

National Claims and Policies Database

Claims trends for liability insurance

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Notation

Amounts are expressed in Australian dollars.

The symbol ' * ' indicates that the data have been masked to maintain confidentiality.

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Executive Summary

Liability insurance stakeholders can make better decisions when equipped with a claims dataset that covers as large a population of claims as possible, over as long a time series as possible. The National Claims and Policies Database (NCPD) has the largest available population of Australian policy and claim data for liability insurance in the post tort reform era, that is, from 2003 onwards. This report releases data from the NCPD to allow stakeholders to assess for the first time claims trends within naturally distinct categories of bodily injury claims and property damage claims for the Australian liability insurance market. In this report, these two distinct kinds of claim are further divided into claim jurisdiction and industry division, giving stakeholders increased visibility into the Australian liability insurance market that has not been possible until now.

Glossary

Exposure is the number of risks for which cover has been provided in a given year. That is, to how many liability risks is the insurance industry 'exposed'? The measure used for exposure in this report is explained in the *Methodology* section.

Accident year of a claim is the year in which the incident occurred which gave rise to the claim.

Finalisation year is the year in which the claim was settled and closed by the insurer.

Development year is the number of years between the incident occurring and the claim being reported. For example, a claim occurred in 2012 but reported in 2014 has a development year 2.

Claim jurisdiction is the state or territory where the claim has been decided by a court judgement or where the claimant resides.

Industry division is the highest level industry classification in the *Australia and New Zealand Standard Industry Classification (ANZSIC) 1993*.

Inflated claim cost is the cost of claim expressed in 2013 dollars to allow for economic inflation.

Large claims are claims settled for more than \$500,000 on an inflated basis.

General nature of loss captures the primary kind of loss associated with a claim. The two largest categories by number and cost of claims are bodily injury and property damage. These account for about 95 per cent of claims and 85 per cent of claim costs. We group other loss types together under the category 'other general natures of loss'.

Cause of loss captures the how the incident occurred which gave rise to the claim.

Claims reported are claims which have been reported to the insurer.

Projected IBNR is an estimate of the number of claims which have not yet been reported to the insurer. See the *Methodology* section for information on how this is calculated.

Projected ultimate is an estimate of the total number of claims, calculated as the sum of claims reported and projected IBNR.

State of policy issue is the state or territory in which the policy was written. The jurisdiction which applies to a claim may be different from the state of policy issue for the policy which corresponds to the claim.

1. Introduction

1.1 Source of data: National Claims and Policies Database

In January 2005, the Australian Prudential Regulation Authority (APRA) created and launched the National Claims and Policies Database (NCPD) for public and products liability and professional indemnity insurance at the request of the Federal Government. The NCPD was established in consultation with the insurance industry and other stakeholders. All of the data in this report is from the NCPD.

The NCPD is a significant industry resource due to the size and coverage of the dataset. The NCPD has built up 11 years of claims and policy data from 2003 through to 2013. Following consultation with industry, NCPD data was published without confidentiality masking for the first time in 2012.

The NCPD provides insurers, the community and the government with a better understanding of public and products liability and professional indemnity insurance. It aims to help make public and product liability and professional indemnity insurance products more affordable and available by:

- providing insurers with detailed information to help them assess risks and determine appropriate premiums for these insurance products; and
- helping insurers develop or enhance the products available to policyholders in the future.

It also enables the government, the community and insurers to identify trends in the cost or number of public and product liability and professional indemnity claims, and to make better informed responses to those changes.

All APRA-regulated insurers that provide these types of insurance policies contribute claims and policies data to the NCPD.

1.2 Purpose of this report

The purpose of this report is to provide more detailed information for the public and products liability market, featuring information at a level of detail that has not been published previously. While this report contains no commentary and does not attempt to identify significant industry trends and influences, it provides data that can be used by stakeholders to gain such further insight by analysing these newly published data.

The objectives of the NCPD are to provide relevant and useful information to stakeholders on public and products liability and professional indemnity insurance. The information released in this report, which is more detailed than existing NCPD releases, enables stakeholders to better understand the insurance market for these products.

NCPD reports and publications

APRA publishes reports from the NCPD each year. There are two sets of published reports: level 1 reports and level 2 reports. Both can be accessed from www.ncpd.apra.gov.au

Level 1 reports

The level 1 reports provide claims and policy information on a class of business, state and accident or underwriting year basis. Access to these reports is free of charge. To access level 1 reports you must first register as a user.

Level 2 reports

The level 2 reports provide information on a number of policy and claim measures such as written premium and claims incurred. The information is aggregated and provides information across state, product, industry/occupation code, limit of indemnity and excess/deductible. Access to these reports is via a free subscription through the NCPD website.

1.3 Format and content of this report

Sample graphs

This report includes a small number of sample graphs which are produced using part of the aggregate data which are given in the report in data tables. These graphs provide a demonstration of the data being transformed into visual format that could be used to prompt discussion and identify trends. These sample graphs do not however attempt to pre-empt any conclusions by the reader from the data given here or to highlight any particular trends or features.

The exception to this intention is the large claim distribution graphs shown in section 6, which are based on underlying individual claim data that are not included in the report.

Report content

This report was prepared in consultation with Finity Consulting on report content and calculation methodologies. This consultation helped ensure that the report includes data which is useful to industry stakeholders in understanding claim trends and drivers of those trends. To achieve this, the data in the report is typically presented in four main ways:

1. **Claim jurisdiction or state** is provided as a number of different factors based on jurisdiction can impact trends in liability insurance. First, underwriters may formulate different strategies for different states and territories. Second, there were differences in how tort reform was introduced in different states and territories, and social and judicial norms can differ between states and territories leading to different claims outcomes. Third, states and territories differ in their demographics, economic conditions and dominant industries.
2. **Industry divisions** can be impacted by different kinds of exposure to incidents. For example, the kinds of incident in the mining industry which give rise to liability claims are different from those in accommodation, cafes and restaurants. As a result, the frequency and size of claims will differ.
3. **General nature of loss** separates out the kind of loss involved in a claim. For the most part, tort reform only limits the cost of bodily injury claims, not property damage claims. Underlying drivers of trends in a claims portfolio may be clearer when claim costs are split by these different types of claim. Therefore, all of the tables separate claims bodily injury claims from property damage claims. Most claims are either bodily injury claims or property damage claims, and so the remaining general natures of loss are grouped into a single category.
4. **Claim size** - Non-large claims comprise the bulk of claims whose behaviour often can be tracked as an average. Large claims, on the other hand, are less frequent and subject to more random fluctuations.

There are a number of relevant measures of industry experience and claims trends. These have been provided in different sections of the report.

Section 2

Policy exposure is presented in section 2. In table 2.1, exposure is shown by industry division, and in table 2.2 by policy state and territory. These tables show the degree to which the insurance industry's exposure to liability risks has grown by industry division and by state and territory.

Section 3

Claims reported, projection of claims incurred but not reported (IBNR) and projected ultimate claims reported are shown in section 3. This gives an indication of how many claims insurers can expect to receive in the future for accident years already past.

Section 4

Inflating the cost of finalised claims allows the cost of claims finalised in different years to be compared on the same basis. This report separates the cost of finalised claims - on an inflated basis - into bodily injury claims, property damage claims and other general nature of loss.

Both the inflated finalised claims cost and the number of claims finalised are given in the aggregate, and by claim jurisdiction, by industry division and by cause of loss. This allows a view of the size and rate at which claims are finalised by different segment, and combined with the cost of claims finalised the average claim size can be calculated.

Section 5

Table 5.1 shows the inflated cost of large claims and of non-large claims, separated into bodily injury versus property damage claims. Table 5.2 is similar to table 13 but presents the number of claims finalised.

Section 6

Finally, charts which show claim size distribution are given. These charts show the cost range within which most claims settle which helps insurers understand the costs to which they are exposed. These charts present a fitted distribution curve to non-large and large claim size categories, up to \$500k, from \$500k to \$2 million and for claims over 2 missions

This report presents data for the time series 2005 through to 2013. This time series is chosen because claim and policy attributes became mandatory in 2005 onwards. Prior to 2005, some claim and policy attributes were submitted on a voluntary basis only. Data relating to 2013 is the most recent full year for which data has been collected.

2. Exposure

Table 2.1 Exposure by industry division

(thousand)

	Calendar year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Accommodation, Cafes and Restaurants	68.7	70.2	70.0	72.0	76.8	83.9	86.1	85.3	88.0
Agriculture, Forestry and Fishing	192.4	198.1	193.8	170.7	189.8	225.1	207.7	201.1	204.6
Communication Services	10.1	9.2	8.3	8.5	8.8	8.9	8.2	7.3	7.1
Construction	296.6	321.9	334.0	356.0	390.8	422.0	435.3	436.2	435.0
Cultural and Recreational Services	39.9	41.9	38.2	33.6	34.3	34.9	34.8	40.0	46.7
Education	13.2	13.8	14.9	16.8	19.6	21.4	21.9	21.6	21.1
Electricity, Gas and Water Supply	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.8
Finance and Insurance	16.8	19.6	21.0	21.5	21.8	22.5	22.7	22.6	22.2
Government Administration and Defence	0.6	0.5	0.5	0.5	0.5	0.7	0.8	0.9	1.0
Health and Community Services	102.9	133.9	154.2	147.0	129.5	125.4	130.0	135.2	140.8
Manufacturing	120.3	124.3	124.4	127.6	132.6	134.3	131.7	128.9	127.3
Mining	56.3	56.8	58.2	67.7	65.8	50.1	55.8	57.9	47.5
Personal and Other Services	107.5	112.2	116.4	124.5	137.0	148.9	153.5	154.7	155.9
Property and Business Services	498.0	525.1	544.4	569.7	600.1	631.0	652.4	670.4	682.6
Retail Trade	301.4	315.6	313.4	319.3	341.0	356.2	350.9	343.0	340.0
Transport and Storage	68.0	71.8	72.7	74.7	79.5	83.6	84.9	83.1	79.9
Wholesale Trade	49.3	50.5	49.6	49.7	49.8	48.8	47.8	47.7	47.7
Unknown	26.8	4.9	3.1	5.6	6.6	4.3	7.5	10.9	13.2
All industry divisions	1969.6	2071.0	2117.7	2165.8	2285.1	2402.5	2432.9	2447.5	2461.4

Note:

(a) Exposure is calculated as the average of the number of risks written in the year stated and the prior year.

Table 2.2 Exposure by state of policy issue

(thousand)

	Calendar year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
NSW	691.9	713.4	717.3	724.3	768.0	803.7	795.2	788.5	791.4
VIC	490.4	524.0	538.6	552.3	583.3	609.3	620.5	634.8	640.3
QLD	349.2	371.9	384.6	400.2	429.1	471.2	495.2	498.4	498.1
SA	157.5	165.1	170.5	173.7	179.2	184.4	184.3	184.4	184.5
WA	193.2	205.8	215.7	223.5	230.7	235.6	239.1	242.8	246.3
TAS	49.2	51.6	52.4	52.9	54.8	56.6	56.2	56.0	57.3
NT	11.8	12.5	12.5	12.4	12.5	12.9	13.3	13.8	14.2
ACT	26.3	26.6	26.3	26.6	27.6	28.9	29.0	28.8	29.4
Total Australia	1969.6	2071.0	2117.7	2165.8	2285.1	2402.5	2432.9	2447.5	2461.4

Note:

(a) Exposure is calculated as the average of the number of risks written in the year stated and the prior year.

