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December 23, 2016

Cheryl Blundon
Board Secretary
Board of Commissioners of Public Utilities
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Dear Ms. Blundon:

Facility Association Rate Revision Application – Taxis and Limousines

On behalf of Facility Association, and as authorized by its Board of Directors, I am pleased to submit for approval a Facility Association rate revision application for Taxis and Limousines in the Province of Newfoundland and Labrador. This revision is proposed to become effective 100 days after approval for New Business and Renewals, rounded to the 1st of the following month or October 1, 2017, whichever is later.

This application proposes changes for all applicable coverages for Taxis and Limousines, with **an overall 29.7% increase proposed.**

This filing also proposes changes to the current rules. They have been presented in such a way so that the current rules, the proposed rules, what is changing and the impact are set out side by side for easy review.

The Facility Association Board of Directors wishes to convey their continued belief that a cost of capital provision is appropriate and essential in Facility Association rates (and as is allowed in five of the six provinces and all three northern territories Facility Association serves). Given the position of the Board of Commissioners of Public Utilities (“PUB”) on the matter, however, we have developed the proposed rate changes without a cost of capital provision.

The chart below includes the indications with and without a cost of capital provision, and without a cost of capital provision using a net return on investment of 2.8%.

Taxi	Liab	AB	UA	CL	CM	SP	All coverage
Indications 12% ROE	+58.3%	+45.7%	+82.2%	+3.5%	+0.9%	+6.4%	+56.6%
Indications without CoC	+40.9%	+29.6%	+62.1%	-7.9%	-10.2%	-5.3%	+39.4%
Indications without CoC, 2.8% RoI	+30.7%	+22.8%	+53.7%	-9.3%	-11.8%	-7.0%	+29.7%
Proposed % change	+30.7%	+22.8%	+53.7%	-9.3%	-11.8%	-7.0%	+29.7%
Proposed avg \$ change	+1,599	+104	+95	-74	-40	-12	+1,762

FA maintains its belief that the FA actuarial assumptions provide the best forecasts of future costs and risks associated with the FA taxi experience for NL.

Based on the FA Actuarial assumptions in our May 2015 rate filing, the 0% Cost of Capital (CoC) indication was +86.7%, assuming that the rates would take effect Feb. 1, 2016 (as opposed to the final effective date of June 1, 2016). All else equal, the 28.9% increase that was allowed by the PUB would reduce this to 44.4% - this can be thought of as the FA view of the “residual” indication. By contrast, the PUB’s position would be that there was no residual indication assuming that the PUB’s assumptions were the more appropriate assumptions to support rates. If the indication models used for the final indications in our May 2015 filing were updated to assume an effective date of Oct. 1, 2016 (the effective date assumed under our January 2016 filing), the residual 0.0% CoC indication for FA increases from 44.4% to 48.1%, while the PUB assumptions residual indication increases from 0.0% to 0.9%.

However, the updated indications in that filing were not 48.1% and 0.9% respectively, but rather 60.3% and 27.7% - i.e. they increased by factors of **1.082** and **1.266** respectively. Clearly, the FA assumptions indications have moved much less than the PUB assumptions indications from where they would have expected to be, all else equal.

A similar phenomenon exists for the March 2016 filing. Updating the indications from that submission to reflect the approved rate changes and moving the effective date to October 1, 2017 would show a residual 0.0% CoC indication using FA assumptions of 31.0% compared with the fully updated indication with this submission of 39.4% (an increase by a factor of **1.064**), whereas the PUB assumptions would show a residual indication of 3.1% compared with the fully updated indication of 15.0% (an increase by a factor of **1.115**). Clearly again, the FA assumptions indications have moved much less than the PUB assumptions indications from where they would have expected to be, all else equal.

The loss experience continues to be poor in relation to rates charged. For example, for the 10 year period ending in 2015, the taxi claims frequency for at-fault third party losses was six times as high as that of private passenger vehicles in the province and more than seven and a half times as high as the claims frequency for commercial vehicles, whereas average earned premium for taxis was only three and a half times higher than private passenger vehicles and less than three

times higher than commercial. Even with the 50% rate increase effective August 1, 2013, the 19.3% rate increase granted effective September 1, 2015, the recent 28.9% rate increase granted effective June 1, 2016, and the recent 25.7% rate increase granted effective March 1, 2017, our projection of the indemnity loss ratio that will be generated for policies effective October 1, 2017 for a 12-month term is 93% (based on the most recent 5 years of experience, prior to our proposed rate increase), well above our 59% target. Specifically, without further rate change, our projection indicates that premium collected will be barely sufficient to cover the indemnity portion of claims, let alone cover expenses incurred throughout the policy period.

Put in this context, it would seem clear that taxi rates, rather than being in any way “excessive”, are clearly still deficient in comparison with rates for private passenger vehicles and commercial vehicles, even with the recent rate changes.

Keeping insurance rates artificially low results in a direct subsidy to the taxi industry; in particular, since the results of Facility Association are shared by jurisdiction and line of business, any shortfall in Newfoundland & Labrador taxi rates must be made up by all insurers providing non-private passenger automobile insurance in the province. Over the 10 accident year period 2006-2015 inclusive, we **estimate the 10-year subsidy to have been \$32.8 million¹**, or \$3.3 million per year (compared with average annual earned premium of \$1.7 million), **or approximately \$4,300 per taxi (compared with per taxi average earned premium of \$2,244 over that 10-year period)**. While we can understand why any industry would want its input costs subsidized, we would hope that most would understand that our industry has no appetite to provide that subsidy.

In 2013, Facility Association adopted the following mission statement:

“Facility Association’s mission is to administer automobile insurance residual market mechanisms, enhance market stability, and guarantee the availability of automobile insurance to those eligible to obtain it. We strive to keep the market share of the residual markets as small as possible, so consumers may benefit from the competitive marketplace to the greatest extent possible.”

Currently, almost all of the taxis in Newfoundland & Labrador are insured through Facility Association, contrary to our mission. However, this is not surprising given that taxis are receiving the coverage at premium levels that do not cover costs. If we can get our pricing to an adequate level, it could help to create “room” in the market for more companies to enter, thereby creating more choice for taxi owners.

¹ Based on \$32.4 million in ultimate indemnity losses over the 10-year period, the associated earned premium would have needed to be \$49.8 million to generate a “target” indemnity loss ratio of 65% (our current target ratio is 59.1% - we are using a higher ratio here to recognize that interest rates on government bonds were higher over the 10-year period than they are right now). The subsidy of \$32.8 million is the difference between the \$49.8 million target premium level and the actual earned premium of \$17.0 million over the 10-year period.

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If anything further is required with respect to this application, please contact me at (416) 644-4912 or email cgeorge@facilityassociation.com.

Yours truly,

A handwritten signature in blue ink, appearing to read "Colin George".

