Returning from a Deep Soft Market and the Largest Catastrophe in History

by Gregory Alff

The hard market is here and it will intensify in 2002. This is the return from the industry's third deep soft market since 1950. This time, the way back was expected to be gradual, and moderated by strong industry surplus. However, rapidly deteriorating economic conditions prior to, and resulting from, the events of September 11 have exacerbated the problems caused by excessive competition. There is real pain in the insurance markets, resulting in sharp underwriting actions being applied to a broad spectrum of insurance clients.

Sharply Lower Profitability Propelled Hard Market Pricing Prior to September 11, 2001

Sometimes one picture tells the whole story. In calendar year 2000, profitability for the entire property/casualty insurance industry plummeted. From the strongest financial returns in insurance industry history in 1997, the decline has been precipitous. In 1999, returns on revenue and equity dropped below the level of the Standard & Poor's 500 and, in 2000, a wicked combination of un-

FIGURE 1

Industry Composite Profitability Measures

Calendar Year	Return on Invested Assets	Total Return on Revenue	Total Return on Equity
1995	10.3%	15.9%	19.4%
1996	9.2	14.2	15.5
1997	11.6	24.3	23.3
1998	8.9	14.5	12.5
1999	6.9	8.7	7.4
2000	4.9	0.7	0.6

Return on Invested Assets = (Net Investment Income + Realized and Unrealized Capital Gains) / Average Invested Assets

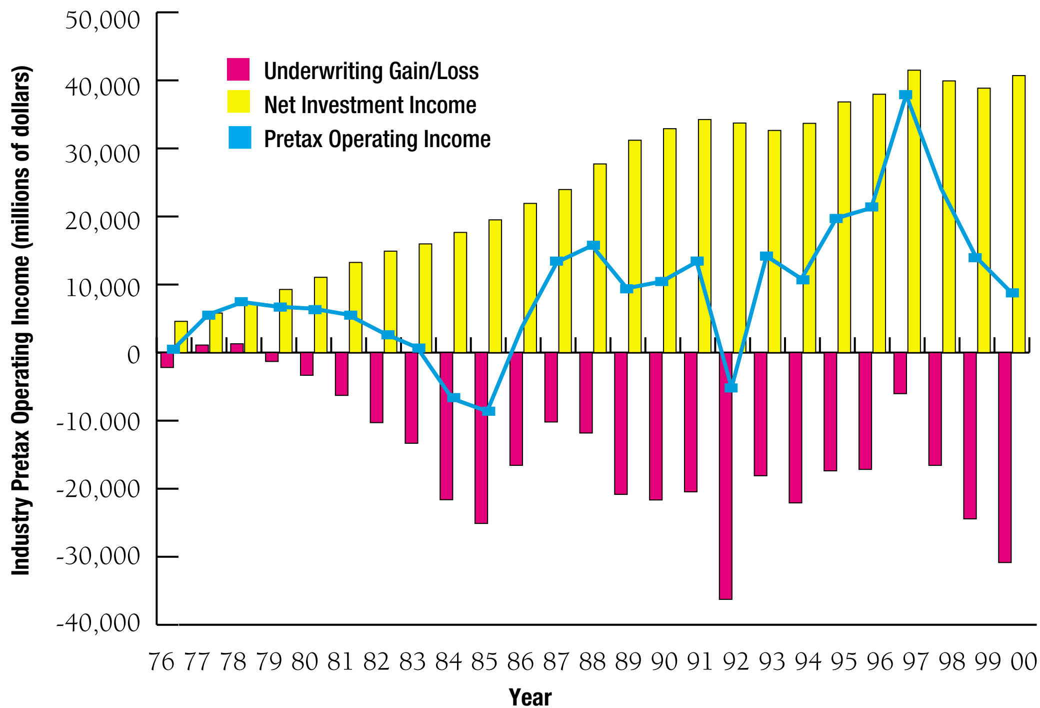
Total Return = Underwriting Income + Net Investment Income - Income Taxes + Realized and Unrealized Capital Gains

Revenue = Net Earned Premium

Equity = Average of Beginning and Ending Surplus

Composite includes 971 property/casualty organizations (2,440 companies excluding state funds).

