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# ARE GROUP LONG-TERM-DISABILITY PROFITS ON THE DECLINE?

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The historical profitability of group long-term disability will be discussed along with the effects of benefit liberalizations, declining interest rates, and economic conditions on profitability.

MR. BARRY T. ALLEN: I'm vice president and LTD actuary at Provident Life and Accident Insurance Company. I will be moderating as well as speaking. John Antliff is a consulting actuary who annually does a very interesting study of profitability. He will enlighten us as to exactly what the numbers show. Paul Hitchcox is second vice president and LTD actuary with UNUM Life Insurance Company of America. And I want to thank in advance, David Andreae, associate actuary at Provident, who will be our recorder.

MR. JOHN C. ANTLIFF: Just to remind us, the question that we're addressing this morning is, Are LTD profits on the decline? I think the answer is yes. I've conducted a survey each year for the last nine years. Twenty-three companies participate in the survey, and those 23 companies, in the aggregate, had a net after-tax gain in 1993 of only 3% of premium. That was a pretty dramatic drop from the previous year, which was 7.8% of premium, which in turn was down somewhat from the average of the five years 1987-91, which was 9.4% of premium. Again, that was way down from the five years before that, when the average was 13.2%. The main reasons for the rather sudden decline last year are as follows. First is reduced investment yields. Second is continuing stiff competition on price and underwriting. The third reason is an increase in expense rates resulting from an increase in lapses. Fourth, it seems clear from the evidence that there was a substantial increase in the level of claims expressed as a percentage of some kind of an expected standard.

The purpose of the survey, of course, is to help the LTD insurers monitor industry results, because you can't get the information from the NAIC blank, where it's nicely hidden along with all other health coverages. Before we analyze the downward trend in the profit margin, I'd like to look first at growth in premiums in this line.

Table 1 shows LTD sales in terms of annualized premium and compound annual rates of growth. Of course, the LTD sales include new business on old cases. You see a pattern of steadily increasing sales. Going back to 1982, which is the first year covered by this survey, you see a steady increase that averaged 15% in the five years from 1982 to 1987. Then you see a rather dramatic surge in 1988, which amounted to 46%, and then a plateau for the next three years (1989-91), for which the growth averaged a mere 1%. There was a second surge in 1992, with an increase of 24%. Finally, total 1993 sales for these 23 companies were just a little less than \$300 million and that was a nice gain of 9% over 1992. The average for the 11 years from 1981 to 1993 was 14%.

## TABLE 1 LTD SALES ANNUALIZED PREMIUM AND COMPOUND ANNUAL GROWTH OF 23 COMPANIES

Year	Premium (Millions)	Annuai Growth
1982	\$72	
1983	74	
1984	90	
1985	122	
1986	139	
1987	145	15% from 1982 to 1987
1988	211	46% from 1987 to 1988
1989	228	
1990	219	
1991	220	1% from 1988 to 1991
1992	272	24% from 1991 to 1992
1993	296	9% from 1992 to 1993
		14% from 1982 to 1993

Table 2 shows the year-by-year history of growth in total earned premium for the 23 companies. There was moderate growth in the first five years, averaging 4%. In the following five years, earned premium growth accelerated rather dramatically to an 8.7% annual rate. It accelerated again in 1993 with an increase in earned premium of 10.6%. The average over the 11 years was 6.7%.

