰⁹ Matthews v SPI Electricity [2013] VSC 74.

²¹⁰ Maurice Blackburn, 'Record Settlement Gets Go Ahead for Kinglake Bushfire Survivors' (Media Release, 23 December 2014) http://www.mauriceblackburn.com.au/about/media-centre/media-statements/2014/record-settlement-gets-go-ahead-for-kinglake-bushfire-survivors/.

²¹¹Maurice Blackburn Lawyers, 'Kilmore East—Kinglake Bushfire Class Action Information Sheet' (2014) <<u>http://www.mauriceblackburn.com.au/media/2423/proposed_settlement_info_sheet.pdf</u>; Michael Eburn, 'Black Saturday Bushfire Survivor Secures \$500 million in Australia's Largest Class Action Payout' in Michael Eburn, *Australian Emergency Law* (15 July 2014) <<u>http://emergencylaw.wordpress.com/2014/05/20/bushfires-the-price-we-pay-for-electricity/>;</u> Jane Lee, Richard Willingham and Timna Jacks, 'Black Saturday Victims Win \$500 Million Settlement' *The Age (online)*, 15 July 2014 <<u>http://www.theage.com.au/victoria/black-saturday-victims-win-500m-settlement-20140715-zt7jh.html></u>.

²¹²Maurice Blackburn, 'Murrindindi—Marysville Bushfire Class Action' <<u>http://www.mauriceblackburn.com.au/legal-services/general-law/class-actions/current-class-actions/bushfire-class-actions/murrindindimarysville-bushfire-class-action/></u>.

failure by the Victorian Government to comply with a legal duty. The unprecedented size of the fire front, coupled with other factors such as the wind speed and direction, meant that despite the best efforts of the Victorian emergency services, it took many days to bring the fires under control.

[126] Notwithstanding the arguable absence of a legal duty, Dr Eburn suggested that due to the responsibilities imposed on the Victorian Government and State Instrumentalities, there was pressure to settle matters out of court. This often-faced moral / political responsibility²¹³ manifested itself when Victoria decided to act as a 'model litigant'.²¹⁴ Under the Victorian Government Department of Justice Guidelines, (*Model Litigants Guidelines: Guidelines on the State of Victoria's Obligations to Act as a Model Litigant*), 'being a model litigant require[d] that the State and its agencies, as parties to litigation, act with complete propriety, fairly and in accordance with the highest professional standards. The expectation that the State and its agencies would act as a model litigant has been recognised by the courts'.²¹⁵

Out-of-Court Settlements: Queensland Floods

[127] The Queensland Government is the subject of class actions. *Rodriguez & Sons Pty Ltd* v *Queensland Bulk Water Supply Authority*²¹⁶ is a class action on behalf of homeowners, tenants, business owners and others who experienced property damage, business interruption, temporary relocation, rebuilding or repairs as a result of the flooding. The action is based on negligence against Sequwater, Sunwater and the Queensland Government for failure to monitor the predictions of rain and minimise any effects downstream from the Wivenhoe and Summerset Dams once they

- *Melbourne Steamship Limited v Moorhead* (1912) 15 CLR 133, 342;
- Kenny v State of South Australia (1987) 46 SASR 268, 273;

²¹⁶ Rodriguez & Sons Pty Ltd v Queensland Bulk Water Supply Authority Proceeding No 2014/200854 http://www.supremecourt.justice.nsw.gov.au/supremecourt/sco2_class_action/floods.html.

²¹³ Eburn, 'Bushfires: The Price We Pay for Electricity' above n 200.

²¹⁴ Victorian Department of Justice, *Model Litigants Guidelines: Guidelines on the State of Victoria's Obligations to Act as a Model Litigant* (2012)

<http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines >. 215 See

[•] Yong Jun Qin v The Minister for Immigration and Ethnic Affairs (1997) 75 FCR 155.

overflowed. The hearing in the Supreme Court of New South Wales began on 5 November 2014.²¹⁷

- [128] Initially, the Statement of Claim was struck down by the Supreme Court of New South Wales on the basis that it lacked specificity. In the amended Statement of Claim, which the plaintiffs filed prior to 13 February 2015, the plaintiffs were obliged to refer to the exact rate of release of water or exact volume of water which should have been released and which was not done. In this way, the Statement of Claim determined the exact parameters of the duty and if the plaintiffs can demonstrate, during the proceedings, that this duty was breached they will likely be successful in their action. Although a hearing was scheduled for 18 July 2016, it was postponed after a trial in November 2015. Justice Beech-Jones from the New South Wales Supreme Court considered that due to the complexity involved, it would not be possible for the plaintiffs to prepare the necessary information prior to 2017 and thus cancelled the 2016 hearing.²¹⁸ Unless this case sets a new legal precedent that imposes an obligation on State (or Territory) Governments, they will continue to have only moral / political responsibilities and no legal duty to assist individuals who have suffered household structural damage.
- [129] The difficulties faced by the plaintiffs in establishing their cause of action and proving negligence on the part of the State or Territory Government or State or Territory Instrumentality, results in uncertainty and delays with litigation and out of court settlements.

Subrogation and Litigation under the Proposed National Catastrophe Insurance Scheme

[130] Under the National Catastrophe Insurance Scheme, once claims are paid to homeowners, the Scheme has the right of subrogation.²¹⁹

²¹⁷ Michael Eburn, 'Litigation over the 2011 Queensland Floods Continues' in Michael Eburn, Australian Emergency Law (9 November 2014) https://emergencylaw.wordpress.com/2014/11/09/litigation-over-2011- queensland-floods-continues/>. ²¹⁸ Rodriguez & Sons Pty Ltd v Queensland Bulk Water Supply Authority t/as Sequwater (No 4) [2015] NSWSC

^{1352, 1356.}

²¹⁹ Subrogation is the right of an insurer to pursue a third party that caused the insurance loss. In pursuing an action for subrogation the insurer will litigate on behalf of the insured and they will be entitled to receive the same rights and benefits that the insured would have been able to receive against the third party. Subrogation is a means of justice or equity that ensures the person who carried out the wrong can be sued by the insurer who is paying the loss for the insured.
[131] Subrogation was first established in *Castellain v Preston* (1883) 11 QBD 380. In explaining the principle of subrogation, Lord Justice Brett explained

As between the underwriter and the assured, the underwriter is entitled to the advantage of every right of the assured, whether such right consists in contract, fulfilled or unfulfilled, or in remedy for tort capable of being insisted on or already insisted on, or in any other right, whether by way of condition or otherwise, legal or equitable, which can be, or has been exercised or has accrued, and whether such right could or could not be enforced by the insurer in the name of the assured by the exercise or acquiring of which right or condition the loss against which the assured is insured, can be, or has been diminished.²²⁰

- [132] Recently (2015) the principle of subrogation as re-affirmed in *Castellain v Preston* was discussed in the case of *Johnston v Endeavour Energy* [2015] NSWSC 1117, in the context of natural disasters arising from the bushfires in Springwood, Winmalee and Yellow Rock (New South Wales). The rights associated with subrogation and its operation were considered in *Johnston v Endeavour Energy*. Lord Justice Brett determined 'subrogation was a creature of equity, and does not depend upon the principles of contract'.²²¹ However, clarification was made regarding the different rights associated with subrogation. In a situation where 'an insurer has paid a claim under a policy, and who thereby has acquired an entitlement by law to be subrogated, it is not in an equivalent position to that which would ensure if a complete assignment of rights had been taken.²²²
- [133] Having regard to the aforementioned jurisprudence, legislation that would govern the proposed National Catastrophe Insurance Scheme would expressly provide that all insurance contracts under the Scheme assign the rights to subrogation to the Scheme. The assignment of subrogation rights would entitle the Scheme to pursue an action in the name of the insured or in the name of the Scheme (should it wish to pursue the action in its own name). In addition to any enabling legislation specifying the assignment to the Scheme, the individual insurance contracts, which would be issued by the Scheme, would also reflect this.

²²⁰ Castellain v Preston (1883) 11 QBD 380, 388.

²²¹ Johnston v Endeavour Energy [2015] NSWSC 1117, [148].

²²² Johnston v Endeavour Energy [2015] NSWSC 1117, [241].

- [134] The effect of the assignment prohibits an insured from taking an action against a third party for liability.²²³ In doing this, the Scheme itself could pursue a third party if it is determined appropriate. The prohibition against insureds individually taking action is likely to reduce the number of class actions and out of court settlements and thus free up the court system to deal with other matters.
- [135] The way in which the proposed Scheme would specifically and expressly assign the rights of subrogation to the insurer would be consistent with subrogation under Part VII of the *Insurance Contracts Act 1984* (Cth). This is particularly important as efforts have been made to ensure the proposed Scheme would operate consistently, to the extent possible taking into account its specific offerings, with the rules and regulations governing the private insurance market. The justification for this consistency (where possible) is to promote a streamlining of the insurance cover offered by the National Catastrophe Insurance Scheme and 'top up' cover or contents cover provided by the private insurance market.
- [136] In order for the proposed Scheme to exercise its right to subrogation (when operational) it must pay the full amount of compensation owed to the insured. The Scheme would be liable to pay the legal costs of pursuing an action in subrogation. The Scheme would not pursue uninsured losses, rather would only seek to recover the insured losses in a subrogation action. The Scheme would seek to promote and facilitate a healthy private insurance market.
- [137] Although in the current form as proposed, the Scheme has the legal right to pursue a third party in subrogation, in exercising this legal right, the Scheme must consider the overarching considerations of facilitating affordable insurance for natural disasters of catastrophic proportions Australia-wide and catering for social needs. As a result, it would be unlikely the Scheme would pursue an action against State or Territory Governments or State or Territory Instrumentalities. Dr Eburn commented that 'the chilling side effect [of subrogation during the Queensland Floods], is that yet again government employees may feel that they are unwilling to take on positions of

²²³ This replicates s 68(1) of *Insurance Contracts Act 1984* (Cth) which states "Where a contract of general insurance includes a provision that has the effect of excluding or limiting the insurer's liability in respect of a loss by reason that the insured is a party to an agreement that excludes or limits a right of the insured to recover damages from a person other than the insurer in respect of the loss, the insurer may not rely on the provision unless the insurer clearly informed the insured in writing before the contract of insurance was entered into, of the effect of the provision."

significant responsibility because of the tendency of these proceedings to focus on personal blame – it was the engineers fault, rather than systemic issues.²²⁴ In assigning the right of subrogation to the Scheme (in the format currently proposed), the enabling legislation would be designed to prevent such 'chilling side effect[s]'.²²⁵ As the proposed Scheme has the support and financial backing of the Commonwealth Government, it seeks to ensure that government employees, and State and Territory Instrumentalities maintain their existing responsibilities for emergency management and emergency services without the fear of being sued.

[138] If the National Catastrophe Insurance Scheme is enacted in its proposed form and does act upon its right to subrogation, it would most likely pursue corporate entities whose negligence contributed to the losses to homeowners. For example, builders who have failed to ensure that properties built by them are resilient or comply with relevant building standards, or electricity suppliers who have delivered faulty wires, which contribute to damage from bushfires.

Responsibility of Insurers

[139] Some insurers may need to assume additional responsibilities in order to assist with the coordination between the proposed Scheme and the insurance regime for standard contingencies. This would take the form of a public-private partnership.

Responsibility of Insurers: Establishment and Functioning of a Workable Public-Private *Partnership*

[140] Recognising the need for cooperation between private insurers and the Commonwealth Government, the proposed National Catastrophe Insurance Scheme is structured as a public-private partnership. This partnership facilitates the use of skilled insurance professionals in the claims handling process when a natural disaster of catastrophic proportions occurs. The Scheme does not have to employ large number of claims assessors unless and until a natural disaster of catastrophic proportions occurs. The ability of the Scheme to draw upon experienced claims handling staff from private insurance companies at such times provides potential cost savings and efficiencies for

²²⁴ Michael Eburn, 'The Disaster Cycle Continues' on Michael Eburn, *Australian Emergency Law* (6 February 2012) <https://emergencylaw.wordpress.com/2012/02/06/the-disaster-cycle-continues/>. ²²⁵ Ibid.

the Scheme. Under the current structure, if the Scheme were enacted, a public-private partnership agreement would be established between the Scheme and an insurer or several insurers initially for a pilot period of two years. The contract would then be assessed for renewal having regard to the outcomes achieved during the pilot phase.

- [141] The proposed Scheme encourages the insurance industry to develop 'top up' cover to insure household buildings if more than \$375,000 of damage is sustained to a household structure during an event. It is in the interests of the Commonwealth Government to encourage the sale of this private 'top up' cover to help ensure that all households are adequately covered. While the 'top up' cover is not part of any public-private partnership between the insurance industry and the Commonwealth Government, it would provide an incentive for the insurance industry to enter into a public-private partnership to provide sufficient claims handling staff in the event of a natural disaster of catastrophic proportions.
- [142] Globally there are examples of governments operating direct insurance schemes for natural disasters of catastrophic proportions.²²⁶ Generally such schemes are developed 'where private insurance markets are unwilling or unable to provide sufficient levels of direct coverage for some or all natural or man-made hazards, due to local conditions or the particular risk profile of the territory...The private insurance sector often contributes its operational capabilities, such as marketing of the policies, collection of the premiums and/or adjustment of claims.²²⁷ Some insurance schemes cover natural disasters of catastrophic proportions by operating as public-private partnerships, or having some operations provided under public-private partnerships.
- [143] In general, public-private partnerships for the provision of catastrophe insurance are designed to provide cover to residential buildings / household buildings based on affordable insurance across the whole country. The proposed National Catastrophe Insurance Scheme would provide some subsidies to assist vulnerable members of society (such as those with low incomes) pay for their insurance cover. This

²²⁶ Examples include the *Consorcio de Comensación de Seguros* in Spain, the Iceland Catastrophe Insurance, the Earthquake Commission in New Zealand, the National Flood Insurance Program in the United States, the Turkish Catastrophe Insurance Pool. In the Philippines a public private partnership is being established whereby the Government will offer direct insurance covering earthquake damage. Although still in its development stages, the Earthquake Protection Insurance Corporation of the Philippines is hoped to be operational in 2016. See OECD, *Disaster Risk Financing: A Global Survey of Practices and Challenges*, above n 40, 65, 68.

subsidisation is enabled through the involvement and financial support of the Commonwealth Government. Like other schemes that operate with a public-private partnership, the National Catastrophe Insurance Scheme would have a Commonwealth Government Guarantee. Its objective is to assist the private insurance market to return, in the future, to a normalised market when it would take over and provide insurance at affordable rates.

- [144] In R &R Fazzolari Pty Ltd v Parramatta City Council [2009] 237 CLR 603 the operation of a public-private partnership was examined by the Australian High Court in the context of compulsory acquisition. It involved a public-private partnership between the Parramatta City Council and a developer (Grocon). To ascertain the nature of the arrangement the High Court examined the Local Government Act 1993 (NSW) which defined public-private partnerships. The majority of the High Court (Justices Gummow, Hayne, Heydon and Kiefel) determined that the 'expression "public-private partnership" cannot be understood as having any technical meaning, separate from the meaning the Act gives it. The content of the rights and obligations created by or subsisting under an arrangement constituting a public private partnership will depend upon the terms of the particular agreement'.²²⁸ This suggests that the public-private partnership between Australian insurers and the National Catastrophe Insurance Scheme (as proposed) would be governed by the terms of each agreement once any statutorily entrenched rules regarding the operation of the partnership are implemented into the workings of the partnership and followed. The agreement between the parties would be to supplement the statutorily entrenched aspects of the partnership.²²⁹
- [145] The Commonwealth Government's National Public Private Partnership Policy Framework²³⁰ considers such partnerships 'a proven infrastructure procurement method that is increasingly being used by governments across Australia alongside more traditional methods to deliver infrastructure to the community'.²³¹ The Public Private Partnership Policy Framework operates for the Commonwealth Government and the State Governments. For any project involving an investment of more than \$50

²²⁸ R &R Fazzolari v Parramatta City Council [2009] 237 CLR 603, 626.

²²⁹ Robert Ball, 'Provision of Public Service Infrastructure- the use of PPPs in the UK and Australia: A Comparative Study' (2011) 24(1) International Journal of Public Sector Management 5, 5.

²³⁰ Commonwealth Government (Infrastructure Australia), 'National Public Private Partnership Policy Framework' (December 2008)

http://www.infrastructureaustralia.gov.au/public_private/files/National_PPP_Policy_Framework_Dec_08.pdf Ibid.

million, the National Public Private Partnership Policy Framework requires that the use of a public-private partnership be considered. This approach has been endorsed by the Council of Australian Governments since 2008.²³²

Responsibilities of Individuals under the Proposed National Catastrophe Insurance Scheme

- [146] The Productivity Commission on Disaster Funding Arrangements highlighted the importance of mitigation and insurance as the most efficient mechanisms for dealing with catastrophe-risk financing.²³³ The National Catastrophe Insurance Scheme, as proposed, seeks to overcome this problem by incentivising individuals to engage in mitigation.²³⁴
- [147] Individuals are provided with incentives under the proposed National Catastrophe Insurance Scheme to mitigate potential losses to their homes and ensure that their homes are resilient to natural disasters of catastrophic proportions. The provision of incentives rather than making mitigation compulsory rewards the good behaviour of insureds. Individuals who comply would be offered discounts on the deductible amount payable, should an individual need to make a claim (discussed in [364]- [373]). Efforts made by individuals to mitigate would be recorded in the national register of repairs (discussed in [341] - [351]). This would enable not only mitigation efforts to be recorded, but also the creation of data sets that could be used to better understand the risks and create insurance products that address these risks. As the proposed Scheme would be compulsory and incentives for mitigation would be determined over the medium term, the mitigation measures run with the title to the property. In addition to promoting resilient properties, providing a financial incentive to those who can and are able to mitigate, helps ensure that the proposed Scheme would observe its objective of providing affordable insurance to all Australians. If such mitigation ever were to become compulsory, aside from the legal issues that would warrant consideration, this could impose an expensive duty on insureds and may detract from the social value of the Scheme. Future owners of residential properties benefit not only from the resilience

²³² Commonwealth Government (Infrastructure Australia), Public Private Partnerships (2016) http://infrastructureaustralia.gov.au/policy-publications/public-private-partnerships/index.aspx

²³³ Productivity Commission Inquiry Report: Disaster Funding Arrangements, above n 10, 17.

²³⁴ Mitigation in this refers to insured's reducing potential damage to their home and ensuring their house is more resilient and thus less likely to endure a loss arising from a natural disaster of catastrophic proportions.

of those properties due to mitigation actions on the part of former homeowners, but would also obtain financial benefits in the form of lower deductible amounts applied to insurance claims.

[148] In Chapter 2, the structure of the scheme is further considered in the context of the constitutional validity of the proposed National Catastrophe Insurance Scheme.

Chapter 2: Commonwealth Legal Power to Enact Laws for the Proposed National Catastrophe Insurance Scheme

- [149] To operate legally, the proposed National Catastrophe Insurance Scheme must be constitutionally valid. Several of the heads of power under s 51 of the *Commonwealth Constitution* could be relied on to ensure that the Commonwealth Government has legal authority to implement the Scheme.
- [150] This thesis examines the following provisions of the *Commonwealth Constitution* when discussing the ability of the Commonwealth to enact the scheme:
 - Chapter 2:
 - o insurance—s 51(xiv)
 - trade and commerce—s 51(i)
 - o rights of residents in States—s 117
 - Chapter 3:
 - o executive power—s 61
 - Chapter 4:
 - o taxation—s 51(ii)
 - Chapter 6:
 - property acquisition on just terms—s 51(xxxi).

Purpose of the Proposed National Catastrophe Insurance Scheme

- [151] Building on the principles underlying the proposed National Catastrophe Insurance Scheme discussed in Chapter 1, the main purpose of the Commonwealth legislation which would enable the National Catastrophe Insurance Scheme to operate is:
 - create a public insurance scheme for natural disasters
 - create a public authority to administer the public insurance scheme
 - provide the public authority with the power to charge insurance premiums to dwelling owners for coverage against catastrophic risks
 - compulsorily require owners of dwellings to insure their properties against natural disasters

• allow the Commonwealth Government to compulsorily acquire property in limited circumstances.

Operation of the Commonwealth Constitution- Separation of Powers and Rule of Law

[152] In order to assess the legal validity of the proposed National Catastrophe Insurance Scheme, it is first necessary to briefly analyse how the Constitution operates. This section will look at the doctrine of the separation of powers and the rule of law, and their constitutional implications. Prior to looking at the individual legislative powers, the division of powers will be analysed in light of the ability of the Commonwealth Government to legislate with respect to the Scheme.

Separation of Powers

[153] The Commonwealth Constitution is based on the doctrine of separation of powers between the powers of the executive, legislature and judiciary (Chapter I – the Parliament, Chapter II – the Executive Government and Chapter III – the Judicature). The power vested in the Parliament facilitates the legal process of enacting legislation. It also seeks to ensure accountability by having a bicameral system where a Bill must pass both houses of parliament and then obtain Royal Assent prior to becoming law. The Executive power is vested in the Governor General as the Queen's representative²³⁵ who may seek the advice of the Federal Executive Council, which²³⁶ comprises of members of Parliament (usually the Prime Minister and the Cabinet). One of the roles of the Judicature is to interpret the Constitution as well as analysing other laws made by the Parliament. This role is carried out by the High Court²³⁷ and any

²³⁵ *Commonwealth Constitution* s 61.

²³⁶ *Commonwealth Constitution* s 62.

²³⁷ The original jurisdiction of the High Court under s 75 of the *Commonwealth Constitution* extends to matters i. Arising under any treaty;

ii. Affecting consuls or other representatives of other countries;

iii. In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party;

iv. Between States, or between residents of different States, or between a State and a resident of another State;

V. In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth.

The High Court is afforded additional jurisdiction under s 76 of the *Commonwealth Constitution*. This enables the Parliament may make laws conferring original jurisdiction on the High Court in any matter:

i. Arising under this Constitution, or involving its interpretation;

ii. Arising under any laws made by the Parliament;

federal courts the Parliament creates.²³⁸ The interpretation of legal issues associated with the interpretation of the Constitution must be undertaken by the High Court.

[154] In the context of the National Catastrophe Insurance Scheme, if constitutional validity were to be raised, the High Court²³⁹ would interpret the enabling legislation implementing the National Catastrophe Insurance Scheme to determine whether the Commonwealth Government has power to operate the Scheme.²⁴⁰

Operation of the Commonwealth Constitution- Division of Powers between the Commonwealth Government and State Governments

- [155] In addition to separation of powers, under the Constitution, legislative powers are divided between the Commonwealth Government and the State Government.
- [156] In determining the validity of the proposed National Catastrophe Insurance Scheme, the thesis examines the relevant powers which the Commonwealth Government has to legislate for the operation of the Scheme.
- [157] In addition to powers exercised exclusively by the States and those exclusively by the Commonwealth Government, there are also concurrent powers under which both the States and Commonwealth can legislate. If there is inconsistency in the way in which legislation made by the Commonwealth Parliament and that legislated at a State level operates, in areas concerning concurrent power, then under s 109 to the extent of the inconsistency the Commonwealth legislation will prevail. However, if there is no inconsistency the State law and the Commonwealth law both remain validly in operation.
- [158] Prior to passing any enabling Act establishing the National Catastrophe Insurance Scheme, the Commonwealth Government would specifically reserve the rights of disaster and emergency management laws to remain in place at the discretion of each of the States. The proposed Scheme would operate solely within the realm of insurance

iii. of Admiralty and maritime jurisdiction;

iv. Relating to the same subject-matter claimed under the laws of different States.

²³⁸ Commonwealth Constitution s 71.

²³⁹ Commonwealth Constitution s 71.

²⁴⁰ Commonwealth Constitution s 76(i).

and thus would not affect these State functions,²⁴¹ and further, the Scheme specifically would not apply to State insurance (see discussion below).

Constitutional Validity of the proposed National Catastrophe Insurance Scheme: Insurance Power—s 51(xiv)

- [159] The Commonwealth, pursuant to s 51(xiv) of the Commonwealth Constitution, has the power to legislate with respect to 'insurance, other than State insurance'. The Commonwealth also has the power to legislate with respect to State insurance extending beyond the limits of the State concerned.
- [160] The proposed National Catastrophe Insurance Scheme relates to insurance (specifically excluding 'state insurance' cover) and would provide coverage to homes / household structures/ household buildings against a specific set of natural disasters of catastrophic proportions (discussed in Error! Reference source not found. - [30]).

National Insurance Schemes

- [161] The proposed National Catastrophe Insurance Scheme would not be the only example of a national insurance scheme in Australia (that is not State insurance), rather insurance schemes operate under the *Insurance Contracts Act 1984* (Cth) and the *Terrorism Insurance Act 2003* (Cth). These schemes are currently in existence with the former operating to standardise the provision of insurance contracts Australia-wide and the latter introducing a national reinsurance pool for terrorism risk.
- [162] Prior to the introduction of the *Insurance Contracts Act 1984* (Cth), the Australian Law Reform Commission²⁴² justified the need for a uniform system of household insurance in Australia on the grounds that in each State, the insurance systems were inconsistent. The Commonwealth Government had the legislative power under the *Commonwealth Constitution* to enact legislation to unify the terms and conditions of insurance

²⁴¹ The proposed Scheme's right to subrogation would need to take into consideration the differing disaster and emergency management laws existing between the States and the extent to which each State imposes duties on its authorities and services to act and in what manner and circumstances. Under the Federal system, disaster and emergency management laws are within the legislative responsibility of the States. In seeking to enact the proposed National Catastrophe Insurance Scheme, the Commonwealth would not set out to erode the power of the States but rather to promote co-operation between the States and between the States and the Commonwealth. ²⁴² Law Reform Commission, *Insurance Contracts*, Report No 20 (1982) 13; Michael Kirby, 'Australian Insurance Contract Law: Out of the Chaos—A Modern, Just and Proportionate Reforming Statute' (Paper presented at Australian Insurance Law Association National Conference 2010, Adelaide, 28 October 2010) 4–5.

contracts. Although the imposition of an insurance system for natural disasters of catastrophic proportions would operate in a different context, the reasoning, and in particular the objective of removing inconsistency and uncertainty between different insurance coverages, would apply by analogy to support the establishment of the proposed National Catastrophe Insurance Scheme. Legally, the Commonwealth Government has the power to legislate nationally for insurance cover under s 51(xiv) of the *Commonwealth Constitution*. This argument is strengthened in the context of the proposed National Catastrophe Insurance Scheme, as the Scheme seeks to co-opt and streamline catastrophe-risk insurance within the existing insurance scheme. The Scheme is intended to complement the insurance products available in the private insurance market.

State Insurance

- [163] In order to ensure the proposed National Catastrophe Insurance Scheme is constitutionally valid, it is necessary to ensure the Scheme does not cover 'state insurance'. At the time the *Commonwealth Constitution* was enacted (1901), legal commentators John Quick and Robert Randolph Garran asserted that the 'power to make laws with respect to insurance is a wide power';²⁴³ however, at the time of their commentary they highlighted there was no clarity regarding the term 'state insurance'. The implication of limited clarity regarding 'state insurance' meant the interpretation of s 51(xiv) of the *Commonwealth Constitution* could be expanded or narrowed depending upon any relevant cases which the High Court may examine.
- [164] Currently there is still little legislative guidance or common law regarding the term 'state insurance'. The first examination of the insurance power was undertaken in the judgement of *Victorian WorkCover Authority v Andrews*²⁴⁴ and its subsequent High Court appeal.²⁴⁵ In *Victorian WorkCover Authority v Andrews*, Justice Selway was asked to assess the validity of the Commonwealth's action in allowing a corporation (Optus) to be covered by the Commonwealth Government's workers compensation scheme: Comcare which operated under the *Safety, Rehabilitation and Compensation Act 1988* (Cth). In order for a corporation to be eligible to use Comcare, they needed to

²⁴³ John Quick and Robert Randolph Garran, *The Annotated Constitution of the Australian Commonwealth (Part 1–1901)* (Australian Book Company, 1901) 581.

²⁴⁴ Victorian WorkCover Authority v Andrews [2005] FCA 94.

²⁴⁵ Attorney-General (Victoria) v Andrews [2007] HCA 9.

satisfy the legislative criteria for an 'eligible corporation' and successfully acquire a licence stipulating Comcare would apply to them. A corporation unable to use Comcare would instead need to comply with any applicable State legislation as it applied for each State in which the corporation conducted their business within. Optus successfully became an 'eligible corporation' and thus relied on Comcare rather than Victorian WorkCover. The Victorian Attorney-General at the time Andrew (Arthur) McCutcheon, pursued litigation seeking to invalidate the *Safety, Rehabilitation and Compensation Act 1988* (Cth) on the basis that it encroached on the Victorian WorkCover Authority. McCutcheon claimed WorkCover was a form of state insurance. The Federal Court was thus required to interpret the term 'state insurance'.

[165] The term 'state insurance' is specifically referred to within s 51(xiv) of the Commonwealth Constitution. An express provision was incorporated into the Commonwealth Constitution to prevent the Commonwealth legislating in relation to 'state insurance' and thus in doing so was specifically preserving the rights of the individual States to 'determine for itself whether and on what terms it wished to establish its own insurance business (as New Zealand had done), providing the business was only conducted within the State'.²⁴⁶ Justice Selway, in obiter dictum, referred to the persuasive influence that having premium income from an insurance scheme incorporated into the financial resources of the State as indicative of the operation of a 'state insurance' scheme. Justice Selway affirmed that if premium income from the insurance scheme were to be allocated to the State and accounted for as State financial resources, the insurance offered would be 'state insurance' even if there was a specific earmarking of the funds only to be used for the insurance scheme.²⁴⁷ In relation to 'state insurance', Justice Selway suggested that Commonwealth powers should be read broadly since 'there was no basis for treating the words "state insurance" as extending to state laws requiring persons to insure with a state insurer or to state laws conferring an economic monopoly on the state insurer'.²⁴⁸

²⁴⁶ Victorian WorkCover Authority v Andrews [2005] FCA 94 [52].

²⁴⁷ Victorian WorkCover Authority v Andrews [2005] FCA 94 [55].

²⁴⁸ Victorian WorkCover Authority v Andrews [2005] FCA 94 [70].

[166] In the High Court, Justice Gleeson upheld the earlier Federal Court decision of Justice Selway.²⁴⁹ Justice Gleeson upheld WorkCover was not 'state insurance'. Justice Gleeson noted that:

In the present case, the impugned provision does not seek to regulate insurance transactions entered into by the Victorian WorkCover Authority. They do not prohibit the conduct of state insurance, and they have not been shown substantially to impair the capacity of Victoria to conduct state insurance. They do not invade the area of protection given by the proviso to part (xiv).²⁵⁰

[167] Justice Gleeson's interpretation was that 'state insurance' should be confined to situations where there is a real fiscal connection between the insurance provided and the particular State. Thus, the test would be whether the purported insurer who was alleged to be a 'state insurer' was owned or controlled by the State.²⁵¹ If the Commonwealth implemented legislation that had a minor effect on 'state insurance' but did not limit the operation of the 'state insurance' or the freedom of the State, there would be no contravention.²⁵²

National Catastrophe Insurance Scheme and States' Rights

- [168] The High Court required 'state insurance' to have a fiscal connection between the insurance and the State. The implication of this for the National Catastrophe Insurance Scheme is that as a mechanism to ensure the Scheme does not provide 'state insurance', the Scheme avoids any fiscal connections between the insurance and any individual State. To ensure constitutional legitimacy, the Commonwealth would provide fiscal support or facilitate the premiums required to operate the National Catastrophe Insurance Scheme without State assistance.
- [169] In Australia, there is currently no State-operated scheme to cover losses to households from natural disasters of catastrophic proportions. Instead, catastrophic losses are dealt with under the existing system that covers standard contingencies (discussed in [33] [38]). Although there is a system of dividing disaster-related costs between the Commonwealth and State Governments through the Natural Disaster Relief and

²⁴⁹ Attorney-General (Victoria) v Andrews [2007] HCA 9 [20].

²⁵⁰ Attorney-General (Victoria) v Andrews [2007] HCA 9 [17].

²⁵¹ Attorney-General (Victoria) v Andrews [2007] HCA 9 [6].

²⁵² Victorian WorkCover Authority v Andrews [2005] FCA 94 [62].

Recovery Arrangements, this does not specifically provide guaranteed financial assistance to households which have experienced structural damage.

- [170] If State Governments decide that their disaster-related expenditure should encompass costs associated with household structural damage under the Natural Disaster Relief and Recovery Arrangements, each individual State can seek reimbursement for such expenditure. In practice, household structural damage has not constituted a large proportion of the disaster costs allocated to State Governments from the Natural Disaster Relief and Recovery Arrangements because generally, disaster expenses by the States have been concentrated in other areas.²⁵³ During the Victorian bushfires (February 2009) and the Queensland Floods (December 2010 – January 2011) funds were mainly allocated towards costs associated with funeral expenses, clean up and recovery, temporary living expenses and temporary re-establishment costs, concessional interest loans for small business, restoration of public assets and personal hardship grants.²⁵⁴
- [171] While States do not currently operate natural disaster of catastrophic proportions insurance schemes, they do provide public liability insurance. States operate 'state insurance' regimes covering the negligence and other legal liabilities of their State authorities and services. For example, the Treasury Managed Fund, a self-insurance fund of the New South Wales Government, may be required to compensate property owners because of alleged unreasonable actions taken by the New South Wales National Parks and Wildlife Service before and during the initial phases of the Wambelong fire.²⁵⁵
- [172] To avoid doubt over its characterisation as an insurance scheme, the proposed National Catastrophe Insurance Scheme would deduct any compensation payable to an insured from State public insurance (if an insured were to get compensation from a State public insurance scheme). As such, the proposed National Catastrophe Insurance Scheme

²⁵³ Attorney-General's Department, Australian Emergency Management: Natural Disaster Relief and Recovery Arrangement Guidelines—NDRRA State and Territory Thresholds, 14 October 2012 <http://www.em.gov.au/Fundinginitiatives/Naturaldisasterreliefandrecoveryarrangements/Pages/NaturalDisaster ReliefandRecoveryArrangementsGuidelines.aspx>.

²⁵⁴ Disaster Assist: Victorian Bushfires, above n 188; Queensland Floods, above n 192; Queensland Government, *Disaster Finance Arrangements* (April 2011) <www.disaster.qld.gov.au/support>. ²⁵⁵ Wambelong Fire, above n 168, 150 – 160 [9.26]- [9.68].

would not impinge on State public liability insurance regimes and it would not facilitate 'double dipping' for compensation by insureds.

[173] The legal infrastructure upon which the National Catastrophe Insurance Scheme would operate minimises the potential for the insurance offered to be categorised as 'state insurance'. It is most unlikely that the High Court would circumscribe the Commonwealth's legislative power under the insurance power; however, should this occur, the States could all agree to pass State laws authorising the Commonwealth to introduce laws to implement the proposed Scheme. The Council of Commonwealth Governments could coordinate this process.

Constitutional Validity of the Proposed National Catastrophe Insurance Scheme: Trade and Commerce—s 51(i)

- [174] This section discusses whether the proposed National Catastrophe Insurance Scheme could rely on the power of trade and commerce under s 51(i) of the *Commonwealth Constitution*.²⁵⁶ Under s 51(i) the Commonwealth Parliament has the 'power to make laws for the peace, order and good governance of the Commonwealth with respect to trade and commerce with other countries and among the States.' It is argued that while the Scheme could not rely on s 51(i), its monopoly structure does not substantially affect trade between the States.
- [175] Legal commentators reviewing the *Commonwealth Constitution* when it was enacted in 1901 suggested that transactions such as banking and insurance were beyond the scope of activities encompassed by the term 'trade and commerce'.²⁵⁷ However, examining the breadth of the Commonwealth's power in relation to trade and commerce, the High Court has tended to focus on three key questions to determine the scope of power under s 51(i):
 - 1. Is the activity within 'trade and commerce'?
 - 2. Does the activity affect trade between the States?
 - 3. Does the activity affect international trade?

 $^{^{256}}$ The Scheme is national and is intended to apply only to Australian households meaning the international trade component does not need exploration.

²⁵⁷ Quick and Garran, above n 243, 518, 583.

- [176] The Bank of New South Wales v Commonwealth ('Bank Nationalisation Case'),²⁵⁸ examined whether banking fell within the trade and commerce power under s 51(i). This was examined notwithstanding banking and insurance are defined under two separate heads of power, s 51(xiii) and s 51(xiv) respectively.
- [177] The Bank Nationalisation Case²⁵⁹ arose after the Commonwealth Government enacted the Banking Act 1947 (Cth) as an attempt to take over private banks and amalgamate all banking services. The Commonwealth Government then intended to create a national bank, the Commonwealth Bank of Australia. The Banking Act 1947 (Cth) expressly excluded 'state banks' and 'state banking'. The Bank of New South Wales initiated a judicial challenge on the basis that the Act was ultra vires by exceeding the constitutional power of the Commonwealth. The High Court struck down the Banking Act 1947 (Cth) on the basis that banking is not commerce.
- [178] The High Court determined 'banking is only a facility which is used by commerce or an adjunct. It is not commerce'.²⁶⁰ The High Court found 'Banking is finance: it provides, it creates, it withdraws, and it destroys and regulates the purchasing medium for the whole community'.²⁶¹ The High Court distinguished finance and financial conduct from physical goods that can be sold or traded.
- [179] Analogously, it is likely that insurance would be considered as the moving of economic risk through the medium of legally enforceable promises (insurance contract).²⁶² In any event, the High Court clarified 'the inference that inter-state trade is attacked cannot be made from the mere fact that a monopoly is set up by legislation',²⁶³ adding that the 'circumstance that a monopoly is a Government monopoly has no materiality'.²⁶⁴ However, in the Bank Nationalisation Case, the proposal to implement a national banking system involved an 'aggressive and obnoxious²⁶⁵ process of compulsorily acquiring private banks (i.e. banks not owned

²⁵⁸ Bank of New South Wales v Commonwealth (1948) 76 CLR 1 ('Bank Nationalisation Case').

²⁵⁹ Bank Nationalisation Case (1948) 76 CLR 1.

²⁶⁰ Bank Nationalisation Case (1948) 76 CLR 1, 82.

²⁶¹ Bank Nationalisation Case (1948) 76 CLR 1, 84.

²⁶² Bank Nationalisation Case (1948) 76 CLR 1, 86–93.

²⁶³ Bank Nationalisation Case (1948) 76 CLR 1, 93; Australian National Airways Ptv Ltd v Commonwealth (1945) 71 CLR 29. ²⁶⁴ Bank Nationalisation Case (1948) 76 CLR 1, 94.

²⁶⁵ Bank Nationalisation Case (1948) 76 CLR 1, 137.

by the State). The High Court found 'taking over of a business not exclusively or predominantly a banking business, [are] for that reason beyond power'.²⁶⁶

[180] In applying the Bank Nationalisation Case to the National Catastrophe Insurance Scheme, the proposed scheme does not seek to take over any insurance companies or insurance entities to support its implementation or position nationally. Further, the fact that the scheme would exist as a monopoly supported by the Government would not of itself invalidate the scheme. Nevertheless, the operation of the proposed National Catastrophe Insurance Scheme by its nature would be likely to take away some products which are currently offered by the insurance market and this may cause tension. However, the limited scope of the Scheme's operation means it is unlikely to be seen as 'aggressive and obnoxious'. To the extent possible, the proposed Scheme would seek to promote the operation of a functional private insurance market in Australia. This includes promoting the provision of contents insurance covering natural disasters of catastrophic proportions by the private market as well as the private market developing insurance products to cover household properties which suffer damage from a natural disaster of catastrophic proportions above the threshold amount. The proposed Scheme would also seek to coordinate its operations so that there is as much streamlining between the Scheme and the private insurance market as possible. The proposed Scheme would operate at a compulsory national level and this would not invalidate the Scheme based upon the requirements outlined in the Bank Nationalisation Case. It is not necessary to consider a potential or actual breach of s 92, which safeguards free trade as insurance is unlikely to be seen as trade and commerce.

Constitutional Validity of the Proposed National Catastrophe Insurance Scheme: States' Rights: No Discrimination between States—s 117

[181] Under s 117 of the *Commonwealth Constitution* 'a subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State'.²⁶⁷ John Quick and Robert Randolph Garran suggested the 'object is to establish a sort of inter-state reciprocity in the enjoyment of privileges and

²⁶⁶ Bank Nationalisation Case (1948) 76 CLR 1, 37.

²⁶⁷ Commonwealth Constitution s 117.

immunities created by and dependent on State laws'.²⁶⁸ Although theoretically applicable to the proposed National Catastrophe Insurance Scheme, this constitutional provision has been interpreted very narrowly, focusing on reciprocity of professional rights among members of the various States.²⁶⁹

²⁶⁸ Quick and Garran, above n 243, 960.
²⁶⁹ Street v Queensland Bar Association (1989) 168 CLR 461.

Chapter 3: Institutional Arrangements and Executive Power of the Proposed National Catastrophe Insurance Scheme

[182] This Chapter discusses the executive power under s 61 of the *Commonwealth Constitution* insofar as it relates to the institutional arrangements of the proposed National Catastrophe Insurance Scheme. In addition to the express executive power outlined in the *Constitution*, there are also implied powers. These implied powers are the prerogatives of the Crown and the ability to exercise executive power as a matter of 'nationhood'. The reliance upon the executive power under s 61 would only be used as an alternative to the insurance power as the enabling head of power which would legitimise any legislation for the proposed National Catastrophe Insurance Scheme. However, the national nature of the Scheme and the fact that it deals with natural catastrophes, means an alternative source of constitutional legitimacy may be found under the executive power in case when the catastrophic proportions of a natural disaster elevates it to the level of a 'national emergency' requiring a 'national response'.

Institutional Arrangements of the Proposed National Catastrophe Insurance Scheme

- [183] The main institutional arrangements that would apply to the proposed National Catastrophe Insurance Scheme are discussed in Chapters 5 and 6. For the purpose of the present chapter, these institutional arrangements are summarised as follows:
 - A Commonwealth corporate entity, namely, a public financial corporation (discussed in [41] [45]) would administer the proposed National Catastrophe Insurance Scheme. It is loosely based on operational infrastructure similar to that upon which the Australian Reinsurance Pool Corporation operates. This would enable the proposed National Catastrophe Insurance Scheme to operate independently or as an extension of the Australian Reinsurance Pool Corporation.
 - The proposed National Catastrophe Insurance Scheme is guided by the legal framework applying to the Australian Reinsurance Pool Corporation, including the power to provide insurance cover for eligible losses and the power to charge premiums.

• The proposed National Catastrophe Insurance Scheme is activated via a process of Ministerial Declaration following the occurrence of one or more expressly defined natural disasters.

Scope of the Executive Power

[184] Under s 61, the executive power is to be vested within the Queen and exercisable by the Governor General as the Queen's representative. The Governor General in exercising their executive power under s 61 is to receive advice from the Federal Executive Council, as enabled by s 62 of the *Commonwealth Constitution*.

Nationhood and Natural Disasters

State of Emergency

- [185] In the context of natural disasters, until the proposed Scheme is enacted, the Commonwealth Government could adopt one or more of several policy options. For example, it could rely on the existing private insurance regime and wait for a natural disaster of catastrophic proportions to occur and then decide on any actions that need to take place. Alternatively, depending upon the levels of insurance and other methods in which any losses can be absorbed by an individual or the community from natural disasters, the Government could become an insurer of last resort. The National Catastrophe Insurance Scheme (if enacted) would make the Commonwealth Government the insurer of first resort (up to \$375,000 per household building per event) for Australian households who experience loss arising from a declared natural disasters of catastrophic proportions.
- [186] *Pape v Commissioner of Taxation*²⁷⁰ which dealt with man-made catastrophe, is nevertheless the most pertinent in this context because the principles and judicial determination from the decision can be applied analogously to natural catastrophes. On this basis the findings of *Pape* will be used to establish constitutional legitimacy of the proposed National Catastrophe Insurance Scheme.

²⁷⁰ Pape v Commissioner of Taxation (2009) 238 CLR 1.

Pape v Commissioner of Taxation

- [187] Pape judicially examined the validity of a federal economic-stimulus package designed to ensure the Australian economy continued to function well and that Australian jobs were retained despite the global economic crisis. Under the stimulus package, Australian taxpayers who, from the previous taxation year, reported taxable incomes of greater than nil and less than \$100,000 would receive tax-bonus payments between \$250 and \$900. Pape received a tax-bonus payment of \$250 and sought a declaration that the tax-bonus payment was unconstitutional.
- [188] The High Court examined a number of constitutional provisions, including trade and commerce s 51(i), taxation s 51(ii), external affairs s 51(xxix), incidental power s 51(xxxix), executive power s 61 and appropriation of funds under s 81 and s 83. The examination of the executive power is of particular relevance.
- [189] In examining the executive power, Chief Justice French's judgement outlined:

Statutory prerogative and non-prerogative capacities form part of, but do not complete the executive power. They lie within the scope of s 61, which is informed by history and the common law relevant to the relationship between the Crown and the Parliament. [...] Section 61 is an important element of a written constitution for the government of an independent nation. While history and the common law inform its content, it is not a locked display cabinet in a constitutional museum. It is not limited to statutory powers and the prerogative. It has to be capable of serving the proper purposes of a national government. On the other hand, the exigencies of "national government" cannot be invoked to set aside the distribution of powers between Commonwealth and States and between the three branches of government for which this *Constitution* provides, nor to abrogate constitutional prohibitions.²⁷¹

[190] This approach was also favoured by Justices Gummow, Crennan and Bell who focused on the nationhood power. Justices Gummow, Crennan and Bell suggested that while the States have the power to ensure the executive power does not unduly encroach on the rights of the States, in circumstances of national necessity the Commonwealth's function as a government of national character comes to the fore. In doing so, the High Court recognised that the Executive Government is 'capable and empowered to act in times of crisis, be it war [or] natural disaster'²⁷² using the executive head of power.

²⁷¹ Pape v Commissioner of Taxation (2009) 238 CLR 1, 60 [127] (per French CJ).

²⁷² Pape v Commissioner of Taxation (2009) 238 CLR 1, 85 [233] (per Gummow, Crennan and Bell JJ).

[191] The executive arm of government responds to a natural disaster in many ways, from crisis management to devising macroeconomic policy settings. *Pape* provides authority for the proposition that the executive power authorises national-level emergency responses to natural disasters. 'The majority [in *Pape*] [...] noted that, like defence power, the nationhood power was elastic, and could expand in times of national emergency.²⁷³ This could authorise the creation of national-level responses to natural disasters.²⁷⁴ Though obiter dictum, the comments of the majority in Pape acknowledged the limited ability of the Commonwealth government to use the executive power for a variety of matters of national significance involving natural disasters.

Addressing Judicial Concerns of an Expansive Executive Power

- [192] Before and since Pape, judicial opinion has cautioned against unfettered executive power. In the AAP Case, Justice Mason held the executive power required the activity in question to be 'peculiarly adapted to the government of a nation and which cannot be otherwise carried on than for the benefit of the nation²⁷⁵. In Davis v *Commonwealth*,²⁷⁶ Justice Brennan referred to the test of Justice Mason from the *AAP Case*,²⁷⁷ highlighting the test 'is an appropriate formulation for a criterion to determine whether an enterprise or activity lies within the executive power of the Commonwealth²⁷⁸ The application of the executive power has been controversial with minority judgements suggesting that future applications may be dependent on a case-by-case analysis.²⁷⁹
- [193] In the case of *Pape*, the entire court (both majority and minority judgements) accepted that there were limits to the executive power and to its expansion. Importantly, there was unanimous agreement that it was not possible to simply call an event a 'national emergency' and automatically expand the powers of the Commonwealth under s 61. Although the majority judgement (Chief Justice French, Justices Gummow, Crennan

²⁷³ Duncan Kerr, 'Executive Power and the Theory of Its Limits: Still Evolving or Finally Settled?' (2011) 13(2) *Constitutional Law and Policy Review* 22, 39. ²⁷⁴ Joe McNamara, 'The Commonwealth Response to Cyclone Tracy: Implications for Future Disasters' (2012)

²⁷⁽²⁾ *The Australian Journal of Emergency Management* 37, 40.

AAP Case (1975) 134 CLR 338, 397-398 (per Mason J).

²⁷⁶ Davis v Commonwealth (1988) 166 CLR 79.

²⁷⁷ AAP Case (1975) 134 CLR 338, 397-398 (per Mason J).

²⁷⁸ Davis v Commonwealth (1988) 166 CLR 79, 111 (per Brennan J).

²⁷⁹ Kerr, above n 273.

and Bell) accepted that the global financial crisis met the threshold of a 'national emergency', their Honours commented:

As already mentioned, that there is a global financial and economic crisis is not contested in this proceeding. It can hardly be doubted that the current financial and economic crisis concerns Australia as a nation. Determining that there is the need for an immediate fiscal stimulus to the national economy in the circumstances set out above is somewhat analogous to determining a state of emergency in circumstances of a natural disaster. The Executive Government is the arm of government capable of and empowered to respond to a crisis be it war, natural disaster or a financial crisis on the scale here.²⁸⁰

[194] The minority judgement of Justices Hayne and Kiefel in Pape²⁸¹ focused on the use of the terms 'natural disaster' and 'emergency'. An inference was drawn that words such as 'emergency' and 'crisis' were highly politicised and claims of national disaster or crisis require real consideration to determine the effect or likely effect:

Words like 'crisis' or 'emergency' do not readily yield criteria of constitutional validity. It may be accepted, for the purposes of argument, both that there is shown to be a national crisis to which a national response is required and that only the Commonwealth has the administrative and financial resources to respond. It does not follow, however, that the Commonwealth's executive power to respond to such circumstances by spending money is a power that is unbounded. Were it so, the extensive litigation about the ambit of the defence power during World War II was beside the point.

Though variously expressed, the argument by reference to national "crisis" or "emergency" can be summed up as being: "There is a crisis; if the Commonwealth cannot do this, who can?"

What that and similar forms of rhetorical question obscure is a conflation of distinct questions about ends and means. The questions are conflated because the legislative power to enact the Impugned Act is treated as depending upon the execution of a power, said to be implicitly vested by the *Constitution* in the Executive, to meet a national crisis (in this case a financial or economic crisis). But if that is the *end* to which the exercise of power is to be directed, it by no means follows that any and every *means* of achieving that end must be within power. To argue from the existence of an emergency to either a general proposition that the Executive may respond to the crisis in any way it sees fit, or to some more limited proposition that the Executive has power to make this particular response, is circular.

Describing the expenditure in issue in this matter as a "short term fiscal [measure] to meet adverse economic conditions affecting the nation as a whole" engages no constitutional criterion of a kind hitherto enunciated by this Court. It is a description

²⁸⁰ Pape (2009) 238 CLR 1, 89 [233] (per French CJ, Gummow, Crennan and Bell JJ).

²⁸¹ Pape (2009) 238 CLR 1.

that conflates the distinction between ends and means that this Court must maintain. It is for the political branches of government, not this Court, to fix upon the ends to be sought by legislative or executive action. It is for the Court, not the political branches of government, to decide whether the means chosen to achieve particular political ends are constitutionally valid and it is for the Court to identify the criteria that are to be applied to determine whether those particular means are constitutionally valid.

The question for decision is whether the response that has been made (by the enactment of the Impugned Act) is within power. That question is not answered by pointing out why the Impugned Act was enacted.

Reference to notions as protean and imprecise as "crisis" and "emergency" (or "adverse effects of circumstances affecting the national economy") to indicate the boundary of an aspect of executive power carries with it difficulties and dangers that raise fundamental questions about the relationship between the judicial and other branches of government.

It was noted at the start of these reasons that no party or intervener disputed that there is a global financial crisis, or sought to suggest that Australia stands apart from the crisis or is immune from its effects. It was, therefore, not necessary in this case to identify the relevant constitutional facts. In particular, it was not necessary to examine whether it is for this Court to decide what constitutes a "crisis" or an "emergency", or whether it is sufficient that the Executive has concluded that circumstances warrant such a description. If it is for the Court to decide these matters, questions arise about what evidence the Court could act upon other than the opinions of the Executive, and how those opinions could be tested or supported. Yet, if it is to be for the Executive to decide whether there is some form of "national emergency" (subject only to some residual power in the Court to decide that the Executive's conclusion. ²⁸²

[195] In essence, *Pape* illustrated that the Commonwealth may have the executive power under s 61 to deal with a natural disaster that amounts to a national emergency, provided the means it employs be within its constitutional remit. The global financial crisis upon which *Pape* was decided, was a sufficient 'national emergency' to satisfy the majority. However, the minority judgement was much more cautious in limiting the exercise of s 61 on the basis of 'national emergency' to ensure that the power does not become unlimited. The proposed National Catastrophe Insurance Scheme would require a natural disaster to be of catastrophic proportions - threatening the nation or a sufficiently significant number of homeowners for only the Commonwealth to manage. On this basis, the enactment of the Government Guarantee for the proposed National

²⁸² Pape (2009) 238 CLR 1, 122 – 123, [347] – [353] (Hayne and Kiefel JJ).

Catastrophe Insurance Scheme would occur if the National Catastrophe Insurance Scheme does not have sufficient funds and thus satisfy the constitutional remit that the matter is one the Commonwealth should manage. One major difference between the situation examined in *Pape* and that of the proposed National Catastrophe Insurance Scheme is that the proposed Scheme is not a response to a global and unforeseen catastrophe, rather it responds to known risks and would operate under existing legislation and this existing legislation would be law with respect to insurance and thus constitutionally sound. However, understanding all of the potential constitutional issues is important to ensure that the Scheme would remain operational should its constitutional validity be challenged.²⁸³

- [196] Subsequent to Pape, judicial opinion in Williams²⁸⁴ indicated that notwithstanding the potential broadening of the executive power, its scope remains limited. In Williams, the Commonwealth Government funding of school chaplains in State schools was challenged. Williams' children attended a State school with a federally funded chaplain: he challenged the funding on the basis it was not constitutionally valid.
- [197] Chief Justice French held that the Commonwealth cannot use the executive power on the sole basis that it operates as a national government.²⁸⁵ Justices Gummow and Bell highlighted the need for the parliament to have an additional legal basis in order for the executive power to apply.²⁸⁶ The implication of this judgement limited the scope of the executive power to ensure it was brought within the concepts of federalism and responsible government, rather than merely be pegged to broader concepts of nationhood. The relevant law was declared constitutionally invalid, as the funding arrangement had no legislative basis beyond the executive power.²⁸⁷
- [198] Williams supports the approach taken in the proposed National Catastrophe Insurance Scheme, the constitutional basis of deriving power not only under the executive power, but also the insurance power (see Chapter 2) or the taxation power (see Chapter 4).

²⁸³Michael Eburn, Australian National University (School of Law), 'Personal Communication to Rachel Anne Carter', 2016. ²⁸⁴ *Williams* [2012] HCA 23.

²⁸⁵ Williams [2012] HCA 23, 44 [83] (per French CJ).
²⁸⁶ Williams [2012] HCA 23, 57 [122] (per Gummow and Bell JJ).
²⁸⁷ Williams [2012] HCA 23, 44 [83], 163, 378.

Executive Power and the Australian Reinsurance Pool Corporation

- [199] Several constitutional issues that are relevant to the proposed National Catastrophe Insurance Scheme were debated when the proposal for the Australian Reinsurance Pool Corporation was established. Although not constitutionally tested, the Commonwealth Parliament, in passing the *Terrorism Insurance Act 2003* (Cth), which created the Australian Reinsurance Pool Corporation, considered the ability of the Commonwealth to legislate for a national catastrophe (re)insurance scheme.
- [200] In debating on the Terrorism Insurance Bill 2003 (Cth), the Australian Parliament referred to the same considerations the High Court had assessed when examining s 61 of the *Commonwealth Constitution*. The parliamentary debates referred to the significance of the issue terrorism (man-made catastrophe risk) at a national as opposed to a State level. The need for the Australian Reinsurance Pool Corporation centred on the need to promote certainty and remedy market failure. These broad issues were discussed by the High Court as factors that would help determine whether the exercise of an executive power could be justified under the nationhood power. Although there are differences in catastrophic events generated by terrorist activities and natural disasters of catastrophic proportions, the broad category of catastrophic events would encompass similar arguments.²⁸⁸

²⁸⁸ While terrorism events are 'man-made' and are less able to be modelled through probabilistic methods, natural disasters of catastrophic proportions are infrequent (but generally large), however these types of events can be modelled based on parametric, probabilistic or deterministic modelling techniques.

Chapter 4: Taxation Considerations and the Proposed National Catastrophe Insurance Scheme

- [201] This chapter examines whether the premium to be charged by the proposed National Catastrophe Insurance Scheme would be a tax. Should the Commonwealth Government's ability to impose premiums fall outside the scope of the insurance power (see Chapter 2), it still may find constitutional validity by virtue of the taxation power. Under s 51(ii) of the *Commonwealth Constitution*, the Commonwealth Government could legislate in relation to 'taxation but so as not to discriminate between States or parts of States'. As the proposed National Catastrophe Insurance Scheme seeks to operate Australia wide, it would not offend the non-discrimination requirement of this head of power.²⁸⁹
- [202] There are two tax questions regarding the premiums charged and collected by the proposed National Catastrophe Insurance Scheme: the first involves categorisation of the premium for tax purposes and the second the operation of tax exemptions. Premiums for the proposed National Catastrophe Insurance Scheme could be categorised as either a tax or a fee for service. If the premiums charged are characterised as a fee for service, the proposed National Catastrophe Insurance Scheme would be liable to collect Goods and Services Tax on the premiums and provide this revenue to the Commonwealth Government. In this context, the question arises whether the proposed National Catastrophe Insurance Scheme would be eligible for tax exemptions on premium income and/or funds held as capital reserves. A tax exemption for the premiums collected and for the funds held as capital reserves would greatly

²⁸⁹ In *Street v Queensland Bar Association* (1989) 168 CLR 461, 476 the High Court ruled that the 'test should be whether the action has the purpose or effect of discriminating against a group of persons by reference in substance to their residence interstate.' The decision was very narrowly confined, focusing on reciprocity of professional rights among members of the various States. Also see discussion on s117 in [181]. In *Castlemaine Tooheys Limited v South Australia* (1990) 169 CLR 436, 473 the majority (Mason CJ, Brennan, Deane, Dawson, and Toohey JJ) determined 'the question whether a particular legislative enactment is a necessary or even a desirable solution to a particular problem is in large measure a political question best left for resolution to the political process.' Determining if a particular piece of legislation offends the Constitutional guarantee (no discrimination between States or parts of States), requires proportionality of the measure undertaken. If the effect of discrimination was merely incidental to the implementation of any legislative regime and is not protectionist and does not discriminate or disadvantage residents of a different State this will not offend the Constitutional guarantee. See also Genevieve Ebbeck, 'The Future for Section 117 as a Constitutional Guarantee' (1993) 4 *Public Law Review* 89.

assist in the operation of the scheme. In addition to lowering the operational costs, it would also add to the capital available within the scheme.

Tax Classification of Premiums under the Proposed National Catastrophe **Insurance Scheme**

[203] As discussed in Chapters 2 and 3, the Commonwealth Government has a constitutional power to legislate in respect of the proposed National Catastrophe Insurance Scheme.²⁹⁰ In a recent study, economist Carolyn Palmer suggested that the taxation system could be utilised to share costs arising from a natural disaster. She suggested:

> Where tax policy choices are likely to have a real impact (and may therefore be either consistent or inconsistent with standard tax policy principles), is on the risk reduction and risk transfer activities that households take; for example, government may choose to promote insurance coverage at an individual and firm level through the tax system.²⁹¹

- [204] In determining whether the premium to be charged by the proposed National Catastrophe Insurance Scheme would be a tax, the Australian courts may divide the examination into three key aspects:²⁹²
 - compulsory exaction of money²⁹³
 - public authority²⁹⁴ has issued/would issue the charge²⁹⁵ •
 - charge was issued/would be issued for a public purpose.²⁹⁶

²⁹⁰ Under the *Commonwealth Constitution*, it will be possible for the Commonwealth Government to legislate to effect the Natural Catastrophic Insurance Scheme due to the following constitutional powers (used individually or collectively) of any of the following heads of powers (individually or collectively):

[•] Insurance power—s 51(xiv)

[•] Executive power—s 61

[•] Rights of residents within states—s 117.

²⁹¹ Carolyn Palmer, 'Flood, Fire and Famine: Tax Policy Lessons from the Australian Responses to Natural Disasters' (Working Paper 15/2004, Victorian University of Wellington, October 2014) 6. ²⁹² Browns Transport Pty Ltd v Kropp (1958) 100 CLR 117, 129.

²⁹³ Air Caledonie International v Commonwealth (1988) 165 CLR 462, 467.

²⁹⁴ In Air Caledonie International v Commonwealth (1988) 165 CLR 462, 467 it was said that the compulsory acquisition of money does not necessarily need to be undertaken by a public authority. In the case of Australian Tape Manufacturing Association Ltd v Commonwealth (1993) 176 CLR 480, 501 although the authority imposing the charge in that case was deemed to be a public authority, it was decided that it may not be necessary to have a public authority imposing the charge: 'the better view is that it is not essential to the concept of a tax that the exaction should be by a public authority'. Although this judicial opinion exists, as it is obiter [dictum], currently there is still a requirement to have a public authority impose the charge.

⁵ Matthews v Chicorv Marketing Board (Victoria) (1938) 60 CLR 265, 276.

²⁹⁶Matthews v Chicory Marketing Board (Victoria) (1938) 60 CLR 265, 276; Logan Downs Pty Ltd v Commissioner of Taxation (1965) 112 CLR 177.

Compulsory Exaction of Money

[205] Whether the premiums payable by Australian homeowners are considered taxes may affect the ability of the scheme to collect money and the mechanisms for so doing. *Air Caledonie International v Commonwealth*²⁹⁷ is the leading High Court case for categorising a charge as a tax. The key legal question of this case concerned whether the compulsory extraction of money was indicative of a tax. The premium to be charged under the proposed National Catastrophe Insurance Scheme would satisfy the element of compulsory exaction. Under the National Catastrophe Insurance Scheme (as proposed), homeowners would have no choice in relation to coverage or paying the corresponding premium. According to the High Court, compulsion may result in a charge being characterised as a tax when:

A person [...] required to pay the exaction is given no choice about whether or not they acquire the service and the amount of the exaction has no discernible relationship of the value of what is acquired, the circumstances may be such that the exaction is, at least to the extent that it exceeds that value, properly to be seen as a \tan^{298} .

