

A Hard Look at

by Gregory Alff, FCAS

In May 1999, Merrill Lynch analysts noted that "the last two accident years have produced smaller reserve redundancies and, for many companies in the study, the 1997 accident year has produced slight reserve deficiencies given what we know about market conditions in commercial lines, the 'cushion' of reserve redundancies likely is shrinking for many companies." Analysts at Dowling & Partners Securities have defined the situation in stronger terms, saying, "The reserve releases and stable AY [accident year] loss ratio 'pick' (for 1998) reflect the 'cheating phase' of the underwriting cycle." ➤

Pricing Trends

TABLE 1

Deterioration of Underwriting Combined Ratios Caused by Price Competition

Calendar Year	Workers' Compensation		Fire & Allied Lines		Commercial Multi Peril		Commercial Auto		Other Liability	
	Written Premium	Combined Ratio	Written Premium	Combined Ratio	Written Premium	Combined Ratio	Written Premium	Combined Ratio	Written Premium	Combined Ratio
1995	\$26.2	97.0%	\$8.3	109.2%	\$18.8	112.5%	\$17.2	108.1%	\$18.6	143.6%
1996	25.1	99.7	8.7	101.3	18.9	118.3	17.6	110.1	19.6	123.5
1997	24.1	100.7	8.4	97.7	19.0	111.1	18.0	110.8	20.1	110.6
1998	23.2	107.6	8.4	110.2	19.0	119.7	18.1	113.8	19.0	114.5

NOTE: Written premium is net written premium in billions of dollars. Combined ratio is combined ratio after dividends to policyholders before inclusion of investment income.

SOURCE: Best's Aggregates and Averages - Property-Casualty, 1999, pp. 264-266.

In this phase of the underwriting/pricing cycle, actuaries are often under pressure from insurance company management to set and certify reserves that are lean but adequate. These reserves might be interpreted as being at the low end of a realistic range.

It is likely that some carriers have "borrowed" money from 1998 and prior accident years' reserves to support the 1998 calendar year results published by the industry. The term *cheating phase* refers to the reduction of re-

serves to the point where deficiencies may be created, while publishing calendar year results which belie deteriorating accident year results.

In the article "An Actuarial Perspective: Insurance Industry Pricing and Reserving through 2000," published in the January 1998 issue of *Risk Management*, Edgar Davenport and I predicted that 1998 and 1999 would be defined by six major trends in the property/casualty industry:

1. Deterioration in underwriting combined ratios caused by price competition
2. Loss and loss adjustment expense reserves will continue to weaken
3. Continued industry consolidation
4. More emphasis on market specialization and targeting specific products and market segments
5. Prices will continue to decrease, but at a lower rate during 1998 and will not bottom out until 1999
6. Financial positions of some carriers could deteriorate rapidly during this period of competitive pricing

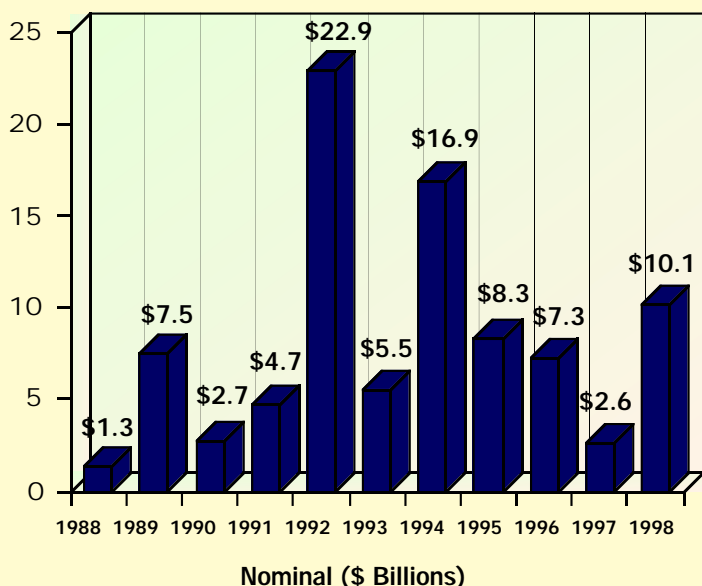
An examination of the numbers and the events of the last two years in commercial lines is the best measure of whether these predictions were accurate.

