Title: Empirical Measure of Reserve Level Uncertainty Relative to Discounting and Financial Solvency for a Monoline Medical Professional Liability Insurer

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Abstract: A monoline medical professional liability insurer faces an unusual degree of solvency risk related to the adequacy of its loss and loss adjustment expense reserves. The issue addressed in this paper concerns how the magnitude of the accumulated investment income earned on assets corresponding to these reserves compares to the uncertainty in the reserve, and how this can be used to assess the financial strength of insurers writing long tailed coverages.

An empirical approach is used to measure the uncertainty in loss reserves and the result is expressed in terms of the annual interest rate that must be earned on assets corresponding to the reserves. The level of uncertainty is then compared with available interest rates to determine if the uncertainty "uses up" the full earning power. If only a portion of this earning power is used up by the uncertainty, the company might discount its loss reserves while still maintaining an adequate safety margin.

EMPIRICAL MEASURE OF RESERVE LEVEL UNCERTAINTY RELATIVE TO DISCOUNTING AND FINANCIAL SOLVENCY FOR A MONOLINE MEDICAL PROFESSIONAL LIABILITY INSURER

A monoline medical professional liability insurer faces an unusual degree of solvency risk related to the adequacy of its loss and loss adjustment expense reserves. In addition to the fact that reserves for this line of insurance have proven difficult to estimate, the reserves are large compared to premium or surplus. Illustration A shows the relative magnitude of surplus and loss reserves for a typical monoline professional liability insurer.

If the loss reserves are not discounted for interest, the risk that reserve estimates might be inadequate can be offset by the investment income which will be earned on assets corresponding to loss reserves. Illustration B shows the magnitude of the accumulated investment income on loss reserves for the same insurer.

THE ISSUE FOR THIS PAPER

The question addressed in this paper is how the magnitude of the accumulated investment income compares to the uncertainty in the reserve. This issue is important to company management in determining how much (if at all) it could prudently discount its loss reserves. The issue is also important to regulators in attempting to assess the financial strength of insurers writing long-tail coverages and in attempting to evaluate the appropriateness of discounted loss reserves for this type of insurer. It should be noted that this paper does not address other areas of uncertainty faced by insurers, such as pricing levels or asset valuation.

In the context of these questions it is useful to measure the uncertainty in the loss reserves in terms of the annual interest rate that must be earned on assets corresponding to the claim reserves. For example, if assets are earning 11%, does the uncertainty "use up" the full 11% earning power or only the equivalent of say 5%; leaving managment and regulators with confidence that with reserves discounted at 6% the company has an adequate safety margin.

ANALYSES OF UNCERTAINTY

The methods of analyzing the uncertainty can be classified as follows: (1) theoretical; (2) historical; and (3) alternate interpretations of experience (difference of opinion approach).

Theoretical Analysis

The uncertainty could be analyzed statistically if the distribution were known for estimates of claim severity, claim frequency, claim or loss developments, IBNR emergence rates, and the like. This approach was described by David Arata (PCAS 1982).

The state-of-the-art has not reached the point where the distributions are known. While reasonable distributions might be selected based on judgment, the conclusions might depend strongly on the distributions and parameters selected.

Historical Analysis

A second approach is to retrospectively measure the accuracy of reserves held by some insurers at prior dates. Difficulties with this approach include the following:

- Methodologies used to set reserves at old valuation dates may not reflect the current state-of-the-art in reserving.
- The reserve might include an explicit or implicit interest discount.

The held reserves might not have reflected the best actuarial estimate of the liability.

Accordingly, the results of such an analysis are likely to overstate the reserve uncertainties.

Difference of Opinion Approach

A third approach is to consider the alternative interpretation of the available data as a measure of the uncertainty. There is the potential for bias towards understating uncertainty if a single actuary evaluates the data. If several actuaries take "opposing" perspectives on reserve estimates the alternative interpretations might overstate the uncertainty.

