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Nominal Insurer Liability Valuation as at 31 December 2017

Background

Insurance & Care NSW (icare) commissioned Finity Consulting Pty Ltd (Finity) to estimate the insurance liabilities of the NSW Workers Compensation Nominal Insurer (NI) as at 31 December 2017. Valuations prior to 2017 were undertaken by PricewaterhouseCoopers Actuarial Pty Ltd (PwC). This document summarises the results of Finity's independent actuarial assessment of the NI insurance liabilities.

The insurance liabilities of the NI include the future claim payments, which continue for the life of the injured worker in some cases, for all claims arising from accidents on or before 31 December 2017 as well as the expenses associated with administering the claims. They also include the expected claim costs that may arise from the exposures written before the valuation date.

The purpose of an insurance liability valuation is to estimate the reserves required for balance sheet reporting. The estimates are reflective of the information available at a specific point in time, the valuation date, and the actuary's expectations across future experience, environmental drivers and economic conditions.

Liability estimates are inherently uncertain and can change as new information becomes available.

The Finity valuation has been prepared with the intention of complying with the Actuaries Institute Professional Standard 300 'Valuations of General Insurance Claims' and producing results that comply with Australian Accounting Standard AASB 1023 'General Insurance Claims'.

Results

As at 31 December 2017 Finity have estimated the discounted net outstanding claims liability of the NI to be $14,197m. This figure includes a 15.1% risk margin over and above the central estimate which has been adopted to provide an estimated 80% probability that the combined liability estimate will prove to be sufficient. The components of the outstanding claims liability as at 31 December 2017 are set out in the following table.

Table 1: Outstanding claims liability	Undiscounted Liability Estimate ($m's)	Discounted Liability Estimate ($m's)
Weekly compensation	5,257	3,937
Medical benefits	5,851	3,300
Work injury damages	2,646	2,318
Section 66 and 67	758	673
Investigation costs	257	211
Legal costs	295	256
Rehabilitation benefits	324	288
Commutations	144	97
Death	148	137
Other	139	109

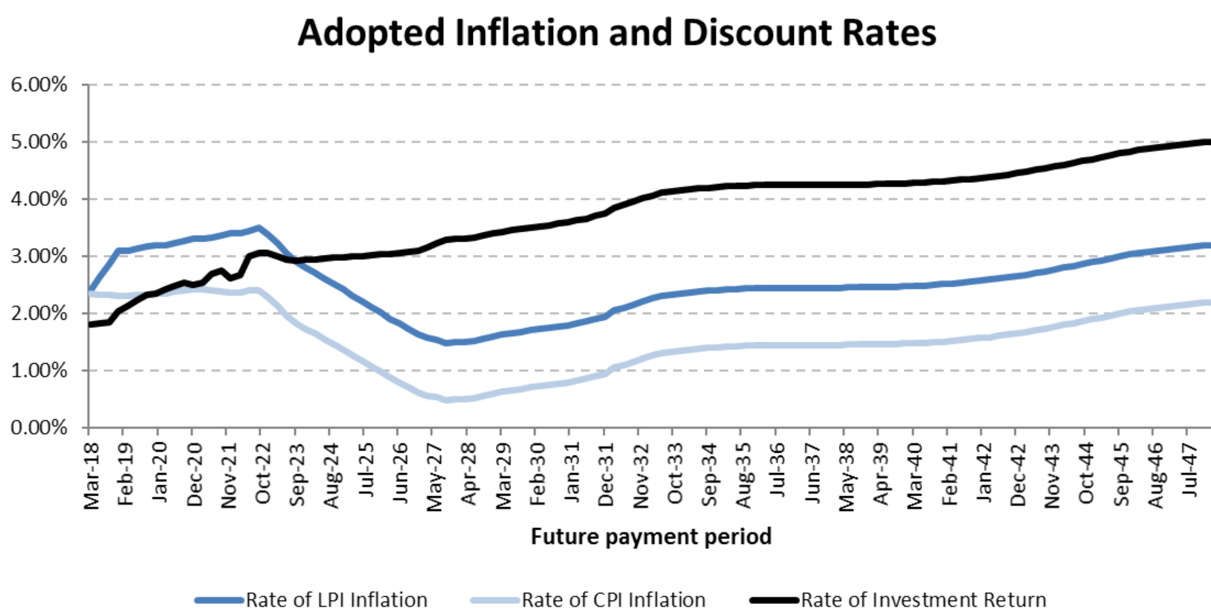
icare is the brand of Insurance & Care NSW, and acts for the Workers Compensation Nominal Insurer and provides services to Workers Compensation (Dust Diseases) Authority, Lifetime Care and Support Authority, Sporting Injuries Authority and NSW Self Insurance Corporation.