TABLE 2				
TOTAL EARN	ed premium	OF	23 LTD	INSURERS

Year	Premium (Millions)	Annual Growth
1982	\$781	
1983	781	
1984	812	
1985	867	
1986	911	
1987	950	4.0% from 1982 to 1987 (Sales 15%)
1988	1,026	
1989	1,170	
1990	1,268	
1991	1,362	
1992	1,437	8.7% from 1987 to 1992 (Sales 13%)
1993	1,591	10.6% from 1992 to 1993 (Sales 9%)
		6.7% from 1982 to 1993 (Sales 14%)

Table 3 is a comparison of what's in this survey versus an estimate of the total industry. As shown, the 23 companies in this survey amount to somewhat less than half of the industry. Although these 23 companies are quite large, we are missing the two largest. That's why that fraction is less than half. In 1993, there was \$1.6

billion of premium in the survey, compared with \$3.8 billion for the industry. I think it's reassuring to see that these companies were not atypical as shown by their 7% compound annual rate of growth over the 11-year period, which is very close to the estimate for the total industry. It's interesting that the pattern of growth accelerates somewhat more for these 23 companies than for the total industry. In other words, it goes from 4.0% to 8.7% to 10.6%. Whereas the growth rate for all insurers is a little flatter from 5.2% to 8.6% to 8.6%, respectively.

		23 Insurers		All Insurers	
Period	Year	Earned Premium	Growth	In Force End of Year	Growth
1982-87	1982	\$781	4.0%	\$1,800	5.2%
1987–92	1987	950	8.7	2,320	8.6
1992–93	1992	1,437	10.6	3,500	8.6
198293	1993	1,591	6.7	3,800	7.0

	TABLE 3		
LTD PREMIUMS	(MILLIONS	OF DOLLAR	(S)

<sup>a</sup>Compound annual growth

Table 4 shows the 23 companies in the survey, ranked by 1993 LTD premium. Twelve of the largest 16 companies participated in the survey. Number 12 in the survey, which is the Guardian, is 16th in the industry. The missing companies in the industry are UNUM (number 1) and CIGNA (number 2). Metropolitan, Standard, and Hartford are in third, fourth, and fifth place. Sixth and seventh are the other two nonparticipants, Fortis and CNA, respectively. Then Prudential picks up in the eighth spot.

Table 5 is an analysis of the growth history. The first column is based on the same numbers as shown in Table 3. The 5.2% shown for 1982-87 is the same number, and the 11-year average (7%) is the same. But the other two numbers are different from Table 3, because the periods of time are different. The analysis shows that if you take the growth pattern for the total industry (all insurers) and take wage inflation according to the Social Security Administration Office of the Actuary, the result is to remove 4.9% in the first five years, 4.5% for the next three, and 3.3% for the last three. Note the deceleration in wage inflation. The next column shows estimated rate reductions in LTD, which were vigorous in the period from 1982 to 1987-an annual rate of 3.5% (these are estimates based on different kinds of input). Then people began to see that they were getting a little carried away, and the rate reductions slowed down only to 0.5% per year in the three years from 1987 to 1990. Then in the most recent three years it was about 1%. Subtracting out the middle two columns on Table 5 from the first column results in an estimate of real growth, which can be thought of as the increase in the number of persons insured, plus the increase in the value of benefits in relation to payroll. The result is 3.9% for the first five years, jumping to 5.9% for three years, and then dropping a little to 4.6% in the most recent three years. I think we can conclude that shows steady progress, and we can be reasonably satisfied with the success of our efforts in extending insured LTD benefits to more and more workers each year.

TABLE 4				
TWENTY-THREE COMPANIES RANKED BY LTD PREMIUM				
CONTRIBUTING COMPANIES				

Companies	1993 LTD Premium (million)	
1. Metropolitan	\$234.6	
2. Standard	221.4	
3. Hartford	210.2	
4. Prudential	114.2	
5. Revere	100.4	
6. Aetna	89.8	
7. Travelers	87.7	
8. Teachers	62.1	
9. Reliance	59.7	
10. Phoenix Home	57.4	
11. Provident	53.2	
12. Guardian	49.8	
13. Group America	46.0	
14. Mutual of Omaha	41.2	
15. Sun	32.9*	
16. Great-West	31.9*	
17. Allianz (NALAC)	30.0	
18. Confederation	23.2*	
19. Combined	17.6	
20. N.W. National	16.5	
21. Canada	15.4*	
22. N.W. Mutual	11.0	
23. Allmerica (State)	10.3	
Total	\$1,616.5	
	(revised from \$1,591)	