This paper analyzes reserve level uncertainty using the difference of opinion approach by evaluating the reserve variations implied by differing rate level projections prepared in the context of an analysis of rate level filings. Since the focus of a rate filing is prospective rather than retrospective, it is likely that the historical loss levels implied by differing rate analyses provide less biased estimates of ultimate costs than would be estimates of future cost levels. For example, a low rate indication based on low trend rates might imply higher historical loss levels and higher indicated reserves.

DATA SUBJECT TO ANALYSIS

This paper presents results of a review of reserve uncertainty implied by differing rate level analyses in New York and Massachusetts. In Massachusetts the Joint Underwriting Association provides coverage for most private practice physicians and many hospital-based physicians in the state. Rates are proposed by the JUA and reviewed by

actuaries from the Massachusetts Medical Society and from the Massachusetts State Rating Bureau. The reserve implications of these three analyses are presented in the sections which follow.

In New York, over 80% of non-hospital-based physicians are insured by Medical Liability Mutual Insurance Company. Most of the remaining non-hospital-based physicians are insured by the Medical Malpractice Insurance Association of New York (MMIA). Both companies use the same data base for their calculations. This paper presents the differences in reserve implications of the rate level projections filed by the two companies.

Actual company loss reserves are affected by factors which might not be reflected in the rate level analyses, e.g., reinsurance, law changes or court decisions during the reserve period, changes in company procedures, whether the company is subject to normal insurance regulation, etc. Therefore, these results should not be interpreted as the true reserve needs of the company, but simply, as we have stated, as a measure of the uncertainty in the process.

Exhibits I and III display the calculation of reserves for the New York physicians company implied by each of two rate level filings. Exhibits II and IV display the calculation of reserves for the Massachusetts physicians company implied by each of three rate level filings.

CONCLUSION

If one accepts that the analysis described in Exhibits I through IV represent a full range of variations, then these results can be used to measure the uncertainty in the loss and loss expense reserves

of a medical liability insurance company from a financial solvency and management perspective. For example, uncertainty can be measured in terms of interest rates by estimating the magnitude of the interest rate required in the discounting process to equate the reserve indications of any two parties for a particular company.

As shown in Exhibit III, Sheet 3, the undiscounted reserve indication of Party B ("low" answer) for the New York Physician Company is approximately equal to the reserve indication of Party discounted at an interest rate of 4-1/2% ("high" answer). This 4-1 interest rate differential exists between the reserve indications o Party A and Party B at each level of discount, and can be used t represent the uncertainty in loss and loss expense reserves for th New York Physicians Company.

Exhibit IV, Sheet 4, indicates that the largest interest rate "uncertainty differential" for the Massachusetts Physicians Company is 6%, between Party A and Party C. When interest rates are used as a measure of uncertainty in this way, the Massachusetts Physicians Company exhibits a greater degree of uncertainty in reserves than does the New York Physicians Company, even though the dollar magnitude of the difference in reserve estimates among parties is greater in New York than in Massachusetts.

As an extension of the above approach, one might consider as a lower bound on an acceptable carried loss and loss expense reserve for a medical liability insurance company the reserve indicated by the party using the most conservative assumptions, discounted at the highest available interest rate consistent with sound insurance company asset management principles (say 10%). In the event t

company chooses to rely on the results of the party using the least conservative assumptions, the interest rate used to discount this party's reserves in determining carried reserves, when viewed from a solvency standpoint, should not differ from the highest available interest rate by more than the interest rate "uncertainty differential" discussed above. For example, assuming the highest available interest rate is 10%, a lower bound on carried reserves for the Massachusetts Physicians Company would be the reserves of Party A discounted at 10%, or $206 million as shown in column (1) of Exhibit IV, Sheet 4. If the Massachusetts Physicians Company relies on the results of Party C, carried reserves reflecting a discount rate of no more than 4% (10% less than the "uncertainty differential" of 6%) could be considered acceptable from a financial solvency perspective.