SOURCE: *Best's Aggregates and Averages—Property/Casualty* (2001)
1995 entries from *Best's Aggregates and Averages—Property/Casualty* (2000)



SOURCE: *Best's Aggregates and Averages—Property/Casualty* (2001)

derwriting losses and unrealized capital losses decimated total returns.

Underwriting Losses in 2000 and 2001 Are Two of the Three Worst in History

The net underwriting losses for the U.S. property/casualty industry for calendar year 2000 were $31.2 billion. Only 1992 results driven by the enormous cost of Hurricane Andrew were worse. While the underpricing and worsening experience for workers' compensation received much of the press, and medical malpractice liability entered a new crisis stage, the sharpest increase in loss ratios occurred in personal lines auto liability. The property loss ratios for both commercial property and homeowners' insurance also deteriorated. Although past loss ratio problems for personal lines and commercial lines have often cycled alternately, this time they coincide.

While the underwriting losses of 1992 were driven largely by natural catastrophes, the underwriting losses of 2000 were created by underpricing of the broad range of insurance products across the entire property/casualty industry.

Now, the events of September 11 have resulted in the largest insurable losses in history, surpassing the $18 billion direct total losses for Hurricane Andrew. As this goes to print, many of the costs remain undefined; estimates, however, for the U.S. property/casualty industry exceed $20 billion net after recovery from global reinsurance markets. The efforts of the industry to increase prices and return to a reasonable level of profit have been derailed.

Because of the increase in prices across all lines of insurance, beginning in 2000 and gaining momentum in 2001, the industry can absorb the World Trade Center losses. The net underwriting losses in 2001 will likely be larger than those for 2000, but might not exceed the losses in 1992 due to surging earned premium in the second half of the year.

Surplus for the Industry Dropped 4.5 Percent in 2000

Figure 3 shows that net investment income remained strong in 2000, more than offsetting net underwriting losses. The industry also managed realized capital gains of $16.2 billion, which led to a net income after taxes of $20.6 billion.

In calculating the change in the policyholders' surplus, net income and

FIGURE 3

Financial Summary of 2000 Operations (in millions)

	Property/Casualty Industry Totals*	Commercial Casualty Lines**	Workers' Comp Predominating***
Statement of Income			
Premiums Earned	$294,024	$96,518	$4,325
Losses and Loss Adjustment Expenses Incurred	238,781	77,258	4,166
Underwriting Expenses and Other Deductions	82,567	28,685	1,299
Dividend to Policyholders	3,896	1,893	118
Net Underwriting Losses	(31,220)	(11,318)	(1,257)
Net Investment Income	40,704	18,084	662
Other Income (Expenses)	373	733	15
Pretax Operating Income	9,857	7,499	(580)
Realized Capital Gains	16,205	3,867	174
Income Taxes Incurred	5,503	1,935	(30)
Net Income	20,559	9,431	(377)
Changes in Policyholders' Surplus			
Net Income	20,599	9,431	(377)
Unrealized Capital Gains or Losses	(18,519)	(7,757)	(50)
Capital and Surplus Paid In	3,666	1,794	143
Capital and Surplus Paid Out	(16,380)	(6,300)	(218)
Other Changes	(4,173)	(2,340)	(119)
Change in Policyholders' Surplus	(14,847)	(5,171)	(621)
2000 Beginning Policyholders' Surplus	**332,207**	**105,933**	**5,850**
2000 Ending Policyholders' Surplus	**317,361**	**100,762**	**5,229**
Percentage Increase or (Reduction in Surplus)	**(4.5%)**	**(4.9%)**	**(10.6%)**

* 971 property/casualty organizations (2,440 companies)
** 376 organizations excluding state funds
*** 72 organizations with workers' compensation predominating—approximately 20 percent of workers' compensation premium (excluding state funds)

SOURCE: *Best's Aggregates and Averages—Property/Casualty* (2001)

capital and surplus paid out (mainly in the form of dividends to stockholders) varied little in 2000 from the amounts recorded for 1999. The big change was in unrealized capital losses, totaling $18.5 billion. (Unrealized capital gains in 1999 were $1.9 billion.) This caused a $14.8 billion reduction in the policyholders' surplus, which is a 4.5 percent reduction in the total property/casualty industry surplus. The drop is very close to the $15 billion predicted in last year's analysis ("State of the Market Part I: The Hard Facts," *RM*, January 2001).

