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Nominal Insurer Liability Valuation as at 31 December 2016

Background

Insurance & Care NSW (icare) commissioned PricewaterhouseCoopers Actuarial Pty Ltd (PwC) to estimate the insurance liabilities of the NSW Workers Compensation Nominal Insurer (NI) as at 31 December 2016. This document summarises the results of PwC's independent 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 2016 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 PwC 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 2016 PwC have estimated the discounted net outstanding claims liability of the NI to be $13,834m. 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 31 December 2016 are set out in the following table.

Table 1: Outstanding claims liability

Items	Undiscounted Liability Estimate ($m's)	Discounted Liability Estimate ($m's)
Weekly compensation	5,208	3,809
Medical benefits	6,010	3,250
Work injury damages	2,458	2,183
Section 66 and 67	696	585
Medical assessment costs	278	226
Legal costs	287	245
Rehabilitation benefits	348	303
Commutations	162	111
Other	301	240
Asbestos	223	109
Uninsured employers	190	112

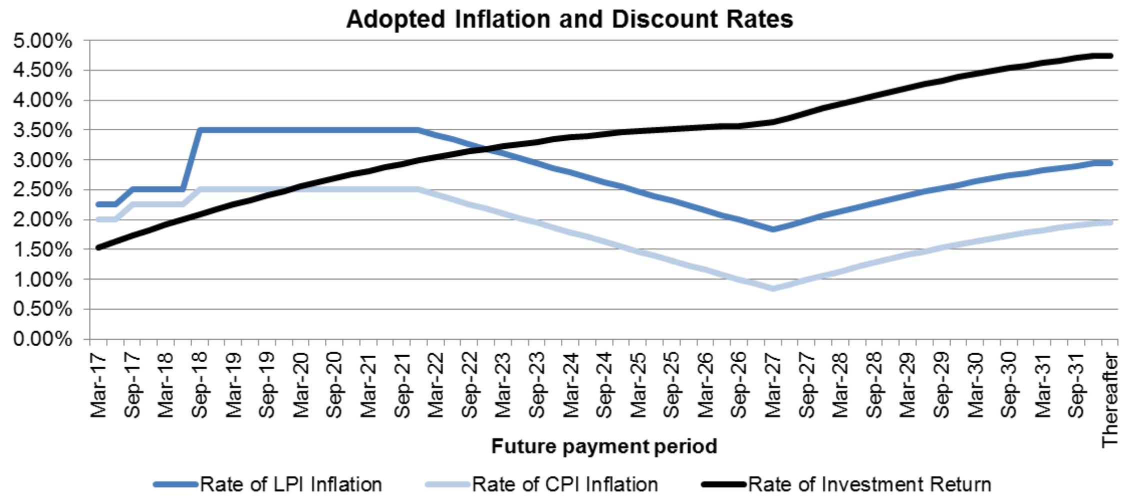
Items	Undiscounted Liability Estimate ($m's)	Discounted Liability Estimate ($m's)
Gross outstanding claims liability	**16,160**	**11,173**
Excess recoveries	2	2
Tax recoveries	100	86
Other recoveries	206	188
Uninsured employer recoveries	16	11
Net outstanding claims liability (excl. CHE)	**15,835**	**10,887**
Claims handling expenses (CHE)	1,537	1,081
Net outstanding claims liability (incl. CHE)	**17,373**	**11,967**
Risk margin (15.6%)	2,710	1,867
Total outstanding claims liability	**20,083**	**13,834**

The risk margin percentage of 15.6% remains unchanged since the 30 June 2016 valuation.

The above liability estimates include an allowance for the anticipated impact of the 2015 benefit reforms and the estimated direct impact of the legal regulations put in place towards the end of 2016. The potential behavioural changes that may occur following the legal regulation have not been allowed for in the December 2016 valuation. Should changes in experience emerge they will be allowed for over time.

The discount rates used by PwC in the assessment of the outstanding claims liability were taken from the yields on Commonwealth Government Bonds as at 31 December 2016 for the first 15 projection years. Beyond the 15 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 2016 valuation are shown in the following figure.

Figure 1: Economic assumptions



The mean term of the outstanding claims liability was estimated to be 13.8 years on an inflated and undiscounted basis and 8.6 years on an inflated and discounted basis.

