

Memorandum

From: Div 66 Actuarial
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To: E. Allen, S. Leeret, B. Harris, S. Cook, R. O'Neil, C. Bourg

CC: J. Johnson, K. Hanna, J. Heaney, C. Steinbach, B. McCoy, J. Stracher, T. Peterson, J. Baier

Date: 9/28/2015

Re: Division 66 - 2015 NSASIS Food Delivery Profitability Study

I. Executive Summary

A. Introduction -

The NSASIS Food Delivery program provides Hired Non-Owned Auto coverage for food delivery only courier services. It is written on a non-admitted excess form that attaches above SIR's ranging from 2,500-5,000, on average. The program has grown significantly over the prior years' due partially from increased access to some of the larger chains in the industry such as Papa John's and at least one other large chain that no longer mandated their franchisee(s) purchase insurance through the corporate program.

Last year's analysis resulted in an overall PY 2015 Ultimate Loss Ratio indication of 57.8% which yielded a RAP neutral rate need of -13.1% based on 2014 RAP values.

The year to date rate change for 2015 is 0.0% in total, varying by LOB.

For purposes of this analysis we have used a 2015 forecasted rate change of 0.5% in total, varying by LOB.

B. Summary of Results

IL and LAE evaluated as of: 2nd Quarter 2015

Currency Employed: USD

Exhibit 1:

Line of Business	Sub-Segment	Policy Year	2015		Projected Ultimate IL and LAE Ratio*	Projected Combined Ratio*	RAP	
			Forecasted GWP (000)	Forecasted Ultimate Ratio*			Target Combined Ratio	Breakeven RAP Rate Need
AL	N/A	2015	30,453	60.0%	91.2%	98.7%	-11.0%	1,513

* Includes PY 2015 rate change achieved

** Assumes a tax rate of 35%

- I. Discussion of Material Findings- This program started writing business in the 4th qtr. of 2013. It was originally evaluated using the prior 7 years of experience from the prior carrier(s), which produced an Initial Expected Loss Ratio (IELR) of 62% before any rate change. The program has incurred 8 claims greater than \$100K since AIG's inception which is line with prior expectations relative to premium growth. The largest claim is a \$2M occurrence in PY14 which we are treating as an early emergence of an expected claim of this magnitude. Frequency appears to be trending down as compared to our prior analyses.

II. Assumptions/Limitations/Data Quality/Other

- A. Assumptions - For purposes of this analysis, the loss ratio indications are based on a 5.0% trend assumption. LDF selections were based on the historical experience, to the extent credible, and on the overall Division 66 factors. For the rate changes used in this analysis, we calculate a forecasted rate change YTD 2014 and 2015 rate changes and the original targeted rate changes. These three rate change estimates are weighted together to arrive at a forecasted annual rate change.
- B. Limitations/Weakness - The projected PY 2015 loss ratio shown in Exhibit 1 of this report assumes that the YTD rate change achieved in 2015 will be consistent throughout the remainder of the year. To the extent that the annual rate change does not equal the YTD rate change, then the results of this report will vary. Besides that, there are no significant limitations/weaknesses with regards to this study outside of standard actuarial caveats that normally apply to projecting future losses. These include, but are not limited to, actual emerged actuarial parameters (LDF's, ILFs, ELR's, trend, etc.) not being in line with selected parameters; miss-coding/inaccurate representation of the data relied upon in this analysis; and future regulatory/judicial changes affecting the frequency/severity of the results.

Data Quality - The data for all lines of business in this analysis is pulled from Sandbox which aggregates the data from CRS. There have been no material adjustments made to the data.

- C. Other - The data for all lines of business in this analysis is pulled from Sandbox which aggregates the data from CRS. No material adjustments were made to the data.

III. Methodology

A review of several claim diagnostics shows no clear evidence of case reserve strengthening for this book of business (no consistent increase in average outstanding or decrease in paid to incurred ratios). In addition, a review of implied claim disposal rate does not show any clear evidence of claims closure rate changes.

