SIRA review of Nominal Insurer liability valuations

Report to the Minister for Finance, Services and Property
August 2018
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Letter to the Minister

The Hon. Victor Dominello, MP
Minister for Finance, Services and Property

Dear Minister

On behalf of the State Insurance Regulatory Authority (SIRA) Board, I am pleased to provide a report on the SIRA review of the Nominal Insurer’s valuation of insurance liabilities across 2016 and 2017. This report represents SIRA’s second report, with the last report published in April 2017.

The Board has reviewed reports on the December 2016, June 2017 and December 2017 actuarial valuations of the NSW workers’ compensation Nominal Insurer’s insurance liabilities (managed by icare). The Board has had the benefit of briefings from icare on each valuation undertaken since our last report. Expert advice from SIRA’s independent scheme actuary has also been considered.

The Board again strongly supports greater transparency of Nominal Insurer valuation and pricing methodologies for workers compensation system participants. Pleasingly, the Board acknowledges that icare has published the half yearly Nominal Insurer valuation summary results since 30 June 2016 and premium information on the icare website, as recommended in our last report.

As outlined in our report of April 2017, the 2012 and 2015 legislative amendments resulted in substantial changes to benefit design, interaction with providers, and the structural regulation and operation of the system. The impact of these amendments has become clearer since our last report, particularly the impact of the legislative amendments relating to the section 39 maximum benefit period provisions introduced in 2012, effective from September 2017.

The review identified a number of key risks underlying the valuation assumptions:

- deterioration in continuance rates (increased length of time receiving weekly benefits)
- medical provider cost utilisation and inflation rates, and
- some ongoing uncertainties regarding the frequency and cost of disputes associated with icare’s Workers Assistance Program.

If these risks are realised, they could have a material impact on the scheme’s liabilities and surplus.

Due to the risks underlying the valuation assumptions and premium pricing, the SIRA Board recommends that the NSW Government does not commit to any ongoing changes to benefit and premium settings at this time.

I would like to thank icare for providing the Nominal Insurer valuation reports and for their presentations to the Board.

Yours sincerely

Trevor Matthews
Chair, State Insurance Regulatory Authority Board
1. Executive summary

The State Insurance Regulatory Authority (SIRA) is committed to conducting regular reviews of the Nominal Insurer’s valuation and reporting to the Minister. The previous report on SIRA’s review of the June 2016 valuation, published in April 2017, focussed on the ongoing nature of many of the legislative amendments from 2012 and 2015, and recommended ‘that the NSW Government does not commit to changes to benefit and premium settings at this time’.

SIRA has reviewed the reports on the actuarial valuations of the insurance liabilities for the NSW Workers Compensation Nominal Insurer as at 31 December 2016, 30 June 2017 and 31 December 2017. The latest funding ratio reported in the December 2017 valuation was 118% based on a probability of sufficiency (PoS) of 75%.

The funding ratio has reduced since the review of the June 2016 valuation and sits below the target funding ratio of 120-140% of assets over expected liabilities set by the icare Board.

The report considers the main experience drivers of the funding ratio reduction from June 2016 to December 2017, as well as highlights the key areas of uncertainty in the valuation.

It also identifies a number of key risks underlying the valuation assumptions, among them:

- a deterioration in continuance rates (increased length of time receiving weekly benefits)
- medical provider cost utilisation and inflation rates, and
- uncertainties regarding the frequency and cost of disputes associated with icare’s Workers Assistance Program.

If these risks are realised they could have a material impact on the scheme’s liabilities and surplus.

The review highlighted that some changes have yet to be fully realised, and will likely have an impact on the accuracy of the valuation. The dispute resolution model is being reformed, with further changes currently being discussed. A new claims model was implemented by the Nominal Insurer on 1 January 2018 which will likely have an impact on claims experience modelling over the next valuation periods.

Having regard to these factors and the objectives of the workers compensation legislation to ensure a fair, affordable and financially viable system, SIRA recommends that the NSW Government does not commit to ongoing changes to the benefit and premium structures at this time. As a general rule, benefit changes need to be counter-balanced by premium rate changes to ensure a prudent and sustainable scheme.

