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Testimony

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Profitability of the Medical Malpractice
and General Liability Lines of Insurance

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Statement of
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Consumer Protection, and Competitiveness
Committee on Energy and Commerce
House of Representatives



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Mr. Chairman and Members of the Subcommittee:

We are pleased to appear before the Subcommittee today to present the results of our work on the profitability of the property/casualty insurance industry, particularly the profitability of the medical malpractice and general liability insurance lines. Our testimony today is in response to your request for information on insurance industry profitability.

In our testimony, we make the following points on the basis of our estimates:

- Despite substantial underwriting losses, the property/casualty industry, as a whole, has been profitable over the 10-year period from 1976 through 1985. Its profitability was made possible by the industry's investment gains.
- Profitability in the property/casualty industry has been cyclical. In recent years, returns on net worth have been lower than many industries. However, over the past 10 years the average return has been comparable to other industries.
- The medical malpractice line of insurance suffered a cumulative after-tax loss for the 11-year period 1975 through 1985 if reserves for future payments are booked

at their full payout value. If, however, these reserves are discounted to their present value, a procedure we recommended and is now required for tax purposes, the medical malpractice line showed an after-tax profit for this period.

-- The general liability line showed an after-tax profit from 1975 through 1985 even when its reserves are booked at their full payout value. If its reserves are discounted to present value, the line's profitability increases significantly.

-- If the established reserves proved inadequate by 10 or 20 percent, the medical malpractice and general liability lines would be profitable, provided that the reserves are discounted to present value.

I would first like to briefly discuss the profitability of the property/casualty insurance industry as a whole, and then I will discuss in more detail the medical malpractice and general liability lines. I would also like to note that our analysis pertains to industry aggregates; therefore, the experience of individual companies may differ.

PROFITABILITY OF THE PROPERTY/CASUALTY INDUSTRY

In July 1986, we testified that over the 10-year period 1976 through 1985, the property/casualty industry was profitable. As shown in the table below we estimated that the industry had about \$81 billion in after-tax income despite almost \$65 billion in underwriting losses. This income resulted primarily from the investments the industry made with funds collected from premiums. Over this 10-year period, the industry had investment income and capital gains of approximately \$144 billion. Thus, profitability in the insurance industry is determined by combining both underwriting results and investment results.

<u>All Companies--Consolidated Basis</u>				
<u>1976 through 1985</u>				
(\$ in billions)				
<u>Underwriting</u> <u>gain/loss^a</u>	<u>Investment</u> <u>gain</u>	<u>Net</u> <u>gain</u>	<u>Federal</u> <u>income tax</u>	<u>Total gain</u> <u>after-tax</u>
(\$64.8)	\$144.3	\$79.5	(\$1.6)	\$81.1

^aReserves used in this calculation were not discounted.

These figures are derived from our computations, and the industry disagrees with our assumptions about including unrealized capital gains and excluding policyholder dividends. If we eliminate those assumptions from our computations, the after-tax net gain was about \$54 billion. Furthermore, we testified that the industry's profitability in terms of its rate of return on net worth over this period was comparable to that of

other industries, such as the banking, transportation, and utility industries. At that time, we pointed out that over the last few years rates of return earned by the property/casualty industry have been substantially lower than those earned by comparable industries.

Looking at attachment I, you can see that the property/casualty industry is subject to profitability cycles. Column 1, "underwriting gains/losses" demonstrates the most recent cycle. This underwriting cycle peaked in 1978. Since then it has declined until it bottomed out in 1985 when the industry experienced record underwriting losses. Because of the industry's cyclical nature, we believe that data covering an entire cycle gives a better picture of the industry's profitability.

Since our July testimony, the Insurance Information Institute has reported that the property/casualty industry's earnings improved substantially in 1986. On the basis of its data, we calculate that the industry's after-tax net gain increased from \$9.7 billion in 1985 to about \$19 billion in 1986.