As interest rates available on the company's total assets rise and fall, the interest rate corresponding to the lower bound reserve level for the medical liability insurance company would need to be reestimated. This result can then be used in an assessment of financial solvency by determining whether the discount rate implicit in the company's carried reserves is consistent with the uncertainty differential established for the company.

Physicians Insurance Company
Undiscounted Loss Reserves

Relationship of Surplus and Loss Reserves

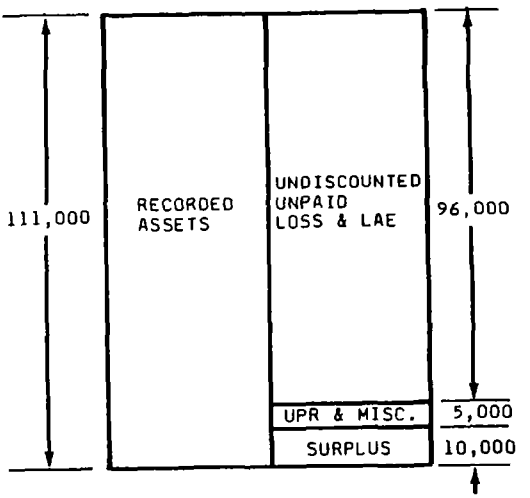
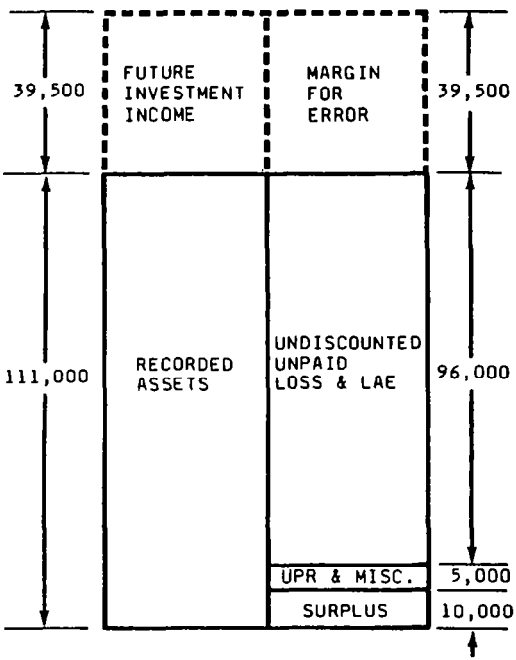


Illustration B

Physicians Insurance Company
Undiscounted Loss Reserves

Relationship of Surplus, Loss Reserves and Future Investment Income



SUMMARY OF EXHIBITS

I - Summary of New York Ratemaking Techniques and Assumptions

II - Summary of Massachusetts Ratemaking Techniques and Assumptions

III - New York:

Sheet 1 - Reserves Based on Party A Assumptions

Sheet 2 - Reserves based on Party B Assumptions

Sheet 3 - Comparison of Discounted Loss and ALE Reserves

IV - Massachusetts:

Sheet 1a - Reserves Based on Party A Assumptions
(report half-years 12/75-12/82)
Sheet 1b - Reserves Based on Party A Assumptions
(report half-years 6/83-6/87

Sheet 2a - Reserves Based on Party B Assumptions
(report half-years 12/75-6/82)
Sheet 2b - Reserves Based on Party B Assumptions
(report half-years 6/83-6/87

Sheet 3a - Reserves Based on Party C Assumptions
(report half-years 12/75-6/82)
Sheet 3b - Reserves Based on Party C Assumptions
(report half-years 6/83-6/87

Sheet 4 - Comparison of Discounted Loss and ALE Reserves

Exhibit I

NEW YORK PHYSICIANS INSURANCE COMPANY

Summary of Differences in
Ratemaking Techniques and Assumptions

Ratemaking Techniques

Party A developed estimates of indicated rate level needs by employing several different ratemaking approaches. The statistics included in this paper are based on a "pure premium approach". Accident year pure premiums (reported incurred losses divided by number of earned doctors) are developed to an ultimate settlement basis and trended to produce pure premium for the upcoming rate year.