Colin George,
Vice President, Underwriting and Claims

cc. David J. Simpson, President & CEO, Facility Association
Amanda Dean, Vice President, Atlantic, Insurance Bureau of Canada

Updated Indication

With respect to the FA March 2016 rate filing, the PUB final decision and ultimate rate approval (dated November 8, 2016) was based on indications using alternate assumptions (that is, based on assumptions that were not consistent with FA’s actuarial group’s view of “best estimate” assumptions). The approved rate change was 25.7%. At this level, we would estimate the “residual” indication, relative to the FA actuarial assumptions, would be as presented in the table below.

NL TX Project 2016 Q1 Indications (basis for January 2016 filing)

Profit Provision	FA Actuarial	FA proposed	PUB assumps	residual indication
12% ROE	79.7%			43.0%
0% CoC	60.3%	27.7%	25.7%	27.5%
change:		-20.3%	-1.6%	

**change is with respect to 0% CoC indication*

The residual indications from the table above can be compared with the updated indication as per the current filing, as summarized below. The indication has deteriorated by a factor of 1.110 due in part to the change in assumed effective dates between indications (i.e. to account for net trend) – adjusting for this leaves the indication with a deterioration factor of 1.082. This deterioration is driven by the experience and the continuation of the annual process that gives weight to the experience that is worse than the complement of credibility.

NL TX Project 2016 Q4 Indications (basis for December 2016 filing)

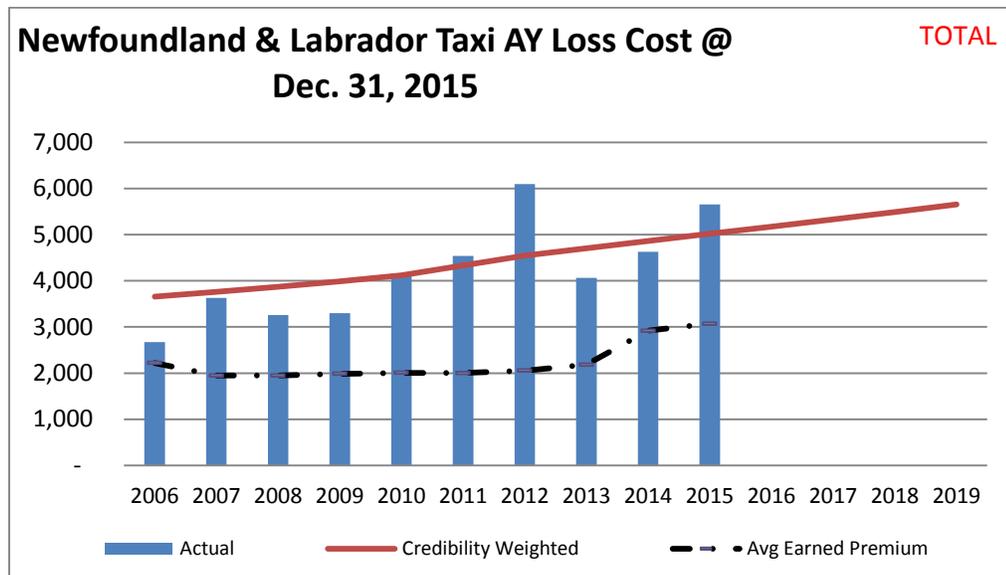
Profit Provision	FA Actuarial
12% ROE	56.6%
0% CoC	39.4%
change:	9.3%

**change is with respect to 0% CoC indication*

Recognizing that the March 2016 rate filing was approved at a lower-than-requested rate change in November 2016, FA is submitting a new application immediately for the following reasons:

- where our rates have not kept up with experience, our preference is to file for rate changes at least annually until the rates are back in line with the experience
 - FA filed a rate submission in January 2013, receiving approval to increase rates effective August 1, 2013
 - FA filed a rate submission in March 2014, receiving approval in May 2015 (i.e. in excess of 1 year) to increase rates effective September 1, 2015 (resulting in a delayed effective date more than 1 year beyond the anticipated effective date of August 1, 2014 anticipated in our filing)
 - FA filed a rate submission in May 2015, receiving approval in February 2016 to increase rates effective June 1, 2016 (compared with the February 1, 2016 effective date anticipated in our filing)

- FA filed a rate submission in March 2016, receiving approval in November 2016 to increase rates effective March 1, 2017 (compared with the October 1, 2016 effective date anticipated in our filing)
- our updated indication takes advantage of updated data and information, including:
 - 2015 AIX FA Residual Market (“FARM”) taxi data
 - 2016 Q2 FARM Newfoundland & Labrador (“NL”) non-private passenger vehicle valuation;
 - 2015-H2 (i.e. Dec. 31) Industry NL commercial vehicle (“CV”) trends as selected by FA
 - 2016 October Government of Canada bond yields (generating the 0.47% net return on investment or “RoI”, although FA’s proposal is based on indications using the PUB minimum 2.8% RoI benchmark)
- the experience continues to be poor:
 - the latest 10 accident years having generated an indemnity loss ratio (ultimate) of 190%
 - loss costs are projected to continue to grow and are on target to be approximately \$5,490 during the rating period under consideration compared with projected on-level average premium of \$5,930 (projected LR of 92.3%) – **average premium at the FA target LR level would be \$9,290** (\$8,270 on a 0.0% cost of capital basis)



- the current filing uses the most recent 5 accident years – this means that accident year 2010 is being replaced with accident year 2015 (on-level loss costs for 2015 are 14.0% higher than 2010)
- offsetting this in part, ultimates for accident years 2010 to 2014 have improved since our last submission:

- the March 2016 rate filing was based on the experience of accident years 2010 to 2014 inclusive, which at the time had an estimated ultimate indemnity level of \$19.9 million – with more up-to-date data and information, this total ultimate level has improved by \$0.8 million (4.2%), with this improvement being equivalent to 9% of the premium earned over that five-year period
- we believe it was made clear during the hearing process on November 6, 2014 in Mr. Doherty’s testimony that it should be expected that continued rate increases beyond what was asked for were likely to emerge:

“I don’t want to shock people, but if the experience is really reflective of the underlying costs and it continues at that level, and we will eventually get there if it continues like that, the actual indication would be about 126 percent increase.”