\* U.S. business

TABLE 5 ANALYSIS OF GROWTH

Years	Total Compound Annual Growth	Wage Index per the SSA	LTD Rate Reductions	Real Growth
1982–87 1987–90 1990–93 1982–93	5.2% 10.1 7.0 7.0	4.9% 4.5 3.3	3.5% 0.5 1.0	3.9% 5.9 4.6

There's another little bit of information I'd like to throw in at this point, which was published in the April 1994 issue of *Employee Benefit Plan Review*. It reported that LTD represented 9.4% of total health premiums (including equivalents) in 1993, which was higher than I had realized. It also said that ASO premium equivalents were 7.8% of LTD, which may be a little lower than some of us would have guessed.

Now we're going to the main event, which is the bottom line over the 12-year period. The after-tax profits shown on Table 6 include investment income. (I think even the property/casualty companies have decided that LTD gains should be reported on the basis of including investment income.) In addition, the results are after-experience refunds and federal income tax. For the five years from 1982 through 1986, profits were terrific, around 14%; then they suddenly dropped in 1987. But results were still pretty decent compared with other coverages. Profits held up reasonably well in 1992, but last year (1993) they suddenly dropped to 3% of premium. The last column of Table 6 shows that of these 23 companies, nine had a net loss on LTD in 1993. That happens to be exactly double the average of the previous 11 years, which was 4.5 companies with a loss.

Year	Amount (Millions)	Percentage of Premium	Number of Insurers with Loss
1982	\$77.6	9.9%	3
1983	109.5	14.0	4
1984	121.0	14.9	1
1985	119.5	13.8	3
1986	120.3	13.2	4
1987	81.8	8.6	7
1988	89.5	8.7	6
1989	111.2	9.5	7
1990	138.2	10.9	4 .
1991	122.8	9.0	6
1992	112.6	7.8	4
1993	47.7	3.0	9

TABLE 6 LTD AFTER-TAX PROFITS

Table 7 is a summary of the previous tables. It shows that for the first five-year period, the premium was averaging about \$830 million and the net gain was \$109, or 13.2% of premium. In the second five years, that dropped to 9.4%, though the absolute amount of the gains was holding up rather well. The profits for 1992 are all more than \$100 million. But the premium increased substantially over this period to \$1.4 billion. Thus, the gain dropped to 7.8% of premium in 1992. But in 1993, even the absolute value of after-tax profits dropped to less than \$50 million. So the question is, why the decline from the 7.8% in 1992 to the 3% in 1993?

TABLE 7 PROFIT SUMMARY (\$ MILLIONS)

Year	LTD Premium	Net Gain After Federal Income Tax	
1982-86	\$830 per year	\$109.6	13.2%
1987–91	1,155 per year	108.7	9.4
1992	1,438	112.6	7.8
1993	1,591	47.7	3.0

In the introduction, I said the first reason for the decline in profits was the drop in investment yields. The *ACLI Fact Book* tells us that in 1989, the average yield for life insurers on all lines of business was 9.47%. Two years later in 1991 it was 9.09%. In 1992 it dropped 51 basis points to 8.58%, and 1993 showed another 40 basis-point drop to 8.18%. So the drop over the period of four years was 129 basis points, 40 of which were in 1993.

To translate that into a component of our drop in profits in LTD, the first step is to convert the 40 basis points from a percentage of assets to a percentage of premium. A drop in yields of 0.4% of assets is approximately 0.7% of premiums. Then subtracting federal income taxes, but adding the amount by which some of the companies have strengthened their reserves because of the drop in yields results in 1% of premium. So my analysis says that about 1% of the total drop of 4.8% was due to decreased investment yields.