The approach traditionally employed by Party B involves a separate projection of claim frequency (number of claims to close with indemnity payment divided by number of earned doctors) and claim severity (average indemnity per claim closed with indemnity payment). Ultimate claim frequencies are estimated by policy year and trended to produce the claim frequency for the upcoming rate year. Historic average claim severities are estimated on the basis of calendar year and accident year paid claim experience and trended to produce a claim severity for the upcoming rate year. The trended claim frequency is multiplied by the trended claim severity to produce pure premium for the upcoming rate year.

Key Assumptions

Differences in certain key assumptions between Party A and Party B contribute greatly to the variation between the two parties in their loss projections. Examples of such differences in key assumptions include the following:

1. Estimation of the effect on loss costs of the 1975 legislative change in New York's statute of limitations relative to medical professional liability claims.

2. Estimation of the loading for allocated loss adjustment expenses.

3. Estimation of the effect of policy limits on past and prospective claim severities.

4. Estimation of the anticipated trend in claim severity and claim frequency.

5. Estimation of the rate level effect of a recent change in New York's collateral source offset law.

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Summary of Differences in
Ratemaking Techniques and Assumptions

Ratemaking Techniques

Party A has traditionally used a "modified claims made" approach, wherein reported claims experience is used to determine rates for both claims made and occurrence policies. Incurred loss experience is classified by accident half-year within report half-year and developed to an ultimate settlement level. The resulting figures are divided by the appropriate exposures to produce report half-year pure premiums. These developed pure premiums are then broken into their frequency (number of claims to close with indemnity per exposure) and severity (amount of indemnity and ALE per claim closed with indemnity) components, and trended separately to produce projected frequency and severity components for the report half-years applicable to the upcoming rate year. The projected pure premiums (product of trended frequencies and trended severities) are then discounted to their present value and loaded for expenses to produce indicated rates by kind of policy.

The historic developed report half-year pure premiums of Party A serve as the starting point for the ratemaking calculations employed by Party B. Party B, however, makes use of external as well as internal data in the trending of the claim severity component of the pure premium, and modifies the trend factor used in projecting claim frequencies in order to adjust for the influence of external factors on recent claim reporting patterns.

Party C also uses reported claims experience to determine rates for both claims made and occurrence policies. Average claim frequencies are estimated for historic report half-years and projected for those report half-years applicable to the upcoming rate year. Average claim severities are developed based on historic calendar year closed claim experience and projected for the report half-years applicable to the upcoming rate year. The resulting pure premiums (product of trended frequencies and trended severities) are then discounted to their present value and loaded for expenses to produce estimated rates by kind of policy.

Key Assumptions

Differences in certain key assumptions between Parties A, B and C contribute greatly to the variation among these parties in their loss projections. Examples of such differences in key assumptions include the following:

1. Estimation of the proportion of reported claims outstanding after 48 months to ultimately close with indemnity payment.

2. Estimation and interpretation of the influence on past and prospective claim reporting patterns resulting from such external factors as changes in interpretation of the statute of limitations applicable to medical malpractice claims, changes in the operation of the tribunal system, and changes in unemployment and economic well being.

3. Use of external indices to supplement internal data in trending claim severities.

4. Estimation of loading for loss adjustment expenses.

NEW YORK PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Filing of Party A
(amounts in thousands)

Accident Year	(1) Reported Pure Premium	(2) Selected Development Factor	(3) Ultimate Pure Premium (1)x(2)	(4) Number of Earned Doctors	(5) Ultimate Incurred Losses (3)x(4)	(6) Allocated Loss Adj Expenses (5)x.26	(7) Policy Limit Effect
1975	$7,090	1.533	$10,869	7,458	$ 81,061	$ 21,076	$ 0
1976	7,381	1.594	11,765	16,100	189,422	49,250	(8,638)
1977	7,662	1.678	12,857	16,620	213,681	55,557	7,415
1978	8,874	1.915	16,994	17,166	291,714	75,846	9,889
1979	9,659	2.238	21,617	17,543	379,224	98,598	5,916
1980	9,176	3.084	28,299	17,717	501,370	130,356	(20,707)
1981	4,472	6.542	29,256	17,961	525,464	136,621	4,256
1982	1,376	--	38,990*	17,636	687,628	178,783	(68,763)
Total							

