

Motor Accident Insurance Commission

Annual review of premium components as at 31 December 2020

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Key changes since the last annual review

	Risk premium	 Decreased \$25 from \$194 to \$169
	Core claim frequency	 Decreased 11% due to the impact of claim farming reforms, accounting for \$22 of the decrease At the last annual review, the impacts of the Dec-19 claim farming reforms were yet to emerge As the year progressed, we observed both a reduction in frequency and a change in the notification pattern The impact of COVID on traffic volumes complicated analysis over 2020, however traffic volumes appear to be back to normal in the final quarter of 2020
	Claim severity profile	 The reduction in frequency following the claims farming reforms has been associated with a strengthening of the claim severity profile, resulting in a \$6 increase It is likely that the reforms have reversed the increase in frequency of small non-serious claims that occurred between 2014 and 2017 – although it is too early to see this in the available data
S	Core claim average claim size	 Decreased 5%, and this change accounts for \$10 of the decrease At the last annual review we increased our average claim size assumption to allow for an apparent increase in the prevalence of psychological injury claims. For this review the evidence suggest that what was observed was a change in coding practices rather than a genuine increase in the prevalence of psychological injury in the scheme. The removal of the loading for psychological injury claims accounts for most of the decrease The decision of Walters v Roche (Oct 2020) has clarified that that gratuitous care costs for severe claims are no longer covered by the Scheme. The removal of these costs also contributes to the decrease
	Economic assumptions	 Wage inflation has been low over 2020 (0.3%) The discount/inflation gap has increased from -1.54% p.a. at the last annual review to -1.24% p.a. due to rising optimism on the economic outlook



Core claim frequency

Claim notifications have been much lower than the forecasts made at the last annual review



COVID-19 related shutdowns reduced traffic volumes over 2020



2020 notifications across all accident quarters have emerged lower than earlier years



- 2020 notifications across all accident quarters have emerged lower than earlier years and show no sign of reversing to prior accident year levels
- The September and December 2020 accident month frequency worms are 10% and 14% below 2019 experience at the same stage of development respectively even after adjusting for the impact of COVID

Core claim frequency has decreased significantly since the claim farming reforms



- Our estimated frequency is 0.1510%. This has been estimated using all post-claim farming reform accident months up to Sep-20, excluding April 2020
- This is an 11% decrease from the pre-claims farming reform frequency of 0.1700%



Severity profile

The core claim severity profile has been stable over the last few years



- Prior to the claim farming reforms, the core claim severity profile was stable for a few years
 - Severities 1N, 1Y and 2 the less severe claims have been a stable proportion of the total core claim frequency since 2017
 - Severities 3 to 6 the more severe claims have had stable frequencies since 2013
- It is too early to measure the impact of the claim farming reforms on severity profile. However, it is reasonable to assume that the reforms have removed a proportion of less severe claims

We expect the severity profile to have increased as result of the claim farming reforms

- Between AY2014 and AY2017, the scheme core claim frequency experienced a significant and unprecedented increasing trend
- This increasing trend was almost entirely driven by an increase in small non-serious claims
 - Small non-serious claims are legally represented claims where the accident involved vehicles travelling in the same direction and there was no overnight stay in hospital or ambulance
- It is likely that the reforms have reversed the increase in frequency of small non serious claims that occurred between 2014 and 2017 – although it too early to see this in the available data
- Since small non-serious claims have the smallest claim size across the three segments, a reduction in their frequency leads to a strengthening in the overall severity profile



The post reform severity profile strengthening has partially offset the risk premium reduction caused by the lower frequency

Core claims	Frequency	Average claim size (Dec-20 \$')	Risk premium impact (\$)	Change in Risk premium (\$)
Dec-19 assumptions	0.1720%	104,506	180	
Post-claim farming frequency	0.1510%	104,506	158	-22
Pre-reform severity profile recalibration	0.1510%	104,811	158	1
Severity profile overlay strengthening	0.1510%	108,229	163	5

*Adjusted for removal of gratuitous care coverage

The post reform severity profile strengthening has led to a 3% increase in average claim size, equivalent to a \$5 increase in RP

Core finalised claim size

The average size of finalised claims was 3% lower than forecast at the last annual review



We reduced the finalised claim size for Severity 1Y claims by 1% in response to less than forecast experience



We reduced the finalised claim size for Severity 3 claims by 3% in response to less than forecast experience



Overall there has been a 1% decrease in the assumed average claim size for finalised claims

