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October 12, 1993

Mr. James A. Loffree
Chief Actuarial Officer
Ohio Bureau of Workers' Compensation
30 West Spring Street
Columbus, Ohio 43266-0581

RE: **Group Rating Experience**

Dear Jim:

We have been requested to provide an actuarial evaluation of the available experience for employers rated under group experience rating. This letter and the attached exhibit provide our analysis.

BACKGROUND

Group experience rating allows employers that are substantially similar to group together to potentially achieve lower premium rates than they could otherwise achieve as individual employers.

The criteria for group experience rating include:

- membership in an organization which has been in existence for at least two years prior to the group application deadline.

- The organization must have been formed for a purpose other than group experience rating.

- The group must be "homogeneous" -- i.e., the employers' main operating manuals are assigned to the same or similar industry group.

- The group must consist of at least 100 members or the aggregate

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workers' compensation premiums of the members must be expected to exceed $150,000 during the rating year.

- The formation and the operation of the group program must substantially improve accident prevention and claims handling for the employers in the group.

The group rating plan is an annual plan for the rating of a policy year, and groups must reapply each year for group rating. The procedure for group experience rating essentially adds together the experience of the individual members of the group, using the same experience period as would have been used for the individual employers. The basic difference in group vs. individual employer experience rating is that credibility is assigned based on the combined expected losses of all of the members of the group. In most cases the result is a much higher credibility factor and a larger average credit (TM%) than would be produced using the lower credibility factors assigned to the individual employers' experience (if the members of the group had been individually rated).

Group experience rating was first used for the policy year effective 7-1-91. There were 94 groups and 5,424 employers rated under group experience rating for this policy period; the average TM% was -59%. For the policy year effective 7-1-92, there were 264 groups and 19,854 employers covered under group rating; the average TM% was -56%. For the policy year effective 7-1-93, there were 357 groups, 32,560 employers, and the average TM% was -57%.

BWC provided premium and loss information for group-rated employers as of March 31, 1993 for the policy year effective 7-1-91 and for the first half of the policy year effective 7-1-92. Also provided were the total premiums and losses for the same periods for those employers who were not group-rated. The applicable TM% for each group was available for each policy year, as was the number of employers included in each group.

CONCLUSIONS

The available data indicate that the credits being given under group experience rating should be reduced significantly and premiums for group-rated employers should be increased, while base rates and premiums for non-group rated employers should be reduced in order to restore equity in the experience rating process.

The statistics are summarized below:

GROUP RATING LOSS EXPERIENCE

	7/1/91	7/1/92
Group Premium ($000's)	44,996	85,127
Non Group Premium ($000's)	1,376,374	692,199
Projected Loss Ratio Relativities		
Group	1.47	1.41
Non Group	0.98	0.95
Total	1.00	1.00
Req'd Adj to Group Prem to Restore Equity	47.0%	41.0%
Req'd Adj to Non Group Premiums	-1.5%	-5.1%
Indicated Group Modification Factor	65.0%	61.0%

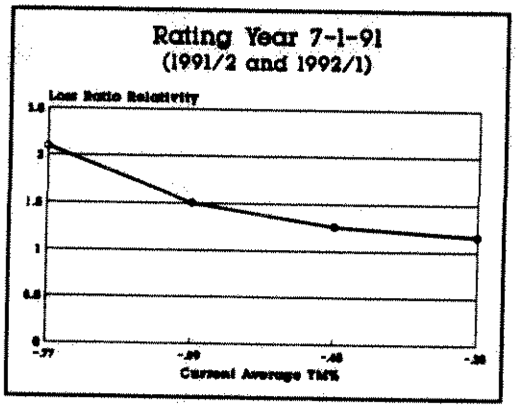
* 7-1-92 is using data from July 1, 1992 through December 31, 1992.

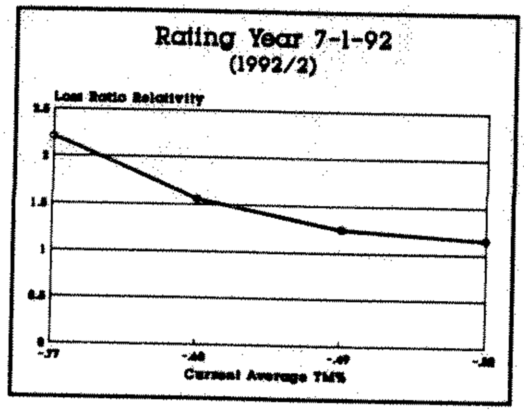
METHODOLOGY

The objective of our study was to analyze the equity of the current experience rating method being used for group rating. The goal of our analysis was to provide indicated modified premiums such that group and non-group employers would be expected to have the same loss ratios, and that no over-all change in premiums would be produced.

To calculate indicated changes in premiums, loss ratios (losses divided by premiums) were calculated for each group, and these loss ratios were divided by the total group plus non-group loss ratio. These calculations produced "relative loss ratios" for each rating group as well as overall relative loss ratios for the total group-rated and non-group-rated employers. These "relative" loss ratios provide the indicated "relative" changes in premiums which are required to produce equitable premiums and therefore equal loss ratios between group and non-group employers. For example, on Exhibit 1, the relative loss ratio for the group employers for the rating year effective 7-1-92 is 1.41 -- indicating that premiums should increase by 41% to bring the group loss ratio to the average loss ratio. On the other hand, non-group premiums should be reduced by 5%.