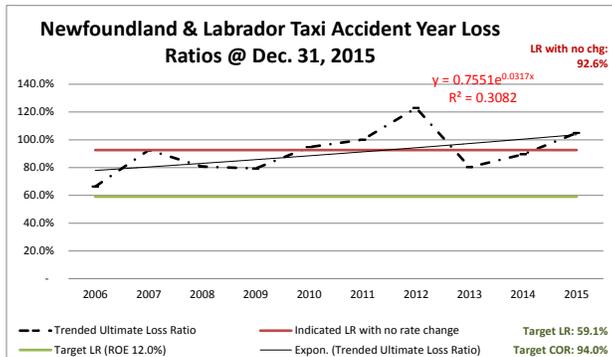
It was confirmed that the 126% rate increase based strictly on the 10 years of experience (i.e. giving full weight to the FA taxi experience) should be compared with the 50% increase that was sought by FA and can be compared with the 19.3% increase eventually granted. Mr. Doherty went on to explain:

“... but if the experience continues along that path we’ve seen for the last ten years, eventually that credibility weighting process is going to lead you to the experience, and you’re going eventually to get to rates that are commensurate with this. So does it happen next year, the year after, the year after, but some time in the next period you’re going to get there unless something dramatically changes in the underlying trends that we’re seeing in the taxi loss cost piece.”

We refer to this as the “credibility LR to experience LR gap” and this can be measured, for indication purposes, as the ratio of the experience LR to the credibility LR less unity.

- for the March 2014 filing, the gap was 152.5% / 116.8% -1 or 30.6%
- for the May 2015 filing, the gap was 164.9% / 127.3% or 29.5%
- for the March 2016 filing, the gap was 127.1% / 109.0% or 16.6%
- for this filing, the gap is 100.0% / 92.6% or 8.0%

Based on the updated experience, 10-year FA taxi experience being given full credibility indicates a rate increase of **38.2%** (consistent with a 0% Cost of Capital provision), but this increases to **50.0%** using 5-year FA taxi experience being given full credibility. The difference in these two “views” is important, as it does suggest a change in loss cost in the experience that has not been reflected in the on-leveling process. That is, if one were to fit an exponential trend line to the on-level loss ratios (as done in the chart to at the top of the next page), the expectation is that no trend would be present that is statistically significant. That is not the case with the 10-year on-level loss ratios – the fitted trend is 3.2% (+/-1.7%) (statistically significant at the 10% level – the p-value is 9.6%) and the regression has adjusted R² value of 22% (we show the R² value at 31% in the chart to the left). This suggests that there is an underlying “trend” in the FA taxi experience that is not being accounted for through the on-leveling process. This is also reflected in the variation of the on-level loss ratios for the first five years (average ratio of 82.7% with a



standard deviation of 11.5%) and the latest five years (average ratio of 99.5% with a standard deviation of 16.2%). As the averages are more than a standard deviation apart, it would seem to suggest a difference in the experience that is not currently reflected in the FA “on-leveling” process.

If the 50.0% experience indication does continue as being the go-forward best estimate (i.e. based on the latest 5 years only and assuming that the potentially “additional” trend of 3.2% does not continue) we anticipate that rate adequacy will not be reached for 10 years (i.e. 2026 rate filing) based on the current approval process.

Experience

The FA’s NL taxi experience continues to be poor, with the latest 10 accident years having generated an indemnity loss ratio (ultimate) of 190% (the associated ratio for the most recent 5 accident years is 204%). Even with the recent rate increases², our projection is that policies effective October 1, 2017 for a 12-month term would generate an indemnity loss ratio of 100%³ if we use the most recent 5 years of experience only (see below):

² Recent rate increases include +50.0% effective Aug. 1, 2013, +19.3% effective Sep. 1, 2015, +28.9% effective Jun. 1, 2016, and +25.7% effective Mar. 1, 2017.

³ The 123% loss ratio is based on a weighted average of the experience by coverage over the most recent five accident years. In our indication exhibit, we use projection loss ratios that are consistent with the above at a coverage level, but due to weighting based on the latest year only, the comparable weighted average loss ratio is 127%.

as at: 31-Dec-2015		FA Experience			Trended Ultimate Loss Ratio		Accident Year Weight	
Coverage	AY	Earned Exposure (excl trailers)	Earned Premium	Ultimate Loss Ratio				
		(1s)	(\$1s)					
		[1]	[2]	[7]		[17]	[18]	
		FA AIX	FA AIX	=[6]/[2]		=[16]/[11]	input	
TOTAL								
	2006	573	1,272,025	120.3%		66.3%		
	2007	663	1,290,663	186.6%		92.6%		
	2008	725	1,412,456	167.3%		80.7%		
	2009	764	1,516,679	166.2%		79.3%		
	2010	780	1,565,401	207.0%		94.7%		
	2011	793	1,587,985	226.8%		100.1%	20.0%	
	2012	816	1,676,159	296.9%		122.9%	20.0%	
	2013	852	1,857,181	186.5%		80.3%	20.0%	
	2014	820	2,394,633	158.6%		89.5%	20.0%	
	2015	795	2,441,126	184.2%		104.9%	20.0%	
	Total/Wtd Avg.	7,581	17,014,308	190.4%		99.5%	100.0%	

The table below presents the change in ultimate levels between the current filing and previous filing:

FA NL Taxi Experience Summary: Experience per March 2016 filing vs November 2016 filing

All Coverages Basis	Change in Recorded Indemnity				Change in Estimated Ultimate Indemnity				Emergence Metric	
	as at Dec 2014	as at Dec 2015	Change	% Change	as at Dec 2014	as at Dec 2015	Change	% Change	2014 IBNR	Rec'd as % 2014 IBNR
	(1s)	(\$1s)	(\$1s)		(1s)	(\$1s)	(\$1s)			
AY	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]
	2013 FA AIX	=[6]	=[10]-[9]	=[11]/[9]	2013 FA AIX	=[7]	=[14]-[13]	=[15]/[13]	=[13]-[9]	=[11]/[17]
2006	1,529,738	1,529,738	-	-	1,529,738	1,529,738	-	-	-	-
2007	2,220,901	2,217,261	(3,640)	(0.2%)	2,399,237	2,408,159	8,922	0.4%	178,336	(2.0%)
2008	2,388,733	2,388,733	-	-	2,490,435	2,362,568	(127,867)	(5.1%)	101,702	-
2009	2,520,358	2,520,358	-	-	2,502,322	2,520,358	18,036	0.7%	(18,036)	-
2010	3,218,663	3,216,086	(2,577)	(0.1%)	3,225,580	3,239,929	14,349	0.4%	6,917	(37.3%)
2011	3,491,417	3,594,184	102,767	2.9%	3,696,509	3,602,098	(94,411)	(2.6%)	205,092	50.1%
2012	4,277,629	4,773,281	495,652	11.6%	4,813,721	4,976,739	163,018	3.4%	536,092	92.5%
2013	3,342,471	3,333,181	(9,290)	(0.3%)	3,901,689	3,464,015	(437,674)	(11.2%)	559,218	(1.7%)
2014	2,574,722	3,274,881	700,159	27.2%	4,277,883	3,797,464	(480,419)	(11.2%)	1,703,161	41.1%
2015										
Total	25,564,632	26,847,703	1,283,071	5.0%	28,837,114	27,901,068	(936,046)	(3.2%)	3,272,482	39.2%
2010 to 2014	16,904,902	18,191,613	1,286,711	7.6%	19,915,382	19,080,245	(835,137)	(4.2%)	3,010,480	42.7%

In total, recorded activity on the 2010 to 2014 accident years (these being years given weight in the May 2015 filing) increased by \$1.3 million (column [11] in the table above), against 2014 IBNR of \$3.0 million for those accident years (i.e. 43% of beginning IBNR was consumed – see column [18] in the table above). Our updated estimates of ultimate (down by \$0.9 million or 9.2% of the earned premium for the 2010-2014 period) reflects the view that the recorded activity was less than expected through the valuation assumptions.