The second major reason for the decline in earnings is that the average premium rate on in-force business dropped. I believe this accounts for about another 1% of premium. I don't think that was intended or planned. I think what's happened here is the effect of many individual case actions, in which both rating and underwriting yielded to competitive pressures. In the survey, 29 companies commented on what was happening in the market. Eighteen of those 29 volunteered that the competition continues to be exceedingly intense. I estimate that what we're looking at is a drop of about 1%, which is the net effect of all those case-by-case actions, partially offset by an effort by some companies to raise their manual rates, to tighten their renewal rating, and also to tighten their underwriting.

The third item, which is not as significant, is the increased expense rate that arises from an increase in lapses. My rough guess is that could be worth about 0.3% of premium. If all of that is true, then we still have 2.5% of the total 4.8% reduction in profits to account for. The only reasonable inference is that the level of incurred claims has risen by 2.5% of premium. The question, of course, is why is that? I think we've convinced ourselves that we now have more effective claim administration, so claim administration is not one of the reasons. Second, we cannot point to a rise in unemployment because, in fact, unemployment dropped from 7.3% at the end of 1992 to 6.4% at the end of 1993. I think the major reason is the fact that we had low inflation. If you look back to the early 1980s when unemployment rose sharply, there was a recession in 1980 and another recession in 1982. And yet LTD insurers were making out like the proverbial bandits. Why was that? It had to be because of the terrifically high inflation, which meant that potential claimants were reluctant to go out on a fixed income, and existing claimants had a great incentive to return to work, because of the erosion in the purchasing power of their LTD benefits. In 1993, on the other hand, inflation over the year was 2.7% according to the CPI.

The second probable cause of the increase in claims is two-income families. It's no longer such a disaster if one of the breadwinners goes out on disability and accepts a 60% benefit as long as the other spouse is still fully employed. Third is the effect of benefit liberalization, most of which happened in the 1980s. But it's quite believable that the effect of this was still causing a continuing deterioration between 1992 and 1993. Fourth, we have the rationalization that we have a weakening of the work ethic and a greater sense of entitlement. One trend that might explain the greater

sense of entitlement is the trend away from noncontributory plans. When employees are paying for their coverage, especially if it's employee pay all, then they think they have a right to derive some benefit from it.

Finally, I believe that (I haven't been able to confirm this) the reduction in unemployment in 1993 did not extend to those people who are insured for the highest LTD benefits; i.e., the managerial and professional classification.

In conclusion, I'd like to offer a prognosis on what we can expect in 1994. With respect to interest rates, long- and short-term interest rates both rose by a full 1% from February 20 through May 20. Yesterday, long treasury bonds, according to the Shearson Lehman Index, rose another 10 basis points to 9.47%. Unemployment has dropped already this year from 6.7% in January to 6.0% in May, which is the lowest since late 1990. I predict that it's going to stabilize around 5.8-6%, which averages 5.9%. On the basis that was in effect for measuring unemployment through the end of the last year, that figure would have been 0.4% lower. In other words, it would have been 5.5% according to the scale that we used for many years. We can obviously expect that trend to be favorable for LTD, just as the increase in investment yields is favorable. Third, inflation in CPI, according to most economists, is going to rise somewhat. Last year it was 2.7%, and they're predicting about 3% during this full calendar year. That would be favorable for LTD. The only thing is that so far this year it has actually dropped to 2.4%. So I guess those economists are looking at many other factors. Incidentally, the bond market also seems to be very fearful of inflation soon to emerge.

Some of the adverse LTD experience last year could have been a one-year fluctuation. The pros in this game understand that LTD is a volatile risk. Some of the leading insurers may be willing to absorb occasional bad years without overreacting. Never-theless, most of the insurers will not be complacent about last year's results, especially those 9 of the 23 who actually suffered a loss. The 3%-of-premium net gain is a return on equity of approximately only 7.5%. Therefore, I think we can expect companies will take further corrective action in 1994 on top of the rate increases and the other tightening that they started last year and the year before. The effect of those earlier actions is now fully in place in this calendar year, and that, combined with the moderately favorable economic factors, should produce an improvement from 3% to maybe 4% or 5%. Of course, my 90% confidence interval is plus or minus 2 or 3. So I guess I'm really saying the range is somewhere between 2% and 7%. But the average of those is 4.5%, which is about 1% more optimistic than what I was saying on April 18, when I issued my report.