Table 1: Outstanding claims liability	Undiscounted Liability Estimate ($m's)	Discounted Liability Estimate ($m's)
Asbestos	221	124
Uninsured employers	169	113
Gross outstanding claims liability	**16,208**	**11,562**
Tax recoveries	96	85
Other recoveries	183	172
Uninsured employer recoveries	17	11
Net outstanding claims liability (excl. CHE)	**15,912**	**11,293**
Claims handling expenses (CHE)	1,378	1,042
Net outstanding claims liability (incl. CHE)	**17,290**	**12,335**
Risk margin (15.1%)	2,611	1,863
Total outstanding claims liability	**19,901**	**14,197**

The risk margin percentage has reduced from 15.6% as at the 30 June 2017 valuation to 15.1% for the 31 December 2017 valuation. This reduction follows a decline in the uncertainty in the estimates as more information is collected regarding the whole person impairment levels in the pre-2012 injured worker cohort.

The discount rates used by Finity in the assessment of the outstanding claims liability were taken from the yields on Commonwealth Government Bonds as at 31 December 2017 for the first 30 projection years. Beyond the 30 year point a fixed discount rate was adopted. Future inflation rates were based on a number of economic forecasts. After the first 10 projection years a fixed gap between the discount and inflation rates was adopted. Blending to the fixed gap occurred between years 5 and 10 of the projection. The adopted rates for the December 2017 valuation are shown in the following figure.

Figure 1: Economic assumptions



The mean term of the outstanding claims liability was estimated to be 13.5 years on an inflated and undiscounted basis and 8.6 years on an inflated and discounted basis.

Finity estimated the premium liability of the NI to be $1,391m as at 31 December 2017. This figure includes a risk margin of 13.7% on the unexpired risk component, again with the intention of providing an estimated 80% probability that the unexpired risk liability estimate will prove to be sufficient.

The components of the premium liability as at 31 December 2017 are set out in the following table.

Table 2: Premium liability	Liability Estimate ($m's)
Total unearned premium reserve	**1,164**
Unexpired risk reserve	1,224
Risk margin (13.7%)	168
Total unexpired risk reserve	**1,391**
Required premium deficiency reserve	228
Premium liability	**1,391**

No risk margin is included in the pricing basis for the NI which will, in general, lead to a premium deficiency when comparing the unearned premium to the expected future claim costs including a risk margin. Premium under-collection can also adversely impact the premium liabilities.

The premium liability at 31 December 2017 is higher than the comparable figure at 30 June 2017 as a direct result of the non-uniform pattern in which premium is written over the year.

The following table shows the estimated financial position of the NI as at 31 December 2017 where the liabilities are assessed at the 80% probability of adequacy.

Table 3: Financial Position	($m's)
Investments	16,101
Outstanding claims recoveries	309
Other assets	2,076
Total assets	**18,486**
Gross outstanding claims liability (incl. CHE)	14,507
Unearned premium reserve	1,164
Unexpired risk reserve	228
Other liabilities	346
Total liabilities	**16,244**
Funding ratio	**114%**

While the published results for the Nominal Insurer include liabilities expressed at the 80% probability of adequacy, the capital management policy set by icare includes liabilities expressed at the 75% probability of adequacy. The 75% probability of adequacy has been used to provide a degree of consistency with the APRA requirements for general insurers. A target funding ratio operating range of between 120% and 140% has been adopted under the NI capital management policy. This range has been based on the estimated minimum capital requirement that would exist for the NI under APRA regulation. It does not include the additional capital and APRA regulated insurer would be required to hold to insure it did not breach statutory minimums.

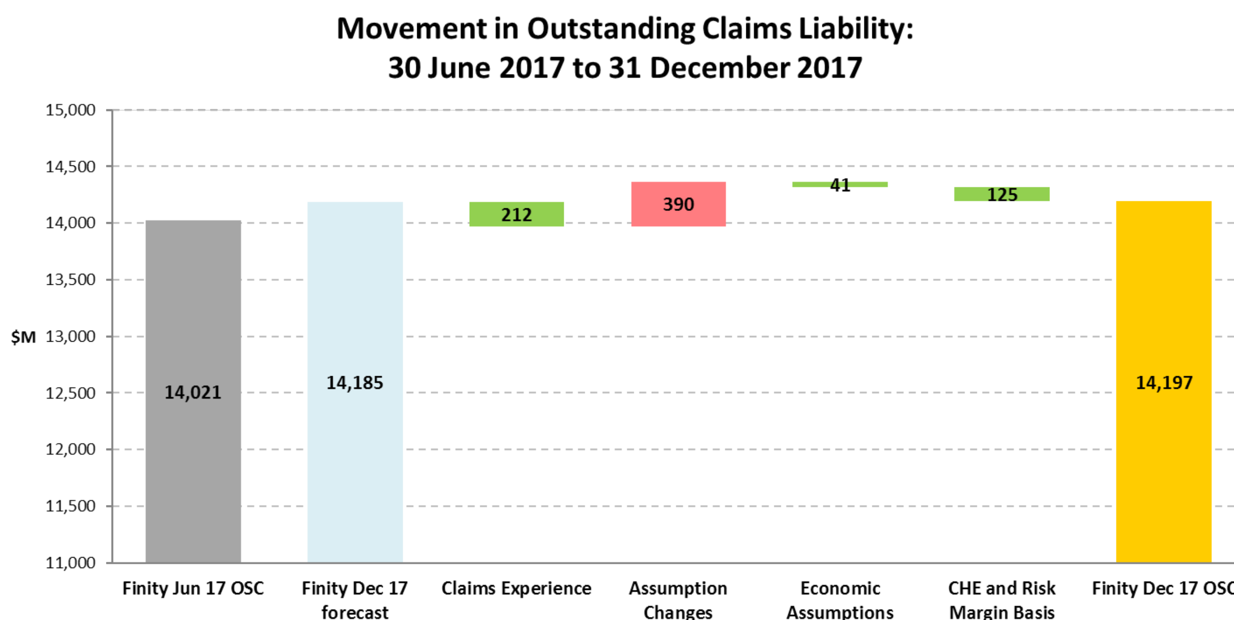
Following the December 2017 insurance liability valuation, the funding ratio for the NI has decreased from 119% to 118% at the 75% probability of adequacy, predominantly due to the deterioration in the outstanding claims liability and the higher premium liability at December relative to June. This is outside the target operating range by 2%. The capital management policy requires a management action review and/or plan to return the funding ratio to the target range within five years. Current expectations are that the funding ratio will return to the target operating zone within