PwC estimated the premium liability of the NI to be $1,509m as at 31 December 2016. 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 31 December 2016 are set out in the following table.

Table 2: Premium liability

Items	Liability Estimate ($m's)
Unearned premium reserve	1,027
Unearned premium related to future adjustments	94
Total unearned premium reserve	**1,121**
Unexpired risk reserve	1,286
Risk margin (17.3%)	223
Total unexpired risk reserve	**1,509**
Required premium deficiency reserve	388
Premium liability	**1,509**

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. The 2015 reforms were not factored into the 2016/17 pricing and as such will have contributed to the deficiency. Premium under-collection can also impact the premium liabilities.

The premium liability at 31 December 2016 is higher than the comparable figure at 30 June 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 31 December 2016. The liabilities are included at the 80% probability of adequacy level consistent with the audited accounts of the Nominal Insurer.

Table 3: Financial position

Items	$m's
Investments	15,963
Outstanding claims recoveries	331
Other assets	1,537
Total assets	**17,832**
Gross outstanding claims liability (incl. CHE)	14,165
Unearned premium reserve	1,027
Unexpired risk reserve	388
Other liabilities	367
Total liabilities	**15,947**
Funding ratio	**112%**

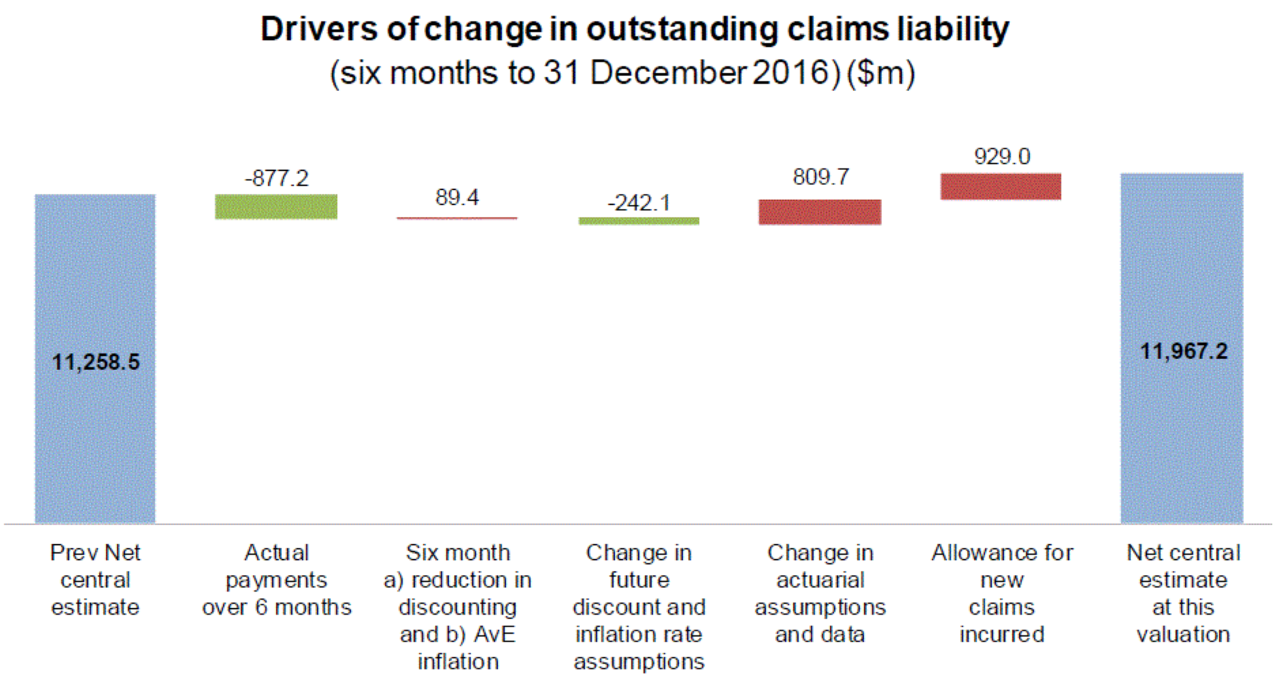
While the published results for the Nominal Insurer include liabilities expressed at the 80% probability of adequacy, the capital management policy set by icare (and pending SIRA endorsement) includes liabilities expressed at the 75% probability of adequacy. The 75% probability of adequacy has been used 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.