3. Projected claims by general nature of loss, claim jurisdiction and industry division

Figure 3.1 - Projected ultimate claims and claims frequency for bodily injury claims

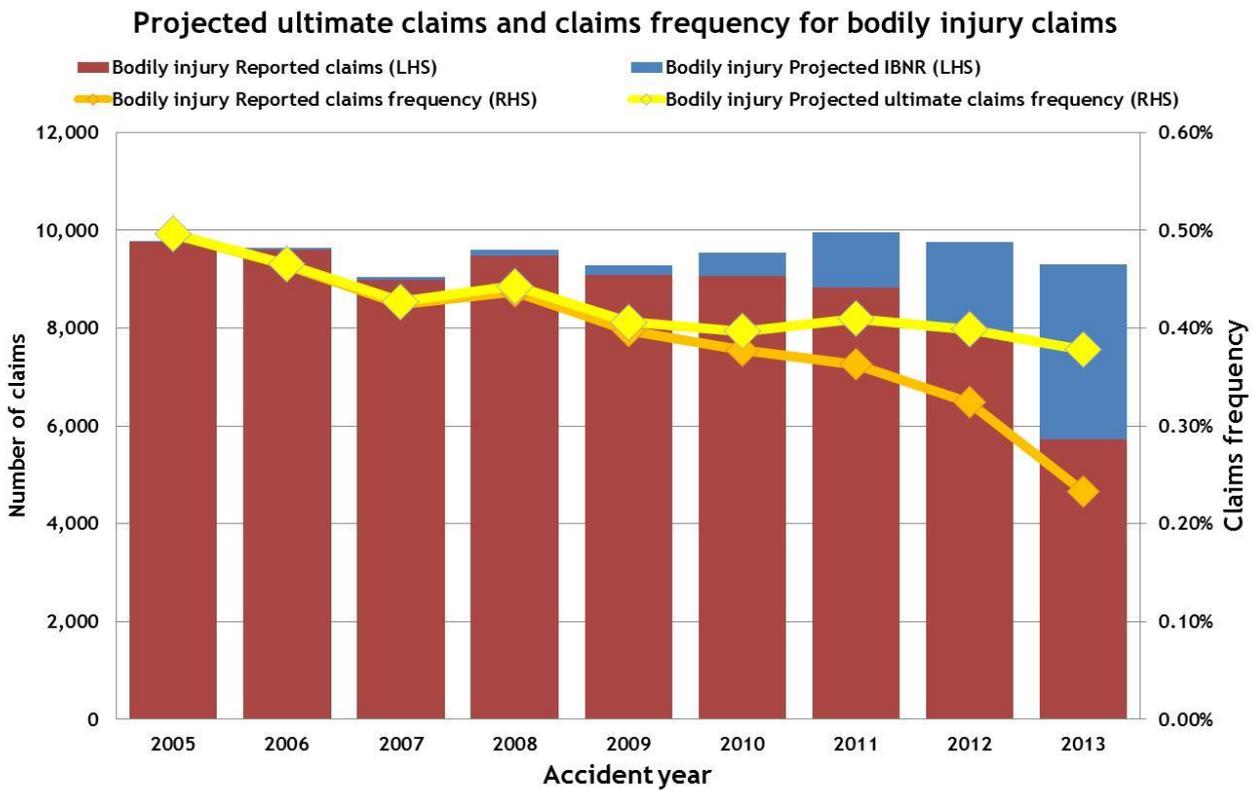


Figure 3.2 - Projected ultimate claims and claims frequency for property damage claims

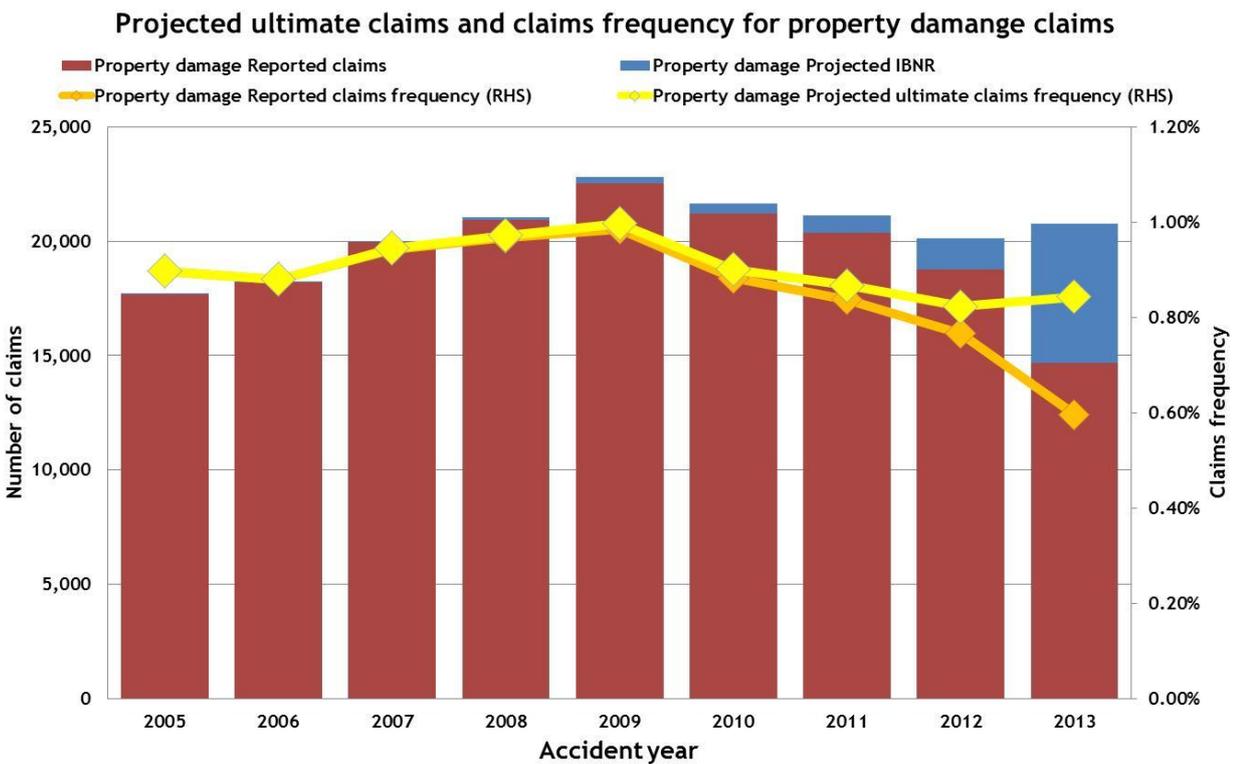


Table 3.1 Projected reported claims by general nature of loss

	Accident year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bodily injury									
Reported claims	9,763	9,609	8,988	9,476	9,077	9,067	8,824	7,934	5,724
Projected IBNR ^a	9	24	52	114	207	467	1,141	1,822	3,578
Projected ultimate^a	9,772	9,633	9,040	9,590	9,284	9,534	9,965	9,756	9,302
Property damage									
Reported claims	17,672	18,196	19,962	20,945	22,523	21,201	20,384	18,771	14,674
Projected IBNR ^a	8	22	54	118	265	442	726	1,371	6,096
Projected ultimate^a	17,680	18,218	20,016	21,063	22,788	21,643	21,110	20,142	20,770
Other general natures of loss									
Reported claims	1,661	1,300	1,251	1,372	1,408	1,617	1,616	1,573	1,236
Projected IBNR ^a	1	3	5	11	21	51	103	187	591
Projected ultimate^a	1,662	1,303	1,256	1,383	1,429	1,668	1,719	1,760	1,827
All claims									
Reported claims	29,096	29,105	30,201	31,793	33,008	31,885	30,824	28,278	21,634
Projected IBNR ^a	18	49	111	243	493	960	1,970	3,379	10,265
Projected ultimate^a	29,114	29,154	30,312	32,036	33,501	32,845	32,794	31,657	31,899

Note:

(a) Data is estimated based on grossing up factors and chain ladder projection method.

Table 3.2 Projected reported claims by general nature of loss and claim jurisdiction

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Claim jurisdiction		Bodily injury								
NSW	Reported claims	4,160	4,394	3,760	3,848	3,640	3,816	3,325	3,058	2,106
	Projected IBNR ^b	2	7	13	28	59	159	394	634	1,173
	Projected ultimate^b	4,162	4,401	3,773	3,876	3,699	3,975	3,719	3,692	3,279
VIC	Reported claims	1,741	1,467	1,559	1,695	1,494	1,429	1,316	1,130	875
	Projected IBNR ^b	5	8	19	43	67	125	223	329	614
	Projected ultimate^b	1,746	1,475	1,578	1,738	1,561	1,554	1,539	1,459	1,489
QLD	Reported claims	2,046	1,896	1,916	2,134	2,242	2,338	2,615	2,329	1,743
	Projected IBNR ^b	1	2	7	16	37	94	328	595	1,270
	Projected ultimate^b	2,047	1,898	1,923	2,150	2,279	2,432	2,943	2,924	3,013
SA	Reported claims	590	625	626	557	559	437	433	381	256
	Projected IBNR ^b	0	1	3	6	13	23	52	88	170
	Projected ultimate^b	590	626	629	563	572	460	485	469	426
WA	Reported claims	848	776	718	812	792	706	693	604	436
	Projected IBNR ^b	1	2	4	9	17	38	84	138	282
	Projected ultimate^b	849	778	722	821	809	744	777	742	718
TAS	Reported claims	112	98	90	85	98	65	77	79	150
	Projected IBNR ^b	0	0	0	1	2	4	11	18	86
	Projected ultimate^b	112	98	90	86	100	69	88	97	236
NT	Reported claims	30	58	113	33	26	55	14	18	8
	Projected IBNR ^b	0	0	0	0	0	2	1	4	7
	Projected ultimate^b	30	58	113	33	26	57	15	22	15
ACT	Reported claims	148	278	187	*	*	*	313	302	112
	Projected IBNR ^b	0	2	2	*	*	*	27	48	57
	Projected ultimate^b	148	280	189	*	*	*	340	350	169
Unknown	Reported claims	88	17	19	*	*	*	38	33	38
	Projected IBNR ^b	0	0	0	*	*	*	5	8	24
	Projected ultimate^b	88	17	19	*	*	*	43	41	62
Total Australia	Reported claims	9,763	9,609	8,988	9,476	9,077	9,067	8,824	7,934	5,724
	Projected IBNR ^b	9	24	52	114	207	467	1,141	1,822	3,578
	Projected ultimate^b	9,772	9,633	9,040	9,590	9,284	9,534	9,965	9,756	9,302

Table 3.2 Projected reported claims by general nature of loss and claim jurisdiction

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Claim jurisdiction	Property damage									
NSW	Reported claims	5,510	5,646	6,033	6,150	6,813	6,395	5,771	5,539	4,103
	Projected IBNR ^b	3	8	18	35	74	128	192	385	1,656
	Projected ultimate^b	5,513	5,654	6,051	6,185	6,887	6,523	5,963	5,924	5,759
VIC	Reported claims	3,912	4,073	4,613	4,726	4,958	4,781	4,751	4,058	3,247
	Projected IBNR ^b	2	6	15	35	83	132	233	381	1,491
	Projected ultimate^b	3,914	4,079	4,628	4,761	5,041	4,913	4,984	4,439	4,738
QLD	Reported claims	3,651	3,902	4,289	4,734	5,207	4,590	4,368	4,328	3,512
	Projected IBNR ^b	2	6	14	32	69	104	160	320	1,457
	Projected ultimate^b	3,653	3,908	4,303	4,766	5,276	4,694	4,528	4,648	4,969
SA	Reported claims	1,512	1,328	1,754	1,663	1,813	1,729	1,803	1,527	1,174
	Projected IBNR ^b	0	0	2	4	13	25	50	93	472
	Projected ultimate^b	1,512	1,328	1,756	1,667	1,826	1,754	1,853	1,620	1,646
WA	Reported claims	2,294	2,482	2,426	2,743	2,810	2,860	2,875	2,524	1,990
	Projected IBNR ^b	0	1	4	9	21	42	75	159	833
	Projected ultimate^b	2,294	2,483	2,430	2,752	2,831	2,902	2,950	2,683	2,823
TAS	Reported claims	466	482	529	547	579	517	495	462	359
	Projected IBNR ^b	1	1	1	3	6	9	15	29	137
	Projected ultimate^b	467	483	530	550	585	526	510	491	496
NT	Reported claims	*	*	104	*	*	113	98	*	62
	Projected IBNR ^b	*	*	0	*	*	2	3	*	22
	Projected ultimate^b	*	*	104	*	*	115	101	*	84
ACT	Reported claims	169	175	207	263	220	207	207	234	165
	Projected IBNR ^b	0	0	1	1	2	4	7	15	63
	Projected ultimate^b	169	175	208	264	222	211	214	249	228
Unknown	Reported claims	*	*	7	*	*	9	16	*	62
	Projected IBNR ^b	*	*	0	*	*	0	1	*	26
	Projected ultimate^b	*	*	7	*	*	9	17	*	88
Total Australia	Reported claims	17,672	18,196	19,962	20,945	22,523	21,201	20,384	18,771	14,674
	Projected IBNR ^b	8	22	54	118	265	442	726	1,371	6,096
	Projected ultimate^b	17,680	18,218	20,016	21,063	22,788	21,643	21,10	20,142	20,770

Table 3.2 Projected reported claims by general nature of loss and claim jurisdiction

