

OBSERVATIONS ON THE LATEST REPORTED STOCK INSURANCE COMPANY EXPENSES FOR 1960

BY

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The Loss and Expense Ratios booklet published annually by the New York Insurance Department summarizes pertinent figures for all companies and for each line of business. It serves as a handy guide for comparisons among companies and has also been used either directly or indirectly for ascertaining the reasonableness of expense loadings which are used by rating organizations.

If a company's expenses vary by amount of written premiums, then, due to the fact that expense loadings are determined from average experience of the past, there is a possibility that some companies could be charging rates which afford inadequate allowances for expenses. Conceivably, the converse might also be true. To the writer's knowledge, there has nowhere appeared any summary of expenses which compares companies according to size of premium volume written.

Out of curiosity and in order to shed some light on questions raised relative to size of premium, the latest reported insurance company expenses which covers calendar year 1960 experience was compiled according to premium size. First, stock companies listed in the loss and expense ratio booklet for 1959 automobile bodily injury liability was used for each line of business. 1960 experience was compiled separately for various lines of business. The lines of business appear in the following exhibits: Exhibit 1: auto liability (bodily injury); Exhibit 2: auto liability (property damage); Exhibit 3: auto fire, theft, and comprehensive; Exhibit 4: auto collision; Exhibit 5: liability other than auto (bodily injury); Exhibit 6: liability other than auto (property damage); and, Exhibit 7: all lines combined. Each line of business was summarized according to certain expense items related to adjusted direct premiums. The ratio items follow, together with identifying sections of each exhibit:

Section A—General Expenses (related to earned premium)

Section B—Other Acquisition (related to written premium)

Section C—Other Acquisition and General Expense Ratios Combined

Section D—Commission and Brokerage (related to written premium)

Section E—Total Expenses (excluding taxes and loss adjustment)

In the case of all lines of business combined, loss adjustment expenses related to net earned premiums were also summarized, and are shown as Exhibit 7, Section F.

After a preliminary examination of the range of size of premium by company, a reasonable number of class intervals was determined by selecting a size interval and doubling it to obtain the next succeeding interval. The logarithms of the class interval midpoints thus produced are in arithmetic progression. In the case of auto liability (bodily injury), the first premium interval selected was 1 to 2 (million dollars), and the succeeding interval was 2 to 4 (million dollars), etc. For auto liability (property damage) and auto

collision, the first interval selected was one-half that of the one for auto liability (bodily injury); for auto fire, theft, and comprehensive, the first selected interval was one-fourth. For liability other than auto (bodily injury), the selected interval was the same as that for auto liability (property damage). For liability other than auto (property damage), the first interval was one-fourth that for liability other than auto (bodily injury). For all lines combined, the first interval selected was \$5 million to \$10 million. Leaving out the lowest and highest expense ratio in each size group (except where the number of companies was four or less) a straight arithmetic average was computed. The midpoint of the class was assumed in computing the total average. Comparative total averages are shown on Exhibits 8 and 9.

The various tables of expense ratios mostly show a graduation of expenses as the insurance carrier's premium volume increases. This is best observed in the total expense ratios, Section E, of Exhibits 1-7. In the individual expense items, there appears to be some offset of lower commissions, Section D, by higher other acquisition expense, Section B, and vice versa. In the case of total expenses, Section E, only the net effect is observed.

We next come to the question of how does premium volume affect expenses. We observe auto liability bodily injury, Exhibit 1, and we find the highest group average is 31.96%, or 4.78 percentage points above the total average. For auto liability property damage, Exhibit 2, the comparable figure is 4.74 percentage points above the total average. Considering that rating organizations aim for 5.0% for profit or contingencies, it will be seen that even the smallest "average" company may expect the actual expense and profit allowance to at least cover its actual expenses. This appears also to be true for collision coverage, Exhibit 5, where the group with the highest expense ratio is 5.73 percentage points above that of the total average. For fire, theft and comprehensive coverage, Exhibit 4, the figure is 10.22 percentage points above the average but this may be due to the fact that the interval selected covers companies with \$250,000 to \$500,000 of premium volume. None of the groups above a million dollars produced average total expense which was as much as 4 percentage points higher than the total average.