The premium increases achieved by the industry in 2001 will be large enough to offset the net losses of September 11, but not large enough to improve the industry's financial results. With much lower realized capital gains and unrealized capital losses likely to exceed those experienced during 2000, the policyholders' surplus for the property/casualty industry may fall by 8 percent or more when 2001 results are finalized.

Figure 3 also shows the consolidated statement of income and the change in surplus calculation for two industry subgroups.

Commercial casualty lines contains the results of 376 organizations—one-third of the total property/casualty industry. Its summary shows that the net underwriting losses and the

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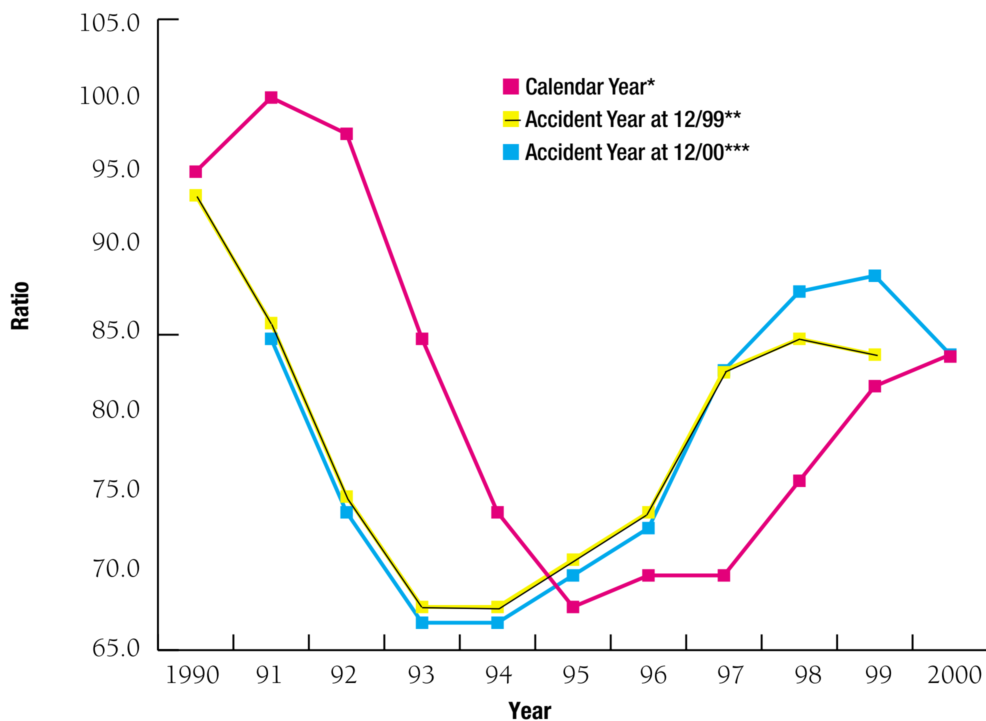
unrealized capital losses for the commercial casualty carriers were slightly worse than for the industry as a whole, resulting in a 4.9 percent reduction in surplus.

For the 72 organizations with workers' compensation predominating—workers' compensation comprised 88 percent of premium writings for these companies, which wrote nearly 20 percent of workers' comp premiums in 2000—the result was a net loss after realized capital gains. Combined with the other negatives in the calculation of change in the policyholders' surplus, this resulted in a 10.6 percent reduction in surplus for the group. Several of these companies were significant writers in the California market, where competition has long held premiums below adequate levels. (Fremont General Corp., now under state supervision in California, is one of the largest carriers in this group.) One of the costs of unreasoned open competition is the increased potential for insolvencies.

Workers' Compensation Loss Ratios Jump

Workers' compensation is the largest of the commercial lines of insurance and is the largest line in most commercial casualty insurance programs for individual corporations. Everyone is aware of the soft market and aggressive pricing, which held through 1999, and of the price increases, which began in 2000 and have accelerated to double digits in many cases in 2001. The question is: Where is the industry now?

If the insurance industry target is a 15 percent return on earned premium after investment income and, from recent experience, investment income can be expected to be 17 percent between the time premium is collected and all losses are fully paid, a combined loss and expense ratio of 102 percent after dividends would be acceptable (17% - 2% = 15%). If dividends to policyholders are 5 percent and underwriting expenses can be reduced slightly to 25 percent, a 72 percent loss and loss adjustment expense (LAE) ratio is a reasonable target (102% - 5% - 25% = 72%). Based on the summarized loss and LAE ratios in Figure 4, the industry was achieving this goal, and more, in accident years 1992 through 1996.



