

Nominal Insurer Liability Valuation as at 30 June 2018

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 30 June 2018. 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 30 June 2018 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 30 June 2018 Finity have estimated the discounted net outstanding claims liability of the NI to be \$14,324m. 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 30 June 2018 are set out in the following table.

Table 1: Outstanding claims liability	Undiscounted Liability Estimate (\$m's)	Discounted Liability Estimate (\$m's)
Weekly compensation	4,863	3,710
Medical benefits	6,054	3,612
Work injury damages	2,686	2,360
Section 66 and 67	798	704
Investigation costs	232	190
Legal costs	267	230
Rehabilitation benefits	285	255
Commutations	139	98
Death	168	150
Other	213	143

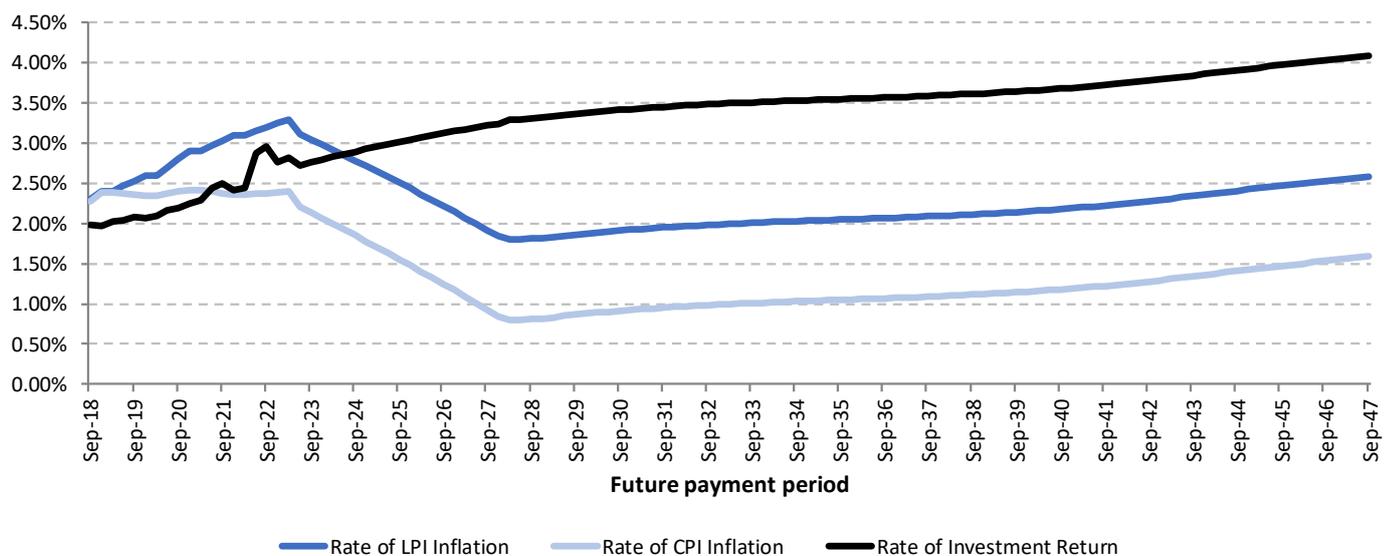
Asbestos	207	122
Uninsured employers	188	118
Gross outstanding claims liability	16,099	11,694
Tax recoveries	91	81
Other recoveries	192	179
Uninsured employer recoveries	19	12
Net outstanding claims liability (excl. CHE)	15,797	11,422
Claims handling expenses (CHE)	1,331	1,023
Net outstanding claims liability (incl. CHE)	17,128	12,445
Risk margin (15.1%)	2,586	1,879
Total outstanding claims liability	19,714	14,324

The risk margin percentage of 15.1% remains unchanged since the 31 December 2017 valuation.

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 30 June 2018 for the first 30 projection years. Beyond the 30 year point a fixed discount rate of 4.50% 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 June 2018 valuation are shown in the following figure.

Figure 1: Economic assumptions

Adopted Inflation and Discount Rates



The mean term of the outstanding claims liability was estimated to be 13.1 years on an inflated and undiscounted basis and 8.9 years on an inflated and discounted basis.

Finity estimated the premium liability of the NI to be \$609m as at 30 June 2018. 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 30 June 2018 are set out in the following table.

Table 2: Premium liability	Liability Estimate (\$m's)
Total unearned premium reserve	491
Unexpired risk reserve	535
Risk margin (13.7%)	73
Total unexpired risk reserve	609
Required premium deficiency reserve	118
Premium liability	609

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 30 June 2018 is lower than the comparable figure at 31 December 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 30 June 2018 where the liabilities are assessed at the 80% probability of adequacy.