For liability other than auto, the comparable figures are 2.89 percentage points (bodily injury), Exhibit 5, and 5.10 percentage points (property damage), Exhibit 6, above the total average.

If the extraordinary Allstate Insurance Group is excluded from the automobile averages of General Expense and Other Acquisition Ratios of Section C, new total averages may be compared with the highest average of any group as follows:

	<u>New Total Average</u>	<u>Highest Average</u>	<u>Difference</u>
Auto Liability (Bodily Injury)	10.3%	12.2%	1.9%
Auto Liability (Property Damage)	11.0	12.7	1.7
Auto Fire, Theft and Comprehensive	11.7	14.9	3.2
Auto Collision	11.0	13.1	2.1

If commission contracts (negotiated between companies and producers) can be considered apart from general expense and other acquisition expense, the difference between the new total average and the highest average would be less than the 2.5% for profit or contingencies which was used until the early 1950's in the auto liability rate structure and less than the 5.0% built into the auto physical damage rates.

The tables also show the extreme expense ratios and the extent to which these ratios vary from the mean average for the class interval. It is apparent that the allowance for profit or contingencies is not enough to cover the added cost incurred by the least efficient companies.¹ At the same time, it is likewise apparent that present profit or contingencies allowances enable the most efficient carriers to produce such large expense savings as to question whether part of the savings ought not to be passed on to the policyholder.

To the foregoing should be added a note regarding competition. The influence of competition makes itself felt in many ways, and in the writer's view, its effect has been to reduce expense loadings slightly.² For example, on auto liability, the rating organization does not use actual production cost which, according to the exhibit, would be 21.1%. Instead, the rates contemplate 20.5% (0.5% for the transfer of certain general expense items to other acquisition when uniform accounting was adopted). In addition, rating organizations base their expense loadings on the experience of their member companies which tends to be somewhat higher than average. Offsetting this, most rating organizations make no formal allowance for reduced premium income which results from the application of premium discount plans.

The application of the method of "quasi-least squares" to the automobile bodily injury liability data may be of some interest. For general, other acquisition and commission expenses combined, the resulting equation is

$$y = .3235 - .03252 \log_{10} P - .00044 (\log_{10} P)^2$$

where y is the expense ratio above described and P is expressed in millions of dollars. Upon dropping the last term, the equation becomes

$$10^y P^{.03252} = 2.1062$$

Similar application to the general and other acquisition expenses combined yields the following formula

$$10^x P^{.01844} = 1.3450$$

where x is the expense ratio as described and P is expressed in millions of dollars.

¹If investment income is recognized as a source of funds, then almost all of the worse than average companies derive sufficient income to offset their higher expenses.

²The reduction of general agents commissions from 25% to 20% is a well known recent illustration.

CALENDAR YEAR 1960 AUTO BODY INJURY LIABILITY
EXPENSE RATIOS

No. Cos.	Premium Range (in Millions)	Section A — General Expense Ratios						Section B — Other Acquisition Ratios						Section C — General Expense & Other Acquisition Ratios					
		Extreme Expense Ratios			Extreme Ratios to Mean			Extreme Expense Ratios			Extreme Ratios to Mean			Extreme Expense Ratios			Extreme Ratios to Mean		
		Avg.*	Lowest	Highest	Lowest	Highest	Avg.*	Lowest	Highest	Lowest	Highest	Avg.*	Lowest	Highest	Lowest	Highest			
10	1-2	6.63%	2.2%	9.3%	-67%	+40%	5.47%	2.1%	7.6%	-62%	+39%	12.08%	4.3%	16.3%	-64%	+35%			
14	2-4	6.90	3.5	10.1	-49	+46	4.94	2.2	9.9	-55	+100	12.17	7.1	16.9	-42	+39			
14	4-8	6.80	3.7	10.8	-46	+59	4.96	1.6	10.4	-68	+110	11.43	8.0	18.5	-30	+62			
11	8-16	6.73	6.1	8.1	-9	+20	4.02	2.3	6.7	-43	+67	10.64	8.4	13.7	-21	+29			
9	16-32	5.90	5.1	7.2	-14	+22	3.96	3.1	5.4	-22	+36	9.99	8.2	11.8	-18	+18			
6	32-64	5.65	4.5	7.0	-20	+24	3.98	2.2	5.7	-45	+43	9.88	6.2	13.6	-37	+38			
4	64-128	6.00	4.2	6.8	-30	+13	4.10	3.1	5.1	-24	+24	10.10	9.3	11.0	-8	+9			
1	128-256	5.5	—	—	—	—	9.9	—	—	—	—	15.4	—	—	—	—			
Total..		5.99%					4.96%					11.01%							