1. Deterioration in Combined Ratios

The evidence is most dramatic in workers' compensation, where as premiums have decreased the combined ratio has been increasing. Reserve releases from prior accident years for workers' comp are masking recent accident year loss ratios and combined ratios, which are deteriorating much faster than evidenced by

TABLE 2

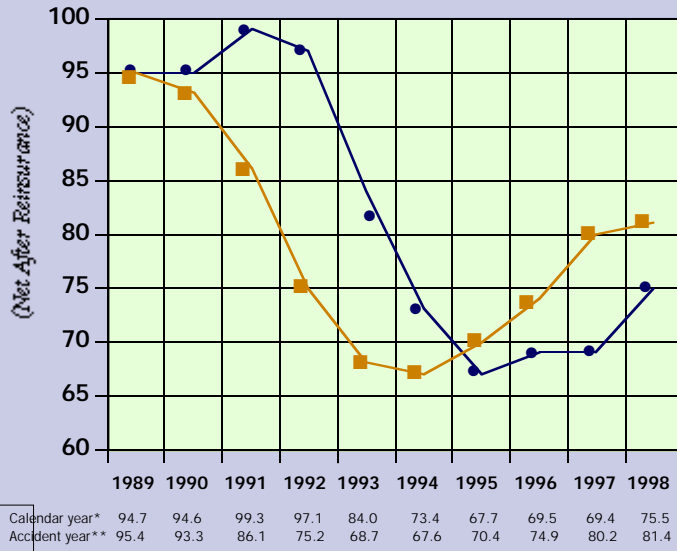
U.S. Insured Catastrophe Losses



Source: Property Claims Service, Insurance Information Institute.

TABLE 3

Workers' Compensation Accident Year vs. Calendar Year Loss and LAE Ratios



* Calendar year loss ratios are from *Best's Aggregates and Averages - Property - Casualty, 1999, p. 265*
 ** Accident year loss ratios valued as of 12.31.98 from *Best's Aggregates and Averages - Property - Casualty, 1999, p. 206*

these calendar year ratios.

For commercial property lines, the low premium levels during 1997 were supported by the lack of major catastrophe losses. (See Table 2.)

With a more "normal" level of catastrophe losses during 1998, but flat premiums for growing exposures, the combined ratios for fire and allied lines and commercial multi-peril leapt forward to unacceptable levels. This has led to a firming of some property prices and a tightening of terms and conditions for some renewals in 1999, but an increase in overall price levels has not yet occurred.

Commercial auto combined ratios also reached unacceptable levels in 1998 after no premium growth. Yet, for both property and commercial auto, the financial strength and level of capital of the insurance carriers has precluded general price increases for either line.

Other liability experience for 1995 and 1996 shows the effects of massive reserve strengthening for asbestos and environmental claims. The results were very profitable in 1997 after the inclusion of 30.5 percent investment income assigned to this long-tail line. Competition caused prices for other liability to decrease somewhat in 1998. With clear evidence of the need to increase prices for commercial property and commercial auto, and with mounting pressure to increase workers' comp prices, it is likely that competitive pricing will be focused on other liability coverage in 2000.

2. Weakening Reserves

The commercial lines 1997 calendar year results were helped not only by the lack of property catastrophes, but also by releases of reserves from years prior to 1997.

Workers' Comp	(\$2.43) billion
Commercial Automobile	(0.250) billion
Medical Malpractice	(1.650) billion
	(\$4.33) billion

Source: *One Year Reserve Change Best's Aggregate & Avgs. Property Casualty, 1998, pp. 188-9.*

Approximately \$1 billion of these funds were used to strengthen reserves for past years in other liability, presumably for asbestos and environmental liabilities. Most of the remainder was released directly into earnings in the form of lower calendar underwriting and combined ratios for these lines.