SOURCE:

* Calendar year loss from *Best's Aggregates and Averages—Property/Casualty* (2001)
1990 calendar year ratio from *Best's Aggregates and Averages—Property/Casualty* (2000)

**Accident year loss ratios valued as of December 31, 1999 from *Best's Aggregates and Averages—Property/Casualty* (2000)

***Accident year loss ratios valued as of December 31, 2000 from *Best's Aggregates and Averages—Property/Casualty* (2001)

The industry continued to report solid profitability in 1997 for workers' compensation, but the calendar year results shown in financial statements were heavily subsidized by reserve releases from earlier accident years.

In reviewing Figure 4, remember that calendar year loss and loss expense ratios are fixed and do not change, while accident year ratios are estimates of ultimate losses and are adjusted each year. The difference between the calendar year ratio and the accident year ratio is caused by the total prior year development during the calendar year for losses and

all loss adjustment expenses, including allocated expenses, cost containment expenses and claims adjustment expenses.

In Figure 4, fixed calendar year ratios, as well as accident year ratios as of December 1999 and from year-end 2000 have been graphed. For accident years 1991 through 1996, the loss and LAE ratios have developed downward slightly, indicating the release of reserves from those years. Note that there was little change in the accident year 1997 reported ratio, but ratios for accident years 1998 and 1999 have developed upward when 2000 reports are compared to those from 1999. The reported loss and LAE ratio for accident year 1999 now stands at 88.7 percent, nearly wiping out potential investment income for the year (17 percent above 72 percent). Given that 1998 and 1999 accident years are developing upward and are expected to continue to develop adversely, the initial reporting of the 82.9 percent accident year 2000 loss and loss adjustment expense ratio may be deficient by 10 percent, indicating underreserving of initial reporting for accident year 2000 by $2 billion or more.

Prior Years' Development

Workers' Compensation. In last year's analysis, a reserve deficiency of $2.4 billion in workers' compensation for accident year 1999 was estimated. Last year's article also stated that 1997 and 1998 were deficient, 1996 reserves were made deficient by reductions, and further reductions in reserves for prior years would likely also make prior years' reserves deficient. During 2000, the industry recognized and funded nearly half of the obvious deficiency in the accident year 1999 workers' compensation reserves. A significant $621 million increase was also made to the 1998 reserves. Unfortunately, the majority of the funds for these increases was stripped from accident years 1996 and prior. This is why the graph in Figure 4 shows decreased loss ratios for accident years 1991 through 1996, while the 1998 and 1999 accident year loss ratios increase. The total deficiency has been spread backward over prior accident years.

The problem of the deficiency in workers' compensation reserves has been partially hidden, but not addressed. In fact, the total deficiency has increased by approximately $2 billion entering 2001, because of the obvious deficiency in reserves for accident year 2000. Robert Farnam, A.M. Best actuary, based in Oldwick, New Jersey, now estimates the total deficiency in workers' compensation reserves to be approximately $14.8

FIGURE 5

Workers' Compensation and Commercial Auto Liability Incurred Losses and Defense and Cost Containment Expenses

	Workers' Compensation (in millions)			Commercial Auto Liability (in millions)		
Years in which Losses Were Incurred	**Estimated Ultimate Losses at 12/31/00**	**Development during 2000**	**Development during 1999**	**Estimated Ultimate Losses at 12/31/00**	**Development during 2000**	**Development during 1999**
Prior		($1,113)	($884)		$239	($282)
1994	$17,616	(233)	(212)	$9,174	(46)	(33)
1995	16,474	(119)	(77)	9,259	(7)	(4)
1996	16,618	(118)	(385)	9,872	67	112
1997	17,563	7	316	10,125	223	199
1998	18,183	621	516	10,116	393	224
1999	17,334	1,108	N/A	10,271	671	N/A
2000	17,640	N/A	N/A	10,077	N/A	N/A
Total		**$153**	**($726)**		**$1,062**	**$216**

SOURCE: *Best's Aggregates and Averages—Property/Casualty* (2001)

billion. Robert Blanco, recent senior actuary with The National Council of Compensation Insurance, has indicated that the deficiency may approach $20 billion. A deficiency in the range of $15 billion to $19 billion implies that the equivalent of one full year's workers' compensation losses are not accounted for in the reserves carried by the industry—a very serious problem.