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No. Cos.	Premium Range (in Millions)	Section D — Commission & Brokerage Ratios						Section E — Total Expense Ratios					
		Extreme Expense Ratios			Extreme Ratios to Mean			Extreme Expense Ratios			Extreme Ratios to Mean		
		Avg.*	Lowest	Highest	Lowest	Highest	Avg.*	Lowest	Highest	Lowest	Highest		
10	1-2	19.23%	16.2%	21.0%	-16%	+9%	30.34%	21.5%	37.0%	-29%	+22%		
14	2-4	19.69	6.6	25.1	-66	+27	31.96	20.8	39.4	-35	+23		
14	4-8	20.34	15.3	21.9	-25	+8	31.69	21.4	39.0	-32	+23		
11	8-16	19.04	17.4	21.7	-9	+14	29.49	27.2	35.6	-8	+21		
9	16-32	17.57	15.1	19.0	-14	+8	27.58	24.7	29.1	-10	+6		
6	32-64	16.55	14.4	18.8	-13	+14	26.50	23.8	28.7	-10	+8		
4	64-128	16.53	13.7	18.1	-17	+9	26.63	23.0	29.1	-14	+9		
1	128-256	8.6	—	—	—	—	24.0	—	—	—	—		
Total..		16.18%					27.18%						

* Lowest and highest cos. in all groups except last two have not been included in determination of averages. Total average is average of all cos.

NOTE: Expenses are expressed as ratios to adjusted direct premiums earned except commissions and other acquisition expenses which are expressed as ratios to written.

CALENDAR YEAR 1960 AUTO PROPERTY DAMAGE LIABILITY
EXPENSE RATIOS

No. Cos.	Premium Range (in Millions)	Section A — General Expense Ratios					Section B — Other Acquisition Ratios					Section C — General Expense & Other Acquisition Ratios				
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean	
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		Lowest	Highest		
5	½-1	5.98%	2.4%	8.8%	—60%	+47%	4.82%	1.9%	8.2%	—61%	+70%	11.26%	4.6%	14.6%	—59%	+30%
17	1-2	6.76	2.8	9.7	—59	+43	5.08	1.7	11.1	—67	+119	11.76	5.7	16.7	—52	+42
14	2-4	7.30	4.5	10.2	—38	+40	5.33	2.9	9.0	—46	+69	12.66	8.6	19.2	—32	+52
13	4-8	6.75	4.7	8.4	—22	+35	4.42	2.3	6.4	—48	+45	11.22	8.2	15.0	—27	+34
8	8-16	6.44	5.0	8.7	—20	+39	4.48	3.3	5.8	—26	+29	11.50	9.2	13.9	—20	+21
3	16-32	5.50	3.8	7.0	—31	+27	3.50	2.2	4.7	—37	+34	9.00	6.0	10.6	—33	+18
4	32-64	6.55	5.1	7.5	—22	+15	4.33	3.1	5.4	—28	+25	10.88	10.1	11.6	—7	+7
1	64-128	5.4	—	—	—	—	9.9	—	—	—	—	15.3	—	—	—	—
Total		6.31%					5.25%					11.66%				

No. Cos.	Premium Range (in Millions)	Section D — Commission & Brokerage Ratios					Section E — Total Expense Ratios				
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean	
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest
5	½-1	20.24%	18.0%	21.7%	—11%	+7%	29.74%	21.3%	35.5%	—28%	+19%
17	1-2	21.11	15.8	25.0	—25	+18	33.09	25.6	40.0	—23	+21
14	2-4	19.91	0.5	23.5	—100	+18	32.61	10.7	40.5	—67	+24
13	4-8	19.05	15.8	21.4	—17	+12	29.99	26.2	32.1	—13	+7
8	8-16	17.89	14.5	20.2	—19	+13	28.91	23.8	31.7	—18	+10
3	16-32	18.73	16.5	20.0	—12	+7	27.73	25.7	30.4	—7	+10
4	32-64	17.40	15.5	18.7	—11	+7	28.28	26.0	30.0	—8	+6
1	64-128	8.6	—	—	—	—	23.9	—	—	—	—
Total..		16.80%					28.35%				

* Lowest and highest cos. in all groups except last three have not been included in determination of averages. Total average is average of all cos.