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Claim jurisdiction	Other general natures of loss									
NSW	Reported claims	642	464	435	451	495	582	576	557	430
	Projected IBNR ^b	0	1	2	3	6	18	39	67	199
	Projected ultimate^b	642	465	437	454	501	600	615	624	629
VIC	Reported claims	320	268	239	294	271	300	317	290	240
	Projected IBNR ^b	0	1	2	4	7	13	24	39	116
	Projected ultimate^b	320	269	241	298	278	313	341	329	356
QLD	Reported claims	408	352	348	380	423	438	408	389	296
	Projected IBNR ^b	0	0	1	3	5	12	25	48	153
	Projected ultimate^b	408	352	349	383	428	450	433	437	449
SA	Reported claims	91	62	82	76	66	85	98	91	64
	Projected IBNR ^b	0	0	0	0	1	2	6	10	29
	Projected ultimate^b	91	62	82	76	67	87	104	101	93
WA	Reported claims	89	61	80	103	86	131	117	119	114
	Projected IBNR ^b	0	0	0	0	1	3	5	12	52
	Projected ultimate^b	89	61	80	103	87	134	122	131	166
TAS	Reported claims	22	13	17	17	19	27	20	20	24
	Projected IBNR ^b	0	0	0	0	0	1	1	2	11
	Projected ultimate^b	22	13	17	17	19	28	21	22	35
NT	Reported claims	*	*	5	*	*	9	9	*	5
	Projected IBNR ^b	*	*	0	*	*	0	0	*	2
	Projected ultimate^b	*	*	5	*	*	9	9	*	7
ACT	Reported claims	25	22	19	*	*	*	33	64	19
	Projected IBNR ^b	0	0	0	*	*	*	2	6	8
	Projected ultimate^b	25	22	19	*	*	*	35	70	27
Unknown	Reported claims	*	*	26	*	*	*	38	*	44
	Projected IBNR ^b	*	*	0	*	*	*	2	*	21
	Projected ultimate^b	*	*	26	*	*	*	40	*	65
Total Australia	Reported claims	1,661	1,300	1,251	1,372	1,408	1,617	1,616	1,573	1,236
	Projected IBNR ^b	1	3	5	11	21	51	103	187	591
	Projected ultimate^b	1,662	1,303	1,256	1,383	1,429	1,668	1,719	1,760	1,827

Table 3.2 Projected reported claims by general nature of loss and claim jurisdiction

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Claim jurisdiction		All claims								
NSW	Reported claims	10,312	10,504	10,228	10,449	10,948	10,793	9,672	9,154	6,639
	Projected IBNR ^b	4	16	33	67	146	321	649	1,117	3,085
	Projected ultimate^b	10,316	10,520	10,261	10,516	11,094	1,114	0,321	0,271	9,724
VIC	Reported claims	5,973	5,808	6,411	6,715	6,723	6,510	6,384	5,478	4,362
	Projected IBNR ^b	8	16	43	98	188	312	536	801	2,269
	Projected ultimate^b	5,981	5,824	6,454	6,813	6,911	6,822	6,920	6,279	6,631
QLD	Reported claims	6,105	6,150	6,553	7,248	7,872	7,366	7,391	7,046	5,551
	Projected IBNR ^b	3	8	20	46	103	196	464	921	2,989
	Projected ultimate^b	6,108	6,158	6,573	7,294	7,975	7,562	7,855	7,967	8,540
SA	Reported claims	2,193	2,015	2,462	2,296	2,438	2,251	2,334	1,999	1,494
	Projected IBNR ^b	1	1	4	9	26	54	124	201	685
	Projected ultimate^b	2,194	2,016	2,466	2,305	2,464	2,305	2,458	2,200	2,179
WA	Reported claims	3,231	3,319	3,224	3,658	3,688	3,697	3,685	3,247	2,540
	Projected IBNR ^b	0	3	9	19	37	79	164	306	1,160
	Projected ultimate^b	3,231	3,322	3,233	3,677	3,725	3,776	3,849	3,553	3,700
TAS	Reported claims	600	593	636	649	696	609	592	561	533
	Projected IBNR ^b	1	1	2	4	9	17	33	59	233
	Projected ultimate^b	601	594	638	653	705	626	625	620	766
NT	Reported claims	100	153	222	147	140	177	121	99	75
	Projected IBNR ^b	0	0	1	1	2	4	6	10	32
	Projected ultimate^b	100	153	223	148	142	181	127	109	107
ACT	Reported claims	342	475	413	538	408	397	553	600	296
	Projected IBNR ^b	0	2	2	5	6	11	30	59	126
	Projected ultimate^b	342	477	415	543	414	408	583	659	422
Unknown	Reported claims	240	88	52	93	95	85	92	94	144
	Projected IBNR ^b	0	0	0	1	2	4	8	14	71
	Projected ultimate^b	240	88	52	94	97	89	100	108	215
Total Australia	Reported claims	29,096	29,105	30,201	31,793	33,008	31,885	30,824	28,278	21,634
	Projected IBNR ^b	17	48	113	247	516	996	2,003	3,451	10,489
	Projected ultimate^b	29,113	29,153	30,314	32,040	33,524	32,881	32,827	31,729	32,123

Notes:

- (a) The symbol ' * ' means the figure is masked to protect confidentiality.
 (b) Data is estimated based on grossing up factors and chain ladder projection method.

Table 3.3 Projected reported claims by general nature of loss and industry division

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Industry division		Bodily injury								
Accommodation, Cafes and Restaurants	Reported claims	923	1,018	790	944	911	849	784	867	1,275
	Projected IBNR ^b	-	-	1	2	6	16	40	88	521
	Projected ultimate^b	923	1,018	791	946	917	865	824	955	1,796
Agriculture, Forestry and Fishing	Reported claims	136	114	122	106	88	123	106	*	80
	Projected IBNR ^b	-	0	2	4	6	15	25	*	94
	Projected ultimate^b	136	115	124	110	94	138	131	*	174
Communication Services	Reported claims	*	*	11	18	*	*	7	17	*
	Projected IBNR ^b	*	*	0	0	*	*	1	4	*
	Projected ultimate^b	*	*	11	18	*	*	8	21	*
Construction	Reported claims	665	750	776	977	859	733	610	481	240
	Projected IBNR ^b	1	3	9	29	50	99	222	336	479
	Projected ultimate^b	666	753	785	1,006	909	832	832	817	719
Cultural and Recreational Services	Reported claims	364	473	502	716	688	640	621	594	455
	Projected IBNR ^b	-	1	2	7	10	21	50	87	227
	Projected ultimate^b	364	474	504	723	698	661	671	681	682
Education	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*
Electricity, Gas and Water Supply	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*
Finance and Insurance	Reported claims	116	105	124	150	85	120	142	158	95
	Projected IBNR ^b	-	-	-	-	1	3	13	30	44
	Projected ultimate^b	116	105	124	150	86	123	155	188	139
Government Administration and Defence	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*
Health and Community Services	Reported claims	223	267	290	287	348	451	376	432	261
	Projected IBNR ^b	-	1	2	3	7	17	30	63	128
	Projected ultimate^b	223	268	292	290	355	468	406	495	389
Manufacturing	Reported claims	892	826	816	871	767	907	1,249	981	543
	Projected IBNR ^b	2	4	8	18	32	80	256	370	524
	Projected ultimate^b	894	830	824	889	799	987	1,505	1,351	1,067
Mining	Reported claims	135	116	112	135	108	69	104	32	*
	Projected IBNR ^b	-	-	1	2	4	7	30	19	*
	Projected ultimate^b	135	116	113	137	112	76	134	51	*

Table 3.3 Projected reported claims by general nature of loss and industry division

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Personal and Other Services	Reported claims	391	448	464	503	488	551	428	299	180
	Projected IBNR ^b	-	1	2	5	10	25	44	56	106
	Projected ultimate^b	391	449	466	508	498	576	472	355	286
Property and Business Services	Reported claims	3,286	2,782	2,564	2,566	2,717	2,734	2,723	2,471	1,549
	Projected IBNR ^b	2	5	9	16	34	90	225	368	656
	Projected ultimate^b	3,288	2,787	2,573	2,582	2,751	2,824	2,948	2,839	2,205
Retail Trade	Reported claims	1,682	1,590	1,335	1,179	1,183	1,045	985	939	599
	Projected IBNR ^b	-	2	2	4	11	29	76	138	302
	Projected ultimate^b	1,682	1,592	1,337	1,183	1,194	1,074	1,061	1,077	901
Transport and Storage	Reported claims	177	173	232	199	220	201	140	137	61
	Projected IBNR ^b	1	1	4	6	15	25	44	81	89
	Projected ultimate^b	178	174	236	205	235	226	184	218	150
Wholesale Trade	Reported claims	367	327	285	273	254	258	256	162	130
	Projected IBNR ^b	-	0	2	4	8	16	35	40	96
	Projected ultimate^b	367	327	287	277	262	274	291	202	226
Unknown	Reported claims	157	107	109	105	74	66	92	*	*
	Projected IBNR ^b	1	1	2	3	4	8	31	*	*
	Projected ultimate^b	158	108	111	108	78	74	123	*	*
All industry divisions	Reported claims	9,763	9,609	8,988	9,476	9,077	9,067	8,824	7,934	5,724
	Projected IBNR ^b	9	24	52	114	207	467	1,141	1,822	3,578
	Projected ultimate^b	9,772	9,633	9,040	9,590	9,284	9,534	9,965	9,756	9,302
Industry division		Property damage								
Accommodation, Cafes and Restaurants	Reported claims	353	325	351	374	360	510	566	529	539
	Projected IBNR ^b	-	-	-	-	1	4	9	20	159
	Projected ultimate^b	353	325	351	374	361	514	575	549	698
Agriculture, Forestry and Fishing	Reported claims	1,008	963	1,102	869	839	1,161	966	946	926
	Projected IBNR ^b	-	1	1	1	3	11	17	42	384
	Projected ultimate^b	1,008	964	1,103	870	842	1,172	983	988	1,310
Communication Services	Reported claims	115	104	118	113	78	77	72	68	60
	Projected IBNR ^b	0	0	0	1	1	2	3	5	25
	Projected ultimate^b	115	104	118	114	79	79	75	73	85
Construction	Reported claims	5,030	5,624	6,223	7,009	8,117	7,399	7,055	6,087	4,748
	Projected IBNR ^b	4	10	29	75	164	251	395	643	2,430
	Projected ultimate^b	5,034	5,634	6,252	7,084	8,281	7,650	7,450	6,730	7,178
Cultural and Recreational Services	Reported claims	144	125	151	144	157	167	166	169	64
	Projected IBNR ^b	-	-	-	-	0	1	2	6	25
	Projected ultimate^b	144	125	151	144	157	168	168	175	89

Table 3.3 Projected reported claims by general nature of loss and industry division

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Education	Reported claims	*	56	46	52	65	59	53	61	47
	Projected IBNR ^b	*	0	0	0	1	1	2	4	19
	Projected ultimate^b	*	56	46	52	66	60	55	65	66
Electricity, Gas and Water Supply	Reported claims	13	20	33	44	19	15	18	19	22
	Projected IBNR ^b	0	0	0	0	0	0	1	1	9
	Projected ultimate^b	13	20	33	44	19	15	19	20	31
Finance and Insurance	Reported claims	33	29	50	37	38	43	30	27	*
	Projected IBNR ^b	0	0	0	0	0	1	1	2	*
	Projected ultimate^b	33	29	50	37	38	44	31	29	*
Government Administration and Defence	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*
Health and Community Services	Reported claims	75	114	100	95	121	115	92	142	112
	Projected IBNR ^b	-	1	1	1	1	2	2	8	37
	Projected ultimate^b	75	115	101	96	122	117	94	150	149
Manufacturing	Reported claims	1,657	1,690	1,777	1,921	1,962	1,695	1,601	1,433	940
	Projected IBNR ^b	1	5	9	15	28	40	63	122	446
	Projected ultimate^b	1,658	1,695	1,786	1,936	1,990	1,735	1,664	1,555	1,386
Mining	Reported claims	*	465	488	528	600	174	*	155	127
	Projected IBNR ^b	*	1	2	2	4	2	*	7	40
	Projected ultimate^b	*	466	490	530	604	176	*	162	167
Personal and Other Services	Reported claims	791	826	1,016	1,163	1,238	1,391	1,190	1,013	893
	Projected IBNR ^b	-	-	-	-	3	10	16	34	266
	Projected ultimate^b	791	826	1,016	1,163	1,241	1,401	1,206	1,047	1,159
Property and Business Services	Reported claims	1,912	1,928	2,098	2,070	2,324	2,421	2,296	2,346	1,664
	Projected IBNR ^b	1	2	4	8	19	40	64	141	653
	Projected ultimate^b	1,913	1,930	2,102	2,078	2,343	2,461	2,360	2,487	2,317
Retail Trade	Reported claims	4,431	4,525	4,981	5,022	5,021	4,603	4,520	4,331	3,368
	Projected IBNR ^b	1	2	5	7	21	48	88	197	1,020
	Projected ultimate^b	4,432	4,527	4,986	5,029	5,042	4,651	4,608	4,528	4,388
Transport and Storage	Reported claims	437	501	591	647	684	609	589	581	428
	Projected IBNR ^b	-	-	-	1	4	9	15	38	197
	Projected ultimate^b	437	501	591	648	688	618	604	619	625
Wholesale Trade	Reported claims	660	598	695	706	716	662	627	587	522
	Projected IBNR ^b	-	-	1	3	7	14	23	47	248
	Projected ultimate^b	660	598	696	709	723	676	650	634	770
Unknown	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*

Table 3.3 Projected reported claims by general nature of loss and industry division