[206] In *Matthews v Chicory Marketing Board (Victoria)*,²⁹⁹ the High Court placed great emphasis on the need to analyse the correlation between the amount charged and the quantity or value of the goods. Therefore, if the National Catastrophe Insurance Scheme were to operate with a uniform pricing structure, regardless of the risk exposure or locality of an individual property, the premium would more likely be defined as a tax than as a fee for service. However, if the premium includes risk-based factors, it is less likely that it would be characterised as a tax and is more likely to be considered a fee for service. The types of risk factors that may be used for calculating the premium include the locality of the property, mitigation measures and the type of building in question, including the materials used. This may present a problem for the proposed National Catastrophe Insurance Scheme. Although it might be desirable to have some risk based pricing used to calculate insurance premiums, from a taxation perspective, the factors considered in previous cases by the courts suggest that the use

²⁹⁷ Air Caledonie International v Commonwealth (1988) 165 CLR 462.

²⁹⁸*Air Caledonie International v Commonwealth* (1988) 165 CLR 462, 467.

²⁹⁹Matthews v Chicory Marketing Board (Victoria) (1938) 60 CLR 265.

of risk based factors in pricing could cause the premium to be classified as a fee for service. If the premium were to be deemed a fee for service, the gross surcharge (due to the Goods and Services Tax and Stamp Duty being added to the premium charged by the Scheme) would be higher and there would be an increase in operational expenses.

- [207] At this point it is apposite to add that: 'a charge would not be a fee for service unless the citizen has asked for the service or in fact received the service for a value of the charge'.³⁰⁰ Although some Australian homeowners would have asked for or sought coverage against structural damage to their home arising from a natural disaster of catastrophic proportions, this is not true of all homeowners. Some Australian homeowners could claim that they did not seek to be covered by insurance and that they have received no value from the insurance cover with which they were provided.
- [208] Airservices Australia v Canadian Airlines International Ltd³⁰¹ raised the issue of whether a fee charged was a tax or a fee for service. Chief Justice Gleeson and Justice Kirby expanded on the tests provided in Air Caledonie International v Commonwealth by setting out a list of factors to aid in the determination of what amounts to a tax and what is a fee for service:
 - 'The charges were not imposed to raise revenue;
 - The charges were undoubtedly charges for the provision of services and facilities;
 - The charges were imposed to recover the cost of providing such services and facilities across the entire range of users;
 - The charges for categories of services were reasonably related to the expenses incurred in relation to the matters to which the charges related;
 - The services and facilities were, of their nature, part of an activity which must be highly integrated in order to be effective.

In those circumstances, there is no warranty for concluding that the charges amounted to taxation on the ground that they exceeded the value to particular users

³⁰⁰ Suri Ratnapala and Jonathan Crowe, *Australian Constitutional Law: Foundations and Theory* (Oxford University Press, 3rd ed, 2012) 339.

³⁰¹ Airservices Australia v Canada Airlines International Ltd [1999] HCA 62.

of particular services or the cost of providing particular services to particular users.' 302

When applied to the Scheme, the fact that a premium may represent more than the actual value of an actuarially sound insurance policy for a particular home, would not automatically prevent the premium from being categorised as a fee for service. However, the fact that the premium might be set at a higher price to ensure that the National Catastrophe Insurance Scheme would be fiscally sound and that the insurance cost would be divided between all Australian households may render the premium more likely to be a tax.

[209] If the premiums under the proposed Scheme were ultimately characterised as a fee for service, the Commonwealth Government would have no power to levy them under the taxation power. Consequently, the Commonwealth Government would need to rely on the premiums being incidental to the insurance power, as the service provided is insurance. Under the proposed Scheme, Australian households receive insurance (a service) for their properties, protecting them against structural damage up to the first \$375,000 of damage per natural disaster event.

Charge Imposed by a Public Authority

- [210] It is probable that the premium to be charged under the proposed National Catastrophe Insurance Scheme would be classified as a tax rather than a fee for service. This is more likely as the proposed National Catastrophe Insurance Scheme would impose a uniform premium contribution. However, if the uniform premiums change to differentiated premiums based for example on risk based pricing, this classification might be affected. The more factors that relate the premium charged to the individual property, the more likely the premiums charged would be characterised as a fee for service rather than a tax.
- [211] The proposed National Catastrophe Insurance Scheme seeks to operate as a public financial corporation (discussed in [41] - [45]) and thus the premium charged is imposed by a public authority. This is required as part of the criteria for establishing when a charge is a tax.

³⁰² Airservices Australia v Canada Airlines International Ltd [1999] HCA 62, 92 (per Gleeson CJ and Kirby J).

Charge Imposed for a Public Purpose

- [212] The High Court has allowed great flexibility in interpreting a charge issued for a public purpose.³⁰³ The High Court is more likely to determine there is a public purpose if all other factors illustrating the charge imposed (premium) is a tax have already been established.
- [213] As discussed in Chapter 1, the justification for the proposed National Catastrophe Insurance Scheme is to address the inadequacies of the current insurance and regulatory system (discussed in [33] - [38]). In particular, it aims to provide a solution to the issues of access and affordability—to ensure that all Australians have access to affordable insurance to provide cover against structural damage. The issue of homeowners not having access to affordable insurance in some areas of Australia has been defined as a public interest issue.³⁰⁴ Consequently, the payment of a premium reflecting the amount needed to ensure the National Catastrophe Insurance Scheme is fiscally sustainable falls within the meaning of a charge issued for a public purpose.

Commonwealth Government's Involvement in Funding the National Catastrophe Insurance Scheme

- [214] The scheme would be funded by the Commonwealth Government through the collection of insurance premiums from the insureds. If the Commonwealth Government would be required to provide additional capital to establish the National Catastrophe Insurance Scheme, the exact amount of any capital contributions would be based on the figures calculated by an actuary and required by the regulations to establish the Scheme. The Commonwealth Government would also provide a Commonwealth Government Guarantee should all of the funds of the Scheme and its capital reserves be exhausted after a natural disaster of catastrophic proportions.
- [215] The benefit of having the proposed Scheme funded in this way is that it addresses the key issues of access and affordability. Since the National Catastrophe Insurance

³⁰⁴ 'Australia: Insurance in N Queensland Needs to be More Affordable', *Asia Insurance Review (online)* 3 March 2015 http://www.asiainsurancereview.com/News/View-NewsLeteer-Article/id/32199/Type/eDaily?utm_source?/Edaily-News-Letter/utm_medium/Grup-

³⁰³ Logan Downs Pty Ltd v Commissioner of Taxation (1965) 112 CLR 177.

Email/utm?campaign/Edaily-NewsLetter>; 2009 Victorian Bushfires Royal Commission, *Final Report*, above n 110, 36, Recommendation 64 [Removal of Transactional Taxes as a Means of Making Insurance More Affordable]; Natural Disaster Insurance Review, above n 51, Pivotal Recommendation 3; 35–41 [3.1–3.31], Pivotal Recommendation 2.

Scheme would be compulsory, there would be procedures created by the Commonwealth Government for determining discounts available to different vulnerable groups in society (lower socioeconomic backgrounds; persons with disability, the elderly, etc.) These arrangements would provide insureds with greater certainty. If a natural disaster of catastrophic proportions caused structural damage to an individual's house they could receive government guaranteed compensation up to the capped amount (subject to the actual losses sustained).

- [216] The OECD has suggested that 'ex ante governmental schemes may, by restricting the scope of compensation (for instance by strictly defining eligible damages and placing a cap on the level of public assistance, with payments covering only essential or reasonable needs), serve to reduce expectations of full compensation of losses and at the same time provide greater certainty regarding compensation for severely affected individuals...Well designed governmental schemes may help to reduce moral hazard and avoid the crowding out of private insurance, thus complementing these markets.'³⁰⁵ The National Catastrophe Insurance Scheme, once fully operational, would be ideally funded by the insureds' premium payments. The ability to raise sufficient reserves would depend upon the number of natural disasters of catastrophic proportions and the damages sustained to household buildings. Although models can help determine the probability of a particular event occurring or a series of events occurring, at present, there are inherent problems with modelling methodology which means that such projections are not certain. Rather models are used as a mere guide (and means of estimating probability) of the type of losses which may be expected.
- [217] The risk of insufficient reserves if there is a highly skewed distribution of losses³⁰⁶ and the insurance premiums charged are not risk related, is at least partially alleviated by the compulsory nature of the Scheme and the inclusion of a variety of high and low risks for each of the different types of listed natural disaster of catastrophic proportions. There is also the potential for volatility of losses; if there are several big losses within a short period, the proposed National Catastrophe Insurance Scheme could be unable to settle claims and thus could call upon the Commonwealth

³⁰⁵ OECD, Disaster Risk Financing: A Global Survey of Practices and Challenges, above n 40, 102.

³⁰⁶ It is possible to have large losses well in excess of the historical average (as estimated using normalised losses). This is the nature of natural disasters and is why pricing them is difficult without invoking contingent capital such as reinsurance. Although the thesis recognises this inherent difficulty, this challenge with pricing and ensuring the existence of adequate reserves will be left to actuaries and catastrophe modellers.

Government. The ability for of the Scheme to rely upon the Commonwealth Government in the absence of sufficient capital reserves post event is based on the Commonwealth Guarantee. The difficulty with the Government Guarantee (and a need for the Scheme to accept all risks) can be illustrated with the example of the National Flood Insurance Program in the United States where due to sequential events (flood and hurricane-induced storm surge)³⁰⁷ incurred a deficit of US\$24 billion.³⁰⁸ After Super Storm Sandy in 2013, given the existing deficit, the National Insurance Flood Program had its borrowing limit increased to US\$30.4 billion. Consequently, National Flood Insurance Program 'policyholders are now very much dependent upon government largesse, a circumstance the scheme was presumably created to avoid.³⁰⁹

[218] Another way of funding the proposed National Catastrophe Insurance Scheme would be through the use of actuarially sound prices and contributions from insurers, insureds and the Commonwealth Government. There are economic and fiscal stability benefits in running the scheme with actuarially sound pricing methods such as a reduced likelihood of the scheme having a deficit. Further, pricing in this way could be used as a signpost to show individuals the actual risk. There are however some problems associated with charging actuarially sound prices (aside from the tax considerations discussed earlier) for all properties. These problems include the economic burden associated with the affordability for some households of the compulsory nature of the proposed National Catastrophe Insurance Scheme.

Collection of Premium for the Proposed National Catastrophe Insurance Scheme

[219] Once the Commonwealth Government has established the infrastructure and procedures for collecting premium income from insureds, the responsibility for these matters would revert to the Executive of the Scheme (overseen by the Commonwealth Government). Several different mechanisms could be employed by the Commonwealth Government as a means of collecting premiums from individual homeowners insured

³⁰⁷ McAneney et al, 'Government-sponsored natural disaster insurance pools', above n 12, 3.

³⁰⁸ Darryl Fears, 'Rise in Government Insurance Rates to Mirror Rising Waters, Flood Debt' 26 March 2015 *Washington Post (online)* <<u>https://www.washingtonpost.com/national/health-science/rise-in-government-insurance-rates-to-mirror-rising-waters-flood-debt/2015/03/28/8f9f17c6-d316-11e4-ab77-9646eea6a4c7 story.html>.</u>

³⁰⁹ McAneney et al, 'Government-sponsored natural disaster insurance pools' above n 12, 5.

under the proposed National Catastrophe Insurance Scheme. The three key options for collecting premiums which will be discussed are:

- 1. Levy to be imposed by the Commonwealth Government (on behalf of the Scheme) using the existing infrastructure for collecting council taxes (council 'rates');
- 2. Levy to be imposed by on the land based upon the land tax model;
- 3. Commonwealth Government could issue an insurance policy with a notice requiring insureds to pay. The way an insured would be required to pay under this model would be based upon the terms and conditions of the policy. This is essentially a premium collection model used by the insurance industry.

An additional mechanism under which the Commonwealth Government could collect premiums, is to tie the premium to be charged by the proposed National Catastrophe Insurance Scheme to private insurance through a levy or surcharge. Internationally it is common for the premium charged by a national scheme to be tied to an existing insurance policy through a levy or surcharge added to the existing policy (discussed in [374]). For example, the Earthquake Commission collects premium income through an insurance levy added to the cost of fire insurance policies. Similarly, the *Consorcio de Compensación de Seguros* also receives its premium income though an insurance levy added to the cost of household insurance. In both of these examples the insurer recovers the levy and repays the money to the national scheme in return for a collection fee. Although this is an option under the National Catastrophe Insurance Scheme, it will not be discussed further as the proposed scheme seeks to operate in a compulsory thus presenting a practical difficulty of collecting the Scheme's premium income in this way.

Commonwealth Government Could Impose a Levy Utilising the Council Rates System

[220] The argument regarding the Commonwealth facilitating premium income through the council rates system is beguiling;³¹⁰ however constitutionally impracticable for the following reasons:

³¹⁰ The legislation enabling each State and Territory Government to delegate authority to local councils to impose council rates is subject to

[•] Local Government Act 1989 (Vic) Pt 8 (Rates and Charges on rateable land)
- The Commonwealth Government does not have power under s 51 of the ٠ Commonwealth Constitution to levy premiums through council rates without voluntary co-operation of each and every council;
- It is unlikely that the Commonwealth would be able to obtain support from every council Australia wide. Even if the Commonwealth Government were to elicit such support, on the basis that local councils are elected and governed by State and Territory Governments, any arrangement is likely generate instability.
- [221] Although not a practical option from a constitutional perspective, the mechanisms for levying rates through councils may be of interest. In analysing the efficiency of council tax rates, the Australia's Future Tax System (Henry Tax Review) noted that 'council rates are broad-based, low-rate taxes levied on the value of land...Council rates are administered by local governments to fund certain services they provide, such as sanitation and planning administration.³¹¹
- [222] 'Overall, council rates are relatively efficient, simple and fair taxes. This is consistent with the indicative modelling of efficiency costs of taxes calculated for the [Henry Tax Review]. Rates are generally applied to all land uses with limited exemptions and apply equally to all properties within the council areas.³¹² If councils were to include the National Catastrophe Insurance Scheme's premium payments as a discrete part of their already collectable taxes, it would enable the premium to be linked with a particular property without establishing a new collection system. This method would be efficient and reduce costs associated with records identifying homeowners who have paid their premiums or still have outstanding premiums.

Local Government Act 1993 (Tas) Pt 9 (rates and charges)

Local Government Act 1993 (NSW) Ch 15, Pt 5 (Levying rates and charges)

Local Government Act 1995 (WA) Pt 6, Div 6 (Rates and Service charges)

Local Government Act 1999 (SA) Ch 10, ss 146 – 185 (Rates and charges)

Local Government Act 2009 (Qld) s 94

Local Government (Rates and Charges Remissions) Act 1991 (Tas)

Northern Territory Rates Act Pt III (Recovery of rates)

Rates Act 2004 (ACT) Pt 3, ss 13-19 (Imposition and payment of rates).

³¹¹ Ken Henry, Australian Future Tax System: Final Report (Commonwealth Government Publishing Service, Canberra, 2010) 257. ³¹² Ibid 258.

[223] Linking charges associated with weather related events to land based taxes such as council rates, is the current practice in all states except New South Wales (will begin in 2017) in relation to the imposition of the Fires Services Levy ([239] - [241]).³¹³ Legally, each State has enacted legislation facilitating the collection of the Fire Services Levy/ Emergency Services Levy³¹⁴ and enabling this charge to be applied to land and payable with council rates. To ensure transparency, home owners are informed of the amount payable as a Fire Services Levy on their council 'rates' certificate.³¹⁵ In calculating the rate payable by the homeowner, the rateable value,³¹⁶ capital improved value of leviable land³¹⁷ or unimproved rateable value of the land³¹⁸

- *Emergencies Act 2004* (ACT) Sch 1 (Ambulance Levy)
- Emergency Services Funding Act 1998 (SA) Pt 3, Div 1, Sub Div 1, s 15
- Fire Brigades Act 1989 (NSW) s 48
- Fire and Emergency Services Authority of Western Australia Act 1998 (WA) Pt 6A, s 36B, ss 36O 36Q
- Fire and Emergency Services Act 1998 (WA) Pt 6A, ss 360 36Q
- Fire and Rescue Services Act 1990 (Qld) s 107
- Fire and Rescue Services Regulations 2001 (Qld) Sch 2
- Fire Services Act 1979 (Tas) s 77A, s 81C
- Fire Services Property Levy Act 2012 (Vic) Pt 3, Div 2, s 26
- Rates Act 2004 (ACT) Pt 8, s 69A; Sch 1, Pt 1.1
- State Emergency Services Act 1989 (NSW) Pt 5A, Div 3, s 24F; Sch 2.

³¹⁵ The owner of the land which is required to pay the Levy needs to be notified either on the council rates notice or through a separate notice. This specifically provided for in the State and Territory Legislation. See

- Emergency Services Funding Act 1998 (SA) s 16
- Fire and Emergency Services Act 1998 (WA) s 36J
- Fire and Emergency Services Authority of Western Australia Act 1998 (WA) s 36J
- *Fire and Rescue Services Act 1990* (Qld) s 114(1)(a)
- *Fire Services Act 1979* (Tas) ss 81D(2) s 81D(3)
- Fire Services and Property Levy Act 2012 (Vic) s 25
- Rates Act 2004 (ACT) s 77.

³¹⁶ The rateable value of the land is used in South Australia, Victoria and Western Australia. See

- *Emergency Services Funding Act 1998* (SA) s 6 (the charge is made up of a fixed component including the rateable value of the land and a variable component)
- *Fire and Emergency Services Act 1998* (WA) s 36H (levy is to be determined by the gross rental under the *Valuation of Land Act 1978* (WA))

• Fire and Emergency Services Authority of Western Australia Act 1998 (WA) s 36H.

³¹⁷ Fire Services Property Levy Act 2012 (Vic) s 16, s 17C.

 ³¹³ For a detailed discussion of the operation of the Fire Services Levy in each Australian State and Territory see Rachel Anne Carter, 'Wild Fires–The Legal Regulatory System of Insurance and Emergency Services Funding' (2011) 14 *Southern Cross University Law Review* 75, 75 – 92.
 ³¹⁴The Fire Services Levy or Emergency Services Levy is administered under State Government legislation or

³¹⁴The Fire Services Levy or Emergency Services Levy is administered under State Government legislation or legislation by the relevant Territory. The governing legislation for each State enabling the imposition of a Fire Services Levy is

The Northern Territory does not have a Fire Services Levy as the fire services are funded by the consolidated revenue.

In Tasmania there is a hybrid system where although levies are imposed on some insurance products, the Fire Services Levy is not payable by home insurance. The legislation enables local councils in Tasmania to collect their proportion from those who own land, but rather than the legislation referring to this as subject to collection from landowners it gives the local councils entire discretion regarding how this is collected.

may be used or a set fee may be prescribed by the legislation or regulations.³¹⁹ For properties which are charged based upon the rateable value or capital improved value or unimproved rateable value this is the rate at which the Council or Valuer-General³²⁰ determines the value of the property (usually done every two years). Administratively, councils are required to pass the collected funds to the State Government (or Commissioner collecting the Levy on behalf of the State Government). The procedure of streamlining the council taxes and the Fire Services Levy reduces the administrative costs associated with collection. Efficiency and cost savings mean that a lower sum could be charged to households.

[224] Although the Fire Services Levy being imposed on properties rather than as a tax on insurance is more equitable, there are also disadvantages associated with such a system. For example, rather than centralising the payment of premiums, this system splinters the premium collection and imposes additional responsibilities on local councils who may not have the resources or willingness to assist the Scheme. The unwillingness of the Council to assist the Scheme may be overcome through either financial incentives or legal obligations which would need to be imposed by State or Territory Governments (as the State and Territory Governments are able to legislate with respect to the governance of local councils). However, using the council 'rates' system would result in an important part of the Scheme (pricing household properties and thus if this is inadequate the potential for a property to be inadequately covered) being left to local councils with their capacity to artificially increase or decrease the rateable value or properties in a locality. The reason why a local council may artificially increase or decrease the rateable value of properties could be to ensure that the rates are affordable for those residing within the area.

³¹⁸ In the Australian Capital Territory, the unimproved rateable value is used under the *Rates Act 2004* (ACT) Pt 2, ss 6 - 12; Sch 1, Pt 1.1(1). ³¹⁹ Instead of charging an amount based upon the value of the property in Queensland a set fee is prescribed. See

³¹⁹ Instead of charging an amount based upon the value of the property in Queensland a set fee is prescribed. See *Fire and Rescue Services Act 1990* (Qld) s 108 (prescribed properties attract the fee); *Fire and Rescue Services Regulation 2001* (Qld) Sch 2.

In South Australia the amount charged is based upon a set fee and a variable component reflecting the value of the property (*Emergency Services Funding Act 1998* (SA) s 6). Similarly, in Victoria the property levy which is due is comprised of a fixed amount of \$100 for residential properties under s 11 (*Fire Services Property Levy Act 2012* (Vic)) as well as a variable amount. The formula for calculating the levy in Victoria is under s 17C.

 $^{^{320}}$ The term for the collection agent differs slightly between States and the ACT but the role is in essence the same – a person or entity responsible for determining the value of the property based upon the criteria outlined in the relevant State or Territory legislation. The term Valuer-General is employed in Victoria and South Australia.

Commonwealth Government Could Impose a Levy on the Land Through Incorporating the Premium Owed to be part of a Property Owner's Land Tax

- [225] A second and more viable option for the Commonwealth Government to collect premiums is incorporating the premium as a component of land tax. Beneficially, the land tax is tied to the property (land) and thus it may be easier to enforce who has paid their premiums and impose penalties on those who have failed to do so. Unlike the Commonwealth Government's capacity to use council tax rates as a collection vehicle, there is constitutional legitimacy for the Commonwealth to levy land taxes under the general taxation power (s 51(ii)). However, to ensure that the Commonwealth complies with the limitations of its constitutional powers, any tax imposed must be uniform between the states.
- [226] The Commonwealth Government has previously collected land tax under the *Land Tax Act 1910* (Cth) which was in operation until it was repealed on 1 April 1953 by the *Land Tax Abolition Act* 1953 (Cth). When the Commonwealth Government ceased to collect land tax in 1953, this enabled State governments to impose these land taxes for the purpose of State revenue. However, 'when the Commonwealth ceased to impose land tax during 1952- 1953, the States were slow to increase their own land taxes... Even today, the land tax imposed by the States exempts residential and rural land, so it can be argued that no real attempt has been made to fully exploit this tax base.'³²¹
- [227] Although land tax is currently levied at the level of State and Territory Government it operates in an area of concurrent power under the *Commonwealth Constitution* (discussed in [157] [158]). This means that the Commonwealth Government or the State Government is able to levy the tax should they choose to do so. If the Commonwealth Government enacts legislation enabling them to impose a land tax for the purpose of collecting premiums for the Scheme, to the extent of any inconsistency this would override any State or Territory legislation. This would occur based upon s 109 of the *Commonwealth Constitution*. However, if there is no inconsistency the Commonwealth and the State Governments could both legislate in relation to land tax.

³²¹ Denis James, 'Federal and State Taxation: A Comparison of the Australian, German and Canadian Systems' (Parliamentary Paper Current Issues Brief 1997 – 1998, Economic, Commerce and Industrial Relations Group, 3 November 1997)

<http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Ar chive/CIB/CIB9798/98cib05>.

- [228] Currently land tax as a state based tax is imposed by each State Government and the Government in the Australian Capital Territory.³²² No land tax is applied to property in the Northern Territory.
- [229] As land tax is currently exercised by the State Governments and the Government of the Australian Capital Territory, in the absence of the Commonwealth levying its own land tax, it would be necessary to obtain the support of all the State and Territory Governments for this premium collection method under the proposed Scheme. Moreover, the Commonwealth, rather than the States and Territories would have to bear the funding burden. The stability of the Scheme would also be precarious as the collection of premiums and thus the capital supply would be contingent upon the State and Territory Government's continuing to agree to collect premiums and to collect premiums in a uniform way. Legal Commentator John McLaren proposed an expanded utilisation of land tax in the future as 'a tax on land is a very efficient form of taxation as it does not adversely affect labour or capital'.³²³ The implication is that it would be preferable to apply one broad based land tax instead of (1) local councils charging council rates, (2) State and Territory Governments separately charging Stamp Duty and land taxes, and (3) the Commonwealth Government charging a premium for coverage under the Scheme as part of a land tax or as a new land tax. The proceeds of the tax would then be divided to ensure that each of the three levels of government still had access to revenue through the land tax. This is consistent with the findings of the Henry Tax Review which suggests

A redesigned land tax system could be simply administered by aligning local government rates with the land tax [and the premium for the Scheme]. Ideally, landowners should receive just one bill per year covering [all land based charges] and have a single point of contact for

- Land Tax Act 2002 (WA) s 5
- *Land Tax Act 2004* (ACT) s 9
- Land Tax Act 2005 (Vic) Pt 2, ss 7 9
- Land Tax Act 2010 (Qld) s 6
- Land Tax Assessment Act 2002 (WA) s 7
- Land Tax Management Act 1956 (NSW) Pt 3, s 7

³²² Land Tax is currently governed by each State Government and the Government of the Australian Capital Territory under the following legislation

[•] Land Tax Act 1936 (SA) s 4

[•] Land Tax Act 1956 (NSW) s 3AL; Sch 13 (Calculation of land tax)

[•] Land Tax Act 2000 (Tas) s 10

[•] Land Tax Rating Act 2000 (Tas) s 6; Sch 1 (Calculation of land tax on general land).

³²³ John McLaren, 'A Uniform Land Tax in Australia: What is the Potential for this to be a reality, post the 'Henry Tax Review'?' (2014) 29 Australian Tax Forum 43, 57.

enquiries, debt management and compliance...In deciding on an acceptable transition mechanism it would be necessary to strike a balance between revenue cost, complexity of design and the extent of shift in policy. The balance of these different considerations is best made by government at the time the reform is undertaken.³²⁴

- [230] On the basis of their power under the *Commonwealth Constitution*, the Commonwealth Government is able to resume its taxation powers in relation to land and apply the premium for the National Catastrophe Insurance Scheme as a land tax (without creating significant taxation reform). However, the Commonwealth Government abandoned land tax in 1953, and there may be no appetite or political will to resume such taxation. If the Commonwealth Government did not impose land tax itself, it could seek agreement from the States and the Australian Capital Territory (the Northern Territory does not impose land tax) as discussed above.
- [231] Even if the State Governments (and the Australian Capital Territory) were to agree, the scope of the land tax would have to be widened to accommodate for the collection of premiums from homeowners. Although the thresholds and means of collecting land tax differ slightly between the various State Governments, currently land tax is exempt from owner-occupier properties (i.e. homes/ primary residences). The proposed National Catastrophe Insurance Scheme targets properties which are currently exempt (these household buildings and residential land are covered by the Scheme). In short, the Commonwealth Government could use its constitutional powers to levy land tax through a new premium-collection system; however, given the existing exemptions it is unlikely the existing State based land tax system would be the most optimal.

Commonwealth Government's ability to Issue an Insurance Policy in the same way as Private Insurers

[232] The third option is that the Commonwealth Government could collect the insurance premium for cover provided by the National Catastrophe Insurance Scheme by issuing an insurance policy and seeking the insured pay for this. However, the compulsory nature of the Scheme, means that substantial sanctions would have to be imposed on individuals who fail to pay the premium or pay the premium late.

³²⁴ Henry, Australian Future Tax System: Final Report, above n 311, 267 - 268.

- [233] The method of issuing an insurance policy and seeking payment is the means by which the Australian Reinsurance Pool Corporation recovers their premium income. To explain the legal procedure for collecting premiums, a brief overview of the Australian Reinsurance Pool Corporations operations will be outlined.
- [234] Currently, the Australian Reinsurance Pool Corporation is the only government backed catastrophe insurance scheme in Australia. It provides terrorism cover, specifically commercial and industrial risks at rates which are set by the Commonwealth Government. It encourages industry participation. Reinsurance cover is provided pursuant to s 10 of the *Terrorism Insurance Act 2003* (Cth). The Commonwealth Government provides a guarantee worth \$10 billion.³²⁵
- [235] In the wake of the September 11, 2001 terrorist attacks in New York, owners of commercial real estate in Australia were finding the price of insurance for terrorism risk prohibitive. During the Second Reading Speech for the *Terrorism Insurance Bill 2003* (Cth), Stuart McArthur³²⁶ noted that insurance capacity existed only in specialist insurance markets such as Lloyd's; however, prices were prohibitive. McArthur stated that if affordable insurance cover was not made available for losses occasioned by terrorist acts, there would be a high likelihood of diminishing investment in Australian infrastructure. As a consequence of this market failure, the Australian Reinsurance Pool Corporation was established as a compulsory system. At the time, its operational infrastructure was described as representing a sensible approach to insurance involving the commercial insurance industry and the Commonwealth Government.
- [236] Under s 11(2)(a) of the *Terrorism Insurance Act 2003* (Cth) the Australian Reinsurance Pool Corporation is responsible for the collection of premiums.³²⁷ The

³²⁵ The Northern Australian Insurance Premiums Taskforce was commissioned in 2015 to look at the possibility of having a government backed insurance solution resolving the issues associated with affordability of insurance covering cyclone. An interim report was handed down on 17 August which suggested a number of possible options for the cyclone pool. See Commonwealth (Treasury), Northern Australia Insurance Premiums Taskforce: Interim Report (August 2015)

<http://www.treasury.gov.au/ConsultationsandReviews/Reviews/2015/NAIP-Taskforce>.

In November 2015, the final report was handed down. See Commonwealth (Treasury), Northern Insurance Premiums Taskforce: Final Report (November 2015)

<http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Reviews%20and%20Inquiries/2015/NAIP%20Taskforce/Final%20Report/Downloads/PDF/NAIP_final_report.ashx>

³²⁶ Commonwealth, *Parliamentary Debates*, House of Representatives, 26 March 2003, 13626 (Stuart McArthur).

³²⁷ Terrorism Insurance Act 2003 (Cth) s 11(2)(a).

legislation also enables the Australian Reinsurance Pool Corporation to charge fees for service that it provides in connection with the provision of terrorism-risk insurance.³²⁸

Offering Insurance Cover under the National Catastrophe Insurance Scheme on Compulsory Basis

- [237] The National Catastrophe Insurance Scheme (as proposed) is a compulsory system that is closely analogous to the Medicare system.³²⁹ The Medicare System³³⁰ in Australia is akin to a compulsory insurance system for public healthcare. A compulsory levy to cover Medicare was introduced in 1976 (under Medicare Mark II)³³¹ and since its introduction it has not been legally challenged. Medicare provides free or low cost medical, optical and hospital care for Australian residents and in some instances provides discounted dental treatment. The existence of Medicare is to ensure that all Australian residents have access to quality medical care and all Australian residents are required to pay a levy regardless of whether they have private medical cover.³³²
- [238] In addition to the Commonwealth Government having mandatory insurance schemes for discrete areas, there are a number of mandatory insurance schemes that operate

³²⁸ Terrorism Insurance Act 2003 (Cth) s 11(2)(b).

³²⁹ Additional, compulsory schemes supported by the Commonwealth Government include the Australian Reinsurance Pool Corporation and the National Disability Insurance Scheme. The National Disability Insurance Scheme will operate as a mandatory program run jointly by the Commonwealth Government and State and Territory Government to provide financial assistance to those with disabilities (based on need). The objective is to integrate people with disability into mainstream society. See Legislative Council of Western Australia, 'Disability Services Amendment Bill 2014' (Report 86, Standing Committee on Uniform Legislation and Statutes Review, May 2014) 1–29; National Disability Insurance Scheme, 'What is the National Disability Insurance Scheme?' (2015) <http://www.ndis.gov.au/what-is-the-ndis.

³³⁰Commonwealth, 'Medicare Background Brief,'
">http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/medicare>">http://www.aph.gov.au/About_Parliamentary_Departmentary_Departmentary_Library/Publications_Archive/arch

³³¹The Medicare system was originally established on 1 July 1975 under the *Health Insurance Act 1973* (Cth) and the Health Insurance Commission Bill 1973 (Cth). However due when the Whitlam government was dismissed, Medicare was revamped as Medicare Mark II which became operational on 1 October 1976. Currently Medicare operates under the *Medicare Levy Act 1986* (Cth). ³³²The levy is collected by employers through the 'Pay-As-You-Go (PAYG)' system. Individuals with a taxable

³³² The levy is collected by employers through the 'Pay-As-You-Go (PAYG)' system. Individuals with a taxable income of less than \$20,896³³² and couples with no children with a combined income of lower than \$35,261 are exempt from paying the Medicare Levy. For low income earners who receive an income higher than \$20,896 and less than \$26,121 or less than \$33,044 for seniors and less than \$41,306 for pensioners, there will be a reduction in the levy payable. See Australian Taxation Office, 'Medicare Levy reduction for low income earners' (2016) https://www.ato.gov.au/individuals/medicare-levy/medicare-levy-reduction-for-low-income-earners/). The threshold amount is increased by \$3,238 for each dependent child or dependent student under 25 years of age under s 8(5) of the *Medicare Levy Act* (Cth). For all other Australian taxpayers, the Medicare Levy is based upon the rate of 2% of the Australian tax resident's taxable income. See *Medicare Levy Act* 1986 (Cth) s 6; Australian Taxation Office, 'Medicare Levy' (2016) <https://www.ato.gov.au/Individuals/Medicare-levy/see.

under legislation passed by State Governments. Some examples are WorkCover³³³ and the Transport Accident Commission.³³⁴

- Work Health and Safety Regulation 2011 (ACT)
- New South Wales, WorkCover http://www.workcover.nsw.gov.au/

 Work Health and Safety Act 2011 (NSW)
 - Work Health and Safety Regulations 2011 (NSW)
- Northern Territory, WorkSafe http://www.worksafe.nt.gov.au/home.aspx
 - Work Health and Safety (National Uniform Legislation) Act 2003 (NT)
 - Work Health and Safety (National Uniform Legislation) Regulations 2003 (NT)
 - Workers Rehabilitation and Compensation Act 2003 (NT)
 - o Workers Rehabilitation and Compensation Regulations 2003 (NT)
 - Work Health Administration Act 2011 (NT)
 - Work Health and Safety (National Uniform Legislation) Implementation Act 2011 (NT)
 - Queensland, WorkSafe <https://www.worksafe.qld.gov.au/>
 - Work Health and Safety Act 2011 (Qld)
 - Work Health and Safety Regulations 2011 (Qld)
 - o Work Health and Safety and Other Legislation Amendment Act 2014 (Qld)
- South Australia, WorkCover https://www.workcover.com/
 - WorkCover Corporation Act 1994 (SA)
 - o Workers Rehabilitation and Compensation Act 1986 (SA)
- Tasmania, WorkCover < http://www.workcover.tas.gov.au/>
 - o Asbestos Related Diseases (Occupational Exposure) Compensation Act 2011 (Tas)
 - o Work Health and Safety Act 2012 (Tas)
 - o Work Health and Safety (Transitional and Consequential Provisions) Act 2012 (Tas)
 - Workers' (Occupational Diseases) Relief Fund Act 1954 (Tas)
 - Workers Rehabilitation and Compensation Act 1988 (Tas)
- Victoria, WorkSafe https://www.worksafe.vic.gov.au/
 - o Accident Compensation Act 1985 (Vic)
 - o Accident Compensation (Occupational Health and Safety) Act 1996 (Vic)
 - o Accident Compensation (WorkSafe Victoria Insurance) Act 1993 (Vic)
 - o Workers Compensation Act 1958 (Vic)
 - o Workplace Injury Rehabilitation and Compensation Act 2013 (Vic)
 - o Workplace Injury Rehabilitation and Compensation Regulations 2014 (Vic)
- Workplace Injury Rehabilitation and Compensation (Savings and Transitional) Regulations 2014 (Vic)
- Western Australia, WorkCover http://www.workcover.wa.gov.au/
 - Workers Compensation and Injury Management Act 1981 (WA)
 - o Employers Indemnity Policies (Premium Rates) Act 1990 (WA)
 - Employers' Indemnity Supplementation Fund Act 1980 (WA)
 - o Waterfront Workers (Compensation for Asbestos Related Diseases) Act 1986 (WA)
 - o Workers' Compensation (Common Law Proceedings) Act 2004 (WA)
- Workers' Compensation and Injury Management (Acts of Terrorism) Act 2001 (WA).

³³⁴ See the following transport-accident authorities' regulation and legislation

- Australian Capital Territory, Treasury ACT < http://www.treasury.act.gov.au/>
- New South Wales, Motor Accidents Authority http://www.maa.nsw.gov.au/about-us/about-the-nsw-ctp-scheme/useful-links
 - Motor Accidents Compensation Act 1999 (NSW)
 - o Motor Accidents Compensation Regulation 2005 (NSW)
 - o Motor Accidents Compensation Regulation 2015 (NSW)
 - Motor Accidents Act 1988 (NSW)
 - Compensation to Relatives Act 1897 (NSW)
 - Motor Accidents (Lifetime Care and Support) Act 2006 (NSW)
- Northern Territory, Territory Insurance Office http://www.tiofi.com.au/
- Queensland, Motor Accident Insurance Commission http://www.maic.qld.gov.au/

³³³ See the following WorkCover programmes, regulations and legislation in Australia

Australian Capital Territory, WorkSafe http://www.worksafe.act.gov.au/health_safety
 Work Health and Safety Act 2011 (ACT)

Application of Fire Services Levy / Emergency Services Levy if the Premium Charged under the Proposed National Catastrophe Insurance Scheme Amounts to a 'Fee for Service'

- [239] If the premium income for the proposed National Catastrophe Insurance Scheme is deemed a fee for service rather than a tax, then the Fire Services Levy / Emergency Services Levy is relevant as a possible model.
- [240] Victoria was one of the last States to remove the Fires Services Levy (Emergency Services Levy) after the Victorian Bushfires. New South Wales will be the last to remove the Emergency Services Levy. Legislative reform in New South Wales has meant that as of 1 July 2017, the funding mechanism in New South Wales will move to a model where the Emergency Services Levy is chargeable to ratepayers not as a component of insurance.³³⁵
- [241] Changing the way in which the Fire Services Levy / Emergency Services Levy is imposed, may result in a reduced premium cost and thus have the probable impact of increasing the insurance take up rates. In the case of New South Wales, it is projected that the cost savings will benefit up to 75% of households.³³⁶ In Victoria after Black Saturday Fires, in addition to the benefit of having the Fire Services Levy removed from insurance premiums, a new Insurance Inspectorate was created to ensure that the costs associated with the removal of the Fire Services Levy were passed on to insurance consumers (discussed in [75]). A similar system is being adopted in New

• Motor Accident Commission Act 1992 (SA)

Victoria, Transport Accident Commission https://www.tac.vic.gov.au/

 Transport Accident Act 1986 (Vic)

o Motor Accident Insurance Act 1994 (Qld)

South Australia, Motor Accident Commission http://www.mac.sa.gov.au/

[•] Motor Vehicles Act 1959 (SA)

o Civil Liability Act 1936 (SA)

Tasmania, Motor Accidents Insurance Board http://www.maib.tas.gov.au/

 Motor Accidents (Liabilities and Compensation) Act 1973 (Tas)

Western Australia, Insurance Commission of Western Australia http://www.icwa.wa.gov.au/

 Motor Vehicle (Third Party Insurance) Act 1943(WA).

³³⁵ 'Australia: New South Wales to Abolish Emergency Services Levy from Insurance', *Asia Insurance Review* (*online*), 11 December 2015 <<u>http://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/34531/Type/eDaily?utm_source/Edaily-News-Letter/utm_medium/Group-Email/utm_campaign/Edaily-NewsLetter></u>

³³⁶ Sarah Gerathy, 'NSW Homeowners better off under new Emergency Levy, Treasurer Glady Berejiklian' ABC News, 10 December 2015 http://www.abc.net.au/news/2015-12-10/nsw-government-to-announce-emergency-services-levy/7016076

South Wales with Professor Allan Fels to be the Emergency Services Insurance Monitor once the legislation becomes enforceable in July 2017.³³⁷

- [242] Given that the thesis includes comparisons with New Zealand, it is pertinent to briefly discuss the New Zealand Fire Services Levy. Under the s 48(1) of the *Fire Services Act 1975* (NZ) an insured who obtains insurance cover which incorporates cover against fire must pay the Fire Services Levy to the Fire Services Commission. The rate payable on residential property is 7.6 cents per NZ\$100 sum insured and it is capped at a maximum of NZ\$76. The Levy is also subject to Goods and Services Tax (currently 15%).³³⁸ The Goods and Services Tax is imposed in addition to the cost of the Levy. The requirement to pay the Fire Services Levy is outlined in s 50 of the *Fire Services Act 1975* (NZ). It will fall on either the insurer (if a NZ insurer), the insurance intermediary or broker (if insuring a client through a non-New Zealand insurer) or an individual (if no insurance intermediary is used and the insurer is outside of New Zealand). Sanctions for failure to pay the Levy are contained in s 53.
- [243] In ensuring that the Fire Services Levy remains viable, under s 48(3) the Minister must review the rate of the Levy annually. In reviewing the Levy, s 48(4) lists factors which the Minister shall take into account.³³⁹ Under s 48(5) if there is any shortfall in the amount collected by the Fire Services Commission and their operating costs, the Minister must make a determination regarding the shortfall pursuant to s 47(3). There is transparency in the way that the Fire Services Levy in New Zealand is imposed, reviewed and penalties sought for non-payment by insureds, insurers or insurance intermediaries (such as brokers) depending upon who is liable to pay the Fire Services Levy. However, as fire services are essential for the community at large, it is more equitable that the cost is shared by the community as access to fire services is not

³³⁷ Ibid.

³³⁸ New Zealand Fire Services, *Levy Manual for Direct Payers* (2016) http://www.fire.org.nz/About-Us/NZFS-levy/Documents/Levy%20Manual.pdf>

³³⁹ s 48(4) of *Fire Services Act 1975* (NZ)- In reviewing the rate of the levy the Minister shall have regard to

⁽a) The total amount for which all properties in respect of which the levy is payable are insured at the latest avail- able date, and the likelihood of any increase or decrease in that total amount:

⁽b) The necessity of ensuring that the amounts received by the Commission in respect of the levy in that financial year are sufficient to meet—
(i) The requirements of the Rural Fire Fighting Fund; and

The actual net expenditure that, in the case of the Commission, is required to be met by way of the proceeds of levy in terms of section 47:

⁽c) The desirability of ensuring, as far as is reasonably practicable, that any increases or decreases in the rate of the levy are designed to maintain the overall level of stability of the levy in the long term.

contingent upon having insurance. Yet, currently in New Zealand, the costs are paid by insureds. This contributes to problems associated with affordability of insurance. It is for this reason that the model of the New Zealand Fire Services Levy would not be adopted by the proposed National Catastrophe Insurance Scheme.

Goods and Services Tax (GST)

- [244] If the premium income for the proposed National Catastrophe Insurance Scheme amounts to a fee for service rather than a tax, the Australian Goods and Services Tax may apply. The Commonwealth Government could seek to waive the Goods and Services Tax on insurance premiums. However, the Goods and Service Tax is a major source of revenue for State and Territory Governments,³⁴⁰ and a waiver would be difficult to negotiate. If the State and Territory Governments were to agree to a request for a waiver, the Commonwealth Government would need to provide them with alternate funding streams to replace the loss of revenue from the Goods and Services Tax.
- [245] The Goods and Services Tax would apply to the premiums charged by the proposed National Catastrophe Insurance Scheme provided there were a taxable supply pursuant to s 9-5 of *A New Tax System (Goods and Services Tax) Act 1999* (Cth). There are six elements to the definition:
 - supply of goods and services
 - made for consideration
 - in the course of or in the furtherance of an enterprise
 - connected with the indirect tax zone (Australia)
 - by a registered entity (or an entity required to be registered)

³⁴⁰ The amount of Goods and Services Tax provided to each state government recently is as follows:

\$ million	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2013-14	15,727.2	11,426.1	10,822.7	2484.8	4618.2	1809.5	1023.9	2807.6	50,720.0
2014-15	16,758.1	11,828.4	11,735.7	2255.3	4956.3	1911.4	1098.6	3166.4	53,710.0
2015-16	17,552.6	12,563.4	12,658.8	2348.3	5251.8	2095.2	1165.5	3384.2	57,020.0
2016-17	18,209.4	13,231.7	13,932.4	2432.1	5698.5	2149.6	1215.4	3571.0	60,440.0
2017-18	19,233.5	14,155.6	14,660.3	2709.2	5921.3	2202.9	1269.4	3657.7	63,810.0

Commonwealth Government, 'Budget Paper No 3—General Revenue Assistance (Budget 2014–2015)' (2015) <http://www.budget.gov.au/2014-15/content/bp3/html/bp3_04_part_3.htm>.

- to the extent that the supply is not free of Goods and Services Tax or input-tax based.
- [246] The provision of catastrophic insurance is a supply within the definition of s 9-10 of A New Tax System (Goods and Services Tax) Act 1999 (Cth). The proposed National Catastrophe Insurance Scheme thus provides a service for consideration (premium payment) as defined in s 9-15 of A New Tax System (Goods and Services Tax) Act 1999 (Cth). When operational, the supply (insurance) would be provided by the National Catastrophe Insurance Scheme in the course of an enterprise and there would be a connection to Australia, as defined in s 9-25(5)(b) of A New Tax System (Goods and Services Tax) Act 1999 (Cth).³⁴¹

Registration for Goods and Services Tax

- [247] The annual turnover of the proposed National Catastrophe Insurance Scheme would exceed the registration turnover thresholds of \$75,000³⁴² or more (or \$150,000³⁴³ for non-profit bodies).³⁴⁴ The scheme would thus be required to register for Goods and Services Tax purposes under s 23-5.³⁴⁵
- [248] If the premium of the proposed National Catastrophe Insurance Scheme is deemed to be a fee for service, the Goods and Services Tax would be payable pursuant to s 7-1(1), as it would likely satisfy the definition of a taxable supply.³⁴⁶ The amount of Goods and Services Tax payable by the insured household owner would be 10% of the price charged.
- [249] Although there are exemptions under Division 38 of A New Tax System (Goods and Services Tax) Act 1999 (Cth), for supplies free of the Goods and Services Tax, none of the exemptions apply to the insurance to be provided by the proposed National Catastrophe Insurance Scheme.

³⁴¹ A New Tax System (Goods and Services Tax) Act 1999 (Cth) s 9-25(5)(a).

³⁴² A New Tax System (Goods and Services Tax) Regulations 1999 (Cth) Reg 23-15.01.

³⁴³ A New Tax System (Goods and Services Tax) Regulations 1999 (Cth) Reg 23-15.02.

³⁴⁴ Although *A New Tax System (Goods and Services Tax) Act* 1999 (Cth) under s 23-15(1) prescribes a registration turnover threshold of \$50,000 and under s 23-15(2) the amount of \$100,000 for non-profit entities, these amounts are subject to the regulations. As the amounts of \$75,000 and \$150,000 are the most current registration turnover thresholds that apply to determine who must be registered for Goods and Services Tax purposes under s 23-5, it is necessary for the Scheme to be registered.

³⁴⁵ A New Tax System (Goods and Services Tax) Act 1999 (Cth).

³⁴⁶ A New Tax System (Goods and Services Tax) Act 1999 (Cth) s 9-5.

[250] Goods and Services Tax compliance would create an additional operating cost for the National Catastrophe Insurance Scheme, however like other operational costs this would be absorbed by the Scheme. The liability of the National Catastrophe Insurance Scheme to pay Goods and Services Tax is consistent with the liability of the Australian Reinsurance Pool Corporation to pay Goods and Services Tax (discussed in [257] -[258]).

Stamp Duty

- [251] Under the current taxation regime, as Stamp Duty³⁴⁷ applies to insurance, the Emergency Services Levy (in New South Wales only as all other States have abolished the Emergency Services Levy / Fires Services Levy from being imposed on insurance premiums)³⁴⁸ and the Goods and Services Tax (in all States) are cumulatively added to the insurance-policy cost and this total is then subject to Stamp Duty. The application of taxation based on the cumulative cost is referred to as a 'cascading effect'.³⁴⁹
- [252] Currently, legislation in all States and Territories specifically enables Stamp Duty³⁵⁰ to be charged on top of existing insurance taxation. The Australian Capital Territory is

- *Duties Act 2001* (Qld) s 349(1)(a) (rate of 9%: Class 1 general insurance for contract entered into after August 2013)
- Stamp Duties Act 1923 (SA) Sch 2 (rate of 11%)
- *Duties Act 2001* (Tas) s 166 (rate of 10%)
- *Duties Act 2000* (Vic) s 179 (rate of 10%)
- Duties Act 2008 (WA) s 215 (rate of 10%).

• Duties Act 1999 (ACT) Ch 8 (duty on general insurance premiums is being reduced until this becomes \$0 by 1 July 2016—*Revenue Circular DAA013*, General Insurance Duty Adjustments (issued 16 January 2014)

<http://www.revenue.act.gov.au/ data/assets/pdf file/0019/540091/Revenue-Circular-

³⁴⁷ The amount of Stamp Duty varies between states. See the following Acts

Duties Act 1999 (ACT) Ch. 8 (duty on general insurance premiums is being reduced until this becomes \$0 by 1 July 2016—Revenue Circular DAA013, General Insurance Duty Adjustments (issued 16 January 2014)
 http://www.revenue.act.gov.au/__data/assets/pdf_file/0019/540091/Revenue-Circular-DAA013.pdf)

[•] Duties Act 1997 (NSW) s 232(2), s 234(1) (rate of 9% for general insurance)

[•] *Stamp Duty Act* (NT) s 38, Sch 1 (rate of 10% for general insurance)

³⁴⁸ For example, in New South Wales where \$100 insurance policy before taxation is likely to be \$145 after tax. The original insurance policy of \$100 will first have the fire-services levy of 21% added (bringing the cost to \$121), then an additional 10% Goods and Services Tax (\$121 + \$12.10 = \$133.10) and finally the entire amount has an additional 9% Stamp Duty tax imposed (\$133.10 + \$11.98 = \$145.08).

See National Insurance Brokers Association, 'How Much Are You Paying?' (Report, National Brokers Association, May 2014) http://www.niba.com.au/tax/html/how_much.cfm>.

³⁴⁹ Commonwealth, Royal Commission on the Failure of HIH Insurance, above n 87, Pt 3 [10.3.3]; Richard Tooth, 'An Analysis of the Demand for House and Contents Insurance in Australia: Insurance Council of Australia—Industry Focus' (Insurance Council of Australia, 2007) 2–3.

³⁵⁰ The amount of Stamp Duty varies between states. See the following Acts

the only Australian State or Territory actively seeking to remove Stamp Duty from insurance premiums.³⁵¹

- [253] If under the National Catastrophe Insurance Scheme, the premium is deemed to be a 'fee for service', as well as being subject to Goods and Services Tax, the scheme also would be subject to Stamp Duty. Although the issue of taxation and its effect of increasing the cost of insurance is a real problem, the proposed National Catastrophe Insurance Scheme cannot solve it.³⁵²
- [254] The Insurance Council of Australia has commented on the effect of Stamp Duty and other transactional taxes:

Financial Services Inquiry would be well placed to reaffirm the recommendations of the Henry Review as they related to transactional taxes, especially stamp duties [...] insurance taxes are highly inefficient vis-à-vis other taxation measures and accordingly economic welfare would be improved through a 'tax mix switch' from transactional taxes to other taxes.³⁵³

The Insurance Council of Australia also commented the following:

In the case of insurance, stamp duties and fire services levies [in New South Wales] drive a wedge between the technical price of insurance and the retail price paid by consumers resulting in non-prudent levels of private insurance, the final cost of being born by the government.³⁵⁴

- Duties Act 1997 (NSW) s 232(2), s 234(1) (rate of 9% for general insurance)
- Stamp Duty Act (NT) s 38, Sch 1 (rate of 10% for general insurance)
- Duties Act 2001 (Qld) s 349(1)(a) (rate of 9%: Class 1 general insurance for contract entered into after August 2013)
- Stamp Duties Act 1923 (SA) Sch 2 (rate of 11%)
- Duties Act 2001 (Tas) s 166 (rate of 10%)
- Duties Act 2000 (Vic) s 179 (rate of 10%)
- Duties Act 2008 (WA) s 215 (rate of 10%).

³⁵² Future research could look into this issue specifically and the broader issue of reducing taxes on insurance. The narrow focus of the thesis in including information directly relevant to the National Catastrophe Insurance Scheme precludes this discussion forming part of the final manuscript.

³⁵³ Insurance Council of Australia, Submission No 1: Submission to the Financial Systems Inquiry to Treasury (Commonwealth), *Financial Systems Inquiry* (March 2014) 26. ³⁵⁴ Ibid 26.

DAA013.pdf>)

³⁵¹ The Australian Capital Territory has implemented a programme that will conclude on 1 July 2016 and result in no Stamp Duty charges being imposed on insurance premiums within that Territory. This would apply to all forms of general insurance and thus, the exemption would also apply for the Natural Catastrophic Insurance Scheme to the extent the scheme applies to homeowners in the Australian Capital Territory. See Australian Capital Territory Revenue Office, 'Duties: Insurance' (26 August 2015) http://www.revenue.act.gov.au/duties- and-taxes/duties/insurance>.

- [255] The removal of Stamp Duty and other taxes is a live issue. However, it is beyond the scope of this thesis to suggest an alternative, apart from noting that it would be preferable for the National Catastrophe Insurance Scheme to be exempt from all Commonwealth Government and State taxes to ensure that individuals do not have the cost of their premium increased by taxes.
- [256] The thesis does, however, propose some exemptions for the National Catastrophe Insurance Scheme, particularly in relation to premium income. These exemptions (see below) are analogous to exemptions applicable to the Australian Reinsurance Pool Corporation.

Possible Tax Exemptions under the proposed National Catastrophe Insurance Scheme

Possible Tax Exemptions for Premium Income and Capital Reserves

- [257] Under s 36 of the *Terrorism Insurance Act 2003* (Cth), the Australian Reinsurance Pool Corporation is not subject to income tax, which is 30% in 2015–2016 (applicable to companies). However, the Australian Reinsurance Pool Corporation remains subject to Goods and Services Tax and Fringe Benefits Tax.
- [258] The public financial corporation, which would administer the proposed National Catastrophe Insurance Scheme could utilise the exemptions on premium income from taxation in order to lower its operating expenditure. In addition to lowering the operating expenditure of the Scheme, the tax exemption could also be used as a means of ensuring funds collected are held as capital reserves should a natural disaster of catastrophic proportions generate damage which the Scheme is liable to compensate insureds.

Presumption that the proposed National Catastrophe Insurance Scheme is Constitutionally Valid

[259] The thesis has demonstrated that the proposed National Catastrophe Insurance Scheme would be constitutionally valid. It could rely on the operation of one or more of the following constitutional powers: insurance power (s 51(xiv)), taxation (s 51(ii)), or rights of individuals within the States (s 117) in conjunction with the executive power (s 61).

[260] The following section outlines the roles of the participants and the operational procedures from a legal perspective.

Part 2:

Practical Considerations and Legal Preconditions for the National Catastrophe Insurance Scheme

Chapter 5: Listed Events and Ministerial Declaration: Legal Preconditions to Activate the proposed National Catastrophe Insurance Scheme

Listed Natural Disaster(s) of Catastrophic Proportions

- [261] Legislation facilitating the proposed National Catastrophe Insurance Scheme circumscribes the operation of the scheme including definitions of each of the listed natural disasters of catastrophic proportions.³⁵⁵ Once an event is a 'natural disaster of catastrophic proportions' and satisfies the legislative criteria for the particular listed event, a Ministerial Declaration is needed to activate compensation under the proposed National Catastrophe Insurance Scheme.
- [262] Under s 61 of the Commonwealth Constitution, in both Williams³⁵⁶ and Pape,³⁵⁷ the High Court narrowed the application of the executive power. Although the term 'natural disaster of catastrophic proportions' was not used in Pape, there was discussion of the terms 'crisis' and 'emergency' and 'national crisis' (discussed in [194] - [195]). In Williams, there was similar discussion about the exercise of s 61 of the Commonwealth Constitution and the requirement that it should be saved for 'genuine emergencies', rather than merely matters of national concern. The emphasis of the proposed National Catastrophe Insurance Scheme is to provide insurance for natural disasters of catastrophic proportions, the types of events that are covered are emergencies as seen by their magnitude and other factors required to prove the 'catastrophic proportions' requirement.
- [263] The proposed National Catastrophe Insurance Scheme uses the term natural disaster of catastrophic proportions as this builds on terms already understood and employed across Australia. Terms such as 'natural disaster' and 'emergency event' used in State and Territory legislation. Although the Northern Territory, Queensland and Western

³⁵⁵ Any events not covered by the Scheme are dealt with within the existing insurance systems. It is thus up to individuals if they wish to insure for risks which are not natural disasters of catastrophic proportions and the levels at which they seek to obtain insurance or to self-insure. As such cover is within the private insurance realm and involves the autonomy of individuals, the discussion of these risks is beyond the scope of the thesis. ³⁵⁶ Williams [2012] HCA 23.

³⁵⁷ Pape (2009) 238 CLR 1, 347 (Hayne and Kiefel JJ).

Australia use the term 'disaster',³⁵⁸ whereas the Australian Capital Territory, New South Wales, South Australia, Tasmania and Victoria use the term 'emergency'³⁵⁹ given the context of their use, these terms would be seen as having similar application to the term used under the Scheme: 'natural disaster of catastrophic proportions'. The benefit of this is to ensure (to the extent possible) consistency with emergency management legislation and disaster procedures employed at State level to promote a more co-ordinated state and national co-operative response to disasters.

Natural Disaster of Catastrophic Proportions and the National Catastrophic Natural Disaster Plan

[264] The National Catastrophic Natural Disaster Plan.³⁶⁰ has defined a catastrophic natural disaster as:

An extreme hazard event that affects one or more communities; resulting in widespread, devastating, economic, health, social and environmental consequences and that exceeds the capacity of existing State or Commonwealth Government emergency and disaster management arrangements. An event could be of sudden impact or sustained impact over an extended timeframe.

Defining features of a catastrophic natural disaster are that it will

- Not be possible to immediately meet the needs of those requiring assistance within the existing capability of an individual, State or nationally
- Take a considerable time from which to recover, and
- The affected Executive Government is temporarily incapacitated or requests urgent assistance...

A catastrophic natural disaster is an event of national consequence.³⁶¹

³⁵⁹ See

- State Emergency and Rescue Management Act 1989 (NSW) s 4
- Emergency Management Act 2004 (SA) s 3
- Emergency Management Act 2006 (Tas) s 3
- Emergency Management Act 1986 (Vic) s 4.

<https://www.em.gov.au/Emergencymanagement/Preparingforemergencies/Plansandarrangements/Documents/ NATCATDISPLAN-NationalCatastrophicNaturalDisasterPlan.pdf>.

³⁶¹ Ibid [2].

³⁵⁸ See

[•] Disaster Act 1982 (NT) s 4

[•] Disaster Management Act 2003 (Qld) s 13(1)

[•] Emergency Management Act 2005 (WA) s 3.

[•] Emergencies Act 2004 (ACT) s 4

³⁶⁰ Emergency Management Australia (Attorney- General's Department), *National Catastrophic Natural Disaster Plan (NATCATDISPLAN)* (September 2010)

[265] The definition provided by the National Catastrophic Natural Disaster Plan is utilised to assist in the criteria for determining if a natural disaster of catastrophic proportions has occurred. However, Dr Eburn has noted that one key weakness of the Plan is 'the Plan is not supported by legislation and the Commonwealth has no special or necessary emergency powers to give effect to the Plan'.³⁶² However, the National Catastrophic Natural Disaster Plan is not legislatively entrenched, its recommendations at best create political and moral obligations. Nevertheless, the incorporation of these recommendations within the regulations governing the proposed National Catastrophe Insurance Scheme would give legal weight to them as factors to consider.

Practical Considerations when Defining 'Natural Disaster of Catastrophic Proportions'

[266] The legislation governing the proposed Scheme would list the natural disasters insured by the Scheme as including fire, flood, cyclone, earthquake, hailstorm, tsunami and landslide. Damage arising from volcanic activity and drought would be expressly excluded. In order to trigger the operation of the proposed Scheme, the natural disaster event(s) must be of catastrophic proportions. In determining the aspect of catastrophic proportions, the regulations would specifically refer to factors utilised by the National Catastrophe Natural Disaster Plan in defining a catastrophic natural disaster. However, the exact monetary losses and probable outcomes of the event would be determined with the assistance of the damage scales and intensity scales. An explanation of current damage scales and how they operate for each event is provided by the Risk Frontiers Website.³⁶³ The enabling legislation facilitating the Scheme would refer to the regulations as determining catastrophic proportions. Having such limits and guiding criteria contained within the regulations would allow the proposed Scheme to be

 ³⁶² Michael Eburn, 'Responding to Catastrophic Natural Disaster and the Need for Commonwealth Legislation' (2011) 10(3) *Canberra Law Review* 81, 81.
 ³⁶³ Risk Frontiers lists and analyses a number of damage scales and intensity scales that are currently used for

³⁶³ Risk Frontiers lists and analyses a number of damage scales and intensity scales that are currently used for natural catastrophes. These include the Rossi - Forel Scale (earthquake), Modified Mercalli Intensity Scale [New Zealand] earthquake- but modified to incorporate the Australian building standards, Beaufort Scale (windstorm), Saffir-Simpson Damage Potential Scale (tropical cyclone), Australian Cyclone Severity Scale, Walker's Intensity scale for tropical cyclone, Fujita Scale Classification of Tornado Wind Intensity (windstorm), TORRO Hailstorm Intensity Scale, Hail Size - descriptive terms (to help clarify the terms used in the TORRO Hailstorm Intensity Scale), Intensity scale for landslide damage to buildings, Tsunami magnitude, Blanche Scale of Fire Magnitude, Damage States (earthquake impacts on buildings taller than 5 stories). See Risk Frontiers, 'Damage Scales' https://www.riskfrontiers.com/damage_scales.htm

Guidance for comparing the various damage scales with damage to buildings at various locations, see Russell Blong, 'Damage Index 1999' (1999) 5(4) *Natural Hazards Quarterly* 1 https://www.riskfrontiers.com/nhq/nhq4-3tables.htm>.

flexible in utilising the latest scientific and technological knowledge (both well established scientific methodologies as well as cutting edge innovations).