NOTE: Expenses are expressed as ratios to adjusted direct premiums earned except commissions and other acquisition expenses which are expressed as ratios to written.

CALENDAR YEAR 1960 AUTO PHYSICAL DAMAGE
EXPENSE RATIOS
Fire, Theft & Comprehensive

No. Cos.	Premium Range (in Millions)	Section A — General Expense Ratios					Section B — Other Acquisition Ratios					Section C — General Expense & Other Acquisition Ratios							
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean				
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest			
7	¼-½	9.21%	2.5%	17.9%	-73%	+94%	6.07%	0.9%	11.2%	-99%	+85%	14.91%	6.3%	22.8%	-58%	+53%			
10	½-1	8.03	5.4	10.0	-33	+25	6.00	3.8	8.2	-37	+37	14.22	10.8	17.4	-24	+22			
19	1-2	7.00	3.6	10.3	-49	+47	4.67	2.0	7.5	-57	+61	11.63	8.6	15.5	-26	+33			
17	2-4	6.95	3.7	9.9	-47	+42	4.51	2.0	7.4	-56	+64	11.58	6.9	16.1	-40	+39			
8	4-8	6.50	4.7	8.7	-28	+34	4.68	2.4	5.9	-49	+26	11.13	6.9	14.1	-38	+25			
4	8-16	6.08	4.3	7.6	-29	+25	4.50	3.1	7.5	-37	+53	10.98	7.7	13.2	-30	+20			
3	16-32	6.57	5.4	7.4	-18	+13	5.67	5.1	6.6	-10	+16	12.23	10.7	14.0	-13	+14			
1	32-64	5.6	—	—	—	—	9.9	—	—	—	—	15.5	—	—	—	—			
Total...		6.49%						5.72%						12.28%					

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No. Cos.	Premium Range (in Millions)	Section D — Commission & Brokerage Ratios					Section E — Total Expense Ratios						
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean			
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		
7	¼-½	25.64%	21.3%	31.0%	-17%	+21%	42.37%	33.6%	63.2%	-21%	+49%		
10	½-1	25.07	24.2	27.9	-3	+11	39.49	36.1	44.6	-9	+13		
19	1-2	24.42	16.8	27.4	-31	+12	36.12	26.4	42.6	-27	+18		
17	2-4	22.95	21.0	27.8	-8	+21	34.35	28.9	39.1	-16	+14		
8	4-8	21.66	16.1	23.9	-26	+10	32.69	26.5	37.0	-19	+13		
4	8-16	20.28	17.1	22.2	-16	+9	31.25	29.9	33.7	-4	+8		
3	16-32	21.23	20.7	22.1	-2	+4	33.47	31.4	34.9	-6	+4		
1	32-64	8.6	—	—	—	—	24.1	—	—	—	—		
Total.....		19.88%						32.15%					

*Lowest and highest cos. in all groups except last three have not been included in determination of averages. Total average is average of all cos.
NOTE: Expenses are expressed as ratios to adjusted direct premiums earned except commissions and other acquisition expenses which are expressed as ratios to written.