Also during 1997 there was a massive release of \$4.8 billion from prior years' private passenger auto reserves. Since many of the largest commercial lines carriers also benefited from the private passenger

auto reserve release, it affected corporate results and overall reserve levels for many commercial lines companies.

In 1998 there were additional reserve releases from prior years for workers' comp (\$1.8 billion) and medical malpractice (\$1.3 billion). Private passenger auto carriers at the same time released an additional \$3.7 billion of reserves from prior years during 1998.

It is clear that reserve levels have been reduced from the levels of adequacy that existed prior to 1997. While current reserve adequacy for medical malpractice and private passenger auto are difficult to judge, there is clear evidence that commercial auto reserves are now deficient and workers' comp reserves are deficient for at least 1997 and 1998 accident years.

Best's Aggregates and Averages Summary of Schedule P-Part 2C, indicates that commercial auto estimated ultimate incurred losses for accident years 1995 and 1996 developed upward in both 1997 and 1998, as did accident year 1997 losses during 1998. Yet the industry has set first estimates of ultimate losses for 1998 at a level less than either 1996 or 1997, which are both developing adversely.

Table 3 is a graph of loss and loss adjustment expense (LAE) ratios for workers' comp. It shows that the reserve redundancies have been stripped from prior years to help fund the

TABLE 4

Workers' Compensation Incurred Losses and Allocated Expenses
(Billions of Dollars)

Age at Evaluation	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
12 months	23.453	26.216	27.701	25.934	23.832	21.789	19.073	18.273	17.299	17.109
24 months	24.255	27.338	28.152	25.540	22.879	20.899	18.472	17.903	17.663	
36 months	24.884	27.771	27.702	24.092	21.966	20.129	17.958	17.642		
48 months	25.283	27.837	27.075	22.888	20.658	18.923	17.139			
60 months	25.476	27.880	26.907	22.545	20.305	18.472				
72 months	25.410	27.741	26.894	22.416	20.032					
84 months	25.579	27.880	26.840	22.298						
96 months	25.730	27.856	26.733							
108 months	25.724	27.845								
120 months	25.684									

SOURCE: *Best's Aggregates and Averages - Property-Casualty*, 1999, p. 224.

consistent calendar year loss ratios and combined ratios in 1995, 1996 and 1997 and to hold down the 1998 calendar year ratios. While at the same time, accident year loss ratios have deteriorated quickly as the result of pricing competition.

Table 4 indicates that, since the initial reserves were set at the end of accident years (at twelve months' evaluation) 1992, 1993 and 1994, more than \$3 billion of net case reserves have been released from each of these accident years through December 31, 1998. The last amount for each accident year on Table 4 represents industry incurred losses valued as of the same date. Some of the funds released were used to pay for adverse development from accident years 1990 and prior, but mainly released funds helped create the very good calendar year results for workers' comp reported in 1996, 1997 and 1998.

Table 4 clearly indicates the real improvement in workers' comp loss experience from the high costs in 1990 and 1991, steadily improving through 1995. Redundancies have been removed. Evidence is mounting that accident year 1995 may be the industry's best underwriting year. Since 1995, incurred losses appear to have plateaued while premiums have continued to drop. Note that during 1998 reserves for accident year 1997 were increased by \$364 million. This is the first sign that some workers' comp carriers have realized that with costs beginning to rise, so must reserves.

Ratios of paid to incurred losses offer additional evidence that workers' comp reserves for accident years 1997 and 1998 are under-reserved.

Actuarial analysis has shown that payment development patterns for large volumes of

workers' comp claims are very stable over time. Thus, if paid losses at any given age are ratioed to ultimate incurred losses, the ratio should be relatively steady. In Table 5, the ratios of paid losses to December 31, 1998 estimates of ultimate incurred losses for accident years 1991 through 1994 are very stable at both twelve and twenty-four months of age. The higher ratios for 1997 and 1998 are indications that December 31, 1998 estimates of ultimate losses are deficient for these two accident years. The indication for 1998 may be clouded by the Unicover reinsurance programs, but appear to indicate substantial reserve deficiencies that could approach 20 percent of published incurred losses.