We turn now to our analysis of the profitability of the medical malpractice and general liability lines, two lines that over the past few years have been in the news due to consumers'

difficulties in obtaining coverage at prices they could afford. As we testified last July, and as shown in attachment II, these two lines represent about 8 percent of the property/casualty industry's business but have accounted for over a quarter of the industry's underwriting losses. It should be noted that these losses did not reflect the investment gains applicable to these lines.

PROFITABILITY OF SPECIFIC LINES

To analyze the profitability of the medical malpractice and general liability insurance lines, we used publicly available data reported by the A.M. Best Company in its Casualty Loss Reserve Development on premiums, losses, and expenses. We used Best's data because it is the only aggregated data base readily available to perform such an analysis. Best gathers its data from the annual financial statements the insurance companies file with state regulators. We did not test the accuracy or adequacy of the data reported by the companies or by Best.

Because Best does not allocate all investment income and gains by insurance line, we had to estimate the investment results for these lines. Our estimates were derived by calculating net cash flow after federal income taxes and by assuming that the results had been invested in a representative investment vehicle, 10-year Treasury securities. Treasury

securities were selected because they are virtually risk free, and because claims in the medical malpractice and general liability lines are not settled, in many cases, for 10 years or longer after the premiums are written.

The data reported by Best do not cover the entire industry. Among those not included in the Best data are (1) joint underwriting associations, (2) a small portion of physician-owned insurance companies, (3) reinsurers, (4) small commercial insurers, and (5) self-insurance mechanisms.

We should also note that medical malpractice insurers are not a homogeneous group. Medical malpractice insurance providers are comprised of both stock and mutual insurance companies. Among the mutual insurers are insurance companies formed by medical professionals to assure the availability of medical malpractice insurance at the lowest possible cost. Thus, their motivation is not necessarily profit oriented. The physician-owned and hospital-owned companies included in our analysis comprised approximately 38 percent of our data base. However, to determine the profitability of the medical malpractice insurance line both stock and mutual insurers have been included.

Our analysis of the profitability of the medical malpractice and general liability insurance lines depends primarily on the manner in which reserves for future payment of claims are

established by the industry. These reserves, which are an operating expense are actuarial estimates of claims that are expected to be paid out in the future. Furthermore, these reserves are adjusted periodically to reflect revisions to prior claim and loss expense estimates. Thus, depending on the ultimate loss experience, profitability may be understated or overstated in any given year.

Additionally important is that for legitimate solvency considerations state regulations require that reserves be generally booked at the full value of expected future loss payouts. We have recommended in the past that for tax purposes reserves be set aside on a "discounted" basis because, in reality, this amount invested at interest will be sufficient to meet expected future losses as long as expectations do not substantially change. In its consideration of the Tax Reform Act of 1986, the Congress agreed with our recommendation and required insurers to discount their reserves for tax purposes.

In this testimony, we present four different estimates of medical malpractice and general liability profitability. The first set of estimates assumes that the industry's reserves are adequate to meet expected claims. The second also assumes that the reserves are adequate, but it discounts the reserves. The third estimate assumes the industry has underreserved by 10 and 20 percent. The fourth estimate discounts the reserves derived

in the third estimate. We will first present our estimates for the medical malpractice line, which we show in attachment III, and then our estimates for general liability, which we present in attachment IV.

Profitability when reserves
are not discounted

We initially computed the annual earnings using reserves that had not been discounted. In the case of the medical malpractice line, as you see in attachment III in column 1, we computed a cumulative \$653 million loss over the 11-year period 1975 through 1985, with a cumulative rate of return, expressed as a percent of premiums earned, of a negative 4.6 percent.

Profitability improves when
reserves are discounted

However, this estimate does not in our view present a completely accurate picture. Both the medical malpractice and general liability lines are typical of insurance lines in which claims are commonly paid many years after the reserves for those claims have been established. In order to compute such a line's profitability, the established reserves need to be discounted to recognize the time value of money. For example, if a claim will cost \$100 in 10 years, should a \$100 reserve be immediately

established for that claim or should a reserve of a lesser amount--a discounted amount--be established that, when invested over the 10-year period, will yield \$100? If a discounted reserve is established, then a greater amount of that year's annual cash flow will be credited to the line's earnings. Thus, discounting the reserves increases current earnings.