- [267] The National Catastrophe Insurance Scheme would operate nationally, and recognises 'that construction costs will vary considerably from State to State within Australia and indeed within much smaller regions.'³⁶⁴ Consequently, in assessing the losses it may be preferable to use a logarithmic damage index as a means of comparing the losses.³⁶⁵ 'The use of the Damage Index methodology, is based on estimates of damage to house equivalents, largely removes the problem of costs variations from place to place...However, the differences in the cost of damage can be readily emphasized, if that is desired by using different per m² construction costs...this also avoids the problems with cost inflation when comparing the consequences of disasters across several decades or more.'³⁶⁶ This would ensure greater consistency in comparing events and may be used to assist in the determination of what is likely to be a natural disaster of catastrophic proportions should a monetary trigger be favoured for the future intervention of the proposed National Catastrophe Insurance Scheme.
- [268] When determining the definition of each of the events covered by the proposed Scheme,³⁶⁷ efforts are made to incorporate existing legislation, regulation and industry specific terminology as employed by emergency management and other similar organisations operating in Australia. This is done to promote consistency and streamline the manner in which the proposed National Catastrophe Insurance Scheme would operate.

Comparison of the Proposed National Catastrophe Insurance Scheme's Approach to other National Catastrophe Solutions

[269] In seeking to ensure the fiscal stability of the scheme, where possible the National Catastrophe Insurance Scheme (as proposed) would attempt to reflect actuarially sound pricing. As discussed earlier, this would be an operational matter with the actuary able

³⁶⁴ Russell Blong, 'A New Damage Index' (2003) 1 Natural Hazards 1, 2.

³⁶⁵ McAneney, above n 20.

³⁶⁶ Blong, 'A New Damage Index', above n 364, 19.

³⁶⁷ If terminology has a specific meaning within the emergency-management or insurance community, this industry specific usage was imported to the extent possible when designing definitions under the Natural Catastrophic Insurance Scheme.

to provide guidance in light of the need for fiscal stability while factoring in the taxation implications of such pricing mechanisms.³⁶⁸

Suitability of a Trigger Mechanism

- [270] Given the proposed Scheme's overriding purpose of providing access to affordable natural disaster insurance Australia wide notwithstanding the significant topographic and demographic variations across Australia, the omission of a monetary amount as a Scheme 'trigger', ensures that the Scheme operates in a way that is equitable and politically neutral. As the Scheme would not operate in a purely commercial manner, rather than having an indemnity trigger related to the dollar loss, the need for broader considerations regarding catastrophic proportions would be utilised by the regulations. Unlike catastrophe insurance products, which are purely commercially driven such as a catastrophe bonds, the criteria used by the proposed Scheme seeks to strike a balance between fiscal stability and socioeconomic concerns.
- [271] A pure commercial insurance product such as a commercial catastrophe bond is employed for generating investment income. Given that the purpose of such catastrophe products is to generate profit, there is a much stricter requirement for a trigger which is parametric or indemnity based. The operation of an effective triggering mechanism capable of defining exactly when an event has occurred is essential for catastrophe bonds to ensure that when the capital is not used to pay for losses arising from a catastrophic event, investors profit. Catastrophe bonds act as a vehicle for professional investors to invest money in return for good interest rates (should the triggering event not eventuate while the bond is active). The bond itself is a commercial tool used to diversify risk portfolios and hopefully generate returns for investors. Unsurprisingly, catastrophe bonds are carefully structured and priced to reflect the investment risk. Due to their commercial use as an investment tool, a great deal of time and money is spent on developing appropriate triggering criteria (usually parametric triggers). The investors and the insurers issuing the bond agree on the terms, conditions and triggers (including magnitude, severity, ground shake or weather-related factors and distance from a city centre). The trigger and operation of

³⁶⁸ An attempt to actuarially calculate aspects affecting the final price charged by insurance cover for a multiperil insurance solution was discussed by William Gardner as his PhD project. See Gardner, *Probable Maximum Losses of Insured Assets from Natural and Manmade Catastrophes in Australia*, above n 160.

the bond is thus unique depending upon the risks of the bond, the investment income and the return sought by investors. The trigger used in a catastrophe bond operates on the basis of the contractual relationship between the investors and the insurer using the money invested in the bond. If a catastrophe bond becomes operational, the insurer can begin paying out insurance claims from the principal sum invested as the catastrophe bond.³⁶⁹

- [272] Catastrophe bonds have generally been used as commercial vehicles. However, in Mexico, the Mexican Fund for Natural Disasters (FONDEN) used three different catastrophe bonds within a government-based scheme. In 2006, a catastrophe bond covering earthquake for three years in three zones worth US\$160 million was used. In 2009, MultiCat Mexico was instituted as a catastrophe bond covering earthquake and hurricane for three years with multiple triggers (for different levels of compensation). Finally, in October 2012, MultiCat was launched covering earthquake and hurricane with multiple parametric triggers. These catastrophe bonds were used to provide a stable source of capital to enable the system of the Mexican Fund for Natural Disasters to operate.³⁷⁰ However, its use was revolutionary, as it was the only government-based natural disaster scheme using catastrophe bonds in that way.
- [273] The justification for comparing catastrophe bonds with the proposed National Catastrophe Insurance Scheme is to illustrate the different considerations for a purely commercial option in comparison to government-sponsored schemes. Additionally, it illustrates that in the future, it may be possible to utilise catastrophe bonds as an alternative to reinsurance. Currently the use of alternative capital (as opposed to commercial reinsurance) is limited because of the costs and difficulty involved (especially in defining the trigger).³⁷¹ However, it remains an option given that a

³⁶⁹There are strict mathematical and actuarial pricing methods to determine the pricing of bonds and how the trigger may work for each zone covered and for each event.

There are a number of different triggers, including an indemnity-based parametric trigger, a parametric-index trigger and modelled-loss trigger. For an explanation of catastrophe bonds, including pricing, see Brenda López Cabrera, *Pricing Catastrophe Bonds for Earthquake in Mexico* (MSc Thesis, Humboldt-Universität zu Berlin, 2006) 18–36.

³⁷⁰ Ibid.

³⁷¹ For example, the MultiCat Mexico catastrophe bond was triggered by scientific measurements relating to the magnitude of the earthquake and central pressure of the hurricanes. As these trigger events were parametrically based, when the event occurred, the funds were released from the catastrophe bond to the Mexican government (independent of the actual damage). The Mexican government would then determine how to use the funds and how to assist with rebuilding and reconstruction—efforts that were independent of the operation of the catastrophe bond.

number of Australian insurers have already acquired some indemnity-based catastrophe bonds associated with Queensland wind risks.³⁷²

International Guidance: Absence of Specific Trigger for other Global Natural Disaster **Insurance Schemes**

- [274] In New Zealand under the Earthquake Commission, it is only necessary to demonstrate that the listed event has occurred. Once the event satisfies the legislative definition, the Earthquake Commission will compensate claims. Payment is made on a first-loss basis up to NZ\$100,000. Similarly, the operation of the Consorcio de Compensación de Seguros in Spain is activated (and provides compensation to those who have endured property damage) once there is proof that an event listed in the legislation has occurred.
- [275] In Japan,³⁷³ Norway³⁷⁴ and Iceland,³⁷⁵ there are no specific trigger mechanisms, rather their systems become operational after the events have occurred based on their legislatively entrenched definition and event criteria (rather than because a predefined numerical trigger has been satisfied).
- [276] In countries where single-peril risk regimes operate such as Turkey, Chinese Taipei (Taiwan),³⁷⁶ Denmark³⁷⁷ and the United States,³⁷⁸ there are no specifically outlined

Issuer: MultiCat Mexico 2009 Ltd								
Peril	Class A: Earthquake	Class B: Pacific	Class C: Pacific	Class D: Atlantic				
	-	Hurricane Zone A	Hurricane Zone B	Hurricane				
Notional (US\$)	140 million	50 million	50 million	50 million				
Trigger	7.9; 8.0 magnitude	944	944	920				
	(Richter Scale)	central pressure	central pressure	central pressure				
S&P Rating	В	В	В	BB-				

Treasury (World Bank), Case Study: Insuring against Natural Disaster Risk in Mexico (20 June 2011) <http://treasury.worldbank.org/bdm/pdf/Case Study/Mexico CatBond.pdf>.

³⁷² In 2014, Australia adopted a catastrophe bond to provide protection against cyclone and earthquake risk in Australia (VenTerra Re Ltd (Series 2013-1)). VenTerra Re Ltd (Series 2013-1) is the first catastrophe bond in Australia, creating the potential for more widespread utilisation to cover an expanded range of catastrophes in the future. See ARTEMIS, 'QBE 'Very Happy' with First Australian Indemnity Cat Bond, VenTerra Re' (8 January 2014) <http://www.artemis.bm/blog/2014/01/08/qbe-very-happy-with-first-australian-indemnity-catbond-venterra-re/>; ARTEMIS, 'VenTerra Re Series 2013-1-Full Details' <http://www.artemis.bm/deal_directory/venterra-re-ltd-series-2013-1/>.

³⁷³ Japan Earthquake Reinsurance Co Ltd <http://www.nihonjishin.co.jp/top.html>.

³⁷⁴ Natural Perils Pool (Norway) <http://www.naturskade.no/en/>.

³⁷⁵ Iceland Catastrophe Insurance <http://www.vidlagatrygging.is/en/>.

³⁷⁶ Taiwan (Chinese Taipei) Residential Earthquake Insurance Fund (EQ TREIF)

<http://www.treif.org.tw/eindex.aspx>.

³⁷⁷ Danish Storm Council <http://www.stormraadet.dk/>.

³⁷⁸ National Flood Information Program <https://www.floodsmart.gov/floodsmart/>; California Earthquake Authority <http://www.earthquakeauthority.com/CEAindex.aspx>.

trigger mechanisms. The United States requires a Ministerial Decree for many of the state-based schemes to be operational and to begin to provide compensation. In the countries with single-peril schemes, the emphasis is on establishing that the event has occurred, with inbuilt procedures used to limit the scope, rather than more difficult scientific criteria such as magnitude, duration or effect.

Technical Definitions in Regulations

[277] This chapter will now discuss definitions for each event to be covered by the proposed National Catastrophe Insurance Scheme.

Bushfire (Wildfire)

- [278] Under the proposed National Catastrophe Insurance Scheme, a bushfire (or wildfire) is an uncontrolled fire affecting vast tracts of land³⁷⁹ and damaging property. The structural damage can arise through charring (which is likely only to occur to wooden or weatherboard houses and only in extreme cases where the structural integrity of a residential building becomes questionable as a result) or burning a house. The damage itself must be caused by the flames or the embers.
- [279] Individuals would not be denied coverage because of the cause of the bushfire's ignition. However, if a bushfire was the result of negligence or arson, those who were negligent in starting the fire and those who engaged in arson are automatically disqualified from insurance cover. If a property is jointly owned and one owner is engaged in negligence or arson that ignited the bushfire, the property would be apportioned to reflect the individual aspects of ownership. The joint owner (who has not been negligent and has nothing to do with the arson) would be able to recover but the portion representing the arsonist or negligent individual's share would not be covered. Additionally, arsonists and those engaged in negligence leading to the ignition of the fire could be sued by the Scheme using subrogation. The proposed National Catastrophe Insurance Scheme is assigned the right to subrogation expressly

³⁷⁹ The Australasian Fire and Emergency Services Authority Council defines bushfire as a 'unplanned vegetation fire. A generic term which includes grass fires, forest fires and scrub fires both with and without a suppression objective'. This discounts the effect that fire can have on property, and thus for the purposes of a National Catastrophe Insurance Scheme it is important to expand the definition to encompass the implications for property damage accounting for the overarching objective of the Scheme to provide property insurance cover. See Australasian Fire and Emergency Services Authority Council, *Bushfire Glossary* (AFAC, January 2012) 4.

by virtue of the enabling legislation and also the individual insurance contracts it provides. The right to subrogation does not affect any criminal actions which may arise against an arsonist (discussion of criminal actions is outside the scope of the thesis). Individuals who have been convicted for arson or negligence³⁸⁰ causing a fire, would not automatically be entitled to cover under the Scheme for future events, rather, there are additional qualifying criteria, which do not apply as standard.³⁸¹

[280] If a bushfire were started through an electrical fault in wiring or the like, individuals could claim under the Scheme, rather than pursue litigation to recover their losses. In such circumstances it is more likely that the Scheme may use their powers of subrogation to take an action against the electricity company or other commercial entity who had a duty of care to ensure that the electrical wires were maintained and would not generate fires or other hazards.

Flood

- [281] As a direct result of the National Disaster Insurance Review undertaken in the wake of the 2010-2011 Queensland flooding,³⁸² and subsequent parliamentary inquiries, the *Insurance Contracts Act 1984* (Cth) was modified. The justification for the changes to the legislation centred on the number of claims denied, and the number of people who were unable to claim for damage sustained by the Queensland floods due to a misunderstanding surrounding the parameters of the insurance cover. The following two key changes were implemented:
 - 1. introduction of a uniform definition of flooding for insurance contracts

³⁸⁰ 'Risk Frontiers have found after having looked at patterns of damage for a number of bushfires, that bushfires are agnostic to building materials and in most cases result in a complete destruction of the building. These outcomes have been encouraged by poor land use planning.' See John McAneney, Macquarie University (Risk Frontiers), Personal Communication to Rachel Anne Carter, 2016.

As discussed in [116], planning laws are the responsibility of State governments. The proposed National Catastrophe Insurance Scheme would seek to work around existing responsibilities and co-operate with State Governments while noting that the federal system poses some challenges for insuring properties across Australia in a holistic manner. For example, this could involve co-operation concerning building materials and planning permission to reduce the potential vulnerability of properties to bushfires or other hazards. ³⁸¹ This requires additional scrutiny regarding obtaining cover whereby the Scheme may refuse to offer cover, if

³⁸¹ This requires additional scrutiny regarding obtaining cover whereby the Scheme may refuse to offer cover, if the objective risk of an individual engaging in negligence or arson for the purposes of obtaining insurance money for their property is particularly high. If this was seen to cause injustice the relevant individual could appeal the decision using the internal mechanisms and if still not satisfied the external appeals avenue.

³⁸² Rachel Anne Carter 'Flood Risk, Insurance and Emergency Management in Australia' (2012) 27 Australian Journal of Emergency Management 20, 20–25; In the Wake of Disasters, above n 148, 37–50.

- 2. introduction of a key-fact sheet to be provided by insurers (discussed in [78]).³⁸³
- [282] Under the Insurance Contracts Amendment Act 2012 (Cth),³⁸⁴ 'flood means the covering of normally dry land by water that has escaped or been released from the normal confines of any lake, river, creek or other natural watercourse whether or not altered or modified or from any reservoir, canal or dam'.³⁸⁵ This definition of flooding is contained draft definitions for the proposed National Catastrophe Insurance Scheme.³⁸⁶
- [283] The requirement that the flood be of catastrophic proportions would be a control mechanism to ensure the Scheme is activated when the flooding is significant.

Cyclone

[284] Under the proposed National Catastrophe Insurance Scheme, only damage from cyclones of catastrophic proportions is compensable. The damage index would assist with the determination of an event (as discussed in [266]).³⁸⁷ Guidance would also be taken from Australian Bureau of Meteorology who define a tropical cyclone as follows:

Low pressure systems that form over warm tropical waters and have gale force winds (sustained winds of 63 km/h or greater and gusts in excess of 90 km/h) near the centre. Technically they are defined as a non-frontal low pressure system of synoptic scale developing over warm waters having organised convection and a maximum mean wind speed of 34 knots or greater extending more than half-way around near the centre and persisting for at least six hours. The gale force winds can extend hundreds of kilometres from the cyclone centre. If the sustained winds around the centre reach 118 km/h (gusts in excess 165 km/h), then the system is called a severe tropical cyclone.³⁸⁸

[285] In defining a cyclone of 'catastrophic proportions' one difficulty is that currently in Australia there are no or few mechanisms or tools to measure cyclone wind speed.

³⁸³ Rachel Anne Carter and Dr Jim McLennan, 'Will your Insurance Cover Bushfire Loss?'

http://www.latrobe.edu.au/news/articles/2013/release/will-your-insurance-cover-bushfire-loss>.

³⁸⁴ Insurance Contracts Amendment Act 2012 (Cth).

³⁸⁵ Insurance Contracts Act 1984 (Cth) s 37B.

³⁸⁶ Explanatory Memorandum, Insurance Contracts Amendment Bill 2012, 14.

³⁸⁷ The scales that will be used to determine a windstorm/ cyclone and categorise it include the Beaufort Scale (windstorm), Saffir-Simpson Damage Potential Scale (tropical cyclone), Australian Cyclone Severity Scale, Walker's Intensity scale for tropical cyclone, Fujita Scale Classification of Tornado Wind Intensity (windstorm). See Risk Frontiers, 'Damage Scales', above n 351.

³⁸⁸ Commonwealth Government Bureau of Meteorology, Climate Change Education: Cyclones <<u>http://www.bom.gov.au/lam/climate/levelthree/c20thc/cyclone.htm</u>>.

Instead, cyclone wind speed is 'estimated from satellite imagery and an assumed relationship between central pressure and maximum wind speeds.³⁸⁹ This method is thus inherently very subjective. The situation is further complicated by the fact that in Australia the 10-minute mean wind speeds and the 3 second peak wind gusts can also become confused as there may be potential different response times of instruments.³⁹⁰

- [286] To achieve certainty, the proposed National Catastrophe Insurance Scheme supports ongoing research regarding measurement of wind speed and the best instruments to capture such speeds. At the present, wind speeds are estimated and, consequently, the wind speed would only have to reach or exceed the threshold wind speed in one part of the cyclone event footprint. It would thus not be necessary to prove that the wind speed was met or exceeded at the point of damage. In this way, the flexibility used in the assessment of wind speed helps promote certainty (and due to imperfect wind speed measurements assists an insured when a cyclone of catastrophic proportions has occurred), it achieves this through enlarging the area in which the minimum wind speed can be generated and still qualify for an insurance payout under the Scheme with the use of imperfect scientific instruments to assess wind speed. In turn, there is the benefit of reduced cost associated with litigation concerning the way wind speed is estimated.
- [287] The probability of widespread damage is high for cyclones of at least 135km/h wind speed when the cyclone reaches land. In considering whether a cyclone of catastrophic proportions has occurred, other factors to consider include the proximity of the cyclone to the mainland and the number of properties destroyed.
- [288] International schemes have minimum wind-speed requirements for coverage. For example, wind speeds in Spain must exceed 135 km/h.³⁹¹ In France, they must exceed 145 km/h continuously for 10 minutes, or exceed 210 km/h for gusts of wind. The procedure in France requires not only the occurrence of a listed event but also a Ministerial Declaration. Based on the international examples, and considering the objective of the scheme to assist households to obtain insurance for natural disasters of catastrophic proportions, the minimum wind speed is 135 km/h. However, should other

³⁸⁹ McAneney, above n 20.

³⁹⁰ Ibid.

³⁹¹ Consorcio de Compensación de Seguros, *Riesgos Extraordinarios* (December 2011)

<http://www.consorseguros.es>.

scientific evidence be provided to the Minister from the Scientific Advisory Panel that a cyclone has occurred and it is of catastrophic proportions, this would be factored into the Minister's decision making.

Earthquake

- [289] Earthquake 'involves the sudden relative movement of rocks on one side of a fault past each other. This fault movement generates seismic waves that are felt as ground motions on the earth's surface. The strength of the ground motions depends on the magnitude of the earthquake and the nature of the ground beneath the observer. The magnitude of the earthquake is related to the area of the fault that ruptures during the earthquake and the amount of slip or movement that occurs across the fault.³⁹²
- [290] The Canterbury Earthquakes Royal Commission analysed the earthquakes that affected Christchurch and surrounding areas from all aspects including the technical aspects of the earthquake and the seismic movements. Although the Christchurch earthquakes had some unusual properties in terms of the intensity of shaking which was unusually high and that the earthquakes themselves occurred in an area of low to moderate seismic activity,³⁹³ much of the Royal Commissions findings on earthquakes generally could be of use for the proposed National Catastrophe Insurance Scheme's definitions. The root cause of earthquakes is the continued movement of tectonic plates relative to each other. 'At their edges they [tectonic plates] pull apart (in "rift" areas), slide past each other laterally (at a "strike slip" boundary) or converge (in "subduction" or "collision" areas)."³⁹⁴ This continued movements of the plates will place strain on the area and an earthquake may result as a means of alleviating the energy which is generated. Generally, the higher the levels of strain at a particular point, the more likely it is that an earthquake will result as the build up of energy will be greater. The areas where the stain is exercised is known as fault lines which are fractures in the rock which are the result of the sustained compression, tension or shearing.³⁹⁵ The size of a fault line can differ and it can be hundreds of kilometres long. When an earthquake occurs it is the release of energy. The violent ground motions that occur are measured

³⁹² Professor Paul Sommerville, Risk Frontiers, 'Letter to John McAneney', 2015.

³⁹³ Canterbury Earthquakes Royal Commission, *Final Report: Volume 1- Seismicity, Soils and the Seismic Design of Buildings* (2012) 15 - 48.

³⁹⁴ Ibid 16.

³⁹⁵ Ibid 16 – 20.

as the acceleration of an earthquake. After an earthquake there will be a series of aftershocks, these aftershocks are technically separate events, however, the Scheme's hours' clause would define the grouping of any damage from an earthquake and aftershocks for the purpose of coverage under the Scheme.

- [291] Senior Vice President and Global Head of Catastrophe Risk Research at Guy Carpenter (international insurance broker, strategic advisory and analytics firm),³⁹⁶ Guillermo Franco, suggests that catastrophe models 'assume that the loss produced by a seismic event is closely related to its main parameters: longitude and latitude of the epicentre, focal depth and moment magnitude'.³⁹⁷ Similarly, Professor Paul Somerville from Risk Frontiers has commented that 'catastrophe models assume that the loss produced by a seismic event is closely related to its magnitude and proximity to the built environment.'³⁹⁸ Applying this requires a 'link between the effects of the earthquake and the damage'³⁹⁹ as the National Catastrophe Insurance Scheme covers household building damage. In looking at this, consideration would be given to the magnitude, intensity, depth and proximity to the affected city or town. These factors would help determine whether an earthquake of catastrophic proportions has occurred once an event has occurred. A decision on its categorisation must be made to activate compensation under the National Catastrophe Insurance Scheme.
- [292] Scientific expertise provided by the Scientific Advisory Panel in the form of a report would be used to assist in the determination of magnitude, intensity and focal depth of an earthquake from which the ground motions can be estimated. For an event such as an earthquake, knowing these factors would affect the way that the ground movement is categorised and whether it would be classified as an earthquake of catastrophic proportions.⁴⁰⁰ The type of soil could also be used to help in the assessment of the likely damage resulting from the earthquake, whereby softer soil types are more likely to generate greater damages. In determining if an earthquake of catastrophic proportions has occurred 'the relevant Minister could thus consider the magnitude,

³⁹⁶ Guy Carpenter <http://www.guycarp.com/content/guycarp/en/home.html>

³⁹⁷ Guillermo Franco, 'Construction of Customized Payment Tables for Cat-in-a-Box Earthquake Triggers as a Basis Risk Reduction Device' in George Deodatis, Bruce R Ellingwood and Dan M Frangopol, *Safety*, *Reliability, Risk and Life-Cycle Performance of Structures and Infrastructures* (Taylor and Francis Group, 2013) 5455.

³⁹⁸ Somerville, above n 392.

³⁹⁹ Ibid.

⁴⁰⁰ Franco, above n 397, 5455; Sommerville, above n 392.

depth and proximity to the affected town(s) or city⁴⁰¹ as well as other factors, which are likely to have a direct link to the loss. These factors coupled with the report (which it is at the Minister's discretion to ask for) would help determine the likely outcome and projected losses from the earthquake, which could be used by the Minister to determine if the earthquake was of catastrophic proportions.

Hailstorm

- [293] Expert researchers define hailstorms as requiring 'certain atmospheric conditions known to be conducive to hail formation; low-level moisture, atmospheric instability, change in wind direction and speed with height (wind shear), convective activity, and higher than average minimum temperatures'.⁴⁰² The hailstorm activity-giving rise to a natural disaster of catastrophic proportions would largely depend on the magnitude and duration of the storm and the severity of the damage that resulted. Essentially given the proposed National Catastrophe Insurance Scheme is designed to provide insurance cover against catastrophes that inflict damage on household buildings, the footprint size of the storm and the size of the actual hail stones are likely to be probative and also have a direct impact on the damages sustained.⁴⁰³ However, one recognised weakness of assessment based upon the size of the hailstones is the trend to exaggerate the size or shape of hailstones particularly likening them to spherical objects such as golf balls.404
- [294] In looking at the example of the 1999 Sydney hailstorm it was found that generally hail stones must be at least 3cm to damage and even greater than 5cm to generate significant damage. Further, for 'hailstone sizes >6cm is associated with more severe damage. In comparison the threshold of hailstorm causing insured claims starts at hailstone sizes of 1cm.⁴⁰⁵ Given the traditional losses associated with hailstones of >6cm, it is likely that this would be a guiding factor in assisting the Minister to determine if the hailstorm had been of catastrophic proportions.

⁴⁰¹Somerville, above n 392.

⁴⁰² Stephanie Niall and Kevin Walsh, 'The Impact of Climate Change on Hailstorm in Southeast Australia' (2005) 25(14) International Journal of Climatology 1933, 1934. ⁴⁰³ McAneney, above n 20.

⁴⁰⁴ S.S. Schuster et al, 'Characteristics of the 14 April 1999 Sydney hailstorm based on ground observations, weather radar, insurance data and emergency calls' (2005) 5 Natural Hazards and Earth System Sciences 613, 614. ⁴⁰⁵ Ibid 620.

Tsunami

- [295] A tsunami is the sudden movement of water generally occurring as a result of an earthquake (or undersea earthquake), landslide (coastal or undersea) or volcanic activity⁴⁰⁶ or 'asteroid and meteorite strikes into the ocean'.⁴⁰⁷ If a tsunami occurs as a result of a different event, it is known as a secondary event,⁴⁰⁸ although it is possible for the tsunami to occur as a primary event.⁴⁰⁹
- [296] The speed of a tsunami is determined by the depth of water in which it is created whereby it is possible to travel at speeds of up to 950km/h in deep water. When a tsunami moves from deep water it slows down, however the impact of the slowing down may mean that the wave increases in size. As the wave size increases, when the wave hits land, if the wave is larger, it is likely to affect further inland than if the wave was smaller in size. The exact impact of a wave will vary. A tsunami can either be comprised of a single wave or it can be characterised by a series of waves (with the first wave not necessarily being the highest).⁴¹⁰
- [297] In categorising tsunami, Risk Frontiers has defined the various types of tsunami and their relative frequency.

Small tsunamis occur quite regularly at the rate of around two per year and flooding to heights of 1 or 2 metres above sea level. About once a decade (and often in the Pacific) a large tsunami occurs, flooding heights of 10 to 20 metres above sea level. Mega tsunamis flood to heights greater than 40 metres.⁴¹¹

The type of tsunami, which is likely to be a natural disaster of catastrophic proportions, is either a large tsunami or a mega tsunami, although the exact location of the tsunami in terms of household properties and the damage sustained would be used in any official determinations. If a tsunami hits land at an area without residential properties

⁴⁰⁶ Geoscience Australia, 'Applying Geoscience to Australia's most important challenges: Tsunami' <<u>http://www.ga.gov.au/scientific-topics/hazards/tsunami></u>.

⁴⁰⁷ Risk Frontiers, 'Tsunami – the Underrated Hazard!' (June 2004) 3 *Risk Frontiers Quarterly Newsletter* 1 https://www.riskfrontiers.com/newsletters/rfnewsV3Issue4.pdf>.

⁴⁰⁸ The term secondary event refers to a catastrophe event which occurs as the result of or with a direct proximate cause to another event. For example, fire is often a secondary event caused by earthquake whereby earthquake may disrupt power lines and thus generate the right conditions for the fire to occur. A secondary event would not have occurred without the occurrence of the primary event. ⁴⁰⁹ A primary event is one which occurs on its own without any interdependence on the occurrence of a different

⁴⁰⁹ A primary event is one which occurs on its own without any interdependence on the occurrence of a different event.

⁴¹⁰ Geoscience Australia, 'Applying Geoscience to Australia's most important challenges: Tsunami' above n 406.

⁴¹¹ Risk Frontiers, 'Tsunami – the Underrated Hazard!' above n 407.

or with only a few residential properties, it is less likely the tsunami would be categorised as being of catastrophic proportions (in relation to the damage it generated).

- [298] In Australia, there is historical evidence of large tsunamis occurring, although in recent times the impacts of tsunamis have been minimal. However, given the proposed National Catastrophe Insurance Scheme would cover future events, it is necessary to take into account possible events which could generate losses for the Scheme but which Australia has not experienced historically (or at least whilst records were available). Risk Frontiers have suggested 'geological work in Western Australia has revealed that 6,000 years ago, a tsunami flooded inland to distances of 30km.^{'412} The historical evidence of the impact of tsunami's and the potential damage particularly to the north western coast of Western Australia, resulted in Geoscience Australia's involvement in an ongoing project to model tsunami. In doing so, Geoscience is involved in the operation of the Joint Australian Tsunami Warning Centre, the purpose of which is to monitor seismic activity and provide warnings of potential tsunami up to 90 mins prior to a tsunami having an impact on land.⁴¹³ The information obtained from this centre could be used by the Scientific Advisory Panel in compiling a report for the Minister should a tsunami hit Australian land and generate residential property damage.
- [299] Tsunamis originate from the ocean, and thus the greatest susceptibility for properties are those in coastal areas. The risks are escalated with multiple story residential buildings in coastal areas (these are covered by the Scheme). A key determinate for a tsunami activating the Scheme is the extent to which the tsunami comes inland and damages residential property and whether this is deemed to be of catastrophic proportions.

Landslide

[300] Geoscience Australia describes a landslide as 'the movement of rock, debris or earth down a slope. They result from the failure of the materials which make up the hill slope and are driven by the force of gravity. Landslides are known also as landslips,

⁴¹² Ibid.

⁴¹³ Geoscience Australia, 'Applying Geoscience to Australia's most important challenges: Tsunami' above n 406.

slumps or slope failure.⁴¹⁴ Like tsunami a landslide can be a primary event or it can be a secondary event resulting from an earthquake or other such primary natural disasters.

- [301] Although not covered in standard household insurance policies, the proposed National Catastrophe Insurance Scheme may provide cover for landslides. However, the definition of landslide damage as required to fall within the insurance cover provided by the proposed Scheme, would require severe damage such that the residential property could not serve as a residential property.
- [302] In California in the case of Hughes v Potomac Insurance Company 199 Cal App 2d 239 (CA 1962) the plaintiff's property was left hanging over a 30-foot cliff as a result of a landslide. In this case the house was not structurally interrupted, however the fact that it was hanging over a cliff that was newly formed by the earthquake meant that it was not fit to operate as a residential dwelling. In this case it was determined that physical damage extended to such a circumstance as 'dwelling or dwelling building connotes a place fit for occupancy, a safe place in which to dwell or live. It goes without question that the respondents 'dwelling building' suffered real and severe damage when the soil beneath it slid away and left it overhanging a 30-foot cliff...Until such damage was repaired and the land beneath the building stabilised, the structure could scarcely be considered a dwelling building in the sense that rational persons would be content to reside there.⁴¹⁵ The physical damage was extended to the soil beneath the building in the case of landslides where they had been compromised to such an extent that the property was otherwise unliveable. The Scheme would likewise consider the impacts of a landslide where the physical structure is damaged or the foundations affected such that the structural integrity of the building is questionable. However, as with the other perils, whether a particular landslide activates the scheme would depend upon whether it is of catastrophic proportions.

Exclusion for Volcanic Activity

[303] Damage arising from volcanic eruption is specifically excluded from the listed natural disaster events covered by the proposed Scheme because there are currently no active volcanoes in Australia. One of the reasons for this is that there are no plate boundaries

⁴¹⁵ Hughes v Potomac Insurance Company 199 Cal App 2d 239 (CA 1962), 248 – 249.

within Australia thus it is unlikely volcanic activity would affect Australia (at least to the extent of having catastrophic impacts).

Ministerial Declaration of a Listed Natural Disaster of Catastrophic Proportions

[304] Figure 1 outlines the process that would need to be undertaken after the occurrence of a natural disaster of catastrophic proportions to activate compensation under the proposed National Catastrophe Insurance Scheme. The discussion will focus on the procedural and legal requirements for a Ministerial Declaration that would activate the payment of compensation under the proposed National Catastrophe Insurance Scheme.



Figure 1- Process to Activate Compensation under the proposed National Catastrophe Insurance Scheme

[305] The process for the proposed National Catastrophe Insurance Scheme to determine whether a listed natural disaster of catastrophic proportions has occurred is modelled on the process for declaring a terrorism event under the Australian Reinsurance Pool
Corporation. This procedure would be incorporated into any legislation that is enacted to facilitate the proposed National Catastrophe Insurance Scheme.

- [306] In January 2015, the Australian Reinsurance Pool Corporation used the procedure within s 6 of the Terrorism Insurance Act 2003 (Cth) to declare a terrorist event. A declaration was made by Treasurer Joe Hockey (the Treasurer at the time) that an eligible terrorist event had occurred at the Lindt Café located in Martin Place, Sydney.⁴¹⁶ The effect of this declaration was that the Australian Reinsurance Pool Corporation was liable for business interruption losses as per any insurance contracts with the Australian Reinsurance Pool Corporation. The declaration was published in the Government Gazette and was tabled in the House of Representatives and the Senate on 9th February 2015. It was made clear that no reduction percentage would be applied—this was a procedural requirement outlined in the Act.⁴¹⁷ In determining whether there was an eligible terrorist event, the relevant Minister (Treasurer) examined the probable losses. The Minister had to consider what the economic loss was, as this was a requirement under the *Terrorism Insurance Act 2003* (Cth).⁴¹⁸ It was decided that because Martin Place was evacuated for security reasons, business interruption and commercial losses occurred. Once the Treasurer made the declaration, it could not be revoked.⁴¹⁹ Under the Act, the Treasurer can delegate the power to make the declaration to the secretary of the Treasury Department, a member of the State Emergency Services,⁴²⁰ or an employee of Treasury or the Attorney-General's Department; however, the delegation option was not exercised for this event.⁴²¹
- [307] The Ministerial Declaration made under the Terrorism Insurance Act 2003 (Cth) was deemed to be a legislative instrument under the Legislative Instrument Act 2003 (Cth). As the Legislative Instruments Regulations 2004 (Cth) stipulated that a determination made under s 6 of the Terrorism Insurance Act 2003 (Cth) [a declared terrorist incident] was not a disallowable instrument.422 As a result, once certified by the

⁴¹⁶ Terrorism Insurance Act 2003 (Cth); Australian Reinsurance Pool Corporation, 'Declaration of a Terrorist Incident' above n 39.

Terrorism Insurance Act 2003 (Cth) s 6(6).

⁴¹⁸ Terrorism Insurance Act 2003 (Cth) s 6(3).

⁴¹⁹ Terrorism Insurance Act 2003 (Cth) s 6(5).

⁴²⁰ The legislation used this terminology to ensure the Treasurer was able to rely on a wide range of experts, thus giving the Treasurer discretion in seeking expert opinion. ⁴²¹ *Terrorism Insurance Act 2003* (Cth) s 6(9).

⁴²² Legislative Instruments Regulations 2004 (Cth) Sch 2 [9A].

Attorney-General, the Ministerial Declaration could not be revoked or challenged, however it may be challenged until the point of certification.

- [308] Under the proposed National Catastrophe Insurance Scheme, the relevant Minister would be required make a declaration that a listed natural disaster of catastrophic proportions has occurred. In drawing an analogy with the Ministerial Declaration required for a declared terrorist incident activating insurance under the Australian Reinsurance Pool Corporation, the legal process of making a Ministerial Declaration under the proposed National Catastrophe Insurance Scheme is similar. A Ministerial Declaration under the Scheme would be executed as a legislative instrument under s 5(1) of the *Legislative Instrument Act* 2003 (Cth). It would therefore have a direct impact on whether the compensatory provisions of the proposed National Catastrophe Insurance Scheme would spring into operation and thus whether the insured would receive compensation based upon the natural disaster being of catastrophic proportions.⁴²³
- [309] The proposed Scheme has a set of definitions to help the relevant Minister and the Attorney-General decide whether a listed natural disaster of catastrophic proportions has occurred. The Ministerial Declaration that a natural disaster of catastrophic proportions has occurred must be made in consultation with and certified by the Attorney-General pursuant to s 10 of the *Legislative Instruments Act 2003* (Cth).
- [310] The relevant Minister and the Attorney-General may consider the effect the event has had, the probable amount of damage and factors relating to the duration and severity of the event in making their determination. It is possible for the requirement that the Minister consults with the Scientific Advisory Panel experts before making the Declaration to be waived under s 18(2)(b)⁴²⁴ on the basis that a decision as to coverage may need to be made urgently. Under s 26 the Minister is required to lodge an explanatory statement with the Senate and House of Representatives outlining why a decision was made.⁴²⁵ The Senate or House of Representatives can disallow the legislative instrument under s 42, however this must be done prior to the declaration

⁴²³ Legislative Instrument Act 2003 (Cth) s 5(2).

⁴²⁴ Legislative Instruments Act 2003 (Cth).

⁴²⁵ Legislative Instruments Act 2003 (Cth) s 39(1).

being certified. This legal process establishes a line of transparency and accountability in the decision making process.

[311] In streamlining the declaration process with the Australian Reinsurance Pool Corporation, consideration of the severity of a natural disaster of catastrophic proportions would be analogous to the determination under the Australian Reinsurance Pool Corporation that economic loss has occurred. The relevant Minister and Attorney-General must focus on household structural damage because the purpose of the National Catastrophe Insurance Scheme is to provide coverage to households.

Publication in Government Gazette

[312] The relevant Minister could require, in writing, the Scientific Advisory Panel to provide a report outlining scientific information on the event in question, catastrophe models, the likely event footprint and damage estimates. This information could be used to determine whether a natural disaster of catastrophic proportions has occurred. The Scientific Advisory Panel provides the expert advice by members of peak scientific bodies in Australia on the severity and magnitude of an event.

Using a Scientific Advisory Panel to Help Law Makers with Decisions on Applicability of National Catastrophe Insurance Scheme

[313] In 2003, the Commonwealth Government undertook an extensive Review of the Corporate Governance of Statutory Authorities and Office Holders and determined the role of an advisory panel or board. Members of the advisory panel or board could include government members, individuals from businesses and academic/scientific experts. The Review of Corporate Governance of Statutory Authorities and Office Holders found there are advantages to the relevant Minister having access to additional information and members of an advisory panel or board with specialist knowledge that can assist the relevant Minister in making their decision.⁴²⁶ Scientific organisations⁴²⁷

⁴²⁶ Commonwealth Government, *Review of the Corporate Governance of Statutory Authorities and Office Holders* (June 2003) ('*Uhrig Report*') 93–95.

⁴²⁷ These may include (but are not limited to) the potential use of experts from the following organisations:

[•] Australian Bureau of Meteorology

Australasian Fires Authority Council

[•] Bushfire and Natural Hazard Cooperative Research Centre

Commonwealth Scientific and Industrial Research Organisation

Geoscience Australia

are best equipped to make a realistic assessment of the severity of an event and measure the event, and thus to assist the relevant Minister when there is uncertainty about the occurrence of a listed natural disaster of catastrophic proportions.

- [314] In 2013, the law changed from the legislation considered by the Uhrig Report. Nevertheless, findings of the Uhrig Report⁴²⁸ are still relevant to the proposed National Catastrophe Insurance Scheme as it operates under the *Public Governance, Performance and Accountability Act 2013* (Cth) and the *Public Governance, Performance and Accountability Rules 2014* (Cth). Although this legislation does not focus on advisory panels or boards specifically, it still provides legal structures to ensure there is accountability for decisions made by public financial corporations. Using the recommendations from the Uhrig Report and the guidance on accountability from the *Public Governance, Performance and Accountability Act 2013* (Cth) there are the following safeguards around the way the Scientific Advisory Panel operates to ensure that it is efficient and workable.
- [315] The legislation provides for appointment of the Scientific Advisory Panel members by the Governor-General for a period not exceeding 5 years, with conditions for termination of the appointment by reason only of misbehaviour (absence from duty, failure to disclose the relevant interests) or physical or mental incapacity. The legislation also provides that the relevant Minister must provide directions and guidelines for the Panel in writing; and that the Panel members are not liable to an action or other proceeding for damages for or in relation to any act done or omitted to be done in good faith in performance or purported performance of any function, or in exercise or purported exercise of any power, conferred on them. These provisions safeguard the independence of the Panel members for the duration of their membership, and provide immunity from legal suit. However, while time-lines for decision-making can be imposed via Regulations, they are not statutorily codified.

Risk Frontiers

Other scientific bodies, government departments or university research centres that would be well positioned to provide specific advice on natural-disaster events.
⁴²⁸ Ibid

[316] The Scientific Advisory Panel would be established by the Chief Executive Officer of the National Catastrophe Insurance Scheme and it would be accountable to the Chief Executive Officer and the relevant Minister.⁴²⁹

⁴²⁹ Currently, some Commonwealth Government departments, government instrumentalities and public financial corporations use an advisory panel or advisory board to assist the relevant Minister in exercising discretion. For example, the Australian Taxation Office, *Tax System Advisory Board Consultation Panel—Report to the Australian Government* (Report, 30 June 2011) 2.

Summary of Procedure to Activate the Proposed National Catastrophe Insurance Scheme

- [317] The procedure to activate the proposed National Catastrophe Insurance Scheme requires the following steps:
 - a natural disaster to occur and satisfy the definition of the listed events covered by the National Catastrophe Insurance Scheme (as proposed). This natural disaster to be assessed as one of catastrophic proportions in order to activate compensation under the Scheme.
 - a. the events covered are flood, fire, earthquake, hailstorm, landslide, tsunami or cyclone
 - b. the Minister must determine whether the listed natural disaster was of catastrophic proportions
 - c. the Scientific Advisory Panel could be requested by the relevant Minister or the Attorney General to produce a brief report to help the relevant Minister or Attorney General determine the circumstances of the particular event and whether it is catastrophic
 - 2. the relevant Minister (as determined by the enabling legislation) notifies the Attorney-General's Department of the event
 - 3. a Ministerial Declaration is made
 - b. Ministerial Declaration must be certified as a legislative instrument by the Attorney-General

c. once certified by the Attorney-General, the Ministerial Declaration is a legislative instrument this must be tabled in the Senate and the House of Representatives within 6 parliamentary sitting days enabling the Senate or House of Representatives to disallow the Ministerial Declaration. After the six parliamentary sitting days the Senate or House of Representatives would no longer have the opportunity to disallow the Ministerial Declaration.

4. compensation is paid under the National Catastrophe Insurance Scheme (provided the legislative instrument is not disallowed).

Chapter 6: Events Limitations, Hours Clauses and Deductible Amounts Affecting the Proposed National Catastrophe Insurance Scheme

Hours Clause

- [318] Legally the duration of an event determines the parameters of cover, the amount of losses the Scheme would incur and how many 'events' arise. Collectively these factors would enable the Scheme to ascertain from the outset the number of claims required to be processed; to assess and make payouts; and thus to adjust operational procedures accordingly. If it appears that the number of claims is overwhelming, the hours clause could be used for guidance. This process also would enable activation of the publicprivate partnership with the relevant insurers under the Scheme for the purpose of utilising additional trained insurance professionals as per the terms of the agreement.
- [319] The operation of an 'hours clause' specifies when the proposed National Catastrophe Insurance Scheme would be liable to pay compensation. Given the Scheme operates with an event limit of \$375,000 per event per residential property, the application of the 'hours clause' would define whether losses fall within one event and thus one deductible with the total compensation to exceed the \$375,000 cap. Alternatively, if multiple events apply then corresponding deductibles would apply and the limit would be capped at \$375,000 per event. If multiple events have occurred, the losses would have to be apportioned between the events.⁴³⁰
- [320] In New Zealand, the operation of the hours' clause and when an event occurred (i.e. its duration) was a factor the High Court considered in *Re Earthquake Commission*.⁴³¹ This legal consideration coupled with the practical effects and liability that arose for the Earthquake Commission saw the New Zealand Treasury undertake an examination and review of its structure and continued operation.⁴³² The examination of when the

⁴³⁰ Robert Merkin, 'The Christchurch Earthquakes: Insurance and Reinsurance' (2012) 18 Canterbury Law *Review*, 119, 147–148, 152. ⁴³¹ [2011] 3 NZLR 695.

⁴³² *Re Earthquake Commission* [2011] 3 NZLR 695 [6] – [10].

hours clause applied required a critical examination of the *Earthquake Commission Act* 1993 (NZ).⁴³³

- [321] The listed event activating the operation of proposed National Catastrophe Insurance Scheme must generally be a single event as per the 'hours clause'. However, in some instances, events occurring simultaneously across several areas could expect some flexibility in determining the duration of an event. In particular, flexibility must be allowed in the application of the hours' clause. An example of where the single event may require further regulatory guidance is earthquakes and their aftershocks. Earthquakes often result in a number of aftershocks of varying magnitude. These aftershocks can occur after the main earthquake. Examining whether damage caused by an aftershock is part of the damage from the original earthquake may involve flexibility in the manner that the hours' clause is applied whereby instead of lasting several hours, the event may be deemed to have lasted for days. If damage arises as a result of the aftershock or secondary event (such as fire following an earthquake) and the aftershock or secondary event falls within the time period for the particular earthquake of catastrophic proportion then the damage to the residential property would be covered by the Scheme. The secondary event does however have to be the type of event which the proposed National Catastrophe Insurance Scheme would provide insurance cover for.
- [322] In New Zealand, the Earthquake Commission⁴³⁴ currently imposes a 48-hour time limit to consider several events or primary and secondary incidences to be incorporated into the same event for insurance purposes (except catastrophic fire).⁴³⁵ In the United States, there is a 72-hour period applied to consider an independent event or series of smaller events which make up one continuous peril.⁴³⁶ The time limitation in the United States seems more reasonable than the shorter period adopted under the New Zealand system. The proposed National Catastrophe Insurance Scheme would not be established as a profit driven entity, rather it would seek fiscal stability with any profits being maintained to build up a fund against future losses. The deductibles need to serve dual purposes of ensuring that there is some individual responsibility and

⁴³³ Re Earthquake Commission [2011] 3 NZLR 695 [11] – [39].

⁴³⁴ This was challenged in a recent High Court decision, *Re Earthquake Commission* [2011] 3 NZLR 695.

⁴³⁵ Earthquake Commission Act 1993 (NZ) Sch 3.

⁴³⁶ Scott J Kipper, Brian Sandoval and Terry Johnson, *Earthquake Insurance: Nevada Consumer's Guide* (Department of Business and Industry-Division of Insurance, Nevada, February 2012) 5.

preventing claims for miniscule amounts whilst ensuring that the rate charged as a deductible does not detract from the Scheme's social objectives. The 72-hour period seeks to achieve a balance between an insured having to pay a deductible amount for each event and the certainty needed for the operation of the proposed National Catastrophe Insurance Scheme. Through the hours clause, the proposed National Catastrophe Insurance Scheme has certainty in terms of calculating the liability resulting out of a particular event.

- [323] In events such as fire or flood, the damage could occur simultaneously yet still be deemed to occur from a single event for the purposes of the National Catastrophe Insurance Scheme (in the format currently proposed for the Scheme). The Scheme follows the New Zealand model by differentiating bushfire and flooding, and by providing that a series of small events within a designated timeframe are categorised as part of the same event if damage occurred within seven consecutive days. This is important for an insured, as they are required to pay one deductible. From an operational viewpoint, this may also prevent the unnecessary processing of several claims by the National Catastrophe Insurance Scheme, thus saving administrative costs.⁴³⁷ The justification for the exception applying to bushfire and flood is that these events often occur over an extended period.
- [324] During the Black Saturday bushfires of February 2009,⁴³⁸ the fires occurred over several days in different geographical localities within Victoria. However, there was sufficient proximity and symmetry between the fires occurring in the different localities for all of the individual events to be grouped together under the name Black Saturday bushfires or the Victorian bushfires. This is based upon the most common reinsurance clauses which provides an hours clause of up to seven days (168 hours) for losses arising from bushfires ('fires originated in or spreading through trees and/or grassland.⁴³⁹) A second example of this is the Queensland floods⁴⁴⁰ where despite the flooding occurring over a period, there was regularity between individual events and the cumulative effect of the flooding was classified as one overarching natural disaster of catastrophic proportions. Therefore, the hours' clause may apply to all listed events other than catastrophic bushfire and flooding where a period of up to seven

⁴³⁷ Earthquake Commission Act 1993 (NZ) Sch 3(1)(b).

⁴³⁸ 2009 Victorian Bushfires Royal Commission, *Final Report*, above n 110.

⁴³⁹ Colin Packham, 'What is an event?' (August 2015) 15(1) *Risk Frontiers Quarterly Newsletter* 3, 3.

⁴⁴⁰ Carter, 'Flood Risk, Insurance and Emergency Management in Australia', above n 382, 20, 20–25.

consecutive days (168 hours) may apply. Where there is slower flooding that develops over a period of weeks, the relevant hours clause may be extended at the discretion of the relevant Minister when making a Ministerial Declaration that a natural disaster of catastrophic proportions has occurred. The relevant Minister may assess the situation on a case-by-case basis. Internationally, there has been a trend with reinsurance products originating in the London Market (where it is likely reinsurance may be sourced) to extend the 'time element for flood "howsoever caused" from 168 hours [7 days] to 504 hours [21 days].⁴⁴¹ Thus, the proposed National Catastrophe Insurance Scheme provides the relevant Minister with the discretion to use this international standard for events such as flood and bushfire, which often develop over prolonged periods. Whilst a reinsurance contract term cannot dictate the terms that would apply under the proposed National Catastrophe Insurance Scheme, consistency between accepted standards ensures greater interaction between the Scheme and the commercial insurance market.

[325] Clarification regarding event limitations is important and has been examined by courts in other countries. A legal and operational issue⁴⁴² in New Zealand concerned the way that hours clauses were to operate under the Earthquake Commission in terms of the capped amount available to compensate victims. In New Zealand, the High Court examined the limitations of an event and whether the NZ\$100,000 limit applied per event or for all events occurring within a year. This was discussed by the New Zealand High Court in *Re Earthquake Commission 2011* (NZ).⁴⁴³ The case was initiated by a number of insurers operating in New Zealand seeking to clarify their liability. The insurers were worried about the definition of earthquake and how the hours' clause applied to the earthquakes in particular the concern was over the ability to claim up to NZ\$100,000 per event or if the policy limit was NZ\$100,000 per policy year. The reason for the concern was that funds provided by the Earthquake Commission would

⁴⁴¹ Packham, above n 439, 4.

⁴⁴² For a discussion of other legal and operational issues experienced by lawyers and the legal fraternity after the Christchurch Earthquakes, see Jeremy Finn, 'The Impact of the Canterbury Earthquakes on the Legal Profession' (Paper presented at University of Canterbury Earthquake Research Forum, Christchurch, 5 June 2012); Elizabeth Toomey and Jeremy Finn, 'What if We Found Legal Issues Arising from the Canterbury Earthquakes?' (Paper presented at 'What If' University of Canterbury Lecture Series, Christchurch, New Zealand, 18 July 2012) https://youtu.be/iDYXvFQ6nH8; Jeremey Finn 'Providing for Legal Issues in Disaster Management: Lessons from New Zealand and the USA' (Paper presented at Australian and New Zealand Disaster and Emergency Management Conference, Gold Coast, 5–7 May 2014) http://anzdmc.com.au/archive/page4.php>.

⁴⁴³ Re Earthquake Commission [2011] 3 NZLR 695.

form the first layer of coverage (insurance on a first-loss basis), with the remaining damage for each event paid for by the insurer providing cover for each individual (above the NZ\$100,000 cap). The insurers wanted to know whether the Earthquake Commission would pay up to NZ\$100,000 for damage arising from each event. There was uncertainty whether the NZ\$100,000 limit was per event or for all events within the same year. The High Court used the purposive interpretation to determine the limits applied as a limit per event rather than an annual cap. The court examined the purpose of the Earthquake Commission and found the commission was established to help individuals suffering property losses from an earthquake (or other listed perils). This meant that an individual's claim for losses arising from one event had no effect on their right to claim up to NZ\$100,000 from a subsequent event. In determining how the hours clause operated for individuals covered by the Earthquake Commission, the court looked at a number of factors starting with the legislation itself to seek clarity regarding the treatment of multiple damages and the nexus for what amounts to cover per event as this would change the liability of the Earthquake Commission. As there was no clarity in the legislation concerning the 'hours clause', one of the sources viewed by the High Court was the reinsurance contract. Under the reinsurance contract that the Earthquake Commission had in place, 'for earthquakes, a catastrophe is defined to include all earthquakes occurring within 720 hours (consecutive hours or 30 days) and a 250 kilometre radius of the original earthquake. Of course the reinsurance arrangements cannot affect the correct construction of the legislation.⁴⁴⁴ However, the reinsurance contract was still used as one source to assist the High Court in determining the intention of the legislation regarding an hours clause and thus what occurs within one event (for insurance purposes).

[326] Functionality of the proposed National Catastrophe Insurance Scheme would depend upon clarity regarding both operations and limitations or constrains on the Scheme.

⁴⁴⁴ Re Earthquake Commission [2011] 3 NZLR 695 [48].

Limitations under the Proposed National Catastrophe Insurance Scheme

Properties Covered: Temporary v Permanent Dwellings

- [327] The proposed Scheme is designed to cover household buildings such as houses, units, apartments (with strata title)⁴⁴⁵ and other permanently affixed buildings such as cabins. In 2011, the Natural Disaster Insurance Review suggested that manufactured homes and caravans may receive the same insurance coverage as more traditional forms of housing. The review stated this was important for reasons of equity.⁴⁴⁶ Although it may be possible to extend coverage under the National Catastrophe Insurance Scheme to caravans, there is a precondition the caravan is permanently affixed to land, as opposed to being a mobile asset. This accords with the nexus of the proposed National Catastrophe Insurance Scheme to provide cover against natural disasters of catastrophic proportions for household structural damage. In this respect, the Australian approach is likely to follow the New Zealand model.
- [328] In New Zealand, coverage under the Earthquake Commission is provided only for permanent dwellings, although this is extended to caravans provided these are permanently affixed to the land and thus, a semi-permanent but more affordable alternative to traditional housing.⁴⁴⁷ The proposed National Catastrophe Insurance Scheme would adopt the New Zealand Earthquake Commission's decision about permanence and determine that temporary housing not affixed to the land would not be insurable under the Scheme. This type of property (non-permanent property and moveable property) may be insured on the private market, however insurance products would depend upon what the private market is willing to offer (and thus is beyond the thesis to discuss the products available).

⁴⁴⁵ Memorandum from Senator Ian MacDonald, 18 November 2011; Letter from Senator Ian MacDonald to Insurance Council of Australia, 9 May 2011; Letter from Senator Ian MacDonald to Linda Tuck, 16 May 2011; 'Insurer to Cover Costs with Premium Hikes', Townsville Bulletin (Townsville), 26 August 2011, 43; Damon Guppy and Gavin King, 'Unit Owners, Tenants Feel the Insurance Pinch: It's Daylight Robbery', Cairns Post (Cairns), 31 August 2011, 3; Alexis Gillham, 'Insurance Fee Dramas Grow', Townsville Bulletin (Townsville), 7 September 2011; Darren Cartwright, 'Blow for Unit Owners', Cairns Post (Cairns), 12 October 2011, 17; Toby Raggatt, 'Insurance Bites', Townsville Post (Townsville), 17 November 2011, 8; Daniel Strudwick, 'Ease Our Insurance Pain', The Cairns Post (Cairns), 9 November 2011, 3.

⁴⁴⁶The Natural Disaster Insurance Review recommended that any insurance solutions when implemented should be available to owners of both standard and non-standard homes. The term 'non-standard homes' referred to manufactured homes or mobile homes. See Natural Disaster Insurance Review, above n 51, Recommendation 10. ⁴⁴⁷ Earthquake Commission Act 1993 (NZ) s 2, s 18.

[329] The exclusion of temporary housing ensures the operation of the proposed National Catastrophe Insurance Scheme would comply with the overarching policy objectives to ensure that housing for individuals is protected against loss arising from a natural disaster of catastrophic proportions. There are also problems with mitigation and resilience that make temporary housing unsuitable for the scheme.

Monetary Limitation of the Proposed National Catastrophe Insurance Scheme

- [330] The assumed \$375,000 (adjusted for inflation) per event limit provided by the National Catastrophe Insurance Scheme enables compensation for standard facilities enjoyed within residential buildings such as kitchen, bedroom/s, bathroom and living room. The amount an individual may obtain under the proposed National Catastrophe Insurance Scheme may be amended on a yearly basis considering inflation and other cost increases.
- [331] In deciding this amount, international limitations were examined to determine their potential applicability to the scheme. An example of this assessment was made against the limited amount available in New Zealand (NZ\$100,000⁴⁴⁸ per event). This amount is inadequate⁴⁴⁹ within the Australian context because the cost of raw materials and labour would quickly exceed this limit for even modest properties in Australia. As such, having this amount as a cap would undermine the utility of National Catastrophe Insurance Scheme.
- [332] In the United States, under the National Flood Insurance Program, there is discretion over the amount of coverage depending an individual receives. The level of cover is dependent on the premium payable and the deductible to which the insured has agreed. Such variation has not been used within the National Catastrophe Insurance Scheme in order to maintain simplicity in operations.

⁴⁴⁸ Earthquake Commission Act 1993 (NZ) s 18.

⁴⁴⁹ The New Zealand limit of NZ\$100,000 is insufficient to cover the losses likely to be sustained from an event covered by the EQC. The New Zealand Treasury are engaged in research concerning improvements to the operation of the Earthquake Commission and the potential of increasing the NZ\$100,000 limit. The final report outlining the findings is yet to be handed down.

Event cap of \$375,000

- [333] The proposed National Catastrophe Insurance Scheme's event limitation of \$375,000 per residential property acknowledges that in different parts of Australia, there are different types of housing to suit the climate or locality and different costs are associated with these. Further, the cost of materials, building and transportation of materials fluctuates between localities within Australia. The \$375,000 cap represents the average value of a household property in 2016.⁴⁵⁰ The compensation provided to an individual should not represent more than the true value of the property.
- [334] The information currently available and the data sets from historical events indicate that floods and other natural disasters of catastrophic proportions destroy very few properties to the extent they are no longer habitable. Consequently, the \$375,000 event limit is likely to be sufficient to cover the losses arising to most Australian properties by flood (or other listed disaster).

International Guidance: Average Flood Losses occasioned by French Caisse Centrale de Réassurance

[335] After the Xynthia Storm in France, the losses were categorised into bands, with a small proportion of losses exceeding €626,000. The majority of the claims payouts were for less than €8,900 with a large proportion of claims also being filed for damages in the range €8,900–28,000. The third largest penetration of claims was for property damage within the range of €28,000–124,000. However, the distribution of losses correlated with proximity to the French coastline, whereby all of the higher overall costs was attributable to land that was located on the French coastal fringe.⁴⁵¹

⁴⁵⁰ This is based upon applying an inflation rate of 5% to the average household value of 2006 which was \$225,858 (based upon the sum insured), would give a 2016 average property value of \$370,000. See Australian Securities and Investment Commission, *Report 89: Making Home Insurance Better* (January 2007) 5. This figure also takes into account the estimated average Australian value of \$385,000 (based on 1 January 2016) the Northern Australian Premiums Taskforce used to make their calculations. See Commonwealth (Treasury), Northern Insurance Premiums Taskforce: Final Report (November 2015)

http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Reviews%20and%20Inquiries /2015/NAIP%20Taskforce/Final%20Report/Downloads/PDF/NAIP_final_report.ashx; Dr Ryan Crompton, Macquarie University (Risk Frontiers), Personal Communication with Rachel Anne Carter, 2016.

⁴⁵¹ Caisse Centrale de Réassurance, 'E-Risk : Inondation consécutives à la tempête Xynthia de février 2010' <www.erisk.ccr.fr/faces/erisk-autres-cout-zone-inondation.jsp>.

[336] A problem with comparing property-damage values of France and Australia relates to the different sizes of properties (on average). As Australian properties on average have a larger habitable area, the losses are unlikely to correlate.

Valuing Property under the Proposed National Catastrophe Insurance Scheme

Rateable Value

- [337] The rateable value of properties would be the insured value of household buildings covered by the proposed National Catastrophe Insurance Scheme.⁴⁵² Valuing properties using the rateable value may have implications for privacy law; these issues are addressed by adherence to the relevant Australian Privacy Principles set out in the *Privacy Act 1988* (Cth).
- [338] Determining the rateable value is the responsibility of the Valuer-General (in each State).⁴⁵³ The rateable value needs to reflect the real value of a house (building structural value) because otherwise the problem of underinsurance may not be addressed under the proposed National Catastrophe Insurance Scheme. Individuals living in councils where there are artificially lowered rateable values are likely to receive an amount that is not reflective of the true value or actual damage suffered.

Challenging Rateable Value of Property for a Higher Insured Value under the Proposed National Catastrophe Insurance Scheme

[339] If an individual considers the rateable value of their property has been artificially lowered and that they would therefore not receive sufficient insurance coverage under the proposed National Catastrophe Insurance Scheme, they could challenge the rateable value as long as this is done before a listed natural disaster of catastrophic proportions occurs.⁴⁵⁴ The proposed National Catastrophe Insurance Scheme would allocate resources and personnel to re-evaluations. Transparency and accountability is paramount in maintaining the integrity of National Catastrophe Insurance Scheme and

⁴⁵² Fiscally it is important to use a realistic figure to represent the value of all houses insured so that adequate capital reserves and reinsurance can be provided for.