MR. ALLEN: I'm going to try to attack it from a different angle. I want to back up and consider a few basics, make some comments on those, and then tie them into business strategy and come down to some thoughts.

I have a list of sources of LTD profit.

- 1. Explicit loads to manual premiums
- 2. Investment income > assumed
- 3. Morbidity < assumed
- 4. Expenses < assumed

# 5. Miscellaneous others

- Profits on fees for services
- Management information systems to reshape manual rates and/or underwriting
- Indirect earnings resulting from renewal mechanics
- Etc.

First, we're all aware of explicit loads to manual premiums. I think it's possible that in the competitive rate wars that we've been through lately, some people have probably cut some of these loads in past years. And now they have to increase them to compensate for the decreased investment income.

Second is investment income that is greater than assumed. By investment income I mean the monthly income, the capital gains, the bond calls. Here I think that we all have to be very careful, as it's a key area for misunderstanding. One must be very careful to define the basis used in calculating the assumed. The basis can be manual premiums, GAAP reserve assumptions, management information reserve system assumptions, renewal rating reserves, etc. There are various types of interest rates floating around. If you're talking to underwriters or salespersons who are really pushing for aggressive rates, they're probably saying assumed was 8% or 9% or whatever it was that we made last year. You have to be careful here.

Third is morbidity, less than assumed. This area may have received too little attention in the days of high investment yields. Now it's becoming more and more important. I think all three of us are going to be touching on that quite a bit.

Next is expenses that are less than assumed. Here the challenge is not to cut back on those expenses that result in real savings with respect to morbidity or persistency. Perhaps in the recent struggle to be extra competitive on rates, some vital functions may have been cut back. With respect to all of these things, by the way, I consider myself to be casting stones in the glass house, at my own house and in other houses.

Fifth is miscellaneous other sources. Fee for service is one that's often overlooked. The company may be small and negligible, but some companies offer a significant volume of special reports or analysis. I just did a special incurred but not reported study for a very large client, that was not in our retention calculations, so we're charging the client extra. Sometimes ASO clients want some extra work, too, and I would call that more or less a consulting charge. I'm going to add another thing under miscellaneous—using your management information system (MIS) to reshape your manual rates and/or your underwriting. A good MIS is vital for managing and integrating all of the sources of profit. As an example, if experience on doctors is poor, identify the specialties that are causing the problems. That has been a neat one lately, because in the last few years, a number of companies (UNUM, my past company, my current company, and others) have gone back and recoded the standard industrial classification (SIC) code for all doctor groups into about 30-40 different specific specialties. On the day you do that, the specialties that are causing you problems will probably jump right out at you. That's only one aspect of your MIS system.

Another thing is indirect earnings resulting from renewal mechanics. I think this one is really overlooked. There are many issues here. For instance, using only the last three to five years of incurred claims for experience rating results in the current profit or loss on claims incurred prior to that period falling to the bottom line. That's indirect and that's subtle. The actuary may understand that, but many other people don't. Another example is a load for contingencies in the retention formula. Have your underwriters been shaving or dropping it consistently to be more competitive by having lower retention charges? These are subtle things, but I think now, with the drop in investment yields, we have to get back to basics and say, where are all of our sources of profit? Do we understand them all? Once we do, have we communicated to management? And once management knows, what does it do?

I'm going to go now to what I call business strategy, where everything is coordinated. For maximum results all of the following points should be addressed for both first-year and renewal business. With respect to marketing, is everybody in your company on the same page? Are you all coordinated toward the same goal? Is there buy-in on publicity and company image? Should you focus on white-collar versus blue-collar or gray-collar sales? Small, medium, or large size cases? What is the strategy with respect to new business on old clients? Have you cut expenses so that you can't carry out this strategy? I'll discuss this issue in more detail later.