CALENDAR YEAR 1960 AUTO PHYSICAL DAMAGE
EXPENSE RATIOS
Collision

No. Cos.	Premium Range (in Millions)	Section A — General Expense Ratios						Section B — Other Acquisition Ratios						Section C — General Expense & Other Acquisition Ratios					
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean				
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		Lowest	Highest					
11	½-1	7.27%	2.1%	14.1%	-71%	+94%	5.95%	0.9%	12.4%	-98%	+108%	13.08%	6.8%	21.1%	-48%	+61%			
11	1-2	7.52	5.0	11.8	-34	+57	4.35	2.7	6.2	-38	+43	12.18	7.7	16.1	-37	+32			
21	2-4	6.88	4.3	10.1	-37	+47	4.80	2.6	7.6	-46	+58	11.72	8.5	17.3	-27	+48			
11	4-8	6.38	4.7	7.8	-26	+22	4.21	1.4	6.3	-67	+50	10.47	6.7	12.6	-36	+20			
9	8-16	5.69	4.0	7.2	-30	+27	4.61	2.4	5.8	-48	+26	10.69	6.9	13.5	-35	+26			
2	16-32	5.55	4.2	6.9	-24	+24	3.25	3.1	3.4	-5	+5	8.80	7.6	10.0	-14	+14			
3	32-64	5.97	4.1	7.3	-31	+22	5.63	4.9	6.5	-13	+15	11.60	9.6	13.8	-17	+19			
1	64-128	5.5	—	—	—	—	9.9	—	—	—	—	15.4	—	—	—	—			
Total...		6.02%					5.67%					11.76%							

No. Cos.	Premium Range (in Millions)	Section D — Commission & Brokerage Ratios						Section E — Total Expense Ratios					
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean			
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		
11	½-1	23.55%	13.0%	28.1%	-45%	+19%	36.11%	27.7%	43.2%	-23%	+20%		
11	1-2	24.85	22.3	30.3	-10	+22	36.98	35.3	39.7	-5	+7		
21	2-4	23.99	20.6	25.7	-14	+7	35.73	31.5	43.0	-12	+20		
11	4-8	21.62	16.9	23.5	-22	+9	32.40	26.6	37.7	-18	+16		
9	8-16	20.86	16.4	23.9	-21	+15	31.62	26.8	34.4	-15	+9		
2	16-32	21.75	21.3	22.2	-2	+2	30.55	29.8	31.3	-2	+2		
3	32-64	21.03	20.3	22.1	-3	+5	32.63	29.9	34.5	-8	+6		
1	64-128	8.6	—	—	—	—	24.0	—	—	—	—		
Total...		19.45%					31.25%						

* Lowest and highest cos. in all groups except last three have not been included in determination of averages. Total average is average of all cos.

NOTE: Expenses are expressed as ratios to adjusted direct premiums earned except commissions and other acquisition expenses which are expressed as ratios to written.

CALENDAR YEAR 1960 BODILY INJURY LIABILITY OTHER THEN AUTO
EXPENSE RATIOS

No. Cos.	Premium Range (in Millions)	Section A — General Expense Ratios						Section B — Other Acquisition Ratios						Section C — General Expense & Other Acquisition Ratios					
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean				
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest			
9	½-1	8.80%	4.3%	13.5%	-51%	+53%	4.68%	2.8%	7.2%	-40%	+54%	14.20%	9.8%	19.9%	-31%	+40%			
14	1-2	9.27	6.0	12.2	-35	+32	6.09	2.3	12.6	-62	+107	15.76	10.2	24.0	-35	+52			
10	2-4	9.49	5.7	12.9	-40	+36	5.55	3.8	6.9	-32	+24	14.44	9.5	18.7	-36	+26			
8	4-8	10.95	7.8	13.6	-29	+24	4.34	3.7	6.4	-14	+47	15.23	12.5	17.6	-19	+15			
9	8-16	11.49	9.6	14.0	-16	+22	4.83	2.7	7.6	-44	+57	16.34	13.3	19.0	-19	+16			
3	16-32	9.97	8.0	11.9	-20	+19	4.17	4.0	4.4	-4	+6	14.30	12.2	16.8	-15	+17			
3	32-64	11.07	10.3	11.9	-7	+7	4.60	3.6	5.2	-22	+13	16.10	15.5	16.8	-4	+4			
Total..		10.74%					4.70%					15.60%							

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No. Cos.	Premium Range (in Millions)	Section D — Commission & Brokerage Ratios						Section E — Total Expense Ratios					
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean			
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		
9	½-1	22.48%	17.8%	30.7%	-21%	+37%	36.71%	27.9%	43.3%	-24%	+18%		
14	1-2	23.46	19.4	26.7	-17	+14	39.09	27.8	49.4	-29	+26		
10	2-4	23.49	22.0	25.3	-6	+8	38.04	31.5	42.8	-17	+13		
8	4-8	21.00	16.2	24.4	-24	+16	36.43	30.5	41.1	-16	+13		
9	8-16	21.86	19.1	23.4	-13	+7	38.32	33.8	41.7	-12	+9		
3	16-32	20.63	19.4	22.3	-6	+8	36.00	34.8	37.0	-3	+3		
3	32-64	18.43	16.2	20.0	-12	+9	33.80	32.9	35.5	-3	+5		
Total		20.61%					36.20%						

* Lowest and highest cos. in all groups have not been included in determination of averages.
Total average is average of all cos.