The table below summarizes claims data for the current filing.

FA NL Taxi Experience Summary: November 2016 filing

All Coverages Basis	Earned			Indemnity @ Dec 2015				
	Exposure (excl trailers)	Earned Premium	Avg Earned Premium	Paid	Case	Recorded	Ultimate	IBNR
	(1s)	(\$1s)	(\$1s)	(1s)	(\$1s)	(\$1s)	(\$1s)	
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
AY	2015 FA AIX	2015 FA AIX	=[2]/[1]	2015 FA AIX	2015 FA AIX	=[5]+[4]	=[6]+[5]	=[7]-[6]
2006	573	1,272,025	2,220	1,529,738	-	1,529,738	1,529,738	-
2007	663	1,290,663	1,947	2,109,761	107,500	2,217,261	2,408,159	190,898
2008	725	1,412,456	1,948	2,388,733	-	2,388,733	2,362,568	(26,165)
2009	764	1,516,679	1,985	2,520,358	-	2,520,358	2,520,358	-
2010	780	1,565,401	2,007	3,195,536	20,550	3,216,086	3,239,929	23,843
2011	793	1,587,985	2,003	2,980,255	613,929	3,594,184	3,602,098	7,914
2012	816	1,676,159	2,054	2,895,020	1,878,261	4,773,281	4,976,739	203,458
2013	852	1,857,181	2,180	2,030,305	1,302,876	3,333,181	3,464,015	130,834
2014	820	2,394,633	2,920	1,081,240	2,193,641	3,274,881	3,797,464	522,583
2015	795	2,441,126	3,071	582,549	2,610,929	3,193,478	4,496,330	1,302,852
Total	7,581	17,014,308	2,244	21,313,495	8,727,686	30,041,181	32,397,398	2,356,217
2010 to 2014	4,061	9,081,359	2,236	12,182,356	6,009,257	18,191,613	19,080,245	888,632

As per above, over the 10 accident years shown, FA has already paid out \$21.3 million in indemnity payments, while having earned only \$17.0 million in premium. In addition, there is an estimated \$11.1 million that will be paid out in the future on those same accident years.

It may be helpful to consider this poor experience in relation to other automobile insurance experience in the province, to put these results into context. Below, we focus on third party liability (TPL) only, as this reflects the experience resulting from damages arising where the driver is at fault.

The table below is the FA NL Taxi TPL experience over the latest 10 accident years, as at December 31, 2015, indemnity only, and “unfactored” (i.e. as recorded only – NOT at ultimate, and NO trends applied).

FA NL Taxi Experience Summary: November 2016 filing – as recorded at Dec. 31, 2015 (unfactored)

Source ID	FA AIX	11 (10yr)
Market	FA	
Jurisdiction (short for)	NL	
Major Coverage Typ	TPL	
Minor Coverage Typ (All)		

Source db: G:\actuarial_dept\pricing\rate_analyses\03 NL\00 Analysis
Source Table: TempTable01

Sum of Amount									
FA Minor Rating Class Code	Accident Year	Earned Exposure (excl trailers) - policy	Earned Premium	Closed Claim Count	Open Claim Count	Recorded Claim Count	Paid Indemnity	Case Indemnity	Recorded Indemnity
TX	2006	573	1,172,997	103		103	1,280,890		1,280,890
	2007	663	1,188,137	131		131	2,001,875	107,500	2,109,375
	2008	725	1,301,390	118		118	2,230,303		2,230,303
	2009	764	1,391,046	133		133	2,283,000		2,283,000
	2010	780	1,430,390	128		128	3,054,392	20,550	3,074,942
	2011	793	1,462,352	161	3	164	2,608,954	522,267	3,131,221
	2012	816	1,532,990	145	8	153	2,569,539	1,554,839	4,124,378
	2013	852	1,686,983	134	4	138	1,781,890	1,203,353	2,985,243
	2014	820	2,185,608	155	18	173	759,975	1,899,086	2,659,061
	2015	795	2,225,223	107	61	168	407,421	2,317,889	2,725,310
TX Total		7,582	15,577,117	1,315	94	1,409	18,978,239	7,625,484	26,603,723

The experience of Industry NL private passenger vehicle (PPV) and commercial vehicle (CV) is shown in the next table, on the same and comparable basis to the above.

Industry NL PPV & CV Experience Summary: March 2016 filing – as recorded at Dec. 31, 2014 (unfactored)

INDUSTRY TPL ONLY Source: Industry AIX LDF Triangle Data, 2014-H2

FA Minor Rating Class Code	Accident Year	Earned Exposure (excl trailers) - policy	Earned Premium	Closed Claim Count	Open Claim Count	Recorded Claim Count	Paid Indemnity	Case Indemnity	Recorded Indemnity
PPVxFrmr	2005	229,582	142,801,412	7,222	3	7,225	76,821,834	1,134,983	77,956,817
	2006	240,239	136,965,342	7,416	11	7,427	71,793,618	4,513,183	76,306,801
	2007	245,397	142,347,373	7,620	14	7,634	82,086,518	8,260,203	90,346,721
	2008	257,393	150,731,662	7,418	25	7,443	80,959,049	6,037,793	86,996,842
	2009	270,065	165,266,650	8,370	40	8,410	81,803,068	13,994,084	95,797,152
	2010	280,467	176,255,328	8,738	96	8,834	85,755,018	30,332,313	116,087,331
	2011	288,948	183,239,725	9,330	178	9,508	80,284,228	37,936,312	118,220,540
	2012	298,383	187,766,471	9,290	309	9,599	66,365,060	56,320,116	122,685,176
	2013	307,601	194,142,941	9,469	721	10,190	48,977,618	81,111,594	130,089,212
	2014	311,177	196,859,479	6,325	2,879	9,204	22,448,648	73,566,375	96,015,023
PPVxFrmr Total		2,729,251	1,676,376,384	81,198	4,276	85,474	697,294,659	313,206,956	1,010,501,615
CV	2005	19,642	16,080,745	480	-	480	5,423,107	446,973	5,870,080
	2006	19,919	15,741,907	497	2	499	5,586,611	555,835	6,142,446
	2007	20,286	15,582,087	530	2	532	6,677,583	967,117	7,644,700
	2008	20,043	15,004,780	472	5	477	6,327,360	899,183	7,226,543
	2009	20,794	15,692,660	503	5	508	6,134,353	840,566	6,974,919
	2010	21,702	16,818,686	498	6	504	6,111,751	1,498,161	7,609,912
	2011	22,859	17,764,092	583	19	602	5,903,335	2,807,932	8,711,267
	2012	24,256	18,253,910	543	27	570	4,520,079	3,006,045	7,526,124
	2013	26,081	18,603,016	616	62	678	3,608,844	6,974,758	10,583,602
	2014	28,581	19,277,351	456	195	651	2,393,580	6,027,478	8,421,058
CV Total		224,163	168,819,234	5,178	323	5,501	52,686,603	24,024,048	76,710,651