Then there is risk selection by the home office and the field. Even with a well-trained home office staff, the degree of training given to the field people has a huge influence on the morbidity gains and the persistency of the business. This might be one of the most underrated aspects of LTD management. It is one of the things that's consistently done better by more profitable companies. I could talk all day on this one.

Both product and pricing discipline are necessary. Too often a new player will initially plan to compete on price, but be more selective on underwriting than the established players. But later it fails to maintain the discipline in the underwriting area. The lack of discipline invalidates the initial plans and jeopardizes the entire venture.

People must buy into the company strategy. As I said before, everybody should be reading off the same page, in the same chapter, and in the same book. Home office people must be made accountable for training and profits. Field people must also be made to focus on the bottom line. This can be done by various combinations of incentives and penalties. If the field people only get paid based on sales, you get what you pay for: sales without regard for company profit. A very good point was made by Hal Palmer in the session on "How Do You Make a Profit in Individual Disability Income." Even if the data that you can pick up through your MIS for a particular office are not actuarially very credible, it may still be worthwhile to publicize that data. It can make people aware that they are having problems. Not only should you make them aware, but you have to go a step further and say, I've subdivided a little bit, and this is what appears to be your problem. Just making people aware that you have the data, that you're watching the data, and that it has gotten down to them, is important in making the office manager aware, especially if several representatives are in the same office. Let the office staff know who's doing better and who's doing worse. There are subtle pressures, even if you're not going to put in a compensation system based on the numbers because they are not credible or for whatever reason.

Even if the current competitive rate pressures are not so intense, you will find that more of the profits made over the lifetime of the LTD block of business are in the later years. It is therefore very important to service the business and to do other things that will bring about a low lapse rate. As interest rates decline this becomes more and more important. I don't think that you can maintain any type of double-digit ROE, particularly 15%, in a low interest rate environment without doing all of the above things very well and maintaining a lapse rate not much more than 10%. There are very few companies down at that level. I think this is a key thing. You have to put all of your sources of profit together, understand what's driving them, and then explain to management exactly how things are going to vary by lapse rate. Once you do that you'll find that there's a better understanding and a better buy-in to increase expenses to do things that are important. Now let's tie it back to another thing I mentioned—new business on old clients (NBOC).

To do a good job developing NBOC, you must do some communicating, especially in the smaller plans where they haven't been in touch with your claims area because they haven't had a claim. Doing some extra communicating and client service will cost you a little bit, but if you can sell a little bit extra on an old case that you have talked with and given some extra service to, then they're more likely to stay with you. In addition, with respect to NBOC, the rate for whatever feature you're adding generally is much more profitable than the rate for the existing coverage. I think that's one of the reasons for the industry having the growth in premiums that John was discussing. Although UNUM was not on his table, it and many companies like it specialize in NBOC, while others kind of ignore it.

I see several challenges facing the industry as we attempt to return to a more profitable environment. First, many companies have not done a good job with respect to one or more of the elements of business strategy I have discussed. Instead, they have relied on extra profits generated by high investment returns. Sometimes it has just been because some of the managers are busy, or they want to be aggressive, or they haven't done their research and said, "Gee, if I do something over here how is it going to affect this idea over here?" I came to Provident about a year and a half ago. Before that I talked to a number of other companies, and I saw this a lot. The knowledge about where their profits were coming from and the resulting coordinated business strategy was just not the best it could have been. Again, I want to state here an example of NBOC. If you don't have NBOC, profits and persistency are just not up to where they could and should be.

Second, investment returns are continuing to decline and will decline further. As bonds are called, the proceeds are reinvested at lower rates. As John brought out, and this is important, investment income drives your disabled life-reserve assumptions. So you are not just losing a little investment income this year compared with last, but the lower interest rates are impacting your profitability because of their effect on disabled life-reserve interest assumptions.