SIRA notes that since its last review, market transparency over the Nominal Insurer valuation has increased through icare’s publication of the half yearly Nominal Insurer valuation summary results. Additionally, earlier in 2018 SIRA published its second annual performance report of the NSW Workers Compensation System and continues to publish monthly dashboards facilitating better monitoring of the system in accordance with a system performance framework.
2. The review

2.1 Context

SIRA has reviewed the reports on the actuarial valuation of the insurance liabilities for the NSW Workers Compensation Nominal Insurer as at 31 December 2016, 30 June 2017 and 31 December 2017.

This is SIRA’s second report on its assessment of the valuations. The first report – on the June 2016 valuation – was published in April 2017.

Since the review of the June 2016 valuation, the Nominal Insurer (managed by icare) has published the half yearly summary results for each subsequent valuation. icare has also provided to SIRA the 31 December 2016, the 30 June 2017 and the 31 December 2017 valuations in addition to attending SIRA Board briefings.

As outlined in our report of April 2017, the 2012 and 2015 legislative amendments resulted in substantial changes to benefit design, interaction with providers, and the structural regulation and operation of the system. The impact of these amendments is substantially clearer since our last report, particularly the impact of the legislative amendments relating to the section 39 maximum benefit period provisions introduced in 2012, effective from September 2017.

In addition, icare has embarked on a significant transformation strategy. Many of its transformation programs, such as a new claims operating model, are already impacting on employer and worker experience. The new claims service model was implemented for the Nominal Insurer from 1 January 2018. A key element of the new model is an online triage system which is intended to facilitate better outcomes for injured workers by segmenting claims into appropriate streams. The segmented claims model potentially allows for faster and better handling of injuries.

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.

2.2 Valuation of insurance liabilities

The purpose of the valuation is to determine an appropriate provision for outstanding claims and premium liabilities that is recorded on the Nominal Insurer’s balance sheet. The valuation of liabilities represents the amount of assets needed to be set aside today, earning interest, to pay all claims (estimated at the date of valuation) as costs fall due at a future time.

Valuations are by their nature complex, and a wide range of assumptions are made in their preparation. The current valuation is based on an assumption of a 75% probability that the level of assets will be adequate to meet future claims (whereas commercial insurers often operate using more stringent standards). It needs to be recognised that because the valuation seeks to estimate assets required over a very long period of time, there is a high degree of uncertainty and there are likely to be variations from one valuation to the next. This review seeks to explain some of these issues.

There is a degree of uncertainty in the valuation as the ultimate number and cost of claims will not be known for many years. Some claims may be lodged late, and the average duration of claims is not certain. Some injured workers continue to receive weekly benefits to retirement age and some may receive medical benefits for life. Insurance liabilities are first estimated as an ‘unbiased’ central estimate, that has an
equal chance of being either too high or too low, in hindsight. This reflects a 50% PoS. In estimating an appropriate provision for insurance liabilities, the following elements are adopted that implicitly introduce a degree of conservatism:

- **Discount rate**: under Australian Accounting standards (AASB 1023), claims liabilities must be discounted using a risk-free rate, such as the long-term Commonwealth bond yield rate. This implies that assets set aside to meet liabilities accrue income at the risk-free rate (irrespective whether assets are invested in classes expected to generate a higher return).

- **Risk margin**: The Australian Prudential Regulatory Authority (APRA) requires insurers to apply a risk margin to increase the PoS to at least 75%. This is a statistical measure of the level of confidence that the funds put aside to pay claims will be sufficient to cover the claims costs when they need to be paid. Some insurers adopt a more stringent PoS standard such as 80%, 85% or 95%.

The valuation actuary estimates the risk margin needed to be added to the central estimate of insurance liabilities to increase the PoS to the level specified by the insurer.

Although not regulated by APRA, the icare Board has determined that reporting of the funding ratio would be at 75% PoS. This is discussed further below. Further, the risk margin at the 75% PoS for the December 2017 valuation has reduced marginally for the first time in many years from 11.9% to 11.5% which has a minor impact on the liability valuation.