Accident Year	(8) Adjusted Ultimate Incurred Loss and ALAE (5)+(6)-(7)	(9) Loss and ALAE Paid to Date	(10) Projected Loss and ALAE Reserves (8)-(9)
1975	$ 102,137	$ 25,253	$ 76,884
1976	230,034	55,921	174,113
1977	276,653	38,045	238,608
1978	377,449	26,175	351,274
1979	483,738	19,200	464,538
1980	611,019	6,198	604,821
1981	666,341	2,440	663,901
1982	797,648	39	797,609
Total	$3,545,019	$173,271	$3,371,748

*Based on selected pure premium trend factor of 23.5% per year applied to accident year 1981 fitted pure premium of $31,573.

NEW YORK PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Filing of Party B
(amounts in thousands)

Accident Year	(1) Calendar Year Projected Unlimited Avg. Severity	(2) Accident Year Projected Unlimited Avg. Indemnity	(3) Projected Avg. Indemnity Limited to Policy Limits	(4) Projected Ult. Number of Indemnity Claims	(5) Ultimate Incurred Losses (3)x(4)
1975	$ 31,770	$174,170	$111,780	532	$ 59,467
1976	39,300	215,450	130,710	1,027	134,239
1977	48,600	266,440	152,060	1,051	159,815
1978	60,110	329,540	176,040	1,193	210,016
1979	74,350	407,600	202,750	1,308	265,197
1980	91,960	504,150	232,280	1,372	318,688
1981	113,740	623,550	264,670	1,404	371,597
1982	140,680	771,240	300,700	1,432	430,602

Accident Year	(6) Allocated Loss Adj. Expenses (5)x.25	(7) Ultimate Loss and ALAE (5)+(6)	(8) Loss and ALAE Paid to Date	(9) Projected Loss and ALAE Reserves (7)-(8)
1975	$ 14,867	$ 74,334	$ 25,253	$ 49,081
1976	33,560	167,799	55,921	111,878
1977	39,954	199,769	38,045	161,724
1978	52,504	262,520	26,175	236,345
1979	66,299	331,496	19,200	312,296
1980	79,672	398,360	6,198	392,162
1981	92,900	464,497	2,440	462,057
1982	107,651	538,253	39	538,214
Total		$2,437,028	$173,271	$2,263,757

NEW YORK PHYSICIANS INSURANCE COMPANY

Comparison of Loss and ALAE Reserves
(amounts in thousands)

Annual Interest Rate	(1) Party A Discounted Loss and ALAE Reserve	(2) Party B Discounted Loss and ALAE Reserve
0%	$3,371,748	$2,263,757
1%	3,074,490	2,130,078
2%	2,817,274	2,007,946
3%	2,593,543	1,896,145
4%	2,397,942	1,793,603
5%	2,226,086	1,699,377
6%	2,074,363	1,612,634
7%	1,939,792	1,532,636
8%	1,819,896	1,458,732
9%	1,712,615	1,390,343
10%	1,616,223	1,326,952
11%	1,529,272	1,268,101
12%	1,450,540	1,213,380
13%	1,378,993	1,162,422

Notes: (1) Based on projected reserves from Exhibit III, Sheet 1 and payout assumptions in Party A rate filing.
(2) Based on projected reserves from Exhibit III, Sheet 2 and payout assumptions in Party B rate filing.

