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Nominal Insurer Liability Valuation as at 31 December 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 31 December 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 31 December 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 31 December 2018 Finity have estimated the discounted net outstanding claims liability of the NI to be $15,027m. 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 2018 are set out in the following table.

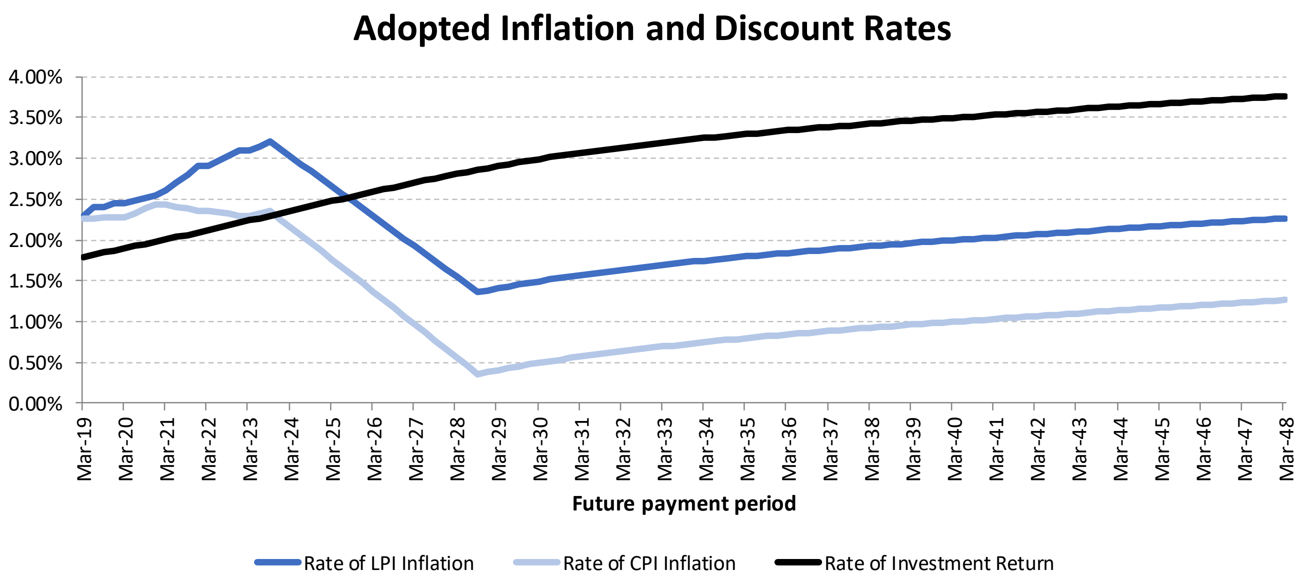
Table 1: Outstanding claims liability	Undiscounted Liability Estimate ($m's)	Discounted Liability Estimate ($m's)
Weekly compensation	4,479	3,660
Medical benefits	6,556	4,192
Work injury damages	2,750	2,447
Section 66 and 67	753	672
Investigation costs	200	173
Legal costs	253	222
Rehabilitation benefits	275	256
Commutations	139	102
Death	183	165
Other	233	163

Asbestos	227	142
Uninsured employers	176	119
Gross outstanding claims liability	**16,224**	**12,311**
Tax recoveries	82	74
Other recoveries	188	175
Uninsured employer recoveries	18	12
Net outstanding claims liability (excl. CHE)	**15,937**	**12,051**
Claims handling expenses (CHE)	1,223	1,005
Net outstanding claims liability (incl. CHE)	**17,160**	**13,056**
Risk margin (15.1%)	2,591	1,971
Total outstanding claims liability	**19,751**	**15,027**

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 31 December 2018 for the first 30 projection years. Beyond the 30 year point a fixed discount rate of 4.00% 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 2018 valuation are shown in the following figure.

Figure 1: Economic assumptions



The mean term of the outstanding claims liability was estimated to be 12.3 years on an inflated and undiscounted basis and 8.5 years on an inflated and discounted basis.

Finity estimated the premium liability of the NI to be $1,524m as at 31 December 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 31 December 2018 are set out in the following table.

Table 2: Premium liability	Liability Estimate ($m's)
Total unearned premium reserve	**1,190**
Unexpired risk reserve	1,340
Risk margin (13.7%)	184
Total unexpired risk reserve	**1,524**
Required premium deficiency reserve	334
Premium liability	**1,524**

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

Table 3: Financial Position	($m's)
Investments	16,680
Outstanding claims recoveries	300
Other assets	1,719
Total assets	**18,700**
Gross outstanding claims liability (incl. CHE)	15,327
Unearned premium reserve	1,190
Unexpired risk reserve	334
Other liabilities	538
Total liabilities	**17,390**
Funding ratio	**108%**

The published results for the Nominal Insurer include liabilities expressed at the 80% probability of adequacy. The capital management policy set by icare has been amended and is now also expressed at the 80% probability of adequacy. A target funding ratio operating range of between 110% and 130% for the 80%

probability of adequacy has been adopted under the NI capital management policy. This range is set 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 December 2018 insurance liability valuation, the funding ratio for the NI has decreased from 115% as at 30 June 2018 to 108% as at December 2018 at the 80% probability of adequacy. This is largely driven by:

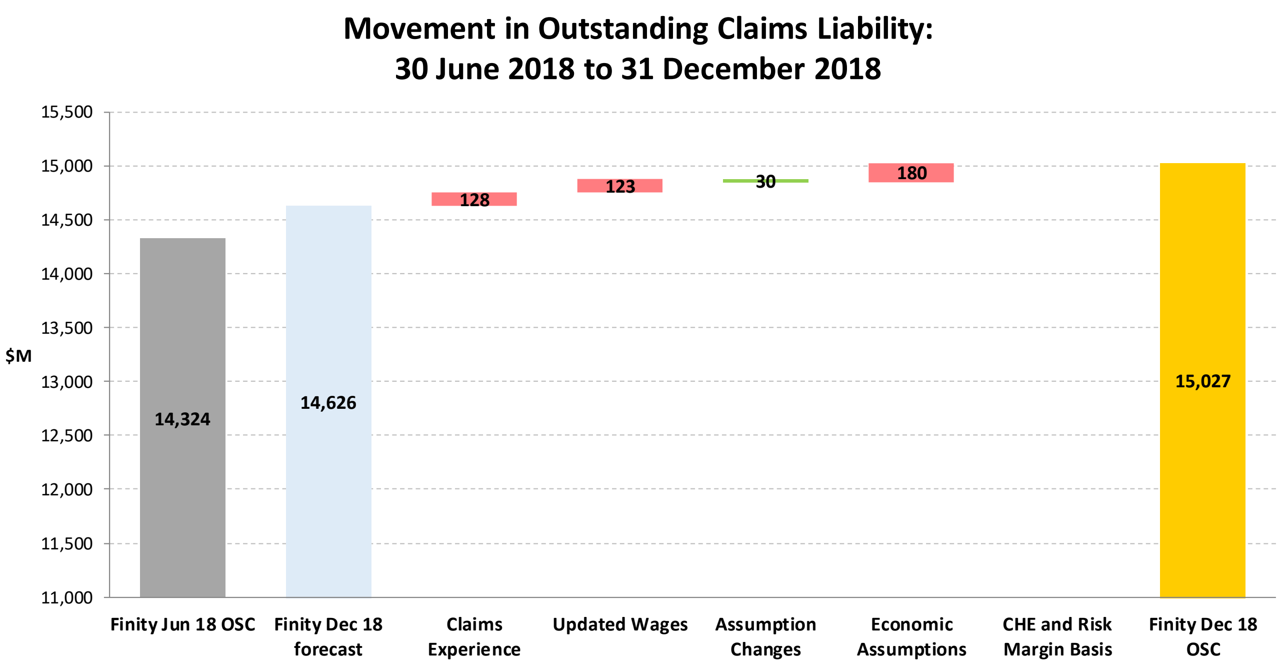
- Poor investment returns in the first half FY2018/19
- Strengthening in outstanding claims liability described further below

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. icare is actively working on claim management strategies, with a focus on return to work and medical spend to achieve claim savings. As of 30 April 2019, the investment performance has improved and the funding ratio for NI is 110%. icare is continuing its work on claim management strategies and the claim experience will be closely monitored so that icare management decisions can appropriately reflect emerging information.

Movement in results

The following figure shows the movement in the total outstanding claims liability between 30 June 2018 and 31 December 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 June 2018, the outstanding claims liability estimate at 31 December 2018 has increased by approximately $401m, or 2.7%. The key drivers of the change were:

- Unfavourable claims experience over the six months to 30 September 2018 which increased the liability estimate by $128m.
- A $123m increase from updated wages which were higher than originally forecasted.
- A $30m decrease from changes to the valuation basis. The primary drivers of this decrease were:

  - A $646m increase due to revised assumptions about the average size of Medical benefits. This is a continued response from the valuation actuaries to the adverse medical claim experience where medical cost per claim have been increasing at around 12% p.a. for the last 3 years.
  - A $495m decrease from making an explicit allowance for injured workers receiving Work Injury Damages (WID) claims in the future to stop receiving Weekly and Medical benefits. Previously the models only had explicit allowance of this for pre-2013 claims due to data limitations.
  - A $70m decrease in Rehabilitation, Investigation and Legal benefits in response to the favourable claims experience for these payment types.
  - Other modelling and assumption changes totalling a decrease of $111m.
- A $180m increase from revised economic assumptions around inflation and discount rates. These changes were made to reflect the changes in the economic outlook.
- No changes to claims handling expenses and risk margins.

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 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.
- The increasing medical payments, driven by procedures such as surgery and other inpatient services becoming more expensive and complex for the Nominal Insurer.
- A new claims service model was 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 2018 legislative amendment changes the process of disputes for Work Capacity Decisions and medical assessments of WIP. There is uncertainty around the impact this may have on the effectiveness of dispute process and its influence on the claims experience.
- 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.
- 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.