### 2.3 Capital and funding ratio

Australian general insurers regulated by APRA are required to hold a minimum level of capital (Prudential Capital Requirement, ‘PCR’). The principal purpose of the PCR is to protect policy holders and claimants from insurer insolvency, which if occurred would leave them financially disadvantaged.

The capital level prescribed by APRA is risk based, in that the amount of capital is commensurate with the individual characteristics of an insurer’s exposure and risk characteristics of assets and liabilities, as well its level of insurance operational risk and concentration risk. The resulting capital aims to ensure there are sufficient assets to survive a 1 in 200-year failure event.

Reflecting a low risk tolerance (appetite) of default in any one year (even at a 1 in 200-year level) and the desire to maintain a high grading from rating agencies, Australian general insurers typically hold a substantially larger capital buffer than the minimum specified under the APRA PCR methodology. Hence, private general insurers regulated by APRA typically maintain buffer capital in the order of 65% in excess of insurance liabilities (equivalent to a funding ratio of 165%). Moreover, many general insurers set their insurance liability provisions using a PoS higher than the minimum of 75% required by APRA, typically in the range 80% - 90%. It is the decision of each insurer’s board to determine an adequate level and quality capital that reflects the scale, nature and complexity and risk profile of the insurer.

In November 2016 icare developed and published its capital management policy for the Nominal Insurer. This policy defines the risks, agreed capital targets, action plan and review requirements. The plan was endorsed by the icare Board and subsequently re-endorsed in November 2017 following an annual review. The capital management policy is available on the icare website¹.

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¹ [https://www.icare.nsw.gov.au/-/media/7d3bf72faebb41588d1b4fd260da0.ashx](https://www.icare.nsw.gov.au/-/media/7d3bf72faebb41588d1b4fd260da0.ashx)
The capital management policy states that:

- an appropriate target capital ratio is 127%
- an appropriate minimum capital requirement is 100%
- target operating zone should be 120-140%
- Funding ratio reporting and monitoring for the capital management policy should be based on 75% PoS

SIRA considers the icare NI target operating zone is reasonable based on a moderate risk appetite.

**Nominal Insurer funding ratio at 75% PoS (June 2016-Dec 2017)**

<table>
<thead>
<tr>
<th>Report</th>
<th>Funding ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2016</td>
<td>127%</td>
</tr>
<tr>
<td>Dec 2016</td>
<td>115%</td>
</tr>
<tr>
<td>June 2017</td>
<td>119%</td>
</tr>
<tr>
<td>Dec 2017</td>
<td>118%</td>
</tr>
</tbody>
</table>

A funding ratio that falls below the target operating zone will result in icare's management formulating an action plan, which returns the funding ratio to the zone within five years. At December 2017, the level of assets is $18.5 billion. A funding ratio of 118% implies a surplus of $2.7 billion.

As the current funding ratio is below 120%, and therefore outside the target operating zone, SIRA is dealing directly with icare senior management in relation to plans to reach the target range.
2.4 Results

Valuation of insurance liabilities as at 31 December 2017

<table>
<thead>
<tr>
<th>Component of valuation</th>
<th>31 December 2017 valuation of insurance liability ($ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net central estimate of outstanding claims liability (OCL)</td>
<td>12.335</td>
</tr>
<tr>
<td>OCL risk margin for 75% PoS</td>
<td>1.419</td>
</tr>
<tr>
<td>(11.5% of net central estimate)</td>
<td></td>
</tr>
<tr>
<td>Net central estimate of premium liability (PL)</td>
<td>1.224</td>
</tr>
<tr>
<td>PL risk margin for 75% PoS</td>
<td>0.189</td>
</tr>
<tr>
<td>(10.5% of net central estimate)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.107</td>
</tr>
</tbody>
</table>

2.5 Key experience drivers

The funding ratio for icare has decreased from 127% to 118% at the 75% PoS from June 2016 to December 2017.