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
All industry divisions	Reported claims	17,672	18,196	19,962	20,945	22,523	21,201	20,384	18,771	14,674
	Projected IBNR ^b	8	22	54	118	265	442	726	1,371	6,096
	Projected ultimate^b	17,680	18,218	20,016	21,063	22,788	21,643	21,110	20,142	20,770
Industry division		Other general natures of loss								
Accommodation, Cafes and Restaurants	Reported claims	153	90	106	104	106	81	173	129	87
	Projected IBNR ^b	-	-	0	0	1	1	7	11	33
	Projected ultimate^b	153	90	106	104	107	82	180	140	120
Agriculture, Forestry and Fishing	Reported claims	45	20	30	21	9	26	28	*	56
	Projected IBNR ^b	-	0	0	0	0	1	1	*	27
	Projected ultimate^b	45	20	30	21	9	27	29	*	83
Communication Services	Reported claims	*	*	5	7	*	*	4	-	*
	Projected IBNR ^b	*	*	-	0	*	*	0	-	*
	Projected ultimate^b	*	*	5	7	*	*	4	-	*
Construction	Reported claims	148	147	154	190	211	281	205	220	203
	Projected IBNR ^b	0	0	1	2	5	13	18	35	124
	Projected ultimate^b	148	147	155	192	216	294	223	255	327
Cultural and Recreational Services	Reported claims	83	108	64	30	34	35	33	32	19
	Projected IBNR ^b	-	0	0	0	0	1	2	4	9
	Projected ultimate^b	83	108	64	30	34	36	35	36	28
Education	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*
Electricity, Gas and Water Supply	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*
Finance and Insurance	Reported claims	28	21	21	14	19	24	24	6	*
	Projected IBNR ^b	-	-	-	-	0	0	2	1	*
	Projected ultimate^b	28	21	21	14	19	24	26	7	*
Government Administration and Defence	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate^b	*	*	*	*	*	*	*	*	*
Health and Community Services	Reported claims	81	41	60	88	83	74	83	97	53
	Projected IBNR ^b	-	0	0	1	1	2	5	11	23
	Projected ultimate^b	81	41	60	89	84	76	88	108	76
Manufacturing	Reported claims	269	225	186	234	167	188	148	128	89
	Projected IBNR ^b	0	1	1	3	4	8	14	22	55
	Projected ultimate^b	269	226	187	237	171	196	162	150	144

Table 3.3 Projected reported claims by general nature of loss and industry division

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Mining	Reported claims	*	12	15	10	10	12	*	20	*
	Projected IBNR ^b	*	0	0	0	0	0	*	2	*
	Projected ultimate^b	*	12	15	10	10	12	*	22	*
Personal and Other Services	Reported claims	74	79	77	82	97	122	117	87	72
	Projected IBNR ^b	-	0	0	0	1	3	5	7	28
	Projected ultimate^b	74	79	77	82	98	125	122	94	100
Property and Business Services	Reported claims	272	240	226	250	330	360	411	472	327
	Projected IBNR ^b	0	0	1	1	4	10	26	54	139
	Projected ultimate^b	272	240	227	251	334	370	437	526	466
Retail Trade	Reported claims	266	167	170	199	200	240	226	216	184
	Projected IBNR ^b	0	0	0	0	1	3	7	14	62
	Projected ultimate^b	266	167	170	199	201	243	233	230	246
Transport and Storage	Reported claims	25	26	25	36	29	39	24	36	28
	Projected IBNR ^b	0	0	0	0	1	2	2	6	18
	Projected ultimate^b	25	26	25	36	30	41	26	42	46
Wholesale Trade	Reported claims	91	30	36	45	45	48	41	40	33
	Projected IBNR ^b	-	0	0	0	1	2	3	5	18
	Projected ultimate^b	91	30	36	45	46	50	44	45	51
Unknown	Reported claims	91	63	38	27	18	15	35	*	*
	Projected IBNR ^b	0	0	0	1	1	1	6	*	*
	Projected ultimate^b	91	63	38	28	19	16	41	*	*
All industry divisions	Reported claims	1,661	1,300	1,251	1,372	1,408	1,617	1,616	1,573	1,236
	Projected IBNR ^b	1	3	5	11	21	51	103	187	591
	Projected ultimate^b	1,662	1,303	1,256	1,383	1,429	1,668	1,719	1,760	1,827
Industry division		All claims								
Accommodation, Cafes and Restaurants	Reported claims	1,429	1,433	1,247	1,422	1,377	1,440	1,523	1,525	1,901
	Projected IBNR ^b	-	-	1	2	8	22	57	120	713
	Projected ultimate^b	1,429	1,433	1,248	1,424	1,385	1,462	1,580	1,645	2,614
Agriculture, Forestry and Fishing	Reported claims	1,189	1,097	1,254	996	936	1,310	1,100	1,053	1,062
	Projected IBNR ^b	-	1	3	5	9	27	43	76	505
	Projected ultimate^b	1,189	1,098	1,257	1,001	945	1,337	1,143	1,129	1,567
Communication Services	Reported claims	133	127	134	138	98	96	83	85	71
	Projected IBNR ^b	0	0	0	1	1	2	4	9	31
	Projected ultimate^b	133	127	134	139	99	98	87	94	102
Construction	Reported claims	5,843	6,521	7,153	8,176	9,187	8,413	7,870	6,788	5,191
	Projected IBNR ^b	5	13	39	106	219	363	635	1,014	3,033
	Projected ultimate^b	5,848	6,534	7,192	8,282	9,406	8,776	8,505	7,802	8,224

Table 3.3 Projected reported claims by general nature of loss and industry division

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Cultural and Recreational Services	Reported claims	591	706	717	890	879	842	820	795	538
	Projected IBNR ^b	-	1	3	7	11	23	54	97	261
	Projected ultimate^b	591	707	720	897	890	865	874	892	799
Education	Reported claims	*	*	*	*	*	*	264	231	171
	Projected IBNR ^b	*	*	*	*	*	*	22	29	108
	Projected ultimate^b	*	*	*	*	*	*	286	260	279
Electricity, Gas and Water Supply	Reported claims	17	28	47	66	37	25	29	32	30
	Projected IBNR ^b	0	0	0	0	1	1	2	4	14
	Projected ultimate^b	17	28	47	66	38	26	31	36	44
Finance and Insurance	Reported claims	177	155	195	201	142	187	196	191	111
	Projected IBNR ^b	0	0	0	0	1	4	16	33	51
	Projected ultimate^b	177	155	195	201	143	191	212	224	162
Government Administration and Defence	Reported claims	33	25	26	35	27	24	*	*	*
	Projected IBNR ^b	0	0	0	0	1	1	*	*	*
	Projected ultimate^b	33	25	26	35	28	25	*	*	*
Health and Community Services	Reported claims	379	422	450	470	552	640	551	671	426
	Projected IBNR ^b	-	2	3	5	10	21	37	82	188
	Projected ultimate^b	379	424	453	475	562	661	588	753	614
Manufacturing	Reported claims	2,818	2,741	2,779	3,026	2,896	2,790	2,998	2,542	1,572
	Projected IBNR ^b	4	9	19	36	63	128	332	515	1,026
	Projected ultimate^b	2,822	2,750	2,798	3,062	2,959	2,918	3,330	3,057	2,598
Mining	Reported claims	748	593	615	673	718	255	514	207	158
	Projected IBNR ^b	-	1	2	4	8	9	40	29	72
	Projected ultimate^b	748	594	617	677	726	264	554	236	230
Personal and Other Services	Reported claims	1,256	1,353	1,557	1,748	1,823	2,064	1,735	1,399	1,145
	Projected IBNR ^b	-	1	2	5	14	37	65	97	400
	Projected ultimate^b	1,256	1,354	1,559	1,753	1,837	2,101	1,800	1,496	1,545
Property and Business Services	Reported claims	5,470	4,950	4,888	4,886	5,371	5,515	5,430	5,289	3,540
	Projected IBNR ^b	4	8	14	25	56	139	315	564	1,448
	Projected ultimate^b	5,474	4,958	4,902	4,911	5,427	5,654	5,745	5,853	4,988
Retail Trade	Reported claims	6,379	6,282	6,486	6,400	6,404	5,888	5,731	5,486	4,151
	Projected IBNR ^b	1	3	7	12	34	80	170	348	1,384
	Projected ultimate^b	6,380	6,285	6,493	6,412	6,438	5,968	5,901	5,834	5,535
Transport and Storage	Reported claims	639	700	848	882	933	849	753	754	517
	Projected IBNR ^b	1	1	4	8	20	36	62	126	303
	Projected ultimate^b	640	701	852	890	953	885	815	880	820
Wholesale Trade	Reported claims	1,118	955	1,016	1,024	1,015	968	924	789	685
	Projected IBNR ^b	-	1	3	8	16	32	61	92	361
	Projected ultimate^b	1,118	956	1,019	1,032	1,031	1,000	985	881	1,046

Table 3.3 Projected reported claims by general nature of loss and industry division

		Accident year								
		2005	2006	2007	2008	2009	2010	2011	2012	2013
Unknown	Reported claims	*	*	*	*	*	*	*	*	*
	Projected IBNR ^b	*	*	*	*	*	*	*	*	*
	Projected ultimate ^b	*	*	*	*	*	*	*	*	*
All industry divisions	Reported claims	29,096	29,105	30,201	31,793	33,008	31,885	30,824	28,278	21,634
	Projected IBNR ^b	18	49	111	243	493	960	1,970	3,379	10,265
	Projected ultimate ^b	29,114	29,154	30,312	2,036	33,501	32,845	32,794	31,657	31,899

Notes:

(a) The symbol ' * ' means the figure is masked to protect confidentiality.

(b) Data is estimated based on grossing up factors and chain ladder projection method.

4. Finalised claims by general nature of loss, claim jurisdiction and industry division

Figure 4.1 - Average inflated claim cost by general nature of loss for finalisation year

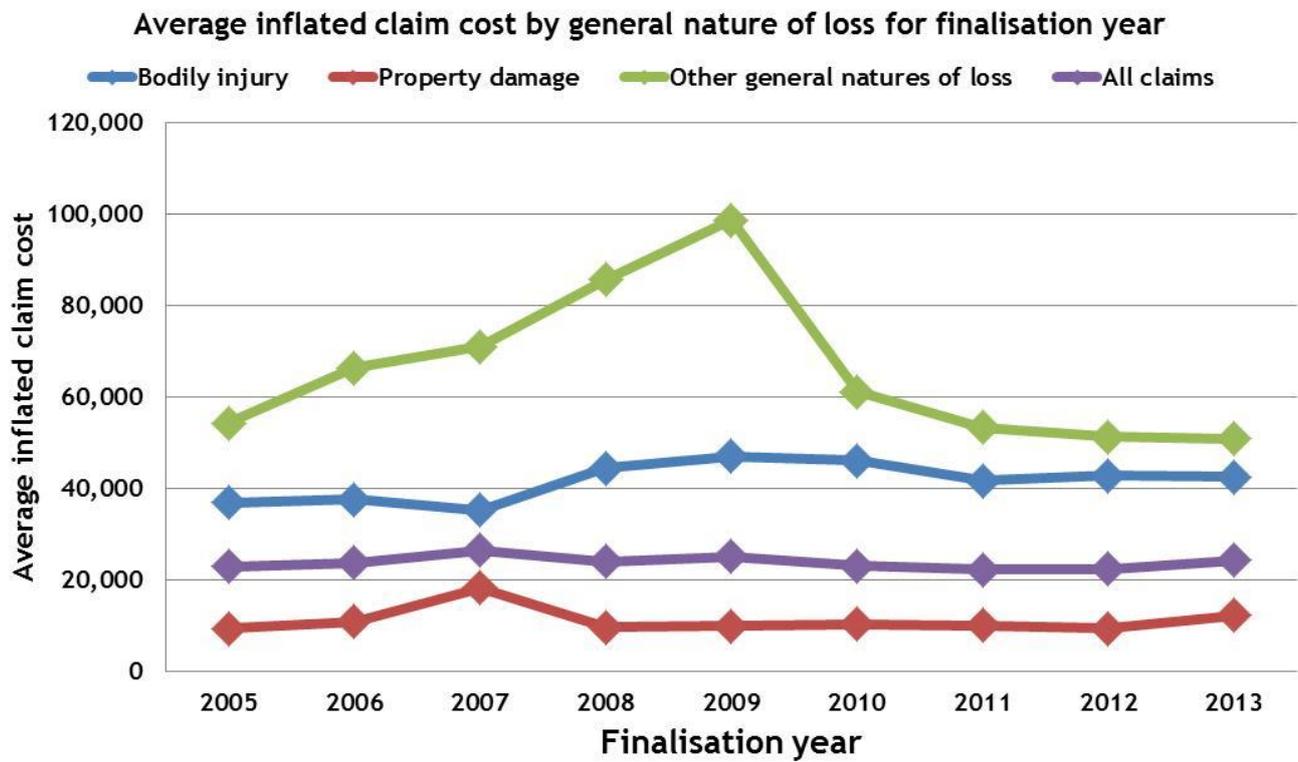


Table 4.1 Inflated finalised claims cost by general nature of loss and claim jurisdiction