I think we've all touched on the declining work ethic a bit. And I think we're all aware of it. In the June 1994 edition of *Risk and Insurance*, there was an article on claims management. It stated that the Insurance Research Council in Oak Brook, Illinois reported that its 1993 public attitude monitor suggests that there is a significant group of consumers who don't perceive insurance fraud as a crime. The article

was focused more on the property/casualty side, but I believe it's clearly applicable across the board.

Growth in technology brings new disabilities. We're all aware of carpal tunnel syndrome and other conditions. John mentioned dual-income families. For those of you who haven't constructed examples to see how that works, a good one was included in the *Record* documenting the group LTD session at the 1993 San Diego meeting. Tim Knott showed a concise example of how total family income changes when one spouse of a dual-income family is disabled.

Benefit liberalizations include high maximums; own occupation definition to age 65 or longer, or for more classes; higher replacement percentage etc.. If you do have a good MIS system and you really look at the mathematics as to what a particular rich benefit option is going to cost, you'll see that experience is usually worse than the incremental difference in your expected claims. I think what happens there is you clearly have a selection factor. For example, my cost-of-living adjustment (COLA) experience would be much worse than if I just loaded the rates for an increasing annuity. When antiselection is a possibility, you need to make sure that your underwriting rules are as appropriate as possible. You may also need a selection load. To summarize, a lot of the problem is not just the interest rate per se. I think that high interest yields in the past have put blinders on people, and they have said, "Gee, I want more of this business, lets go in and be more competitive."

Target markets have been a hot topic recently. Many underwriters and salespeople think that target market means "Where can I shop with my pencil, where can I lower rates?" That's not the only reason you have a target market. You should define a target market where you can make some extra profit. You don't want to just hand it away by lowering the rates. What can you do in your business strategy to target a certain segment that has been profitable in the past?

I think that the lack of a thorough and complete business strategy that addresses all of these sources of profits is essential especially since interest rates are coming down. Where am I going? How am I going to get there? I'll turn it over to Paul who has some more interesting observations.

MR. PAUL D. HITCHCOX: I will be addressing three major areas. First is a theme that you've heard about frequently during the last few years from myself and Tim Knott: "the impact of economic considerations on LTD and LTD profits." Second the interest environment is one factor that's obvious. I'll add a little to that, in terms of taxes. Third, I will get a little more specific about some of the emerging risk which is going on and what we've seen within UNUM.

Pricing in the 1990s depends on both tangibles and intangibles. The tangibles are things that are fairly obvious to all of us. The SOA exams have about ten pages on LTD. So of course we're all familiar with the basic pricing factors, such as occupation, age, and industry. You have to make sure that you're charging the right rate in the first place if you're going to try to make any profit in this business. But as you've heard, the intangibles are the trickiest part of this business. First is the subjective nature of disability. It's always kind of fun dealing with the brokers who think they understand LTD. We had a case last week wanted a 100% replacement ratio. They

honestly believed that was the right thing to do for the client. And they said that as long as you just make sure that there is appropriate benefit adjudication, we can have this 100% replacement. We had fun trying to debate that.

Certainly attitudes of employees and employers have been changing a lot in the last ten years. I'm not sure we're all willing to knock ourselves out to make a living anymore. To the employee, LTD must be considered an alternative. If there's a spectrum out there with a job on one end and no job on the other end, then LTD is somewhere in the middle.

Health care reform has been a hot topic lately; it's been on everybody's minds. Recently employers have been very careful about where they're spending their dollars. They are very uncertain about what's going to be happening in the next 12-18 months, so they are paying much more attention to where those dollars are being spent. I'll discuss financial stability and economic factors later.

Participation and selection is an oldie but goody. I want to show you something along those lines, as it affects some of the shifts that are taking place away from employer pay-all plans and toward plans in which the employees are actually picking up part of the cost. Benefits are becoming more and more attractive. Some of the numbers with the tax rates put in are very surprising.