3. Consolidation

Consolidations are one sure way to reduce the number of competitors and help relieve competitive pressure. Since Liberty Mutual Insurance Co. acquired Employers Insurance of Wausau and its subsidiaries on December 30, 1998, the decades of competition between these two top workers' comp underwriters has effectively ended. The acquisition by The St. Paul Cos. Inc. of USF&G in 1998 has also effectively eliminated a competitor. These two major 1998 consolidations follow the Travelers acquisition of Aetna P&C and the disappearance of both The Home and Continental Insurance from the commercial lines marketplace. In quick succession, five major competitors have disappeared in the process of consolidation. Today AIG, CNA, The Hartford, Kemper, Liberty Mutual and Travelers control pricing for almost 40 percent of the workers' comp market.

This consolidation is beginning to have a sta-

bilizing effect on workers' comp pricing, especially for larger accounts that require the security of the largest underwriters.

Brokers and reinsurers have also been consolidating. With A&A being acquired by AON and Johnson & Higgins and Sedgwick by Marsh, competition in this area is also being curtailed. The recent consolidations of reinsurers could have a more direct impact on pricing. An article appearing in the January 16, 1999 edition of *The Economist* observes:

"Taking American reinsurance as an example, the market counted over a hundred firms a decade ago, 65 six years ago, and only 38 last year. In 1998 there were takeovers by Warren Buffett's Berkshire Hathaway of General Re, Swiss Re of Life Re, GE Capital of Kemper Re and Gerling Global of Constitution Re. Worldwide, the top ten reinsurers now control 60 percent or more of the market."

Reinsurance market consolidation, by reducing competition, should result in increased pricing integrity of reinsurance products.

The push for appropriate reinsurance pricing will also be aided by the apparent disastrous results of the much publicized reinsurance program underwritten by the Unicover Managers Facilities. The authors of *IBNR Insurance Weekly* #25, June 20, 1999, describe the situation concisely: "The entire Unicover program was based upon 'arbitrage' and the use/abuse of cheap/naïve reinsurance capacity." The shutdown of this reinsurance facility should have two salient effects. First, the cheap reinsurance capacity will immediately be stripped away from the primary insurers who took advantage of it. Assuming that no similar program of such magnitude will quickly appear, the primary carriers will be forced to replace the cheap reinsurance with more appropriately priced reinsurance or retain the underwriting experience themselves. Either al-

ternative will result in pressure to increase workers' comp pricing.

4. Market Specialization

There has been a trend toward greater market specialization and targeting of specific products and market segments during the last two years. This has shown up in consolidation and restructuring of the workers' comp target markets for Liberty and Wausau. St. Paul's acquisition of USF&G has resulted in the refocusing of the acquired assets. In property, underwriters such as Ace INA, Chubb, Fireman's Fund and St. Paul are concentrating underwriting efforts on segments where they each have recognized expertise.

However, in no line is specialization more apparent than for commercial automobile coverage. Liberty and St. Paul/USF&G, apparently quite concerned about deteriorating results, are raising prices and tightening underwriting. At the same time, Old Republic has acquired Great West and is working to expand its market eastward. CNA is forming a new commercial auto unit to write in specific market segments, and Protective continues to grow within its chosen market segments. Ace INA is offering new specialty coverages. Intercargo is targeting small fleets, while MTU (through Gulf, a unit of Travelers) is targeting large fleets.

Throughout all this, commercial auto premiums in the aggregate have remained flat. It remains to be seen if the overall results of this line of insurance can be improved through specialization. Broader price increases may be required to reduce the 104.4 percent operating ratio after investment income in calendar year 1998 back to a profitable level.