⁴⁵³ For example, see Victorian Government, 'Valuer-General Victoria: Valuing Victoria' http://www.dtpli.vic.gov.au/__data/assets/pdf_file/0006/218355/valuingvictoria09_v1.pdf.

⁴⁵⁴ The challenge requires an individual to furnish evidence of the locality of their premises, the type of house, flat or apartment they own, including a detailed plan of the property and construction materials.

ensuring individuals are dealt with fairly. If the challenge is accepted and the independent body determines a higher value is more appropriate, the individual would automatically have the higher value of their property recognised for the purposes of future compensation under National Catastrophe Insurance Scheme. Conversely, the insured would also have the new rateable value used in determining local rates (to ensure uniformity in valuations) and thus may be charged an additional amount to reflect the increased value.

- [340] The re-valuation process provides security to homeowners that their house would be covered for its true value under the proposed National Catastrophe Insurance Scheme. There are however some practical challenges or limitations inherent to the reevaluation process which include:⁴⁵⁵
 - Given the value of household properties would be determined by Councils, the same Councils might be reluctant to re-evaluate property for the purposes of the National Catastrophe Insurance Scheme unless the property is scheduled for revaluing for Council purposes.
 - An individual homeowner who challenges the existing value of their property is under a great administrative burden to produce the documentation needed to satisfy the National Catastrophe Insurance Scheme's independent body of the incorrect valuation. The cost of this is split between the homeowner who pays an administrative fee (fee calculation contained within the regulations) and the National Catastrophe Insurance Scheme who absorbs the processing costs.
 - Pragmatically, some homeowners may be reluctant to challenge deflated council values because this would have the implication of increasing the amount they pay in council tax. To the extent the premium for coverage under the proposed National Catastrophe Insurance Scheme would be based upon the value of the property, this may also increase their premium.

⁴⁵⁵ McAneney, above n 20.

 As the proposed National Catastrophe Insurance Scheme seeks to operate nationally, valuation methodology by local councils, may be inconsistent across Australia.⁴⁵⁶

Although there are potentially a number of challenges associated with the method used to price properties for the purposes of coverage by the National Catastrophe Insurance Scheme, they are outweighed by the utility and costs of establishing a new valuation method.

National Register of Repairs

- [341] A national register of repairs could be established to address the need for a greater focus on mitigation and ensuring properties are resilient as opposed to simply focusing on the repair and recovery costs. The national register of repairs, may help in the mid to long term by the promotion of resilience.
- [342] The national register of repairs, if operational could serve the dual purpose of creating a certified record for retrofitting of properties to ensure greater resilience or in mitigating potential losses to that residential building, as well as recording repairs. In terms of it recording repairs, this refers to repairs which were undertaken as a result of natural disasters such as for example fixing a roof which was damaged during a cyclone. If the repairs go beyond restoring the property to the state the property was in prior to the natural disaster, then the repairs which constitute betterment would also be recorded (betterment is discussed in [350] [351]). The national register of repairs would also record attempts to retrofit properties to enhance their resilience, such as measures to ensure older properties comply with the latest building codes.⁴⁵⁷
- [343] The cost associated with the operation of the national register of repairs may be absorbed by the proposed National Catastrophe Insurance Scheme as part of their operational costs. The register would enable the Scheme to trace and understand changes made to properties throughout Australia as a result of repairs, mitigation measures and betterment. In turn, a better understanding of the properties and their vulnerabilities would help ensure that the Scheme has sufficient measures in place to

⁴⁵⁶ Ibid.

⁴⁵⁷ Although the national register of repairs is designed for recording repairs carried out by builders, if an owner or occupier has carried out repairs themselves but can document what they have done and evidence that it is of a sufficient standard, this too can be recorded.

cover the risks through an accumulated capital reserve, investments⁴⁵⁸ and / or commercial reinsurance (only relying upon the government guarantee to the extent necessary).⁴⁵⁹ Although the national register of repairs would enhance transparency and accountability of the scheme, it may also create a risk of being used by commercial insurers to increase premiums for 'top up' cover for properties, which are particularly susceptible to one or more catastrophe risk(s). The use of repairs and mitigation data must adhere to the relevant Australian Privacy Principles⁴⁶⁰ set out in the *Privacy Act 1988*. The Australian Privacy Principles would apply, particularly in relation to database access to the database and its use by commercial insurers.⁴⁶¹ The national register of repairs could be created as an online database with a portal for individuals to upload documents, ask questions and find out relevant information.

⁴⁵⁸ The Australian Reinsurance Pool Corporation currently has an investment policy with investments held in its name. On 30 June 2016, the Australian Reinsurance Pool Corporation held investments of \$524 million in term deposits and \$2.3 million in cash. In 2015 – 2016, 'investment income fell to \$17.2 million due to a period of sustained low interest rates, a very low risk investment profile, and the requirement to fund \$112.5 million in dividend and fee payments to the Commonwealth Government, which decreased the investment balance.' See Australian Reinsurance Pool Corporation, *Australian Reinsurance Pool Corporation Annual Report 2015 – 2016* (2016) 44 – 45. ⁴⁵⁹ An internal investment policy could be developed by the National Catastrophe Insurance Scheme. If the

 $^{^{459}}$ An internal investment policy could be developed by the National Catastrophe Insurance Scheme. If the Scheme is required to pay the Commonwealth Government a dividend or fees for the Commonwealth Government guarantee (as proposed to underpin the Scheme), a similar approach could be adopted to that utilised by the Australian Reinsurance Pool Corporation. The tax exemption could help to ensure that the maximum possible capital reserves are held. This in itself would provide a greater safeguard and establish a larger buffer between the funds available to pay for compensation due under the Scheme and the need for the Government Guarantee to be activated. See Australian Reinsurance Pool Corporation, *Annual Report 2015 – 2016*, above n 458, 44 – 45.

⁴⁶⁰ In order for the Australian Privacy Principles to apply (as outlined in Schedule 1 of the Privacy Act 1988 (Cth)), the National Catastrophe Insurance Scheme must satisfy the definition of Australian Privacy Principle entity. The term 'Australian Privacy Principle entity' is defined in s 6 of the Privacy Act 1988 (Cth) and the definition is explained in Chapter B of the Australian Privacy Principle Guidelines. The National Catastrophe Insurance Scheme is an 'Australian Privacy Principle entity' and thus it must adhere to the Australian Privacy Principles in the way it handles personal information. The classification of the Scheme as an 'Australian Privacy Principles entity' is consistent with the categorisation of the Australian Reinsurance Pool Corporation. In compliance with Australian Privacy Principle 1 [open and transparent management of personal information], the National Catastrophe Insurance Scheme has a Privacy Policy which outlines measures which it will take to ensure that personal information is kept private. It is also careful to ensure that it complies with the existing Australian Privacy Principles. See also Office of Australian Information Commissioner, 'Australian Privacy Principles (Summary)' (2016) https://www.oaic.gov.au/privacy-law/privacy-act/australian-privacy-principles; Office of the Australian Information Commissioner, 'Australian Privacy Principle Guidelines: Privacy Act 1988 (31 (Cth)' March 2015) <https://www.oaic.gov.au/resources/agencies-and-organisations/appguidelines/APP_guidelines_complete_version 1 April 2015.pdf>.

⁴⁶¹ The significance of the Scheme's compliance to the Australian Privacy Principles means that there may be limitations placed regarding access to information on the national register of repairs. The reason for this is to ensure compliance and thus prevent commercial insurers having access to personal information. It is however, possible for personal information to be disclosed to commercial insurers provided the way this is done conforms to the National Catastrophe Insurance Scheme's Privacy Policy and also that consent is provided as per the obligation under Australian Privacy Principle 6 [use or disclosure of personal information]. Information which is not 'personal information' and which is contained on the national register of repairs can be released to commercial insurers.

- [344] From a legal perspective the Commonwealth Government could maintain a national register of repairs in three ways:
 - 1. under any enabling regulations that would facilitate the proposed National Catastrophe Insurance Scheme
 - seeking to modify the National Construction Code by proposing a change to the Building Code of Australia or allowing the national register of repairs to sit alongside the Building Code of Australia and apply with the Code⁴⁶²
 - 3. having each individual State and Territory pass identical legislation to facilitate the operation of the national register of repairs.

The Proposed National Catastrophe Insurance Scheme and Regulations to Facilitate the National Register of Repairs

- [345] Although theoretically it is possible to incorporate the national register of repairs into the existing regulations that could govern the National Catastrophe Insurance Scheme, this would not be the optimal way of implementing the register.
- [346] The national register of repairs does not fall within one of the exclusive powers of the Commonwealth as set out under s 51 of the *Commonwealth Constitution*. Consequently, if the register were to be contained within any enabling legislation for the proposed National Catastrophe Insurance Scheme and struck down as being invalid from a constitutional perspective, it could put the entire scheme into question. To overcome this problem, National Construction Code or Building Code of Australia could be modified to include the National Register of Repairs.

- Evidence of the existence of the problem
- How the proposal is expected to solve the problem
- Alternatives to regulation that have been considered, and why they are not preferred
- Who will be affected and how they will be affected
- Consultation that has taken place.

⁴⁶² It will be possible for the Commonwealth Government to make a 'Proposal for Change' application to modify the existing National Construction Code to facilitate the operation of a national register of repairs for property damages arising from catastrophic events. In making an application, the Commonwealth Government would need to justify its intention to change the National Construction Code and develop a national building register with an application outlining the following:

[•] Description of the proposal

[•] Explanation of the problem it is designed to resolve

See Australian Building Codes Board, 'Proposal to Change the National Construction Code' (6 August 2014) http://www.abcb.gov.au/consultation/proposal-to-change-the-ncc.

Potential Modifications to the National Construction Code or Building Code of Australia to allow for the National Register of Repairs

- [347] There was no Commonwealth power to create the National Construction Code or the Building Code of Australia so all of the States and Territories established an intergovernmental agreement to create and empower the Australian Building Codes Board.⁴⁶³
- [348] The Australian Building Codes Board may consider the national register of repairs is useful in carrying out its objectives of ensuring and improving the maintenance of national building codes. Consequently, with the agreement of the States and Territories, the existing mandate of the Board has been extended to encompass the national register of repairs. This may be a preferable option, rather than each State and Territory having to implement identical legislation that would create a uniform national register of repairs.⁴⁶⁴

Examples of other National Insurance Systems upon which the National Register of Repairs could be Modelled on or could work in conjunction with

[349] Although the national register of repairs is a novel concept for Australia, there have been other similar insurance initiatives, which have been carried out throughout Australia. One example of such an initiative is the Insurance Council of Australia's Building Resiliency Rating Tool⁴⁶⁵ and Building Resilience Knowledge Database.⁴⁶⁶ The Rating Tool assesses individual properties based on resilience to all natural hazards. Ratings depend on risk exposure, individual structural considerations and geographical location. The corresponding database records the floor heights of properties above ground level. The database is concerned with flood and would be

⁴⁶³ Australian Building and Construction Board, 'Intergovernmental Agreement 2012' <<u>http://www.abcb.gov.au/Resources/Publications/Corporate/Inter-Governmental-Agreement></u>.

⁴⁶⁴ Currently, all Australian states and territories have agreed to the National Construction Code. Consequently, from 1 May 2011, the Australian Building Code was effectively referenced in the building acts or regulatory instruments in every State and Territory. Natural disasters do not respect State or Territory boundaries, thus the extension of the Australian Building Code to encompass measures to improve the resilience of a structure to natural disaster hazards is logical. See Australian Building Code Board, 'The History of the National Construction Code' (2011) http://www.abcb.gov.au/en/about-the-national-construction-code/history-of-the-ncc.

⁴⁶⁵ Insurance Council of Australia, 'Building Resilience Rating Tool' (2014) <http://www.buildingresilience.org.au/brrt>.

⁴⁶⁶ Insurance Council of Australia, 'Building Resilience Knowledge Database' (2014) http://www.buildingresilience.org.au/brkd>.

used to better inform the industry of the actual flood risk posed to individual properties.⁴⁶⁷ Adapting these tools and creating new infrastructure to generate resiliency under the National Catastrophe Insurance Scheme enables individuals to assess the resiliency of their properties.⁴⁶⁸ Knowledge concerning the exposure to catastrophic hazards may influence decisions regarding ways of minimising damage to property and informing home owners of important risk factors.⁴⁶⁹

Betterment and the Proposed Natural Disaster Insurance Scheme as Modelled on the National Disaster Relief and Recovery Arrangements

[350] The concept of the proposed Scheme paying for repairs to improve a building's resiliency or mitigation is termed 'betterment'.⁴⁷⁰ Betterment was introduced in the Natural Disaster Relief and Recovery Arrangements in 2007 to enable a State or Territory to claim contributions from the Commonwealth Government to ensure buildings were repaired or replaced in a way that makes them more resilient. Under the Natural Disaster Relief and Recovery Arrangements, clause 3.6.6⁴⁷¹ allows a State Government to seek additional costs for betterment from the Commonwealth Government. The State Government must demonstrate the betterment action was an eligible measure against an essential public asset to ensure the asset is rebuilt or repaired to ensure it is more resilient.⁴⁷²

⁴⁶⁷ Interview with Karl Sullivan, General Manager of the Insurance Council of Australia (Telephone interview 10.20-10.44am, 4 March 2013).

⁴⁶⁸ It may be possible to use the existing resources of the Insurance Council of Australia in conjunction with the new national register of repairs. Combining these resources may better enable individuals, communities and governments to understand catastrophe-risk exposure. 469 Productivity Commission Inquiry Report: Disaster Funding Arrangements, above n 10, 16–18.

⁴⁷⁰ The concept of betterment was applied by the New South Wales Supreme Court in *Lumley General* Insurance Ltd v Vintex Pty Ltd (1991) 24 NSWLR 652. In this case, the Supreme Court ordered the insurer to pay the insured a higher sum for recovery to reflect the fact that the new repairs needed to comply with updated earthquake legislation, ensuring higher standards of resilience. However, importantly, the building was not materially different in its appearance and there was no evidence that there were additional functional benefits that were attributed as factors contributing to the judicial award of the higher amount of damages. See Merkin, above n 430, 119, 133-134.

⁴⁷¹ Attorney-General's Department (Parliament of Australia), Natural Disaster Relief and Recovery Arrangements Determination 2011, Clause 3.6.5-3.6.6 <http://www.ag.gov.au/www/emaweb/rwpattach.nsf/VAP/(689F2CCBD6DC263C912FB74B15BE8285)~NDR

RA+-+Determination+2011+-+Version+1+(PDF)+-+Web+update.pdf/\$file/NDRRA+-+Determination+2011+-+Version+1+(PDF)+-+Web+update.pdf>; Attorney-General's Department (Parliament of Australia), Natural

Disaster Relief and Recovery Arrangements Guideline 7—Criteria for the Provision of Betterment Funding (October 2014) http://www.disasterassist.gov.au/NDRRADetermination/Documents/NDRRAguideline7.pdf>.

⁴⁷² Phillip Blunden, 'Appendix 10', A Review of the Natural Disaster Relief and Recovery Arrangements During the North Coast Floods of 30 March-1 April 2009 and 20-22 May 2009 (Blunden Consultancy Services, September 2009) 5.

[351] The Commonwealth Government's Attorney-General's Department created a form named the 'Betterment Coversheet Proposal' to outline the key information that will be considered. The Betterment Coversheet Proposal makes it easier for a State Government to prepare an application to the Commonwealth Government's Attorney-General's Department to receive additional funds under the betterment clause. States seeking to claim betterment for their assets under the Natural Disaster Relief and Recovery Arrangements must demonstrate the costs and benefits the additional investment would have for the Commonwealth Government (in the long term).⁴⁷³ Although betterment currently only applies in relation to essential public assets under the Natural Disaster Relief and Recovery Arrangements, this legal concept could be incorporated into any enabling legislation used to implement the proposed National Catastrophe Insurance Scheme. The concept of betterment may be one way in which the Scheme could save funds in the long term through a lowered likelihood of structural damage to individual households.

Moral Hazard and Influences on the Proposed National Catastrophe Insurance Scheme- Case Study of CAT Nat (France)

[352] One problem encountered in a compulsory regime⁴⁷⁴ with a prohibition of pricing catastrophe risks based on actuarially sound models⁴⁷⁵ is moral hazard. In order to reduce the potential ramifications of moral hazard in a system where price cannot be used to symbolise risk, the proposed National Catastrophe Insurance Scheme emphasises mitigation (through the national register of repairs), and the provisions relating to betterment and corresponding discounts for more resilient properties. In this way, the proposed National Catastrophe Insurance Scheme looks at the French CAT Nat Scheme as guidance. Within the French CAT Nat Scheme, mitigation is used to reduce the amount paid as deductibles when an insured makes a claim under the policy.

⁴⁷³ Natural Disaster Relief and Recovery Arrangements Guideline 7, above n 471.

⁴⁷⁴ The regime is compulsory in the sense that all homeowners and tenants are required to have standard insurance coverage and on obtaining standard coverage for potential property damage or loss by fire, a compulsory adjunct aspect of coverage is that an insurer must provide the insured with protection against the occurrence of a natural disaster.

⁴⁷⁵ Suzanne Vallet, 'The French Experience in the Management and Compensation of Large Scale Disasters' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publication, 2005) 293–302, 296.

Compulsory Acquisition & Natural Disasters of Catastrophic Proportions

- [353] Although in some instances looking at financial and community safety perspectives, it is preferable to acquire property rather than repair household buildings that have suffered repeated loss,⁴⁷⁶ the compulsory acquisition of household buildings and household land under the proposed National Catastrophe Insurance Scheme would be difficult to implement. Under s 51(xxxi) there is a constitutional guarantee that property which is acquired by the Commonwealth is subject to the acquisition being undertaken on 'just terms'. Under s 51(xxxi) 'the Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to the acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws'.
- [354] As the proposed National Catastrophe Insurance Scheme is a national program run by the Commonwealth Government, it is doubtful that the courts would allow a constitutional guarantee to be overcome by allowing the States to compulsory acquire private property on behalf of the Commonwealth without paying 'just compensation'. In any case, the States would have to agree to implement such acquisitions in a uniform manner. In order to prevent constitutional uncertainty, the Scheme would not include compulsory acquisition provisions.

⁴⁷⁶In 1995 in France, due to the risk exposure of some existing properties that were destroyed in the flooding, rather than rebuilding new properties on the precariously risky land, homes were compulsorily acquired. See Vincent R. Parisi, 'Floodplain Management and Mitigation in France' (Paper presented at Meeting of the Association of State Floodplain Managers and FEMA Region V, Paris) 3 <http://www.floods.org/PDF/Paris Meeting Summary.pdf>. Similarly, in 2010 in the aftermath of the Xynthia Storm, the French Government demolished 1,510 houses in the riskiest areas due to the damage that had occurred during Xynthia Storm and the likelihood of similar damage occurring in the future should the property be rebuilt. To ensure fairness and no disadvantage to those who had their houses compulsorily acquired, 'the French government promised to fully compensate all home owners, based on the value of the real estate prior to the storm with the ministry of finance stating that they would pay up to $\notin 250,000$ per house', see D. M. Lumbroso and F. Vincent, 'A Comparison of the Causes, Effects and Aftermaths of the Coastal Flooding of England in 1953 and France in 2010 (2011) 11 Natural Hazards Earth System Sciences 2321, 2328.

International examples

[355] Given the conceptual legal model of the proposed National Catastrophe Insurance Scheme is new for Australia, it is useful to examine how compulsory acquisition is dealt with internationally.477

New Zealand 'Red Zoning' and Issues Associated with Compulsory Acquisition

[356] In March 2015 the Supreme Court of New Zealand decided on the issue of compulsory acquisitions and 'red zoning' of vulnerable properties after the Canterbury Earthquakes.⁴⁷⁸ The case was brought about in response to the *Canterbury Earthquake* Recovery Act 2011 (New Zealand) which set out a framework for the recovery of Christchurch and surrounding areas after the earthquakes. This involved classifying

Greater Christchurch into four zones according to the extent of land damage and prospects of remediation. As well as identifying the four zones, the Cabinet committee decided there would be an offer to purchase insured residential properties in the red zone which were characterised by the Committee as areas where rebuilding may not occur in the short to medium term.⁴⁷⁹

- [357] There was recognition that some areas 'had a substantial risk (assessed at 34 per cent) of a further major earthquake in the next 12 months. Many of the buildings in the city centre were damaged past the point of economic repair and the central business district was cordoned off... It was recognised that in some instances, remediation could only be achieved satisfactorily if existing houses and other improvements were first removed.'480
- [358] Those landowners who had insurance were offered 100% of the value of the property pre-earthquake (2007 valuation) but all insurance claims against both the Earthquake Commission and private insurers were assigned to the New Zealand Government which was acquiring the property. Those who did not have insurance for their property were offered 50% of the 2007 rateable value of the property if their property was red zoned. The action was taken by those who were uninsured and thus offered 50% of the rateable value of the property for their properties located in the red zone. In particular,

⁴⁷⁷ For more information on acquiring property in New Zealand in the aftermath of the Christchurch Earthquakes, see Toomey and Finn, above n 442.

³ Quake Outcasts v Minister for Canterbury Earthquake Recovery [2015] NZSC 27.

⁴⁷⁹ Quake Outcasts v Minister for Canterbury Earthquake Recovery [2015] NZSC 27 [3].

⁴⁸⁰ Ouake Outcasts v Minister for Canterbury Earthquake Recovery [2015] NZSC 27 [328].

the legal validity of s 53 of the *Canterbury Earthquake Recovery Act 2011* (New Zealand) had to be examined in light of the ability to acquire the red zoned properties.⁴⁸¹

[359] The Supreme Court of New Zealand⁴⁸² found that it was unlawful to offer 50% of the 2007 rateable value as it was the government policy of re-zoning properties to become red zoned that affected the property value, particularly as most of the properties were otherwise unaffected by the earthquake. Although s 53⁴⁸³ enabled individual or small scale purchases, this could not be used as a way of practically compulsorily acquiring properties within the red zone. The Court found a 'lack of real choice for people in the red zones as to whether to accept the offers (given the warnings by the Crown about the likely lack of infrastructure and the possible use of compulsory powers).'⁴⁸⁴ The Court accepted that 'although insurance was not an irrelevant consideration, other relevant considerations weighted against this being a determinative factor.'⁴⁸⁵ Factors to be taken into account when assessing the value (and the reasonableness of a distinction between insured and uninsured properties), included not only features of a

6) To avoid doubt, any requirements to offer land back under the *Public Works Act 1981* continue to apply to any land declared under subsection (5) to be held under this Act.

⁴⁸¹ Canterbury Earthquake Recovery Act 2011 (New Zealand) s 53: Acquiring or disposing of property

¹⁾ The chief executive may, in the name of the Crown, purchase or otherwise acquire, hold, sell, exchange, mortgage, lease, and dispose of land and personal property.

²⁾ Subsection (3) applies if land acquired by the chief executive is no longer required for that purpose and is available for disposal.

³⁾ To avoid doubt, nothing in sections 40 to 42 of the *Public Works Act 1981* applies to the disposal of land to which this subsection applies, whether by sale, exchange, or otherwise, except as provided in s 58.

⁴⁾ The Minister may, by notice in the Gazette, declare land held under this Act to be set apart for a Government work in terms of the *Public Works Act 1981*.

⁵⁾ The Minister may, by notice in the Gazette, declare land held for a public work in terms of the *Public Works Act 1981* to be held under this Act.

⁴⁸² After *Quake Outcasts v Minister for Canterbury Earthquake Recovery* [2015] NZSC 27, the Quake Outcasts sought judicial review. The judicial review was undertaken by the High Court. The Quake Outcasts sought a decision on whether the Minister and the Chief Executive had complied with the legal requirements in determining the value offered to property owners in the red zone. In *Quake Outcasts v Minister for Canterbury Earthquake Recovery* [2016] NZHC 1959 (22 August 2016), Justice Nation determined 'all judges of the Supreme Court intended to respect the Court's role in judicial review proceedings where it was being asked to review the decision a Minister had made in exercise of legislative powers' [59] and that 'it was not for the Court to dictate the basis upon which the Minister should make their decision' [70]. Justice Nation was 'not persuaded that either the Minister or the Chief Executive acted unlawfully, that relevant requirements of fairness were not met or that their decisions were not ones they could reasonably reach in exercising the powers conferred on them by Parliament.' [149]. As the decision of the Minister and Chief Executive had been lawful, the judicial review was unsuccessful and the Quake Outcasts were bound by the earlier decision regarding the value offered for red zoned properties.

⁴⁸³ Canterbury Earthquake Recovery Act 2011 (NZ).

⁴⁸⁴ Quake Outcasts v Minister for Canterbury Earthquake Recovery [2015] NZSC 27 [195].

⁴⁸⁵ Quake Outcasts v Minister for Canterbury Earthquake Recovery [2015] NZSC 27 [196].

particular property but also broader consideration of 'social, economic, cultural and environmental wellbeing of Christchurch's communities'.⁴⁸⁶

France: Compulsory Acquisition of Houses after the Xynthia Storm

- [360] The February–March 2010 flooding in France from the Xynthia Storm (discussed in [402] [408]) affected more than 50,000 hectares of land⁴⁸⁷ and caused a damage bill exceeding €2.5 billion.⁴⁸⁸ After the flooding and because of the Ministerial Declaration, the French Government decided to demolish 1,510 houses due to risk exposure: the 'French government promised to fully compensate all homeowners, based on the value of the real estate prior to the storm with the ministry of finance stating that they would pay up to €250,000 per house'.⁴⁸⁹ It was determined that the long-term solution (for economic reasons and community safety) was the compulsory acquisition of the properties so that individuals could live in areas that were less exposed to flood.
- [361] The French Government sought speedy resolutions by declaring the flood a natural disaster of catastrophic proportions; this enabled insurers to begin the loss adjustment and claims-handling process. However, the speed at which relief provided was 'so rapid that data assessment was incomplete and field work was precluded'.⁴⁹⁰

United States: National Flood Information Program–Differentiating repeated-severeloss properties

[362] The National Flood Insurance Program 'is prevented from refusing coverage to any policyholder in a participating community. Some properties, however, referred to as repetitive loss properties, have seen higher and/or more frequent claims than others.'⁴⁹¹ Under the National Flood Insurance Program in the United States, 'repeated-severe-loss properties' cannot be not compulsorily acquired by the national government for

⁴⁸⁶ Quake Outcasts v Minister for Canterbury Earthquake Recovery [2015] NZSC 27 [197].

⁴⁸⁷ Lumbroso and Vincent, above n 476, 2321.

⁴⁸⁸ Jean Le Goff, 'The Xynthia Storm in France' in Francois Gemenne, Pauline Brucker and Joshua Glasser, *The State of Environment Mitigation 2010* (IDDRI and the International Organisation for Migration, 2011) 57, 57; Bas Kolen et al 'Learning from French Experience with Storm Xynthia: Damages After a Flood' (HKI Consultants, Netherlands, September 2010).

⁴⁸⁹ Lumbroso and Vincent, above n 476, 2328.

⁴⁹⁰ Le Goff, above n 488, 59.

⁴⁹¹ Carolyn Kousky and Erwann Michel-Kerjan, 'Examining Flood Insurance Claims in the United States: Six Key Findings' (2015) *Journal of Risk and Insurance* 1, 6.

constitutional reasons.⁴⁹² However, they are treated differently to other properties. Under the National Flood Insurance Program there are two categories of 'repeated-severe-loss' properties:

- property that has endured four payments from the National Flood Insurance Program since 1978 that exceed US\$5,000 per payout or cumulatively exceed more than US\$20,000 in compensation.
- property that has experienced structural damage on two occasions where the structural loss exceeded the market value of the property.⁴⁹³
- [363] The United States differentiates these properties and provides a special direct facility to insure them. Decisions are then made about the severity of the risk exposure and different mitigation and resiliency measures must be executed by the property owner before they can obtain insurance.⁴⁹⁴ Repeated severe loss properties amount for '1 percent of properties insured under the National Flood Insurance Program, but account for 25 percent to 30 percent of all claim losses.⁴⁹⁵ Consequently, increases in the amount of spending by the National Flood Insurance Program have contributed to its deficit. Constitutionally any acquisitions of property can only be undertaken at a local level.⁴⁹⁶ As a result in the US there has been a push towards mitigation and ensuring the properties are more resilient.

Deductibles⁴⁹⁷

[364] Legally, the amount received in the form of deductibles is important as a signal to prevent moral hazard and prevent people claiming for minor losses. A deductible is payable by the homeowner in respect of each insurance event for which they are

⁴⁹² Roy E Wright (Deputy Associate Administrator for Insurance and Mitigation, FEMA), 'Privatization/ Commercial Opportunity' (Paper presented at Reinsurance Association of America Cat Risk Management Conference 2016: Pragmatic Decisions- Imprecise Data Points, Orlando, 17 February 2016).

⁴⁹³ Federal Emergency Management Authority, *National Flood Insurance Program: Answers to Questions about the National Flood Insurance Program* (FEMA F-084, March 2011) 37–39 < http://www.fema.gov/media-library-data/20130726-1438-20490-1905/f084_atq_11aug11.pdf>.

⁴⁹⁴₄₉₅ Ibid.

⁴⁹⁵ Government Accountability Office, 'Actions to Address Repetitive Loss Properties' (US Senate, Washington, Document GAO-06-174T, 25 March 2004, William O Jenkins, Jr.) http://www.gao.gov/new.items/d06174t.pdf>.

⁴⁹⁶ Wright, above n 477.

⁴⁹⁷ The term 'deductible', as used in this chapter and as envisioned for the scheme, refers to the compulsory amount of money an individual must pay for each claim made under the scheme. The deductible should be a set monetary amount.

claiming (if multiple events have occurred). This system is similar to the one operating in France.

- [365] In France, under CAT Nat, accounting for ordinary contingencies and a limited number of national disasters, the system enables two declarations of natural disaster within a five-year period. If two or fewer declarations of natural disaster occur, the standard deductible applies.⁴⁹⁸ The third declaration within this period doubles the deductibles and the forth declaration trebles the standard deductibles. If there are five or more declarations within a period of five years, the standard deductible is quadrupled,⁴⁹⁹ amounting to €1,540 for damage to domestic property caused by natural disasters (but excluding drought or subsidence of the soil). The deductible at its highest is €6,080 where damage arises due to drought or the subsidence of the soil.⁵⁰⁰
- [366] The amount charged in France as deductibles can be reduced if the locality where an individual lives has a *Plan de Prévention des Risques Naturels* in operation. The reason why this is in place is that not only does it promote individuals making their properties more resilient but seeks to place pressure on local governments to ensure resiliency measures are put into place for communities to reduce the overall risks of damage to communities. The French CAT Nat has employed incentives to ensure mitigation of risk is inherent. The French system works well in combining resources from different levels of government, coupled with local knowledge. The system is also designed to dissuade future activity that could increase exposure to natural catastrophes.
- [367] Table 1 presents some of deductibles used within catastrophic regimes worldwide. The purpose of this table is to illustrate the global analysis that was undertaken in Australia prior to the determination of the optimal deductable amount that may apply under the proposed National Catastrophe Insurance Scheme.

⁴⁹⁸ The standard deductible amounts are \in 380 for damage to domestic property and motor vehicles with the exception of losses incurred through land movement due to drought or soil subsiding where the basic amount will be \notin 1,520. See Caisse Centrale de Réassurance, '*Les Catastrophes Naturelles en France*' http://www.ccr.fr/index.do?fid=1395293532771582094>.

⁴⁹⁹ Ibid.

⁵⁰⁰ Arrêté du 4 août 2003 du ministre de l'économie, des finances et de l'industrie [Order of 4 August 2003 from the Ministry of Economics, Finance and Industry] (France).

Table 1: Deductible Amounts as Applied in Germany, Switzerland, New Zealand, **Turkey, France and Spain**

Country	Deductible Amount
	(or percentage of the amount when the deductible is variable)
Germany ⁵⁰¹	Average of 10% with the amount generally being between €672–6,725 based on risk exposure
Switzerland ⁵⁰²	0.46% of the total claim
New Zealand ⁵⁰³	For damage less than NZ\$20,000, a deductible of NZ\$200 is imposed. For losses exceeding NZ\$20,000, 1% of the total losses (capped at a maximum deductible of NZ\$1,150 is imposed). If household building and contents occur in the same event, only one excess will be imposed for both losses
Turkey ⁵⁰⁴	2% deductible (possibility of a discretionary higher deduction proportion)
France ⁵⁰⁵	One to two declarations imposes the standard deductible of $\notin 380$; three declarations imposes a doubling of the standard deductible ($\notin 380 \ge 2 = \notin 760$); four declarations imposes a tripling of the standard deductible ($\notin 380 \ge 3 = \notin 1,140$); five or more declarations quadruples the standard deductible ($\notin 380 \ge 4 = \notin 1,520$)
Spain ⁵⁰⁶	No deductible is charged on losses to a house and a deductible of 7% is imposed on household contents

[368] Although Australia broadly utilises the French concepts and methodology for determining the deductible payable, the Australian deductible system imposes deductibles based upon losses to an individual property (rather than taking into account the actions of local communities to ensure communities are made more resilient). The French concept of using the deductible system to motivate individuals and communities (through a two pronged deductible criteria: (1) mitigating risks to an

⁵⁰¹ Youbaraj Paudel, 'A Comparative Study of Public Private Catastrophe Insurance Systems: Lessons from Current Practices' (2012) 37 The Geneva Papers on Risk and Insurance-Issues and Practice 257, 269. ⁵⁰² Ibid.

⁵⁰³ New Zealand Earthquake Commission, 'Excesses on Earthquake Commission Claims' (New Zealand Government, 2012) < http://canterbury.eqc.govt.nz/sites/default/files/excess-factsheet.pdf>.

⁵⁰⁴ Eugene Gurenko et al, Earthquake Insurance in Turkey: History of the Turkish Catastrophe Insurance Pool (World Bank Report No 38654, Washington, 2006) 32. ⁵⁰⁵ Les Catastrophes Naturelles en France, above n 498.

⁵⁰⁶ Consorcio de Compensación de Seguros, 'Scope of Activity: Extraordinary Risks' <http://www.consorseguros.es/web/guest/ad re rps>.

individual property and (2) local governments introducing mitigation measures that will make entire areas or communities safer) is not used in Australia.

- [369] Given the proposed National Catastrophe Insurance Scheme promotes a national register of repairs, it would be relatively simple for a homeowner to prove that they would be entitled to a discount on the basis of mitigation work which has been undertaken to the residential property. The deductible amount charged may be reduced⁵⁰⁷ to reflect the reduced risk of damage to a property because of the mitigation measure. The process of recording mitigation initiatives in the national register of repairs and providing a corresponding discount on the deductible payable is likely to incentivise mitigation measures.
- [370] The deductible amount is independent of the premium charged⁵⁰⁸ and instead reflects the number of losses a property has endured (including from different classes of listed catastrophes affecting the locality within a five-year period). In Australia, natural disasters are a part of life, and thus the occurrence of two natural disasters affecting an area within a five-year period only attracts a minimal compulsory deductible. However, the deductible payable increases with the number of losses a property has suffered from any of the listed natural disasters within a five-year period.
- [371] There is a four-tier deductible system with the amount charged presented in Figure 2:

⁵⁰⁷ These figures are based on the data available and are thus hypothetical figures to demonstrate the functionality of the modelling methodology and the deductibles to be applied.

⁵⁰⁸ Under the National Flood Insurance Program in the United States, deductibles are used to impute some moral hazard. However, the way in which these function is that the deductible amount changes depending on the premium an individual decided to pay (which reduces the premium cost). This is problematic because it does not greatly resolve the issue of affordability because while someone who opts for a greater deductible will be paying less for their premiums, they will also receive a reduced amount if their property is damaged.



Figure 1: Deductibles under National Catastrophe Insurance Scheme

- [372] As illustrated, the occurrence of one or two natural disasters of catastrophic proportions (even if they are not the same type of catastrophe), would result in a deductible of \$500 being imposed per event. This would be imposed regardless of socioeconomic status of the insured; the justification for this is that for those on a lower income the deductible could be deducted directly out of the insurance compensation prior to this being paid out to the insured. Further, those from lower socioeconomic backgrounds if eligible would receive discounts on the insurance premiums- the discounting of which would be dealt with separately to any deductibles. Households claiming compensation from the National Catastrophe Insurance Scheme for damage arising from more than two natural disasters of catastrophic proportions would incur an additional amount of \$500 per event on top of the original \$500 and this would be payable by the homeowner (up to a maximum deductable of \$2,500).⁵⁰⁹
- [373] The discount for mitigation would be provided regardless of whether the house in question endured a loss from one of the other listed natural disasters of catastrophic proportions, provided the mitigation mechanism reduced the exposure and potential

⁵⁰⁹ The suggested figures (for potential deductibles under the Natural Catastrophic Insurance Scheme) were derived after examining the deductible amounts applied within national catastrophe-risk regimes in several countries. Using these international examples, the ultimate figure required a deductible that was fair and appropriate.

damage of the property to one of the listed natural disasters covered by the proposed Scheme. To ensure consistency in the way that deductibles are calculated, any discounts for loss mitigation would also be provided within the corresponding five-year period.⁵¹⁰ Due to the recording process, any mitigation measures recorded on the national register of repairs would run with the title to the property, and thus would be available to homeowners even if there were a change of ownership within the five-year period in which the deductible amount is calculated. As illustrated a homeowner could receive a discount in the form of a reduced deductable of approximately 20–50%. For homeowners who by virtue of the occurrence of a natural disaster of catastrophic proportions, claim compensation under the proposed National Catastrophe Insurance Scheme more than five times within a five-year period, no discount would be available for loss mitigation.

⁵¹⁰ Although some events such as bushfires and floods may have longer periods of recurrence than 5 years, in order to ensure that the scheme operates consistently and to reduce unnecessary complexity, a bushfire or flood will be covered by the same deductible rule regarding the number of natural disasters of catastrophe proportions for which an individual property has been subjected to within a 5-year period.

Chapter 7: International Comparative- Best Practices from Existing Natural Catastrophe Insurance Schemes

- [374] In Spain, France and New Zealand,⁵¹¹ 'all-peril' regimes operate at a national level, protecting against property damage from catastrophic risk. The way that the Consorcio de Compensación de Seguros in Spain, the Caisse Centrale de Réassurance⁵¹² in France and the Earthquake Commission in New Zealand price their policies is standardised. A compulsory levy is imposed upon insureds who have household insurance policies. The rate is largely based upon a consistent rate across policy holders, although in France (unlike the system in Spain or New Zealand), there are some factors relating to the risks to the individual property as well as the risk vulnerability of the town where the property is located that may vary the price marginally. However, due to the way in which these schemes are priced, there is very little incentive for homeowners to reduce the risks to their property.
- [375] Efforts have been made throughout the thesis to examine well established international natural disaster schemes, as a means of ensuring optimal functionality and operation of the proposed National Catastrophe Insurance Scheme. To the extent international 'best practices' or 'illustrative practices' exist concerning the insurability of a particular peril or the best ways to operate an all-peril natural disaster scheme, efforts were made to determine the suitability for the proposed National Catastrophe Insurance Scheme. Consequently, this resulted in a modified adaptation of aspects of various international disaster schemes. To the extent any aspects of existing operating models or natural disaster schemes were replicated, adaptation was undertaken to ensure the operational aspects were not in conflict with any aspects of constitutional legitimacy or other legal principles which affect the way the proposed National Catastrophe Insurance Scheme operates within the Australian context. The thesis will now list some of the international best practices to be incorporated into the proposed National Catastrophe Insurance Scheme. These include:

 ⁵¹¹ New Zealand Earthquake Commission http://www.eqc.govt.nz/.
⁵¹² See Les Catastrophes Naturelles en France, above n 498.

- The imposition of a risk reflective deductible to be imposed against any compensation payable by the proposed Scheme. This concept was modified and adapted from the French CAT Nat system.
- Mechanisms to reduce delays as well as a structured procedure under which the proposed Scheme could increase the number of claims handlers and / or claims adjusters that are available in the aftermath of a natural disaster was specifically built into the procedures and operation for the proposed National Catastrophe Insurance Scheme. This was modified from the Consorcio, where there is an increase in claims handlers who are available to service the Consorcio after a natural disaster. The ability to have access to additional staff in the immediate aftermath of a natural disaster has enabled the Consorcio to ensure insureds are paid within a timely manner. However, due to the differences between the Consorcio and the Scheme, the way in which the concept operates from a practical viewpoint under the proposed National Catastrophe Insurance Scheme differs to the way staff are utilised in claims handling for the Consorcio. Under the proposed National Catastrophe Insurance Scheme, the additional claims handlers would be available from within the private insurance market and the terms and conditions upon which an insurer or several insurers provide additional claims handling personnel is subject to the terms and conditions of a public private partnership between the Scheme and the insurer.
- The way in which the New Zealand Earthquake Commission categorises damage arising from a natural disaster separately into damage that is caused to the household building and damage which occurs to the land was also adapted and applied within the proposed National Catastrophe Insurance Scheme. The corresponding definitions used under the Earthquake Commission were also adopted for use by the proposed National Catastrophe Insurance Scheme.
- Overall international guidance was also sought regarding the definitions of the different perils, the use of the 'hours clauses' in various jurisdictions and within international insurance/ reinsurance markets. Additionally, the proposed Scheme looks at how it could utilise a variety of globally recognised modelling methodologies.

- [376] There are a multitude of other international examples, contained within the thesis that seek to provide context for the various legal and operational elements of the National Catastrophe Insurance Scheme. These illustrate, not only the ultimate model or components that apply within the proposed National Catastrophe Insurance Scheme but also provide examples of alternative legal or operational aspects that have been incorporated globally into various insurance markets, displaying variations in insuring against damage arising from natural disasters. Given the thesis has focused on the legal aspects of the proposed National Catastrophe Insurance Scheme, care was taken in using the international comparative methodology to foreshadow areas of potential uncertainty or issues which have been subject to judicial scrutiny in the way natural disaster insurance schemes have operated and continue to operate in jurisdictions outside of Australia.
- [377] Although international analysis has been injected into the thesis with regard to certain operational issues, in order to understand how each of the key international schemes operate, these will be examined individually in greater depth. Research has shown that it is necessary not only to look at various components of a natural disaster insurance scheme as it operates in a jurisdiction outside of Australia, but also to look at how the scheme works in totality within its international context. The focus on the Earthquake Commission in New Zealand, the French Caisse Centrale de Réassurance,⁵¹³ the Spanish Consorcio de Compensación de Seguros, the United States National Flood Insurance Program seeks to contextualise the operation of these schemes and how they operate in totality. Up until this point, when examining the various schemes in New Zealand, France, Spain and the United States, as a way of comparison, the different systems have been dissected and the various aspects determined for their suitability or workability (subject to adaptation) within an Australian context. The last aspect of the international comparison is a table illustrating various alternative natural disaster schemes as the operate in different localities around the world. Although an international comparison has been undertaken, the international comparison is not exhaustive and thus does not compare all of the different global schemes operating to insure against natural disasters but provides a good global context in which to assess the proposed National Catastrophe Insurance Scheme.

⁵¹³ See Les Catastrophes Naturelles en France, above n 498.
Earthquake Commission (New Zealand)

- [378] In New Zealand, the Earthquake Commission EQCover insurance must be purchased by any insureds who obtains household insurance coverage against fire risk. The two are bundled together with the insured paying a set premium rate for cover and the rate set by Earthquake Commission for cover. The Earthquake Commission's premium is uniform, regardless of the property's location or the risk exposure of the individual. During the Christchurch earthquakes the price individuals were charged trebled from NZ\$5 per every NZ\$100 covered to \$15 for every NS\$100 covered. Due to the cap of NZ\$100,000 for household property cover this meant that the cost of cover from EQC to the cap of NS\$100,000 went from NZ\$69 per year to NZ\$207 per year.⁵¹⁴ The private insurer collects their premium and the premium for the Earthquake Commission and then provides the levy to the Earthquake Commission. The Earthquake Commission has an important secondary role in providing and funding risk education, including ways of mitigating damage caused by natural disasters.⁵¹⁵
- [379] During World War II, New Zealand had a compulsory War Damage Commission. Historically, New Zealand has experienced earthquake damage in several towns but did not have an insurance pool for earthquake risk until 1942.⁵¹⁶ In 1942, as a result of the Wairarapa earthquake which caused widespread damage and unveiled extensive underinsurance, New Zealand legislated to transform the War Damage Commission into the Earthquake and War Damage Commission.
- [380] The *Earthquake and War Damages Commission Act 1944* (NZ) gave effect to the Earthquake and War Damage Commission. Once implemented, the Commission introduced compulsory earthquake cover (for commercial and residential property)

⁵¹⁴ Muir-Wood, above n 62, 93, 104.

⁵¹⁵ OECD, Policy Issues in Insurance: Financial Management of Large-Scale Catastrophes (OECD Publishing, 2008) 85.

⁵¹⁶ Before this event there was a history of earthquake activity in New Zealand with the following earthquakes of particular note:

^{• 1929:} Murchison earthquakes reached 7.8 on the Richter scale, killed 17 people and caused widespread damage

^{• 1931:} Hawkes Bay earthquake reached 7.8 on the Richter scale and killed 256 people; the event was the worst natural disaster in New Zealand history in terms of the loss of lives; after the earthquakes, further damage was caused by fires

^{• 1947:} Poverty Bay earthquake which was 7.0-7.1 on the Richter scale. The earthquake itself caused minimal damage; within 30 minutes of the earthquake a tsunami with waves of 10-13 meters which caused significant damage

^{• 1968:} Inangahua earthquake reached 7 on the Richter scale and cost the Earthquake Commission NZ\$2.4 million in repairs

when insurance policies covering fire were purchased. When the War Damage Commission was transformed to the Earthquake and War Damage Commission, the War Damage Commission's substantial budget surplus was transferred to the Earthquake and War Damages Commission and used to assist with rebuilding areas affected by the earthquakes.⁵¹⁷

[381] In 1993, the Earthquake and War Damage Commission was structurally modified to become the Earthquake Commission. The Earthquake Commission operates under the *Earthquake Commission Act 1993* (NZ). One structural change was that the Earthquake Commission no longer offered insurance cover to commercial property; rather, it was designed to insure residential property. A second change was the replacement of the Earthquake and War Damage Fund with a Natural Disasters Fund. Before the Christchurch earthquakes in 2010, the Natural Disasters Fund had NZ\$5.9 billion in assets.

CAT Nat and France's Caisse Centrale de Réassurance

Origins of Insurance Coverage for Catastrophic Risks

[382] Catastrophe-risk coverage in France is a relatively new phenomenon. Before the 1980s, there was no standardised coverage regime for extreme events; in fact, many catastrophic events were uninsurable.⁵¹⁸ Further, due to problems with disjointed statistics and inadequate mapping, many insurers did not wish to undertake such risks.⁵¹⁹ The potential for the existence of a natural-disaster regime had been contemplated in the 1970s, but nothing eventuated. A turning point was the cumulative economic effect from the flooding of 1981, which occurred in the Saone and Rhône Valleys and in southwest France.⁵²⁰ Consequently, in 1982, legislation⁵²¹ was passed to entrench coverage for catastrophic events as a compulsory aspect of property insurance in France.⁵²²

⁵¹⁷ New Zealand Earthquake Commission, *Our History* http://www.eqc.govt.nz/our-history.

⁵¹⁸ Vallet, above n 475, 293–302, 293–295.

⁵¹⁹ Les *Catastrophes Naturelles en France*, above n 498, 1, 4.

⁵²⁰ Parisi, above n 476, 1, 3; Mario Jametti and Thomas Von Ungern-Sternberg, 'Risk Selection in Natural Disaster Insurance- The Case of France' (Working Paper No 1683, March 2006).

⁵²¹ Loi n^o 82-600 du 13 juillet 1982 [Law No 82-600 of 13 July 1982] (France).

⁵²² Code des Assurance (France) Art L125-1.

- [383] Currently in France, there is a dual overlapping regime that affords insurance coverage for natural disasters as an adjunct to the existing private insurance regime. The regime operates under the specific Assurance Catastrophe Naturelles 'CAT Nat' paradigm⁵²³ and is linked to the acquisition of fire insurance. Private insurers can use the financial security of the Caisse Centrale de Réassurance,⁵²⁴ a French Government backed reinsurance regime, to provide security against potential losses. Although it is possible to utilise the reinsurance provided by the Caisse Centrale de Réassurance, there is no compulsion on the part of French insurers to use the Caisse Centrale de Réassurance for reinsurance and retrocession agreements. The basic structure of CAT Nat centres on the existence of a public-private partnership consisting of three key players: the French Government (through its Treasury department), the French private insurance market and the Caisse Centrale de Réassurance.⁵²⁵
- [384] In France, both homeowners and tenants must have insurance coverage.⁵²⁶ Catastrophe insurance coverage utilises the insurance infrastructure of the private insurance regime and is offered as part of an insurance contract by a commercial insurer.
- [385] The protection afforded against natural-disaster damage is mandated by the Code des Assurances⁵²⁷ and CAT Nat enabling legislation.⁵²⁸ There is an obligation requiring insurers who provide cover for fire or other property damage to provide coverage pertaining to natural-disaster risks as well.⁵²⁹ The burden of providing insurance for catastrophic risk is thrust on the private insurance industry. The obligation derives from the French Government ensuring that there is a mandatory offer of catastrophe insurance by insurers and mandatory acceptance of catastrophe insurance by insureds.

⁵²³ Les Catastrophes Naturelles en France, above n 498.

⁵²⁴ Ibid.

⁵²⁵ Nathalie de Marcellis-Warin and Erwann Michel-Kerjan, 'The Public-Private Sector Risk Sharing in the French Insurance CAT Nat System' (Centre Interuniversitaire de Recherche en Analyse des Organisations, Scientific Series Paper No 2001s-60, Montréal, November 2001) 1, 4-8.

⁵²⁶ Erwann Michel-Kerjan, 'Insurance against Natural Disasters: Do the French Have the Answers? Strengths and Limitations' (Ecole Polytechnique Centre National De La Recherche Scientifique, Cahier No 2001-007, Paris, August 2001). ⁵²⁷ Code des Assurances (France).

 $^{^{528}}$ Loi n° 82-600 du 13 juillet 1982 [Law No 82-600 of 13 July 1982] (France).

⁵²⁹ Code des assurance (France) Article L125-1: 'Les contrats d'assurance, souscrits par toute personne physique ou morale autre que l'Etat et garantissant les dommages d'incendie ou tous autres dommages à des biens situés en France, ainsi que les dommages aux corps de véhicules terrestres à moteur, ouvrent droit à la garantie de l'assuré contre les effets des catastrophes naturelles, dont ceux des affaissements de terrain dus à des cavités souterraines et à des marnières sur les biens faisant l'objet de tels contrats.'

⁽English translation)-Those who have an insurance contract in France that covers damage caused by fire or other damage are also entitled to protection against natural disasters, including losses that arise from the land subsiding due to underground cavities or marl pits on the land of the property that is insured.

[386] The French regime is compliant with the obligations under the European Union Directives⁵³⁰ particularly those facilitating free trade. The *Caisse Centrale de Réassurance* does not operate as a monopoly. If an insurer can find more suitable reinsurance on the commercial market, there is no obligation to obtain coverage through the *Caisse Centrale de Réassurance*. Insurers are free to obtain coverage from the most commercial and secure option they see fit (subject to solvency requirements). In instances where an insurer is not satisfied with the reserves held by a reinsurer and is thus sceptical about the potential future solvency of a reinsurer, the primary insurer can employ the services of the *Caisse Centrale de Réassurance*. The *Caisse Centrale de Réassurance* has the dominant market share for reinsurance of natural catastrophes in France.⁵³¹

Regulatory Regime Governing Operability of CAT Nat

- [387] France is a civil-law country. Therefore, the primary tool regulating insurance in France is contained in an insurance (assurance) code. The *Code des Assurances*⁵³² exhaustively covers all aspects of insurance contracts including the compulsory adjunct protection against losses incurred through natural disasters.
- [388] The CAT Nat regime was originally implemented under *Loi* n^o 82-600.⁵³³ However, this law does little more than establish a framework under which insurance cover for catastrophe risk can be facilitated. The legislation contains few details about the operation and structure of the regime. Details on the operation of CAT Nat are found among a complex patchwork of additional legislative and regulatory instruments.
- [389] The first distinguishing feature of the CAT Nat regime in France is that the definition of natural disaster is wide.⁵³⁴ The definition is so wide that it is difficult to determine

⁵³⁰ Directive 92/49/EEC of the European Parliament and of the Council of 18 June 1992 entitled 3rd EU Directive on Non-Life Insurance.

⁵³¹ Caisse Centrale de Réassurance, 2012 Rapport Annuel: Annual Report 2012, (Caisse Centrale de Réassurance, 2012) 12–15; Caisse Centrale de Réassurance, Catastrophes Naturelles: La Gestion d'un Evénement Extrême D'amont en Ava (4éme Edition de la Journée Caisse Centrale de Réassurance) (Eurosites George V, 20 juin 2013).

⁵³² Code des assurances (France) Arts L125-1—L125-6.

 $^{^{533}}$ Loi n° 82-600 du 13 juillet 1982 [Law No 82-600 of 13 July 1982] (France).

⁵³⁴ Code des assurance (France), art L125-1: 'Sont considérés comme les effets des catastrophes naturelles, au sens du présent chapitre, les dommages matériels directs non assurables ayant eu pour cause déterminante l'intensité anormale d'un agent naturel, lorsque les mesures habituelles à prendre pour prévenir ces dommages n'ont pu empêcher leur survenance ou n'ont pu être prises.'

which events are natural disasters for the purpose of coverage under CAT Nat and which events do not facilitate the operation of the regime. Since the creation of the CAT Nat scheme, the scheme has been subject to some definitional variations. In 1990, the originally limited coverage was enlarged to include wind damage arising from storm, cyclone or hurricane.⁵³⁵ Further change occurred in 2002 when coverage was extended to damage caused by underground caves and marl pits.⁵³⁶ The component of the definition of 'natural disaster' pertaining to uninsurable interest was clarified to mean that coverage will be afforded under CAT Nat if the risk is not insurable through ordinary means (in the absence of the operation of the regime).⁵³⁷ The emphasis on creating a separate natural-disaster regime was to provide cover where the market had failed to do so, rather than to provide an additional avenue for acquiring cover for contingencies that could easily be insured on standard market terms.

- [390] The definition of natural disaster remains purposefully wide to ensure coverage is provided for a variety of events (subject to a Ministerial Declaration). The diversity of events covered is a means of ensuring that public support for the regime is maintained.⁵³⁸
- [391] An important operational aspect of the CAT Nat is the interaction between the regime and mitigation measures. CAT Nat supports attempts to reduce the actual or likely consequence of damage from a natural disaster. However, there are also inbuilt punitive mechanisms for individuals and communities who fail to adopt measures to mitigate the impact of disasters. Individuals are equipped with knowledge about the risk profile of their properties and potential vulnerabilities to damage arising from one or more natural disaster events. In continuing the culture of sharing risk information and knowledge under CAT Nat, future owners / occupiers of a property that has historically been subjected to natural disaster(s) must receive written notification.⁵³⁹ The system effectively intertwines policy objectives with realistic mechanisms for

⁽English translation)-The effects of natural disasters for the purpose of this chapter were direct property damage has occurred which is uninsurable and the damage was caused by a natural agent, which was of such strength that ordinary measures to prevent damage occurring were unable to prevent the damage that actually occurred. ⁵³⁵ *Loi n*^o 90-509 *du 25 juin 1990* [Law No 90-509 of 25 June 1990] (France).

⁵³⁶ This is overtly reflected in the current definition. See *Loi n^o 2002-276 du 27 février 2002* [Law No 2002-276 of 27 February 2002] (France).

⁵³⁷ Loi nº 92-665 du 16 juillet 1992 [Law No 92-665 of 16 July 1992] (France).

⁵³⁸ Michael G Faure, 'Financial Compensation for Victims of Catastrophes: A Law and Economics Perspective' (2007) *Law and Policy* 339, 339–350.

³³⁹ Loi nº 2003-699 du 30 juillet 2003 [Law No 2003-699 of 30 July 2003] (France).

achieving the desired aims of minimising damage from natural disasters—an achievement to be lauded.

Plan de Prévention des Risques Naturels

- [392] In 1995, France devised a regime that combined planning, mitigation, risk exposure and insurance. This was achieved through a natural-disaster risk-prevention plan, the *Plan de Prévention des Risques Naturels*.⁵⁴⁰ As a result, individuals have greater knowledge of the risk profile of the area in which they live and, specifically, those natural disasters from which their homes are most susceptible to damage should the disaster occur.⁵⁴¹ The scheme assists in zoning and planning by taking into account exposure to specific natural disasters and seeking to minimise damage should those natural disasters materialise. Under the *Plan de Prévention des Risques Naturels*, areas of land are zoned according to a three-tier system: *Zone Rouge* (Red Zone), *Zone Bleu* (Blue Zone) and *Zone Blanche* (White Zone).⁵⁴²
- [393] If an insured ignores zoning rules and their property is damaged, the insurer has the right to deny the claim. The system seeks to promote a change in behaviour of individuals to ensure they are aware of risks that may affect their property and act accordingly.⁵⁴³ The zoning system does not operate in a punitive manner for property that is suboptimal in terms of its location and vulnerability to risks provided that the property received planning permission prior to the implementation of the *Plan de Prévention des Risques Naturels*. The system recognises that the solution is not simply to relocate the occupants of all high-risk properties and to demolish those properties. If property is destroyed by a natural disaster, the future of the property, including decisions to rebuild, repair or relocate, requires consideration of both the property's location and the probability of similar disasters occurring in the future. The rights of the individual property owner are weighed against the public cost of works to repair or

⁵⁴⁰ Loi nº 95-1001 du 2 février 1995 La Loi Barnier [Law No 95-1001 of 2 February 1995] (France).

 ⁵⁴¹ This works in combination with the French legislative and regulatory regime dealing with catastrophic risk insurance, which requires vendors/landlords to notify purchasers/tenants that a property has endured damage from a natural disaster and the actual damage that was sustained from the event: Loi n° 2003-699 du 30 juillet 2003 [Law No 2003-699 of 30 July 2003] (France).
 ⁵⁴²European Consumer Centre, 'Natural Disaster Insurance in France'

⁵⁴²European Consumer Centre, 'Natural Disaster Insurance in France' <www.europe.consommateurs.eu/en/consumer-topics/insurance/natural-disaster-insurance-in-france/>; Les Catastrophes Naturelles en France, above n 498.

⁵⁴³ Serge Magnan, 'Catastrophe Insurance System in France' (1995) 20 *The Geneva Report on Risk and Insurance* 474, 479.

rebuild that property should it carry a significant risk of similar damage occurring in the future.⁵⁴⁴

Interaction between Caisse Centrale de Réassurance and CAT Nat

- [394] The *Caisse Centrale de Réassurance* has an unlimited state-based guarantee. Insurers who use the *Caisse Centrale de Réassurance* as their reinsurer can be ensured of solvency and stability even after the most severe events. The *Caisse Centrale de Réassurance* being a government funded reinsurance corporation has not detracted from its commerciality or competition within the French market and internationally. In fact, it has been 'ranked among the top twenty five reinsurers in the world'.⁵⁴⁵ The two primary means under which it offers reinsurance for potential catastrophic events is under a quota share regime and/or a 'stop-loss' regime.
- [395] Insurers who use the *Caisse Centrale de Réassurance* have further business opportunities for subcontracting some of the valuation work for the *Caisse Centrale de Réassurance* in the aftermath of an event with the *Caisse Centrale de Réassurance* providing the private insurer with 24% of the reinsured premium. Insurers also receive lucrative financial benefits for the *Caisse Centrale de Réassurance* using their administrative systems to collect the premium to be provided to the *Caisse Centrale de Réassurance* de *Réassurance* for reinsurance cover against catastrophic events.⁵⁴⁶

Encouraging Insurers to Create a Reserve Fund for Catastrophic Events: Government Initiatives

[396] The French system facilitates the creation of a separate tax-free fund. An insurer or reinsurer is able to put up to 75% of their profits into a separate account earmarked for natural catastrophes. These funds have favourable tax treatment. The favourable tax treatment encourages investment, development and maintenance of specific-purpose natural-disaster funds. Insurers are likely to be enticed into this regime, as they are able to retain the profits tax free should they not be used in a 10-year period. The insurer also has the benefit of readily accessible cash reserves should an event causing

⁵⁴⁴ In 1995, the French Government provided additional assistance to victims that had their properties compulsorily acquired. A specific-purpose regime known as the Prevention of Major National Risks was thus devised and began to operate to alleviate the economic costs of catastrophic disasters on individuals. See Parisi, above n 476, 3.

⁵⁴⁵ Les Catastrophes Naturelles en France, above n 498, 1, 3.

⁵⁴⁶ Jametti and Von Ungern-Sternberg, above n 520.

widespread economic or proprietary losses occur. This satisfies the French Government, as it can be assured of sufficient reserve funds that lessen the likelihood of their involvement. From a fiscal perspective, this is a well-considered move taking into account factors that may affect the potential solvency of insurers.

Scope of Coverage Provided Under CAT Nat

[397] The overriding objective of the CAT Nat regime is to provide coverage for natural disasters where it is not otherwise possible to obtain coverage.⁵⁴⁷ The scope of the CAT Nat regime is restricted to naturally occurring events, whereas man-made catastrophes such as terrorism⁵⁴⁸ or catastrophes to agricultural land⁵⁴⁹ are dealt with separately under the *Code des Assurance*.⁵⁵⁰

Assessing Regime: Economic Stability and Effectiveness

[398] The CAT Nat regime was not economically viable in its original form. There was a pricing disparity between the initial cost projections and the actual costs of operating the CAT Nat. Due to the difference between projected cost and actual cost there was a substantial increase in charges to insureds between 1982 (when the scheme began) and 1983. The price for coverage in 1982 was 5.5% of the premium payable and in 1983, this amount rose to 9%.⁵⁵¹ The dramatic pricing shift in the first operational year, in the absence of any major catastrophes warranting such a rise, illustrated that the initial calculations used to develop the economics of the system were poorly devised. A legacy that remains from the original miscalculations applied to CAT Nat during its first year of operation is that calculations need to be carefully worked out to determine viability, yet despite this, it may be necessary to revise the economic costing and the premiums payable after a period.

⁵⁴⁷ The definition specifically refers to uninsurable events. See *Code des assurance* (France) Art L125-1.