(\$ thousand)

Claim jurisdiction	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bodily injury									
NSW	225,286	189,901	155,764	206,885	252,529	190,025	163,042	173,625	164,610
VIC	82,697	67,270	59,710	71,413	82,714	67,276	86,860	70,870	91,245
QLD	82,408	68,079	64,296	77,340	77,337	105,760	101,618	117,044	100,485
SA	29,076	37,157	29,644	37,204	33,341	23,721	24,007	37,060	23,203
WA	39,093	24,254	30,932	34,597	39,908	50,378	42,913	30,065	37,311
TAS	6,145	5,547	3,757	7,158	*	*	2,557	1,414	4,672
NT	1,738	2,187	2,574	1,463	*	*	1,218	2,808	754
ACT	9,136	11,186	7,667	8,060	8,574	8,257	7,204	8,339	18,853
Total Australia	475,579	405,582	354,345	444,120	500,063	453,577	429,421	441,224	441,132
Property damage									
NSW	61,999	96,020	228,049	70,300	76,185	70,067	69,762	58,118	86,228
VIC	40,124	39,438	33,337	48,502	43,431	49,317	54,950	48,176	53,073
QLD	29,393	22,776	32,248	30,472	35,896	62,392	36,853	41,784	43,526
SA	14,459	11,116	9,803	17,176	30,651	16,391	18,775	13,911	20,733
WA	15,519	11,646	21,270	16,494	20,059	23,647	19,413	20,965	26,416
TAS	*	*	*	*	*	*	*	*	*
NT	*	*	*	*	*	*	*	*	*
ACT	1,496	1,166	1,524	1,983	2,214	2,241	1,723	1,430	4,381
Total Australia	166,083	186,025	330,189	191,608	212,083	227,381	205,717	188,313	238,603
Other general natures of loss									
NSW	62,081	57,717	34,374	68,012	65,464	39,189	40,220	38,238	39,234
VIC	15,513	13,324	29,015	15,731	18,592	16,724	13,445	16,222	26,375
QLD	16,771	18,067	21,071	20,437	19,074	21,263	23,380	29,608	20,508
SA	7,056	15,273	4,234	5,333	11,252	3,959	6,312	3,163	4,063
WA	6,516	5,390	6,045	2,994	5,404	11,433	3,239	6,306	4,583
TAS	*	*	*	*	*	*	*	*	*
NT	*	*	*	*	*	*	*	*	*
ACT	414	1,185	3,615	2,092	1,235	1,070	1,406	142	4,319
Total Australia	109,632	114,827	98,722	115,890	129,504	94,025	91,226	94,729	99,390

Table 4.1 Inflated finalised claims cost by general nature of loss and claim jurisdiction

(\$ thousand)

Claim jurisdiction	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
	All claims								
NSW	349,366	343,638	418,187	345,197	394,179	299,281	273,024	269,981	290,072
VIC	138,334	120,031	122,063	135,645	144,738	133,317	155,255	135,268	170,692
QLD	128,572	108,921	117,615	128,250	132,307	189,414	161,851	188,435	164,519
SA	50,590	63,546	43,681	59,712	75,243	44,071	49,095	54,134	47,998
WA	61,128	41,290	58,247	54,085	65,371	85,459	65,564	57,336	68,310
TAS	9,989	12,269	6,900	14,465	14,009	10,415	9,110	4,994	7,689
NT	2,269	3,200	3,756	2,130	3,781	1,457	2,132	4,206	2,292
ACT	11,046	13,537	12,807	12,135	12,023	11,569	10,333	9,911	27,553
Total Australia	751,294	706,433	783,255	751,619	841,650	774,983	726,364	724,266	779,125

Note:

(a) The symbol '*' means the figure is masked to protect confidentiality.

Table 4.2 Inflated finalised claims cost by general nature of loss and industry division

(\$ thousand)

Industry division	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bodily injury									
Agriculture, Forestry and Fishing	715	803	2,009	7,093	9,134	5,685	7,619	4,324	11,609
Construction	4,805	9,031	16,394	27,268	54,513	57,896	62,115	78,389	79,237
Health and Community Services	742	1,073	1,615	3,906	4,904	5,403	5,680	7,056	8,101
Manufacturing	4,832	6,609	12,332	27,841	45,833	54,610	49,300	61,163	69,495
Personal and Other Services	1,199	2,392	3,917	7,431	8,841	12,299	11,819	13,056	11,810
Property and Business Services	3,972	6,986	12,494	24,862	41,071	51,963	54,872	60,176	53,120
Retail Trade	3,887	7,682	11,339	23,514	31,343	26,087	33,562	37,496	39,627
Other industries	4,899	14,235	24,916	51,559	67,295	82,116	88,409	102,245	110,092
Unknown	450,529	356,772	269,330	270,647	237,130	157,519	116,046	77,319	58,040
All industry divisions	475,579	405,582	354,345	444,120	500,063	453,577	429,421	441,224	441,132
Property damage									
Agriculture, Forestry and Fishing	*	5,127	6,484	*	*	*	*	10,417	*
Construction	*	27,522	34,494	47,904	57,489	57,245	68,859	64,277	75,037
Health and Community Services	114	234	291	*	*	*	*	255	*
Manufacturing	10,846	11,937	18,124	24,781	37,706	38,057	32,669	32,695	46,318
Personal and Other Services	1,505	1,677	2,305	2,153	4,641	3,488	2,884	2,617	4,636
Property and Business Services	5,650	5,494	6,331	8,790	13,486	10,635	13,426	11,615	21,820
Retail Trade	17,622	20,965	22,241	24,790	32,439	24,926	26,575	31,894	28,734
Other industries	9,232	11,856	17,297	16,870	19,622	48,424	24,316	23,383	30,739
Unknown	94,808	101,211	222,621	56,626	39,429	35,579	27,692	11,160	14,768
All industry divisions	139,776	186,025	330,189	191,329	211,817	219,192	196,717	188,313	237,970
Other general natures of loss									
Agriculture, Forestry and Fishing	*	568	1,001	*	*	*	*	1,945	*
Construction	*	2,350	4,579	6,754	7,947	12,405	16,216	11,858	12,321
Health and Community Services	131	466	243	*	*	*	*	1,392	*
Manufacturing	873	4,843	8,386	9,402	10,099	14,492	17,373	23,258	21,853
Personal and Other Services	445	477	918	1,859	2,604	4,167	2,278	2,719	1,777
Property and Business Services	1,229	3,019	1,863	4,190	5,383	7,754	7,919	17,927	19,051
Retail Trade	732	1,338	3,536	5,500	5,444	7,343	4,632	6,559	6,696
Other industries	1,367	2,292	4,660	7,269	7,120	15,216	11,880	12,714	17,070
Unknown	101,611	99,473	73,535	79,006	89,614	30,067	27,518	16,358	14,072
All industry divisions	106,387	114,827	98,722	115,188	128,818	92,474	90,531	94,729	97,929

Table 4.2 Inflated finalised claims cost by general nature of loss and industry division

(\$ thousand)

Industry division	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
	All general natures of loss								
Agriculture, Forestry and Fishing	5,533	6,498	9,494	17,716	16,745	15,424	17,314	16,686	32,617
Construction	29,538	38,903	55,468	81,925	119,949	127,545	147,190	154,524	166,595
Health and Community Services	987	1,773	2,149	4,889	5,856	7,273	8,689	8,703	10,194
Manufacturing	16,550	23,389	38,842	62,023	93,638	107,158	99,342	117,116	137,667
Personal and Other Services	3,150	4,545	7,139	11,443	16,086	19,953	16,981	18,392	18,223
Property and Business Services	10,851	15,499	20,689	37,842	59,940	70,352	76,217	89,718	93,991
Retail Trade	22,241	29,986	37,116	53,804	69,226	58,356	64,769	75,948	75,057
Other industries	15,497	28,383	46,872	75,698	94,038	145,755	124,605	138,342	157,901
Unknown	646,947	557,457	565,485	406,279	366,173	223,165	171,257	104,836	86,880
All industry divisions	751,294	706,433	783,255	751,619	841,650	774,983	726,364	724,266	779,125

Note:

(a) The symbol ' * ' means the figure is masked to protect confidentiality.

Table 4.3 Inflated finalised claims cost by general nature of loss and cause of loss

(\$ thousand)

Cause of loss	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bodily injury									
Custody	8,241	3,638	6,079	10,054	6,008	*	12,685	2,872	*
Fall	233,592	159,453	154,614	168,616	174,007	157,615	169,758	160,085	163,397
Faulty	17,711	15,116	15,761	19,519	29,301	15,565	24,390	23,297	20,329
Fire	2,466	*	1,938	*	*	*	5,963	*	*
Impact	94,327	86,705	77,531	99,104	93,907	94,555	69,080	106,721	94,661
Other non-financial	20,814	44,168	25,204	30,207	23,624	23,304	29,836	39,719	34,092
Water	*	*	728	*	416	*	1,935	674	*
Worker	2,494	5,893	*	*	*	*	*	*	*
Other causes	89,401	85,717	57,056	86,370	69,639	76,468	56,528	44,743	56,729
Unknown	*	*	*	*	*	*	*	*	*
All causes	475,579	405,582	354,345	444,120	500,063	453,577	429,421	441,224	441,132
Property damage									
Custody	11,660	9,329	7,427	11,312	10,378	9,940	11,761	9,254	13,563
Fall	796	*	605	719	1,003	835	1,533	597	474
Faulty	49,695	44,645	52,449	67,163	58,890	61,359	59,125	60,366	78,415
Fire	12,504	40,751	15,508	16,856	22,951	14,125	27,374	18,870	31,755
Impact	19,737	33,913	25,103	25,649	30,050	29,505	27,207	26,383	31,291
Other non-financial	*	14,220	*	*	39,241	24,702	*	24,253	*
Water	14,110	9,983	10,580	11,641	17,859	16,849	14,897	15,180	21,047
Worker	*	*	*	*	*	*	*	*	*
Other causes	37,871	26,112	198,640	37,571	30,913	68,947	39,783	33,168	38,102
Unknown	*	*	*	*	*	*	*	*	*
All causes	166,083	186,025	330,189	191,608	212,083	227,381	205,717	188,313	238,603
Other general natures of loss									
Custody	1,775	1,058	777	1,572	1,001	*	1,192	1,448	*
Fall	33,656	*	33,045	30,535	28,220	26,970	20,411	30,736	25,416
Faulty	9,722	12,856	10,169	6,766	6,573	8,861	14,493	5,046	8,697
Fire	3,060	*	7,816	*	*	*	1,483	*	*
Impact	14,410	19,623	19,919	14,818	13,891	19,853	14,110	21,825	14,995
Other non-financial	*	7,211	*	*	9,426	7,013	*	10,464	*
Water	*	*	183	*	431	*	932	279	*
Worker	*	*	*	*	*	*	*	*	*
Other causes	36,422	36,053	18,994	48,885	59,403	21,515	30,758	17,686	28,332
Unknown	*	*	*	*	*	*	*	*	*
All causes	109,632	114,827	98,722	115,890	129,504	94,025	91,226	94,729	99,390

Table 4.3 Inflated finalised claims cost by general nature of loss and cause of loss

(\$ thousand)

Cause of loss	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
	All claims								
Custody	21,676	14,025	14,283	22,937	17,388	31,495	25,638	13,574	22,021
Fall	268,044	194,704	188,264	199,870	203,230	185,420	191,701	191,418	189,287
Faulty	77,128	72,617	78,379	93,448	94,764	85,785	98,009	88,709	107,441
Fire	18,030	49,294	25,262	24,916	38,428	21,684	34,819	24,816	36,947
Impact	128,474	140,241	122,552	139,571	137,848	143,912	110,397	154,929	140,947
Other non-financial	45,651	65,599	46,507	55,840	72,290	55,019	60,033	74,437	70,713
Water	19,990	12,013	11,492	13,065	18,705	18,703	17,764	16,133	24,502
Worker	3,335	6,898	*	*	*	*	*	*	*
Unknown	5,271	3,160	*	*	*	*	*	*	*
Other causes	163,695	147,882	274,691	172,826	159,955	166,930	127,069	95,597	123,164
All causes	751,294	706,433	783,255	751,619	841,650	774,983	726,364	724,266	779,125

Note:

(a) The symbol '*' means the figure is masked to protect confidentiality.