NOTE: Expenses are expressed as ratios to adjusted direct premiums earned except commissions and other acquisition expenses which are expressed as ratios to written.

CALENDAR YEAR 1960 PROPERTY DAMAGE LIABILITY OTHER AUTO
EXPENSE RATIOS

No. Cos.	Premium Range (in Millions)	Section A — General Expense Ratios					Section B — Other Acquisition Ratios					Section C — General Expense & Other Acquisition Ratios				
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean	
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		Lowest	Highest		
6	1/8-1/4	8.83%	2.7%	11.8%	-69%	+34%	5.75%	2.4%	9.1%	-58%	+58%	15.32%	11.7%	19.6%	-24%	+28%
11	1/4-1/2	10.05	6.3	14.1	-37	+40	6.17	2.8	9.8	-55	+59	16.29	9.6	23.9	-41	+47
9	1/2-1	9.81	5.2	15.3	-47	+56	5.52	3.1	7.8	-44	+41	15.14	10.3	21.1	-32	+39
10	1-2	12.96	9.9	17.0	-24	+31	4.46	2.5	6.7	-44	+50	17.32	12.6	23.2	-27	+34
6	2-4	11.45	8.6	12.8	-25	+12	4.87	3.4	6.1	-30	+25	16.65	13.5	18.7	-19	+12
2	4-8	9.70	7.7	11.7	-21	+21	3.75	3.1	4.4	-17	+17	13.45	10.8	16.1	-20	+20
4	8-16	11.98	10.6	13.5	-12	+13	6.15	5.4	7.0	-12	+14	17.25	15.1	19.3	-12	+12
Total..		11.52%					5.37%					16.53%				

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No. Cos.	Premium Range (in Millions)	Section D — Commission & Brokerage Ratios					Section E — Total Expense Ratios				
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean	
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest
6	1/8-1/4	26.08%	23.9%	28.4%	-8%	+9%	42.10%	36.1%	51.7%	-14%	+23%
11	1/4-1/2	23.14	18.7	28.1	-19	+21	39.17	31.0	45.0	-21	+15
9	1/2-1	19.16	0.1	25.6	-100	+34	34.28	14.1	43.2	-59	+26
10	1-2	22.54	20.7	24.8	-8	+10	40.23	35.5	43.9	-12	+9
6	2-4	21.98	19.9	24.0	-9	+9	38.18	34.9	41.9	-9	+10
2	4-8	20.15	16.8	23.5	-17	+17	33.60	27.6	39.6	-18	+18
4	8-16	19.78	18.0	20.9	-9	+6	36.48	33.4	38.9	-8	+7
Total..		20.75%					37.00%				

* Lowest and highest cos. in all groups have not been included in determination of averages except 4-8 range. In 4-8 range there are only two companies. Total average is average of all cos.

NOTE: Expenses are expressed as ratios to adjusted direct premiums earned except commissions and other acquisition expenses which are expressed as ratios to written.

CALENDAR YEAR 1960 EXPENSE RATIOS
All Lines of Business

No. Cos.	Premium Range (in Millions)	Section A — General Expense Ratios					Section B — Other Acquisition Ratios					Section C — General Expense & Other Acquisition Ratios							
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean				
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		Lowest	Highest					
14	5-10	6.23%	0.8%	8.8%	-99%	+41%	3.21%	0.7%	6.6%	-98%	+106%	9.58%	1.1%	13.3%	-89%	+39%			
12	10-20	5.63	3.2	7.9	-43	+40	4.64	1.0	10.1	-78	+118	10.81	6.9	15.8	-36	+46			
22	20-40	6.72	4.1	9.5	-40	+40	4.09	1.6	5.6	-61	+37	10.77	5.9	15.3	-45	+42			
18	40-80	7.39	5.1	10.0	-31	+35	5.23	2.9	7.3	-45	+40	12.63	10.6	17.1	-16	+35			
8	80-160	8.33	6.9	9.0	-17	+8	4.46	2.7	6.3	-39	+41	13.05	11.1	14.3	-15	+10			
9	160-320	7.43	4.7	8.9	-37	+20	5.20	4.2	6.9	-19	+33	12.63	10.2	14.5	-19	+15			
3	320-640	6.77	5.5	8.1	-19	+20	5.37	3.6	6.7	-33	+25	11.77	8.0	13.9	-32	+18			
Total		7.27%						4.98%						12.22%					