Several methodologies have been used to project loss & legal expenses to ultimate. This includes the following: paid and incurred loss development and Bornhuetter-Ferguson methods (on a paid and incurred basis) all for losses uncapped and at varying capped levels. Frequency and severity is employed along with ultimate ILAE ratio selections to select a final PY 2015 ultimate loss ratio. The selected frequency and severities are somewhat consistent in comparison to the prior profit study.

The commissions and underwriting expenses are program specific. The RAP neutral ratio is calculated based program specific RAP profit loads. Rate need is based on a ratio of the ultimate ILAE ratio and the target ILAE ratio.

IV. Actuarial Next Steps - We will continue to monitor these results through quarterly actual versus expected analyses.

V. Underwriting Action Plans - Below is the response provided by C. Bourg.

Appendix - Methodology:

Please note that the analysis has three sections:

Section II - Auto Liability

Exhibit 1 - Summarizes PY 2015 ultimate ILAE ratios and PY 2015 rate need.

Exhibit 2 - PY reported incurred and paid loss and LAE ratios in triangle format.

Exhibit 3 - Indexing PY 2005 - 2015 ultimate ILAE (incurred + LAE) ratios to PY 2015 and selection of PY 2015 ultimate ILAE ratios.

Exhibit 4 - Frequency/Severity method used to calculate an indicated PY 2015 ultimate ILAE ratio

Exhibit 5 - Summarizes various methods (Exhibit 6a - Exhibit 8f) used to calculate ultimate + LAE & ratios for PY's 2005 - 2015.

- a) Policy Limits
- b) Capped at \$250,000
- c) Capped at \$100,000

Exhibit 6 - Bornhuetter-Ferguson methods

- a) Methodology
- b) A Priori Loss Ratios

Exhibit 7 - ILF selections

Exhibit 8 - Loss development methods. In general, the selected age to age loss development factors are determined by giving weight to the overall Division 66 loss development factors as well as historical results of the program.

- a) Uncapped Incurred
- b) Incurred Capped at \$250,000
- c) Incurred Capped at \$100,000
- d) Uncapped Paid
- e) Paid Capped at \$250,000
- f) Paid Capped at \$100,000

Exhibit 9 - Gross Written Premium developed to an ultimate PY basis. In general, the selected age to age premium development factors are determined by giving weight to the overall Division 66 premium development factors as well as the historical results of the program.

Exhibit 10 - Total claim counts (excluding closed w/no-pay) developed to ultimate. In general, the selected age to age loss development factors are determined by giving weight to the overall Division 66 claim development factors as well as the historical results of the program.

Exhibit 11 - Open claim count, closed with payment claim count, closed without payment claim count and total claim count development.

Exhibits 12 - Key diagnostic triangles.

- a) Case Reserves per Open Claim
Paid & Legal per Closed With Payment
Paid per Closed With Payment
- b) Paid & Legal to Incurred & Legal
Paid to Incurred
Closed W/Pay to Total Claim Count (Ex CWNP)
- c) Legal to Indemnity
- d) Total Claim Count to Total Policy Count
Average Account Size - Total - GWP to Total Policy Count
Average Account Size - New- GWP to New Policy Count
Average Account Size - Renewal - GWP to Renewal Policy Count

Exhibit 13 - Large loss listing (Incurred + LAE > \$100,000).

Please let me know if you have any questions or comments regarding this study.

Program Summary by LOB - PY 2015

(1) LOB	(2) PY 2015 Forecasted GWP		Direct	(3) Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	RAP Neutral		(6) PY 2015 Rate Achieved	(7) After 2015 Rate Change PY 2015 Ultimate ILAE Ratio
					(4) Target Ratio	(5) Before 2015 Rate Change PY 2015 Rate Need		
AL	30,453		1.0%	60.3%	67.5%	-10.6%	0.5%	60.0%

- (1) = Input
- (2) = Exhibit 2
- (3) = (7) * [1 + (6)]
- (4) = Exhibit 1
- (5) = [(3) + (Direct Expense)] / [(4) + (Direct Expense)] - 1
- (6) = Exhibit 1
- (7) = Exhibit 1