⁵⁴⁸ Code des assurance (France) Ch VI (*L'assurance contre les actes de terrorisme*).

⁵⁴⁹ In France, where there is widespread damage to agricultural land, people affected can seek assistance under the National Fund for the Guarantee of Agricultural Losses (*Fonds National de Garantie des Calamités Agricoles*). Farmers also have access to a specific insurance regime known as Multi-Risk Climatic Insurance (*Assurance Multi-Risques Climatiques*), which was specifically established to deal with the issue of assisting farmers and others who have agricultural interests in obtaining insurance against weather-related catastrophes. See G. Enjolras et al, 'Flood Management at the Basin Level in France: Sustainability of Local Risk-Sharing Policies' (Paper presented at International Water Resources Association World Water Conference, Montpellier, France, 1–4 September 2008) 1, 2–10.

⁵⁵⁰ Code des assurance (France).

⁵⁵¹ Magnan, above n 543, 479.

- [399] In the period 1982-1999 the Caisse Centrale de Réassurance had sufficient reserves to pay for insurance claims covered by the scheme without having to activate the governmental guarantee. Despite the high penetration level of the *Caisse Centrale de Réassurance* for reinsuring catastrophic risks, the governmental guarantee was only called into play in 1999 due to a culmination of serious disasters within a limited period.⁵⁵² If the Caisse Centrale de Réassurance relies on the French guarantee, there is no compulsion to reimburse this amount subsequently.
- [400] The major natural disaster for which the CAT Nat scheme has been called to provide financial assistance has been flooding. In the period 1982-2007, 59.7% of the total claims under the CAT Nat scheme were from flooding, 18.2% were the result of landslides, 13.7% were a culmination of multiple contingencies and 8.4% of the total losses arose from soil subsidence.⁵⁵³ Although the losses for a number of the catastrophes were enormous, a major catastrophe such as flooding of the Seine River in Paris⁵⁵⁴ or an earthquake in the Côte d'Azur has not eventuated. The occurrence of a major catastrophe of this scale would be even more problematic, and would carry the possibility of thrusting the regime into a state of questionable solvency. Projections have been made that the cost of either of these potential contingencies eventuating could be multi-billions of euros.⁵⁵⁵ If either of these major catastrophes were to eventuate, it is likely the Caisse Centrale de Réassurance would have to rely upon the government guarantee.
- [401] In the past 20 years, since the CAT Nat system was devised, the system has generally dealt well with the natural disasters against which the scheme provided economic protection. The State guarantee has been beneficial to insurers and insureds alike in ensuring solvency for catastrophic events.

⁵⁵² Two separate lots of flooding occurring in late 1999 around the Aude district of France and flooding within the Lothar and Martin district of France. The damages were approximately €240 million for each events within the different districts of France. As a result, the French government guarantee was relied upon. See Vallet, above n 475, 293–302. ⁵⁵³ Les Catastrophes Naturelles en France, above n 498, 1, 13.

⁵⁵⁴ Exact losses from the 2016 flooding of the Seine River are yet to be finalised as the flood waters have not fully subsided (June 2016).

⁵⁵⁵ It has been suggested that flooding of the Seine River could amount to damages of €5 billion and an earthquake near the Côte d'Azur has the potential to create losses of up to €15 billion. See Les Catastrophes Naturelles en France, above n 498, 1, 12.

Experience of Insured: Effectiveness of CAT Nat in Satisfying Claims for Natural Disasters in a Timely and Efficient Manner

- [402] In February 2010, there was significant flooding due to the Xynthia Storm near Bordeaux and the Loire Estuary. A Ministerial Declaration was made for the Xynthia Storm, treating the event as a natural disaster (for insurance purposes). The flooding saw an inundation of more than 50,000 hectares of land and 47 deaths.⁵⁵⁶ The resultant damage bill was €2.5 billion.⁵⁵⁷ An important outcome from this flood was that the mitigation regime did not achieve desired targets.
- [403] In the aftermath of the flooding, the French Government decided to demolish 1,510 houses due to their risk exposure.⁵⁵⁸ The inadequacy of the status quo as tested during this event was evident and propelled meaningful change that would provide long-term benefits both economically and for community safety in reducing exposure to risk.
- [404] Although there were some inadequacies with the CAT Nat regime and disaster mitigation, overall, the system worked well for this event. The biggest problem was the lack of communication or the disconnect between the different levels of government. Although there is a system to protect individuals against economic losses incurred through natural disaster, a problem arises because local mayors grant building permission in risk-exposed areas.
- [405] The flooding was evidence that in this locality, the mitigation measures that had been implemented were rendered useless as a practical means alleviating the property damage caused by the floods. It was suggested that part of the problem was a 'lack of integration between the different key stakeholders ... the effectiveness of French legislation regarding developments in flood zones has suffered from slow implementation, ways to circumvent it and controversial planning decisions made at a local level. It is important that lessons are learnt from the implementation of previous legislation to avoid the same mistakes being repeated'.⁵⁵⁹
- [406] Another problem was the speed at which the French Government sought resolutions. First, the French Government aided insureds by the relevant Minister making a

⁵⁵⁶ Lumbroso and Vincent, above n 476, 2321.

⁵⁵⁷ Le Goff, above n 488, 57; Kolen et al, above n 488.

⁵⁵⁸ Lumbroso and Vincent, above n 476, 2328.

⁵⁵⁹ Ibid 2333.

Ministerial Declaration of natural disaster, which activated natural-disaster insurance coverage. However, the speed at which relief was pursued was such that it was 'so rapid that data assessment was incomplete and field work was precluded'.⁵⁶⁰

- [407] From an insurance perspective, this event demonstrated the inability of insurers to satisfy all of their obligations under the CAT Nat regime (settling all claims within three-months). Many insurers ensured that small claims (of €2,000 or less)⁵⁶¹ were paid within this period and were willing to provide some money within the required time but could not satisfy each claim completely. Insurers were unable to settle claims within the three-month period because they received 500,000 claims for material damage to properties arising from the flooding. A second distinctive feature of this disaster was that insureds had a period of one month in which to make a claim, whereas generally they only have 10 days from the governmental declaration. However, despite the challenge posed by this event the 'insurance [industry] dealt with most of the paperwork and they seem to handle claims relatively quickly'.⁵⁶²
- [408] The flooding from Xynthia Storm was a testing event that required all the available resources of the CAT Nat regime. Although it was impossible for the industry to satisfy 500,000 claims within the designated three-month period, the claims that were not settled within that period were still settled in a timely manner, reducing potential delays for affected individuals. Thus, the system can be said to have worked efficiently for catastrophe risk.

Cross-Subsidisation

- [409] In France, the use of cross-subsidisation centres on the principle of fairness and gleans legitimacy due to the multiplicity of catastrophic events that are encompassed under the CAT Nat scheme. Where planning permission has already been granted for existing properties, it seems unfair to impute the highest insurance premiums.
- [410] The effect of cross-subsidisation is balanced against deductibles, which can entrench moral hazard and personal responsibility for risk mitigation. Deductibles can be used to signal risk. The way that the French have linked their mitigation measures, planning

⁵⁶⁰ Le Goff, above n 488, 59.

⁵⁶¹ 'Storm Insurance Deadline Extended' *The Connexion (France) (online)*, 3 March 2010

http://www.connexionfrance.com/storm-xynthia-insurance-claims-deadline-extended-view-article.html.

⁵⁶² Kolen et al, above n 488, 1, 16.

and insurance is an economically sound and viable way of achieving the desired goal of preventing losses. The creation of the Plan de Prévention des Risques Naturels is linked to the deductibles in France, creating an obligation to ensure public knowledge of local risk plans that outline the real risk exposure. This heightens community awareness of risk and can ensure that local communities who may not have had sufficient knowledge of a risk become informed so that they can react and implement preventive measures.

Spain's Consorcio de Compensación de Seguros⁵⁶³

[411] In Spain, extraordinary risks are covered by the Consorcio de Compensación de Seguros. The Consorcio de Compensación de Seguros is a mandatory regime that works in conjunction with the Spanish private insurance regime to cover catastrophe risk where insurers would not otherwise provide coverage. The Consorcio de Compensación de Seguros complies with obligations under the European Union Directives.⁵⁶⁴ The Consorcio de Compensación de Seguros' profitability, accountability and transparency are maintained through inherent checks and balances to ensure commerciality.⁵⁶⁵

Scope of Coverage Provided under the Consorcio

[412] The Consorcio de Compensación de Seguros covers a wide array of insurable events such as losses to property, and physical injuries arising from extraordinary⁵⁶⁶ events. The events covered under the natural-phenomenon category are listed under Article 6(1)(a). These include flooding, earthquake, seaquake, volcanic eruption, cyclonic

⁵⁶³ Understanding of the Consorcio and translations of some of the governing legislation (in Spanish) was guided by Alfonso Nájera Ibáñez, Sub-Director for Studies and International Relations, Consorcio de *Compensación de Seguros* who provided practical guidance on the current and historical operations of the CCS. ⁵⁶⁴ *Directive 92/49/EEC of the European Parliament and of the Council of 18 June 1992 entitled 3rd EU*

Directive on Non-Life Insurance. ⁵⁶⁵ Ley 21/1990 (19 December 1990) (Spain) Art 6(1)(a).

⁵⁶⁵ Alfonso Nájera Ibáñez, Consorcio de Compensación de Seguros (Sub-Director for Studies and International Relations), Personal Communication to Rachel Anne Carter, October 2015.

⁵⁶⁶ The Spanish usage of the term 'extraordinary' in the context of extraordinary events is similar to the common usage of the term 'catastrophic event' in Australia. Spanish commentator Fernando Sanchez Calero has suggested the terms extraordinary and catastrophic are interchangeable under the Spanish regime. See Fernando Sanchez Calero, 'Comentario al Art 44' in Fernando Sanchez Calero (ed) Ley de Contrato de Seguro Comentarios a la Ley 50/1980 de 8 de Octubre, y a sus Modificaciones (Thomson, 2005) 788-805; Pablo Salvador Coderch, Sonia Ramos González and Rosa Milla Rafael, 'Catastrophic Harms: Insurance and Liability: General Report' in Karen B Brown and David V Snyder (eds.), General Reports of the XVIIIth Congress of the International Academy of Comparative Law/Reporte Généraux du XVIIIeme Congrès de L'Académie Internationale de Droit Comparé (Springer, 2012) 85–103.

storms, falling of astronomic bodies or meteorites and extreme fires.⁵⁶⁷ The parameters of cover and definition of each of the events is provided in Article 2 of the *Real Decreto 300/2004* (20 February 2004). The boundaries for operation of the *Consorcio de Compensación de Seguros* for losses experienced as a result of cyclonic storms are clarified under Article 2. For any damage incurred by wind to be covered by the *Consorcio de Compensación de Seguros*, the wind speed must exceed 120km/h.⁵⁶⁸ This wind speed was reduced after Windstorm Klaus⁵⁶⁹ where the previous wind speed was 135 km/h.⁵⁷⁰ The utilisation of Article 6(1)(a) in outlining events covered, and Article 2 in providing precise limitations of coverage, ensures an insured can be satisfied after an event if the *Consorcio de Compensación de Seguros* are coverage.

[413] Historically, the greatest proportion of the Consorcio de Compensación de Seguros' natural-disaster losses have been caused by flooding.⁵⁷¹ Flooding has generated 85% of the Consorcio de Compensación de Seguros' total compensation payments from 1971 to 2012.⁵⁷²

⁵⁶⁷ Ley 21/1990 (19 December 1990) (Spain) Art 6(1)(a).

⁵⁶⁸ Nájera Ibáñez, above n 565.

⁵⁶⁹ Ibid.

⁵⁷⁰ Real Decreto 300/2004 [Royal Decree of 20 February 2004] (20 February 2004) (Spain).

⁵⁷¹ OECD, *Policy Issues in Insurance: Financial Management of Large-Scale Catastrophes*, above n 515, 93. It was suggested by the OECD that in the period 1987–2003, there were claims worth €1,385,383,648 for property losses arising from flooding relating to 85% of the total losses incurred during this period. Other natural disasters that caused sizable losses were cyclone (for which there were property damage claims of €40,235,666, amounting to 2.5% of the total claims). Additionally, earthquake losses of €16,725,642 amounted to 1% of the total property compensation payments made by the *Consorcio de Compensación de Seguros* during the same period. The *Consorcio de Compensación de Seguros* had a number of compensation claims arising from different events; however, the events outlined above were the key natural-disaster losses experienced by the *Consorcio de Compensación de Seguros*. It is important to recognise that of the property losses sustained, only 22.6% of the total property losses arose from damage to housing or offices (albeit the amount of damage came from 367,986,707 properties). The proportion of these payments of all payments made by the *Consorcio de Compensación de Seguros* for all contingencies covered meant that overall losses to housing and offices were only 7.46% of the total losses. See Ignacio Machetti, 'The Spanish Experience in the Management of Extraordinary Risks, Including Terrorism' (Paper presented at Conference on Catastrophe Risks and Insurance, Paris, 22–23 November 2004) 337–348, 344–346.

⁵⁷² Consorcio de Compensación de Seguros, *Scope of Activity* (Consorcio de Compensación de Seguros, December 2011) <http://www.consorseguros.es>; Anna Serra, J David Tabara and Illan Chabay, 'Assessing the Role of Vertical and Horizontal Communication in Disaster Risk Reduction Learning and Planning: The Case of the Spanish Tous Dam-Break, 1982' (Report of the United Nations Integrated Risk Governance Project, 2011) 1, 24.

Funding of the Consorcio

[414] The *Consorcio de Compensación de Seguros* is funded by a compulsory surcharge⁵⁷³ imposed on household insurance policies issued by private insurers. At present the amount of the surcharge is 0.08% per thousand, for residential insurance cover.⁵⁷⁴ The *Consorcio de Compensación de Seguros* has the ability in exceptional cases to vary the amount of the surcharge including reducing the amount payable by the homeowner.⁵⁷⁵ The insured pays the surcharge as part of the total cost of their insurance and thus they pay this surcharge to their insurer. The insurer is responsible for paying the money directly to the *Consorcio de Compensación de Seguros*. The insured has two contracts of insurance: one contract of insurance with the *Consorcio de Compensación de Seguros* (for extraordinary risks) and one contract of insurance with the insurer (pertaining to commercial coverage). The *Consorcio de Compensación de Seguros* protects all insureds against extraordinary risk and provides additional protections to an insured if their insurer is unable to pay an amount owed under a policy, for example, when an insurer has filed for bankruptcy, and is unwilling or unable to pay out on a valid claim.

Legal Origins and Original Structure of the Consorcio

[415] The Consorcio de Compensación de Seguros was established in 1954,⁵⁷⁶ originally governed by the 1908 legislation⁵⁷⁷ (governing insurance contracts) and an enabling piece of legislation⁵⁷⁸ (regulating the running of the Consorcio de Compensación de Seguros). Although the Consorcio originated in 1954 'the current Consorcio de

⁵⁷³ An insured that purchases insurance covering any property risk will have to pay a surcharge to the *Consorcio* de Compensación de Seguros. See Real Decreto 300/2004 [Royal Decree of 20 February 2004] (Spain); Real Decreto Legislativo de 29 de octubre de 2004 [Royal Statutory Decree of 29 October 2004] (Spain) Art 7, Art 8.1.

⁵⁷⁴Consorcio de Compensación de Seguros, 'The Surcharge and the Tariff', <http://www.consorseguros.es/web/ambitos-de-actividad/seguros-de-riesgos-extraordinarios/masinformacion/el-recargo-y-su-tarifa>

 ⁵⁷⁵Alfonso Nájera Ibáñez, Sub-Director for Studies and International Relations, *Consorcio de Compensación de Seguros*, Personal communication to Rachel Anne Carter, May 2016.
 ⁵⁷⁶ La Ley de 16 de diciembre de 1954 por la que se crea el Organismo Autónomo Consorcio de Compensación

⁵⁷⁶ La Ley de 16 de diciembre de 1954 por la que se crea el Organismo Autónomo Consorcio de Compensación de Seguros [The Law of 16 December 1954 Establishing the Autonomous Agency of the Insurance Compensation Consortium] (Spain).

⁵⁷⁷ La Ley Regula la Entrada de Firmas, Compañías, Asociaciones y en General Todas las Organizaciones que Tengan por Objeto la Realización de Negocio de Seguros en el Registro que se Creará a tal Efecto [The Law of 1908 Governing the Entry of Firms, Companies, Associations and Generally All Organisations whose Purpose is to Conduct Insurance Business in the Register to be Created for that Purpose] (Spain).

⁵⁷⁸ La Ley de 16 de diciembre de 1954 por la que se crea el Organismo Autónomo Consorcio de Compensación de Seguros [The Law of 16 December 1954 Establishing the Autonomous Agency of the Insurance Compensation Consortium] (Spain).

Compensación de Seguros is very different to the Consorcio of its origins, or to the Consorcio de Compensación de Seguros set up in 1954, or to the Consorcio de Compensación de Seguros post 1990 when it changed legal status.⁵⁷⁹ The Consorcio has evolved as it continues to provide cover for extraordinary risks.

- [416] Initially, the Consorcio de Compensación de Seguros was the responsibility of the Spanish Government and thus was assigned to the Dirección General de Seguros [Directorate of General Insurance].⁵⁸⁰ It is designed to alleviate a situation in which 'demand for insurance products remained highly concentrated among the moneyed classes'.⁵⁸¹ Importantly, it was established with the objective of facilitating insurance coverage where it would not otherwise be affordable for many Spaniards.
- [417] The Consorcio de Compensación de Seguros has its origins in the aftermath of the Spanish Civil War⁵⁸² when there was a multitude of pooling arrangements to help finance the rebuilding and re-establishment of personal and community property that had been destroyed by fire and extreme wind. The need for formalised disaster pooling arrangements, coupled with severe fires in the 1940s, created the impetus to establish formally an entity designed to provide a means of financially shifting economic risks and shifting the potential costs associated with property damage caused by catastrophic events. In return for the pool accepting the financial burden of property damage, the pool would charge a fee reflecting the financial shift or transfer of risk. Despite the Consorcio de Compensación de Seguros' roots being the threat of severe fires coupled with extreme wind⁵⁸³, nowadays; fire risk poses the lowest natural-disaster risk in

⁵⁷⁹ Nájera Ibáñez, above n 565.

⁵⁸⁰ For a historic account of the Consorcio de Compensación de Seguros, see Leonardo Carauana, 'Insurance in Spain 1934–2004' in Instituto de Ciencias de Seguro: Encuentro Internacional Sobre la Historia del Seguro (Fundación Mapfre, 2010), 175–197. ⁵⁸¹ Ibid 175–197, 176.

⁵⁸² Prior to the Spanish Civil War (1936–1939), the insurance market in Spain tended to attract foreign and multinational insurance companies. Most national insurance in Spain originated from marine insurance; however, Spanish insurers were also dominant in fire insurance. During this period, some of the greatest losses arose from fire-related incidents and this cumulative impetus pushed for the creation of the Consorcio de Compensación de Seguros. See Jeronia Pons, 'A History of Insurance Companies in Spain Until 1936' in Instituto de Ciencias de Seguro: Encuentro Internacional Sobre la Historia del Seguro (Fundación Mapfre, Madrid. 2010) 141–175. 142–172.

⁵⁸³ The term 'severe fires' employed in Spain and it is akin to bushfire in Australia. See Nájera Ibáñez, above n 565.

Spain. The highest cost to the *Consorcio de Compensación de Seguros* of damages arises from flooding.⁵⁸⁴

[418] This mandatory regime with its governmental input (as direct insurer of extraordinary events) is seen to be an economically sound model for insuring extraordinary (catastrophe) risks. Further, the retention of the operational surplus by the *Consorcio de Compensación de Seguros* plus any capital injections into the *Consorcio de Compensación de Seguros* and into risk-minimisation programmes is important to its overall success.⁵⁸⁵ Under the *Consorcio de Compensación de Seguro*, the Spanish Government acts as the primary insurer, underwriting extraordinary risks in Spain. The cost savings made by the regime, particularly in relation to administration and the failure to have commercial shareholders, have been said to create savings up to 40%⁵⁸⁶ compared to the costs of providing similar insurance products within the Spanish insurance industry (as a stand-alone product or integrated into other property insurance products). Former Chief Executive Officer of the *Consorcio de Compensación de Seguros*, Ignacio Machetti, highlighted the utility served by such a regime suggesting that 'from a historical overview, [it has been] a successful experience, with a high projection to the future'.⁵⁸⁷

The Legal and Regulatory Regime Governing Insurance Law in Spain and the Consorcio

[419] Spanish insurance law originated from legislation dated 14 May 1908. This founding legislation remained operational until 1954. The legislative guidance on insurance law and particularly extraordinary risk in Spain remained stagnant until 1984. Change occurred as a pre-emptive measure to help facilitate Spain to become part of the global insurance market and prepare for admission into the European Union. At this time, the important changes that occurred were the establishment of the insurance supervisory

 ⁵⁸⁴ Consorcio de Compensación de Seguros, 'Estadistica Riesgos Extraordinarios Series 1971–2011' (October 2012)
 87 ">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>">http://www.consorseguros.gorguros.gorguros.gorgurogeurogeuros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorguros.gorgu

⁵⁸⁵ Maria Rubio-Misas, 'The Structure, Conduct and Performance of the Spanish Insurance Industry' in David J Cummins and Bertrand Venard (eds.), *Handbook of International Insurance: Between Global Dynamics and Local Contingencies* (Springer, 2007) 499, 505–506.

⁵⁸⁶ Thomas Von Ungern-Sternberg, 'State Intervention on the Market for Natural Damage Insurance in Europe' (CESifo Working Paper No 1067, October 2003) 4 (Paper presented at Venice Summer Institute Workshop on Insurance, Venice, July 2003).

⁵⁸⁷ Machetti, 'The Spanish Experience in the Management of Extraordinary Risks, Including Terrorism', above n 571, 337–348, 338.

authority and the standardisation of minimum rights afforded to insureds under insurance contracts. The changes were easier to facilitate within the private insurance market in Spain than in the *Consorcio de Compensación de Seguros*.⁵⁸⁸

- [420] When Spain joined the European Union, substantial structural changes had to be made to ensure compliance with the third European Union Directive on non-life insurance.⁵⁸⁹ This third directive required the control of the Consorcio de Compensación de Seguros to be modified so it was not deeply rooted within the Spanish Government. However, the importance of the Consorcio de Compensación de Seguros to the Spanish people and the positioning of the Consorcio de Compensación de Seguros as a means of providing economic protection for property damage and personal injury caused by extraordinary events prompted a compromise between Spain and the European Union. The Spanish maintained the Consorcio de Compensación de Seguros but in a corporate form. Despite the Consorcio de Compensación de Seguros formally becoming a corporation, in reality it acts as if it were a public entity. The third European Union Directive required Spain to facilitate free trade for insurance; this was theoretically overcome by the Spanish allowing other insurers to cover extraordinary risks. However, private insurers are obliged by Spanish law to pay the compulsory surcharge for the Consorcio de Compensación de Seguros.⁵⁹⁰ However they obtain this from a range of compulsory surcharges imposed on different insurance products. In return for collecting the surcharge the Consorcio de Compensación de Seguros provides the insurers with a commission of 5%.⁵⁹¹ This entrenched the monopoly of the *Consorcio* de Compensación de Seguros, as it is not commercially viable for any insurer operating in Spain to cover extraordinary risks. The imposition of a surcharge as opposed to an insurance premium has theoretically satisfied the compliance obligations with the third European Union Directive.⁵⁹²
- [421] Although there is an interesting track of domestic legislation that shaped the *Consorcio de Compensación de Seguros*' current corporate identity, this summary will only explore the most recent legislative enactments,⁵⁹³ namely *Ley 21/1990*;⁵⁹⁴ *Real Decreto*

⁵⁸⁸ 'Spain: The New Insurance Law, a Tough Birth' (1996) 49(3) International Insurance Monitor 18, 18–19.

⁵⁸⁹ Directive 92/49/EEC of the European Parliament, above n 542.

⁵⁹⁰ Von Ungern-Sternberg, above n 586, 2.

⁵⁹¹ Nájera Ibáñez, above n 565.

⁵⁹² Directive 92/49/EEC of the European Parliament, above n 542, Art 10.

⁵⁹³ The form of the *Consorcio de Compensación de Seguros* changed many times between the conclusion of the Spanish Civil War and 1960. The principal changes were a transformation from the *Consorcio de*

7/2004⁵⁹⁵ and Ley 12/2006.⁵⁹⁶ The Consorcio de Compensación de Seguros is controlled by unique regulations concerning its operation, while satisfying the insurance obligations imposed on commercial insurers under the Lev de Contrato de Seguro.⁵⁹⁷ Traditionally, Spain was very protective of its primary insurance market, even where this was not the most economically viable option.⁵⁹⁸

Law 21/1990: Estatuto Legal del Consorcio de Compensación de Seguros

[422] The first of a series of legislative instruments that moved the Consorcio de Compensación de Seguros to conform with European Union membership obligations⁵⁹⁹ was Article 4 of *Estatuto Legal del Consorcio de Compensación de* Seguros de 19 diciembre de 1990.⁶⁰⁰ Article 4 prohibited the continued exclusivity of the monopoly over extraordinary-risk insurance previously enjoyed by the Consorcio de Compensación de Seguros. The Consorcio de Compensación de Seguros' great advantage was that many private insurers were largely unwilling or unable to cover catastrophe risk at an affordable rate.⁶⁰¹ Estatuto Legal del Consorcio de Compensación de Seguros de 19 diciembre de 1990 has now been ruled by the

Compensación de Riesgos Catastróficos sobre las Cosas [Consortium for Catastrophic Risks Affecting Goods], which was operative from May 1944 to December 1954 when the Consorcio de Compensación de Seguros [Insurance Consortium] was developed and attributed as the foundation of the current regime. In 1960, the structure largely remained the same; however, there was an extension of events covered to include a multitude of catastrophic events. ⁵⁹⁴ Estatuto Legal del Consorcio de Compensación de Seguros de 19 diciembre de 1990 [Legal Statute of 19

December 1990 for the Insurance Compensation Consortium] (Spain). ⁵⁹⁵Real Decreto Legislativo 6/2004 de 29 de Octubre, por el que se Aprueba el Texto Refundido de la Ley de

Ordenación y Supervisión de los Seguros Privados [Royal Statutory Decree number 6 of 29 October 2004 Approving the Revised Text of the Law of Regulation and Supervisión of Private Insurance]. 596 Lm 12/2006 L 16 L

Ley 12/2006, de 16 de mayo, por la que se Modifica el Texto Refundido del Estatuto Legal del Consorcio de Compensación de Seguros, Aprobado por el Real Decreto Legislativo 7/2004, de 29 de octubre, y la Ley 24/1988, de 28 de julio, del Mercado de Valores [Law of 16 May 2006 amending the consolidated text of the Legal Status of the Insurance Compensation Consortium, approved by Royal Statutory Decree of 29 October 2004 and Law of 28 July 1988 on the Securities Market] (*'Ley 12/2006'*). ⁵⁹⁷ Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts].

⁵⁹⁸ Rubio Misas, above n 585, 449.

⁵⁹⁹ Ley 21/1990 (19 December 1990) (Spain) Art 4.

⁶⁰⁰ Estatuto Legal del Consorcio de Compensación de Seguros de 19 diciembre de 1990 (19 December 1990) (Spain) [Legal Statute for the Consorcio de Compensación de Seguros of 19 December 1990]. ⁶⁰¹Eugene Gurenko and Rodney Lester in publishing for the World Bank have suggested it is 'unrealistic to

expect private insurance companies to build up special catastrophic reserves for severe but unlikely events in the absence of tax and accounting incentives and given the reality of shareholders' shorter-term business planning horizons'. In light of the fact that in Spain there is no tax relief or other incentive for private insurers to rely on, they are likely to decline these risks and rely on the existing regime of the Consorcio de Compensación de Seguros. See Eugene Gurenko and Rodney Lester, 'Rapid Onset Natural Disasters: The Role of Risk Financing in Effective Catastrophe Risk Management' in OECD, Policy Issues in Insurance: Catastrophic Risk and Insurance (OECD Report No 8, OECD Publishing, 2005) 235-267, 245.

consolidated text of Real Decreto Legislativo 7/2004 which has had revisions under Ley 12/2006,⁶⁰² Ley 6/2009⁶⁰³ and Ley 20/2015.⁶⁰⁴

[423] The strength and positioning of the Consorcio de Compensación de Seguros as the critical catastrophe insurance regime in Spain was further entrenched by combining the Consorcio de Compensación de Seguros with Fondo de Compensación de Incendios Forestales (Spain's compensation fund for integrated forest fire). Pooling of resources established the Consorcio de Compensación de Seguros as a unified large-scale risk insurer.⁶⁰⁵

Lev 12/2006

- [424] Article 1 of Ley 12/2006 effectively modifies the legal status of the Consorcio⁶⁰⁶ by incorporating personal insurance, life insurance, death and disability insurance cover, accident insurance, vehicle cover, rail insurance and fire insurance.
- [425] Minor legislative amendments and structural changes have occurred since Ley $12/2006^{607}$ was implemented. However, the majority of the regime remains preserved in an efficient and workable state.

⁶⁰² Lev 12/2006, de 16 de mayo, por la que se modi-fica el texto refundido del Estatuto Legal del Consorcio de Compensación de Seguros, apro- bado por el Real Decreto Legislativo 7/2004, de 29 de octubre, y la Ley 24/1988, de 28 de julio, del Mercado de Valores. [Law 12/2006 of 16 May, which is modified the revised text of the Legal Statute for the Consorcio de Compensación de Seguros, approved by Royal Legislative Decree 7/2004 of 29 October, and the Law 24/1988 of 28 July, on the Securities Market] ('Ley 12/2006'). ⁶⁰³ Ley 6/2009, de 3 de julio, por la que se modifica el Estatuto Legal del Consorcio de Compensación de

Seguros, aprobado por Real Decreto Legislativo 7/2004, de 29 de octubre, para suprimir las funciones del Consorcio de Compensación de Seguros en relación con los seguros obligatorios de viajeros y del cazador y reducir el recargo destinado a financiar las funciones de liquidación de entidades aseguradoras, y el texto refundido de la Ley de ordenación y supervisión de los seguros privados, aprobado por Real Decreto Legislativo 6/2004, de 29 de octubre [Law 6/2009 of 3 July, the Legal Statute of the Consorcio de Compensación de Seguros, approved by Royal Legislative Decree 7/2004, of October 29 is amended to delete the functions of the Consorcio de Compensación de Seguros in concerning compulsory insurance rating and hunter and reduce the surcharge to finance the settlement functions of insurance companies, and the revised text of the Law on regulation and supervision of private insurance, approved by Royal Legislative Decree 6/2004 of 29 October] ('Ley 6/2009')

⁶⁰⁴ Ley 20/2015, de 14 de julio, de ordenación, supervisión y solvencia de las entidades aseguradoras y reaseguradoras [Law 20/15 of 14 July on the management, supervision and solvency of insurance companies and reinsurance companies] ('Ley 20/2015').

⁶⁰⁵ Lev 21/1990 (19 December 1990) (Spain) Art 66.

⁶⁰⁶ Enrique Barrero Rodríguez, *El Consorcio de Compensación de Seguros* (Tirant lo Blanch-Cuatreases, 2000) 158–257. ⁶⁰⁷ Ibid.

Enforceability of System: Juxtaposing this with the Spanish Private Insurance Regime

- [426] The *Consorcio de Compensación de Seguros* must comply with the *Ley de Contrato de Seguro*,⁶⁰⁸ which mandates the inclusion of minimum standards for insurance contracts. These standards are designed to ensure protection for the individual while facilitating the just operation of the *Consorcio de Compensación de Seguros*. The strict operation of the minimum standards (insurance contract protections for individuals) as incorporated into the legislation can only be overridden in instances where an insurer offers terms more favourable for an insured.⁶⁰⁹
- [427] To have insurance coverage under the *Consorcio de Compensación de Seguros*, an insured must have a legally recognised insurable interest *interés asegurable*^{,610} The person, who has insurance coverage for a certain risk must have a real risk of damage occurring and a loss being sustained as a result. The economic justification is to prevent the person with the true interest paying a higher price than would ordinarily correspond with their risk.⁶¹¹ The failure to possess such an interest invalidates an insurance contract.⁶¹²

Facilitating Quick Processing of Claims after an Extraordinary Event

[428] The position of an insured is further strengthened by ability to ensure that an insurer handles their claims in a timely manner. An insurer has an upper limit of three months on which a claim must be satisfied. If an insurer fails to satisfy this obligation, the insured's compensation will increase by 20–100% of the initial loss.⁶¹³ The imposition of this penalty for the insurer (or additional benefit for the insured) creates incentive for an insurer to handle claims quickly.

⁶⁰⁸ Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain).

⁶⁰⁹ Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain).

⁶¹⁰ Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain) Art 25: 'Sin perjuicio de lo establecido en el artículo cuarto el contrato de seguro contra datos es nulo si en el momento de suclusión no existe un interés del asegurado a la indemnización el deño.'

⁽English translation)- Without detriment to article 4, the insurance contract is null if in the moment of its inclusion there is no interest from the part of the insured to the compensation.

⁶¹¹Diccionario Mapfre de Seguros (Fundación Mapfre, 2013) http://www.mapfre.com/wdiccionario/terminos/vertermino.shtml?i/interes-asegurable.htm>.

⁶¹² Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain) Art 25.

^{25.} ⁶¹³Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain) Art 20.

[429] In the event of a catastrophic loss, the *Consorcio de Compensación de Seguros* can call on 350 insurance professionals, legal professionals and loss adjusters.⁶¹⁴ The temporary/emergency staff members come from within the insurance industry and are already sufficiently trained.⁶¹⁵ This is an important aspect of the *Consorcio de Compensación de Seguros* that contributes to its overall success.

Claims Handling and Extraordinary Events

- [430] The claims-handling process is generally divided into two broad groups of minor claims (where the damage claimed does not exceed €30,000) and large claims (where the claim exceeds €30,000). For claims of less than €30,000, an 80% proportion of the claimed amount is generally paid out in a timely manner with the remaining 20% being paid out after loss adjustment is made. Generally, this has proven to be workable as the maximum claim processed in this manner is €30,000.
- [431] Quality assurance and loss adjustment for smaller claims (less than €30,000) employs random sampling mechanisms.⁶¹⁶ The random sampling method means that for smaller claims, a number of insurance claims submitted to the Consorcio are adjusted by a loss adjuster using the same rigour as for larger claims. The majority of smaller claims are not subject to this rigorous procedure. The benefit of the random sampling method, as opposed to assessing each small claim in great detail, is in the cost saving generated. During 2008–2012, 584,000 claims worth a total of €2.2 billion were settled by the *Consorcio de Compensación de Seguros*. However, due to the strength of the surcharge only rose 2.2%.⁶¹⁷

⁶¹⁴ Machetti, 'The Spanish Experience in Management of Extraordinary Risks Including Terrorism', above n 571, 337–348, 339.

⁶¹⁵ In 2012, the expenditure on staffing and overhead costs for the Consorcio amounted to 1.9% of the premiums collected. In total, the amount of expenditure on staff salaries for 2012 was €12.6 million (which included fulltime staff and staff used to process claims from extraordinary events). This amount was reduced by 5.5% in comparison to the amount expended in 2011. See Consorcio de Compensación de Seguros, Informe Anual 2012 Report 2012] (Ministerio de Economía Competitividad, 2012) [Annual y 40, 75 http://www.consorseguros.es/web/c/document library/get file?uuid=d7f3f206-6516-4aa2-8882a76465e8224e&groupId=10124>.

 ⁶¹⁶ Alejandro Izuzquiza, 'The Consorcio de Compensación de Seguros and its wind storm insurance coverage' paper presented at 6th European Conference on Severe Storms (Palma de Mallorca, October 2011) 30 – 35.
 ⁶¹⁷ Consorcio de Compensación de Seguros, 'Summary of Activity 2012' (2012)

http://www.wfcatprogrammes.com/c/document library/get file?folderId=12566&name=DLFE-3005.pdf>.

[432] For larger claims (exceeding €30,000), verification of the loss is mandatory.⁶¹⁸ This is a more tedious process but due to the *Consorcio de Compensación de Seguros*' ability to double its staff capacity quickly most claims are satisfied in a timely manner.⁶¹⁹

Challenging the Claims-Handling Time: Windstorm Klaus

[433] During Windstorm Klaus (23–24 January 2009), the three-month period for claims handling was challenged⁶²⁰ due to an 'unprecedented number of claims'.⁶²¹ The total damage bill was €465,224,515, with €291,086,822.19 paid by the *Consorcio de Compensación de Seguros* and the remaining €174,137,691.37 not covered by the *Consorcio de Compensación de Seguros* (or was self insured).⁶²² The portion which was paid by the *Consorcio de Compensación de Seguros* (or was from 270,000 claims (one of the biggest disaster events ever in Spain).⁶²³ It was for this reason that not all of the claims that were to be paid by the Consorcio could be paid within the three month window as required by the *Consorcio de Compensación de Seguros*.

Achieving Equilibrium: Responsibilities of an Insured

[434] The *Ley de Contrato de Seguro*⁶²⁴ is not entirely favourable towards an insured. Rather, it attempts to achieve balance through responsibilities imposed on an insured, including strict application of rules relating to misrepresentation.⁶²⁵ When the risk is reduced, Article 13 operates to enable the insured to obtain a refund in the price differential between the premium that was charged and the premium reflecting the lowered risk.⁶²⁶

⁶¹⁸ Izuzquiza, above n 616, 30–35.

⁶¹⁹ Ibid 17.

⁶²⁰ Ibid.

⁶²¹ Unión Española de Entidades Aseguradoras y Reaseguradoras, *Spanish Insurance Social Report* (Unión Española de Entidades Aseguradoras y Reaseguradoras, 2009) 85.

⁶²² Ibid 86.

⁶²³ Ignacio Machetti, 'Spanish Scheme: Last Changes Repercussions' (Paper presented at World Forum of Catastrophe Programs, Bucharest, 12–14 October 2010).

⁶²⁴ Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain).

⁶²⁵ Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain) Art 10.

⁶²⁶ Ley de Contrato de Seguro [Law of 8 October 1980 on Insurance Contracts] (8 October 1980) (Spain) Art 13.

Deductible (Franquicias)

[435] To ensure adequate liquidity, the Consorcio de Compensación de Seguros has discretion to deduct⁶²⁷ a deductible amount from the overall losses payable. The main criterion is that the Minister of Finance must present a report with support of the Consorcio de Compensación de Seguros justifying the change. The report provides a written record of the change to enforce a deductible that varies from the 7% and ensures there is accountability for the variation in *franquicias*.⁶²⁸ Although the Consorcio de Compensación de Seguros can utilise its discretion to deduct an amount different to the 7%⁶²⁹ of compensation payable (as stipulated in the legislation), this happens very rarely. This has generally not occurred previously because there has been no need to enact this on the basis of the liquidity of the Consorcio de Compensación de Seguros and the reporting requirement. Due to its consistency, certainty and workability, the Consorcio de Compensación de Seguros strictly adheres to the

⁶²⁷ The process of being able to deduct in Spain is known as the process of imposing franquicias. See Reglamentó del Seguro de Riesgos Extraordinarios Aprobado por el Real Decreto 300/2004, de Febrero [Royal Decree of 24 February 2004 on Extraordinary Risk Insurance] (24 February 2004) (Spain) Art 9.

⁶²⁸ Reglamentó del Seguro de Riesgos Extraordinarios Aprobado por el Real Decreto 300/2004, de Febrero Art

^{9(3).} ⁶²⁹ Reglamentó del Seguro de Riesgos Extraordinarios Aprobado por el Real Decreto 300/2004, de Febrero Art

^{1.} En el caso de daños directos, la franquicia a cargo del asegurado será:

a. En los seguros contra daños en las cosas, de un siete por ciento de la cuantía de los daños indemnizables producidos por el siniestro. No obstante, tal franquicia no será de aplicación a los daños que afecten a vehículos asegurados por póliza de seguro de automóviles, viviendas y comunidades de propietarios de viviendas.

b. En los seguros de personas no se efectuará deducción por franquicia.

^{2.} En el caso de la cobertura de pérdida de beneficios, la franquicia a cargo del asegurado será la misma prevista en la póliza, en tiempo o en cuantía, para daños consecuencia de siniestros ordinarios de pérdida de beneficios. De existir diversas franquicias para la cobertura de siniestros ordinarios de pérdida de beneficios, se aplicarán las previstas para la cobertura principal.

^{3.} Se faculta al Ministerio de Economía para que, cuando las circunstancias lo aconsejen, y previo informe del Consorcio de Compensación de Seguros, pueda modificar el importe de la franquicia establecido en este artículo.

⁽English translation)- Article 9 [Deductibles]:

^{1.} In the case of direct damage, the deductible payable by the insured shall:

a. Insure against damage to things, seven per cent of the amount of compensatory damages caused by the incident. However, such exemption shall not apply to damage involving vehicles insured by autoinsurance policy, housing and homeowner's communities.

b. In personal-insurance deduction no franchise fee.

^{2.} In the case of loss of benefits coverage, the deductible payable by the insured shall be the same as on the policy, in time or amount, for ordinary claims damages resulting from loss benefits. From there, various franchises to cover ordinary claims of lost profits, apply those for the primary coverage.

^{3.} It empowers the Ministry of Finance so that when the circumstances so warrant, and the report the Insurance Compensation Consortium, you can change the amount of the exemption provided in this article.

practices as published on their website and incorporated into the daily operational aspects of the scheme.⁶³⁰

Assessing the Regime: Economic Stability and Effectiveness

[436] In Spain, there is a relatively high concentration of insurance coverage,⁶³¹ which remains stable. Although not required by legislation, banks and other lenders in Spain impose the requirement of insurance (through the mortgage contract) on properties that have a mortgage.⁶³²

⁶³⁰ Consorcio de Compensación de Seguros, 'Scope of Activity: Extraordinary Activity—Indemnities and Deductibles' http://www.consorseguros.es/web/guest/ad_re_iy>.

⁶³¹ In the period 2001–2010, the retention rate for non-life insurance was relatively high at 88.42% in 2001, the lowest level for the period being 84.53% in 2009, which is still relatively high. Further, based on the OECD's statistics collected on Spain's total gross premiums collected in 2001–2010, there has been a steady increase in the uptake of insurance with premium income worth €18,012 million in 2001, insurance peaking in 2008 at gross premium income of €51,069 million and then declining slightly in 2010 at €40,025 million. Further, insurance penetration and density within Spain has remained steady within this period. See OECD Insurance Statistics, *Insurance Activity Indicators: Density* (Table, Spain, OECD Internal document DOI10.1787/ins-dataen); OECD Insurance Statistics, *Insurance Activity Indicators: Penetration* (Table, Spain, OECD Internal document DOI10.1787/ins-data-en); OECD Insurance Statistics, *Insurance Activity Indicators: Retention Ratio* (Table, Spain, OECD Internal document DOI10.1787/ins-data-en); OECD Internal document DOI10.1787/ins-data-en); OECD Internal document DOI10.1787/ins-data-en); OECD Internal document DOI10.1787/ins-data-en); OECD Insurance Statistics, *Insurance Activity Indicators: Retention Ratio* (Table, Spain, OECD Internal document DOI10.1787/ins-data-en); OECD Internal document DOI10.1787/ins-data-en); OECD Internal document DOI10.1787/ins-data-en); OECD Internal document DOI10.1787/ins-data-en); OECD Internal document DOI10.1787/ins-data-en).

⁶³² Banco de España, *Claims Service: Is it Compulsory to Buy Insurance from a Financial Institution when taking out a Mortgage?* http://www.bde.es/webbde/en/secciones/servicio/reclama/seguro.html.

National Flood Insurance Program (United States)

- [437] The National Flood Insurance Program was introduced following the high costs sustained following other natural disaster events such as Alaska Earthquake of 1964 and Hurricane Betsy of 1965,⁶³³ and is one of the few national catastrophe schemes in the United States.⁶³⁴ Howard Kunreuther suggests that the basis for establishing the National Flood Insurance Program was primarily sociological and psychological factors as opposed to economic considerations. Although there were strong sociological reasons for the establishment of the National Flood Insurance Program, one of the challenges in ensuring economic and fiscal stability has been the voluntary nature of the program and adverse selection whereby a large portion of policyholders own homes in high risk flooding areas. Concerns have been raised over the fiscal instability of the National Flood Insurance Program and its longevity.⁶³⁵
- [438] The entrenchment of mitigation in the National Flood Insurance Program has made buildings more resilient and consequently reduced costs associated with damage in some parts of the United States by approximately 80%.⁶³⁶

Suitability of International Natural Disaster Insurance Schemes as a basis for the Proposed National Catastrophe Insurance Scheme

[439] The Spanish model is the most optimal model upon which the National Catastrophe Insurance Scheme in Australia could be modelled. The proposed National Catastrophe Insurance Scheme (as discussed throughout the thesis) utilizes the multi-peril direct insurance approach as employed by the *Consorcio de Compensación de Seguros*. The proposed National Catastrophe Insurance Scheme also seeks to entrench the Spanish practice of utilising claims handlers from within the insurance industry to deal with

⁶³³ Douglas C Dacy and Howard Kunreuther, *The Economics of Natural Disasters: Implications for Federal Policy* (The Free Press, 1969) 37–47.

⁶³⁴ Some of the regimes in operation in the United States to provide specific insurance products based on single risk include the California Earthquake Authority http://www.earthquakeauthority.com/, Florida Hurricane Catastrophe Fund http://www.earthquakeauthority.com/, Florida Hurricane http://www.sbafla.com/fhcf/, Texas Windstorm Insurance Association http://www.sbafla.com/fhcf/, Texas Windstorm Insurance Association http://www.earthquakeauthority.com/. In the United States, there is also a national insurance regime primarily designed to counter the problem with attaining flood insurance in the United States under the National Flood Insurance Program http://www.fema.gov/business/nfip/

⁶³⁵ Dan Huber, *Fixing a Broken National Flood Insurance Program: Risks and Potential Reforms* (Centre for Climate and Energy Solutions, June 2012) 1–5.

⁶³⁶ Federal Emergency Management Agency and Federal Insurance and Mitigation Administration, *National Flood Insurance Program: Program Description* (Federal Emergency Management Agency, August 2002) 1–4.

natural disasters based upon a pre-disaster claims handling agreement. Further as a means of seeking to minimise delay the National Catastrophe Insurance Scheme seeks to adopt the *Consorcio de Compensación de Seguros's* position of having an upper under which the Scheme should pay out compensation, with the insured receiving a financial payment for delays beyond this period. When proposing the National Catastrophe Insurance Scheme for Australia the *Consorcio de Compensación de Seguros* has not been replicated but rather modified taking into account legal differences, cultural differences and differences in the risk landscape. To the extent parts of the *Consorcio de Compensación de Seguros* would not suitable for the proposed National Catastrophe Insurance Scheme, aspects of the French CAT Nat could be utilised. For example, adapting the French model of providing individuals with incentives for engaging in mitigation. The National Catastrophe Insurance Scheme has also utilised some aspects of the Earthquake Commission.

[440] Although the Earthquake Commission has been incorporated into the National Catastrophe Insurance Scheme, some of the key weaknesses (as seen through the Christchurch Earthquakes) are replaced by aspects of the French or Spanish Schemes. One key weaknesses identified in the aftermath of the Christchurch earthquakes was the procedures and timing in assessing whether a loss exceeded \$100,000. This was problematic because in order for insurers to pay insured losses, they needed to be sure the losses exceeded the \$100,000 insurance layer provided by the Earthquake Commission. The proposed National Catastrophe Insurance Scheme is also different to the Earthquake Commission to address the significant challenges to the enabling legislation of the Earthquake Commission and prevent such legal challenges from being replicated in the proposed Scheme. In establishing the proposed National Catastrophe Insurance Scheme, care has been taken to ensure any findings of the New Zealand Supreme Court are dealt with and any lessons would be incorporated when the legislation for the proposed National Catastrophe Insurance Scheme is drafted. The National Flood Insurance Program has not been utilised greatly in the proposed National Catastrophe Insurance Scheme. One of the problems with the National Flood Insurance Program which the proposed National Catastrophe Insurance Scheme seeks to avoid is that of a significant deficit and potential for recurring losses (which the National Flood Insurance Program currently has).

Alternative National Catastrophe Insurance Systems Operating Globally

- [441] The construction of the proposed National Catastrophe Insurance Scheme has drawn heavily on the New Zealand, French and, particularly, Spanish regimes noted in [374] to [440]. The thesis recognises that the proposed National Catastrophe Insurance Scheme could have drawn upon other international examples, however, has decided against this for a variety of reasons explained forthwith. Two other international schemes researched in depth but which were not relied on greatly are the Turkish Catastrophe Insurance Pool and Food Re (UK). The Turkish Catastrophe Insurance Pool is very different from Flood Re. The Turkish Catastrophe Insurance Pool has the character of a corporate reinsurance pool as the Turkish government lacks sufficient funds to back up the scheme in the case of an earthquake. Flood Re has been operational for less than a year and thus it is too early to make valid conclusions of the effectiveness of this scheme. For these differing reasons, aspects of these international examples were not utilised in the proposed National Catastrophe Insurance Scheme. In a similar vein to the Turkish Catastrophe Insurance Pool, although the Mexican Fund for Natural Disasters (FONDEN) was discussed in [272] in the context of catastrophe bonds, the structure of FONDEN was not used in the development of the proposed National Catastrophe Insurance Scheme.
- [442] The thesis will now present some of the other national catastrophe insurance schemes, which exist globally. These schemes all have a degree of government financial support. The tables below merely illustrate some of the factors affecting the operation of each of these schemes and does not seek to undertake a comprehensive analysis of all of these schemes.

Government Compensation Schemes

Table 1- Government Compensation Schemes

	Program	Purpose	Coverage	Description	Financing
	0				Mechanism- Associated Government Department
Australia	Disaster Recovery Allowance	Provide financial assistance (without having to wait standard periods under existing social welfare regulations) to individuals whose their income has been directly affected by a natural disaster	Bushfire Earthquake Flood Storm Cyclone Storm surge Landslide Tsunami Meteorite strike Tornado	The Commonwealth Government has discretion to provide Disaster Recovery Allowance payments. The exercise of the discretion depends on the event being of national significance and affecting one or more industries. The Disaster Recovery Allowance can be provided to those who can demonstrate a direct connection between a natural disaster and income loss. The Disaster Recovery Allowance can provide individuals with income for up to 13 weeks.	Centrelink (the social-security system is used to facilitate this scheme)
Australia	Commonw ealth Governmen t Disaster Recovery Payment	Provide individuals with a one-off payment after a disaster to cover emergency expenditure	Bushfire Earthquake Flood Storm Cyclone Storm surge Landslide Tsunami Meteorite strike Tornado	For the Commonwealth Government Disaster Recovery Payment to be activated, a government determination must be made. The Commonwealth Government will consider the number of individuals affected, the community effect, the State or Territory response and the extreme nature of the disaster when making the determination. The payment of the Commonwealth Government Disaster Recovery Payment operates in addition to any funds provided under the Natural Disaster Relief and Recovery Arrangements.	Commonwealt h Government provides a one-off non- means-tested payment of \$1000 for eligible adults and \$400 for eligible children
Austrian	Austrian Catastrophe s Fund	Assure adequate aid to injured people and reconstruct damaged infrastructure	Flood Avalanche Earthquake Landslide Hurricane and hail	Disaster damage to private property is usually compensated by the States for up to 20–30% of the loss suffered, and their compensation expenses are 60% reimbursable by the fund. Damage to public infrastructures in the States or other local jurisdictions is financed up to 50% by the fund. This fund covers protective measures and provides financial assistance to victims of disasters (individuals and enterprises). It also contributes to the funding of equipment for disaster relief of the fire brigades. In a disaster, additional funds can be mobilised by the Austrian government for the compensation of losses. Additionally, the provincial governments have budget lines for disaster relief.	Funded through income tax, rewards tax, corporation tax and capital yield tax
Belgium	National Calamity Fund (Fonds Caisse Nationale des Calamites)	Provides assistance to individuals and public establishment s; the system was established to provide compensation and ensure damage is compensated at real value	Storm Earthquake Flood Public- sewage overflow and backflow Landslides Ground subsidence	 The National Calamity Fund is subdivided as follows: National Public Calamities Fund National Agricultural Calamities Fund. For compensation to be made payable under the scheme, it is necessary that a declaration of a natural calamity is made by the Director of Calamities who will seek scientific opinion in the determination of whether the event is a natural calamity. If the scientific body decides that the event is a natural calamity for the purposes of the scheme, approval must be made by the Ministry of the Interior and Council of Ministers. The final process is that a Royal Decree is created, signed by the King and published in the <i>Belgian Official Gazette</i>. People seeking to claim must do so within three months. The governor will send an expert to assess the damage, which will be payable to the victim. A compulsory deductible fee and an allowance is then removed. In some exceptional cases, it may be possible for the government to grant an exceptional loan at the rate of 5% under the scheme. 	Fund is publicly financed by cash advances, credits and other budgetary input following a disaster; Those receiving compensation that exceeds $\notin 250$ will have a deductible (<i>franchise</i>) applied against the damages to fund the operation of the fund

	P 1 P	D 11	51 1		T : 11
Hungary	Fund For Flood and Inland Water Compensati on (Wesselenyi Miklos Ar- es Belvizvedel	Provide assistance to individuals who cannot otherwise obtain flood insurance	Floods	Individuals who own real property in a risky region of Hungary pay contributions to the fund, and based on these contributions, are entitled to indemnification in case of loss.	Financed by the government budget but those who receive coverage pay contributions
India	mi) National Disaster Response Fund and State Disaster Response Fund (unified body)	Support affected individuals to meet immediate basic needs and regain livelihood; financial assistance is provided on a case-by-case basis; the purpose of the reserve funds is to finance disaster preparation, mitigation, recovery and reconstructio n	Natural calamities (severe) Cyclone Drought Earthquake Fire Flood Tsunami Hailstorm Landslide Avalanche Cloud burst Frost Cold wave Pest attack	The fund is structured to provide immediate relief to victims, with additional financial and logistic support provided by the central government. In India, the responsibility of immediate response in a post-disaster situation rests with the State Government concerned while the central government of India supplements the efforts by providing requisite logistic and financial support to meet the situation effectively. For the funds to be activated, the natural calamity must be deemed severe. Currently, there are no legislatively entrenched criteria or thresholds for a natural calamity to be deemed as severe; the government of India has discretion to categorise an event as severe. Payments to the fund are made bi-annually in June and December, with some funds granted unconditionally and others subject to satisfying certain procedures.	The State Disaster Response Fund is the responsibility of the Ministry of Home Affairs with the Indian Government contributing 75% of the funding for the States in the general category and 90% of the funding for the States in the special category; the associated government departments is the Ministry of Home Affairs
Mexico	Fund for Natural Disasters (FONDEN)	Provide the 32 Mexican States and the Mexican Federal Agencies in charge of federal infrastructure with the necessary resources to cover the losses and damages caused by natural hazards whose magnitude exceeds their financial capacity	Geological Disasters Earthquake Volcanic eruption Avalanches Tidal wave Landslide Hydro meteorologica I disasters Atypical drought Cyclone Tropical depression Tropical storm and hurricane Extreme rains Snowfall Hailstorm Atypical floods Tornado Other disasters Forrest fire	The Mexican Fund for Natural Disasters provides coverage for public infrastructure, forest resources, protected natural areas, coastal zones, riverbeds and lagoons, archaeological, artistic and historical patrimony and assistance for disaster victims.	Government support is provided gratuitously; the Associated Government Department are the Ministry of Finance and the Ministry of the Interior
Netherlands	Wet tegemoetko ming schade bij rampen (Calamities and Compensati on)		Fresh water floods Earthquake Large accidents	The <i>Calamities Compensation Act</i> 1998 enables the disbursement of compensation for damages and costs experienced as a result of a catastrophe or major accident.	The maximum amount of compensation that the Dutch Government can provide under the Act is \notin 450,000,000

New Zealand	Local Authority Protection Programme Disaster Fund	Provide funding to local governments to assist with critical infrastructure and uninsurable essential services that may be damaged by a disaster	Earthquake Storms Floods Cyclones Tornados Volcanic eruption Tsunami Disasters of a catastrophic nature such as a major gas explosion	The Local Authority Protection Programme Disaster Fund is a cash accumulation mutual pool operating since 1993 to help local authority members pay their share of infrastructure replacement costs for water, sewage and other generally uninsurable essential services if damaged by natural disaster. The Local Authority Protection Programme Disaster Fund is intended to cover a local authority's 40% share above the threshold set by central government for recovery assistance. The Local Authority Protection Programme Disaster Fund currently has 46 members. Members' contributions to the fund are set annually and are assessed on a risk based actuarial formula that takes into account the replacement value of each member's infrastructural assets adjusted to recognise geographical exposures to risk such as floods, storms, volcanic eruptions and earthquakes. The fund is supplemented with reinsurance to enhance this balance.	The associated government department is the Civil Defence Emergency Management
Norway	Norwegian National Fund for Natural Damage Assistance	Provide assistance to those who cannot obtain insurance thorough the insurance markets	Landslide Floods Inundation Storm and tempest Earthquake Volcanic eruption Similar disasters	The Accident Compensation Corporation provides comprehensive, no-fault personal-injury cover that includes disaster-related injuries. Compensation is not provided when damages are covered by insurance or when uninsured if it was possible to contract insurance against such damage through private insurance as the system is only for those who cannot obtain insurance through the private insurance markets. The damage assessment and the related report is sent to the fund, which will determine the extent of the indemnification to a limit of 85% of the damage, with a deductible of NOK 10, 000 kr to be applied on the resulting sum.	
Turkey	Disaster Reserve Fund (under the control of the Republic of Turkey Prime Ministry Disaster and Emergency Manageme nt Authority)		Natural Disaster Earthquake Floods Windstorms and similar disasters	AFAD (Republic of Turkey Prime Ministry Disaster and Emergency Management Authority) is authorised to allocate the disaster response and recovery budget to the relevant institutions and the local government depending on their needs. In addition to the AFAD (Republic of Turkey Prime Ministry Disaster and Emergency Management Authority) budget, the Ministry of Finance has a Disaster Reserve Fund that can be used for the disasters during the period of recovery.	The amount of compensation also limited; the associated Government department is the Prime Ministry Disaster and Emergency Management Authority

Table 2- Federal Government Ex-post Distribution of Assets for Disaster	er-related Events (Government Schemes)
---	--

	Program	Purpose	Coverage	Exclusions	Description	Financing
		•			-	Mechanism
Australia	Natural Disaster Relief and Recovery Arrangeme nts	Cost sharing arrangemen t between the Commonwe alth Governmen ts (as the Commonwe alth Governmen ts (as the Commonwe alth Governmen t collects the majority of taxation)	Bushfire Earthquake Flood Storm Cyclone Storm surge Landslide Tsunami Meteorite strike Tornado	Drought Frost Heat wave Epidemic	The system is set up so that each year there are two predetermined threshold levels for state expenditure on natural-disaster risk. After the State expenditure for the first threshold amount is exceeded, the Commonwealth Government will pay the state government 50% of the costs spent on subsequent disasters and once the second threshold level is exceeded, the Commonwealth Government will pay 75% of the State Government's expenditure on disaster.	Tax sharing arrangement between the Commonwealth Government and the State Governments (the funds under the Natural Disaster Relief and Recovery Arrangements come out of the consolidated revenue); Emergency Management Australia (Commonwealth Government department)
Canada	Disaster Financial Assistance Arrangeme nts	Assist provinces with the costs of dealing with a disaster for which the costs would place a significant burden on the provincial economy and would exceed what they might reasonably be expected to fully bear on their own	Natural disasters: Flood Wildfire (where residential properties or infrastructur e is threatened) Storm	Disaster events limited to one production sector of the economy Chronic or pandemic health emergencies Terrorist acts Wildfires (except if occurring in built-up areas and may pose a threat to housing)	The federal government supports the provincial and territorial governments. The federal aid does not go directly to the individuals affected but rather to the territories and provinces who decide where the money should be allocated. This can include, but is not limited to, evacuation operations, restoring public works and infrastructure to their pre-disaster condition, and replacing or repairing basic, essential personal property of individuals, small businesses and farmsteads. Through the Disaster Financial Assistance Arrangements, response and recovery financial assistance is provided to the province or territory that has exceeded its coping capacity. The provincial/territorial governments then design, develop and deliver financial disaster assistance, deciding the amounts and types of assistance that will be provided to the communities that have experienced losses.	The associated government department is Public Safety Canada

Part 3:

Conclusion: Solution and the Future Implementation of the National Catastrophe Insurance Scheme

Conclusion

The Proposed National Catastrophe Insurance Scheme- Key Features

- [443] The aim of this thesis was to explore whether the proposed National Catastrophe Insurance Scheme could be a suitable alternative for insuring damage to residential property and residential land in Australia. The focus was on exploring insurance options where the damage arose from natural disasters of catastrophic proportions. In order to achieve this aim, this research explored the rationale for having a Commonwealth Government backed Scheme to assist Australian citizens and residents obtain affordable insurance cover to protect against household property or land damage in the event of natural disasters.
- [444] The insurance system currently operating in Australia was elucidated to place the National Catastrophe Insurance Scheme in context. The current legal and regulatory system in Australia operating under the *Insurance Contracts Act 1984* (Cth) generally works well for standard contingencies. Unlike standard contingencies where the losses are independent, natural disasters of catastrophic proportions generate correlated losses within the same area or within a close geographical proximity, with multiple losses occurring simultaneously or within a short period. Recent events, including the Black Saturday bushfires in Victoria in 2009 and the 2010–2011 Queensland floods, illustrated how the insurance system for standard contingencies was overwhelmed resulting in delays in processing payments and providing compensation to those insureds who suffered loss. Given, the susceptibility of various parts of Australia to one or more natural disaster(s), a specifically designed system dealing with natural catastrophes is likely to reduce the number of delays.
- [445] The thesis has confirmed that the proposed National Catastrophe Insurance System would not affect the operation of the Natural Disaster Relief and Recovery Arrangements. The Natural Disaster Relief and Recovery Arrangements would continue to operate and offer State Governments with the ability to recover part of their expenditure on disaster relief provided the conditions contained therein are satisfied. For a State Government to be eligible for Commonwealth Government funding, it must exceed the prescribed threshold amounts for its own expenditure on disaster relief.