No. Cos.	Premium Range (in Millions)	Section D — Commission & Brokerage Ratios					Section E — Total Expense Ratios					Section F — Loss Adjustment Expense Ratios							
		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean		Avg.*	Extreme Expense Ratios		Extreme Ratios to Mean				
			Lowest	Highest	Lowest	Highest		Lowest	Highest	Lowest	Highest		Lowest	Highest					
14	5-10	22.77%	16.0%	32.7%	-30%	+44%	32.32%	24.8%	39.0%	-23%	+21%	8.93%	5.8%	12.1%	-35%	+35%			
12	10-20	26.25	19.0	30.9	-28	+18	37.19	30.3	43.4	-19	+17	8.08	5.7	11.5	-29	+42			
22	20-40	24.18	—	28.0	-100	+16	34.99	9.1	40.7	-74	+16	8.34	5.8	10.9	-30	+31			
18	40-80	22.33	12.7	26.0	-43	+16	35.05	24.7	41.3	-70	+18	9.08	6.9	13.1	-24	+44			
8	80-160	21.40	19.8	24.0	-7	+12	33.95	30.5	39.0	-10	+15	8.58	6.8	10.1	-21	+18			
9	160-320	19.94	15.4	22.7	-23	+14	32.58	25.6	35.9	-21	+10	7.90	6.8	9.6	-14	+22			
3	320-640	15.43	8.5	19.1	-45	+24	29.17	23.7	32.5	-19	+11	8.00	6.1	9.5	-24	+19			
Total		20.20%						32.80%						8.29%					

* Lowest and highest cos. in all groups have not been included in determination of averages. Total average is average of all cos.

NOTE: Loss adjustment expenses are expressed as ratios to net premiums earned. Other expenses are expressed as ratios to adjusted direct premiums earned except commissions and other acquisition expenses which are expressed as ratios to written.

EXHIBIT 8

CALENDAR YEAR 1960 AVERAGE EXPENSE RATIOS

By Lines of Business

<i>Auto Liability</i>	<i>B.I. Total</i>	<i>P.D. Total</i>
General Expense Ratio	6.0%	6.3%
Other Acquisition Ratio	5.0	5.3
Commission & Brokerage Ratio	16.2	16.8
General & Other Acquisition Ratio	11.0	11.7
Total Expense Ratio	27.2	28.4
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<i>Auto Physical Damage</i>	<i>Fire, Theft & Comp. Total</i>	<i>Collision Total</i>
General Expense Ratio	6.5%	6.0%
Other Acquisition Ratio	5.7	5.7
Commission & Brokerage Ratio	19.9	19.5
General & Other Acquisition Ratio	12.3	11.8
Total Expense Ratio	32.1	31.3
<hr/>		
<i>Liability Other Than Auto</i>	<i>B.I. Total</i>	<i>P.D. Total</i>
General Expense Ratio	10.7%	11.5%
Other Acquisition Ratio	4.7	5.4
Commission & Brokerage Ratio	20.6	20.8
General & Other Acquisition Ratio	15.6	16.5
Total Expense Ratio	36.2	37.0

CALENDAR YEAR 1960 AVERAGE EXPENSE RATIOS
All Lines of Business

<i>All Lines of Business</i>	<i>Total</i>
Loss Adjustment Expense Ratio	8.3%
General Expense Ratio	7.3
Other Acquisition Ratio	5.0
Commission & Brokerage Ratio	20.2
General & Other Acquisition Ratio	12.2
*Total Expense Ratio	32.8

* Not including loss adjustment expense ratio.