

Nominal Insurer Liability Valuation as at 30 June 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 30 June 2017. Previous valuations were undertaken by PricewaterhouseCoopers Actuarial Pty Ltd (PwC). This document summarises the results of Finity's assessment of the NI insurance liabilities as the independent scheme actuary.

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 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 will 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 2017 Finity have estimated the discounted net outstanding claims liability of the NI to be \$14,021m. This figure includes a 15.6% 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 2017 are set out in the following table.

Table 1: Outstanding claims liability	Undiscounted	Discounted
	Liability Estimate	Liability Estimate
	(\$m's)	(\$m's)
Weekly compensation	5,113	3,819
Medical benefits	5,832	3,173
Work injury damages	2,724	2,376
Section 66 and 67	664	587
Investigation costs	257	212
Legal costs	296	256
Rehabilitation benefits	336	297
Commutations	165	113
Death	162	151
Other	120	94
Asbestos	240	127

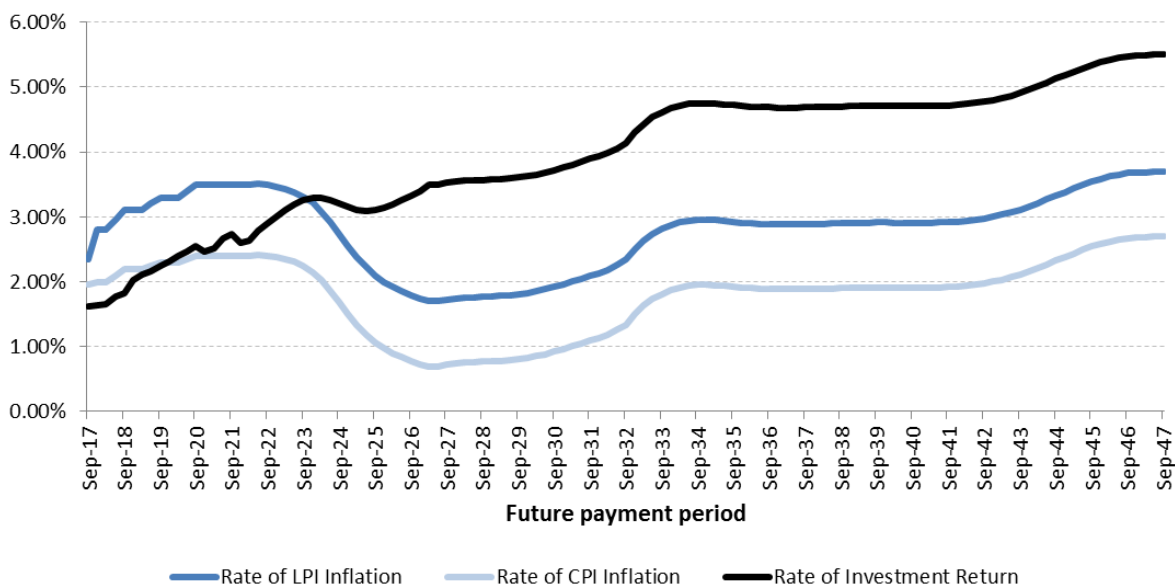
Table 1: Outstanding claims liability	Undiscounted Liability Estimate (\$m's)	Discounted Liability Estimate (\$m's)
Uninsured employers	177	115
Gross outstanding claims liability	16,087	11,320
Tax recoveries	93	82
Other recoveries	182	171
Uninsured employer recoveries	18	11
Net outstanding claims liability (excl. CHE)	15,794	11,056
Claims handling expenses (CHE)	1,422	1,073
Net outstanding claims liability (incl. CHE)	17,216	12,129
Risk margin (15.6%)	2,686	1,892
Total outstanding claims liability	19,902	14,021

The risk margin percentage of 15.6% remains unchanged since the 31 December 2016 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 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 June 2017 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 13.8 years on an inflated and undiscounted basis and 8.4 years on an inflated and discounted basis.

Finity estimated the premium liability of the NI to be \$575m as at 30 June 2017. This figure includes a risk margin of 17.3% 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 2017 are set out in the following table.

Table 2: Premium liability	Liability Estimate (\$m's)
Unearned premium reserve	484
Unearned premium related to future adjustments	17
Total unearned premium reserve	501
Unexpired risk reserve	490
Risk margin (17.3%)	85
Total unexpired risk reserve	575
Required premium deficiency reserve	74
Premium liability	575

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 impact the premium liabilities.

The premium liability at 30 June 2017 is lower than the comparable figure at 31 December 2016 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 2017.