Experience		Model Pr		Projec	ojection	
• Over the year, the financially significant changes have been decreases in severities 1Y and 3	Severity	Est Baseline as at Dec-19	imated average o Baseline as at Dec-20	claim size (Dec-2 Change (%)	0 \$000s) Impact on risk premium (\$)	
	1N	7	7	2%	+0.0	
	1Y	78	77	-1%	-1.1	
	2	157	157	0%	+0.1	
	3	338	328	-3%	-0.9	
	4	595	602	1%	+0.1	
	5	961	946	-2%	-0.1	
	6	304	313	3%	+0.1	
	9NA	13	13	-1%	-0.0	
	Total	105	104	-1%	-1.7	

Emerging risks and trends in average claim size

Emerging risks and trends in average claim size

- Our finalised claim assumptions are calibrated using recently finalised claims
- These recently finalised claims will on average relate to accidents occurring in the 2017 accident year and so models calibrated to these claims will miss emerging trends in more recent accident years
- We use **Insurer case estimates on open claims** and **a Claims mix model** to identify emerging trends in average claim size in more recent accident years

Lack of stability in insurer case estimates makes them difficult to use as a lead indicator of claim size



The claims mix model forecasts a decreasing trend in average claim size for nonserious claims



Psychological claims: Incurred costs – which allow for insurer case estimates on open claims – pointed to a higher average claim size



- The proportion of claims coded as having a psychological injury has increased significantly in recent accident years
- The incurred average claim size for psychological claims is much higher than for non-psychological claims
- On its own, this implies that the increasing proportion of psychological claims may lead to a higher overall average claim size

Psychological claims: Finalised claim costs over 2020 do not support a higher average claim size



• The increasing proportion of psychological claims in recent accident years is observed in finalised claims as well, although to a lower extent

- However, we see that while AY 2018 has a higher proportion of finalised claims, those claims have finalised at a lower average claim size. The non-psychological claims for AY 2018 are also finalising at a lower average claim size
- This suggests that claims formerly coded as non psychological are being coded as psychological claims with no impact on overall claims cost

Insurer case estimates

Claims mix model

Psychological claims

- At this annual review, we have removed the allowance for psychological injury claims for the following reasons:
 - Analysis of finalised claim sizes does not now support this allowance
 - The allowance included for psychological claims at the last annual review was based on incurred costs. The case estimates driving these incurred costs are at odds with the finalised claims experience and recent unpredictability in the development of case estimates reduces our confidence in them
 - An investigation into the increase in the frequency of psychological claims by Jensen McConaghy and commissioned by MAIC in 2020 concluded that the increasing trend in the prevalence of psych claims was "not the result of an intentional strategy or trend on the part of the legal profession in Queensland" and that claim farming and progressive coding injuries were potential drivers of the trend
- We will continue to monitor experience as it emerges and update our advice if required



Risk premium

Change in the risk premium since the last annual review

- A \$25 decrease in the estimated risk premium over the year:
 - The reduction in the estimated frequency is the main contributor, offset by an assumed increase in the severity profile
 - Benign overall inflation over the year despite some big swings in ABS figures during the year
 - There have been several changes to the assumed average claim size:
 - Small reduction in assumed average claim size for finalised claims
 - Gratuitous care costs for NIISQ claims have been excluded due to Walters v Roche decision
 - Allowance for decreasing average claim size of nonserious claims has been weakened
 - Loading for impact of increasing psychological claims removed

	Risk
	premium
	(\$)
Estimated risk premium at 31 Dec 2019	194
Change due to:	
AWE	+1
Overall frequency	-22
Severity profile	+6
Average claim size	
Finalised average claim size model	-2
Removing NIISQ gratuitous care coverage from the Scheme	-3
Allowance for decreasing average claim size of non-serious claims	+3
Allowance for increasing proportion of psychological claims	-8
Workers compensation, interstate sharing and NSW claims	+1
Total change	-25
Estimated risk premium at 31 Dec 2020	169

Change in the risk premium since the last quarterly review

- An \$8 decrease in the estimated risk premium
 - In general, the annual changes referred to in the previous slide have been gradually recognised over 2020
 - The December 2020 AWE figure released by the ABS since the last quarterly review gave negative AWE growth over the quarter

	Risk
	(\$)
Estimated risk premium at 30 Sep 2020	177
Change due to:	
AWE	-3
Overall frequency	-3
Severity profile	+1
Average claim size	
Finalised average claim size model	-0
Removing NIISQ gratuitous care coverage from the Scheme	-3
Allowance for decreasing average claim size of non-serious claims	+2
Allowance for increasing proportion of psychological claims	-2
Workers compensation, interstate sharing and NSW claims	+1
Total change	-8
Estimated risk premium at 31 Dec 2020	169