INDUSTRY Source: Industry AIX LDF Triangle Data, 2015-H2

FA Minor Rating Class Code	Accident Year	BI Only	TPL (BI tab)	TPL Only	TPL Only	TPL Only	TPL Only	TPL Only	TPL Only
		Earned Exposure (excl trailers) - policy	Earned Premium	Closed Claim Count	Open Claim Count	Recorded Claim Count	Paid Indemnity	Case Indemnity	Recorded Indemnity
PPVxFrmr	2006	240,239	142,801,412	7,419	8	7,427	72,630,069	3,682,612	76,312,681
	2007	245,397	136,965,342	7,626	7	7,633	84,865,808	3,842,737	88,708,545
	2008	257,393	142,347,373	7,424	12	7,436	83,143,781	3,652,217	86,795,998
	2009	270,064	150,731,662	8,389	16	8,405	87,722,466	7,739,173	95,461,639
	2010	280,466	165,266,650	8,766	51	8,817	97,065,927	16,376,846	113,442,773
	2011	288,946	176,255,328	9,401	81	9,482	93,531,119	26,141,855	119,672,974
	2012	298,384	183,239,725	9,430	146	9,576	89,412,811	39,588,408	129,001,219
	2013	307,591	187,766,471	9,887	266	10,153	79,943,741	56,144,049	136,087,790
	2014	313,740	194,142,941	9,164	604	9,768	48,973,884	74,130,253	123,104,137
	2015	320,014	196,859,479	6,148	2,850	8,998	23,077,455	76,048,382	99,125,837
PPVxFrmr Total		2,822,232	1,676,376,384	83,654	4,041	87,695	760,367,061	307,346,532	1,067,713,593
CV	2006	19,919	15,741,907	497	2	499	5,586,611	554,372	6,140,983
	2007	20,286	15,582,087	530	1	531	7,126,183	40,101	7,166,284
	2008	20,043	15,004,780	473	2	475	6,337,360	1,047,280	7,384,640
	2009	20,794	15,692,660	504	3	507	6,430,390	501,130	6,931,520
	2010	21,702	16,818,686	500	2	502	6,638,955	867,827	7,506,782
	2011	22,860	17,764,092	590	11	601	6,629,324	1,841,718	8,471,042
	2012	24,256	18,253,404	563	12	575	5,623,063	2,147,261	7,770,324
	2013	26,076	18,603,691	656	29	685	5,680,381	6,116,154	11,796,535
	2014	28,536	19,185,236	660	56	716	5,107,339	5,784,490	10,891,829
	2015	29,081	19,999,277	389	200	589	1,756,384	5,373,635	7,130,019
CV Total		233,553	168,819,234	5,362	318	5,680	56,915,990	24,273,968	81,189,958

The next table presents comparative statistics related to the preceding tables. This statistics table shows that over the ten year period, the FA taxi TPL recorded indemnity loss ratio was **171%**, compared with **64%** for Industry PPV and **48%** for Industry CV. Again, these ratios are not ultimate ratios, but rather recorded indemnity only. However, they are directly comparable

assuming that relative growth in earned exposures has been consistent among them, and trends and reporting patterns are largely the same.

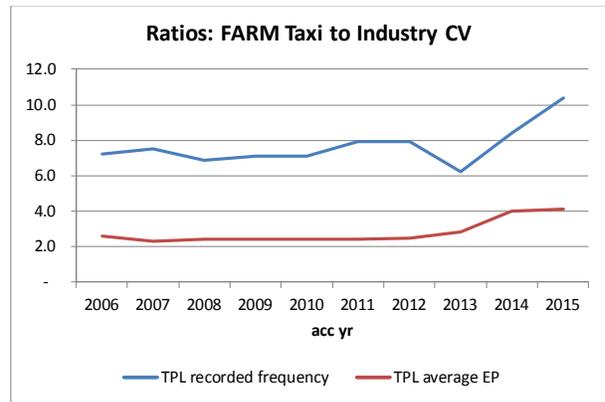
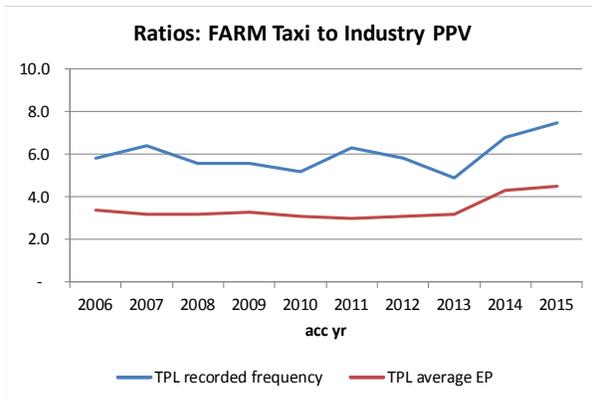
Sum of Amount		FA	TPL	Source: FA AIX AU11 (10yr)					average
FA Minor Rating Class Code	Accident Year	recorded LR	claim count per 1,000 earned exposures	paid & closed indemnity severity	case & open indemnity severity	recorded indemnity severity	recorded indemnity loss cost	earned premium	
TX	2006	109.2%	179.7	12,436	-	12,436	2,234.92	2,046.67	
	2007	177.5%	197.6	15,281	107,500	16,102	3,181.02	1,791.75	
	2008	171.4%	162.7	18,901	-	18,901	3,075.54	1,794.59	
	2009	164.1%	174.0	17,165	-	17,165	2,987.04	1,820.02	
	2010	215.0%	164.1	23,862	20,550	24,023	3,941.28	1,833.39	
	2011	214.1%	206.8	16,205	174,089	19,093	3,948.08	1,843.85	
	2012	269.0%	187.5	17,721	194,355	26,957	5,055.36	1,879.03	
	2013	177.0%	161.9	13,298	300,838	21,632	3,503.31	1,979.75	
	2014	121.7%	211.0	4,903	105,505	15,370	3,242.46	2,665.13	
	2015	122.5%	211.2	3,808	37,998	16,222	3,426.50	2,797.74	
TX Total		170.8%	185.8	14,432	81,122	18,881	3,508.61	2,054.38	