Table 3: Financial position	(\$m's)
Investments	16,388
Outstanding claims recoveries	306
Other assets	1,001
Total assets	17,695
Gross outstanding claims liability (incl. CHE)	14,327
Unearned premium reserve	484
Unexpired risk reserve	74
Other liabilities	446
Total liabilities	15,330
Funding ratio	115%

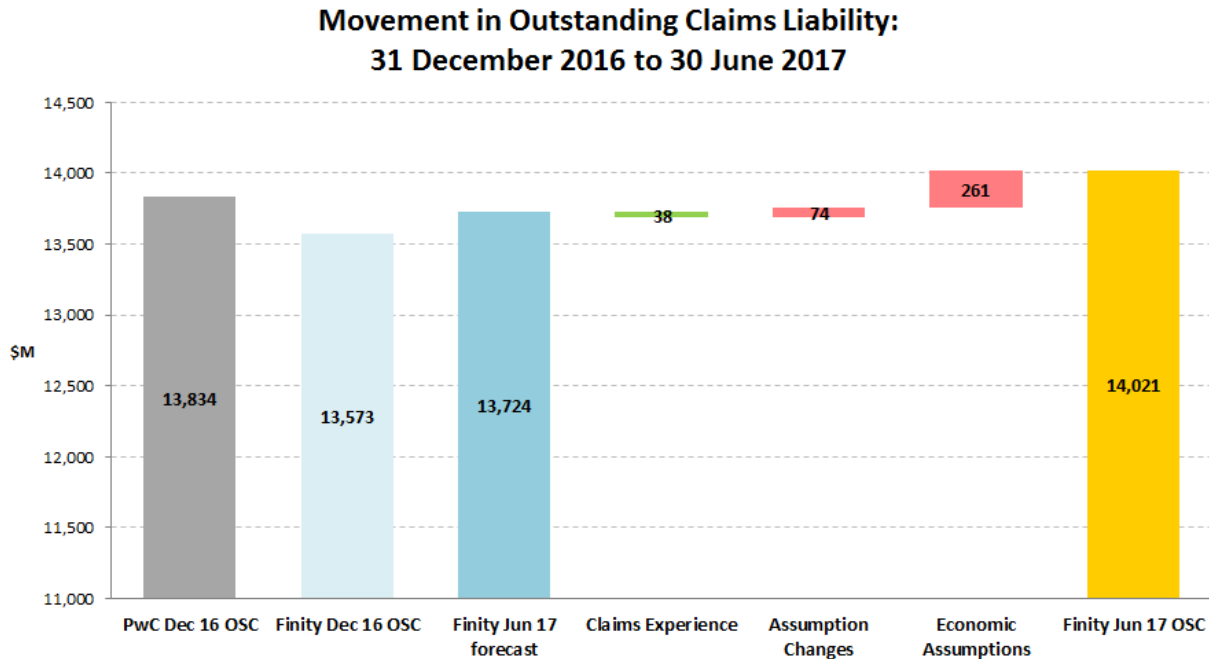
While the published results for the Nominal Insurer include liabilities expressed at the 80% probability of adequacy, the capital management policy set by icare includes liabilities expressed at the 75% probability of adequacy. The 75% probability of adequacy has been used to provide a degree of consistency 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 reflects the estimated minimum capital requirement that would exist for the NI under APRA regulation.

Following the December 2016 insurance liability valuation the funding ratio for the NI has increased from 115% to 119% at the 75% probability of adequacy, predominantly due to the lower premium liability at June relative to December. This is just outside the target operating range by 1%. The capital management policy requires a management action review 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 five years, assuming no unanticipated changes occur.

Movement in results

The following figure shows the movement in the total outstanding claims liability between 31 December 2016 and 30 June 2017 split by the key components of the change.

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



As part of the transition of actuarial providers, Finity undertook a shadow valuation as at 31 December 2016 where they valued the liabilities independently of PwC. Finity's estimate was \$262m (or 1.9%) lower than PwC's. The key driver of the change was a lower Medical liability, due to lower average payment sizes. As part of the shadow valuation Finity also estimated the June 2017 liability position based on the experience to December 2016.

Relative to Finity's expectations at December 2016 the liability estimate at June 2017 has increased by approximately \$297m, or 2.2%. The key drivers of the change were:

- A reduction in the yields on Commonwealth Government Bonds increased the liability estimate by \$261m.

Favourable claims experience over the three months to 31 March 2017 reduced the liability estimate by \$38m, driven mainly by lower than expected active claim numbers in older accident periods.

- Changes in valuation assumptions have led to an increase in \$74m. The primary drivers of this increase were:
 - A reassessment of weekly compensation payments per active claim, the proportion of part time workers and the inflation assumptions for part time workers increased the liability estimate by \$57m. This was partially offset by lower expectations around the duration injured workers will remain on benefits.
 - Increased expectations around the ultimate cost of know catastrophic medical claims added \$24m to the liability.
 - The work injury damages liability increased by \$29m following assumption adjustments to reflect increases in settlement costs.
 - Other modelling and assumption changes offset some of these increases.

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 are still uncertain. As injured workers are assessed a better picture of the whole person impairment distribution and the likely outcome of the capping will emerge.
- 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.
- 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 01 January 2018 and the transition to this model may provide data changes or outcomes that impact claims experience modelling.
- 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.
- Regulations around the payment of legal costs for the review of work capacity decisions introduced under the 2015 reforms have now been implemented. While this reduces the uncertainty around the nature of the legal cost coverage, potential changes in the profile of disputes still result in material uncertainty. Increased legal activity will not only have a direct cost impact, it may also lead to behavioural changes that further impact costs.
- 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.