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Rate Filing of Party A
(amounts in thousands)

Report Half Year	(1) Basic Limits Reported Loss and ALAE Reserve	(2) Selected Reserve Development Factor	(3) Projected B/L Loss and ALAE Reserve (1)x(2)x1.50*	(4) Selected Increased Limits Factor	(5) T/L Loss and ALAE Reserve (3)x(4)
12/75	$ 0	.895	$ 0	1.453	$ 0
6/76	18	.744	20	1.453	29
12/76	90	.773	104	1.453	151
6/77	285	.695	297	1.453	432
12/77	445	.699	467	1.453	679
6/78	1,816	.724	1,972	1.453	2,865
12/78	2,747	.742	3,057	1.453	4,442
6/79	2,359	.728	2,576	1.453	3,743
12/79	5,138	.719	5,542	1.453	8,051
6/80	5,203	.728	5,682	1.453	8,256
12/80	7,896	.791	9,369	1.453	13,613
6/81	7,549	.822	9,308	1.453	13,525
12/81	15,641	.860	20,177	1.453	29,317
6/82	15,608	.971	22,733	1.453	33,031
12/82	12,647	1.208	22,916	1.453	33,297
Total	$77,443	.897	$104,219	1.453	$151,431

*Reflects the loading for ALAE reserves incorporated into the development factors in column (2).

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Rate Filing of Party A
(amounts in thousands)

Report Half Year	(1) Occurrence Exposures Weighted by Accident Year Lag Factors	(2) Basic Limit Projected Pure Premium	(3) Projected B/L IBNR Loss and ALAE Reserve (1)x(2)x2.0	(4) Selected Excess Limits Factor	(5) Ultimate IBNR Loss and ALAE Reserve (3)x(4)
6/83	7,745	$1,159	$ 17,958	1.500	$ 26,937
12/83	7,084	1,255	17,776	1.500	26,664
6/84	6,228	1,354	16,868	1.500	25,302
12/84	5,366	1,466	15,737	1.500	23,606
6/85	4,462	1,575	14,054	1.500	21,081
12/85	3,826	1,696	12,979	1.500	19,469
6/86	2,042	1,813	7,450	1.500	11,108
12/86	1,477	1,943	5,738	1.500	8,607
6/87	1,156	2,078	4,804	1.500	7,206
Total			$113,319	1.500	$169,980

Report Half Years	(6) Indicated Loss and ALAE Reserve
12/75-12/82	$151,431
6/83- 6/87	169,980
All Years	$321,411

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Rate Filing of Party B
(amounts in thousands)

Report Half Year	(1) Basic Limits Reported Loss and ALAE Reserve	(2) Selected Reserve Development Factor	(3) Projected B/L Loss and ALAE Reserve (1)x(2)x1.50*	(4) Selected Increased Limits Factor	(5) T/L Loss and ALAE Reserve (3)x(4)
12/75	$ 0	.895	$ 0	1.453	$ 0
6/76	18	.744	20	1.453	29
12/76	90	.773	104	1.453	151
6/77	285	.695	297	1.453	432
12/77	445	.699	467	1.453	679
6/78	1,816	.724	1,972	1.453	2,865
12/78	2,747	.742	3,057	1.453	4,442
6/79	2,359	.728	2,576	1.453	3,743
12/79	5,138	.719	5,542	1.453	8,051
6/80	5,203	.728	5,682	1.453	8,256
12/80	7,896	.791	9,369	1.453	13,613
6/81	7,549	.822	9,308	1.453	13,525
12/81	15,641	.860	20,177	1.453	29,317
6/82	15,608	.971	22,733	1.453	33,031
12/82	12,647	1.208	22,916	1.453	33,297
Total	$77,443	.897	$104,219	1.453	$151,431

*Reflects the loading for ALAE reserves incorporated into the development factors in column (2).