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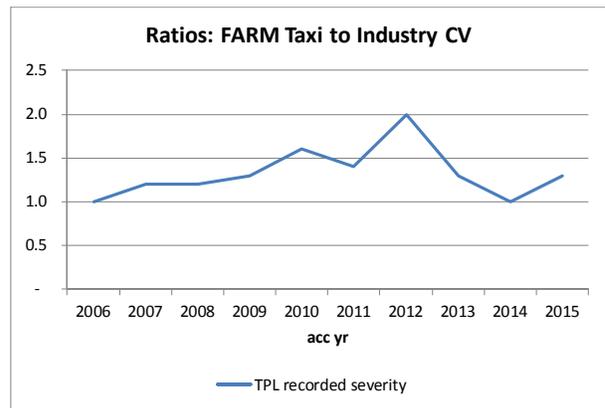
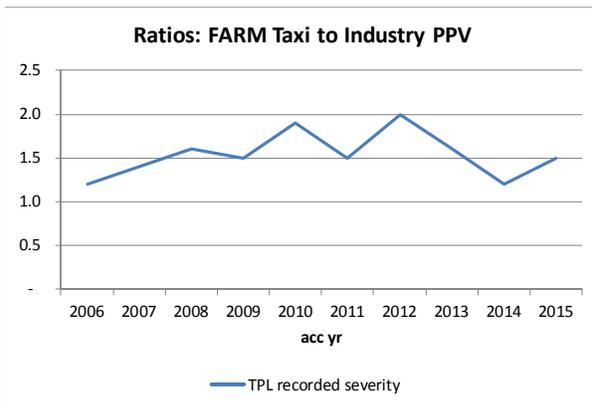
		INDUSTRY	TPL	Source: Industry AIX LDF Triangle Data, 2015-H2					average
FA Minor Rating Class Code	Accident Year	recorded LR	claim count per 1,000 earned exposures	paid & closed indemnity severity	case & open indemnity severity	recorded indemnity severity	recorded indemnity loss cost	earned premium	
PPVxFrmr	2006	53.4%	30.9	9,790	460,327	10,275	317.65	594.41	
	2007	64.8%	31.1	11,128	548,962	11,622	361.49	558.14	
	2008	61.0%	28.9	11,199	304,351	11,672	337.21	553.04	
	2009	63.3%	31.1	10,457	483,698	11,358	353.48	558.13	
	2010	68.6%	31.4	11,073	321,115	12,866	404.48	589.26	
	2011	67.9%	32.8	9,949	322,739	12,621	414.17	609.99	
	2012	70.4%	32.1	9,482	271,153	13,471	432.33	614.11	
	2013	72.5%	33.0	8,086	211,068	13,404	442.43	610.44	
	2014	63.4%	31.1	5,344	122,732	12,603	392.38	618.80	
	2015	50.4%	28.1	3,754	26,684	11,016	309.76	615.16	
PPVxFrmr Total		63.7%	31.1	9,089	76,057	12,175	378.32	593.99	
CV	2006	39.0%	25.1	11,241	277,186	12,307	308.29	790.28	
	2007	46.0%	26.2	13,446	40,101	13,496	353.26	768.12	
	2008	49.2%	23.7	13,398	523,640	15,547	368.44	748.63	
	2009	44.2%	24.4	12,759	167,043	13,672	333.35	754.68	
	2010	44.6%	23.1	13,278	433,914	14,954	345.90	774.98	
	2011	47.7%	26.3	11,236	167,429	14,095	370.57	777.09	
	2012	42.6%	23.7	9,988	178,938	13,514	320.35	752.53	
	2013	63.4%	26.3	8,659	210,902	17,221	452.39	713.44	
	2014	56.8%	25.1	7,738	103,294	15,212	381.69	672.33	
	2015	35.7%	20.3	4,515	26,868	12,105	245.18	687.70	
CV Total		48.1%	24.3	10,615	76,333	14,294	347.63	722.83	

Claims frequency in the statistics table measures the number of claims per 1,000 vehicles exposed over a 12-month period. Again, this is TPL, so this represents the frequency of claims where the driver was at fault. The TPL frequency for taxi over the 10 year period is shown at

186⁴ per thousand, compared with 31 for PPV and 24 for CV. This indicates that taxi drivers generate 6 times as many TPL claims as PPV, and 7¾ times as many claims as CV. This is shown in the charts below, along with the ratio of taxi average earned premium to PPV (left chart) and CV (right chart).

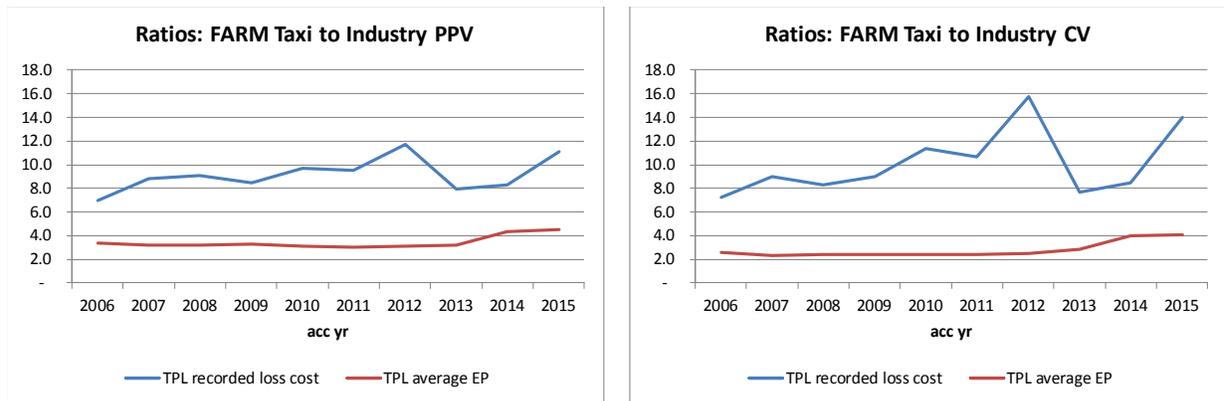


In addition to having a higher level of TPL claims frequency, the TPL claims severity (i.e. the average size of the claim, once a claim occurs) is also higher for taxi than PPV or CV over the period shown (see charts below, where the severity ratios are more than 1).



As a result of the higher TPL frequency and severity of claims, the combination of these two (being loss cost), is 9¼ times as large for taxi than PPV, and 10 times as large for CV (see table at the top of the next page). And yet, as shown in the table below, the average taxi premium over this period was only 3½ times that of PPV and 2¾ times that of CV. This, of course, is captured in the loss ratio gap that we started the discussion with.