- [446] The implementation of the proposed National Catastrophe Insurance Scheme would centre on access and affordability. The Victorian Bushfires Royal Commission⁶³⁷ and the Natural Disaster Insurance Review⁶³⁸ illustrated how the lack of access and affordability were barriers within the some parts of the current insurance and regulatory system, preventing some individuals from accessing insurance. By establishing the proposed National Catastrophe Insurance Scheme as a public–private partnership, the Commonwealth Government could ensure all Australians have access to affordable all-peril natural disaster insurance. If the proposed National Catastrophe Insurance Scheme were to operate in a compulsory manner this is likely to ensure affordability and discounts for those who are otherwise unable to pay premiums. The proposed Scheme is better able to ensure affordability through its compulsory nature and an enlarged class of participants. Having all Australian households insured by the Scheme would prevent instances of adverse selection and could alleviate the risk of the highest risk properties forming the greatest proportion of insured properties.
- [447] Care has been taken to establish that the problem of household structural damage arising from natural disasters of catastrophic proportions is a problem that the Commonwealth Government could manage. The analysis of recent legal reports dealing with natural disasters has generated a nuanced and empirically based understanding of inherent challenges associated with insuring natural disasters, particularly in the absence of a dedicated Scheme. The legal and operational infrastructure of the proposed Scheme addresses the key concerns raised by these reports and provides an alternative solution, designed specifically for natural disasters, whilst working with the insurance industry and promoting commercial insurance cover for risks not encompassed within the insurance to be provided by the proposed Scheme.
- [448] The proposed Scheme seeks to operate as an all-peril, first loss insurance model covering structural damage (and potential land damage) arising from listed and declared natural disaster. Under the proposed Scheme an insured would only able to claim a maximum of \$375,000 in structural losses per event. The perils which the proposed Scheme seeks to cover include flood, bushfire, earthquake, hailstorm,

⁶³⁷ 2009 Victorian Bushfires Royal Commission, *Final Report*, above n 110, 36, Recommendation 64 [Removal of Transactional Taxes as a Means of Making Insurance More Affordable].

⁶³⁸ Natural Disaster Insurance Review, above n 51, Pivotal Recommendation 3; 35–41 [3.1–3.31], Pivotal Recommendation 2.

cyclone, landslide and tsunami. There is an express exclusion of damage arising from volcanic activity.

- [449] The proposed Scheme seeks to be compulsory for all Australian citizens and residents who own a home within Australia regardless of whether the home is a freehold property or under strata title. The home must be owned by an individual or jointly owned by two or more individuals; the proposed Scheme does not cover properties owned by corporate entities. The thesis posits that the existence of a home office would not prevent a home being covered by the Scheme, however, should the property have more significant commercial purposes, insurance cover would need to be sourced from the private insurance market. The proposed National Catastrophe Insurance Scheme would only provide insurance cover against household structural damage and damage to land. This is because the research undertaken in the course of the thesis suggests that operational and running expenditure for the proposed National Catastrophe Insurance Scheme would be higher if contents cover were to be included.
- [450] The main justification for the limited scope of the proposed Scheme is the prioritisation of finite funds; whereby the Scheme seeks to resolve the greater human need for shelter. For the same reason, under the proposed Scheme in order to be covered, homes must be fully constructed (not in the process of being built or undergoing substantial renovations). The proposed Scheme would not cover compensation for pure economic loss.

Overview and Key Findings Concerning the Legal Operation of the Proposed National Catastrophe Insurance Scheme

[451] In Chapter 1, the key assumptions underpinning the research were discussed; they indicated that the proposed National Catastrophe Insurance Scheme was the most optimal means of facilitating household structural cover for damage incurred by natural disasters. Although the thesis proposes the National Catastrophe Insurance Scheme, it is accepted that there are a number of different models which could be used to operate a national scheme and a number of options which exist which do not involve the existence of a Scheme. Although the proposed Scheme would be the responsibility of the Commonwealth Government, there would be clear roles for State Governments, Local Governments, insurers and individuals; in the thesis, each of these stakeholders

have their roles carefully demarcated. The chapter argued that a focus on clarity and a well-defined legal and operational infrastructure would help to prevent future litigation. Illustrations were provided in support of the need for demarcation. In particular, a number of the recent cases from the New Zealand High Court examined the responsibility of the Earthquake Commission for operational decisions, and clarified the operation of the *Earthquake Commission Act 1993* (NZ) where there was inconsistency or uncertainty.⁶³⁹

- [452] Chapter 2 demonstrated that the proposed National Catastrophe Insurance Scheme would be constitutionally valid. Although there has never previously been a National Catastrophe Insurance Scheme operating in Australia, the analysis undertaken in this dissertation has confirmed legal and constitutional legitimacy for the implementation of the Scheme.
- [453] The key constitutional provisions underpinning the existence of the proposed National Catastrophe Insurance Scheme include the insurance power (s 51(xiv) of the *Commonwealth Constitution*), the trade and commerce power (s 51(i) of the *Commonwealth Constitution*), states' rights power (s 117 of the *Commonwealth Constitution*), states' rights power (s 117 of the *Commonwealth Constitution*).
- [454] The thesis analysed complex problems associated with the need for co-operation between the Commonwealth Government and States within the federal structure of Australia to ensure that all aspects of the proposed Scheme have constitutional legitimacy. Research documented in Chapter 3 highlights different constitutional foundations that could be relied upon. One of the options includes reliance on s 61 of the *Commonwealth Constitution* which has been interpreted as enabling the creation of programs under the nationhood power. In this regard, the proposed National Catastrophe Insurance Scheme would require a natural disaster to be of sufficiently

⁶³⁹ For example, the New Zealand High Court examined what amounted to an 'event' for the purposes of apportioning compensation payable by the Earthquake Commission after the Christchurch earthquakes. See *Re Earthquake Commission* [2011] 3 NZLR 695.

A different example was seen when the High Court was called to make a declaration regarding the standard which the Earthquake Commission was obliged under the Earthquake Commission Act 1993 (Cth) to make repairs. See Joint Statement between Earthquake Action Group and the Earthquake Commission, Sch 2 <http://www.eqcgroupaction.co.nz/ga/Joint-Statement-EQC-Action-Group-28-April-2016.pdf>; Settlement EQC Agreement: Action and Earthquake Commission, Group 28 April 2016 <http://www.eqcgroupaction.co.nz/ga/Agreement-EQC-Action-Group-28-April-2016.pdf>
catastrophic proportions for the Commonwealth to take the responsibility for compensation of damage suffered by homeowners.

- [455] In Chapter 4, key tax considerations were analysed, notably the consequences if the Scheme's premium income is classified as a 'fee for service' or a tax. If the premium income collected by the proposed National Catastrophe Insurance Scheme were to be considered a tax under law, the premium would not be subject to Goods and Services Tax or Stamp Duty. The chapter revealed that a focus on risk-based pricing, from a tax perspective, would cause the premium to be classified as a 'fee for service' and thus be subject to the Goods and Services Tax and Stamp Duty. If the premium is classified instead as a fee for service, the gross surcharge for the cover provided by the Scheme would be higher, and there also would be an increase in operational expenses. Although it would be preferable for the proposed Scheme to be exempt from all taxation obligations, the proposed National Catastrophe Insurance Scheme would not provide taxation relief for the cascading effect of state tax on federal tax. However, following the example of the Australian Reinsurance Pool Corporation, the proposed Scheme may be able to take advantage of taxation exemptions. Examination of the Australian Reinsurance Pool Corporation illustrated the benefits associated with lower operating costs (should the Scheme obtain an income tax-exemption for premium income). Chapter 4 then discussed the options available under the proposed Scheme to collect premiums from insureds.
- [456] Although the taxation implications of the proposed Scheme were carefully considered, it is important to stress that given the legal focus of the thesis, the results of the thesis do not calculate the premiums that could be charged by the proposed Scheme or other fiscal calculations. Instead, pricing of the Scheme is to be based on calculations and advice of qualified actuaries and informed by catastrophe modelling. When providing recommendations on pricing, the actuaries take into account the competing factors of fiscal stability, tax implications and affordability. The internal structures for accepting pricing recommendations and changes in relation to the cost of cover would ultimately be a matter that the CEO and executive team are to determine.
- [457] Chapter 5 discussed factors that affect the operability and practical functions necessary to ensure a robust Scheme. The thesis confirmed the need for transparency and accountability in relation to the products and cover offered under the Scheme. As a

result, before compensation would payable under the proposed Scheme, the following legal procedural steps must be followed: (1) occurrence of a listed natural disaster; (2) Ministerial Declaration; (3) tabling in Parliament of Ministerial Declaration; (4) Parliament allowing the Ministerial Declaration; and (5) Compensation payable under the Scheme.

- [458] The critical importance of the listed events requires clear definitions of each of the natural disasters covered (bushfire, flood, cyclone, earthquake, hailstorm, landslide and tsunami). The thesis explains the complex processes required to satisfy the statutory provisions once an event has occurred and circumstances leading to compensation payouts. This includes advice provided by the Scientific Advisory Panel to the Minister before he or she makes a Ministerial Declaration. It was argued throughout the thesis the strict legal procedures are necessary to ensure transparency and accountability of executive processes under the Scheme.
- [459] Chapter 6 focused on the 'hours clause' to illustrate links between legal and operational procedures. The 'hours clause' provides the basis upon which an event and resultant losses would be calculated for insurance purposes. The findings of the thesis after looking at the 'hours clauses' used in other natural catastrophe systems indicated the preferable 'hours clause' would be 168 hours (7 days) in standard circumstances. The thesis found that in clearly prescribing the 'hours clause' an insured would be aware of the losses likely to be covered, for example, if damage caused by an earthquake is exacerbated by the earthquake's aftershocks. In this example if the additional damage occurred within 168 hours of the earthquake (listed natural disaster of catastrophic proportions) then all damages within this period would be compensable and subject to the overall limit of \$375,000 per property. Examination of various options regarding the suitability of a universal 'hours clause' indicated that where the natural disaster of catastrophic proportions develops over a prolonged period such as in the case of bushfires and flooding, the Minister would have discretion to extend the 'hours clause' to 504 hours (21 days) given the slower onset of the event.
- [460] The underpinning need for resilient properties achieved through mitigation was also analysed in chapter 6. Individuals would be encouraged and provided with incentives to mitigate against potential damage to their houses. The study has shown one way of recording efforts to make a household more resilient, be it through repairs, retrofitting

or mitigation initiatives undertaken by homeowners, is the utilisation of a national register of repairs. It was argued that the existence of the national register of repairs is a way of entrenching transparency in the way the deductable is discounted for those who engage in mitigation. The use of the register would also mean the benefits to a property associated with retrofitting or mitigation could run with the title to the property. Consequently, even if there were a change of ownership within the 5-year assessment period, the discount would be available on the amount payable as a deductible for that property.

- [461] The final chapter, employs a comparative methodology to provide an international context within which the proposed National Catastrophe Insurance Scheme is analysed. The comparative analysis centred on key operative and legal functions of the Earthquake Commission in New Zealand, the French *Caisse Centrale de Réassurance*,⁶⁴⁰ the Spanish *Consorcio de Compensación de Seguros*, the United States National Flood Insurance Program and the Mexican Fund for Natural Disasters (FONDEN). The thesis also provides a comparative table of other global natural disaster insurance systems, which highlights differences in the operation of alternative systems as they operate in Austria, Belgium, Chinese Taipei (Taiwan), Denmark, Hungary, Iceland, India, Japan, Netherlands, Norway and Turkey.
- [462] From an institutional design perspective, the proposed National Catastrophe Insurance Scheme if implemented would build on the on the experience of the New Zealand Earthquake Commission by inserting mechanisms designed to minimise litigation based on claims of inconsistency or lack of clarity in the way the proposed Scheme could operate. That said, given similarities between the Australian and New Zealand legal systems, should (once the Scheme is operational) similar claims be made against the propose Scheme, the Australian courts would almost certainly refer to the approach taken by the High Court of New Zealand in the Earthquake Commission cases.

Challenges which would Remain Notwithstanding the Potential Implementation of the National Catastrophe Insurance Scheme

[463] Although the proposed National Catastrophe Insurance Scheme provides a solution for insuring household properties against damage arising from natural disasters of

⁶⁴⁰ See Les Catastrophes Naturelles en France, above n 498.

catastrophic proportions, it is not perfect. The thesis identified some challenges to the way the proposed Scheme could operation. Depending upon the classification of the premium (either as a tax or a 'fee for service'), the premiums may be subject to existing insurance taxes which would increase the cost of the insurance cover. Similarly, some individuals living in low risks areas may be acquiring not acquire insurance unless the Scheme is implemented and becomes compulsory. For those who have a very low risk exposure to all of the listed natural disasters, the premium charged may be slightly higher than an actuarially sound premium (there is a small amount of cross subsidisation under the proposed Scheme). From the perspective of the Commonwealth Government's potential fiscal contributions, the thesis illustrated the potential for the Commonwealth Government guarantee to be called upon, if a natural disaster of catastrophic proportions were to occur and the Scheme was in its infancy (such as during any period the Scheme builds capital reserves), or in a situation when several natural disasters of catastrophic proportions occur within a short time period. Although the Commonwealth Government provides a government guarantee, liability is limited at \$375,000 per property for each event.

Benefits Generated by the Proposed National Catastrophe Insurance Scheme and the Need for Further Research

- [464] The thesis has identified the proposed National Catastrophe Insurance Scheme as an improvement to the previously existing options for insuring households against damage arising from natural disasters. The system demonstrates the complexities and continued need for co-operation between the Commonwealth Government and the States given the Australian federal structure and the need for all aspects of the Scheme to have constitutional legitimacy. Further, the thesis has identified additional legal complexity in the prudential and regulatory aspects of the Scheme and the interaction between various government agencies. Notwithstanding this complexity, the proposed Scheme would operate under a robust statutory authority and legal procedures. Even if the Scheme were implemented at a future date, it would take a period of time and the occurrence of events to determine the effectiveness of the Scheme.
- [465] This thesis has identified a research deficit in the area of national solutions (or practical workable infrastructure) to address the issue of access and affordability of natural

disaster insurance for all Australian households. In analysing the proposed National Catastrophe Insurance Scheme, the research has endeavoured to address this problem and in so doing the thesis has provided intellectual and legal foundations for further research. In particular, more research is needed in the pivotal area of extending cover under the proposed National Catastrophe Insurance Scheme to incorporate cover for household contents insurance. Likewise, in the interests of public good and the promotion of resilient communities (which involves fostering the continued operation of local small businesses after a natural disaster), research could be undertaken with reference to the potential future operation of separate insurance cover to be provided by the Scheme to overcome the adverse effects of business interruption and structural losses to small businesses affected by a natural disaster of catastrophic proportions.

Part 4:

Authors Publications

List of Publications on Catastrophe Risk (Rachel Anne Carter)

Articles (English)

- Rachel Anne Carter, 'Can Insurance Evolve to Meet the New Terror Threat' (2016) 1(1) *Journal of Terrorism and Cyber Insurance* 20 (online) </http://www.terrorismcyberinsurance.com>
- Rachel Anne Carter, 'Insuring against the Terrorism Risk: Is 'The Silo Mentality' A Limiting Factor?' (10 October 2016) *Risk UK (online)* https://www.security-institute.org/news/press_coverage_docs_2016/2016_oct_riskuk
- Rachel Anne Carter and Tom Johansmeyer, 'Terror Risk Transfer: The Evolution of the Attacks and Why the Market Needs to Grow' (28 July 2016) *Artemis (online)* <http://www.artemis.bm/blog/2016/07/28/terror-risk-transfer-the-evolution-of-theattacks-and-why-the-market-needs-to-grow/>
- Rachel Anne Carter, 'Natural catastrophes and insurance in Australia: is it time for a national insurance scheme for natural disasters?' (2015) 3 *Consorseguros (online)* http://www.consorsegurosdigital.com/en/numero-03/content/colaboraciones/natural-catastrophes-and-insurance-in-australia>
- Rachel Anne Carter, 'Public/Private Partnerships- UK named as world leading example at the International Catastrophic Risks Forum' (2015) *Pool Re Media (online)* <https://www.poolre.co.uk/publicprivate-partnerships-uk-named-as-world-leadingexample-at-the-international-catastrophic-risks-forum/>
- Rachel Anne Carter, 'Terrorism Today and the need for a modern global response' (2015) *Global Reinsurance (online)* http://www.globalreinsurance.com/terrorism-today-and-the-need-for-a-modern-global-response/1415643.article>
- Lee Godden et al, 'Law, Governance and Risk: Deconstructing the Public–Private Divide in Climate Change Adaptation' (2013) 36(1) University of New South Wales Law Journal 224
- Rachel Anne Carter, 'How Insurable is Terrorism Risk?' (2013) 36(3) Australian and New Zealand Institute of Insurance and Finance Journal 34 <https://theinstitute.com.au/members-centre/the-journal-articles/volume-36/issue-3/howinsurable-is-terrorism-risk>

- Professor Danuta Mendelson and Rachel Anne Carter, 'Catastrophic Damages—Liability and Insurance' (2012) 31(2) *University of Tasmania Law Review* 32
- Rachel Anne Carter, 'Flood Risk, Insurance and Emergency Management in Australia: NSW Flooding 2012 and Queensland Flooding 2011' (2012) 27(2) Australian Journal of Emergency Management 20
- Rachel Anne Carter, 'Taxing the Taxed—Duplication of Taxation in Property Insurance and Its Societal Implications' (2011) 6(1) *Journal of Australian Tax Teachers Association* 38
- Rachel Anne Carter, 'Economic Management of Disaster Resilience and Recovery Remedying the Insurance Problem' (2011) 28(7) *International Association of Emergency Managers Bulletin* 6
- Rachel Anne Carter, 'Wild Fires—The Legal Regulatory System of Insurance and Emergency Services Funding' (2011) 14 *Southern Cross University Law Review* 75

Article (Spanish)

 Rachel Anne Carter, 'Catástrofes naturales y seguro en Australia: ¿Ha llegado la hora de un sistema nacional de seguros de desastres naturales?' (2015) 3 *Consorseguros (online)* http://www.consorsegurosdigital.com/es/numero-03/portada/catastrofes-naturales-y-seguro-en-australia>

Books

- Organisation for Economic Co-operation and Development (OECD), *Disaster Risk Financing: A Global Survey of Practices and Challenges* (OECD Publishing, 2015)
 [Contributed to researching for the report and was named a key contributor]
- Organisation for Economic Co-operation and Development (OECD), *Disaster Risk Financing in APEC Economies: Practices and Challenges* (OECD Publishing, 2013) [Contributed to researching and writing the report and was named a key contributor]
- Professor Mirko Bagaric, Peter Faris QC and Rachel Anne Carter, *The Law of Compensation for Harms: Torts* (Pan Macmillan, 2011)

Conference Papers and Seminars

- May 2016: Global Security and Cyber Conference, Aberdeen, Scotland
 - o Rachel Anne Carter, 'Insurance, Security and Inherent Risks: Insuring for

Uncertainty' (Paper presented at Ardloe House, Aberdeen, 24 May 2016) (Invited Presentation)

- August 2012: Australasian Fire and Emergency Services Authority Council and Bushfire Cooperative Research Centre Annual Conference, Perth, Australia
 - Rachel Anne Carter, 'Catastrophe Insurance Regimes' (Poster presentation, 28 31 August 2012)
- November 2011: National Climate Change Adaptation Research Facility and Australian National University Workshop on the Legal and Institutional Dimensions of Adaptation and Extreme Event Management, Canberra, Australia
 - Rachel Anne Carter, 'Disasters and Insurance' (Paper presented at Australian National University School of Law, 23 November 2011) (Invited Presentation)
- September 2011: Australasian Fire and Emergency Services Authority Council and Bushfire Cooperative Research Centre Annual Conference, Sydney, Australia
 - Rachel Anne Carter, 'Risk and the Decision to Insure in Australia: The Black Saturday Fires' (Poster presentation, 29 August – 1 September 2011)
- August 2011: Guest Lecture at the Australian National University (School of Law), Canberra, Australia
 - Rachel Anne Carter, 'Disasters, Economics and Insurance—Paying for It All' (Guest Lecture at the Australian National University School of Law, August 2011) (Invited Presentation)
- July 2011: Disasters and Sociolegal Studies Workshop, Oñati, Spain
 - Rachel Anne Carter, 'Risk and the Decision to Insure in Australia: The Black Saturday Fires' (Paper presented at the Disasters and Sociolegal Studies Workshop, Oñati, Spain, 21-22 July 2011)
- June 2011: 9th Conference on Catastrophe Insurance in Asia, Beijing China
 - Rachel Anne Carter, 'Mitigating Future Disasters in Australia—The Role of the Government, the Insurers and the People' (Paper presented at 9th Conference on Catastrophic Insurance in Asia, 8-9 June 2011)
- May 2011: Bushfire Cooperative Research Centre Research Advisory Forum, Brisbane
 - Rachel Anne Carter, 'Analysis of Australian Insurance Law and Regulatory Systems Covering Property Damage Caused by Fire' (Paper presented at the Bushfire Cooperative Research Centre Research Advisory Forum, 25-26 May 2011) (Invited Presentation)

- January 2011: Australasian Tax Teachers Association Conference, University of Melbourne, Australia
 - Rachel Anne Carter, 'Taxing the Taxed—Duplication of Taxation in Property Insurance and Social Implications' (Paper presented at the Australasian Tax Teachers Association Conference, University of Melbourne, 19-21 January 2011)
- September 2010: Australasian Fire and Emergency Services Authority Council and Bushfire Cooperative Research Centre Annual Conference, Darwin Convention Centre, Darwin, Australia
 - Rachel Anne Carter, 'Catastrophic Events, Insurance and Sufficient Funding for Fire Services—A Legal Perspective' (Poster presentation, 8–10 September 2010)
- July 2010: Keeping the Fire Conference, University of Wollongong, Wollongong, Australia
 - Rachel Anne Carter, 'Wild Fires—The Legal Regulatory System of Insurance and Emergency Services Funding' (Paper presented at the University of Wollongong, Keeping the Fire Conference, 22-25 July 2010)
- June 2010: Universitat of Pompeu Fabra, Private Law Department, Barcelona, Spain
 - Rachel Anne Carter, 'Fire Insurance—Problems with Claims Resulting from Catastrophic Events' (Paper presented at Universitat Pompeu Fabra, June 2010)

Other

- Rachel Anne Carter, 'Australia's Emergency Funding is Another Disaster Waiting to Happen' *The Conversation (online)* 6 January 2015 https://theconversation.com/australias-emergency-funding-is-another-disaster-waiting-to-happen-35896>
- Rachel Anne Carter and Dr Jim McLennan, 'Will your Insurance Cover Bushfire Loss?' (online) (2013) http://www.latrobe.edu.au/news/articles/2013/release/will-your-insurance-cover-bushfire-loss>
- Rachel Anne Carter, 'Why Disaster Insurance Should Be on the G20 Agenda', *The Conversation (online)* 14 October 2013 https://theconversation.com/why-disaster-insurance-should-be-on-the-g20-agenda-18700>
- Rachel Anne Carter, 'Cutting Out the Insurance "Free Rider" When it Comes to Funding Fire Services' *The Conversation (online)* 25 July 2013

<https://theconversation.com/cutting-out-the-insurance-free-rider-when-it-comes-tofunding-fire-services-15852>

- Rachel Anne Carter, 'Bushfire Losses Reignite Debate about Insurance Reform', *The Conversation (online)* 14 January 2013 accessed at https://theconversation.com/bushfire-losses-reignite-debate-about-insurance-reform-11512>
- Nick Grimshaw, 'Concerns Raised about Underinsurance', ABC News 24 on ABC Television, 11 January 2013 (Insurance expert: Rachel Carter) http://www.abc.net.au/news/2013-01-11/concerns-over-under-insurance/4461572>
- Rachel Carter, Submission No 1 to Treasury, Parliament of Australia, *Unfair Terms in Insurance Contracts*, 13 February 2012 (Written submission)
- Edward Mortimer, Anthony Bergin and Rachel Anne Carter, 'Sharing the Risk: Distributing the Cost of Natural Disasters in Australia' (Australian Strategic Policy Institute, 2011)
- Rachel Anne Carter, Submission No 1 to National Disaster Insurance Review (Treasury), Parliament of Australia, *Inquiry into Insurance for the National Disaster Insurance Review*, 25 July 2011 (Written submission)
- Evidence to Senate Economics References Committee, Parliament of Australia, Canberra, 13 May 2011 (Oral presentation: Rachel Anne Carter)
- Rachel Carter, Submission No 1 to Senate Economics References Committee, Parliament of Australia, *Inquiry into the State Governments Insurance and the Flood Levy*, 13 April 2011 (Written submission)
- Anthony Bergin, Edward Mortimer and Rachel Carter, 'Deciding Just Who Picks Up the Tab After a Catastrophe', *The Australian* (Sydney) 12 February 2011
- ABC Radio National, 'Lessons of the Floods: How Do We Minimise the Damage?' *Australia Talks*, 24 January 2011 (Insurance expert: Rachel Carter)
- 2CC Talking Canberra, 'Problems Facing the Insurance Industry after the Flooding', *Breakfast*, 23 January 2011 (Insurance expert: Rachel Carter)
- Rachel Carter, 'Don't Blame the Insurers—Blame the System', *The Punch* (www.thepunch.com.au), 20 January 2011
- Rachel Carter, 'Flood Insurance Must Be Made Accessible to All', *The Australian* (Sydney) 13 January 2011, 14
- Newstalk ZB (New Zealand Radio), 'Cost of Natural Disasters to the Australian

Economy', *News Radio*, 13 January 2011 (Insurance expert: Rachel Carter)

• Kirstin Murray, 'Cost of the Clean Up', 7:30 Report on ABC Television, 13 January 2011 (Insurance expert: Rachel Carter)

Part 7:

Bibliography

Bibliography

Articles/Books/Reports

'Australia: Insurance in N Queensland Needs to be More Affordable', *Asia Insurance Review* (online), 3 March 2015

'Australia: New South Wales to Abolish Emergency Services Levy from Insurance', Asia Insurance Review (online), 11 December 2015 http://www.asiainsurancereview.com/News/View-NewsLetter- Article/id/34531/Type/eDaily?utm_source/Edaily-News-Letter/utm_medium/Group-Email/utm campaign/Edaily-NewsLetter>

'Fire and Marine Insurance Companies Transacting Business in Melbourne' (1879) 3 Australasian Insurance and Banking Records 19

'Insurer to Cover Costs with Premium Hikes', *Townsville Bulletin* (Townsville) 26 August 2011

'New Zealand: Insurers' New Code becomes effective on 1 January', *Asia Insurance Review* (online), 4 January 2016 http://www.asiainsurancereview.com/News/View-NewsLetter-Article/id/34620/Type/eDaily/New-Zealand-Insurers-new-code-becomes-effective-on-1-Jan

'Spain: The New Insurance Law, a Tough Birth' (1996) 49(3) International Insurance Monitor 18

'Special Report: Black Saturday—Emerging from the Ashes, Members Reflect' (2010) February *The Police Association Journal* 10

'Storm Insurance Deadline Extended', *The Connexion* (France), 3 March 2010 <http://www.connexionfrance.com/storm-xynthia-insurance-claims-deadline-extended-viewarticle.html>

'The Insurance Institute of New South Wales' (1884) 8 Australasian Insurance and Banking Report 588 'The Insurance Record: The Insurance Institute as a Guarantor of Good Faith' (1884) 8 Australasian Insurance and Banking Records 452

'Victorian Bushfire Appeal Fund December 2010 Progress Report' (Progress Report, Victoria Bushfire Appeal Fund, 26 November 2010)

ANZ Bank, ANZ Survey of Adult Financial Literacy in Australia (The Social Research Centre, 2008)

Appleby, Gabrielle and Stephen McDonald, 'Looking at the Executive Power through the High Court's new Spectacles' (2013) 35 *Sydney Law Review* 253

Arthur, Craig, Anthony Schofield and Bob Cechet, 'Assessing the Impacts of Tropical Cyclones' (2008) 23 Australian Journal of Emergency Management 14

Ashton, Ron, 'Keeping the Faith—Good Faith in Insurance and the Emergence of General Contractual Good Faith' (2011) 22 *Insurance Law Journal* 81

Attorney-General's Department, 'Victorian Bushfires January–February 2009' (Report, Disaster Assist—An Australian Government Initiative Carried out for the Attorney-General's Department, 2 February 2011)

Australian Building and Construction Board, 'Intergovernmental Agreement 2012' <http://www.abcb.gov.au/Resources/Publications/Corporate/Inter-Governmental-Agreement>

Australian Bureau of Statistics, 'Household Expenditure Survey: Summary of Results' (Report, Canberra, 15 February 2006)

Australian Business Roundtable, 'Building Our Nations Resilience to Natural Disasters' (Whitepaper, June 2013)

Australian Capital Territory, 'Australian Capital Territory Insurance Authority Annual Report 2009–2010' (Annual Report, Office of the Nominal Defendant of the Australian Capital Territory, 2010) Australian Government, Department of Agriculture, Fisheries and Forestry and the Australian Bureau of Agricultural and Resource Economics and Sciences, 'Drought in Australia: Context, Policy and Management' (Report, March 2012)

Australian Government, Government's Response to Natural Disaster Insurance Review (NDIR) Recommendations (2011)

Australian Law Reform Commission, Insurance Contracts, Report No 20 (1982)

Australian Securities and Investment Commission, Consumer Understanding of Flood Insurance (Report No 7, June 2000)

Australian Securities and Investment Commission, *Disclosure: Product Disclosure Statements (and Other Disclosure Obligations)* (Regulatory Guide No 168, 6 September 2010)

Australian Securities and Investment Commission, *Report 54: Getting Home Insurance Right—A Report on Home Building Underinsurance* (September 2005)

Australian Taxation Office, *Tax System Advisory Board Consultation Panel—Report to the Australian Government* (Report, 30 June 2011)

Australian Treasury, A Natural Disaster Insurance Scheme for Australia: A Discussion Paper Tabled by the Minister Assisting the Treasurer in Commonwealth Parliament (Australian Treasury, Canberra, 1976)

Bâcher, J L, 'La Fraude á l'Assurance et sa Prévention par les Compagnies Privées' (1995) 19 *Déviance et Society* 185

Bagaric, Mirko, Peter Faris and Rachel Carter, *Torts—Compensation for Harm: Law Principles and Practice* (Palgrave Macmillan, 2011)

Bagwell, Sheryle, 'Insurance Giant: Catastrophe Bonds: A Better Solution than Levies' *ABC Radio National (Breakfast)* 10 February 2011 (insurance expert: Mark Senkevic, Australian and New Zealand Chief Officer, Swiss RE)

Baillieu, Ted, 'Coalition to Introduce a Fairer System to fund Victoria's Fire Service' (Media Release, 120828, 28 August 2012)

Bakir, P G, 'Proposal for a National Mitigation Strategy against Earthquakes in Turkey' (2004) 33 *Natural Hazards* 405

Ball, Michael, 'Reducing Claims under the Insurance Contracts Act 1984' (1992) 1 Insurance Law Journal 1

Ball, Robert, 'Provision of Public Service Infrastructure- the use of PPPs in the UK and Australia: A Comparative Study' (2011) 24(1) *International Journal of Public Sector Management* 5

Banks, Gary, 'Report on Government Services 2011' (Productivity Commission Report, January 2011) http://www.pc.gov.au/_data/assets/pdf_file/0015/105252/rogs-2011-volume1.pdf

Barbon, Nicholas, A Letter to a Gentleman in the Country, Giving an Account of the Two Insurance Offices (1698)

Barrero Rodríguez, Enrique, *El Consorcio de Compensación de Seguros* (Tirant lo Blanch-Cuatreases, 2000)

Bayo Martinez, Carlos, 'Natural Disaster Fund (FONDEN)' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publishing, 2005)

Beckett, James V, Suzanne Wilkinson and Regan Potangaroa, 'Post Disaster Recovery: Multi-Agency Leadership and Co-ordination' (Paper presented at the Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors, Dauphine Université, Paris, 2–3 September 2010)

Bell, Justine, 'Flood Insurance, Denials of Claim and the Role of the Financial Ombudsman Service' (2011) 22 *Insurance Law Journal* 40

Bentham, J, A Fragment on Government (Oxford Clarendon Press, 1891)

Bergin, Anthony, Edward Mortimer and Rachel Carter, 'Deciding Just Who Picks Up the Tab After a Catastrophe', *The Australian* (Sydney) 12 February 2011

Bibby, Andrew, 'Extraordinary events demand extraordinary leadership' (July 2012) 74 International Cooperative and Mutual Insurance Federation Voice 14 Birds, John, 'Recent Common Law Developments Regarding Insurable Interest and Subrogation' (1988) 1 *Insurance Law Journal* 171

Birds, John, 'The Reform of Insurance Law' (1982) 1 Journal of Business Law 449

Bittman, Michael and Kimberly Fisher, 'Exploring the Economic and Social Value of Present Patterns of Volunteering in Australia' (Social Policy Research Paper No 28, Parliamentary Library, Parliament of Australia, 2006)

Blazey, Patricia and Paul Govind, 'Financial Adaptation and Challenges for the Insurance Industry Due to Climate Change', (2007) 4 *Macquarie Journal of Business Law* 15

Blong, Russell, 'Damage Index 1999' (1999) 5(4) Natural Hazards Quarterly 1 https://www.riskfrontiers.com/nhq/nhq4-3tables.htm

Bommer, Julian et al, 'Development of an Earthquake Loss Model for Turkish Catastrophe Insurance' (2002) 6 *Journal of Seismology* 431

Bounds, Gregory, 'Challenges to Designing Regulatory Policy Frameworks to Manage Risk' in OECD, *OECD Review of Regulatory Reform—Risk and Regulating Policy—Improving the Governance of Risk* (OECD Publishing, 2010)

Bowrey, Graham, 'Keeping up Appearances: The Quest for Governance Legitimacy' (2008) 14 *Accounting, Accountability and Performance* 1

Brook, Nigel, 'New Zealand High Court rules on Earthquake Commission's Reinstatement Argument' (2011) 19(3) *Environmental Liability* 103

Brown, Karen B and David V Snyder (eds.), *General Reports of the XVIIIth Congress of the International Academy of Comparative Law/Reporte Généraux du XVIIIeme Congrès de l'Académie Internationale de Droit Comparé* (Springer, 2012)

Buckle, P, 'Flood Insurance: Is there a Problem? Is there A Solution? A Review of the Workshop Held at the Centre for Resource and Environmental Studies, Australian National University on 7–9 February 2001' (2001) Autumn *Australian Journal of Emergency Management* 1

Bunyon, Charles John, The Law of Fire Insurance (Charles & Edwin Layton, 1867)

Bureau of Transport Economics, 'Economic Costs of Natural Disasters in Australia' (Report 103, Bureau of Transport Economics, 2001)

Burrows, Andrew, 'We Do this at Common Law but That in Equity' (2002) 22 Oxford Journal of Legal Studies 1

Butler, J G R and D P Doessel, 'Natural Disaster Relief and Horizontal Equalization in Australia' (1983) Winter *Publius* 55

Butler, J R G and D P Doessel, 'Who Bears the Cost of Natural Disasters? An Australian Case Study' (1980) 4 *Disaster* 187

Calthorpe, Kevin D and Ken Capell, *Brisbane on Fire: A History of Firefighting 1860–1925* (Marino Lithographs Pty Ltd, 1997)

Calwell, A, Labor's Role in Modern Society (Landsdown Press, 1963)

Cameron, Alan and Nancy Milne (Commonwealth Government, Treasury), *Review of the Insurance Contracts Act 1984 (Cth)–Report into the Operation of Section 54* (2003)

Cameron, P A et al, 'Black Saturday: The Immediate Impact of the February 2009 Bushfires in Victoria, Australia' (2009) 191 *Medical Journal of Australia* 11

Campbell, Dennis and Russell E Carlisie (eds.), *The Transnational Person: Private Rights in the International Business Community* (Kluwer Law and Taxation Publishers, 1992)

Campbell, Neil, 'Wilful Misconduct, Fraud and the Innocent Co-Insured' [2000] New Zealand Law Review 263

Cane, Marilyn and Paul A Caldarelli, '*Apres le Deluge:* National Flood Insurance' (1992-1993) 17 *Nova Law Review* 1077

Canterbury Earthquakes Royal Commission, *Final Report: Volume 1- Seismicity, Soils and the Seismic Design of Buildings* (2012)

Carauana, Leonardo, 'Insurance in Spain 1934–2004' in *Instituto de Ciencias de Seguro: Encuentro Internacional Sobre la Historia del Seguro* (Fundación Mapfre, 2010) Carlson, Jenifer Anne, 'The Economics of Fire Protection: From the Great Fire of London to Rural/Metro' (2005) 25 *Institute of Economic Affairs* 39

Carnegie, Gary D and Stephen P Walker, 'Household Accounting in Australia: Prescription and Practice from the 1820s to the 1960s' (2007) 20 *Accounting, Auditing and Accountability Journal* 41

Carter, John W, 'Conditions and Conditions Precedent' (1991) 4 Journal of Contract Law 90

Carter, R A, 'Wild Fires–The Legal Regulatory System of Insurance and Emergency Services Funding' (2011) 14 *Southern Cross University Law Review* 75

Carter, R, 'Don't Blame the Insurers–Blame the System', *The Punch (online)*, 20 January 2011

Carter, R, 'Flood Insurance Must Be Made Accessible to All', *The Australian* (Sydney) 13 January 2011

Carter, Rachel Anne, 'Analysis of Australian Insurance Law and Regulatory Systems Covering Property Damage Caused by Fire' (Paper presented at the Bushfire Cooperative Research Centre Research Advisory Forum, Brisbane, 25-26 May 2011)

Carter, Rachel Anne, 'Australia: The Natural Disaster Insurance Review 2011' in Alberto Monti, 'Good Practices in Disaster Risk Financing: Supporting the G20/OECD Methodological Framework' (Doc DAF/AS/WD(2013)6, OECD, 6–7 June 2013)

Carter, Rachel Anne, 'Cutting out the Insurance "Free Rider" When it Comes to Funding Fire Services" *The Conversation (online)* 25 July 2013 http://theconversation.com/cutting-out-the-insurance-free-rider-when-it-comes-to-funding-fire-services.com

Carter, Rachel Anne, 'Economic Management of Disaster Resilience and Recovery Remedying the Insurance Problem' (2011) 28(7) *International Association of Emergency Managers Bulletin* 6

Carter, Rachel Anne, 'Flood Risk, Insurance and Emergency Management in Australia' (2012) 27 Australian Journal of Emergency Management 20

Carter, Rachel Anne, 'Mitigating Future Disasters in Australia—The Role of Government, Insurers and the People' (Paper presented at 9th Conference on Catastrophe Insurance in Asia, Beijing, China, 8–9 June 2011)

Carter, Rachel Anne, 'Risk and the Decision to Insure in Australia: The Black Saturday Fires' (Paper presented at Disasters and Sociolegal Studies Workshop, Oñati, Spain, 21-22 July 2011)

Carter, Rachel Anne, 'Taxing the Taxed—Duplication of Taxation in Property Insurance and its Societal Implications' (2011) 6(1) *Journal of Tax Teachers Association* 38

Carter, Rachel Anne, Submission No 1 to Senate Standing Committee on Environment and Communication, Parliament of Australia, *Recent Trends in and Preparedness for Extreme Weather Events*, 15 January 2013

<http://www.aph.gov.au/Parliamentary_Business/Committees/Senate_Committees?url=ec_ctt e/extreme_weather/submissions.htm>

Carter, Rachel, Submission No 1 to Senate Economics References Committee, Parliament of Australia, *Inquiry into the State Governments Insurance and the Flood Levy*, 13 April 2011

Cartwright, Darren, 'Blow for Unit Owners', Cairns Post, 12 October 2011

Chipperfield, Spencer, 'Proving Prejudice in Claims Handling under s 54' (2007) 18 Insurance Law Journal 135

Clarke, Malcolm A, *The Law of Insurance Contracts* (Lloyd's of London Press Ltd, 2nd ed, 1994)

Cohen, Deborah F, Timothy E De Masi and Aaron Krauss, 'Uberrimae Fidei and Reinsurance Rescission: Does a Gentlemen's Agreement Have a Place in Today's Commercial Market' (1994) 29 *Tort and Insurance Law Journal* 602

Coldbeck, Peter, 'Proving Insurance Fraud' (1997) 8 Insurance Law Journal 1

Commonwealth, 'A Discussion Paper Tabled by the Minister Assisting the Treasurer in the Commonwealth Parliament' (December 1976)

Commonwealth Government, *Government's Response to Natural Disaster Insurance Review Recommendations* (2011)

Commonwealth, 'Medicare Background Brief,' <http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Libra ry/Publications_Archive/archive/medicare>

Commonwealth, *Parliamentary Debates*, House of Representatives, 29 February 2012 (Shayne Neumann)

Commonwealth, *Productivity Commission Inquiry Report: Barriers to Effective Climate Change Adaptation* (Australian Government, Productivity Commission, Canberra, September 2012)

Commonwealth, *Productivity Commission Inquiry Report: Disaster Funding Arrangements* (Australian Government, Productivity Commission, Canberra, September 2014)

Commonwealth, Report of the Royal Commission on Insurance (Part II—Fire Insurance), *Final Report* (1910)

Commonwealth, Royal Commission on the Failure of HIH Insurance, Final Report (2003)

Commonwealth (Disaster Assist), *Queensland Floods (November 2010 – February 2011)*, 4 September 2013

<http://www.disasterassist.gov.au/Currentdisasters/Pages/QLD/Queenslandfloods(November 2010February2011).aspx>

Commonwealth (Treasury), Northern Australia Insurance Premiums Taskforce: Interim Report (August 2015)

<http://www.treasury.gov.au/ConsultationsandReviews/Reviews/2015/NAIP-Taskforce>

Commonwealth (Treasury), Northern Insurance Premiums Taskforce: Final Report (November 2015)

<http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Reviews %20and%20Inquiries/2015/NAIP%20Taskforce/Final%20Report/Downloads/PDF/NAIP_fin al_report.ashx>

Consorcio de Compensación de Seguros, 'Estadistica Riesgos Extraordinarios Series 1971– 2011' (October 2012) <http://www.consorseguros.es/c/document_library/get_file?uuid=548d4f59-b6c5-40dd-b06b-98dbcefd790f&groupId=10124>

Consumer Affairs Council of Victoria, *Report for the Year Ending 30 June 1974* (Legislative Assembly, 1974)

Consumer Affairs Council of Victoria, *Report for the Year Ending 30 June 1973* (Legislative Assembly, November 1973)

Consumer Affairs Council of Victoria, *Report for the Year Ending 30 June 1972* (Legislative Assembly, December 1972)

Consumer Protection Council, *Report for the Year Ending 30 June 1970* (Legislative Assembly, April 1971)

Cooper, Jeremy, 'Insurance Council of Australia 2009 Regulatory Update: Views from ASIC' (Australian Securities and Investment Commission, 4 February 2009)

Cossette, Helene, Thierry Duchesne and Etienne Marceau, 'Modelling Catastrophes and Their Impact on Insurance Portfolios' (2003) 7(4) *North American Actuarial Journal* 1

Council Assisting, Submission to the Victorian Bushfire Royal Commission, 2009 Victorian Bushfires Royal Commission—Insurance and the Fire Services Levy, 2009

Council of Australian Governments, *National Strategy for Disaster Resilience*, (Commonwealth Parliament, February 2011)

Council of Australian Governments, Natural Disasters in Australia—Disaster Insurance, (Report, August 2002)

Courbage, Christophe and Walter R Stahel (eds.), *The Geneva Reports—Risk and Insurance Research: Extreme Events and Insurance: 2011 Annus Horribilis* (The International Association for the Study of Insurance Economics, Geneva, 2012)

Craven, Greg, 'Judicial Activism in the High Court—A Response to John Toohey' (1999) 28 Western Australian Law Review 214 Crompton, Ryan et al, 'Influence of Location, Population and Climate on Building Damage and Fatalities due to Australian Bushfire: 1925 – 2009' (2010) 2 *Weather Climate and Society* 300

Crompton, Ryan and John McAneney, 'The Cost of Natural Disasters in Australia: The Case for Disaster Risk Reduction' (2008) 23 *Australian Journal of Emergency Management* 43

Cummins, David J and Bertrand Venard (eds.), *Handbook of International Insurance: Between Global Dynamics and Local Contingencies* (Springer, 2007)

Cummins, Robert A, Jacqui Woerner and Monica Chester, 'Australian Unity Wellbeing Index Survey 20.1–Part A Report: The Wellbeing of Australians—The Effect of Fires in Victoria and Floods in Queensland' (Report 20.1, Australian Centre on Quality of Life, Deakin University, April 2009)

Dacy, Douglas C and Howard Kunreuther, *The Economics of Natural Disasters: Implications for Federal Policy* (The Free Press, 1969)

Dahms, Ted, 'Resilience and Risk Management: Dahms Argues that Compliance against a Universal Set of Rules Reduces Resilience' (2010) 25 *The Australian Journal of Emergency Management* 21

Danzon, Patricia M, 'Tort Reform and the Role of Government in Private Insurance Markets' (1984) 13 *The Journal of Legal Studies* 517

Darwin Reconstruction Commission, Darwin Area Building Manual (Canberra, 1975)

Davidson, John, Fire Insurance: An Introduction to its Principles and Practices (W Blackwood, 1923)

Dayton-Johnson, Jeff, 'Natural Disasters and Adaptive Capacity' (Working Paper No 237 (DEV/DOC (2004) 06), OECD Development Centre, August 2004)

De Marcellis-Warin, Nathalie and Erwann Michel-Kerjan, 'The Public Private Sector Risk-Sharing in the French Insurance Cat. Nat. System' (Centre Interuniversitaire de Recherche en Analyse des Organisations, Scientific Series Paper No 2001s-60, Montréal, November 2001) Deniz, A and Semih Yucemen, 'Assessment of Earthquake Insurance Rates for the Turkish Catastrophe Insurance Pool' (2009) 3 *Georisk* 67

Department of Treasuring and Finance, 'Annual Report 2009–2010' (Annual Report, Government of Tasmania, 2010) <http://www.sro.tas.gov.au/domino/dtf/dtf.nsf/LookupFiles/2009-10-Treasury-Annual-Report.pdf/\$file/2009-10-Treasury-Annual-Report.pdf>

Department of Treasury and Finance, 'Fire Services Funding Review' (2010) <http://www.dtf.vic.gov.au/CA25713E0002EF43/WebObj/RevisedToRPDF/\$File/RevisedTo RPDF.pdf>

Derrington, Justice and R Ashton, 'What Have They Done to the Common Law? Disclosure and Misrepresentation' (1980) 1 *Insurance Law Journal* 1

Dixon, Owen, 'Concerning Judicial Method' (1956) 29 Australian Law Journal 468

Dong, Weimin, Haresh Shah and Felix Wong, 'A Rational Approach to Pricing of Catastrophe Insurance' (1996) 12 *Journal of Risk and Uncertainty* 201

Drummond, Stanley, 'Fraudulent Misrepresentation or Non-Disclosure–Does the Insurer Have to Return the Premium?' (2010) 21 *Insurance Law Journal* 1

Earthquake Commission, 'Householders Guide to Earthquake Cover' (New Zealand Government) (2011) http://www.eqc.govt.nz/downloads/pdfs/household-guide-eqc-cover.pdf>

Ebbeck, Genevieve, 'The Future for Section 117 as a Constitutional Guarantee' (1993) 4 *Public Law Review* 89.

Eburn, Michael, *Australia's International Disaster Response—Laws, Rules and Principles* (PhD Thesis, Monash University, 2009)

Eburn, Michael, 'Responding to Catastrophic Natural Disaster and the need for Commonwealth Legislation' (2011) 10(3) *Canberra Law Review* 81

Ellis, Matthew, 'Truly Daunting—Measuring Prejudice under s 54 of the Insurance Contracts Act 1984' (2007) 18 *Insurance Law Journal* 103 Ellis, Matthew, 'Utmost Good Faith: The Scope and Application of s 13 of the *Insurance Contracts Act* in Wake of the *CGU v AMP*' (2009) 20 *Insurance Law Journal* 92

Enjolras, G et al, 'Flood Management at the Basin Level in France: Sustainability of Local Risk—Sharing Policies' (Paper presented at International Water Resources Association World Water Conference, Montpellier, France, 1–4 September 2008)

Epstein, Richard A, 'The Legal and Insurance Dynamics of Mass Tort Litigation' (1984) 13 *The Journal of Legal Studies* 475

Ermoleiv, Yuri M et al, 'A System Approach to Management of Catastrophic Risks' (2000) 122(2) *European Journal of Operational Research* 452

Evidence to House of Representatives Standing Committee on Economics, Parliament of Australia, Canberra, 16 February 2011 (Gerard Patrick Bradley, Under Treasury, Queensland Treasury)

Evidence to Senate Economics References Committee, Parliament of Australia, Canberra, 13 May 2011 (Rachel Anne Carter, Associate Lecturer, La Trobe University)

Evidence to Senate Economics References Committee, Parliament of Australia, Canberra, 13 May 2011 (Stephen Joseph Marshall, Chief Executive Officer, Victorian Managed Insurance Authority)

Evidence to Senate Economics References Committee, Parliament of Australia, Canberra, 13 May 2011 (Neil Singleton, Insurance Commissioner, Queensland Government)

Explanatory Memorandum, Income Tax Rates Amendment (Temporary Flood and Cyclone Reconstruction Levy) Bill 2011 (Cth)

Explanatory Memorandum, Insurance Contracts Amendment Bill 2012 (Cth)

Faure, Michael G, 'Financial Compensation for Victims of Catastrophes: A Law and Economics Perspective' (2007) 29 *Law and Policy* 339

Fears, Darryl, 'Rise in Government Insurance Rates to Mirror Rising Waters, Flood Debt' 26 March 2015 *Washington Post (online)* https://www.washingtonpost.com/national/health-science/rise-in-government-insurance-rates-to-mirror-rising-waters-flood-debt/2015/03/28/8f9f17c6-d316-11e4-ab77-9646eea6a4c7_story.html

Federal Emergency Management Agency and National Science Teachers Association, *Earthquakes* (FEMA, April 1999)

Finn, Jeremy, 'Providing for Legal Issues in Disaster Management: Lessons from New Zealand and the USA' (Paper presented at Australian and New Zealand Disaster and Emergency Management Conference, Gold Coast, Australia, 5–7 May 2014) <http://anzdmc.com.au/archive/page4.php>

Finn, Jeremy and Elizabeth Toomey, 'Sustainability and Disasters: The View from New Zealand' (Paper presented at 9th International Conference on Environmental, Cultural, Economic and Social Sustainability Conference, Hiroshima, Japan, 23–25 January 2013)

Finn, Jeremy, 'The Impact of the Canterbury Earthquakes on the Legal Profession' (Paper presented at University of Canterbury Earthquake Research Forum, Christchurch, New Zealand, 5 June 2012)

Franco, Guillermo, 'Construction of Customized Payment Tables for Cat-in-a-Box Earthquake Triggers as a Basis Risk Reduction Device' in George Deodatis, Bruce R Ellingwood and Dan M Frangopol, *Safety, Reliability, Risk and Life-Cycle Performance of Structures and Infrastructures* (Taylor and Francis Group, 2013)

Franco, Guillermo, 'Earthquake Mitigation Strategies through Insurance' (26 March 2015) Encyclopaedia of Earthquake Engineering 1

Franco, Guillermo, 'Minimisation of Trigger Error in Cat-in-a-Box Parametric Earthquake Catastrophe Bonds with an Application to Costa Rica' (2010) 26(4) *Earthquake Spectra* 983

Freeman, Paul K and Kathryn Scott, 'Comprehensive Analysis of Large Scale Catastrophe Compensation Schemes' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Report No 8, OECD Publishing, 2005)

Friedman, David D, *Law's Order: What Economics Has to Do with Law and Why It Matters* (Princeton University Press, 2000)

Galbraith, David, 'An Unmeritorious Defence—The Requirement of the Insurable Interest in the Law of Marine Insurance and Related Matters' (1992) 5 *Insurance Law Journal* 177

Gallery, Gerry T and Natalie Gallery, 'Rethinking Financial Literacy in the Aftermath of the Global Financial Crisis' (2010) 19 *Griffith Law Review* 30

García-Ruiz, José L and Leonardo Caruana, 'Strategies in the Internationalisation of the Spanish Insurance Companies in the Twentieth Century' (Paper presented at the Academic Symposium on Internationalisation and Globalisation of the Insurance Industry in the 19th and 20th Centuries, Swiss RE Centre for Global Dialogue, Zurich, 9–10 October 2006)

Gemenne, Francois, Pauline Brucker and Joshua Glasser, *The State of Environment Mitigation (SEM) 2010* (Institute for Sustainable Development and International Relations and the International Organisation for Migration, Paris, 2011)

Gerangelos, Peter, 'The Executive Power of the Commonwealth of Australia: Section 61 of the *Commonwealth Constitution*, "Nationhood" and the Future of the Prerogative' (2012) 12 (1) *Oxford University Commonwealth Law Journal* 97

Gerathy, Sarah, 'NSW Homeowners better off under new Emergency Levy, Treasurer Glady Berejiklian' ABC News, 10 December 2015 http://www.abc.net.au/news/2015-12-10/nsw-government-to-announce-emergency-services-levy/7016076>

Gibbs, W J, 'Brisbane Floods January 1974' (Report, Department of Science at the Bureau of Meteorology, December 1974)

Gilbert, Claude, 'From One Crisis to the Other: The Shift of Research Interest in France' (2002) 10 *Journal of Contingencies and Crisis Management* 192

Gillham, Alexis, 'Insurance Fee Dramas Grow', *Townsville Bulletin* (Townsville) 7 September 2011

Ginger, John et al, 'Housing Damage in Windstorms and Mitigation for Australia' (Paper presented at the International Group for Wind Related Disaster Risk Reduction Conference, Tokyo, Japan, 2010)

Glenn, Brian J, 'The Shifting Rhetoric in Insurance Denial' (2000) 33 Law and Society Review 779

Godden, L et al, 'Law, Governance and Risk: Deconstructing the Public-Private Divide in Climate Change Adaptation' (2013) 36(1) *University of New South Wales Law Review* 224 Goldberg, Victor P, 'Tort Reform and the Role of Government in Private Insurance Markets: Comment on Danzon' (1984) 13 *The Journal of Legal Studies* 565

Gollier, Christian, 'Some Aspects of the Economics of Catastrophe Risk Insurance' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publishing, 2005)

Goodsall, David (Insurance Actuaries of Australia), Submission No 1 to Disaster Recovery Policy Taskforce, Attorney-General's Department, *Natural Disaster Relief and Recovery Enquiry* (31 January 2012)

<http://www.actuaries.asn.au/Library/Submissions/GI/2012/AGDeptNDRRA20120131.pdf>

Government Accountability Office, 'Actions to Address Repetitive Loss Properties' (US Senate, Washington, Document GAO-06-174T, 25 March 2004) http://www.gao.gov/new.items/d06174t.pdf>

Green, Colin and Edmund Penning-Roswell, 'Flood Insurance and Government "Parasitic" and "Symbiotic" Relations' (2004) 29 *The Geneva Papers on Risk and Insurance* 518

Greene, Mark R, 'The Spanish Insurance Industry: An Analysis' (1972) 39 *The Journal of Risk and Insurance* 221

Guppy, Damon and Gavin King, 'Unit Owners, Tenants Feel the Insurance Pinch: It's Daylight Robbery' *Cairns Post* (Cairns) 31 August 2011

Gurenko, Eugene and Rodney Lester, 'Rapid Onset of Natural Disasters: The Role of Risk Financing in Effective Catastrophe Risk Management' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Report No 8, OECD Publishing, 2005)

Gurenko, Eugene et al, *Earthquake Insurance in Turkey: History of the Turkish Catastrophe Insurance Pool* (World Bank Report No 38654, Washington, 2006)

Hahlo, H R and L C B Gower, 'Here Lies the Common Law: Rest in Peace' (1967) 30 *The Modern Law Review* 241

Hallegatte, Stephane, and Valentin Przyluski, 'The Economics of Natural Disasters: Concepts and Methods' (Policy Research Working Paper No 5507, The World Bank, December 2010)

Harnett, Bertram, 'The Doctrine of Concealment: A Remnant in the Law of Insurance' (1950) 15 Law and Contemporary Problems 391

Hasson, R A, 'The Doctrine of Uberrima Fides in Insurance Law: A Critical Evaluation' (1969) 32 *The Modern Law Review* 615

Havenga, Peter, 'Good Faith in Insurance Contracts-Some Lessons from Australia' (1996) 8 South African Mercantile Law Journal 75

Hawke, Fred, 'Utmost Good Faith- What does it really mean?' (1994) 6 Insurance Law Journal 91

Haynes, K et al, *Institutional Response and Indigenous Experiences of Cyclone Tracy* (Report to National Climate Change Adaptation Research Facility, Gold Coast, June 2011)

Henchcliffe, Scott, 'Insurance Claims: Fraud and the Duty of Utmost Good Faith' (1997) 8 Insurance Law Journal 1

Henham, Brian, Hand in Hand 1696–1996 (Commercial Union, 1996)

Henry, Ken, 'Confidence in the operation of the tax system' (Paper presented at Taxation Institute of Australia Conference, Sydney, 13 March 2009)

Henry, Ken, 'How much inequity should we allow?' (Paper presented at Australian Council of Social Service National Conference, 3 April 2009)

Henry, Ken, Australian Future Tax System: Final Report (Commonwealth Government Publishing Service, Canberra, 2010)

Herke, John, 'Teething Pains at age 25: Developing Meaningful Enforcement of the National Flood Insurance Program (1993-1994) 7 *Tulane Environmental Law Journal* 165

Hitz, M Luzi, 'Le Défi de la modélisation catastrophe-Monde des Modèles contre Monde Réel' (Paper presented at Association des Professionnels de la réassurance en France (APREF), Paris, 11 June 2013)

Holloway, Sally, Courage High: A History of Fire fighting in London (HMSO, 1992)

Höppe, Peter and Petra Löw, 'Characteristics of the Extreme Events in 2011 and their Impact on the Insurance Industry' in Christophe Courbage and Walter R Stahel, *The Geneva Reports- Risk and Insurance Research: Extreme Events in Insurance: 2011 Annus Horribilis* (Geneva Association, Geneva, 2012)

Hore, R H W and E C Farley, *Principles and Practices and Law of Fire Insurance written for the Australian Insurance Institute Post War Rehabilitation Scheme* (Incorporated Australian Insurance Institute, 1945)

Horsely, K J, 'Section 54 of the Insurance Contracts Act' (1996) 7 Insurance Law Journal 1

House of Representatives Standing Committee on Social Policy and Legal Affairs, Parliament of Australia, *In the Wake of Disaster: The Operation of the Insurance Industry during Disaster Events* (2012)

Howard, John, 'Natural Disaster Insurance: A Policy Information Paper Issued by the Treasurer' (Australian Treasury, Canberra, 1979)

Huber, Dan, *Fixing a Broken National Flood Insurance Program: Risks and Potential Reforms* (Centre for Climate and Energy Solutions, Arlington, June 2012)

Hudson, Paul et al, 'Adverse Selection and Moral Hazard in Natural Disaster Insurance Markets: Empirical evidence from Germany and the United States' (Paper presented at the American Risk and Insurance Association Annual Conference, Seattle, 4 August 2014)

Institute of Insurance Actuaries, 'Submission to the Garnaut Climate Change Review–Update 2011' (3 March 2011)

Instituto de Ciencias de Seguro: Encuentro Internacional Sobre la Historia del Seguro (Fundación Mapfre, Madrid, 2010)

Insurance Australia Group Ltd, Submission 11 to Treasury, A National Survey of Small and Medium Business, July 2001

Insurance Council of Australia, Submission to the Victorian Bushfires Royal Commission, Insurance and the Fire Services Levy: Submissions of the Insurance Council of Australia Ltd to the Victorian Bushfires Royal Commission, April 2010 Insurance Council of Australia, Response to 2011 Natural Disaster Insurance Review, *Response*, July 2011

Insurance Council of Australia, Submission to the Victorian Parliamentary Economic Development and Infrastructure Committee, *Inquiry into State Government Taxation and Debt*, October 2009

International Federation of Accountants, 'International Public Sector Accounting Standards Board: Reporting Service Performance Information' (Exposure Draft, December 2013)

Izuzquiza, Alejandro, 'The Consorcio de Compensación de Seguros and its wind storm insurance coverage' paper presented at 6th European Conference on Severe Storms (Palma de Mallorca, October 2011)

Jacobs, Marcus, Laws of Compulsory Land Acquisition (Thomas Reuters Australia, 2010)

Jaffee, Dwight M and Thomas Russell, 'Catastrophe Insurance, Capital Markets and Uninsurable Risks' (1997) 64(2) *The Journal of Risk and Insurance* 205

James, Denis, 'Federal and State Taxation: A Comparison of the Australian, German and Canadian Systems' (Parliamentary Paper Current Issues Brief 1997 – 1998, Economic, Commerce and Industrial Relations Group, 3 November 1997) <http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Libra ry/Publications_Archive/CIB/CIB9798/98cib05>

Jametti, Mario, Thomas Von Ungern-Sternberg, 'Risk Selection in Natural Disaster Insurance- The Case of France' (Working Paper No 1683, March 2006)

Jean Kwon, W, 'Human Capital Risk and Talent Management Issues in the Insurance Market: Public Policy, Industry and Collegiate Education Perspectives' (Paper presented at Shin Research Panel Insurance Gaining Relevance in the Global Economy, June 2013)

Johnson, Harry M, 'The History of British and American Fire Marks' (1972) 39(3) *Journal of Risk and Insurance* 405

Jones, Peter J, Underinsurance and Non-Insurance in the Small Business Sector (Suncorp, 2007)

Kaley, Mathew, 'Flood: The Trouble with Words' (2000) 23 Australian Insurance Institute Journal 26

Keating, Michael et al, Independent Pricing and Regulatory Tribunal of New South Wales Review of State Taxation- Report to the Treasurer (2008)

Keneley, Monica and Tom McDonald, 'The Nature and Development of the General Insurance Industry in Australia to 1973' (2007) 47 *Australian Economic History Review* 278