Following the December 2016 insurance liability valuation the funding ratio for the NI has dropped from 127% to 115% at the 75% probability of adequacy, predominantly due to the changes in the assumptions relating to the 260 week weekly compensation cap (section 39) and unfavourable investment markets. This is outside the target operating range. The capital management policy requires a management action plan to return the funding ratio to the target range within five years. The action plan must then be approved by the icare Board of Directors. Current expectations are that the funding ratio will return to the green zone within five years, assuming no unanticipated changes occur.

Movement in results

The following figure shows the movement in the discounted net central estimate (i.e. excluding the risk margin) of the outstanding claims liability between June 2016 and December 2016 split by the key components of the change. Relative to expectations at 30 June 2016 the liability estimate has increased by approximately $819m, or 6.3%, including the risk margin.

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



The key drivers of the change were:

- An increase in the yields on Commonwealth Government Bonds lead to a reduction in the liability estimate for pre 30 June 2016 claims. Coupled with some broadly offsetting movements in the short term inflation expectations this led to a liability reduction of $242m.
- Experience within the portfolio was generally favourable for pre 30 June 2016 claims. This has been more than offset by updated information regarding the pre 2012 claims impacted by the 260 week weekly compensation cap (as per *Section 39* of the NSW Workers Compensation Act 1987). The overall result has been an increase in the pre 30 June 2016 claims liability estimate of $810m. The primary drivers of this increase were:
  - A reduction in the number of claimants remaining on weekly compensation benefits was more than offset by an increase in the expected number of pre 2012 claims that will remain on benefits beyond the 260 point. Overall the weekly compensation experience and modelling changes led to a $424m increase in the estimated liability.
  - The numbers of claimants in receipt of medical benefits had also fallen. Combined with further recalibration of the allowance made for reactivations post the 2015 reforms due to the low number of reactivations observed to date this has led to a reduction in the liability estimate. These reduction have been more than offset by the impact on future medical costs linked to the increase in the expected duration on weekly compensation for a cohort of pre 2012 claims. The combined impact of these factors led to an increase of $174m in the medical liability estimate.

  - There were small increases in work injury damages intimation numbers in some years relative to expectations. This led to a $16m increase in the liability estimate.
  - Higher than expected death reports and payments led to an increase in the liability estimate of $40m
  - Increased average rehabilitation payment assumptions and higher experience led to an increase in the liability estimate of $40m.
  - Other modelling and assumption changes increased the liability estimate by $46m.
- The impact of the new incurred claims arising from the six month period to 31 December 2016 was 6%, or $52m, higher than the actual payments over the past six months.

These changes are all compounded by the addition of a risk margin.

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 and 2015 reforms as well as the 2016 legal regulations. The key uncertainties identified in the PwC valuation were:

- The impact of the Worker Assistance Program and the application of the 260 week benefit caps (as per *Section 39* of the NSW Workers Compensation Act 1987) are still uncertain. Injured workers have been through the assessment process which is providing insight into the likely outcomes. Until all impacted injured workers are assessed a full picture of the whole person impairment distribution and the likely outcome and impacts will not be possible. The link between the assessment process and any subsequent dispute litigation also leads to increased uncertainty.
- The slow development of written premium and the recent increase in the breakeven premium rate place a source of strain on the balance sheet of the NI. The lower funding ratio following the December 2016 valuation increases the risk arising from potential future strains.
- 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 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.
- The 2012 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 and 2015 reforms will be refined as experience emerges but the later development years are more uncertain as a result of the reforms.
- A number of precedents have already occurred following the 2012 reforms. The indexation of transitional weekly compensation benefits and decisions impacting section 66 and 67 benefits has provided some clarification around the application of aspects of the reforms. As decisions were made, and in some cases overturned, certainty increased but the changes further destabilised the emerging post reform experience. Potential future decisions could alter the experience again increasing the uncertainty.
- Work injury damages were being accessed more frequently leading up to 2012. 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 work injury damages experience can be significant and as such this is viewed as a key risk area for the NI.
- 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.

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.