Table 4.4 Number of finalised claims by general nature of loss and claim jurisdiction

Claim jurisdiction	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Bodily injury								
NSW	5,851	5,020	4,442	4,598	4,639	4,406	4,066	3,836	3,905
VIC	2,416	1,847	1,618	1,632	2,104	1,610	1,565	1,586	1,683
QLD	2,381	2,005	1,931	1,846	2,115	2,115	2,876	3,014	2,965
SA	793	725	744	734	638	636	562	592	605
WA	1,099	892	845	773	768	769	772	827	806
TAS	158	127	98	118	90	115	85	105	165
NT	55	43	126	48	32	52	38	28	25
ACT	140	136	253	245	258	157	326	332	241
Total Australia	12,893	10,795	10,057	9,994	10,644	9,860	10,290	10,320	10,395
	Property damage								
NSW	5,531	5,387	5,269	5,964	6,758	6,889	6,155	6,007	5,573
VIC	4,168	3,739	4,213	4,711	4,579	4,754	4,894	4,525	4,576
QLD	3,663	3,603	4,007	4,214	4,989	5,032	4,283	4,488	4,673
SA	1,566	1,418	1,511	1,693	1,790	1,826	1,780	1,642	1,559
WA	2,261	2,392	2,425	2,500	2,684	2,907	2,727	2,712	2,606
TAS	*	*	*	*	*	*	*	*	*
NT	*	*	*	*	*	*	*	*	*
ACT	163	144	143	282	214	232	239	244	199
Total Australia	17,910	17,224	18,157	19,996	21,692	22,309	20,678	20,213	19,724
	Other general natures of loss								
NSW	814	654	510	479	444	523	612	694	699
VIC	424	413	303	311	281	307	327	353	401
QLD	402	415	347	316	356	451	489	488	518
SA	146	116	95	78	97	94	92	107	132
WA	193	87	79	105	80	105	119	128	130
TAS	*	*	*	*	*	*	*	*	*
NT	*	*	*	*	*	*	*	*	*
ACT	12	22	28	36	27	30	32	47	39
Total Australia	2,021	1,732	1,391	1,352	1,312	1,539	1,710	1,846	1,953

Table 4.4 Number of finalised claims by general nature of loss and claim jurisdiction

Claim jurisdiction	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
	All claims								
NSW	12,196	11,061	10,221	11,041	11,841	11,818	10,833	10,537	10,177
VIC	7,008	5,999	6,134	6,654	6,964	6,671	6,786	6,464	6,660
QLD	6,446	6,023	6,285	6,376	7,460	7,598	7,648	7,990	8,156
SA	2,505	2,259	2,350	2,505	2,525	2,556	2,434	2,341	2,296
WA	3,553	3,371	3,349	3,378	3,532	3,781	3,618	3,667	3,542
TAS	666	591	618	674	677	700	612	625	644
NT	135	145	224	151	150	165	150	132	118
ACT	315	302	424	563	499	419	597	623	479
Total Australia	32,824	29,751	29,605	31,342	33,648	33,708	32,678	32,379	32,072

Note:

(a) The symbol '*' means the figure is masked to protect confidentiality.

Table 4.5 Number of finalised claims by general nature of loss and industry division

	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Industry division	Bodily injury								
Agriculture, Forestry and Fishing	56	80	85	81	98	98	104	89	151
Construction	303	287	388	568	650	687	755	836	848
Health and Community Services	173	202	254	323	294	456	377	362	411
Manufacturing	440	482	581	665	791	877	1,400	1,292	990
Personal and Other Services	219	240	334	523	593	525	460	376	368
Property and Business Services	2,265	2,452	2,164	2,225	3,145	2,618	3,084	3,029	2,800
Retail Trade	1,395	1,425	1,320	1,055	1,131	1,034	1,130	1,059	1,109
Other industries	1,295	1,704	2,169	2,469	2,577	2,532	2,370	2,733	3,237
Unknown	6,747	3,923	2,762	2,085	1,365	1,033	610	544	481
All industry divisions	12,893	10,795	10,057	9,994	10,644	9,860	10,290	10,320	10,395
Industry division	Property damage								
Agriculture, Forestry and Fishing	*	*	998	938	852	1,015	1,071	916	1,061
Construction	4,100	4,593	5,122	6,227	7,265	7,884	7,074	6,899	6,837
Health and Community Services	*	*	100	106	109	114	98	113	144
Manufacturing	1,296	1,426	1,558	1,685	1,902	1,929	1,785	1,564	1,500
Personal and Other Services	746	726	931	1,118	1,201	1,386	1,245	1,036	1,109
Property and Business Services	1,748	1,777	1,843	1,960	2,181	2,363	2,300	2,487	2,301
Retail Trade	4,147	4,278	4,638	4,867	5,022	4,694	4,395	4,556	4,026
Other industries	2,079	2,157	2,243	2,409	2,735	2,594	2,467	2,423	2,428
Unknown	2,858	1,268	724	686	425	330	243	219	318
All industry divisions	17,910	17,224	18,157	19,996	21,692	22,309	20,678	20,213	19,724
Industry division	Other general natures of loss								
Agriculture, Forestry and Fishing	*	*	17	21	16	15	16	24	19
Construction	46	88	116	120	131	215	265	233	305
Health and Community Services	*	*	40	68	57	88	96	82	87
Manufacturing	118	205	168	149	186	177	200	184	210
Personal and Other Services	35	45	76	53	74	106	111	113	125
Property and Business Services	172	189	171	188	216	284	344	466	512
Retail Trade	215	167	143	149	154	208	236	243	261
Other industries	245	247	217	262	254	254	317	399	375
Unknown	1,103	717	443	342	224	192	125	102	59
All industry divisions	2,021	1,732	1,391	1,352	1,312	1,539	1,710	1,846	1,953

Table 4.5 Number of finalised claims by general nature of loss and industry division

	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Industry division	All claims								
Agriculture, Forestry and Fishing	946	1,016	1,100	1,040	966	1,128	1,191	1,029	1,231
Construction	4,449	4,968	5,626	6,915	8,046	8,786	8,094	7,968	7,990
Health and Community Services	306	339	394	497	460	658	571	557	642
Manufacturing	1,854	2,113	2,307	2,499	2,879	2,983	3,385	3,040	2,700
Personal and Other Services	1,000	1,011	1,341	1,694	1,868	2,017	1,816	1,525	1,602
Property and Business Services	4,185	4,418	4,178	4,373	5,542	5,265	5,728	5,982	5,613
Retail Trade	5,757	5,870	6,101	6,071	6,307	5,936	5,761	5,858	5,396
Other industries	3,619	4,108	4,629	5,140	5,566	5,380	5,154	5,555	6,040
Unknown	10,708	5,908	3,929	3,113	2,014	1,555	978	865	858
All industry divisions	32,824	29,751	29,605	31,342	33,648	33,708	32,678	32,379	32,072

Note:

(a) The symbol '*' means the figure is masked to protect confidentiality.

Table 4.6 Number of finalised claims by general nature of loss and cause of loss

Cause of loss	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bodily injury									
Custody	179	120	107	87	83	104	108	87	116
Fall	7,024	5,593	5,005	4,603	5,039	4,764	5,435	5,375	5,483
Faulty	576	430	378	436	372	320	334	365	376
Fire	49	33	30	38	26	17	35	25	36
Impact	1,975	1,701	1,687	1,672	1,938	1,803	2,135	2,087	1,862
Other non-financial	991	1,114	1,162	1,377	1,448	1,282	943	1,031	1,174
Water	26	16	19	14	10	16	27	20	16
Worker	64	48	*	*	*	*	*	*	*
Other causes	1,974	1,710	1,488	1,448	1,251	1,108	856	888	910
Unknown	35	30	*	*	*	*	*	*	*
All causes	12,893	10,795	10,057	9,994	10,644	9,860	10,290	10,320	10,395
Property damage									
Custody	1,692	1,681	1,502	1,981	1,738	1,591	1,697	1,539	1,400
Fall	75	97	105	96	128	157	155	83	56
Faulty	4,182	3,985	4,288	4,536	5,142	5,613	5,582	5,420	5,489
Fire	471	441	460	435	429	415	362	453	476
Impact	4,850	4,695	4,984	5,324	6,455	7,172	6,217	5,736	5,897
Other non-financial	*	1,977	2,331	3,321	3,504	3,108	2,655	2,907	2,420
Water	1,454	1,418	1,435	1,500	1,727	1,716	1,632	1,429	1,421
Worker	*	*	*	*	13	*	*	7	*
Other causes	2,845	2,862	3,022	2,754	2,520	2,368	2,354	2,617	2,537
Unknown	221	*	*	*	36	*	*	22	*
All causes	17,910	17,224	18,157	19,996	21,692	22,309	20,678	20,213	19,724
Other general natures of loss									
Custody	74	69	42	66	43	58	88	132	98
Fall	670	534	459	380	432	464	465	402	414
Faulty	220	251	183	171	145	170	198	209	258
Fire	41	15	23	15	24	13	14	16	8
Impact	266	239	195	205	198	232	242	284	251
Other non-financial	*	161	150	147	146	202	252	310	321
Water	37	31	20	25	31	38	42	37	37
Worker	*	*	*	*	*	*	*	*	*
Other causes	506	419	305	332	285	347	395	447	549
Unknown	16	*	*	*	*	*	*	*	*
All causes	2,021	1,732	1,391	1,352	1,312	1,539	1,710	1,846	1,953

Table 4.6 Number of finalised claims by general nature of loss and cause of loss

Cause of loss	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
	All claims								
Custody	1,945	1,870	1,651	2,134	1,864	1,753	1,893	1,758	1,614
Fall	7,769	6,224	5,569	5,079	5,599	5,385	6,055	5,860	5,953
Faulty	4,978	4,666	4,849	5,143	5,659	6,103	6,114	5,994	6,123
Fire	561	489	513	488	479	445	411	494	520
Impact	7,091	6,635	6,866	7,201	8,591	9,207	8,594	8,107	8,010
Other non-financial	3,290	3,252	3,643	4,845	5,098	4,592	3,850	4,248	3,915
Water	1,517	1,465	1,474	1,539	1,768	1,770	1,701	1,486	1,474
Worker	76	62	*	*	*	*	*	*	*
Other causes	5,325	4,991	*	*	*	*	*	*	*
Unknown	272	97	54	47	52	215	33	29	28
All causes	32,824	29,751	29,605	31,342	33,648	33,708	32,678	32,379	32,072

Note:

(a) The symbol '*' means the figure is masked to protect confidentiality.

5. Non-large claims versus large claims

Figure 5.1 - Non-large and large inflated finalised claims by size for bodily injury claims

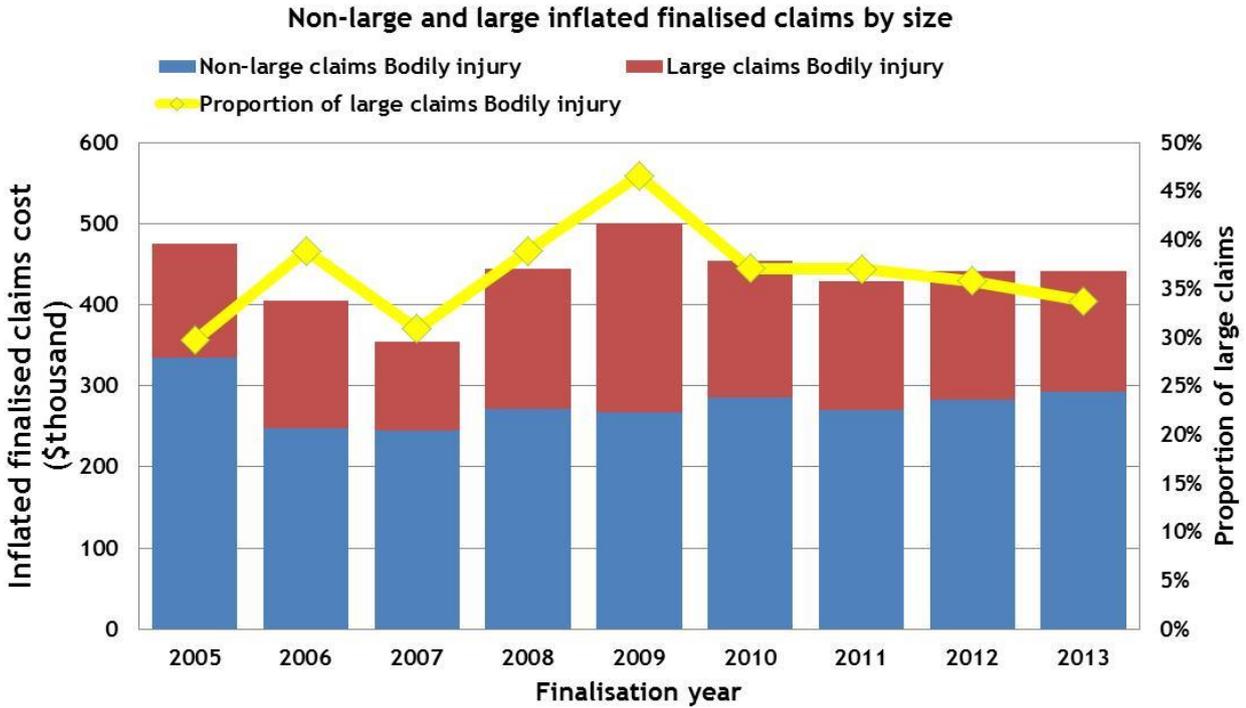


Figure 5.2 - Non-large and large inflated finalised claims by size for property damage claims