Keneley, Monica, 'The Origins of Formal Collusion in Australian Fire Insurance 1870–1920' (2002) 42 *Australian Economic History Review* 54

Kerr, Duncan, 'Executive Power and the Theory of Its Limits: Still Evolving or Finally Settled?' (2011) 13(2) *Constitutional Law and Policy Review* 22

Keyzer, Patrick, *Principles of Australian Constitutional Law* (LexisNexis Butterworths, 3rd ed, 2010)

Kimura, Shingo, 'Managing Droughts and Bio-Security in Australia' in OECD, *Managing Risks in Agriculture: Policy Assessment and Design* (OECD Publishing, 2011)

Kipper, Scott J, Brian Sandoval and Terry Johnson, *Earthquake Insurance: Nevada Consumer's Guide* (Department of Business and Industry- Division of Insurance, Nevada, February 2012)

Kirby, Michael, 'After the Fires Die Down and the Lawyers Depart' (Paper presented at Australasian Fire & Emergency Services Authority Council Annual Conference, Darwin, 9 September 2010)

Kirby, Michael, 'Australian Insurance Contract Law: Out of the Chaos- A Modern, Just and Proportionate Reforming Statute' (Paper presented at Australian Insurance Law Association National Conference 2010, Adelaide, 28 October 2010)

Kirby, Michael, 'Judicial Activism' (1997) 27 Western Australian Law Review 1

Kirby, Michael, 'Reforming Australian Insurance Law' (1976-1977) 12 Forum 940

Kirby, Michael, '50 Years in the Law: A Critical Self–Assessment' (Paper presented at State Supreme Court and Federal Court Judges' Conference, Hobart, 26 January 2009)

Klein, Christine A and Sandra B Zellmer, 'Mississippi River Stories: Lessons from a Century of Unnatural Disasters' (2007) 60 *SMU Law Review* 1471

Klumpes, Paul J M, 'The Financial Accountability of Australia's Medicare System: A Generational Accounting Analysis' (2001) 17 *Financial Accounting and Management* 171

Kohler, Claus, 'European Community Legislation in the Financial Services Sector' in Dennis Campbell and Russell E Carlisie (eds.), *The Transnational Person: Private Rights in the International Business Community* (Kluwer Law and Taxation Publishers, 1992)

Kolen, Bas et al 'Learning from French Experience with Storm Xynthia: Damages After a Flood' (HKI Consultants, Netherlands, September 2010)

Kousky, Carolyn and Erwann Michel-Kerjan, 'Examining Flood Insurance Claims in the United States: Six Key Findings' (2015) *Journal of Risk and Insurance* 1

Kunreuther, Howard, *Disaster Insurance Protection Public Policy Lessons* (John Wiley and Sons Incorporated, 1978)

Kunreuther, Howard, 'The Role of Insurance in Reducing Losses from Extreme Events: The Need for Public-Private Partnerships' (2015) 40 *The Geneva Papers on Risk and Insurance-Issues and Practice* 741

Kunreuther, Howard, 'Incentives for Mitigation Investment and more effective Risk Management: The Need for Public-Private Partnerships' (2001) 86 *Journal of Hazardous Materials* 171

Kunreuther, Howard, Cecilia Yen Koo and Erwann Michel-Kerjan, 'Insurability of (Mega) Terrorism Risk: Challenges and Perspectives' in OECD, *Policy Issues in Insurance: Terrorism Risk Insurance in OECD Countries* (OECD Publishing, 2005)

Laganiere, Benoit et al, 'The Role of Insurance Statistics in Australian Insurance Portfolio Management' (Paper presented at Institute of Actuaries of Australia 16th General Insurance Seminar, Coolum, Australia, 9–12 November 2008)

Lamel, Linda, 'State Regulation of the Insurance Industry' (1978) June Insurance Law Journal 336

Law Reform Commission, Insurance Contracts Report No 20 (1982)

Law Reform Committee Fifth Report, Conditions and Exceptions in Insurance Policies (London, 1956)

Le Goff, Jean, 'The Xynthia Storm in France' in Francois Gemenne, Pauline Brucker and Joshua Glasser, *The State of Environment Mitigation 2010* (IDDRI and the International Organisation for Migration, 2011)

Lewis, Richard, 'Insurers' Agreements Not to Enforce Strict Legal Rights: Bargaining with the Government and in the Shadow of the Law' (1985) 48 *The Modern Law Review* 275

Liedtke, Patrick M, Kai-Uwe Schanz and Walter R Stahel, 'Climate Change as a Major Risk Management Challenge: How to Engage the Global Insurance Industry' (Background Paper No 15, The Geneva Association- Risk and Insurance Economics)

Liès, Michael, 'The Essential Guide to Reinsurance' (Report no 1504240_10_en10/10,500en, Swiss RE, 2010)

Linnerooth-Bayer, Joanne and Anna Vari, 'Designing a Disaster Insurance Pool Participatory and Expert Approaches in Hungary and Turkey' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publishing, 2005)

Llasat, M C, et al, 'High Impact Floods and Flash Floods in Mediterranean Countries: The FLASH Preliminary Database' (2010) 23 *Advances in Geosciences* 47

Lloyds, 'Lloyds Global Underinsurance Report' (October 2012) <http://www.lloyds.com/~/media/Files/News%20and%20Insight/360%20Risk%20Insight/Gl obal Underinsurance Report 311012.pdf>

Lorimer, Rebecca, 'After the Flood' (2010) Proctor 24

Lu, Andrew, Jeremy Johnson and Chris Harris, 'Clearing the Muddied Waters of Flood Insurance' (2011) March *Australian Insurance Law Bulletin* 50

Lumbroso, D M and F Vincent, 'A Comparison of the Causes, Effects and Aftermaths of the Coastal Flooding of England in 1953 and France in 2010' (2011) 11 *Natural Hazards Earth System Sciences* 2321

Lynch, Andrew, 'Dissent: The Rewards and Risks of Judicial Disagreement in the High Court of Australia' (2003) 27 *Melbourne University Law Review* 724

Ma, Eva Q, et al, 'Australian Floods and their Impact on Insurance' in Christophe Courbage and Walter R Stahel, *The Geneva Reports- Risk and Insurance Research: Extreme Events in Insurance: 2011 Annus Horribilis* (Geneva Association, Geneva, 2012)

Machetti Bermejo, Ignacio and Alfonso Nájera Ibáñez, *Riesgos Catastróficos de la Naturaleza: Diversidad de Sistemas de Cobertura en el Mundo*, (Consorcio de Compensación de Seguros, 1994)

Machetti, Ignacio, 'Spanish Scheme: Last Changes Repercussions' (Paper presented at World Forum of Catastrophe Programs, Bucharest, 12–14 October 2010)

Machetti, Ignacio, 'The Spanish Experience in the Management of Extraordinary Risks, Including Terrorism' (Paper presented at Conference on Catastrophe Risks and Insurance, Paris, 22–23 November 2004)

Mackay, Keith, 'The Performance Framework of the Australian Government 1987 to 2011' (2011) 3 *OECD Journal on Budgeting* 1

Magnan, Serge, 'Catastrophe Insurance System in France' (1995) 20 The Geneva Report on Risk and Insurance 474

Majeed, A, R L Watts and D M Brown (eds.), *Distribution of Powers and Responsibilities in Federal Countries* (McGill-Queen's University Press, 2006)

Mann, Peter and Candice Lewis, Annotated Insurance Contracts Act (Lawbook Co, 4th ed, 2003)

Mansilla, Felix, 'Insurance: The Future Has Begun' (1994) 19 The Geneva Papers on Risk and Insurance 304

Mason, A J, 'The History of Flood Insurance in Australia', September 2011 http://www.ndir.gov.au/content/issuespapers/NDIRIssuesPaper.pdf>
Mason, Matthew and Katharine Haynes, 'Case Study: Cyclone Tracy Final Report' (RiskFrontiers,MacquarieUniversity,Sydney)<http://www.riskfrontiers.com/publications/Cyclone%20Tracy%20-%20Report</td>FINAL.pdf>

Mason, Anthony, 'Future Directions in Australian Law' (1987) 13 Monash University Law Review 149

McAneney, John et al, 'Government-sponsored natural disaster insurance pools: A view from down under' (2016) 15 *International Journal of Disaster Risk Reduction* 1

McCaffrey, Sarah, 'Thinking of Wildfires as a Natural Hazard' (2004) 17 Society and Natural Resources 509

McLaren, John, 'A Uniform Land Tax in Australia: What is the Potential for this to be a Reality post the Henry Tax Review?' (2014) 29 *Australian Tax Forum* 43

McLennan, John et al, 'Deep Survival: Experiences of some who lived when they might have died in the 7 February 2009 Bushfires' (2011) 26 *The Australian Journal of Emergency Management* 41

McNamara, Joe, 'The Commonwealth Response to Cyclone Tracy: Implications for Future Disasters' (2012) 27(2) *The Australian Journal of Emergency Management* 37

McNamara, P, 'Victorian Bushfire Appeal Fund 12 Month Report' (Report, Victorian Bushfire Appeal Fund and Australian Red Cross, 1 February 2010)

McNeicek, Roger V, With Skill and Determination: The Development of Volunteer Town Fire Brigades in Tasmania (Tasmanian Fire Service, 1993)

Mead, Patrick, 'The Effect of Section 54 of the Insurance Contracts Act 1984 and Proposals for Reform' (1997) 9 *Insurance Law Journal* 1

Mendelson, Danuta and Rachel Anne Carter, 'Catastrophic Loss and the Law: A Comparison between the Black Saturday Fires and the 2011 Queensland Floods and Cyclone Yasi' (2012) 31 (2) *University of Tasmania Law Review* 32

Mendelson, Danuta, 'Devaluation of a Constitutional Guarantee: The History of Section 51(xxiiiA) of the Commonwealth Constitution' (1999) 23 *Melbourne University Law Review* 308

Merkin, Robert, 'Reforming Insurance Law: Is there a Case for Reverse Transportation? A Report for the English and Scottish Law Commissions on the Australian Experience of Insurance Law Reform' (Report, 2011)

Merkin, Robert, 'The Christchurch Earthquakes Insurance and Reinsurance Issues' (2012) Vol 18 *Canterbury Law Review* 119

Michel-Kerjan, Erwann et al, 'Catastrophe Risk Models for Evaluating Disaster Risk Reduction Investments in Developing Countries' (Working Paper # 2012-07, The Wharton School - Risk Management and Decision Processes Centre, 2013)

Michel-Kerjan, Erwann, 'Insurance Against Natural Disasters: Do the French Have the Answers? Strengths and Limitations' (Ecole Polytechnique Centre National De La Recherche Scientifique, Cahier No 2001-007, Paris, August 2001)

Michel-Kerjan, Erwann, and Nathalie de Marcellis-Warin, 'Public Private Programs for Covering Extreme Events: The Impact of Information Distribution on Risk Sharing' (2006) 1 *Asia Pacific Journal of Risk and Insurance* 21

Mill, J S, On Liberty (Batoche Books, 1859)

Ministry of Consumer Affairs, Report of the Director of Consumer Affairs for the Year Ending 30 June 1978 (F. D. Atkinson, 1979)

Ministry of Consumer Affairs, Report of the Director of Consumer Affairs for the Year Ending 30 June 1977 (F. D. Atkinson, 1978)

Monti, Alberto, 'Disaster Risk Financing in APEC Economies: Supporting the Implementation of the G20/OECD Methodological Framework' (Document DAF/AS/WD(2013)15, OECD Publishing, 25 July 2013)

Monti, Alberto 'Good Practices in Disaster Risk Financing: Supporting the G20/ OECD Methodological Framework' (Document No: DAF/AS/WD(2013)6, OECD Publishing, 2013)

Monti, Alberto and Claudio Tagliapietra, 'Tracking Insurance Industry Exposures to CAT Risks and Quantifying Insured and Economic Losses in the Aftermath of Disaster Events: A Comparative Survey' (Paper presented at OECD International Network on the Financial Management of Large Scale Catastrophes Conference, Bangkok, 24–25 September 2009)

Monti, Alberto, 'Survey of Country Approaches' in OECD, *Financial Management of Large Scale Catastrophes* (OECD Publishing, 2008)

Mony, S V, 'Financial Education and Insurance' (Paper presented at the PFRDA- OECD Conference on Financial Education, Delhi, 21 September 2006)

Mortimer, Edward, Anthony Bergin and Rachel Carter, 'Sharing the Risk: Financing Australia's Disaster Resilience' (Australian Strategic Policy Institute, Canberra, February 2011)

Muir-Wood, Robert, 'The Christchurch Earthquakes of 2010 and 2011' in Christophe Courbage and Walter R. Stahel, *The Geneva Reports- Risk and Insurance Research: Extreme Events in Insurance: 2011 Annus Horribilis* (Geneva Association, Geneva, 2012)

Munich RE, 'Topics Geo: Natural Catastrophes 2011 Analysis, Assessment and Position' (Report, Münchener Rückversicherungs-Gesellschaft, Munich, 2012)

Murphy O'Connor, Patrick, 'Recent Trends in the Catastrophic Risk Insurance/Reinsurance Market' in in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (No 8, OECD Publishing, 2005)

Murray, John, 'The Review of the *Fire and Emergency Services Act 2005*–Pursuant to Section 149 of the *Fire and Emergencies Service Act 2005*' (March 2008)

Nakata, Hiroyuki, Yasuyuki Sawada and Mari Tanaka, 'Entropy Characterisation of Insurance Demand: Theory and Evidence' (Research Institute of Economy, Trade and Industry, Discussion Paper 10-E-009, February 2010)

Nanto, Dick K et al, 'Japan's 2011 Earthquake and Tsunami: Economic Effects and Implications for the United States' (Congressional Research Service, April 2011)

Natural Disaster Relief and Recovery Arrangements, Disaster Assist: Victorian Bushfires(January–February2009)—IndividualAssistance(22August2013)

<http://www.disasterassist.gov.au/PreviousDisasters/StateandTerritories/Pages/VIC/Victorian bushfires(JanuaryFebruary2009).aspx>

National Insurance Brokers Association, 'National Insurance Brokers Association Insurance Taxes Discussion Paper: What you need to know about taxes on insurance' (Report, National Brokers Association, May 2009)

Natural Disaster Insurance Review (Treasury), Parliament of Australia, *Inquiry into Flood Insurance and Related Matters* (2011)

New South Wales Government Fair-trading, 'The Consumer Movement: 1960 to 1970' <http://www.fairtrading.nsw.gov.au/Youth/School_projects/Brief_history_of_consumer_prot ection_in_NSW/The_consumer_movement.html>

New South Wales Legislative Council General Purpose Standing Committee No 5, *Wambelong Fire* (Report No 41, 20 February 2015)

New Zealand Government (Treasury), New Zealand's Future Natural Disaster Insurance Scheme: Proposed Changes to the Earthquake Commission Act 1993 (Discussion Document, July 2015)

New Zealand Law Commission, Some Insurance Law Problems (Report 46, 1998)

Newell, Robert, 'To Disclose or not to Disclose: The Duty of Utmost Good Faith and the Royal Commission Findings' (1993) *Insurance Law Journal* 212

Niall, Stephanie and Kevin Walsh, 'The Impact of Climate Change on Hailstorm in Southeast Australia' (2005) 25 International Journal of Climatology 1933

Nicholson, Margaret et al, 'Elements of a National Drought Policy: The Australian Context' (Report 11.18, ABARES Project 43050, ISSN 1447-3666, Canberra, July 2011)

Niekerk, J P Van, 'Fraudulent Insurance Claims' (2000) 12 South African Mercantile Law Journal 69

Niven, David, 'I'm Sorry, Your Policy Doesn't Cover That' (1998) 23 Alternative Law Journal 200

Novak, Julie, Kate Herbert and Sinclair Davidson, 'Business Bearing the Burden- The Size and Impact of State Government Business Taxes: The Institute of Public Affairs State Business Tax Calculator' (Institute of Public Affairs, December 2008)

O'Brien, Michael, 'Insurable Interest–Social Welfare and Semantics' (2006) 17 Insurance Law Journal 105

O'Connor, J, *Without Warning: One Woman's Story of Surviving Black Saturday* (Hardie Grant Books, 2010)

Ocqueteau, F, 'Etat, Compagnies D'Assurances Et Marche De La Protection Des Biens' (1995) 19 Déviance et Société 151

OECD, Disaster Risk Financing: A Global Survey of Practices and Challenges (OECD Publishing, 2015)

OECD, 'Policy Issues in Insurance: Financial Management of Large Scale Catastrophes' (Policy Paper No 12, OECD Publishing, 2008)

OECD, Disaster Risk Assessment and Risk Financing: An OECD Methodological Framework: Executive Summary (OECD Publishing, 2012)

OECD, Insurance Statistics Yearbook 1998–2007 (Annuaire des Statistiques D'Assurance 1998–2007) (OECD Publishing, 2009)

OECD, 'Expanding Systemic Risks: The Consequences for Insurers, Enterprises and the Role of Governments' (Directorate for Financial, Fiscal and Enterprise Affairs Insurance Committee, Doc DAFFE/AS/WD(2001)23, OECD Publishing, 13–14 December 2001)

OECD, Disaster Risk Financing in APEC Economies: Practices and Challenges (OECD Publishing, 2013)

OECD, Managing Risks in Agriculture: Policy Assessment and Design (OECD Publishing, 2011)

OECD, Policies Issues in Insurance: Terrorism Risk Insurance in OECD Countries (OECD Publishing, 2005)

OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Report No 8, OECD Publishing, 2005)

OECD, Policy Issues in Insurance: Financial Management of Large- Scale Catastrophes (OECD Report No 12, 2008)

Oloruntoba, Richard, 'An Analysis of the Cyclone Larry Emergency Relief Chain: Some Key Success Factors' (2010) 126 *International Journal of Production Economics* 85

Ozawa, Shiro, 'Impact of the Great East Japan Earthquake on the Reinsurance Market' (Paper presented at 9th Conference on Catastrophe Insurance in Asia, Beijing, 8 June 2011)

Palmer, Carolyn, 'Flood, Fire and Famine: Tax Policy Lessons from the Australian Responses to Natural Disasters' (Working Paper 15/2004, Victorian University of Wellington, October 2014)

Papon, Thomas, 'The Effect of Pre-Commitment and Past Experience on Insurance Choices: An Experimental Study' (2008) 33 *The Geneva Risk and Insurance Review* 47

Parisi, Vincent R, 'Floodplain Management and Mitigation in France' (Paper presented at Meeting of the Association of State Floodplain Managers and FEMA Region V, Paris) http://www.floods.org/PDF/Paris_Meeting_Summary.pdf>

Paudel, Youbaraj, 'A Comparative Study of Public Private Catastrophe Insurance Systems: Lessons from Current Practices' (2012) 37 *The Geneva Papers on Risk and Insurance-Issues and Practice* 257

Pawson, Ray, Geoff Wong and Lesley Owen, 'Known Knowns, Known Unknowns, Unknown Unknowns: The Predicament of Evidence- Based Policy' (2011) 32 *American Journal of Evaluation* 518

Pearson, Gail, 'The Place of Codes of Conduct in Regulating Financial Services' (2006) 15 *Griffith Law Review* 333

Pearson, Robin, 'Moral Hazard and the Assessment of Insurance Risk in Eighteenth and early Nineteenth Century Britain' (2002) 76 *The Business History Review* 1

Pentony, Brendan, 'Protection of Legal Interests of the Insured in Australia and China: A Task Not Yet Complete? The Australian Perspective' (1997/1998) 4 *Canberra Law Review* 201

Pettersen, Noel, 'Fire Services Levy and Insurance Discussion Paper' (Discussion Paper, National Insurance Brokers Association, 2009) http://www.niba.com.au/html/37589.cfm

Pfeffer, Irving, 'Residual Risks in Europe' (1974) 41 The Journal of Risk and Insurance 41

Pfennigstorf, Werner, 'Government Risk Management in Public Policy and Legislation: Problems and Opinions' (1977) 2 *American Bar Foundation Research Journal* 255

Phaup, Marvin and Charlotte Kirschner, 'Budgeting for Disaster: Focusing on the Good Times' (2010) 10 *OECD Journal on Budgeting* 1

Pons Pons, Jeronia, 'A History of Insurance Companies in Spain Until 1936' in *Instituto de Ciencias de Seguro: Encuentro Internacional Sobre la Historia del Seguro* (Fundación Mapfre, Madrid, 2010)

Posner, Richard A, Catastrophe: Risk and Response (Oxford University Press, New York, 2004)

Price Waterhouse Coopers, 'Thought Leadership: Effective Disaster Recovery- What Lessons Can we learn from Australia's Black Saturday Bushfires' (Report, July 2010) <http://www.pwc.com.au/industry/government/assets/Effective-Disaster-Recovery-Jul10.pdf>

Priest, George L, 'The Government, the Market and the Problem of Catastrophic Loss' (1996) 12 *Journal of Risk and Uncertainty* 219

Property Council of Australia (Victorian Division), *Fire Services Funding Review (A Submission Prepared by the Property Council of Australia)* (2003)

Public Accounts Committee, Parliament of New South Wales, *Public Accounts Committee-Review of Fire Service Funding* (2004)

Pursell, Gary, 'Australian Non-Life Insurance Since 1909' [1968] December *The Economic Record* 438 Pursell, Gary, 'Rate Control and Government Competition in Australian Non-Life Insurance' (1967) 34 *The Journal of Risk and Insurance* 237.

Pynt, Greg, Australian Insurance Law: A First Reference (LexisNexis Butterworths, 2nd ed, 2008)

Pynt, Greg, 'Everything You Always Wanted to Know About s 54 but were Afraid to Ask' (2010) 21 *Insurance Law Journal* 197

Queensland Fire and Rescue Service, 'Urban Fire Levy Administration Procedures Manual', Version 4.0, November 2009

Queensland Flood Commission, Inquiry, Inquiry into Flood Insurance (2011)

Queensland Government, *Disaster Finance Arrangements* (April 2011) <www.disaster.qld.gov.au/support>

Quick, John and Robert Randolph Garran, *The Annotated Constitution of the Australian Commonwealth (Part 1–1901)* (Australian Book Company, 1901)

Quinto, Cornel, Insurance Systems in Times of Climate Change: Insurance of Buildings Against Natural Hazards (Springer, 2009)

Raggatt, Toby, 'Insurance Bites', Townsville Post (Townsville), 17 November 2011

Ratnapala, Suri and Jonathan Crowe, *Australian Constitutional Law: Foundations and Theory* (Oxford University Press, 3rd ed, 2012)

Reeves, Andrew, 'Political Disaster: Unilateral Powers, Electoral Incentives and Presidential Disaster Declarations' (2011) 73(4) *The Journal of Politics* 1142

Reichelt, Carl, 'Queensland Disaster Relief and Recovery Arrangements' (Disaster Relief and Recovery Arrangements, Queensland Government, Emergency Management Queensland, 2007–2008)

Reichenmiller, Peter et al, 'Weathering Climate Change: Insurance Solutions for More Resilient Communities' (Report, Swiss RE, 2010) Reinholtd, Samantha, 'Managing Change within the Emergency Services to Ensure the Long Term Viability of Volunteerism' (1999) 14 *Australian Journal of Emergency Management* 6

Relton, Francis Boyer, An Account of the Fire Insurance Companies, Associations, Institutions, Projects and Schemes Established and Projected in Great Britain and Ireland During the 17th and 18th Centuries including the Sun Fire Office also of Charles Povey the projector of that office, his writing and schemes (Swan Sonnenschein & Co, 1893)

Renda-Tanali, Irmak and Francois Mancebo, 'French Emergency Management System: Moving Towards an Integrated Risk Management Policy' in FEMA Higher Education Comparative Emergency Management Book (FEMA, 2010)

Roche, Kevin M et al 'Policy Options for Managing Flood Risk' (2010) 9(4) Environmental Hazards 369

Roxon, Nicola and Peter Ryan, *National Strategy for Disaster Resilience: Companion Booklet* (Attorney-General's Department, Canberra, 2012)

Rubio–Misas, Maria, 'The Structure, Conduct and Performance of the Spanish Insurance Industry' in David J Cummins and Bertrand Venard (eds.), *Handbook of International Insurance: Between Global Dynamics and Local Contingencies* (Springer, 2007)

Salvador Coderch, Pablo, Sonia Ramos Gonzalez and Rosa Mila Rafael, 'Catastrophic Harms: Insurance and Liability: General Report' in Karen B Brown and David V Snyder (eds.), *General Reports of the XVIIIth Congress of the International Academy of Comparative Law/Rapports Généraux du XVIIIeme Congrès de L'Académie Internationale de Droit* Comparé (Springer, 2012)

Sánchez Calero, Fernando (ed.), *Ley de Contrato de Seguro Comentarios a la Ley 50/1980 de 8 de Octubre, y a sus Modificaciones* (Thomson, 2005)

Sánchez, Fernando, 'Comentario al Art 44' in Fernando Sánchez Calero (ed.), *Ley de Contrato de Seguro Comentarios a la Ley 50/1980 de 8 de Octubre, y a sus Modificaciones* (Thomson, 2005)

Scawthorn, Charles, 'Lessons to be Learnt from Recent Catastrophe' (Paper presented at 9th Conference on Catastrophe Insurance in Asia, Beijing, 8 June 2011)

Schuster, S, et al, 'Characteristics of the 14 April 1999 Sydney hailstorm based on ground observations, weather radar, insurance data and emergency calls' (2005) 5 *Natural Hazards and Earth System Sciences* 613

Scotford, Tony, 'The Insurer's Duty of Utmost Good Faith- Implications for Australian Insurers' (1988) 1 *Insurance Law Journal* 82

Select Committee, House of Commons, Parliament of Great Britain, *Report from the Select Committee on Fires in the Metropolis; Together with the Proceedings of the Committee, Minutes of Evidence* (1862)

Select Committee, House of Commons, Parliament of Great Britain, *Report from the Select Committee on Fires Protection Together with the Proceedings of the Committee, Minutes of Evidence and Appendix* (1867)

Select Committee, Victorian Legislative Assembly, *Report of the Select Committee upon the Fire Brigade System* (1885)

Senate Economic References Committee, Parliament of Australia, *The Asset Insurance* Arrangements of Australian State Governments (2011)

Senate Economics Legislation Committee, Parliament of Australia, Canberra, 11 March 2011 (Richard Denniss, Executive Director of Australia Institute)

Senate Standing Committee on Environment and Communications, Parliament of Australia, Recent Trends and Preparedness for Extreme Weather Events (2013)

Serra, Anna, David J Tabara and Illan Chabay, 'Assessing the Role of Vertical and Horizontal Communication in Disaster Risk Reduction Learning and Planning: The case of the Spanish Tous dam-break, 1982' (Report: United Nations Integrated Risk Governance Project, 2011)

Siddique, Noor Alam, 'Rhetoric and Reality of Public-Private Partnerships: Learning Points from the Australian Experience' (2011) 19(2) *Asian Journal of Political Science* 129

Silver, Nick and Andrew Dlugolecki, 'The Insurability of the Impacts of Climate Change' (Paper presented at GIRO Conference- Actuarial Models Getting the Balance Right, Edinburgh, October 2009)

Slovic, Paul and Elke U Weber, 'Perception of Risk Posed by Extreme Events' (Paper presented at Risk Management Strategies in an Uncertain World Conference, New York, April 2002)

Slovic, Paul, 'Perception of Risk' (1987) 236 Science 280

Slovic, Paul, 'Trust, Emotion, Sex, Politics and Science: Surveying the Risk-Assessment Based Battlefield' (1999) 19 *Risk Analysis* 689

Soyer, B, 'Warranties in Commercial Insurance Contracts- Is the Time Ripe for a Reconstruction of their Contractual Status?' (2009) 25 *Journal of Contract Law* 168

Stewart, Mark G, Xiaoming Wang and Gary R Willgoose, 'Indirect Cost and Benefit Assessment of Climate Adaptation Strategies for Extreme Wind Events in Queensland' (CSIRO, Canberra, May 2012)

Stone, Gary K, 'A Trend in Complaints Processed by State Insurance Departments' (1967) 34 *The Journal of Risk and Insurance* 231

Strudwick, Daniel, 'Ease Our Insurance Pain', *The Cairns Post* (Cairns, Australia) 9 November 2011

Sullivan, Karl, 'Policy Implications of Future Increases in Extreme Weather Events due to Climate Change' (2008) 23 *The Australian Journal of Emergency Management* 37

Suncorp, Submission No SUBM.002.032.0031_R to Victorian Royal Commission, *Victorian Bushfires Royal Commission*, 18 May 2009 <http://www.royalcommission.vic.gov.au/Submissions/SubmissionDocuments/SUBM-002-032-0007 R>

Sutton, Kenneth, Insurance Law in Australia (The Law Book Company Limited, 2nd ed, 1991)

Swaby, Gary, 'Insurance Law: Fit for Purpose in the Twenty- First Century?' (2010) 52 International Journal of Law and Management 21

Swisher, Peter Nash, 'Judicial Rationales in Insurance Law: Dusting Off the Formal for the Function' (1991) 42 *Ohio state Law Journal* 1037

Tarr, A, 'The Insurance Contracts Act Revisited' (1991) 4 Insurance Law Journal 216

Tarr, Anthony A and Julie-Anne Tarr, 'The Insured's Non-Disclosure in the Formation of Insurance Contracts: A Comparative Perspective' (2001) 50 *International and Comparative Law Quarterly* 577

Tarr, Julie-Anne, 'Disclosure in Insurance Law: Contemporary and Historical Economic Considerations' (2001) 6 *International Trade and Business Law* 209

Tarr, Julie-Anne, 'Floods, Earthquakes and Insurance Coverage- Issues, Problems and Solutions' (2011) 39 *Australian Business Law Review* 111

Tate, Patricia, 'What is state insurance? Commentary on David Bennett QC's Paper' (2007) 28 (1) *Adelaide Law Review* 95

Thomas, Melanie et al, 'Resilience to Climate Change Impacts: A Review of Flood Mitigation Policy in Queensland, Australia' (2011) 26 *The Australian Journal of Emergency Management* 8

Thornton, R, 'Short Communication on Research Response to the Black Saturday (7th February 2009) Victorian Bushfires, Australia' (2010) 47 *Fire Technology* 295

Tindall, Jon, 'Securitise This: The Structuring, Pricing and Risk Management Applications of Insurance Securitisation' (Paper presented at Institute of Insurance Actuaries of Australia Biennial Convention 2011, Sydney, 11–13 April 2011)

Toljar, S J, 'The Contractual Concept of Condition' (1953) 69 Law Quarterly Review 485

Tooth, Richard and George Baker, 'The Non- Insured: Who, Why and Trends' (Insurance Council of Australia, 2007)

Toomey, Elizabeth and Jeremy Finn, 'What if We Found Legal Issues Arising from the Canterbury Earthquakes?' (Paper presented at 'What If' University of Canterbury Lecture Series, Christchurch, New Zealand, 18 July 2012) https://youtu.be/iDYXvFQ6nH8

Tooth, Richard, 'An Analysis of the Demand for House and Contents Insurance in Australia: Insurance Council of Australia- Industry Focus' (Insurance Council of Australia, 2007) Treasury, 'Key Fact Sheet for Home Building and Home Contents Insurance Policies' (Regulatory Impact Statement, Treasury 2012)

Treasury, 'Treasury Managed Fund- Scheme Structure including the Contract of Coverage' (Contract Version 3.0, New South Wales Self Insurance Corporation, December 2010)

Treasury, Parliament of Australia, Terrorism Insurance Act Review: 2012 (2012)

Trebilcock, Clive, *Phoenix Assurance and the Development of British Insurance* (Cambridge University Press, 1998)

Trebilcock, M J, 'Consumer Protection in the Affluent Society' (1970) 16 McGill Law Journal 263

Turvey, K C, Insurance Law in Australia (LBC Information Services, 3rd ed, 1999)

Vallet, Suzanne, 'The French Experience in the Management and Compensation of Large Scale Disasters' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publication, 2005)

Van den Honert, Robin C and John McAneney, 'The 2011 Brisbane Floods: Causes, Impacts and Implications' (2011) 3 *Water* 1149

Van Niekerk, J P, 'Fraudulent Insurance Claims' (2000) 12 South African Mercantile Law Journal 69

Van Schoubroeck, C, 'Legislation and Practice Concerning Natural Disasters and Insurance in a Number of European Countries' (1997) 22 *The Geneva Papers on Risk and Insurance* 238

Vance, W R, 'The History of the Development of the Warranty in Insurance Law' (1911) 20 *Yale Law Journal* 523

Victoria, 2009 Victorian Bushfires Royal Commission, Final Report (2010)

Victoria, Green Paper- Fire Services and the Non Insured, Parliamentary Paper (2009)

Victoria, Parliamentary Debates, Legislative Assembly, 10 November 2009

Victoria, Parliamentary Debates, House of Representatives, 2 December 1936

Victorian Bushfire Reconstruction and Recovery Authority, '24 Month Report' (Report, Victorian Bushfire Reconstruction and Recovery Authority, February 2011)

Victorian Bushfire Reconstruction and Recovery Authority, *100 Day Report* (Report, Victorian Bushfire Reconstruction and Recovery Authority, 2009)

Victorian Government, National Strategy for Disaster Resilience <http://www.dpc.vic.gov.au>

Viscusi, W Kip and Richard Zeckhauser, 'Addressing Catastrophic Risks: Disparate Anatomies Require Tailored Therapies' (Paper presented at HKS Faculty Research Working Paper Series RWP11-045, John F Kennedy School of Government, Harvard University, 2011)

Von Ungern-Sternberg, Thomas, 'State Intervention on the Market for Natural Damage Insurance in Europe' (CESifo Working Paper No 1067, October 2003) (Paper presented at Venice Summer Institute Workshop on Insurance, Venice, July 2003)

Walford, Cornelius, 'Fire and Insurance Considered under their historical, financial, statistical and national aspects' (1877) 40(3) *Journal of the Statistical Society of London* 347

Walker, George, 'Comparison of the Impacts of Cyclone Tracy and the Newcastle Earthquake on the Australian Building and Insurance Industries' (Paper presented at Australian Earthquake Engineering Conference, 2009) http://www.aees.org.au/wp-content/uploads/2013/11/Walker.pdf>

Walker, George R, 'A Review of the Impact of Cyclone Tracy on Building Regulations and Insurance' (2010) 60 *Australian Meteorological and Oceanographic Journal* 199

Walker, George R, 'Report on Cyclone Tracy–Effect on Buildings' (Department of Housing and Construction, Commonwealth Parliament, March 1975)

Walters, K J, 'The Reconstruction of Darwin after Cyclone Tracy' (1978) 2(1) Disasters 59

Wang, Di, 'Current Issues in Insurance Law: Quantification of Prejudice under s 54 of the Insurance Contracts Act 1984 (Cth)' (2002) 14 Insurance Law Journal 1

Warren, Neil, 'Intergovernmental Fiscal Arrangements as a Constraint on State Tax Reform under Henry' (Paper presented at Conference on Australia's Future Tax System: A Post-Henry Review, Sydney, 21–23 June 2010)

Warwick, Stephen, 'Impact of the Australian/ New Zealand Catastrophes- the Market's Reaction and the Lessons Learned from Reinsurance Industry' (Paper presented at 9th Conference on Catastrophe Insurance in Asia, Beijing, 9 June 2011)

Waters, Denis, Bob Cechet, and Craig Arthur, 'Role of Exposure in Projected Residential Building Cyclone Risk for the Australian Region' (2010) 11 *Earth and Environmental Science* 1

Webb, Duncan, 'Playing Dice with God: Insurance in a Climate of Change' (2008) 19 Insurance Law Journal 58

Wells, Celia, Modern Legal Studies- Negotiating Tragedy: Law and Disasters (Sweet and Maxwell, 1995)

Westall, Oliver, *The Historian and the Business of Insurance* (Manchester University Press, 1984)

Western Australia, Parliamentary Debates, Legislative Assembly, 25 September 2002

Whittaker, Joshua and John Handmer, 'Community Bushfire Safety: A Review of Post Black Saturday Research' (2010) 25 *The Australian Journal of Emergency Management* 7

Whittaker, Joshua et al 'Research Results from February 7th Victorian Fires Second Report on: Human Behaviour and Community Safety' (Report from Household Mail Survey, Bushfire CRC, January 2010)

Wickens, P C, *Insurance Institutes in Australia 1884–1984: A Century of Service* (A H Massina & Company in conjunction with the Australian Insurance Institute, 1984)

Wilde, Sally, Life under the Bells: A History of the Metropolitan Fire Brigade, Melbourne 1891–1991 (Longman Cheshire, 1991)

Wilkins, Michael, 'The Need for a Multi- Level Approach to Climate Change- An Australian Perspective' (2010) 35 *The Geneva Papers: The International Association for the Study of Insurance Economics* 336

Wilkins, Mike, 'Building Australia's Resilience to Natural Disaster' (Paper Presented at Address to CEDA, Sydney, 11 April 2011) http://www.cgu.com.au/cgu/news-media/cgu-insights/Pages/BuildingAustralia'sresiliencetonaturaldisaster.aspx

Williams, George et al, Australian Constitutional Law and Theory: Commentary and Materials (The Federation Press, 6th ed, 2014)

Williams, John M and Clement Macintyre 'Commonwealth of Australia' in A Majeed, R L Watts and D M Brown (eds.), *Distribution of Powers and Responsibilities in Federal Countries* (McGill-Queen's University Press, 2006)

Williams, Toni, 'Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services' (2007) 29 *Law and Policy* 226

Willis Re, *Managing Extremes: 1st View–Market Reshaping a Reality* (Willis Re Report, London, January 2015)

Wilson, David I, Nick Pelham and Colin F Duffield, 'A Review of Australian PPP Governance Structures' (2010) 11 (2) *Journal of Financial Management of Property and Construction* 198

Wilson, R G and A L Mackley, 'How much did the English Country House Cost to Build, 1660–1880?' (1999) 52 *The Economic History Review* 436

Wood, Kenneth A, *Ready Aye Ready: A History of the Volunteer Fire Brigade Movement of Western Australia* (Western Australian Volunteer Fire Brigades' Association (Inc.) and the League of Champion Firemen, 1989)

Woodhill, Samantha, 'Earthquake Class Action goes to High Court' (23 November 2015) New Zealand Lawyer (online) http://www.nzlawyermagazine.co.nz/news/earthquake-class-action-goes-to-high-court-208842.aspx

Wright, Brian, Insurance Fire Brigades 1680–1929: The Birth of the British Fire Service (Tempus, 2008)

Wright, Michael, 'Angry Disputings- Violence, Strikes and Demarcation: Relations Between Paid and Unpaid Fire-fighters in Sydney Prior to 1884' (Paper presented at the Past Before Us- The Ninth National Labour History Conference, University of Sydney, 30 June –2 July 2005)

Wright, Roy E, 'Privatization / Commercial Opportunity' (Paper presented at Reinsurance Association of America Cat Risk Management Conference 2016: Pragmatic Decisions-Imprecise Data Points, Orlando, 17 February 2016)

Writer, Larry, The Australian Book of Disasters (Murdoch Books Australia, 2011)

Yazici, S, 'The Turkish Catastrophe Insurance Pool (TCIP) and Compulsory Earthquake Insurance Scheme' in OECD, *Policy Issues in Insurance: Catastrophic Risk and Insurance* (OECD Publication, 2005)

Yeo, H Y, 'Of Reciprocity and Remedies- Duty of Disclosure in Insurance Contracts' (1991) 11 *Legal Studies* 131

Young, John, 'Influence of the Minority' (1978) 52 Law Institute Journal 500

Yucemen, M S, 'Probabilistic Assessment of Earthquake Insurance Rates for Turkey' (2005) 35 *Natural Hazards* 291

Cases: Australia

Adeels Palace Pty Ltd v Moubarak; Adeels Palace Pty Ltd v Bou Najem [2009] HCA 48 Advance (NSW) Insurance Agencies Pty Ltd v Matthews (1989) 166 CLR 606 Air Caledonie International v Commonwealth (1988) 165 CLR 462 Airservices Australia v Canada Airlines International Ltd [1999] HCA 62 Akai Pty Ltd v People's Insurance Co Ltd (1996) 188 CLR 418 Allianz Australia Insurance Ltd v GSF Australia Pty [2005] FCA 69 Antico v Health Fielding Australia Pty Ltd (1997) 188 CLR 652 Attorney-General (Victoria) v Andrews [2007] HCA 9 Attorney-General (Victoria) v Commonwealth (1945) 71 CLR 237

Australian Conservation Foundation Incorporated v Commonwealth (1980) 146 CLR 493

Australian National Airways Pty Ltd v Commonwealth (1945) 71 CLR 29

Australian Tape Manufacturing Association Ltd v Commonwealth (1993) 176 CLR 480

Avon House Ltd v Cornhill Insurance Co Ltd (1980) 1 ANZ Insurance Cases 60-429

Babatsikos v Care Owners Mutual Insurance Company Limited [1970] VR 297

Bank of New South Wales v the Commonwealth (1948) 76 CLR 1

Barrett v State of South Australia (1994) 62 SASR 208

Boynton v Monarch Life Insurance Co of New Zealand Ltd [1973] 1 NZLR 606

Brian Reginald Pape v Commissioner of Taxation [2009] HCA 23

British Medical Association v Commonwealth (1949) 79 CLR 201

British Traders' Insurance Co Ltd v Monson (1964) 111 CLR 86

Browns Transport Pty Ltd v Kropp (1958) 100 CLR 117

Buckee v The Commonwealth of Australia [2014] FCA 242

Caff v McHenland Nominees Pty Ltd (trading as Confol Containers) (1984) 3 ANZ Insurance Cases 60-575

Calder v Batavia Sea & Fire Insurance Co Ltd [1932] SASR 46

Carnofsky v New Zealand Insurance Company (1893) 14 NSW 102

CGU Insurance Ltd v AMP Financial Planning Pty Ltd (2007) 237 ALR 420

Chapman v Greater Midwest Insurance Pty Ltd [1981] 1 NSWLR 86

CJ Burland Ltd v Metropolitan Meat Industry Board (1968) 120 CLR 400

Commonwealth v Tasmania (1983) 158 CLR 1

Commissioner of Taxation of the Commonwealth of Australia v Citylink Melbourne Limited (2006) 228 CLR 1

Condogianis v The Guardian Assurance Company Limited (1921) 29 CLR 341

Crane v The Colonial Mutual Fire Insurance Company Ltd [1920] VLR 473

Darrel Lea (Vic) Pty Ltd v Union Assurance Society of Australia Limited [1969] VR 401

Davis v Commonwealth (1988) 166 CLR 79

Davjoyda Estates Pty Ltd v National Insurance Company of New Zealand Limited (1965) 69 SR (NSW) 381

Deaves and Another v CML Fire and General Insurance Co Ltd (1979) 143 CLR 24

Delphin v Lumley General Insurance Ltd (1989) 5 ANZ Ins Cas 60-941

Distillers Co Bio-Chemicals (Australia) Pty Ltd v Ajax Insurance Co Ltd (1974) 48 ALJR 136

District Registry, General Division NT NO G16 of 1979 (23 November 1979)

Dr. Gregory Moore v The National Mutual Life Association of Australasia Ltd [2011] NSWSC 416

Elilade Pty Ltd v Nonpareil Pty Ltd [2002] FCA 909

Elston v Phoenix Prudential Australia Ltd [1987] 2 Qd R 354

FAI General Insurance Co Ltd v Australian Hospital Care Pty Ltd (2001) 204 CLR 641

FAI Insurance Ltd v Custom Credit Corporation Ltd (Appeal) (Federal Court of Australia, Northern Territory District Registry, General Division NT NO G16 of 1979, 23 November 1979)

Ferrcom Pty Ltd v Commercial Union Assurance Co of Australia Ltd (1993) 176 CLR 332

Gamer's Motor Centre (Newcastle) v Natwest Wholesale Australia Pty Ltd (1987) 163 CLR 236

General Practitioners Society v Commonwealth (1980) 145 CLR 532

Georgiadis v Australian & Overseas Telecommunications Corporation (1994) 179 CLR 297

Goldman v Southern Union General Insurance Co of Australasia Ltd [1930] SASR 274

Guardian Assurance Co Ltd v Condogianis [1919] HCA 33

Hams & Others v CGU Insurance Limited [2002] NSWSC 273

Hanley v Pacific Fire and Marine Insurance Company (1893) 14 NSW 224

Harper and Another v Zurich Australian Insurance Ltd and Others (1987) 4 ANZ Insurance Cases 60-779

Health Insurance Commission v Peverill (1994) 179 CLR 226

Hiddle v National Fire and Marine Insurance Company (1896) 17 NSW 46

Huddart Parker Ltd v Commonwealth (1931) 44 CLR 492

In re Judiciary and Navigation Acts (1921) 29 CLR 257

Ingot Capital Investments Pty Ltd v Macquarie Equity Capital Markets Ltd (2008) 252 ALR 659

Johnston v Endeavour Energy [2015] NSWSC 1117

Johnson v Guardian Assurance Co Ltd (1931) 31 SR (NSW) 386

Jumna Khan v Bankers and Traders Insurance Company Limited (1925) 37 CLR 451

Kartinyeri v Commonwealth (1998) 195 CLR 337

Kazacos v Fire & All Risks Insurance Co Ltd (1970) 92 WN (NSW) 397

Kelly v New Zealand Insurance Co Ltd (1996) 9 ANZ Insurance Cases 61-317

Kenny v State of South Australia (1987) 46 SASR 268

Khoury v Government Insurance Office (NSW) (1984) 165 CLR 622

Kolokythas v Federation Insurance Ltd [1980] 2 NSWLR 663

Landmark Group Pty Ltd v Lane Cove Council [2011] NSWLEC 1245

Logan Downs Pty Ltd v Commissioner of Taxation (1965) 112 CLR 177

Lumley General Insurance Ltd v Vintex Pty Ltd (1991) 24 NSWLR 652

Manufacturers Mutual Insurance Limited v Stargift Pty Ltd (1984) 3 ANZ Insurance Cases 60-615

Matthews v Chicory Marketing Board (Victoria) (1938) 60 CLR 265

Matthew v SPI Electricity (Ruling Number 16) [2013] VSC 74

Mayne Nickless Ltd v Pegler [1974] 1 NSWLR 228

Melbourne Steamship Limited v Moorhead (1912) 15 CLR 133

Mercieca v SPI Electricity [2012] VSC 204

National Mutual Life Assurance of Australasia Ltd v Chandler (1991) 6 ANZ Insurance Cases 61-053

Newborn v City Mutual Life Assurance Society Ltd (1935) 52 CLR 723

NRG Victory Australia Ltd v Hudson [2003] WASCA 291

NRMA Insurance Ltd v Tatt and Another (1989) 94 FLR 339

Ortner v Automobile Insurance Co of Australia Ltd [1930] VLR 194

Osborne v Commonwealth (1911) 12 CLR 321

Pape v Commissioner of Taxation (2009) 238 CLR 1

Pendlebury v Colonial Mutual Life Assurance Society Ltd [1912] HCA 9

Perry v Powercor Australia Ltd [2012] VSC 113

Place v Powercor Australia Ltd [2013] VSC 6

Plasteel Windows Australia Pty Limited v CE Heath Underwriting Agencies Pty Limited (1989) 5 ANZ Ins Cas 60-926

R v Compensation Court of Western Australia (1990) 72 LGRA 1

R & R Fazzolari v Parramatta City Council [2009] 237 CLR 603

Repatriation Commission v Malady [2006] FMCA 1050

Revenue Ruling Pub-DT-2001-4

Rodriguez & Sons Pty Ltd v Queensland Bulk Water Supply Authority t/as Sequwater (No 4) [2015] NSWSC 1352

Rodriguez & Sons Pty Ltd v Queensland Bulk Water Supply Authority Proceeding No 2014/200854

<http://www.supremecourt.justice.nsw.gov.au/supremecourt/sco2_class_action/floods.html>

Ronald Williams v The Commonwealth of Australia and Others [2012] HCA 23

Roumeli Food Stores (NSW) Pty Ltd v New India Assurance Co Ltd [1972] 1 NSWLR 227

Ruddock v Vadarlis (2001) 110 FCR 491

Saunders v Queensland Insurance Co Ltd (1931) 45 CLR 557

Smith v Associated Dominions Assurance Society Pty Ltd (1956) 95 CLR 381

Southern Cross Assurance Co Ltd v Australian Provincial Assurance Co (1939) 39 SR (NSW) 174

Street v Queensland Bar Association (1989) 168 CLR 461

The Phoenix Assurance Company Limited v Berechree (1906) 3 CLR 946

Thomas v Powercor Australia Ltd [2011] VSC 614

Timothy Andrew Burnard Muggleston v National Mutual Life Association of Australasia Ltd [2004] NSWSC 913

To v Australian Associated Motor Insurers Ltd [2001] VSCA 48

Todaro v Farmers & Graziers Co-operative Co Ltd [1982] VR 73 Truran Earthmovers Pty Ltd v Norwich Union Fire Insurance Society (1976) 17 SASR 1 Twenty-first Maylux Pty Ltd v Mercantile Mutual Insurance (Aust) Ltd [1990] VR 919 Tyndall Life Insurance Co Limited v Chisholm [1999] SASC 445 Victoria v Commonwealth (AAP Case) (1975) 134 CLR 338 Victorian WorkCover Authority v Andrews [2005] FCA 94 Von Braun v Australian Associated Motor Insurers Limited (1998) 135 ACTR 1 Western Australian Bank v Royal Insurance Co (1908) 5 CLR 533 Western Australian Insurance Co Ltd v Dayton (1924) 35 CLR 355 Yong Jun Qin v The Minister for Immigration and Ethnic Affairs (1997) 75 FCR 155 Ziel Nominees Pty Ltd v VACC Insurance Co Ltd (1975) 180 CLR 173

Cases: New Zealand

Boynton v Monarch Life Insurance Co of New Zealand Ltd [1973] 1 NZLR 606 Earthquake Commission v Insurance Council of New Zealand [2014] NZHC 3138 FAME Insurance Co Ltd v McFadyen [1961] NZLR 1070 Kraal v Earthquake Commission [2014] NZHC 919 Lee v Earthquake Commission [2015] NZHC 8 Quake Outcasts v Minister for Canterbury Earthquake Recovery [2015] NZSC 27 Quake Outcasts v Minister for Canterbury Earthquake Recovery [2016] NZHC 1959 Re Earthquake Commission [2011] 3 NZLR 695 Ryde v Earthquake Commission [2014] NZHC 2763 South British Insurance Co Ltd v Irwin [1954] NZLR 562

Whiting v Earthquake Commission [2014] NZHC 1736

Cases: Spain

Ley v Reglamento de Consorcio de Compensación de Seguros (Madrid, Ministerio de Hacienda, Dirección General de Seguros, 1967)

Cases: United Kingdom

Amin Raheed Shipping Corporation Appellants v Kuwait Insurance Company [1984] AC 50

Anderson v Fitzgerald (1853) 4 HCL 510

Asfar & Co v Blundell [1896] 1 QB 123

Associated Oil Carriers Limited v Union Insurance Society of Canton Limited [1917] 2 KB 184

Attorney-General v De Keyser's Royal Hotel Ltd [1920] AC 508

Banque Financière de la cite SA v Westgate Insurance Co Ltd [1991] 2 AC 249

Banque Keyser Ullmann SA v Skandia (UK) Insurance Co Ltd [1987] 2 WLR 1300

Bates v Hewitt (1867) LR 2 QB 595

Berger v Pollock [1973] 2 Lloyd's Rep 442

Biggar v Rock Life Assurance Company (1901) 1 KB 517

British and Foreign Marine Insurance Company Limited v Samuel Sanday & Co [1916] 1 AC 650

Carter v Boehm [1766] 97 Eng Rep 1162

Case 15- Anonymous [1722] 24 Eng Rep 646

Castellain v Preston (1883) 11 QBD 380

Central Control Board (Liquor Traffic) v Cannon Brewery Co Ltd [1919] AC 744

Clough v London and North Western Railway Co (1871) LR 7 Exch 26

Container Transport International Incorporated v Oceanus Mutual Underwriting Association (Bermuda) Ltd [1984] 1 Lloyd's Rep 476

Crowley v Cohen (1832) 110 Eng Rep 172

Darwen v Southern Cross Assurance Co Ltd [1936] St R Qd 105

Dawson Ltd v Bonnin [1922] 2 AC 413

Deek v Perry (1889) 14 App Cas 337

Donoghue v Stevenson [1932] AC 562

Elston v Phoenix Prudential Australia Ltd [1987] 2 Qd R 354

Equitable Fire and Accident Company v Ching Wo Hong [1907] AC 96

Ewer v National Employer' Mutual General Insurance Association Ltd [1937] 2 All ER 193

Fairchild v Glenhaven Funeral Service [2003] 1 AC 32

Glicksman v Lancashire and General Assurance Co [1925] 2 KB 593

Graham Barclay Oysters Pty Ltd v Ryan (2002) 211 CLR 540

Hardy v Motor Insurers Bureau [1964] 2 QB 745

Hedley Byrne v Heller and Partners Ltd [1964] AC 465

Hooley Hill Rubber and Chemical Company Limited v Royal Insurance Company Limited and Others [1920] 1 KB 257

Horne v Poland [1922] 2 KB 364

Iron Trades Mutual Insurance Co Ltd v Companhia de Seguros Imperio [1991] 1 Re LR 213 Joel v Law Union and Crown Insurance Company [1908] 2 KB 431 John T Ellis v Hinds [1947] 1 KB 475

Jones v Provincial Insurance Co (1857) 140 ER 662

Joyce v Kennard (1871) LR 7 QB 78

King v Victoria Insurance Co [1896] AC 250

Lambert v Co-Operative Insurance Society [1975] 2 Lloyd's Rep 465

London Assurance Co v Sainsbury (1783) 99 ER 636

Macaura v Northern Assurance Co Ltd [1925] AC 619

Marene Knitting Mills Pty Ltd v Greater Pacific General Insurance Ltd [1976] 2 Lloyd's Rep 631

McAndrew v Waltons Insurance Co Ltd [1983] 1 Qd R 263

McLauchlan v The Standard Fire and Marine Insurance Co of New Zealand (1877) Knox 224

Mutual Life Insurance Company of New York v Ontario Metal Products Company Limited [1925] AC 344

Newcastle Fire Insurance Co v Macmorran and Co (1815) 3 Eng Rep 1057

Provincial Insurance Company Limited v Morgan [1932] 2 KB 70

Re Bradley v Essex and Suffolk Accident Indemnity Society [1912] 1 KB 415

Re George and Goldsmiths v General Burglary Insurance Associations Ltd [1899] 1 QB 595

Roger Lynch and Another v Robert Dalzell and Others [1729] 2 Eng Rep 292

Sadlers' Company v Badcock (1743) 95 Eng Rep 463

Stook v Inglis (1882) 9 QBD 708

Visscher Enterprises Pty Ltd v Southern Pacific Insurance Co Ltd [1981] Qd R 561

Waters v The Monarch Life Assurance Co 119 Eng Rep 705

Zurich General Accident and Liability Insurance Co v Leven (1940) SC 406

Cases: United States

Hughes v Potomac Insurance Company (1962) 199 Cal App 2d 239 Liverpool Insurance Co v Massachusetts, 10 Wall 566 Paul v Virginia, 8 Wall 168 Truta v Avis Rent-A-Car System Inc (1987) 193 Cal App 3d 802 Legislation: Australia A New Tax System (Goods and Services Tax) Act 1999 (Cth) A New Tax System (Goods and Services Tax) Regulations 1999 (Cth) Accident Compensation (Occupational Health and Safety) Act 1996 (Vic) Accident Compensation (WorkSafe Victoria Insurance) Act 1993 (Vic) Accident Compensation Act 1985 (Vic) Acquisition of Land Act 1967 (Qld) Acts Interpretation Act 1901 (Cth) Acts Interpretation Act 1919 (SA) Adelaide Fires Act 1958 (SA) Aged Care Act 1997 (Cth) Aged or Disabled Persons Care Act 1991 (Cth) Asbestos Related Diseases (Occupational Exposure) Compensation Act 2011 (Tas) Auditor General Act 1997 (Cth)

Australian Capital Territory Insurance Authority Act 2005 (ACT)

Australian Prudential Regulatory Authority, *Prudential Standard CPS 520: Fit and Proper*, July 2012

Australian Prudential Regulatory Authority, Prudential Standard GPS 220: Risk Management, July 2008

Australian Reinsurance Pool Corporation, 'Declaration of a Terrorist Incident under the *Terrorism Insurance Act 2003* (Cth)–53 Martin Place, Sydney, New South Wales' (15 January 2015) http://www.comlaw.gov.au/Details/F2015L00053>

Bush Fires Act 1937 (WA)

Bushfires Act 1949 (NSW)

Charter of Budget Honesty Act 1998 (Cth)

Child Care Act 1972 (Cth)

Civil Liability Act 1936 (SA)

Commonwealth Authorities and Companies Act 1997 (Cth)

Commonwealth Constitution Act 1901 (Cth)

Commonwealth Services Delivery Act 1997 (Cth)

Companies Act 1928 (Vic)

Compensation to Relatives Act 1897 (NSW)

Corporations Act 2001 (Cth)

Country Fire Authority Act 1958 (Vic)

Darwin Cyclone Damage Construction Act 1975 (Cth)

Darwin Reconstruction Act 1975 (Cth)

Disability Services Act 1986 (Cth)

Disaster Act 1982 (NT)

Disaster Management Act 2003 (Qld)

Disasters Act 1982 (NT)

Districts Fire Brigades Act 1909 (WA)

Duties Act 1997 (NSW)

Duties Act 1999 (ACT)

Duties Act 2000 (Vic)

Duties Act 2001 (Qld)

Duties Act 2001 (Tas)

Duties Act 2008 (WA)

Electrical Safety Act 1998 (Vic)

Emergencies Act 2004 (ACT)

Emergency Management Act 1986 (Vic)

Emergency Management Act 2004 (ACT)

Emergency Management Act 2004 (SA)

Emergency Management Act 2005 (WA)

Emergency Management Act 2006 (Tas)

Emergency Services Funding Act 1998 (SA)

Emergency Services Levy Act 2002 (WA)

Explanatory Memorandum, Insurance Contracts Amendment Bill 2012 (Cth)

Explanatory Memorandum, Insurance Contracts Bill 1984 (Cth)

Explanatory Memorandum, Terrorism Insurance Bill 2002 (Cth)

Employers Indemnity Policies (Premium Rates) Act 1990 (WA) Employers Indemnity Supplementation Fund Act 1980 (WA) Federal Financial Relations Act 2009 (Cth) Financial Management and Accountability Act 1997 (Cth) Fire and Emergency Services Act 2005 (SA) Fire and Emergency Services Act 1998 (WA) Fire and Emergency Services Authority of Western Australia Act 1998 (WA) Fire and Rescue Services Act 1990 (Qld) Fire and Rescue Service Regulation 2001 (Qld) Fire Brigade and Bush Fires (Amendment) Act 1958 (NSW) Fire Brigade Charges Refund Act 1977 (SA) Fire Brigade Charges Refund Regulations 1977 (SA) Fire Brigades (Amendment) Act 1985 (NSW) Fire Brigades Act 1876 (Qld) Fire Brigades Act 1881 (Qld) Fire Brigades Act 1882 (SA) Fire Brigades Act 1883 47 Vic 21 (Tas) Fire Brigades Act 1884 47 Vic 3 (NSW) Fire Brigades Act 1890 (SA) Fire Brigades Act 1890 (Vic) Fire Brigades Act 1898 (WA)

Fire Brigades Act 1909 (NSW)

Fire Brigades Act 1915 (Vic)

Fire Brigades Act 1916 (WA)

Fire Brigades Act 1917 (WA)

Fire Brigades Act 1920 (Qld)

Fire Brigades Act 1920 (SA)

Fire Brigades Act 1920 (Tas)

Fire Brigades Act 1928 (Vic)

Fire Brigades Act 1942 (WA)

Fire Brigades Act 1945 (Tas)

Fire Brigades Act 1964 (SA)

Fire Brigades Act 1989 (NSW)

Fire Brigades Act Amendment Act 1923 (SA)

Fire Brigades Act Amendment Act 1965 (SA)

Fire Brigades Act Amendment Act 1973 (SA)

Fire Brigades Act Amendment Act 1977 (SA)

Fire Brigades Act Amendment Act of 1882 (Qld)

Fire Brigades and Bush Fire (Amendment) Act 1958 (NSW)

Fire Services Act 1979 (Tas)

Fire Services Property Levy Act 2012 (Vic)

General Insurance Code of Practice 2012

Government Financing Authority (Insurance) Amendment Act 2006 (SA)

Health Insurance Act 1973 (Cth)

Health Insurance Commission Bill 1973 (Cth)

Hearing Services Administration Act 1997 (Cth)

Home and Community Care Act 1985 (Cth)

Housing Assistance Act 1996 (Cth)

Imperial Adoption Act 1836 (WA)

Income Tax Assessment Act 1997 (Cth)

Income Tax Rates Amendment (Temporary Flood and Cyclone Reconstruction Levy) Act 2011 (Cth)

Income Tax Rates Amendment (Temporary Flood and Cyclone Reconstruction Levy) Bill 2011 (Cth)

Instruments (Insurance Contracts) Act 1936 (Vic)

Instruments Act 1890 (Vic)

Instruments Act 1915 (Vic)

Instruments Act 1928 (Vic)

Insurance Act 1973 (Cth)

Insurance Commission of Western Australia Act 1986 (WA)

Insurance Contracts Act 1984 (Cth)

Insurance Contracts Amendment Act 2012 (Cth)

Insurance Contracts Amendment Regulations 2012 (Cth)

Insurance Contracts Regulations 1985 (Cth)

Insurance Regulations 1974 (Cth)

Insurance Regulations 2003 (Cth)

Interpretation of Acts Act 1918 (WA)

Land Acquisition and Compensation Act 1986 (Vic)

Land Administration Act 1997 (WA)

Land Acquisition Act 1969 (SA)

Land Acquisition Act 1993 (Tas)

Land Acquisition (Just Terms Compensation) Act 1991 (NSW)

Land Tax Act 1936 (SA)

Land Tax Act 1956 (NSW)

Land Tax Act 2000 (Tas)

Land Tax Act 2002 (WA)

Land Tax Act 2004 (ACT)