Medical Malpractice. Large upward developments in reserves for medical malpractice liability also precipitated dramatic price increases and strong underwriting actions—including nonrenewal notices in 2001—for this line of insurance.

Deterioration of Underwriting Ratios Continuing

The calendar year financial statement combined ratios for commercial lines of insurance continued to deteriorate during 2000, as shown in Figure 6. Only commercial multiperil and commercial auto improved slightly while the other three largest components of commercial lines deteriorated. The price increases in workers' compensation and fire and allied lines in 2001 were making progress toward improved results. The events of September 11, however, will wipe out the gains made, leaving combined ratios at these unacceptably high levels and workers' compensation reserve deficiencies not addressed.

FIGURE 6

Deterioration of Underwriting Combined Ratios Continued in 2000

Calendar Year	Workers' Compensation		Fire and Allied Lines		Commercial Multiperil		Commercial Auto		Other Liability	
	Earned Premium (billions)	Combined Ratio	Earned Premium (billions)	Combined Ratio	Earned Premium (billions)	Combined Ratio	Earned Premium (billions)	Combined Ratio	Earned Premium (billions)	Combined Ratio
1995	$26.0	97.0%	$8.1	109.2%	$18.3	112.5%	$17.0	108.1%	$18.1	143.6%
1996	25.0	99.7%	8.7	101.3%	18.7	118.3%	17.3	110.1%	18.6	123.5%
1997	23.9	100.7%	8.5	97.7%	18.8	111.1%	17.8	110.8%	19.1	110.6%
1998	23.1	107.6%	8.6	110.2%	18.8	119.7%	17.9	113.8%	18.8	114.5%
1999	22.0	115.3%	8.3	111.8%	19.0	118.1%	17.8	118.0%	18.1	109.1%
2000	23.5	118.2%	8.1	112.9%	9.2	115.0%	18.8	115.7%	19.1	112.0%

Note: Combined ratio is combined ratio after dividends to policyholders before inclusion of investment income.
SOURCE: *Best's Aggregates and Averages—Property/Casualty* (2001)

Commercial Auto. With a quicker payout required, the commercial auto underreserving (cited in last year's article) is being addressed faster than that for workers' compensation. The carriers' realization that these reserves were required resulted in sharp pricing and underwriting actions beginning in 2000 and continuing in 2001. Unrealistic competitive pricing was quickly halted in the commercial auto market segment. The actions taken have helped drive some consolidation in the trucking industry, and refocused major trucking firms on safety and driver training.

The U.S. Commercial Lines Cycle

Paul Brehm, the group chief actuary of Saint Paul, Minnesota-based The St. Paul Companies, has compared growth in commercial lines net written premium against long-term growth in the consumer price index (CPI) to estimate the deviation from adequate pricing of commercial lines over the years. While admittedly not a perfect measure, the graph produced from the calculations provides a useful picture of the relative pricing adequacy and of the commercial lines pricing cycle. This graph shows that 1999 was the bottom of the third major soft market since 1950. (See Figure 7.)