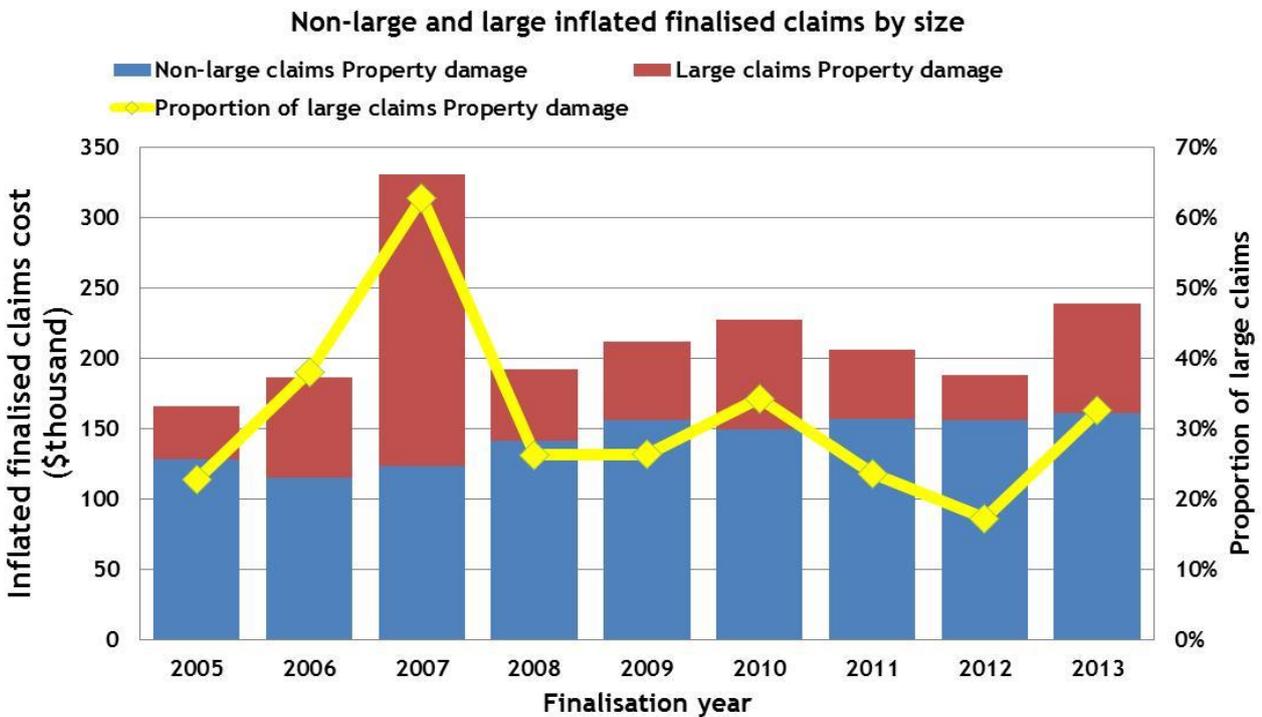


Table 5.1 Inflated finalised claims cost by general nature of loss and size of claim

(\$ thousand)

	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bodily injury									
Claims finalised with inflated cost up to \$500,000	334,303	247,929	244,973	271,574	267,084	285,401	270,429	283,415	292,275
Claims finalised with inflated cost more than \$500,000	141,277	157,653	109,372	172,545	232,979	168,176	158,992	157,809	148,858
Total finalised claims cost	475,579	405,582	354,345	444,120	500,063	453,577	429,421	441,224	441,132
Property damage									
Claims finalised with inflated cost up to \$500,000	128,351	115,267	122,828	141,346	156,279	149,557	157,141	155,938	161,030
Claims finalised with inflated cost more than \$500,000	37,732	70,758	207,361	50,262	55,803	77,824	48,577	32,374	77,573
Total finalised claims cost	166,083	186,025	330,189	191,608	212,083	227,381	205,717	188,313	238,603
Other general natures of loss									
Claims finalised with inflated cost up to \$500,000	69,688	54,977	55,647	56,466	51,011	55,418	53,424	57,268	58,986
Claims finalised with inflated cost more than \$500,000	39,944	59,850	43,074	59,425	78,494	38,607	37,801	37,461	40,403
Total finalised claims cost	109,632	114,827	98,722	115,890	129,504	94,025	91,226	94,729	99,390
All claims									
Claims finalised with cost up to \$500,000	532,342	418,173	423,448	469,386	474,374	490,376	480,994	496,621	512,291
Claims finalised with cost more than \$500,000	218,952	288,261	359,808	282,233	367,276	284,606	245,370	227,644	266,834
Total finalised claims cost	751,294	706,433	783,255	751,619	841,650	774,983	726,364	724,266	779,125

Table 5.2 Number of finalised claims by general nature of loss and size of claim

	Finalisation year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bodily injury									
Claims finalised with inflated cost up to \$500,000	12,750	10,663	9,939	9,826	10,457	9,711	10,145	10,165	10,238
Claims finalised with inflated cost more than \$500,000	143	132	118	168	187	149	145	155	157
Total finalised claims cost	12,893	10,795	10,057	9,994	10,644	9,860	10,290	10,320	10,395
Property damage									
Claims finalised with inflated cost up to \$500,000	17,871	17,193	18,086	19,954	21,664	22,265	20,643	20,184	19,661
Claims finalised with inflated cost more than \$500,000	39	31	71	42	28	44	35	29	63
Total finalised claims cost	17,910	17,224	18,157	19,996	21,692	22,309	20,678	20,213	19,724
Other general natures of loss									
Claims finalised with inflated cost up to \$500,000	1,988	1,684	1,342	1,314	1,271	1,503	1,682	1,813	1,920
Claims finalised with inflated cost more than \$500,000	33	48	49	38	41	36	28	33	33
Total finalised claims cost	2,021	1,732	1,391	1,352	1,312	1,539	1,710	1,846	1,953
All claims									
Claims finalised with inflated cost up to \$500,000	32,609	29,540	29,367	31,094	33,392	33,479	32,470	32,162	31,819
Claims finalised with inflated cost more than \$500,000	215	211	238	248	256	229	208	217	253
Total finalised claims cost	32,824	29,751	29,605	31,342	33,648	33,708	32,678	32,379	32,072

6. Distribution of claim size

The following charts present the severity distribution function modelled using claims finalised between 2005 and 2013. We have divided the claims data into several segments and fitted a distribution to each segment.

Two sets of distribution functions are shown in each chart: the solid lines represent all claims; and the dashed lines represent claims finalised within 10 years of being reported, which is more focused on post-tort reform accident periods.