Program Summary by LOB - PY 2016

(1)	(2)		(3)	RAP Neutral	
LOB	PY 2015 Forecasted GWP	Direct	After 2015 Rate Change PY 2016 Ultimate ILAE Ratio	(4)	(5)
				Target Ratio	After 2015 Rate Change PY 2016 Rate Need
AL	30,453	1.0%	62.4%	67.5%	-7.5%

- (1) = Input
- (2) = Exhibit 2
- (3) = Exhibit 1
- (4) = Exhibit 1
- (5) = [(3) + (Direct Expense)] / [(4) + (Direct Expense)] - 1

Program Summary by LOB

AL

PY	GWP	Reported	Reported	Selected	Ultimate
		ILAE	ILAE Ratio	Ultimate	ILAE Ratio
2005	0	0	-	0	-
2006	0	0	-	0	-
2007	0	0	-	0	-
2008	0	0	-	0	-
2009	0	0	-	0	-
2010	0	0	-	0	-
2011	0	0	-	0	-
2012	0	0	-	0	-
2013	3,467	769	22.2%	1,740	50.2%
2014	25,212	4,574	18.1%	15,700	62.3%
2015	30,453	95	0.3%	17,967	59.0%

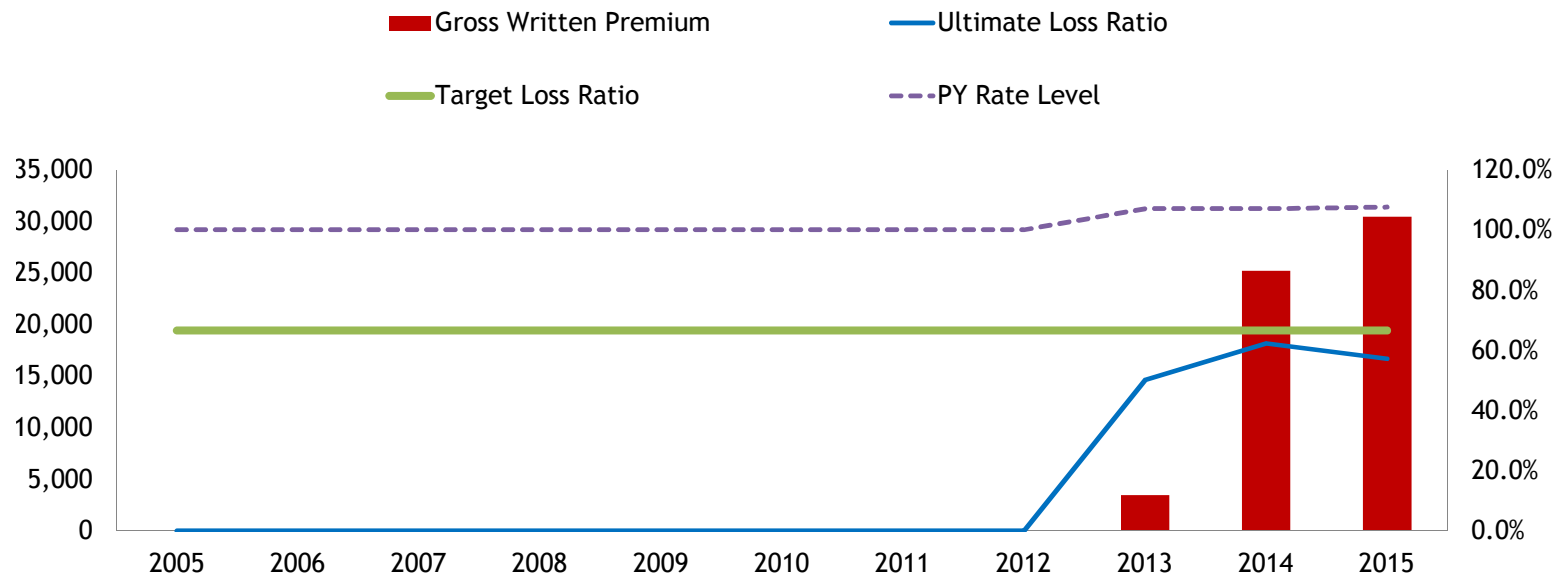
Program Summary by LOB - Prior Profitability Study