⁴ Note: this is a claim count frequency measure, not an accident count measure. A single accident may cause several individual claims within TPL, as there are 2 sub-coverages included (bodily injury and property damage) and there may be more than one claimant per accident.



Furthermore, it is not one or two individual “bad” years that are causing these differences – the gaps are consistent and persistent.

Full Credibility Standard Count

The FA actuarial assumption is based on FA’s selected claim count for full credibility at the coverage level.

FA implemented changes to the “full credibility” standard counts across all jurisdictions in 2013 to make all consistent (basically differentiating between “long tailed” and “short tailed” coverages). The impact of the change gives more weight to FA experience, all else being equal. This change was based on actuarial judgement, with the explicit goal of giving more weight to the FA’s experience (whether good or bad). The PUB’s filing guidelines state that when such a change is implemented, it is to be discussed and supported. While the rationale for the change was discussed during the hearing and was also provided in our May 2015, the NL PUB rejected the change with respect to both filings. We understand that the NL PUB’s position is that FA has not provided sufficient evidence to support the move away from the previously accepted levels. We have included additional information in this filing in an attempt to address this.

Appendix – RoI Discussion

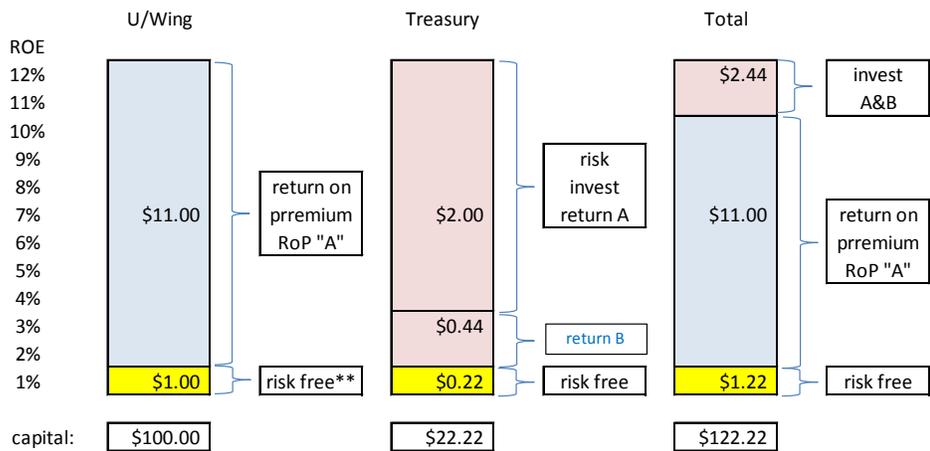
We believe the proper approach to the return on investment (RoI) assumption setting in ratemaking is based on:

- RoI should be forward-looking– i.e. reflect current yields versus historical returns;
- government bond as “risk-free” rates, where “risk-free” is more accurately described as “free-of-default-risk”

On this first issue, historical returns, however measured, are no guarantee of future returns. Further, historical returns are dependent upon how those returns are measured (i.e. both the “return” itself is subject to interpretation and accounting rules etc., and the “base” against which the return is measured is subject to accounting rules etc.) These “measure” differences do not change the economics of any cash flows of invested assets and it is the “economic reality” of the cash flows that is important in the context of the rate making process.

On the second issue, it is FA’s view that any investment return in excess of a “free-of-default-risk” return generated on funds supporting the insurance operations should ipso facto be to the benefit of the capital provider and not to insurance policyholders. The capital provided is a buffer to ensure that policyholders are more likely to be provided the protection (i.e. paid indemnification for insured events) where it turns out that the premium collected (and the investment returns on the associated cash flows) are insufficient to meet the full cash flow requirements. We call this the “performance obligation guarantee”.

The policyholder does not provide the capital, nor is the policyholder exposed to the downside risk of investment returns in securities other than “free-of-default-risk” return. As such, it is FA’s position that the policyholder should not benefit from returns on policyholder provided funds and/or capital in excess of “free-of-default-risk” return. We display this in the diagram at the top of the next page.



$\$22.22 = \$2 / (12\% - 3\%)$

*return on premium reflects both underwriting profit and investment returns on policyholder funds at a free-of-default-risk

**risk-free here refers to "free-of-default-risk"

risk investment return A is the additional 2% risk return on \$100 initial capital via over risk free (1%)

risk investment return B is the additional 2% risk return on \$22.22 "additional" capital via over risk free (1%)

\$22.22 "additional" capital set so that \$2 of additional risk return on \$100 initial capital generates a 9% return (9% being difference between target ROE of 12% and total investment return of 3% when risk return included)

In the diagram, capital is provided to underwriting to support issuance of policies, with the capital investment return provided to underwriting at the “free-of-default-risk” return rate (and it is assumed that policyholder funds will likewise be invested at “free-of-default-risk” returns). We have assumed here a target ROE (where “equity” is synonymous with “capital”) of 12%, and a “free-of-default-risk” investment return of 1%. In order to get the 12% ROE, the total return on capital provided by policyholder funds (from both underwriting income and investment income) would need to be 11% (and is referred to in the diagram as “return on premium RoP “A”), with the remaining 1% target return on capital being provided by investment return on that capital (for ease, we’ve also included the associated dollar amounts, assuming \$100 of capital required to support the underwriting operations).

As a separate function, “treasury”⁵, is responsible for actual investment activity on all invested funds and would be likewise charged with a target return of 12% ROE, where the “capital” is required to support any investment in other than “free-of-default-risk” securities.

As an example, in choosing to assume a higher level of investment risk, invested capital supporting the underwriting operation could be invested at 3%⁶ instead of 1%, but risking:

⁵ In the specific case of FA, “underwriting” is at FA, while “treasury” or “investment” is at the member company level where the capital is actually maintained and invested.

⁶ Provided as an example.

- liquidity (i.e. having to liquidate capital at an investment loss to meet unfunded cash obligations)
- reinvestment (i.e. as securities mature and need to be reinvested, they are reinvested at lower yields)
- default (or a “credit event” i.e. security issuers default in whole or in part on coupons and/or principal when they come due)
- other market/credit risks.