The key experience drivers of the reduced funding ratio are:

- a volatile and low-investment-return environment. In December 2016, this was marked by negative investment returns for the Nominal Insurer
- a higher than expected volume of workers with a workplace injury with whole person impairment greater than 20% who were not subject to the section 39 maximum benefits period. These workers will continue to receive weekly compensation and medical benefits beyond 260 weeks.
- increased work injury damages (WID) in the older accident years, from increased number of WID intimations and increased settlement sizes, and
- increased premium liability (as expected) during a mid-year valuation.

These factors have also contributed to underwriting losses in recent financial years.

2.6 Key risks and uncertainties in the valuation

Significant uncertainty continues to exist when assessing the outstanding claims liabilities.

Recent legislative amendments

In general, the 2012 and 2015 legislative amendments have changed the way claims develop. Benefit utilisation and continuance rates will both be impacted, and the post-amendment patterns may still not be clear for a number of years. Estimates of the impact of the 2012 and 2015 legislative amendments will be refined as experience emerges but the later development years are more uncertain.

The impact and application of the section 39 maximum benefits period (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 injured workers who will dispute their whole person impairment assessment and be successful.

**Limited data**

The limited data available on whole person impairment has led to approximations of the whole person impairment distribution being used. This adds to the uncertainty in the valuation estimates.

**Work injury damages (WID)**

A growing proportion of claimants with claims from older accident years are reaching the work injury damages (WID) threshold of 15% whole person impairment and have been commencing WID actions. The nature of this benefit type means 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 Nominal Insurer.

**Medical costs**

The December 2017 valuation has identified significant upward trends in the Nominal Insurer’s medical costs, both in terms of utilisation of medical services and average cost of services per claim. The level of medical inflation is occurring at levels significantly higher than normal average weekly earnings inflation. This area is another key source of uncertainty for the valuation.

**Risk Management**

SIRA is actively engaging with icare in relation to icare’s risk governance framework. SIRA regularly seeks assurance that icare’s framework is operational and effective across all of its operations regulated by SIRA, including the management of risks associated with the icare change program and, in particular, that the framework appropriately supports icare, as manager of the Nominal Insurer, in the delivery of the workers compensation system objectives.

**2.7 Other changes relevant to liability valuations**

**icare claims model**

A new claims service model was implemented from 1 January 2018 for the Nominal Insurer. A key element of the new model is the online triage system which is intended to facilitate better outcomes for injured workers by segmenting claims into appropriate streams. The segmented claims model potentially allows for faster and better handling of injuries.

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.
3. Summary and conclusions

The valuation of the Nominal Insurer’s liabilities as at December 2017 leads to a funding ratio of 118%. The review has concluded that a number of remaining valid risks could reduce the apparent level of assets. There are clear sources of uncertainty from recent and ongoing reforms, particularly with the risks associated with the cost of icare’s transformation process relative to the expected benefits and potential for adverse changes to the claims experience.

Local and global investment markets continue to be volatile, which has a significant impact on the Nominal Insurer’s investment portfolio. These factors and the underwriting loss in recent financial years make it prudent for SIRA to continue to monitor the situation closely. Based on this valuation, the future financial position of the Scheme is uncertain and more time is required to observe how future experience tracks against the current projections.

4. Recommendations

Based on the underlying uncertainty that exists in the workers compensation system and reflected in the Nominal Insurer’s December 2017 valuation, SIRA recommends that the NSW Government does not commit to ongoing changes to benefit and premium settings at this time.

SIRA will continue to undertake regular reviews of the Nominal Insurer valuation of insurance liabilities and will report to the Minister on SIRA’s assessment.
This publication may contain information that relates to the regulation of workers compensation insurance, motor accident third party (CTP) insurance and home building compensation in NSW. It may include details of some of your obligations under the various schemes that the State Insurance Regulator Authority (SIRA) administers.

However, to ensure you comply with your legal obligations you must refer to the appropriate legislation as currently in force. Up to date legislation can be found at the NSW Legislation website legislation.nsw.gov.au

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