six years, which is close to the five year timeframe. Based on the inherent uncertainties in future claims development patterns related to key benefit types and investment rates, icare management is comfortable with adopting a watching brief over this metric and re-evaluating after the June 2018 insurance liability valuation.

Movement in results

The following figure shows the movement in the total outstanding claims liability between 30 June 2017 and 31 December 2017 split by the key components of the change. The figures are inclusive of risk margins intended to deliver an 80% probability of adequacy.

Figure 2: Change in the outstanding claims liability (incl. risk margin)



Relative to Finity's expectations at June 2017 the outstanding claims liability estimate at December 2017 has increased by approximately $12m, or 0.1%. The key drivers of the change were:

- A $390m increase from changes to the valuation basis. This was mainly from the revised assumptions about the number of pre-2013 injured workers that will receive a whole person impairment assessment of 21% or greater and will therefore potentially remain on Weekly Compensation benefits until retirement and on Medical benefits for life (Section 39).
- Favourable claims experience over the six months to 30 September 2017 which reduced the liability estimate by $212m.
- Updated claims handling expense and risk margin assumptions which resulted in a reduction of $125m.
- A $41m reduction from revised economic assumptions around inflation and discount rates. These changes were made to reflect the changes in the economic outlook.

Over the past two years, the total liability increase related to the pre-2013 cohort of injured workers impacted by Section 39 was $1,152m, reflecting updated information on their injury profile and whole person impairment assessments. In addition, the 2015 benefit reforms added a further $1,033m to the estimated outstanding claims liabilities.

Uncertainties

Any estimate of insurance liabilities will contain elements of uncertainty. In the case of the NI these uncertainties are compounded by past benefit reforms, including but not limited to, the 2012, 2014 and 2015 reforms. The key uncertainties identified in the Finity valuation were:

- The impact and application of the Section 39 benefit caps (the limitation of Weekly Compensation benefits to 260 weeks for injured workers with whole person impairment less than 21%) are still uncertain. The assessment of whole person impairment through the icare initiated Workers Assistance Program are largely complete, but there is still uncertainty around the number of claims that will dispute their whole person impairment assessment and be successful.
- The limited data available on whole person impairment and the reliance of post 2012 benefits on this information has led to approximations of the whole person impairment distribution being used. This adds to the uncertainty in the valuation estimates. This has been compounded by delays in injured workers seeking these assessments as a result of the use of a single assessment to determine some lump sum benefit payments.
- A growing proportion of claims from older accident years reaching the Work Injury Damages (WID) threshold of 15% whole person impairment have been commencing WID actions. The nature of this benefit type is such that it is subject to significant volatility and may escalate rapidly. The cost impact of changes to WID experience can be significant and as such this is viewed as a key risk area for the NI.
- A new claims service model is being implemented from 1 January 2018 and the transition to this model may provide data changes or outcomes that impact claims experience modelling. Any changes in the claims experience makes estimating the future treatment and support costs of injured workers more complicated.
- The 2012, 2014 and 2015 reforms have changed the way claims develop. Benefit utilisation and continuance could both be impacted and the post reform patterns may not be clear for a number of years. Estimates of the impact of the 2012, 2014 and 2015 reforms will be refined as experience emerges but the later development years are more uncertain as a result of the reforms. There is evidence that average medical payment amounts are increasing, some of which is due to higher hospital costs and the utilisation of surgery.
- The long tailed nature of the NI's liabilities mean that it is highly leveraged to risk free discount rates and the actual investment returns achieved. In the current volatile market environment this can lead to significant instability in both the liability estimates and the funding ratio outcomes.

The above list is not exhaustive but does illustrate the uncertainty in the NI portfolio and the liability assessment process. Maintaining a sound funding ratio position is essential to ensuring the ongoing ability of the NI to deliver on its commitments to the workers and employers of NSW. That means managing and mitigating the uncertainty in the estimates where possible and holding sufficient funds to protect against potential fluctuations where it is not possible.