We discounted the reserves by the average annual interest rate earned on 10-year Treasury securities. As you can see in attachment III in column 2, if the reserves are discounted in this manner, the medical malpractice line yielded a profit of \$2.2 billion over the 11-year period 1975 through 1985. As a percentage of premiums earned, the medical malpractice line's cumulative rate of return increases from a negative 4.6 percent to a positive 15.3 percent when the reserves are discounted in this manner.

Profitability deteriorates if the reserves
established are not adequate to cover claims

In deriving the profitability estimates we have just presented, we assumed that industry-established reserves are sufficient to settle future claims. We made this assumption because companies review their reserve estimates at least annually and are bound by state regulators to provide for fully adequate reserves. Future events, however, may show that the

reserves were either excessive or inadequate. Some in the industry believe that the reserves are inadequate. If, due to unforeseen circumstances, the reserves proved insufficient, then the profitability of the lines would deteriorate. To provide an appropriate degree of conservatism in light of this possibility, we are supplying calculations of profitability on the alternative assumptions that the estimated reserve requirements are inadequate to the extent of 10 percent or 20 percent of their current stated value.

If the reserves needed to be increased by 10 percent, the medical malpractice line's profitability based upon undiscounted reserves for the 11-year period 1975 through 1985 would decline from a \$653 million loss to a \$1.2 billion loss. Its rate of return as a percentage of premiums earned would decline from a negative 4.6 percent to a negative 8.8 percent.

If the undiscounted reserves proved to be 20-percent deficient, the profitability and rate of return on the medical malpractice line would decline from a \$653 million loss to a negative \$1.8 billion loss and from a negative 4.6 percent rate of return to a negative 13.0 percent.

Similarly, if the reserves proved to be 10-percent deficient then the medical malpractice line's profitability and rate of return on a discounted basis would decline from a \$2.2 billion

profit to a \$1.9 billion profit and from a 15.3 percent rate of return to a 13.1 percent rate of return. If the reserves needed boosting by 20 percent to be sufficient, the profitability and rate of return on the medical malpractice line on a discounted basis would decline further to a \$1.6 billion profit and a 10.9 percent return.

Profitability of the
general liability line

In attachment IV we show our profitability estimates for the general liability insurance line, which we calculated by using the same methodology as for the medical malpractice line. As column 1 shows, if reserves are not discounted, the general liability line yielded a profit of \$2.0 billion for the period 1975 through 1985, with a cumulative rate of return of 3.4 percent. As column 2 shows, with reserve discounting the general liability line yielded a profit of \$8.0 billion over the same period, with a cumulative rate of return of 13.4 percent.

If we assume that reserves were insufficient and needed to be increased by 10 percent, the general liability line's profit based upon undiscounted reserves would decline from \$2.0 billion to \$783 million, and the rate of return would decline from 3.4 percent to 1.3 percent. If undiscounted reserves were 20-percent

deficient, the general liability line's profitability would decline from \$2.0 billion to a negative \$462 million, with the rate of return decreasing from a positive 3.4 percent to a negative 0.8 percent.

If we base our estimates on discounted reserves and assume a 10 percent reserve deficiency, then the profitability of the general liability line would be \$7.4 billion, as opposed to \$8.0 billion on a discounted basis with no deficiency assumed and a rate of return of 12.3 percent as opposed to 13.4 percent. If we assume a 20-percent deficiency, the general liability line on a discounted basis shows a \$6.7 billion profit and a rate of return of 11.2 percent.

CONCLUSIONS

Although cyclical in nature, the property/casualty industry, as a whole, has been profitable over the 10-year period 1976 through 1985. Despite faring poorly in recent years, the industry's profitability in terms of its rate of return on net worth over this 10-year period was comparable to that of other industries, such as the banking, transportation, and utility industries. Data for 1986 shows that the underwriting cycle has turned and is now moving in a positive direction.