Table 3: Financial Position	(\$m's)
Investments	16,980
Outstanding claims recoveries	313
Other assets	1,155
Total assets	18,447
Gross outstanding claims liability (incl. CHE)	14,637
Unearned premium reserve	491
Unexpired risk reserve	118
Other liabilities	781
Total liabilities	16,027
Funding ratio	115%

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

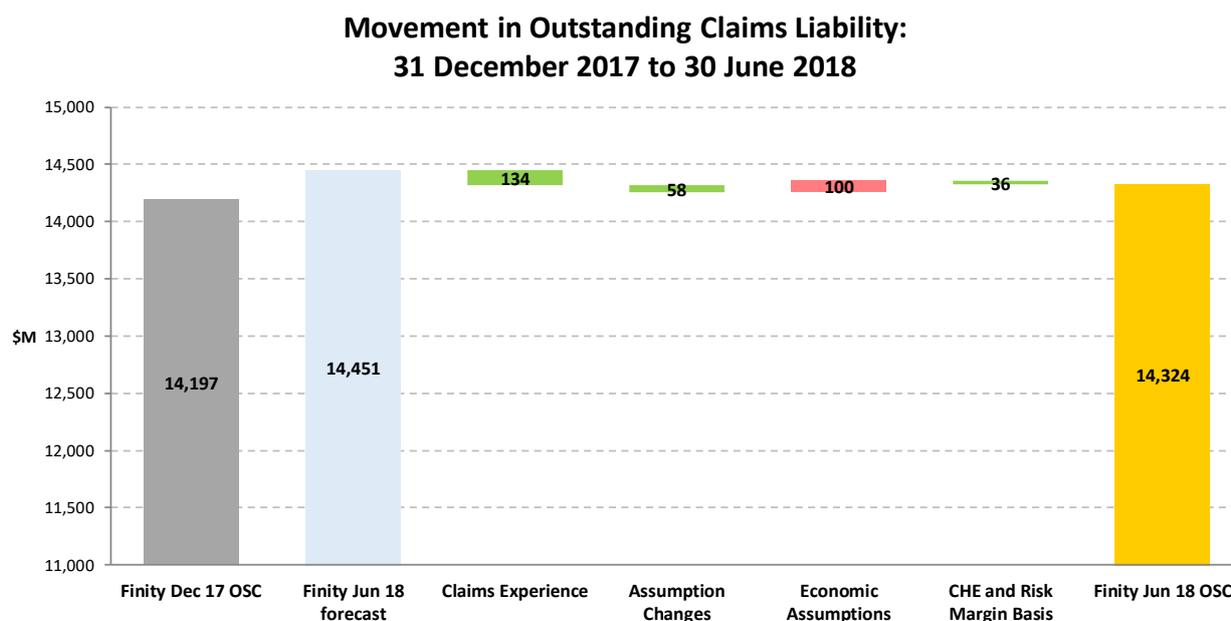
requirements for general insurers. A target funding ratio operating range of between 120% and 140% has been adopted under the NI capital management policy. This range has been based on the estimated minimum capital requirement that would exist for the NI under APRA regulation. It does not include the additional capital an APRA regulated insurer would be required to hold to insure it did not breach statutory minimums.

Following the June 2018 insurance liability valuation, the funding ratio for the NI has increased from 118% to 119% at the 75% probability of adequacy, predominantly due to the lower premium liability at June relative to December being partly offset by higher other liabilities. This is outside the target operating range by 1%. Current expectations are that the funding ratio will return to the target operating zone within four years, if no unanticipated changes occur. 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.

Movement in results

The following figure shows the movement in the total outstanding claims liability between 31 December 2017 and 30 June 2018 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 December 2017, the outstanding claims liability estimate at 30 June 2018 has decreased by approximately \$127m, or 0.9%. The key drivers of the change were:

- Favourable claims experience over the six months to 31 March 2018 which reduced the liability estimate by \$134m.
- A \$58m decrease from changes to the valuation basis. The primary drivers of this decrease were:
 - A \$225m decrease from making an explicit allowance for pre-2013 injured workers that have lodged a Work Injury Damages (WID) claim to stop receiving Weekly and Medical benefits when the WID claim is expected to finalise.
 - A \$121m decrease in the average size of non-Medical benefits, particularly from Rehabilitation, Investigation and Legal benefits.
 - A \$296m increase due to revised assumptions about the average size of Medical benefits.
 - Other modelling and assumption changes offset some of these movements.

- A \$100m increase from revised economic assumptions around inflation and discount rates. These changes were made to reflect the changes in the economic outlook.
- A \$36m decrease from updated claims handling expenses reflecting operating efficiencies under icare.

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 final impact 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%) is still uncertain. The assessments 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 may dispute their impairment 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 because 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.
- A new claims service model was implemented from 1 January 2018 and the transition to this model which is designed to provide faster treatment and therefore recovery 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.
- Due to higher hospital costs and greater frequency in workers undertaking surgery, there is evidence that average medical payment amounts are increasing.
- 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 liability assessment process and therefore the valuation of the NI portfolio. 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.