5. Prices Decrease

Prices for commercial lines insurance continued to decline during 1998. After year-end

TABLE 5

Workers' Compensation Paid to Incurred Loss Ratios (Based on 12.31.98 Estimates of Ultimate Incurred)

Age of Paid Losses	Accident Year							
	1991	1992	1993	1994	1995	1996	1997	1998
12 months	.210	.211	.206	.214	.225	.227	.232	.252
24 months	.481	.472	.465	.475	.480	.483	.510	

1991-94 Average 12 month paid to incurred ratio = .210.

1991-94 Average 24 month paid to incurred ratio = .475.

SOURCE: *Best's Aggregates and Averages - Property-Casualty, 1999.*

Paid losses from p. 229 divided by incurred losses valued 12.31.98 from p. 224.

TABLE 6

Financial Strength

	1985	1990	1995	1997	1998
Policy Surplus*	\$75,500	\$138,400	\$230,000	\$308,500	\$333,300
Net Written Premiums/PHS	1.9	1.5	1.1	0.9	0.8
Loss & LAE Reserves/PHS	2.0	2.1	1.6	1.2	1.1

*Dollars stated in millions for all property and casualty lines combined.

SOURCE: *Best's Aggregates and Averages - Property-Casualty*, 1999 - p. 252.

1998, chief executives of AIG, St. Paul and Chubb indicated that their companies had declined to renew substantial volumes of business that underwriters identified as not meeting pricing standards. They also indicated they will give up additional market share in U.S. commercial lines if prices do not firm.

At the end of the second quarter of 1999, first reports of modest price increases began to appear, with some major carriers reporting overall average price increases in the range of 2 percent to 4 percent during the second quarter. Since then this author has received verbal reports of increases of 5 percent or more in some lines and some jurisdictions.

It appears that workers' comp pricing bottomed out in the second or third quarter of 1999 and that modest price increases are beginning.

6. Financial Positions Deteriorate

Several major commercial line underwriters have been forced to take significant charges for reserve increases during the last twelve months. An analysis by Merrill Lynch, dated

May 19, 1999, notes that Orion Capital Corporation "took a \$164.5 million net reserve charge in the first quarter of 1999." Reliance Group Holdings, Inc. announced it took a charge of \$147.7 million in the second quarter of 1999 for increasing net loss reserves for commercial lines policies and reinsurance treaties for prior policy periods. On August 25, 1999 Fremont General indicated it would take a \$75 million hit to net reserves, with \$50 million of that amount related to workers' comp for 1998 and 1999. Additional announcements should be expected after reserve reviews in the fourth quarter of 1999.

Financial Strength Delays Pricing Actions

The excellent overall underwriting results of the last six accident years, coupled with high levels of investment income, have created financial strength unparalleled in the history of the industry. Table 6 displays the key indicators of this strength. Policyholder surplus increased \$100 billion between 1995 and 1998 on top of a \$92 billion increase from 1990 through 1995. ➤

TABLE 7

Major Investable Assets and Investment Income
For All Property and Casualty Lines Combined
(Millions of Dollars)

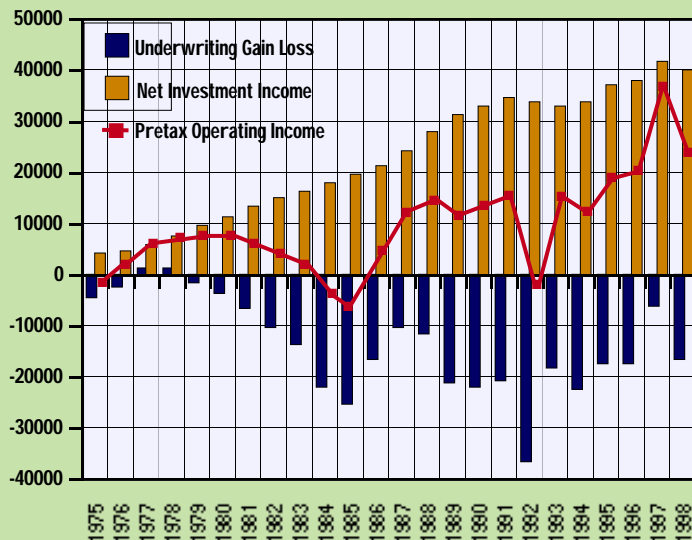
Year	Policyholders' Surplus	Unearned Premium Reserves	Loss & LAE Reserves	Total Major Investable Assets	Net Investment Income
1985	75,511	56,850	154,425	286,786	19,508
1990	138,401	82,561	289,878	510,840	32,901
1995	230,001	103,852	360,940	694,793	36,834
1996	255,527	108,536	365,319	729,382	37,962
1997	308,479	112,802	363,351	784,632	41,499
1998	333,327	116,668	365,196	815,191	39,925