The profitability of the medical malpractice and general liability lines depends primarily on the manner in which reserves for future payments of claims are established--the adequacy of the reserves and whether those reserves are discounted to reflect their present values. If the reserves established to cover future loss payouts are inadequate, boosting the reserve to cover those losses will decrease the profitability of the line. Conversely, the profitability of the line improves if the reserves are discounted. We have recommended in the past, and the Congress has agreed, that for tax purposes reserves should be established on a discounted basis.

Using reserve amounts as established by the industry and applying different assumptions about reserve adequacies and discounting, we developed four profitability estimates for each line. Essentially, those estimates show that the medical malpractice line incurred losses when the reserves were valued at their full estimated payout, but the line was profitable when the reserves were discounted to present values. On the other hand, the general liability line was profitable under all but one of our estimating assumptions. In that estimate we assumed that the reserves were not discounted to present values and that they were 20-percent deficient.

This concludes my prepared statement. We would be pleased to respond to any questions.

Combined After-Tax Gains for the Property/Casualty Insurance
Industry by Year for the Period 1976-1985 (Consolidated Basis)^a
(\$ in millions)

<u>Year</u>	<u>Underwriting gains/losses^b</u>	<u>Investment gains/losses^c</u>	<u>Pre-tax total</u>	<u>Federal income tax^d</u>	<u>After-tax total</u>
1976	(\$1,726)	\$7,173	\$5,447	\$148	\$5,299
1977	1,926	5,063	6,989	1,015	5,974
1978	2,548	7,758	10,306	1,389	8,917
1979	24	11,610	11,634	896	10,738
1980	(1,712)	15,870	14,158	593	13,565
1981	(4,464)	10,858	6,394	55	6,339
1982	(8,303)	18,387	10,084	(716)	10,800
1983	(11,088)	19,441	8,353	(1,218)	9,571
1984	(19,379)	17,875	(1,504)	(1,732)	228
1985	<u>(22,597)</u>	<u>30,219</u>	<u>7,622</u>	<u>(2,030)</u>	<u>9,652</u>
1976-1985	<u>(\$64,771)</u>	<u>\$144,254</u>	<u>\$79,483</u>	<u>(\$1,600)</u>	<u>\$81,083</u>

^aConsolidated totals eliminate "double counting" by excluding intercompany transactions between parent and subsidiary companies.

^bNet premiums earned, less losses and expenses.

^cNet investment income, plus realized and unrealized capital gains.

^dNegative federal income tax occurs because companies report losses for tax purposes and consequently generate negative income taxes. Negative income taxes can be applied to past taxes paid, and they generate refunds or are carried forward to apply against future tax liabilities.

Source: Data used in the preparation of this table obtained from A.M. Best Company publications.

Net Premiums Earned, Underwriting Gains/Losses, and Combined
Ratios by Insurance Line for the Period 1976-1985
(\$ in millions)

<u>Insurance lines</u>	<u>Net premiums earned</u>	<u>Premiums as a percent of all lines</u>	<u>Underwriting gains/losses^a</u>	<u>Underwriting gains/losses as a percent of all lines</u>	<u>Combined ratios</u>
Auto liability (Private passenger)	\$192,432	20.49	(\$16,509)	25.49	107.9
Auto physical damage (Private passenger)	134,515	14.32	815	(1.26)	98.6
Workers' compensation	128,099	13.64	(1,589)	2.45	100.9
Homeowners multiple peril	96,376	10.26	(3,813)	5.89	102.4
Commercial multiple peril	66,002	7.03	(7,014)	10.83	108.5
General liability	61,746	6.57	(13,255)	20.46	120.0
Auto liability (Commercial)	46,150	4.91	(8,746)	13.50	117.6
Auto physical damage (Commercial)	25,599	2.73	(94)	0.15	99.1
Medical malpractice	14,143	1.51	(5,177)	7.99	135.7
All other lines	<u>174,066</u>	<u>18.54</u>	<u>(9,389)</u>	<u>14.50</u>	— ^b
Total - all lines	<u>\$939,128</u>	<u>100.00%</u>	<u>(\$64,771)</u>	<u>100.00%</u>	105.9

^aNet premiums earned, less losses and expenses. This column does not include investment gains allocated by insurance line.