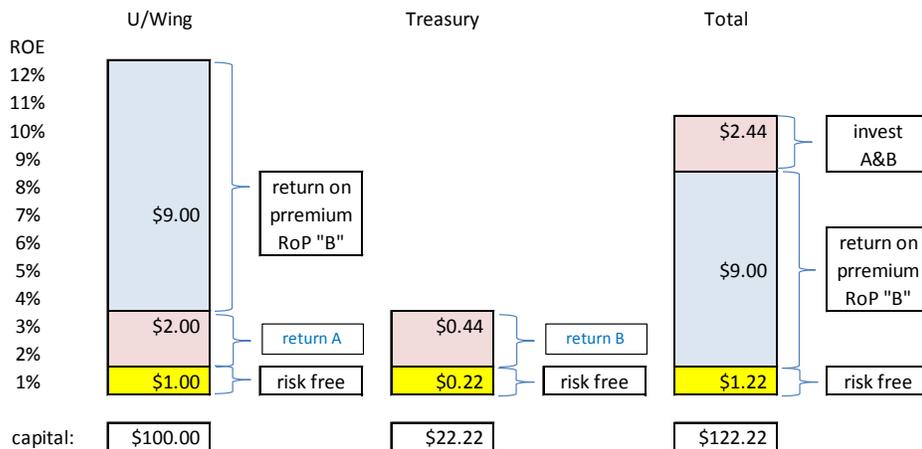
Assuming policyholder funds are invested “free-of-default-risk”⁷, but capital is invested in risk-assets that generate a 3% total return, the 3% return on the initial \$100 of capital would generate an additional \$2 of return over the \$1 return generated at “free-of-default-risk”. Treasury would consider then the amount of “additional” capital that would be required to support this additional return. Assuming the additional capital would also be invested at 3%, so long as the additional capital required is no more than $\$2 / (12\% - 3\%)$ or \$22.22, it would make sense for treasury to make the investment (they would get \$2 of additional return on the initial \$100, plus $3\% \times \$22.22$ or \$0.66 for a total return of \$2.66 on \$22.22 of capital, for a return of 12%).

On the other hand, if the capital required to support the investment at 3% is more than \$22.22, the company would be better off giving access to that \$22.22 capital to underwriting to write more insurance (generating at 12% ROE).

Note that under this scenario, underwriting has no vested interest in the investment activities, specifically whether or not investment risk activities are taken (so long as it is properly capitalized to reflect the inherent riskiness of the activity relative to the firms overall risk appetite, tolerance, and limits).

If, instead, the \$2 of additional risk-return on invested capital were to accrue to the benefit of the policyholder (in the form of lower premium), the diagram above would instead look like the one shown below:

⁷ We make this assumption to simplify the discussion – otherwise, we have to introduce how much of the original return on premium is generated from underwriting profit and how much from investment income on policyholder funds, and for the latter, we need to make an assumption regarding the average duration of the policyholder funds. This is all doable, but risks losing the message in the detail.



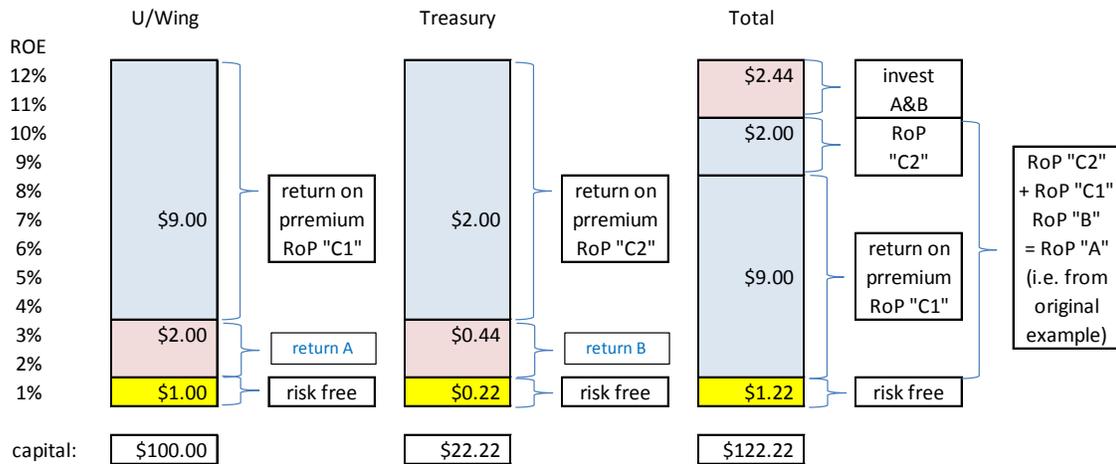
Under this scenario, treasury is unable to capture the investment risk return on the initial capital of \$100 (while it is captured as part of “underwriting’s return”, it is in fact given to the policyholder in the form of lower premium⁸). Note that here, the underwriters would have a vested interest in treasury’s investment activity, as more “risky” activity will allow underwriting to reduce premium’s charged – but all of the additional risk is borne by treasury (here, it would be underwriting putting pressure on treasury to increase yield that would potentially be problematic for an insurer – note that this is not an issue for FA as FA’s mission is to be as small as possible).

Also note, importantly, that under this scenario, the company in total does not meet its overall 12% ROE target (it gets to 10%). Again, this is because part of its overall return was “given” to the policyholder.

Under this scenario (and assuming management can keep underwriting from pressuring treasury), the optimum strategy is NOT to invest the capital supporting underwriting at 3%, but instead give the additional \$22.22 of capital to underwriting to write more business at the 12% ROE, ensuring that the total \$122.22 would generate the target 12% ROE (again, this doesn’t directly apply to FA as FA’s mission is to be as small as possible).

Alternatively (and again, this wouldn’t apply to FA), management could have treasury seek the additional “rent” from the policyholder as indicated below:

⁸ For ease of discussion, we ignore here that all else equal, offering lower premium to the policyholder for the same underwriting risk would require more capital to be provided to support underwriting. Capital to support underwriting is the amount required to guarantee performance of the insurance obligation to a set level of probability. In our initial case, the funding available to support the guarantee consisted of the initial \$100 of capital plus the \$12 expected return on that capital (i.e. \$112 in total). These funds would be associated with a specific probability of fulfilling the performance guarantee. If less premium is charged, the “return” will be less than \$12 so that the total funding available would be less than \$112. To maintain the performance guarantee probability, additional capital would be required to make up the funding shortfall to get it back to the \$112 target level.



The above is a simple “re-package” of the original scenario, although it is, in our view, more convoluted and makes it more difficult to see clearly “who owns what”. In addition, this approach could not apply to FA, as treasury (i.e. members) would not be able to extract the “rent” from the FA policyholders.

The same argument applies if one were to expand the investment in non-free-of-default-risk investments to policyholder funds. This would require additional capital by treasury to support as discussed above where only capital was invested in non-free-of-default-risk investments.

In addition to the above discussion as relates to the use of a “free-of-default-risk” return as being appropriate, it is also important to emphasize that rate making is a forward looking (i.e. prospective) exercise. As such, investment yields achieved historically do not imply the levels that will be achieved going forward (notwithstanding the fact that the historic yields earned by the industry were not strictly based on “free-of-default-risk” securities). We believe the best estimate of prospective yields are “current yields” available.

Again, for FA’s taxi indication, while the FA actuarial group selected a net return on investment / discount rate based on current risk-free yields as discussed above, management has based the proposed rate change on an indication based on an assumption of a 2.8% net return on investment, being the lowest level within the PUB published Benchmark range.