SOURCE: *1999 Best's Aggregates and Averages - Property-Casualty*.

TABLE 8

Industry Operating Results Industry Pretax Operating Income For All Property and Casualty Lines Combined

(Millions of Dollars)



SOURCE: 1999 Best's Aggregates and Averages - Property - Casualty.

The leverage ratios of net written premium to policyholder surplus, and loss and LAE reserves to policyholder surplus have steadily declined since 1990. Both ratios stood at their lowest point in at least fifty years at the end of 1998.

This level of financial strength has delayed pricing actions as many insurers compete to use their capacity to write additional business in target markets, or at least maintain the accounts previously underwritten and on their books.

This pressure to grow or maintain premium writing may have been exacerbated by all time high investment incomes during 1996, 1997 and 1998, as shown in Table 7. The growth in policyholder surplus during the decade of the 1990s is solely attributable to investment income.

Table 8 graphs insurance industry pretax operating income as a function of underwriting gain or loss and investment income. Since 1979 operating income has come entirely from investment which has offset underwriting losses. For ten years, 1989 through 1998 levels of underwriting losses and investment income have been fairly consistent. The two spikes are caused by Hurricane Andrew in 1992 and the lack of catastrophes in 1997.

This picture will begin to change as underwriting losses increase and investment income decreases for calendar year 1999.

Into 2000

It is becoming evident that workers' comp prices are increasing because the need has been generally recognized throughout the industry. Small increases will be the general rule for the first two months of 2000. However, as poor year-end 1999 results are finalized and more NCCI loss cost filing increases take effect, the magnitude of price increases will steadily increase throughout the year. By late in the year, employers in some jurisdictions may be faced with increases of 10 percent or more.

Property prices will increase over the broad spectrum of commercial lines risks by midyear. The changes will be driven by the reinsurance markets as they force price increases after suffering underwriting losses for 1999 weather events, exacerbated by underpriced primary coverage.

Commercial auto, although displaying unprofitable and deteriorating results, will take more time to turn. This is because the problem is not as generally acknowledged, and companies apparently believe they can specialize their way out of unprofitable results. By the end of 2000 the increasingly poor results will be evident and prices will rise across the entire commercial auto market.

General liability is the one broad commercial line which shows continued profitability after investment income. Although results will be put under pressure by environmental and asbestos loss development, prices and premiums for general liability may actually decrease in 2000. With pressure to increase prices for other lines, general liability will likely become the focal point for price competition as it has at this point in past underwriting/pricing cycles.

Bottom Line Events and Issues—Composite results for calendar year 1999 will show workers' comp reserve strengthening for prior accident years of at least \$1 billion concentrated in accident years 1997 and 1998. Reserve strengthening for commercial auto prior accident years will exceed \$500 million.

Investment income in 1999 likely decreased more than \$1.5 billion from 1998, but still offsets the largest calendar year underwriting loss since 1992.

Year-end 1999 results will bring the problems of underpricing in the current environment into sharp focus. The party is over. Carriers that continue the cheating phase and fail to act in accordance with this very real turning point in underlying costs and needed price increases may soon present issues regarding financial security for risk management professionals.