^bAll other lines includes: reinsurance (114.9); fire (96.9); inland marine (98.0); group accident and health (111.7); allied lines (97.1); burglary and theft (81.2); surety (95.7); ocean marine (108.0); other accident and health (101.8); farmowners multiple peril (109.5); fidelity (104.8); boiler and machinery (93.8); aircraft (104.1); and miscellaneous (111.0).

Source: Data used in the preparation of this table obtained from A.M. Best Company publications.

Summary of Profitability of the Medical
Malpractice Insurance Line, 1975-1985^a
(\$ in millions)

Using company-established reserves:

	Not discounted by GAO	Discounted by GAO
Net premiums earned	\$14,187	\$14,187
Interest earned (estimated)	<u>4,352</u>	<u>4,352</u>
Revenues	18,539	18,539
Payments & expenses	8,772	8,772
Reserves	10,976 ^b	8,152
Taxes	<u>(556)</u>	<u>(556)</u>
Expenses	<u>19,192</u>	<u>16,368</u>
Earnings	<u>(\$ 653)</u>	<u>\$ 2,171</u>

	<u>Not discounted by GAO</u>		<u>Discounted by GAO</u>	
<u>Reserves</u>	<u>Earnings</u>	<u>Percent rate of return^c</u>	<u>Earnings</u>	<u>Percent rate of return^c</u>
Adequate	(\$ 653)	(4.6)	\$2,171	15.3
10% inadequate	(1,245)	(8.8)	1,861	13.1
20% inadequate	(1,838)	(13.0)	1,551	10.9

^aMedical malpractice profitability, as shown above, depends on (1) the adequacy of reserves established to settle claims, and (2) the degree to which the reserves are discounted. This table shows the level of profitability assuming three levels of reserve adequacy, not discounted and discounted.

^bOf this \$10,976 million reserve \$2,660 million is shown in the statements of the Physician Insurers Association of America as already having been discounted. The reserve shown in the second column is the result of discounting the remaining \$8,316 million and adding the result to the \$2,660 million already discounted by the companies.

^cRate of return as percent of net premiums earned.

Source: Data used in the preparation of this table obtained from A.M. Best Company publications and the Physician Insurers Association of America.

Summary of Profitability of the General
Liability Insurance Line, 1975-1985^a
(\$ in millions)

Using company-established reserves:

	Not discounted by GAO	Discounted by GAO
Net premiums earned	\$59,812	\$59,812
Interest earned (estimated)	<u>12,234</u>	<u>12,234</u>
Revenues	72,046	72,046
Payments & expenses	45,235	45,235
Reserves	23,056	17,069
Taxes	<u>1,726</u>	<u>1,726</u>
Expenses	<u>70,017</u>	<u>64,030</u>
Earnings^b	<u>\$ 2,028</u>	<u>\$ 8,014</u>

<u>Reserves</u>	<u>Not discounted by GAO</u>		<u>Discounted by GAO</u>	
	<u>Earnings</u>	<u>Percent rate of return^c</u>	<u>Earnings</u>	<u>Percent rate of return^c</u>
Adequate	\$2,028	3.4	\$ 8,014	13.4
10% inadequate	783	1.3	7,368	12.3
20% inadequate	(462)	(0.8)	6,721	11.2

^aGeneral liability profitability, as shown above, depends on (1) the adequacy of reserves established to settle claims, and (2) the degree to which the reserves are discounted. This data shows the level of profitability assuming various levels of reserve adequacy and discounting.

^bDoes not add due to rounding.

^cRate of return as percent of net premiums earned.

Source: Data used in the preparation of this table obtained from A.M. Best Company publications.