We reviewed the relative loss ratio statistics by industry, class, experience rating group, size of TM%, and premium size. Our study indicates that there is a very significant correlation between the size of the credits being given under group rating and the indicated relative loss ratios. The graphs below illustrate these relationships. Groups receiving the largest credits tended to have the highest relative loss ratios, and the total loss ratio for all group-rated employers was 47% higher than the average loss ratio for the policy year effective 7-1-91 and 41% higher for the policy year effective 7-1-92.





Loss Ratios and Average TM% are from Exhibit 1, columns (5) and (6), respectively.

Based on our analysis, a simple method to restore equity is to apply a "group rating modification factor" to reduce the credits produced by the current experience rating method. For the rating year effective 7-1-91, the TM%'s should have been multiplied by a factor of .65, and for 7-1-92 the indicated group modification factor is .61. The required modifications could be produced by simply multiplying the current TM% by the indicated group modification factor. Although we analyzed other methods, such as a new credibility table with different modifications by premium size, the proposed method of multiplying the TM% by the same modification factor for all premium sizes is the simplest approach and produces revised relative loss ratios which are remarkably consistent across the TM% ranges.

We researched whether additional improvement could be accomplished by using a higher credibility standard (i.e. reducing the credits less for the larger premium size groups). The available data do not indicate this would be a significant improvement from the recommended approach. We suggest this approach be studied again with additional data for possible implementation for the rating year effective 7-1-95.

Regarding the required modification factor for the rating year effective 7-1-94, we suggest using the indicated modification factor from the latest available policy year -- in this case .61 -- which is the indicated factor from the policy year effective 7-1-92. The actual required modification for the rating year effective 7-1-94 will be influenced by a number of factors which are unknown at this time. There will be some changes in the TM%'s for the groups that renew, based partially on loss experience for the time the members were group-rated. We would expect the TM%'s to be gradually reduced as the actual group experience is used in the calculations of the TM%'s. On the other hand, there will be additional groups and additional members included in the renewing groups, which will have unknown effects. Finally, we note that the groups which commenced coverage effective 7-1-91 had significant growths in the numbers of members included for the policy year effective 7-1-92, and these renewing groups had higher loss ratios for the policy year effective 7-1-92 than the groups which were newly included in group rating effective 7-1-92.

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Non-group employers have been subsidizing group-rated employers. Non-group premiums and base rates should have been lower by 1.5% for the rating year 7-1-91 and 5.1% lower for the rating year effective 7-1-92. It is important to understand that our analysis does not indicate that group rating should be discontinued. Rather, the analysis provides the indicated premium changes that are required to provide equity in premiums between employers who are group-rated and those who are not group-rated.

If you have any questions or comments on our study, please let us know. We will be available to discuss our analysis at your request.

Cordially,

James G. Inkrott

James G. Inkrott, FCAS, MAAA, CPCU, CLU
Principal

JGI/stc

Ohio Bureau of Workers' Compensation
Group Rating Current vs. Indicated TM %

Rating Year 7-1-92 (July 1, 1992 -- December 31, 1992)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TM % Range	Number Of Risks	Losses	Premium	Loss Ratio Relativity	Current Average TM %	Indicated Average TM % Factor = 0.61	Revised Loss Ratio Relativity
(-65) - (-95)	9,171	19,684,752	12,609,112	2.21	-77 %	-47 %	1.01
(-55) - (-64)	3,715	17,602,979	16,035,957	1.56	-60 %	-37 %	1.03
(-44) - (-54)	3,420	23,971,668	27,287,359	1.25	-49 %	-30 %	0.95
(-43) +	3,548	23,630,673	29,194,872	1.15	-32 %	-20 %	1.02
Totals:							
Group	19,854	84,890,072	85,127,300	1.41	-56 %	-34 %	1.00
Non-Group		463,393,888	692,199,115	0.95			1.00
Grand Total		548,283,960	777,326,415	1.00			1.00
Indicated Base Rate Change							-5.1 %

Rating Year 7-1-91 (July 1, 1991 -- June 30, 1992)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TM % Range	Number Of Risks	Losses	Premium	Loss Ratio Relativity	Current Average TM %	Indicated Average TM % Factor = 0.65	Revised Loss Ratio Relativity
(-65) - (-95)	2,852	15,835,126	10,289,504	2.09	-77 %	-50 %	0.98
(-55) - (-64)	1,102	11,048,607	10,002,138	1.50	-59 %	-39 %	1.01
(-44) - (-54)	780	9,375,372	10,139,106	1.26	-48 %	-31 %	0.96
(-43) +	690	12,482,193	14,566,174	1.16	-28 %	-18 %	1.04
Totals:							
Group	5,424	48,741,298	44,996,922	1.47	-59 %	-38 %	1.00
Non-Group		997,810,472	1,376,374,127	0.98			1.00
Grand Total		1,046,551,770	1,421,371,049	1.00			1.00
Indicated Base Rate Change							-1.5 %

Notes: Group and Non-Group losses have been adjusted for surplus payments