Land Tax Act 2005 (Vic)

Land Tax Act 2010 (Qld)

Land Tax Assessment Act 2002 (WA)

Land Tax Management Act 1956 (NSW)

Land Tax Rating Act 2000 (Tas)

Language of Acts Act 1872 35 & 36 Vic 9 (SA)

Legislative Instrument Act 2003 (Cth)

Legislative Instruments Regulations 2004 (Cth)

Local Government Act 1989 (Vic)

Local Government Act 1993 (NSW)

Local Government Act 1993 (Tas)

Local Government Act 1995 (WA)

Local Government Act 1999 (SA)

Local Government Act 2009 (Qld)

Local Government (Rates and Charges Remissions) Act 1991 (Tas)

Medicare Levy Act 1986 (Cth)

Metropolitan Fire Brigade Act 1865 (UK)

Metropolitan Fire Brigades Act 1958 (Vic)

Motor Accident Commission Act 1992 (SA)

Motor Accident Insurance Act 1994 (Qld)

Motor Accidents (Liabilities and Compensation) Act 1973 (Tas)

Motor Accidents (Lifetime Care and Support) Act 2006 (NSW)

Motor Accidents Act 1988 (NSW)

Motor Accidents Compensation Act 1999 (NSW)

Motor Accidents Compensation Regulation 2005 (NSW)

Motor Accidents Compensation Regulation 2015 (NSW)

Motor Vehicle (Third Party Insurance) Act 1943(WA)

Motor Vehicles Act 1959 (SA)

National Health Act 1953 (Cth)

New South Wales Self Insurance Corporation Act 2004 (NSW)

New Tax System (Family Assistance) Act 1999 (Cth)

Northern Territory Rates Act (NT)

Nursing Homes Assistance Act 1974 (Cth)

Penalty Interest Rates Act 1983 (Vic)

Privacy Act 1988 (Cth)

Public Corporations (Dissolution of South Australian Captive Insurance Corporation) Regulations 2006 (SA)

Public Governance, Performance and Accountability Act 2013 (Cth)

Rates Act 2004 (ACT)

Reserve Bank Act 1959 (Cth)

Social Security Act 1991(Cth)

South Australian Metropolitan Fire Services Act 1936 (SA)

Stamp Duties (Amendment) Act 1924 (NSW)

Stamp Duties (Amendment) Act 1932 (NSW)

Stamp Duties (Amendment) Act 1933 (NSW)

Stamp Duties (Amendment) Act 1939 (NSW)

Stamp Duties (Amendment) Act 1940 (NSW)

Stamp Duties (Amendment) Act 1949 (NSW)

Stamp Duties (Amendment) Act 1952 (NSW)

Stamp Duties (Amendment) Act 1954 (NSW)

Stamp Duties (Amendment) Act 1955 (NSW)

Stamp Duties (Amendment) Act 1956 (NSW) Stamp Duties (Amendment) Act 1958 (NSW) Stamp Duties (Amendment) Act 1962 (NSW) Stamp Duties (Amendment) Act 1963 (NSW) Stamp Duties (Amendment) Act 1964 (NSW) Stamp Duties (Amendment) Act 1966 (NSW) Stamp Duties (Amendment) Act 1967 (NSW) Stamp Duties (Amendment) Act 1968 (NSW) Stamp Duties (Amendment) Act 1970 (NSW) Stamp Duties (Amendment) Act 1971 (NSW) Stamp Duties (Amendment) Act 1972 (NSW) Stamp Duties (Amendment) Act 1973 (NSW) Stamp Duties (Amendment) Act 1974 (NSW) Stamp Duties (Amendment) Act 1975 (NSW) Stamp Duties (Amendment) Act 1977 (NSW) Stamp Duties (Amendment) Act 1978 (NSW) Stamp Duties (Amendment) Act 1979 (NSW) Stamp Duties (Amendment) Act 1980 (NSW) Stamp Duties (Amendment) Act 1982 (NSW) Stamp Duties (Amendment) Act 1984 (NSW) Stamp Duties Act 1920 (NSW)
Stamp Duties Act 1923 (SA)

Stamp Duty Act 2011 (NT)

Stamps Act 1890 (Vic)

Stamps Act 1915 (Vic)

Stamps Act 1928 (Vic)

Stamps Act 1948 (Vic)

Stamps Act 1958 (Vic)

Stamps Act 1978 (Vic)

State Deficit Levy Act 1992 (Vic)

State Deficit Levy (Repeal) Act 1995 (Vic)

State Development and Public Works Organisation Act 1971 (Qld)

State Emergency and Rescue Management Act 1989 (NSW)

State Emergency Services Act 1989 (NSW)

Superintendent of Fire Brigades Act 1867 (SA)

Tax Laws Amendment (Temporary Flood and Cyclone Reconstruction) Act 2011 (Cth)

Tax Laws Amendment (Temporary Flood Reconstruction Levy) Bill 2011 (Cth)

Terrorism Insurance Act 2003 (Cth)

Terrorism Insurance Regulations 2003 (Cth)

The Stamp Act 1894 (Qld)

Transport Accident Act 1986 (Vic)

Veterans Entitlements Act 1986 (Cth)

Victoria State Emergency Service Act 2005 (Vic)

Waterfront Workers (Compensation for Asbestos Related Diseases) Act 1986 (WA)

Work Health Administration Act 2011 (NT)

Work Health and Safety (National Uniform Legislation) Act (NT)

Work Health and Safety (National Uniform Legislation) Implementation Act 2011 (NT)

Work Health and Safety (National Uniform Legislation) Regulations 2011 (NT)

Work Health and Safety (Transitional and Consequential Provisions) Act 2012 (Tas)

Work Health and Safety Act 2011 (ACT)

Work Health and Safety Act 2011 (NSW)

Work Health and Safety Act 2011 (Qld)

Work Health and Safety Act 2012 (Tas)

Work Health and Safety and Other Legislation Amendment Act 2014 (Qld)

Work Health and Safety Regulation 2011 (ACT)

Work Health and Safety Regulations 2011 (NSW)

Work Health and Safety Regulations 2011 (Qld)

WorkCover Corporation Act 1994 (SA)

Workers Compensation Act 1958 (Vic)

Workers Compensation and Injury Management Act 1981 (WA)

Workers Rehabilitation and Compensation Act 1986 (SA)

Workers Rehabilitation and Compensation Act 1988 (Tas)

Workers Rehabilitation and Compensation Act 2003 (NT)

Workers Rehabilitation and Compensation Regulations 2003 (NT)

Workers (Occupational Diseases) Relief Fund Act 1954 (Tas)

Workers Compensation (Common Law Proceedings) Act 2004 (WA)

Workers Compensation and Injury Management (Acts of Terrorism) Act 2001 (WA)

Workers Compensation and Injury Management Act 1981 (WA)

Workplace Injury Rehabilitation and Compensation (Savings and Transitional) Regulations 2014 (Vic)

Workplace Injury Rehabilitation and Compensation Act 2013 (Vic)

Workplace Injury Rehabilitation and Compensation Regulations 2014 (Vic)

Legislation: European Union

Directive 92/49/EEC of the European Parliament and of the Council of 18 June 1992 entitled 3rd EU Directive on Non-Life Insurance

Legislation: France

Arête du 4 août 2003 du ministre dé l'économie, des finances et de l'industrie [Order of 4 August 2003 from the Ministry of Economics, Finance and Industry]

Code de l'environnement [Environment Code]

Code des assurances [Insurance Code]

Décret no 82-705 du 10 août 1982 [Decree No 82-705 of 10 August 1982]

Décret n° 82-706 du 10 août 1982 [Decree No 82-706 of 10 August 1982]

Décret nº 83-7 du 19 septembre 1983 [Decree No 82-706 of 19 September 1983]

La Constitution du 4 octobre 1958 [Constitution of 4 October 1958]

Loi n° 2002-276 du 27 février 2002 [Law No 2002-276 of 27 February 2002]

Loi n^o 2003-699 du 30 juillet 2003 [Law No 2003-699 of 30 July 2003]

Loi n^o 2005-845 du 26 juillet 2005 [Law No 2005-845 of 26 July 2005]

Loi n^o 82-600 du 13 juillet 1982 [Law No 82-600 of 13 July 1982]

Loi N° 87-585 *du 22 juillet 1987* [Law No 87- 585 of 22 July 1987]

Loi Nº 90-509 du 25 juin 1990 [Law No 90-509 of 25 June 1990]

Loi N° 92-665 *du* 16 *juillet* 1992 [Law No 92-665 of 16 July 1992]

Loi Nº 95-1001 du 2 Février 1995 [Law No 95-1001 of 2 February 1995]

Loi Nº 2004-811 du 13 août 2004 [Law No 2004-811 of 13 August 2004]

Ordonnance Nº 2007-329 du 12 mars 2007 [Ordinance No 2007-329 of 12 March 2007]

Tsegaye, Yves-Antoine, *Insurance Code (France) including amendment made by virtue of Act no 2005-845 of 26 July 2005 (*Translated into English) <http://195.83.177.9/code/liste.phtml?lang=uk&c=38>

Legislation: New Zealand

Building Act 1991 (NZ)

Building Act 2004 (NZ)

Canterbury Earthquake Recovery Act 2011 (NZ)

Crown Entities Act 2004 (NZ)

Earthquake and War Damage Act 1944 (NZ)

Earthquake Commission Act 1993 (NZ)

Earthquake Commission Regulations 1993 (NZ)

Earthquake Damage Emergency Regulation 1944 (NZ)

Fair Insurance Code 2016 (NZ)

Fire Services Act 1975 (NZ) Local Government Act 1974 (NZ) Public Works Act 1981 (NZ) Reserve Bank of New Zealand Act 1989 (NZ) War Damage Act 1941 (NZ) War Damages Assessment Act 1942 (NZ)

Legislation: Spain

Estatuto Legal del Consorcio de Compensación de Seguros de 19 diciembre de 1990 [Legal Statute of 19 December 1990 for the Insurance Compensation Consortium]

La Ley de 16 de Diciembre de 1954 por la que se crea el Organismo Autónomo Consorcio de Compensación de Seguros [The Law of 16 December 1954 Establishing the Autonomous Agency of the Insurance Compensation Consortium]

La Ley de Contrato de Seguro [The Law for Insurance Contracts]

La Ley Regula la Entrada de Firmas, Compañías, Asociaciones y en General Todas las Organizaciones que Tengan por Objeto la Realización de Negocio de Seguros en el Registro que se Creará a efecto [The 1908 Law that Governs the Entry of Firms, Companies, Associations and in General all Organisations having their Purpose the Conduct of Insurance Business in the Register to be Created for that Purpose]

Ley 12/2006, de 16 de Mayo, por la que se Modifica el Texto Refundido del Estatuto Legal del Consorcio de Compensación de Seguros, Aprobado por el Real Decreto Legislativo 7/2004, de 29 de Octubre, y la Ley 24/1988, de 28 de Julio, del Mercado de Valores [Law 16 May 2006 Amending the Consolidated Text of the Legal Status of the Insurance Compensation Consortium, approved by Royal Decree Law of 29 October 2004 and Law 28 July 1988 on the Securities Market]

Ley 30/ 1995, de 8 de Noviembre, de Ordenación y Supervisión de los Seguros Privados [Law number 30 of 8 November 1995 on the Regulation and Supervision of Insurance] *Ley 33/ 1984 de 2 de Agosto, Sobre Ordenación de Seguro Privado* [Law number 33 of 2 August 1984 on the Management of Private Insurance]

Ley 44/ 2002, de 22 de Noviembre, de Medidas de Reforma del Sistema Financiero [Law number 44 of 22 November 2001 on Financial System Reform]

Ley 6/ 1997, de 14 de Abril, de Organización y Funcionamiento de la Administración General del Estado [Law number 6 of 14 April 1997 on the Organisation and Functioning of the General State Administration]

Real Decreto 300/2004 [Royal Decree number 300 of 20 February 2004]

Real Decreto Legislativo 1255/1986 de 6 de Junio por él se Modifican Determinados Artículos de la Ley 33/1984, de 2 de Agosto, Sobre Ordenación para Adaptaría a los Compromisos Derivados de Tratado de Adhesión de España a la Comunidad Económica Europea [Royal Legislative Royal Decree number 1255 of 6 June 1986 on the Organisation of Private Insurance to suit their Commitments under the Treaty of Accesión of Spain to the European Economic Community]

Real Decreto Legislativo 6/2004, de 29 de Octubre, por el que se Aprueba el Texto Refundido de la Ley de Ordenación y Supervisión de los Seguros Privados [Royal Statutory Decree number 6 of 29 October 2004 Approving the Revised Text of the Law of Regulation and Supervisión of Private Insurance]

Real Decreto Legislativo de 29 de Octubre de 2004 [Royal Statutory Decree of 29 October 2004]

Reglamentó del Seguro de Riesgos Extraordinarios Aprobado por el Real Decreto 300/2004, de Febrero [Royal Decree of 24 February 2004 on Extraordinary Risk Insurance]

Legislation: United Kingdom

An Act of Parliament for the Better Preventing of the Mischief's that May happen by Fire (Queen Anne's Parish Pump Act) 1708 (UK)

Australian Courts Act 1828 9 Geo 4 ch 83 (Imp)

Commonwealth of Australian Constitution Act 1900 63 & 64 Vic (Imp)

Fires Prevention (Metropolis) Act 1774 14 Geo 3 c 78 (Imp)

Metropolitan Fire Brigade Act 1865 (UK)

Supreme Court Act 1867 31 Vic 23 (Imp)

Victorian Constitution Act 1855 18 & 19 Vic c 55 (Imp)

Legislation: United States

Bunning-Bereuter-Blumenauer Flood Insurance Reform Act 2004 Pub L No 108-2 Stat 2238 (2004)

National Flood Insurance Act 1968 ch 50 USC (1968)

National Flood Insurance Reform Act 1994 42 USC 4001 (1994)

Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288) (1988)

Other

'2011 Worse Year on Record for Insurance Losses- Munich Re' *Insurance Times* (United Kingdom) 5 January 2012 http://www.globalreinsurance.com/2011-worst-year-on-record-for-insured-losses-munich-re/1394247.article

'30,000 Flee Homes in Santander Fire: Scores of Buildings in Spanish Port are destroyed' 18 February 1941 *New York Times*

'Affordability: The Elephant in the Room' *InsuranceNews.com* (Australia), 25 March 2013 <<u>http://www.insurancenews.com.au/analysis/affordability-the-elephant-in-the-room</u>>

'Big Fire in Santander' 17 February 1941 New York Times

'Bushfire Legal Help Handbook: A Guide to the Law for People Affected by the February 2009 Victorian Bushfires (Handbook, Bushfire Legal Help, June 2009)

'Catastrophes Naturelles : La gestion d'un événement extrême d'amont en aval', 4éme édition de la journée Caisse Centrale de Réassurance' (20 June 2013, Eurosites George V, Paris) 'Households Still in the Dark over Flood Insurance Claims', Courier Mail (Brisbane), 10 February 2011

'Insurance Companies' Definition of Flood Leaves Queensland Flood Families in Limbo' *The Courier Mail* (Queensland), 8 February 2011 <http://www.news.com.au/national/insurance-companies-definition-of-flood-leavesqueensland-flood-families-in-limbo/story-e6frfkvr-1226001854330>

'Insurers Back Government Flood Decisions', *InsuranceNews.com* (Australia), 23 March 2013 http://insurancenews.com.au/local/insurers-back-government-flood-decisions>

'Room to swing a cat? Hardly', *BBC News*, 15 August 2009 <<u>http://news.bbc.co.uk/2/hi/uk_news/magazine/8201900.stm</u>>

'Suncorp won't offer new policies in flood prone towns' *ABC News 24* (Australia), 7 May 2012 http://www.abc.net.au/news/2012-05-07/suncorp-wont-offer-new-policies-for-flood-prone-towns/3994612

2CC Talking Canberra, 'Problems Facing the Insurance Industry after the Flooding', *Breakfast*, 23 January 2011 (insurance expert: Rachel Carter)

ABC Radio National, 'Lessons of the Floods: How Do We Minimise the Damage?' *Australia Talks*, 24 January 2011 (insurance expert: Rachel Carter)

AIR, 'New Thinking on Catastrophe Risk' http://www.air-worldwide.com/_public/NewsData/000833/newthinkingoncatastropherisk.pdf

ANZ, *Home Insurance Product Disclosure Statement and Policy Document* (20 November 2010)

Arnison, Peter, Robert Gotterson and Colin Apelt, (Flood Response Review), *Brisbane Flood January 2011–Independent Review of Brisbane City Council's Response*, 9 - 22 January 2011 http://www.brisbane.qld.gov.au/community-support/emergency-management/flooding/Flood-Response-Review/final-report/index.htm

ARTEMIS, 'QBE 'very happy' with first Australian indemnity cat bond, VenTerra Re' 8 January 2014 http://www.artemis.bm/blog/2014/01/08/qbe-very-happy-with-first-australian-indemnity-cat-bond-venterra-re/

ARTEMIS, 'VenTerra Re Series 2013-1–Full Details' <http://www.artemis.bm/deal_directory/venterra-re-ltd-series-2013-1/>

Attorney-General's Department (Parliament of Australia) 'Natural Disaster Relief and Recovery Arrangements Determination 2007', 2007

Attorney-General's Department (Parliament of Australia), *Natural Disaster Relief and Recovery Arrangements Guideline 7—Criteria for the Provision of Betterment Funding* (October 2014)

<http://www.disasterassist.gov.au/NDRRADetermination/Documents/NDRRAguideline7.pdf >

Attorney-General's Department (Parliament of Australia) 'Natural Disaster Relief and Recovery Arrangements Guidelines'

<http://www.ema.gov.au/www/emaweb/rwpattach.nsf/VAP/(9A5D88DBA63D32A661E636 9859739356)~EMA+-+RR+-+NDRRA+-+2010-

11+NDRRA+State++Territory+Threshold.PDF/\$file/EMA+-+RR+-+NDRRA+-+2010-11+NDRRA+State++Territory+Threshold.PDF>

Attorney-General's Department (Parliament of Australia) 'Natural Disaster Relief and Recovery Arrangements Determination 2011' <http://www.ag.gov.au/www/emaweb/rwpattach.nsf/VAP/(689F2CCBD6DC263C912FB74 B15BE8285)~NDRRA+-+Determination+2011+-+Version+1+(PDF)+-+Web+update.pdf/\$file/NDRRA+-+Determination+2011+-+Version+1+(PDF)+-+Web+update.pdf>

Attorney-General's Department, Australian Emergency Management: Natural Disaster Relief and Recovery Arrangement Guidelines- NDRRA State and Territory Thresholds, 14 October 2012

<http://www.em.gov.au/Fundinginitiatives/Naturaldisasterreliefandrecoveryarrangements/Pages/NaturalDisasterReliefandRecoveryArrangementsGuidelines.aspx>

Australasian Fire and Emergency Services Authority Council, *Bushfire Glossary* (AFAC, January 2012)

Australia, Report of the Royal Commission on the Constitution (Minutes of Evidence, Sir

Robert Garran)

Australian Accounting Standards Board, 'General Insurance Contracts' (AASB 1023, 26 November 2010)

Australian Accounting Standards Board, 'Insurance Contracts' (AASB 4, 26 November 2010)

Australian Accounting Standards Board, *Statement of Accounting Concepts- Definition of the Reporting Entity* <<u>http://www.aasb.gov.au/admin/file/content102/c3/SAC1_8-</u> 90_2001V.pdf>

Australian Building Codes Board, 'Proposal to change the National Construction Code', 6 August 2014 http://www.abcb.gov.au/consultation/proposal-to-change-the-ncc

Australian Building Codes Board, 'The Building Code of Australia' (2011) <http://www.abcb.gov.au/about-the-national-construction-code/the-building-code-ofaustralia>

Australian Building Codes Board, *The Commercial in Confidence Final Report—Benefits of Building Regulation Reform: From Fragmentation to Harmonisation* (4 December 2012) http://www.abcb.gov.au/en/about-the-national-construction-code/the-regulatory-process.aspx>

Australian Building Code Board, 'The History of the National Construction Code' (2011) http://www.abcb.gov.au/en/about-the-national-construction-code/history-of-the-ncc

Australian Bureau of Statistics, 'Household Expenditure Survey: Summary Results' (15 February 2006) ">http://www.abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUSSTATS/abs.gov.au/AUS

Australian Bureau of Statistics Table 21.5 'Value of Work Done' http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1301.0~2012~Main%20Fe atures~Construction%20activity~99>

Australian Bureau of Statistics Table 21.6 'Dwelling Units Approved' (total new dwellings) http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1301.0~2012~Main%20Fe atures~Construction%20activity~99>

Australian Bureau of Statistics, 'The Exceptional Heat Wave of January–February 2009 in South Eastern Australia' (Year Book 2009–2010, 3 June 2010) <http://www.codeplay.abs.gov.au/AUSSTATS/abs@.nsf/39433889d406eeb9ca2570610019e 9a5/D9CC49B3D42A8623CA25773700169C27>

Australian Competition and Consumer Commission, 'Standard Definition Raises too many Uncertainties' (News Release, #ND 252/08, 3 September 2008) <http://www.accc.gov.au/content/index.phtml/itemId/841725?pageDefinitionItemId=16940>

Australian Reinsurance Pool Corporation (Payments to the Commonwealth) Direction 2012 (Cth)

Australian Reinsurance Pool Corporation (Risk Retention) Direction 2007 (Cth)

Australian Reinsurance Pool Corporation, 'The Scheme' (2016) <http://arpc.gov.au/aboutarpc/about/>

Australian Taxation Office, Flood Levy Information for Individuals: Flood Levy Rates (4 July 2012)

<http://www.ato.gov.au/individuals/content.aspx?menuid=0&doc=/content/00216565.htm&p age=7&H7>

Australian Taxation Office, 'Medicare Levy reduction for low income earners' (2016) https://www.ato.gov.au/individuals/medicare-levy/medicare-levy-reduction-for-low-income-earners/

AustralianTaxationOffice,'MedicareLevy'(2016)<https://www.ato.gov.au/Individuals/Medicare-levy/>

Banco de España, *Claims Service: Is it Compulsory to Buy Insurance from a Financial Institution when taking out a Mortgage?* http://www.bde.es/webbde/en/secciones/servicio/reclama/seguro.html

Bayer, Kurt, 'Quake Outcasts going back to court', *New Zealand Herald* (New Zealand), 3 February 2016 http://m.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11584205

Blunden, Phillip, 'Appendix 10', A Review of the Natural Disaster Relief and Recovery Arrangements During the North Coast Floods of 30 March–1 April 2009 and 20–22 May 2009 (Blunden Consultancy Services, September 2009)

Burfield, Tim, 'Natural Disaster Relief and Recovery Arrangements' (Newsletter No 2, South Australian Insurance Corporation, April 2011) <http://www.safa.sa.gov.au/documents/saicorp_newsletters/35_saicorp_new.pdf>

Caisse Centrale de Réassurance, 2012 Rapport Annuel ['Annual Report 2012'] (Caisse Centrale de Réassurance, 2012)

Caisse Centrale de Réassurance, *Catastrophes Naturelles : La Gestion d'un Evénement Extrême D'amont en Ava (4éme Edition de la Journée Caisse Centrale de Réassurance)* (Eurosites George V, 20 June 2013)

Caisse Centrale de Réassurance, '*E-Risk : Inondation consécutives à la tempête Xynthia de février 2010*' <www.erisk.ccr.fr/faces/erisk-autres-cout-zone-inondation.jsp>

Caisse Centrale de Réassurance, '*Les Catastrophes Naturelles en France*' http://www.ccr.fr/index.do?fid=1395293532771582094>

Caisse Centrale de Réassurance, '*Les Catastrophes Naturelles En France- Le Régime D'Indemnisation des Catastrophes Naturelles :* Natural Disasters in France- The Natural Disaster Compensation Scheme' (Caisse Centrale De Réassurance, September 2008) <http://www.ccr.fr/sites/fr/pdf/BD 62484 CATNAT INTER 08.pdf>

Campbell, Shaun, 'Kinglake Residents to Help Solve Insurance Puzzle' *Diamond Valley Leader* (Melbourne), 18 March 2011

Cantos, Jorge Olcina, 'The Mediterranean, A Risk Region- a View from Spain' (Department of Regional Geographic Analysis, University of Alicante) (unpublished)

Carswell, Andrew, 'Big Insurers Leaves Towns High and Dry', *The Sunday Telegraph* (Brisbane), 3 February 2013

Carter, R A, 'Catastrophic Events, Insurance and Sufficient Funding for Fire Services–A Legal Perspective' (Poster presented at Australasian Fire & Emergency Services Authority Council Annual Conference, Darwin, 9 September 2010)

Carter, R A, 'Human Reaction to Insurance (Black Saturday Case Study) - Interviews and

Written Questionnaires' April–May 2011 [Ethics approval granted on 16 February 2011 (Ethics Application 71/10PG)]

Carter, R A, 'Mitigating Future Disasters in Australia- The Role of Government, Insurers and the People' (Paper presented at 9th Conference on Catastrophe Insurance in Asia, Beijing, 8–9 June 2011)

Carter, Rachel Anne and Dr Jim McLennan, 'Will your Insurance Cover Bushfire Loss?' (online) (2013) http://www.latrobe.edu.au/news/articles/2013/release/will-your-insurance-cover-bushfire-loss>

Coleman, Tony, 'The Impact of Climate Change on Insurance against Catastrophes' (Report, Insurance Group Australia)

Commonwealth, 'Official Committee Hansard–Senate Economics Legislation Committee: Terrorism Insurance Bill 2003' (Canberra, 1 May 2003)

Commonwealth, *Parliamentary Debates*, House of Representatives, 26 March 2003 (Julie Bishop)

Commonwealth, *Parliamentary Debates*, House of Representatives, 26 March 2003 (Luke Hartsuyker)

Commonwealth, *Parliamentary Debates*, House of Representatives, 26 March 2003 (Stuart McArthur)

Commonwealth (Treasury), Statement 8: Statement of Risk, *Budget 2014–2015* (2015) http://www.budget.gov.au/2014-15/content/bp1/html/bp1_bst8-01.htm

Commonwealth Bank of Australia, CommInsure Home Insurance Product Disclosure Statement (8 May 2007)

Commonwealth Bank of Australia, CommInsure Home Insurance- Supplementary Product Disclosure Statement (1 April 2010)

Commonwealth Government, 'Budget Paper No 3—General Revenue Assistance (Budget 2014–2015)' (2015) http://www.budget.gov.au/2014-15/content/bp3/html/bp3_04_part_3.htm

Commonwealth Government Bureau of Meteorology, 'Climate Change Education: Cyclones' http://www.bom.gov.au/lam/climate/levelthree/c20thc/cyclone.htm

Commonwealth Government Bureau of Meteorology, 'Tropical Cyclones Factsheet' http://www.bom.gov.au/cyclone/faq/

Commonwealth Government, Department of Agriculture, 'History of Drought Policy and Programs', 10 November 2014 http://www.agriculture.gov.au/agriculture-food/drought/drought-policy/history

Commonwealth Government, Department of Agriculture, 'National Drought Program Reform' 10 November 2014 http://www.agriculture.gov.au/agriculture-food/drought-program-reform

Commonwealth Government, Department of Finance and Deregulation, 'The Commonwealth and You: Compulsory Acquisition of Land', May 2011 <http://www.finance.gov.au/sites/default/files/Compulsory_Acquisition_of_Land_Brochure-May-2011.pdf>

Commonwealth Government, Geoscience Australia, Australian Flood Risk Information Portal http://www.ga.gov.au/scientific-topics/hazards/flood/afrip

Commonwealth Government, Geoscience Australia, 'National Flood Information Project' (2014) http://www.ga.gov.au/scientific-topics/hazards/flood/nfrip

Commonwealth Government, Geoscience Australia, 'Work Completed to Date—National Flood Risk Advisory Group', November 2012

<http://www.ga.gov.au/hazards/governance/national-committees-hazards/national-flood-risk-advisory-group/work-completed-to-date.html>

Commonwealth Government, National Commission of Audit, 'Disaster Relief' (2014) <http://www.ncoa.gov.au/report/appendix-vol-2/10-9-natural-disaster-relief.html>

Commonwealth Government, *Review of the Corporate Governance of Statutory Authorities and Office Holders* (June 2003)

Commonwealth Government (Infrastructure Australia), 'National Public Private Partnership Policy Framework', December 2008

<http://www.infrastructureaustralia.gov.au/public_private/files/National_PPP_Policy_Frame work_Dec_08.pdf>

Commonwealth Government (Infrastructure Australia), *National Public Private Partnership Principles: Volume 3: Commercial Principles for Social Infrastructure* (Report, December 2008)

<http://www.infrastructureaustralia.gov.au/public_private/files/National_PPP_Guidelines_Vo 1_3_Commercial_Principles_Social_Infrastructure_Dec_08.pdf>

Commonwealth Government (Infrastructure Australia), Public Private Partnerships (2016) <http://infrastructureaustralia.gov.au/policy-publications/public-privatepartnerships/index.aspx>

Commonwealth Government (Treasury), *Terrorism Insurance Act Review 2009* (2009) <http://archive.treasury.gov.au/documents/1640/HTML/docshell.asp?URL=TIA_review-02.asp>

Consorcio de Compensación de Seguros, *Informe Anual 2012* ['Annual Report 2012'] (Ministerio de Economía y Competitividad, 2012)

Consorcio de Compensación de Seguros, Natural Catastrophe Insurance Cover: A Diversity of Systems (Consorcio de Compensación de Seguros Report, 2008)

Consorcio de Compensación de Seguros, *Riesgos Extraordinarios* (December 2011) <http://www.consorseguros.es>

Consorcio de Compensación de Seguros, 'Scope of Activity: Extraordinary Activity— Indemnities and Deductibles' http://www.consorseguros.es/web/guest/ad_re_iy

Consorcio de Compensación de Seguros, 'Scope of Activity: Extraordinary Risks' http://www.consorseguros.es/web/guest/ad_re_rps

Consorcio de Compensación de Seguros, 'Summary of Activity 2012' (2012) <http://www.wfcatprogrammes.com/c/document_library/get_file?folderId=12566&name=DL FE-3005.pdf>

Consorcio de Compensación de Seguros, 'The Surcharge and the Tariff' <http://www.consorseguros.es/web/ambitos-de-actividad/seguros-de-riesgos-

extraordinarios/mas-informacion/el-recargo-y-su-tarifa>

Council of Australian Government, *Council of Australian Governments Meeting Communiqué* (13 February 2011) http://www.coag.gov.au/coag_meeting_outcomes/2011-02-13/index.cfm?CFID=4474118&CFTOKEN=80064835

Country Fire Authority, Country Fire Authority Summary of Funding 2010 (2010) <www.cfa.vic.gov.au>

Crompton, Ryan, Macquarie University (Risk Frontiers), Personal Communication to Rachel Anne Carter, 2016.

Daley, Gemma, 'Australia to Rebuild Fire–Hit Towns "Brick by Brick", *Bloomberg* (United States), 10 February 2009

Department of Treasury and Finance (Victoria), 'State Taxation Revenue: Overview' http://www.dtf.vic.gov.au/Publications/Victoria-Economy-publications/State-taxation-revenue

Diccionario Mapfre de Seguros (Fundación Mapfre, 2013) http://www.mapfre.com/wdiccionario/terminos/vertermino.shtml?i/interes-asegurable.htm

Earthquake Commission, 'Review of New Zealand Earthquake Commission's Catastrophe Response Operational Capability' (Report, May 2009)

Earthquake Commission, 'Statement of Investment Policies, Standards and Procedures', (Statement of Investment Policies No 3.1.1, May 2009)

Eburn, Michael 'Australian Bushfire Cases: Annotated Litigation 1867–2011', 30 April 2012 http://www.bushfirecrc.com/resources/external-resource/australian-bushfire-cases-annotated-litigation-1867-2011>

Eburn, Michael, Australian National University (School of Law) 'Personal Communication to Rachel Anne Carter', 2016.

Eburn, Michael 'Bushfires: The Price We Pay for Electricity' in Michael Eburn, *Australian Emergency Law*, 20 May 2014

Eburn, Michael, 'Black Saturday bushfire survivor secures \$500 million in Australia's largest class action payout' in Michael Eburn, *Australian Emergency Law*, 15 July 2014 http://emergencylaw.wordpress.com/2014/05/20/bushfires-the-price-we-pay-for-electricity/

Eburn, Michael, 'Litigation over the 2011 Queensland Floods Continues' in Michael Eburn, *Australian Emergency Law*, 9 November 2014 <https://emergencylaw.wordpress.com/2014/11/09/litigation-over-2011-queensland-floodscontinues/>

Eburn, Michael, 'The Disaster Cycle Continues' on Michael Eburn, *Australian Emergency Law*, 6 February 2012 <https://emergencylaw.wordpress.com/2012/02/06/the-disaster-cyclecontinues/>

Editorial, 'Clarity Vital on the Fire Services Levy', *The Weekly Times* (online), 16 February 2011<http://www.weeklytimesnow.com.au/article/2011/02/16/296061_opinion-news.html>

Elsworth, Sophie and Koren Helbig, 'Suncorp's decision to no longer offer insurance in flood prone communities of Roma and Emerald sets dangerous precedent, Local Government Association of Queensland claims' *The Courier Mail* (Brisbane), 8 May 2012

Elsworth, Sophie, 'Suncorp will not offer new policies to Queensland towns Emerald and Roma as fallout from 2011 floods continues' *The Courier Mail* (Brisbane), 7 May 2012

Emergency Management Australia (Attorney-General's Department), *Natural Catastrophic Disaster Plan (NATCATDISPLAN)* (Commonwealth, 2010)

European Consumer Centre, 'Natural Disaster Insurance in France' <www.europe.consommateurs.eu/en/consumer-topics/insurance/natural-disaster-insurancein-france/>

Federal Emergency Management Agency and Federal Insurance and Mitigation Administration, *National Flood Insurance Program: Program Description* (FEMA, August 2002)

Federal Emergency Management Agency, *Declaration Process Fact Sheet: The Emergency Response Process* (Fact Sheet, 2014) http://www.fema.gov/declaration-process-fact-sheet

296

Federal Emergency Management Agency, Disaster Assistance Policy 1004: Interim (Procedures for Processing Requests for Emergency or Expedited Major Disaster Declarations), 15 May 2007

Federal Emergency Management Authority, *National Flood Insurance Program: Answers to Questions about the National Flood Insurance Program* (FEMA F-084, March 2011) <http://www.fema.gov/media-library-data/20130726-1438-20490-1905/f084_atq_11aug11.pdf

Federal Emergency Management Authority, *National Flood Insurance Program: Program Description*, August 2002 <http://www.fema.gov/media-library-data/20130726-1447-20490-2156/nfipdescrip_1_.pdf>

Federal Emergency Management Agency, *National Flood Insurance Program Reauthorization Guidance*, 16 July 2012 < http://www.fema.gov/national-flood-insuranceprogram/national-flood-insurance-program-reauthorization-guidance>

Federal Emergency Management Agency, *Pre Disaster Emergency Declaration Requests* (FP 010-4) (18 May 2012)

Federal Emergency Management Agency, *Presidential Disaster Declarations*, (Fact Sheet, 24 December 2014) http://www.fema.gov/presidential-disaster-declarations>

Federal Emergency Management Agency, 'The Declaration Process', 24 December 2014 http://www.fema.gov/declaration-process>

Fire and Emergency Services Authority, 'Emergency Services Levy: Why was theEmergency Services Levy funding system introduced?' (Report: Fire and EmergencyServicesAuthority,WesternAustralia)<http://www.fesa.wa.gov.au/internet/default.aspx?MenuID=184>

Gallagher Bassett, 'What is Catastrophe Claims Management and is it different to Crisis Claims Management?' (2011)

<http://www.gallagherbassett.com.au/Articles/WhatisCatastropheClaimsManagement/tabid/2 09/Default.aspx>

Gardner, William, Combus Pty Ltd (Actuary and Catastrophe Modeller), 'Personal

Communication to Rachel Anne Carter', December 2016

Gardner, William, 'Impacts of Frequency Contagion on Pricing of Catastrophe Excess of Loss Reinsurance for Australian Perils' (Paper presented at Actuaries Institute General Insurance Seminar: Connecting Today and Tomorrow, Melbourne, Australia, 13 – 15 November 2016) http://www.actuaries.asn.au/Library/Events/GIS/2016/PaperGardner.pdf>

Gardner, William, Probable Maximum Losses of Insured Assets from Natural and Manmade Catastrophes in Australia (PhD Thesis, Macquarie University, 2006) <http://www.combus.net/docs/WillGardnerThesis.pdf>

Geoscience Australia, 'Applying Geoscience to Australia's most Important Challenges: Landslides' http://www.ga.gov.au/scientific-topics/hazards/landslide

Geoscience Australia, 'Applying Geoscience to Australia's most important challenges: Tsunami' http://www.ga.gov.au/scientific-topics/hazards/tsunami

Geoscience Australia, 'What is an earthquake?' (2014) <http://www.ga.gov.au/scientific-topics/hazards/earthquake/basics/what>

Gillard, Julia, 'Flood Levy to Pass, Natural Relief and Recovery Arrangements Strengthened' (Media Release, Australian Labor Party, 3 March 2011)

Government of Victoria, Government of Victoria—Policy and Instructions for the Purchase, Compulsory Acquisition and Sale of Land, August 2000

Guy Carpenter, *Reinsurance Terms* (2014) <http://www.guycarp.com/content/guycarp/en/home/the-company/mediaresources/glossary/r.html>

Handmer, J and B Proudley, 'The Economic of Interface Wildfires' (Paper presented at Second International Symposium on Fire Economics, Policy and Planning: A Global View, Cordoba, 19–22 April 2004)

Hannam, Peter, 'Costs Soar for Reinsurers' The Age (Melbourne), 17 February 2013

Hannam, Peter, 'Expect to Pay More for Risky Lifestyles' *The Age* (Melbourne), 12 January 2013

Hannam, Peter, 'Flood Cover rises to unaffordable levels' *The Sydney Morning Herald* (Sydney), 17 February 2013

Hannam, Peter, 'Walls keep Water Out and Flood Bills Down' *The Age* (Melbourne), 2 February 2013

Hoban, Mark, 'Public Interest versus Private Profits' (Paper presented at Gresham College, 17 September 2015)

Hogarth, Murray, 'Token Levy is no Financial Levee for Fraught Climate Future' ABCEnvironment(Australia),28January2011<http://www.abc.net.au/environment/articles/2011/01/28/3123767.htm>

Hurst, Daniel, 'State Insurance Documents to Stay Under Wraps' *Brisbane Times* (Brisbane), 9 March 2011

Institute of Insurance Actuaries, 'Submission to Garnaut Climate Change Review- Update 2011', March 2011 <www.actuaries.asn.au>

Insurance Council of Australia, 'Affordability Projects: National Flood Information Database' (2015) < http://www.insurancecouncil.com.au/affordability>

Insurance Council of Australia, 'Aggregated Flood Policy Data' (2014) <http://www.insurancecouncil.com.au/industry-statistics-data/flood-cover>

Insurance Council of Australia, 'Building Resilience Knowledge Database' (2014) <http://www.buildingresilience.org.au/brkd>

Insurance Council of Australia, 'Building Resilience Rating Tool' (2014) <http://www.buildingresilience.org.au/brrt>

Insurance Council of Australia, 'ICA Supports Natural Disaster Insurance Review' (Media Release, 4 March 2011)

<http://www.insurancecouncil.com.au/Portals/24/Media%20Centre/2011%20Media%20Rele ases/Disaster%20Review.pdf>

Insurance Council of Australia, 'Insurance Council of Australia Historical and Current Data Statistics at 25 March 2011' (Statistics, Insurance Council of Australia, 25 March 2011) <http://www.insurancecouncil.com.au/IndustryStatisticsData/CatastropheDisasterStatistics/ta bid/1572/Default.aspx>

Insurance Council of Australia, 'Insurance Council of Australia Response to the Report to the Council of Australian Governments on Natural Disasters in Australia' (March 2006)

Insurance Council of Australia, 'New Flood Database Expands Insurers' Knowledge of Risk' (2012) http://www.insurancecouncil.com.au/media_release/plain/177

Insurance Council of Australia, 'Non-Insurance', 2 December 2015 <http://www.insurancecouncil.com.au/issues-submissions/reports/non-insurance>

Insurance Council of Australia, 'Queensland Floods: Hydrology Reports' (Report, Insurance Council of Australia, 2011) http://www.insurancecouncil.com.au/Default.aspx?tabid=1881

Insurance Council of Australia, Submission No 1: Submission to the Financial Systems Inquiry to Treasury (Commonwealth), *Financial Systems Inquiry*, March 2014

Insurance Council of Australia, Submission to the Victorian Parliamentary Economic Development and Infrastructure Committee, *Inquiry into State Government Taxation and Debt*, October 2009

Insurance Council of Australia, *Year in Review 2009* (2009) <http://www.insurancecouncil.com.au/Portals/24/Year%20In%20Review%202009/Insurance Council_YearInReview_PRINT2.pdf>

Insurance Council of Australia and Council of Australian Governments, 'Natural Disasters in Australia: Reforming Mitigation, Relief and Recovery Arrangements', August 2002

Insurance Council of New Zealand, 'Our Members', 2016 http://www.icnz.org.nz/about-us/our-members/>

Insurance Council of New Zealand, 'Insurers Agree a \$100,000 fine for Fair Insurance Code Breach', 10 July 2015 http://www.icnz.org.nz/insurers-agree-100k-fine-for-fair-insurance-code-breach/>

Integrated Fire Management Planning Knowledge Based Workshop, University of Ballarat, Mt Helen Campus, 3 August 2012 International Risk Management Institute, 'Probable Maximum Loss (PML)' (2015) <https://www.irmi.com/online/insurance-glossary/terms/p/probable-maximum-losspml.aspx>

Interview with Karl Sullivan (Phone interview, 31 July 2012)

Interview with Phil Hammond, Senior Manager CGU Insurance (Melbourne, 18 May 2011)

James, Denis, 'Federal and State Taxation: A Comparison of the Australian, German and Canadian Systems' (Parliamentary Paper Current Issues Brief 1997 – 1998, Economic, Commerce and Industrial Relations Group, 3 November 1997) <http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Libra ry/Publications Archive/CIB/CIB9798/98cib05>

James, Julian, 'Spain Consorcio Changes: Cover for 'Extraordinary Events' in Spain and Applicable Charges' (Market Bulletin No Y3709, Lloyd's of London, 20 December 2005)

Joint Statement between Earthquake Action Group and the Earthquake Commission http://www.eqcgroupaction.co.nz/ga/Joint-Statement-EQC-Action-Group-28-April-2016.pdf

Keys, Chas and Anthony Bergin, 'Don't wait until flood horse has bolted to close the door' *The Age* (Melbourne), 5 February 2013

Kirby, Michael, 'Laws of Compulsory Land Acquisition (Forward)' (2010) <http://www.michaelkirby.com.au/images/stories/speeches/2000s/2010_Speeches/2429.Fore word-LawsOfCompulsoryLandAcquisition.pdf>

Koch, David, 'Flood Victims Ripped Off by Greedy Insurers' *The Punch (online)* 18 January 2011 http://www.thepunch.com.au/articles/flood-victims-ripped-off-by-greedy-insurers/desc/

Latham, C, P McCourt and C Larkin, 'Natural Disasters in Australia: Issues of Funding and Insurance' (Paper presented at Institute of Actuaries of Australian 17th General Insurance Seminar, Gold Coast, 7–10 November 2010)

Lee, Jane, Richard Willingham and Timna Jacks, 'Black Saturday Victims Win \$500 Million Settlement' *The Age (online)*, 15 July 2014 http://www.theage.com.au/victoria/black-saturday-victims-win-500m-settlement-20140715-zt7jh.html

Legislative Council of Western Australia, 'Disability Services Amendment Bill 2014' (Report 86, Standing Committee on Uniform Legislation and Statutes Review, May 2014)

Letter from Chris Pearce to J I Gersh (Chairman of the Australian Reinsurance Pool Corporation), 3 May 2007

Letter from J I Gersh (Chairman of Australian Reinsurance Pool Corporation) to Chris Pearce, 24 July 2007

Letter from Senator Ian MacDonald to Insurance Council of Australia, 9 May 2011

Letter from Senator Ian MacDonald to Linda Tuck, 16 May 2011

Lloyds, 'Claims Management: Lloyd's Claims Management Principles and Minimum Standards', 1 January 2012 http://www.lloyds.com/The-Market/Operating-at-Lloyds/Performance-Framework-of-Minimum-Standards/Claims-Management

López Cabrera, Brenda, *Pricing Catastrophe Bonds for Earthquake in Mexico* (MSc Thesis, Humboldt-Universitat zu Berlin, 2006)

Madigan, Michael, 'Flood Insurance Premiums Slashed by up to 90% as Levees Relieve the High Cost of Cover' *Courier Mail* (Brisbane), 28 July 2014 <http://www.couriermail.com.au/news/queensland/flood-insurance-premiums-slashed-by-upto-90-as-levees-relieve-high-cost-of-cover/story-fnihsrf2-

1227003399201?nk = 045 ebcf2e3c1e81a36b54 ebf8ea7e838 > 045 ebcf2e3c1e81a36b54 ebf8ea7e83 > 045 ebcf2e3c1a81a56b54 = 045 ebcf2e3c1a81a56b54 = 045 ebcf2e36 > 045 ebcf2e3c1a81a56 > 045 ebcf2e36 > 045 e

Main, Andrew, 'Victoria Abolishes the Fire Services Levy on Insurance', *The Australian* (*online*), 28 August 2010 < http://www.theaustralian.com.au/business/victoria-abolishes-fire-services-levy-on-insurance/story-e6frg8zx-1225911077603>

Marney, Tim, '2010 RiskCover Fund Report' (Fund Report, Treasury of Western Australia, 2010)

Maurice Blackburn Lawyers, 'Kilmore East—Kinglake Bushfire Class Action Information Sheet' (2014) http://www.mauriceblackburn.com.au/media/2423/proposed settlement info sheet.pdf>

Maurice Blackburn Lawyers, 'Murrindindi—Marysville Bushfire Class Action' (2014) ">http://www.mauriceblackburn.com.au/legal-services/general-law/class-actions/current-class-actions/bushfire-class-actions/murrindindimarysville-bushfire-class-action/>">http://www.mauriceblackburn.com.au/legal-services/general-law/class-actions/current-class-actions/bushfire-class-actions/murrindindimarysville-bushfire-class-action/

Maurice Blackburn Lawyers, 'Record Settlement Gets Go Ahead for Kinglake Bushfire Survivors' (Media Release, 23 December 2014) <http://www.mauriceblackburn.com.au/about/media-centre/media-statements/2014/recordsettlement-gets-go-ahead-for-kinglake-bushfire-survivors/>

McAneney, John, Macquarie University (Risk Frontiers), Personal Communication to Rachel Anne Carter, 2015

McKechnie, Kirrin, 'No Go Flood Insurance Zone Worries Regional Council Leaders' 7:30 Queensland News, 8 June 2012 http://www.abc.net.au/news/2012-06-08/no-go-flood-insurance-zone-worries-regional/4061506

Memoranda from Senator Ian MacDonald, 18 November 2011

Nájera, Alfonso, 'Insurance and Floods in Spain' (Paper presented at Flood Resilience in Urban Areas—the Collaborative Research on Flood Resilience in Urban Areas Project, Barcelona, 19 May 2014) http://www.cetaqua.com/uploads/pdf/06_Alfonso_N%C3%A1jera_%28CCS%29_Insuran ce_and_floods_in_Spain.pdf>

Nájera Ibáñez, Alfonso, *Consorcio de Compensación de Seguros*, Personal Communication to Rachel Anne Carter, May 2016

Nájera Ibáñez, Alfonso, *Consorcio de Compensación de Seguros*, Personal Communication to Rachel Anne Carter, October 2015

Nancarrow, Dan, 'When is a Flood Not a Flood?' *Brisbane Times* (Brisbane), 6 January 2011 <<u>http://www.brisbanetimes.com.au/environment/weather/when-is-a-flood-not-a-flood-</u>

20110105-19g0p.html>

NatCatSERVICE, 'Catastrophe Categories' (Munchener Ruckersicherungs-Gesellschaft, Geo Risks Research, 2001)

<http://www.munichre.com/app_pages/www@res/pdf/natcatservice/database/catastrophe_cla sses_touch_en.pdf>

National Insurance Brokers Association, 'How Much Are You Paying?' (Report, National Brokers Association, May 2014) http://www.niba.com.au/tax/html/how_much.cfm>

National Disability Insurance Scheme, 'What is the National Disability Insurance Scheme?' (2015) http://www.ndis.gov.au/what-is-the-ndis

New South Wales Government Fair-trading, 'The Consumer Movement: 1960 to 1970' <http://www.fairtrading.nsw.gov.au/Youth/School_projects/Brief_history_of_consumer_prot ection_in_NSW/The_consumer_movement.html>

New South Wales, Motor Accidents Authority http://www.maa.nsw.gov.au/about-us/about-the-nsw-ctp-scheme/useful-links

New South Wales Self Insurance Corporation (Annual Report 2009–2010, New South Wales Self Insurance Corporation, 31 October 2010)

New South Wales Self Insurance Corporation, 'Treasury Managed Fund' (Fund Overview, April 2009)

New Zealand, Parliamentary Debates, 15 December 1992

2% 22 Papers + relating + to + the + introduction + of + salmon + ova% 22 - - >

New Zealand Earthquake Commission, 'Excesses on Earthquake Commission Claims' (New Zealand Government, 2012) http://canterbury.eqc.govt.nz/sites/default/files/excess-factsheet.pdf>

New Zealand Earthquake Commission, Our History http://www.eqc.govt.nz/our-history

New Zealand Earthquake Commission, 'Review of New Zealand Earthquake Commission's Catastrophe Response Operational Capability' (Report, May 2009)

New Zealand Earthquake Commission, 'Statement of Intent from 1 July 2011–30 June 2014', (New Zealand Government, 30 June 2011)

New Zealand Earthquake Commission, 'Statement of Investment Policies, Standards and Procedures', (Statement of Investment Policies No 3.1.1, May 2009)

New Zealand Fire Services, *Levy Manual for Direct Payers* (2016) http://www.fire.org.nz/About-Us/NZFS-levy/Documents/Levy%20Manual.pdf>

Northern Territory Government, 'Natural Disaster Relief and Recovery Arrangements' http://www.nt.gov.au/ntt/NDRRA/index.shtml

Northern Territory Treasury, 'Treasurer's Directions: Risk Management–Insurable Risk Framework Section M 2.1- Insurance Arrangements' (Treasurer's Directions, Northern Territory Treasury, December 2010)

OECD, Recommendation: *Good Practices for Mitigating and Financing Catastrophe Risk* (16 December 2010)

OECD Insurance Statistics, *Insurance Activity Indicators: Density* (Table, Spain, OECD Internal document DOI10.1787/ins-data-en)

OECD Statistics, *Insurance Activity Indicators: Total Gross Premiums* (Table, Spain, OECD Internal document DOI10.1787/ins-data-en)

OECD Statistics, *Insurance Activity Indicators: Penetration* (Table, Spain, OECD Internal document DOI10.1787/ins-data-en)

OECD Statistics, *Insurance Activity Indicators: Retention Ratio* (Table, Spain, OECD Internal document DOI10.1787/ins-data-en)

OECD, 'Insurance Activity Indicators: Ratio of Reinsurance Accepted', OECD Insurance Statistics Database (OECD Internal Document DOI10.187/ins-data.en)

OECD, Glossary of Insurance Policy Terms (OECD Publishing, 1999)

Office of the Australian Information Commissioner, 'Australian Privacy Principle Guidelines: *Privacy Act 1988* (Cth)' (31 March 2015) <https://www.oaic.gov.au/resources/agencies-and-organisations/appguidelines/APP guidelines complete version 1 April 2015.pdf>

Office of Australian Information Commissioner, 'Australian Privacy Principles (Summary)' (2016) https://www.oaic.gov.au/privacy-law/privacy-act/australian-privacy-principles

Okada, Tetsuya et al, 'Recovery and Resettlement following the 2011 Flash Flooding in the Lockyer Valley' (2014) 8 *International Journal of Disaster Risk Reduction* 20

Packham, Colin, 'What is an event?' (August 2015) 15(1) *Risk Frontiers Quarterly Newsletter* 3

Queensland Government, *Premier's Disaster Relief Appeal: Distribution Committee Report* (October 2011)

<http://www.premiers.qld.gov.au/publications/categories/reports/assets/premiers-disasterrelief-appeal.pdf>

Queensland Government 'Premier's Disaster Relief Appeal Major Donations' (11 April 2011) http://www.thepremier.qld.gov.au/initiatives/disaster_recovery/donations.aspx

Queensland Government, 'Queensland Cyclone and Flood Assistance', January 2011 <www.business.qld.gov.au/disaster-recovery/flood-assistance.html>

Queensland Government, *Disaster Finance Arrangements* (April 2011) </br><www.disaster.quld.gov.au/support>

Queensland Reconstruction Authority, *Operation Queenslander: The State Community, Economic and Environmental Recovery and Reconstruction Plan 2011–2013* (March 2011) <http://www.qldreconstruction.org.au/u/lib/State-Plan-QRA.pdf>

RAA Insurance, Home and Contents Insurance Product Disclosure Statement (October 2007)

Reserve Bank of Australia, 'Inflation Target' http://www.rba.gov.au/inflation/infl

Reserve Bank of New Zealand and New Zealand Treasury, 'Christchurch Insurance Update' (Report T2011/391- Treasury 2024587v1, 10 March 2011)

Risk Frontiers, 'Damage Scales' https://www.riskfrontiers.com/damage_scales.htm

Risk Frontiers, 'Tsunami – the Underrated Hazard!' (June 2004) 3 *Risk Frontiers Quarterly Newsletter* 1 <https://www.riskfrontiers.com/newsletters/rfnewsV3Issue4.pdf>

RMS, 'Catastrophic Models: Mapping the Landscape' http://www.rms.com/models/models-cat

South Australian Insurance Corporation, 'Government Contracts: A Guide to Insurance and Liability Issues' (Report, South Australian Government, February 2005)

Senate, 'Second Reading Speech: National Disability Insurance Scheme 2013' (Senate, 20 March 2013)

Settlement Agreement: EQC Action Group and Earthquake Commission, 28 April 2016 <http://www.eqcgroupaction.co.nz/ga/Agreement-EQC-Action-Group-28-April-2016.pdf>

Shaw Knowles, George, 'Opinion No 1633—National Health and Pensions Insurance Bill' (31 May 1938) http://legalopinions.ags.gov.au/legalopinion/opinion-1633

Shorten, Bill, 'Government Moves on Flood Insurance Fine Print' (Media Release 047, 5 April 2011)

Shorten, Bill, 'National Disaster Insurance Review' (Press Release 039, 4 March 2011) <http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=pressreleases/2011/039.htm&pageI D=003&min=brs&Year=&DocType=0>

Silverii, Jason, 'Fire Services Levy Abolition Long Overdue' (Media Release, 27 August 2010) http://www.aar.com.au/med/pressreleases/pr27aug10 01.htm>

Solomons, Mark, 'Anger Mounts as NRMA Rejects 'Sunny Day' Flood Claims' *The Courier Mail* (Queensland), 22 February 2011 ">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178>">http://www.couriermail.com.au/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178">http://www.couriermail.com.au/money-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178">http://www.couriermail.com.au/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178">http://www.couriermail.com.au/money-matters/anger-mounts-as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178">http://www.couriermail.com.au/money-matters/as-nrma-rejects-sunny-day-flood-claims/story-fn3hskur-1226009681178">http://www.couriermail.com.au/money-matters/story-flood-claims/story-flood-claims/story-flood-claims/story-flood-cl

Sommerville, Paul, 'Letter to John McAneney', 2015

South Australian Government Financing Authority, *Insurance (SAICORP)* http://www.safa.sa.gov.au/insurance/

Standard and Poor, Credit Research Update: Caisse Centrale de Reassurance 'AA+' Ratings Affirmed After Insurance Criteria Change; Outlook Negative (Alarca Store, June 2013)

Standard and Poor, Ratings Direct: What may cause insurance companies to fail and how this influences our criteria (Document 11443461300323561, 13 June 2013)

Stephenson, Catherine et al, 'Estimating the Net Cost of the 2009 Black Saturday Fires to the Affected Regions' (2012) http://www.bushfirecrc.com/news/news-item/estimating-net-cost-2009-victorian-black-saturday-fires-affected-regions>

Suncorp Insurance, *Class Home and Contents Insurance Product Disclosure Statement* (13 September 2010)

Swiss RE, 'Flooding in Australia: The Reality of Secondary Peril' (Media Release, 20 January 2011)

Thompson, Tuck and Mark Solomons, 'Delays to Queensland Flood Compensation Result in Big Windfall for Insurers' *The Courier Mail* (Brisbane) 28 February 2011 <http://www.dailytelegraph.com.au/news/national/delays-to-flood-compensation-result-inbig-windfall-for-insurers/story-e6freuzr-1226013210766>

Treasury (World Bank), *Case Study: Insuring Against Natural Disaster Risk in Mexico* (20 June 2011) http://treasury.worldbank.org/bdm/pdf/Case_Study/Mexico_CatBond.pdf

Unión Española de Entidades Aseguradoras y Reaseguradoras, *Spanish Insurance Social Report* (Unión Española de Entidades Aseguradoras y Reaseguradoras, August 2010)

Unión Española de Entidades Aseguradoras y Reaseguradoras, 'Los intentos de fraude al Seguro aumentaron casi un 12% en 2012', 6 May 2013 <http://www.unespa.es/adjuntos/fichero_3559_20130506.pdf>

United States Geological Society, 'Earthquake Hazards Program: Earthquake Glossary' http://earthquake.usgs.gov/learn/glossary/?term=earthquake

Victoria, *Parliamentary Debates*, Legislative Assembly, 10 November 2009, 3762 (Tim Holding)

Victoria, *Parliamentary Debates*, House of Representatives, 2 December 1936 (Thomas Tuke Hollway)

Victoria, *Parliamentary Debates*, House of Representatives, 2 December 1936 (Sir Albert Louis Bussau, Attorney-General)

Victoria, *Parliamentary Debates*, House of Representatives, 2 December 1936 (Sir Archie Reuben Louis Michaelis)

Victoria, *Parliamentary Debates*, House of Representatives, 2 December 1936 (Trevor Donald Oldham)

Victoria, *Parliamentary Debates*, House of Representatives, 2 December 1936 (William George Alexander McKenzie)

Victoria, *Parliamentary Debates*, House of Representatives, 2 December 1936 (William Slater)

Victorian Bushfire Appeal Fund, *Fund Payments*, (State Government of Victoria, Department of Human Services, 2011) http://www.dhs.vic.gov.au/bushfireappeal/Fund-Payments>.

Victorian Bushfire Appeal Fund, Victoria Bushfire Appeal Fund 12 Month Report (2010) <http://www.dhs.vic.gov.au/__data/assets/pdf_file/0006/531375/vbaf_12mnthreport_dec201 0.pdf>

Victorian Bushfire Reconstruction and Recovery Authority, 'Rebuilding Together: A Statewide Plan for Bushfire Reconstruction and Recovery' (Plan, October 2009)

Victorian Bushfire Recovery and Reconstruction Authority, 'In Their Own Words: Reflections, Insights and Stories from the 2009 Victorian Bushfires' (Anecdote Report, November 2010)

Victorian Department of Justice, *Model Litigants Guidelines: Guidelines on the State of Victoria's Obligations to Act as a Model Litigant* (2012) ">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice.vic.gov.au/home/justice+system/laws+and+regulation/victorian+model+litigant+guidelines>">http://www.justice/wictorian+guidelines>">http://www.justice/wictorian+guidelines">http://www.justice/wictorian+guidelines">http://www.justice/wictorian+guidelines

Victorian Government, 'About the Levy- Why did this change?'

<http://www.firelevy.vic.gov.au/why-did-this-change.html>

Victorian Government, 'Fire Services Property Levy–Fact Sheet' (July 2014). http://www.firelevy.vic.gov.au/pdf/Language%20Files/English/What%20it%20means%20f or%20households.pdf>

Victorian Government, 'Fire Service Levy Reforms' (Media Release, 5 February 2014) http://www.vic.gov.au/news/fire-services-levy-reforms.html

Victorian Government, 'Valuer-General Victoria: Valuing Victoria' http://www.dtpli.vic.gov.au/_data/assets/pdf_file/0006/218355/valuingvictoria09_v1.pdf

Von Ungern-Sternberg, Thomas, *Catastrophe Insurance: Spain v France* (OECD, France) <<u>http://www.oecd.org/env/cc/37781875.pdf</u>>

Wilkins, Roger and Margot McCarthy, *Council of Australian Governments National Strategy for Disaster Resilience: Building Our Nation's Resilience to Disaster* (Report, Council of Australian Governments, 13 February 2011) <http://www.coag.gov.au/coag_meeting_outcomes/2011-02-13>

Williams, Stewart et al, 'Natural Disaster Preparation and Response: A Guide for State Housing Authorities' (Australian Housing and Urban Research Institute Positioning Paper No 113, 2009)

Wilson, Lauren, 'State Goes It Alone in Shunning Insurance' *The Australian* (Sydney) 3 February 2011

World Bank, 'Global Forum of Disaster Risk Reduction: Catastrophe Risk Insurance Pricing' (April 2011)

<http://www.gfdrr.org/sites/gfdrr.org/files/documents/DRFI_CatRiskPricing_Concept_Apr11 .pdf>

World Bank and Queensland Reconstruction Authority, *Queensland: Recovery and Reconstruction in the Aftermath of the 2010/2011 Flood Events and Cyclone Yasi* (World Bank, June 2011)

Yeates, Clancy, 'Booby Trap in the Fine Print as Industry Cops Warning' *Sydney Morning Herald (online)*, 3 February 2011 http://www.smh.com.au/environment/weather/booby-trap- in-the-fine-print-as-industry-cops-warning-20110202-1advv.html#ixzz1MoBTyUvi>

Yeates, Clancy, 'Fine Print Might Give Insurers Get Out Clause' *The Age* (Australia), 3 February 2011 <<u>http://www.theage.com.au/national/fine-print-might-give-insurers-getout-</u> clause-20110202-1adu8.html>