Uncertainty

Scenarios illustrating plausible alternative outcomes for the risk premium

• We show the sensitivity of the risk premium to some different scenarios below

Risk premium scenarios	Impact on estimated risk premium	
Business as usual variation		
Core claim frequency +/- 6% (excluding severities 4-6)	+\$10 /	-\$10
Core average claim size +/- 8%	+\$13 /	-\$13
Key uncertainties		
Apparent frequency reduction due to claim farming reforms is halved		+\$7
CMM adjustment not realised/Apparent size reduction in segment 2 fully realised	+\$3 /	-\$2
Post claim farming frequency reduction coming from All severities/Severities 1N,1Y, 2 & 9/Severity 1	Y only -\$5 / -\$1.3 /	-\$0.9
Severity 1Y claim size continues to develop at the same level as recent experience		-\$3

• There is considerable variation in risk premium indicated by a number of realistic scenarios

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Frequency reduction due to claim farming reforms uncertainty



- This scenario illustrates the impact if the post-claim farming frequency reduction is half that we estimated
- Our estimated frequency has been set using post-claim farming reform experience adjusted for the impacts of COVID
- Our frequency assumption is uncertain as there is only one year of post-claim farming experience, and this has been affected by COVID
- There are a number of reasons why the claim frequency for future underwriting quarters may be different from our assumption but, in our view, other than removing the impact of COVID these risks are not sufficient to change our long-standing practice of basing our risk premium on the most recently observable frequency, averaged over a suitable period

Scenarios

Plausible alternative outcomes

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The claims mix model forecasts a decreasing trend in average claim size for nonserious claims



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We expect the severity profile to have increased as result of the claim farming reforms

- We have assumed that the reforms have reversed the increase in frequency of small non serious claims that occurred between 2014 and 2017 – although it too early to see this in the available data
- We have included 3 scenarios illustrating other possibilities:
 - The first scenario represents claim size staying at the same level as pre-claim farming severity which leads to a \$5 reduction in risk premium
 - The second scenario represents the frequency reduction only coming from small severities (1N, 1Y, 2 and 9) leading to a \$1 reduction in risk premium
 - The last scenario represents the frequency reduction only coming from severity 1Y. The severity 1Y claim size is close to the average claim size across the small non-serious segment (segment 1) hence this scenario leads to the smallest risk premium reduction of \$0.9



Scenarios

Plausible alternative outcomes

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Post claim farming frequency reduction coming from All severities/Severities 1N,1Y, 2 & 9/Severity 1Y only	-\$5 / -\$1.3 /	-\$0.9
Severity 1Y claim size continues to develop at the same level as recent experience		-\$3

Severity 1Y claim size continues to develop at the same level as recent experience

- The average finalized size of severity 1Y claims has been low over the past 5 quarters. Our finalisation model has only partially allowed for this low experience since it has been calibrated based on the last 2-3 years of finalisations
- This scenario aims to estimate the reduction in risk premium if the Sev1Y experience continues to emerge at the level that it has been over the past 5 finalisation quarters





Economic parameters

Wage inflation to 31 December 2020

- We have applied the future inflation rates forecast by Deloitte to the Dec-20 AWE result released by the ABS
 - This gives an AWE increase of 0.3% from the last annual update and a 1.89% decrease from the last quarterly update



1. ABS data released on 25 February 2021

2.

Deloitte forecast released mid-Jan 2021

MAIC - Annual Review December 2020

Discount rates and future wage inflation

Taylor Fry inflation model



Current versus previous inflation assumptions



- We updated the discount rates on 2nd March 2021
- Discount rates have increased significantly over the year due to rising optimism on the economic outlook
- Inflation rates have revised upwards in the short term since the recent quarterly review

12.5%

Payment

Discount rates and future wage inflation

Gap using TF inflation model

	Economic assumption (%p.a.)		
Review	Discount rate	Wage inflation	Economic gap
Current	0.90%	2.14%	-1.24%
Last quarter	0.48%	1.85%	-1.37%
Last annual review	0.59%	2.13%	-1.54%
Change since:			
Last quarter	0.42%	0.29%	0.13%
Last annual review	0.31%	0.01%	0.31%

Economic gap by underwriting quarter



• The gap has increased since the last annual review



Superimposed inflation

Superimposed inflation

Net of NIISQ Heads of Damage payments

Period (accident quarter)	Description	Accident period superimposed inflation (p.a.)
Mar-03 - Dec-20	Post-2003 Civil Liability Act	0.7%
Dec-15 - Dec-20	Last 5 years	-1.5%
Sep-96 - Dec-20	Long term average	-0.1%

- Estimates of superimposed inflation have been made after controlling for historical changes in severity mix
- Superimposed inflation estimates vary depending on which accident periods are included in the estimate
- This analysis of past Scheme SI supports an assumption in the range 0 1% p.a.



Relativities



- Current estimates of the class 3 risk premium relativity show a decreasing trend by accident year – this results from a decreasing trend in the average claim size component of the relativity
- If the decreasing trend in claim size continues, the risk premium relativity for this class could reduce in the future



Class 26: Ride booking and limousines



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