AL

PY	2014		2015
	GWP	Ultimate ILAE Ratio	Ultimate ILAE Ratio
2005	0	-	-
2006	0	-	-
2007	0	-	-
2008	0	-	-
2009	0	-	-
2010	0	-	-
2011	0	-	-
2012	0	-	-
2013	3,467	47.6%	50.2%
2014	25,212	54.0%	62.3%
2015	30,453		59.0%

Total Program Summary

PY	GWP	-----Loss Ratio-----			-----Combined Ratio-----		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2005	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2006	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2007	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2008	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2009	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2010	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2011	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2012	0	0.0%	0.0%	66.5%	82.4%	98.7%	0	0.0%	1.00	-
2013	3,467	22.2%	50.2%	66.5%	82.4%	98.7%	374	7.0%	1.07	27.0%
2014	25,212	18.1%	62.3%	66.5%	94.5%	98.7%	709	0.0%	1.07	27.0%
2015	30,453	0.3%	57.1%	66.5%	89.3%	98.7%	1,886	0.5%	1.08	27.0%
Total	59,132	9.2%	58.9%				2,969			



* Target Ratio = 1 - (Expense Ratio) - (AAL) - (XOL) - (Corporate Cat Reinsurance) - (ULE) - (Claim Fees) - (Risk Load)

* Ultimate Loss Ratios exclude modeled cats, ULE, non-machine claims fees and the impact of XOL/corporate cat reinsurance

AL

Rate Need Indications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Target	Target	Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	Before 2015 Rate Change PY 2015 Rate Need	PY 2015 Rate Achieved	After 2015 Rate Change PY 2015 Ultimate ILAE Ratio	PY 2016 Ultimate ILAE Ratio	PY 2016 Rate Need
RAP Neutral:	98.7%	67.5%	60.3%	-10.6%	0.5%	60.0%	62.4%	-7.5%

Expense Ratio calculated as follows:

Commission:	27.0%
Prem Tax:	0.3%
Other Acquisition Fees:	0.3%
Direct Expense:	1.0%
Indirect Expense:	2.6%
	<u>31.2%</u>

(1) = [1 - (Calculated RAP)]

(2) = [(1) - (Total Expense)]

(3) = (6) x [1 + (5)]

(4) = [(3) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

(5) = Input

(6) = Exhibit 3

(7) = (6) x [1 + (Trend)]

(8) = [(7) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

AL

Large Losses - Incurred + LAE > 100k

PY	DSP	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	LAE	ILAE	Acc State	Description
2013	1-0-45	1063552	8525	6/9/2014	PJ Operations Llc	-	200	-	200	Kentucky	Auto - Collision with a Pedestrian- I
2013	1-0-45	1063581	5626	8/10/2014	JNH Food LLC; Cnh	-	150	30	180	Texas	Auto - Collision with a Pedestrian-D
2014	1-0-45	1063761	1435	6/29/2014	Oney Bayside LLC	2,000	-	8	2,008	Florida	Auto - Collision with a Pedestrian: I
2014	1-0-45	1063827	1407	3/23/2014	Pascual & Blanton	-	201	18	219	Florida	IV Struck CV WHO WAS ON A Motorc
2014	1-0-45	5424023	5270	10/4/2014	Our Dream Pizza In	10	140	19	169	South Carolina	Auto - Other : insured's driver was i
2014	1-0-45	1064402	2149	7/19/2014	Wisconsin Hospital	-	127	8	135	Wisconsin	Auto - Other: IV Driver Waited AT T
2014	1-0-45	1064267	2485	1/15/2015	PPS Holdings	-	120	1	121	Utah	Insured Vehicle Collided with Cyclis
2014	1-0-45	1064225	1910	8/26/2014	Into Dough I LLC a	23	80	4	107	Florida	Auto - Other IV Rear Ended CV