Figure 6.1 Claim Size Distributions - Non-large Claims

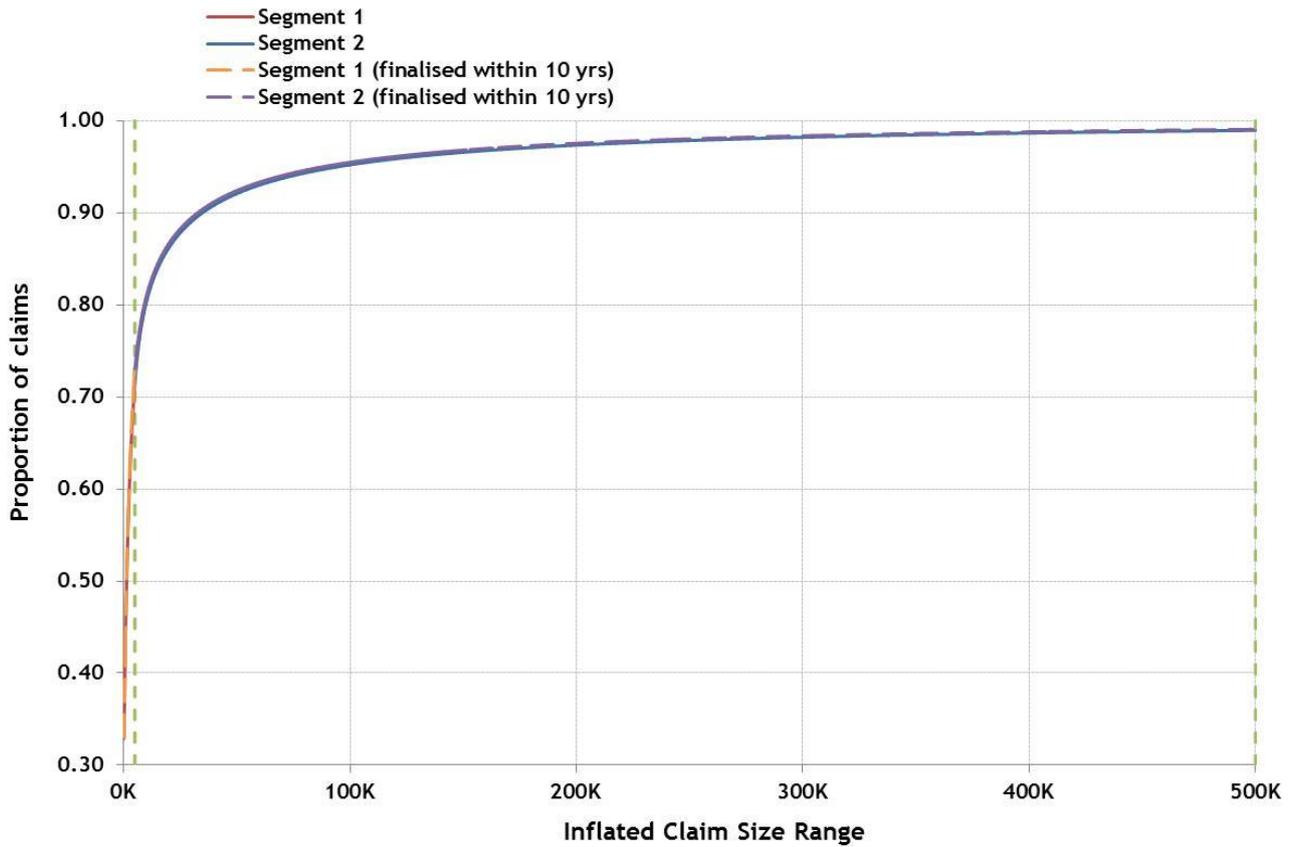


Figure 6.2 Claim Size Distributions - Large Claims

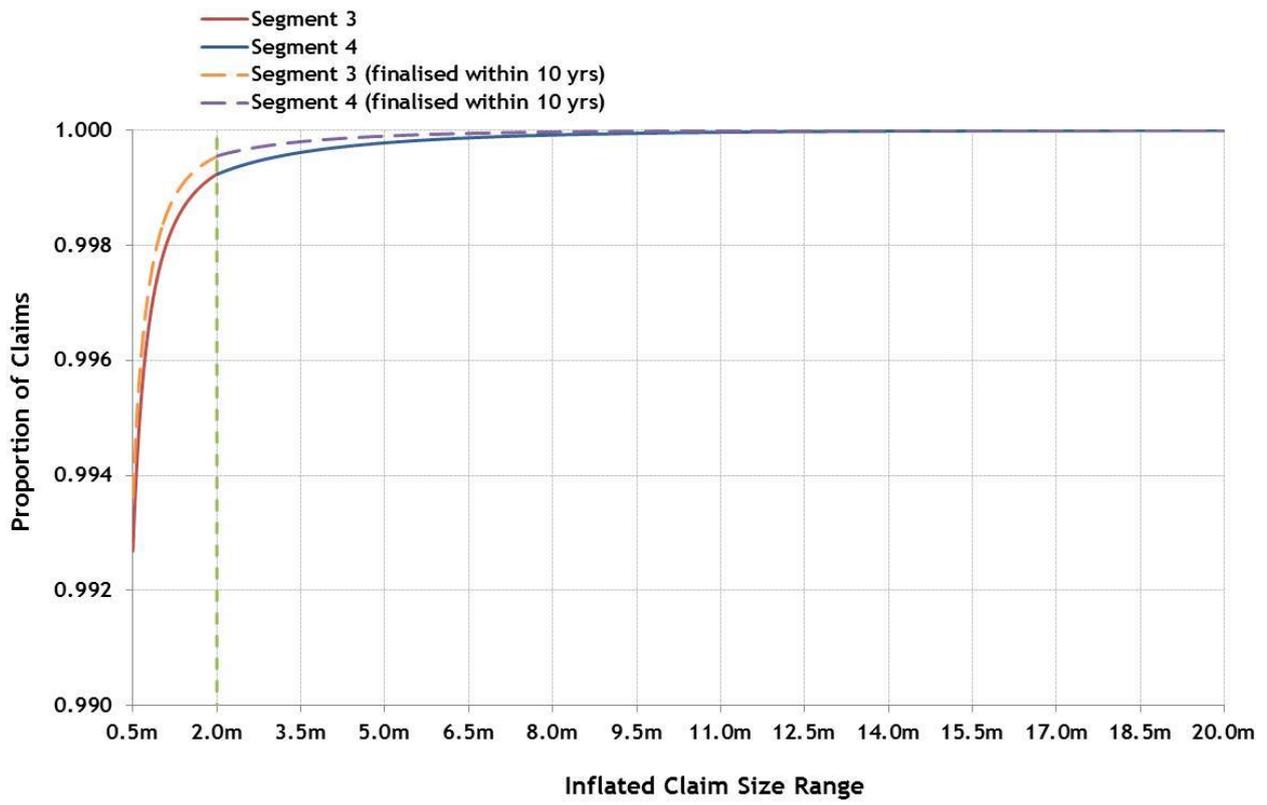
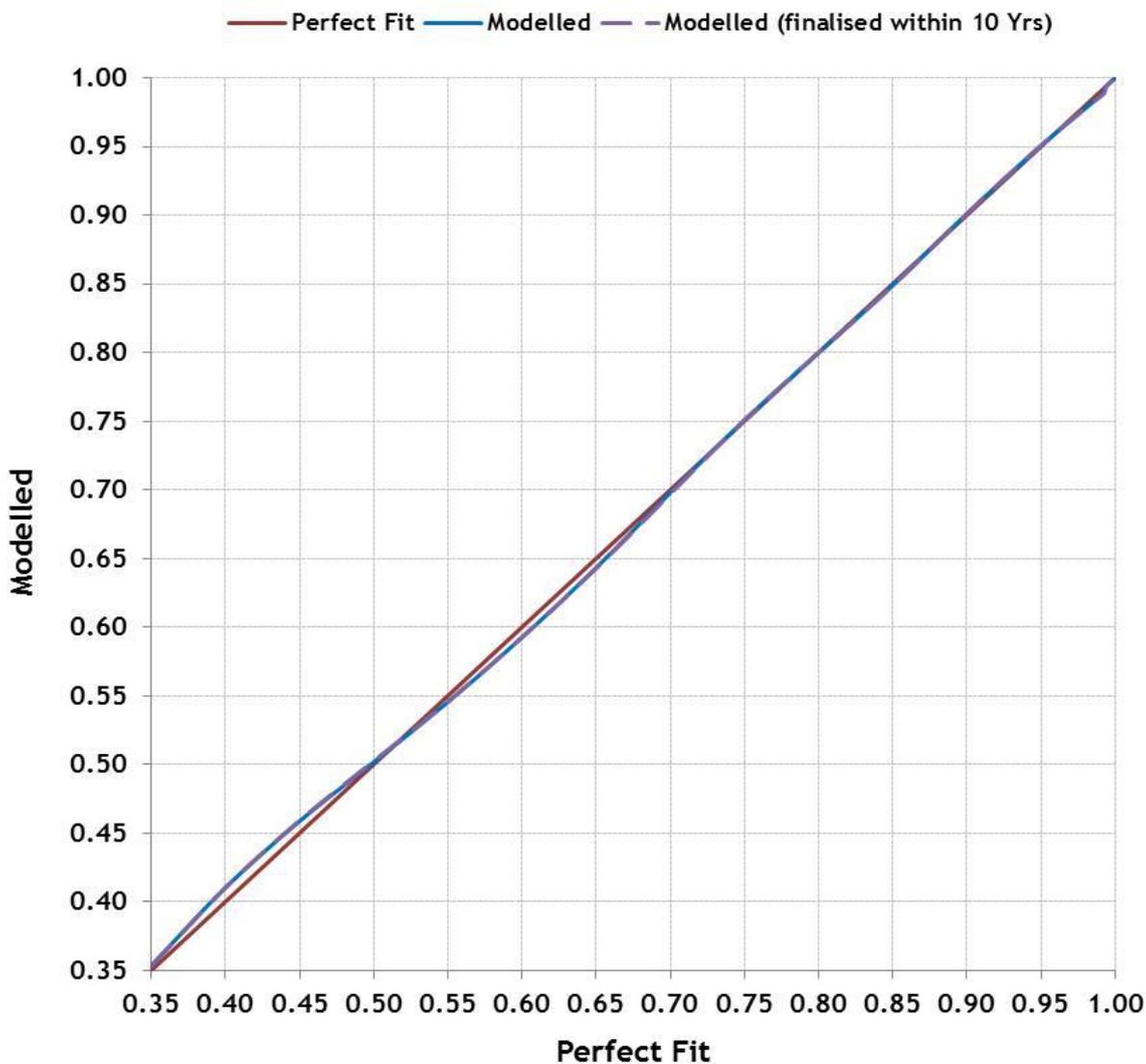


Figure 6.3 Probability-Probability Plot

The probability-probability (P-P) plot below provides an indication of the goodness-of-fit by comparing the above distribution models against the theoretical perfect fit. The P-P plot indicates that the models generally provide a good fit, with 90% of the residuals lie in the range of [-0.4%, +0.2%]. In addition, the modelled outcomes are closer to the perfect fit in the top percentile due to our greater focus on the fit to large claims.



Appendix A - Methodology

Projection to ultimate number of claims

In liability insurance, claims are often not reported immediately, rather there is a delay between the occurrence of a claim and the reporting of that claim to the insurer. Therefore there are often more claims that are yet to be reported. Estimating these 'incurred but not reported' (IBNR) claims is standard practice in insurance. The most widely accepted method involves linear projection.

In the data proposed for release, we present the actual number of claims reported which is the figure we published in the standard NCPD publications, we present the 'IBNR', and we present the 'ultimate' number of claims.

The projection of ultimate number of claims involves two steps: grossing up reported claim numbers and projecting reported claims to ultimate.

Grossing up reported claim numbers

Having examined the history of reported claim numbers, it appears that the claims numbers reported during early development periods tend to be revised by insurers due to backdating or delayed processing. Therefore, a gross up factor was selected for each accident year and development year to allow for this revision of reported claim numbers.

Chain ladder projection to ultimate number of claims

The chain ladder method was used to project the ultimate number of claims in each accident period by analysing past development pattern of claims reported and estimating a pattern for the future.

The reported claims data were grouped by state of jurisdiction, industry division and general nature of loss. Due to their smaller size, the chain ladder factors for each of Tasmania, the Australian Capital Territory and the Northern Territory were based on the combined experience for those three jurisdictions.

For each unique combination of claim jurisdiction, industry division and general nature of loss, the following steps are involved:

- Produce a triangle of cumulative claims reported, by accident year and development year;
- Calculate development ratios by dividing the claims reported as at the end of year $n+1$ by the claims reported as at the end of year n ;
- Select a development ratio for each development year; and
- Apply these ratios to the claims reported to date to project the ultimate number of claims in each accident year.

Note that the chain ladder projections were performed on the combined data of all insurers, segmented at jurisdiction, industry and loss type level. Therefore, the reporting pattern selected is only a representation of an average profile which may not reflect individual insurer's risk profile and claims practices. In addition, any variations in insurers' claims processing and accuracy of reported data to NCPD may have an impact on the reporting pattern selected.

For most segments, the reporting patterns have been relatively stable hence an average over the last 10 accident years (2004-2013) was adopted. When there is insufficient data for any particular segment, the development pattern of that division and claim type combination at the national level was adopted instead.

The chain ladder method is widely used in the insurance industry to estimate ultimate number of claims where the reporting pattern is expected to be stable. It is based on the assumption that the number of claims will develop in the same pattern into the future.

Inflation factors for claim sizes

Insurance costs are subject to inflationary pressure over time, in particular for Liability claims. Typically, bodily injury claims costs are linked to the weekly earnings of the claimant and property damage claims costs are related to the inflationary pressure of goods and materials. Therefore, claim costs have been expressed in 2013 dollars in this report. This was done by inflating bodily injury (BI) claims at the rate of average weekly earnings from the Australian Bureau of Statistics (ABS), and property damage (PD) and mixed loss type claims were inflated at the rate of the consumer price index (CPI) from the ABS.

Approximating risk exposure

Risks to which an insurer is exposed during a year give rise to the claims incurred in the year. As most public liability policies are annual policies, we approximate risks exposed during any given year by taking the average of the number of risks written in that year and the prior year.

This approach is based on the assumption that risks are written evenly across the year, which may not be the case in practice.

Masking

The NCPD reports provide information at an aggregate level that is derived from the policy and claim records submitted to the NCPD. To protect the confidentiality of the information provided to the NCPD, data items are masked in the NCPD reports at this aggregate level unless at least three insurers contribute to the aggregate total for that data item. A data item is also masked where a single insurer contributes more than 85 per cent of the aggregate total or two insurers contribute more than 90 per cent of the total. An additional data item may be masked if it could be used to calculate any data item already masked.

The symbol “*” indicates that the data have been masked to maintain confidentiality.

Claim size distribution

Insurers need to estimate the severity of claims for pricing, reserving and capital projection purposes, which can be challenging for liability insurers due to the low frequency and high severity nature of liability claims. At times, insurers' own data may be insufficient to forecast the severity of liability claims, particularly for large claims.

To assist the industry with estimating liability claim size, we have constructed a severity distribution function utilising claims finalised within the industry between 2005 and 2013, inflated to 2013 values as described earlier.

Liability claims tend to be heavily skewed with considerable uncertainty at the tail. As a result, no one single distribution function will be able to model the entire severity distribution accurately. Therefore, we have divided the claims into the several segments and fitted a distribution to each segment. We have not modelled claims of \$100 or less. These claims contribute to 33% of the total number of the claims finalised, majority of which are nil claims.

For each segment, we have taken the parametric distribution fitting approach by assuming the claim size to follow some specific parametric model. We then estimated the parameters by minimising the sum of squared residuals. We have tested several models and chosen the optimal model that produced the lowest total squared residuals with no clear bias.

In addition, we performed modelling on two different bases: all claims; and claims finalised within 10 years of being reported. This is because claims that take longer to settle and therefore were from older incident periods may not be representative of future claims, e.g. asbestos claims.

The resulted cumulative distribution functions and the corresponding parameter values are shown below. The differences between the parameter values on the two bases mainly exist in large claims. This is not unexpected as claims that take longer to settle tend to be larger in size.

All claims:

$$F(x) = \begin{cases} 0.3287, & x \leq \$100 \\ 0.3287 + 0.6713 \times F_1(x - \$100), & \$100 < x \leq \$5K \\ 0.7161 + 0.2839 \times F_2(x - \$5K), & \$5K < x \leq \$500K \\ F_3(x - \$171K), & \$500K < x \leq \$2M \\ F_4(x - \$403K), & x > \$2M \end{cases}$$

Segment	Claim Size Range	Distribution	Parameter	$F(x)$ Upper Limit
0	$x \leq \$100$			0.3287
1	$\$100 < x \leq \$5K$	Lognormal	$F_1(x - \$100) \sim \text{LogN}(8.19, 1.59^2)$	0.7161
2	$\$5K < x \leq \$500K$	Lognormal	$F_2(x - \$5K) \sim \text{LogN}(9.55, 2.00^2)$	0.9895
3	$\$500K < x \leq \$2M$	Lognormal	$F_3(x - \$171K) \sim \text{LogN}(6.96, 2.35^2)$	0.9992
4	$x > \$2M$	Gamma	$F_4(x - \$403K) \sim \text{Gam}(0.000920, 4.82M)$	1

Claims finalised within 10 years:

$$F^*(x) = \begin{cases} 0.3304, & x \leq \$100 \\ 0.3304 + 0.6696 \times F_{1^*}(x - \$100), & \$100 < x \leq \$5K \\ 0.7232 + 0.2768 \times F_{2^*}(x - \$5K), & \$5K < x \leq \$500K \\ F_{3^*}(x - \$107K), & \$500K < x \leq \$2M \\ F_{4^*}(x - \$384K), & x > \$2M \end{cases}$$

Segment	Claim Size Range	Distribution	Parameter	$F(x)$ Upper Limit
0	$x \leq \$100$			0.3304
1	$\$100 < x \leq \$5K$	Lognormal	$F_{1^*}(x - \$100) \sim \text{LogN}(8.15, 1.58^2)$	0.7232
2	$\$5K < x \leq \$500K$	Lognormal	$F_{2^*}(x - \$5K) \sim \text{LogN}(9.51, 2.00^2)$	0.9900
3	$\$500K < x \leq \$2M$	Lognormal	$F_{3^*}(x - \$107K) \sim \text{LogN}(8.14, 1.91^2)$	0.9995
4	$x > \$2M$	Gamma	$F_{4^*}(x - \$384K) \sim \text{Gam}(0.000703, 3.65M)$	1

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