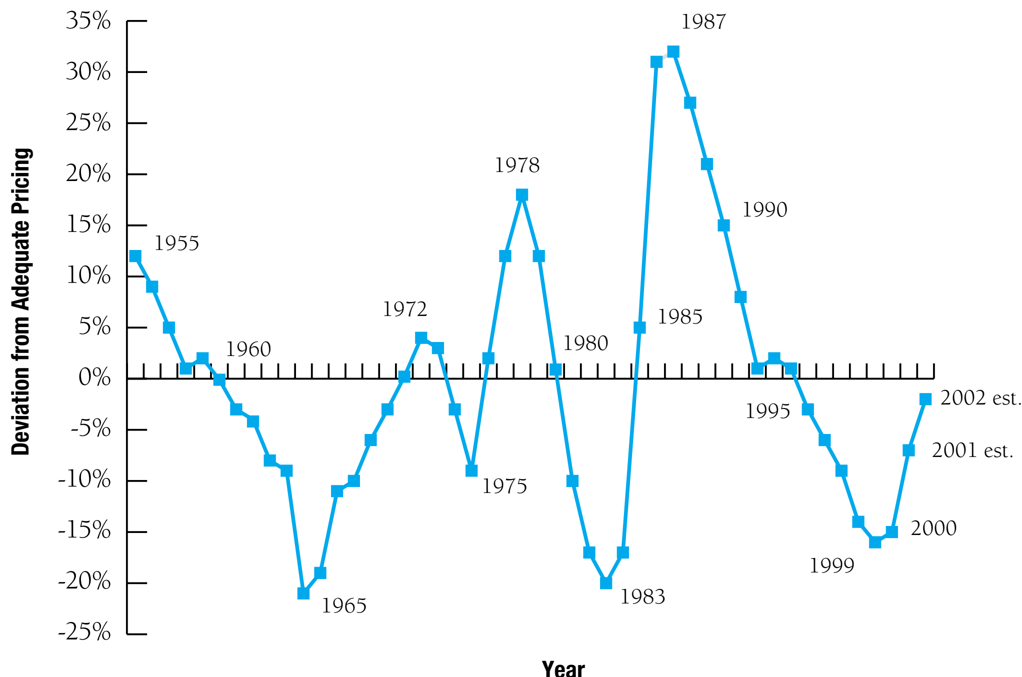
This past summer, prior to September 11, Douglas Leatherdale, chairman of The St. Paul Companies, said he expected that the current cycle of rate hardening in the United States would mirror the only other hard market cycle on record not driven by solvency issues—the upturn from 1965 to 1972. The magnitude of the September 11 losses, however, and the effect on underwriting results and the reduction of surplus in 2001, will likely cause a second sharp incline in the graph for 2002. The commercial lines insurers are now forced to continue pressing prices upward to fund reserve deficiencies, replace the surplus lost in 2000 and 2001, and regain profitability.

Ahead in 2002

Writing an article for a monthly magazine to be published in January means that a full calendar quarter

FIGURE 7

U.S. Commercial Lines Cycle



SOURCE: St. Paul actuaries' 2001 analysis by Paul Brehm, group chief actuary, based on data from A.M. Best
Estimates for 2001 and 2002 by Gregory Alff

passes between the article being finalized and the month it appears in print. The attacks of September 11 and the dark prospects for the fourth quarter at the time of this writing make detailed projections for 2002 impossible. Key elements of the commercial lines environment, however, are clear enough. The events of September 11 are a major blow in conjunction with the challenges that were already facing the industry in its struggle to recover from the depths of a soft market. The strong surplus and recent surge of price increases across virtually all lines, however, will allow the unprecedented catastrophe losses to be absorbed.

In order for pricing of each line of insurance to stand on its own, the most significant repercussions will likely be:

- A very hard market will continue through 2002, with a second round of strong price increases.

- The hard market portion of the property/casualty pricing cycle will lengthen into 2003, with prices not beginning to plateau until the middle of 2003.

- The financial blow to reinsurers from September 11, which has resulted in lower reinsurance capacity available from individual reinsurers, will make it increasingly difficult to complete layers for the largest concentrated property and liability risks.

- There will be, as has already been demonstrated, increased interest in the use of captives and self-insurance by large companies looking to avoid the second round of sharp price increases and have the ability to access reinsurance markets individually.

- Financing of concentrated risk through capital markets and financial market alternatives will likely be made more difficult. In response, new vehicles are already appearing, including a Bermuda-based reinsurer with $1 billion in initial capital, launched jointly by U.S. insurers AIG and Chubb, and investment bank Goldman Sachs.

The Bottom Line

The greatest threat at this time is the potential for a second major catastrophe, either from an act of terrorism or from a natural catastrophe, such as a level 4 or level 5 hurricane. Such an event, coming in the next six to twelve months, could trigger serious solvency concerns for some major carriers. Provided the industry can move forward through 2002 with no additional catastrophe costing in excess of $10 billion, it will, as a whole, achieve pricing adequacy and improve financial performance over the next three years. That recovery, however, will be uneven; further consolidation of carriers may occur, even as new entities emerge.

As prices rise sharply, these new entrants may enter into the field of commercial lines underwriting. Care will be needed to differentiate between strong, long-term capacity and new, naive capacity, which could forestall full recovery with premature and unfounded price competition. RM

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