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Rate Filing of Party B
(amounts in thousands)

Report Half Year	(1) Occurrence Exposures Weighted by Accident Year Lag Factors	(2) Basic Limit Projected Pure Premium	(3) Projected B/L IBNR Loss and ALAE Reserve (1)x(2)x2.0	(4) Selected Excess Limits Factor	(5) Ultimate IBNR Loss and ALAE Reserve (3)x(4)
6/83	7,745	$1,011	$ 15,656	1.500	$ 23,484
12/83	7,084	1,069	15,151	1.500	22,727
6/84	6,228	1,129	14,064	1.500	21,096
12/84	5,366	1,198	12,854	1.500	19,281
6/85	4,462	1,260	11,246	1.500	16,869
12/85	3,826	1,324	10,128	1.500	15,192
6/86	2,042	1,397	5,706	1.500	8,559
12/86	1,477	1,463	4,321	1.500	6,482
6/87	1,156	1,539	3,559	1.500	5,339
Total			$ 92,685	1.500	$139,029

Report Half Years	(6) Indicated Loss and ALAE Reserve
12/75-12/82	$151,431
6/83- 6/87	139,029
All Years	$290,460

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Rate Filing of Party C
(amounts in thousands)

Report Year	(1) Earned Exposures	(2) Basic Limits Projected Pure Premium	(3) Projected B/L Loss and ALAE (1)x(2)x2.0	(4) Loss and ALAE Paid (Estimate)	(5) Loss and ALAE Reserve (3)-(4)
1977	8,454	$226	$ 3,818	$ 3,324	$ 494
1978	13,085	286	7,486	6,486	1,000
1979	18,263	398	14,545	6,987	7,558
1980	22,067	481	21,220	7,397	13,823
1981	24,090	638	30,750	6,117	24,613
1982	24,574	832	40,868	1,054	39,814
			$120,168	$30,453	$87,802

Report Year	(6) Selected Increased Limit Factor	(7) Total Loss and ALAE Reserve (5)x(6)
1977	1.453	$ 718
1978	1.453	1,453
1979	1.453	10,982
1980	1.453	20,085
1981	1.453	35,763
1982	1.453	57,850
		$126,851

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Reserves Based on Assumptions in Rate Filing of Party C
(amounts in thousands)

Report Half Year	(1) Earned Exposures Weighted by Lag Factors	(2) Basic Limit Projected Pure Premium	(3) Projected B/L IBNR Loss and ALAE Reserve (1)x(2)x2.0	(4) Selected Excess Limits Factor	(5) Ultimate IBNR Loss and ALAE Reserve (3)x(4)
6/83	7,745	$ 901	$13,956	1.500	$ 20,934
12/83	7,084	948	13,431	1.500	20,147
6/84	6,228	995	12,394	1.500	18,591
12/84	5,366	1,041	11,172	1.500	16,758
6/85	4,462	1,088	9,709	1.500	14,564
12/85	3,826	1,134	8,677	1.500	13,016
6/86	2,042	1,180	4,819	1.500	7,229
12/86	1,477	1,225	3,619	1.500	5,429
6/87	1,156	1,269	2,934	1.500	4,401
Total					$121,069

Report Half Years	(6) Indicated Loss and ALAE Reserve
12/75-12/82	$126,851
6/83- 6/87	121,069
All Years	$247,920

MASSACHUSETTS PHYSICIANS INSURANCE COMPANY

Comparison of Loss and ALAE Reserves
(amounts in thousands)

Annual Interest Rate	(1) Party A Discounted Loss and ALAE Reserve	(2) Party B Discounted Loss and ALAE Reserve	(3) Party C Discounted Loss and ALAE Reserve
0%	$321,411	$290,460	$247,920
1%	305,698	276,606	236,150
2%	291,216	263,918	225,254
3%	277,788	252,137	215,137
4%	265,321	241,186	205,727
5%	253,720	230,982	196,976
6%	242,939	221,486	188,826
7%	232,859	212,598	181,197
8%	223,458	204,298	174,075
9%	214,674	196,532	167,412
10%	206,446	189,250	161,164
11%	198,715	182,401	155,289
12%	191,476	175,978	152,780
13%	184,658	169,924	144,588