The last intangible, competition, is our old favorite; it is simply making sure that we're all on our toes.

One way to look at the recent problems with LTD profits is to look at what's possible for the LTD market in terms of trying to grow. What is it that keeps us from growing as fast as we might want to? First, we all know about health care reform. This reform is likely to restructure the entire health care industry. Hospitals are having a tough time trying to figure which way to go. There are all sorts of antitrust issues with hospitals. An example is in Portland, Maine, where three hospitals are trying to come together on a trial basis to see if they can work around some issues. They view it as an opportunity to get some synergy among the hospitals, instead of everybody having their own fancy units.

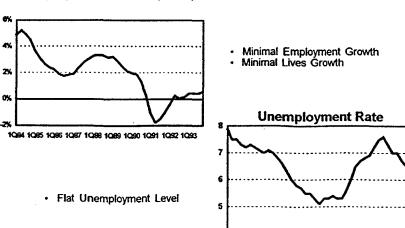
The debt binge of the 1980s has an influence on our market—the whole idea of what people spent in the 1980s and the attitude toward the extravaganza of the 1980s. Third, there's no question that industries out there are trying to become flatter instead of fatter. Corporate restructuring has ramifications not only to the people who are being laid off directly, but also to the next layer, the middle managers who have been under the stress of having to layoff the lower level employees. Everybody who remains is now trying to pick up the work that was left behind, i.e. productivity. The result is more stress on the rest of the organization.

When we were hit with the recession in the 1980s, part of the reason for LTD's success was that inflation made it very expensive to stay out on disability. But President Reagan came along and made sure that employment growth was every-thing we had ever asked for. One of the major industries that grew in the early 1980s was the defense industry. Just the opposite is taking place today. Cutbacks are taking place. Anybody who is watching what is going on in Seattle with Boeing

knows about this. You may not be insuring Boeing, but who are you insuring around the Seattle area? What else might be affected as Boeing cuts back? i.e., the trickle down effect. Permanent job losses are the tragedy of the 1980s, which is the way we must look at it in the 1990s. Between one and two million jobs that were out there 10 years ago and are no longer there make it that much more difficult to grow.

The standard model we've used for years has been simply to follow two things: employment growth and the unemployment rate. The simple fact that there is employment growth in the first place suggests that there's an opportunity for claimants to return to work, and there's certainly less incentive to go out in the first place. You can see some startling numbers in Chart 1. The growth rate started dropping down in the late 1980s and early 1990s to the recessionary level where there's virtually no growth whatsoever. If you graph that against profit, you get some interesting pictures. We also follow the unemployment rate. The unemployment rate was seen historically as an indicator that simply suggested that if you knew a layoff was coming, and you had a bad back, you might as well file the application for the disability. So you're filing about the same time that the layoff is occurring. Up goes unemployment, up go our claims; they kind of go hand in hand. We'll be watching whether that still works going forward. That's probably the most difficult aspect of taking these models and trying to apply them. The way employment is going nowadays, you may be back to work but not back to work full time. There are many part-time workers and contract workers, so you may get an indication that unemployment is low. But you're not anywhere close to where you were in the 1980s.

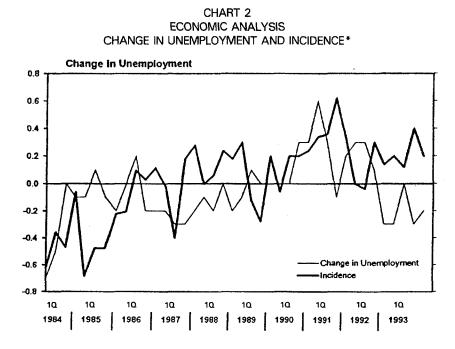




Employment Growth (Yr/Yr)

1084 1085 1086 1087 1088 1089 1090 1091 1092 1093

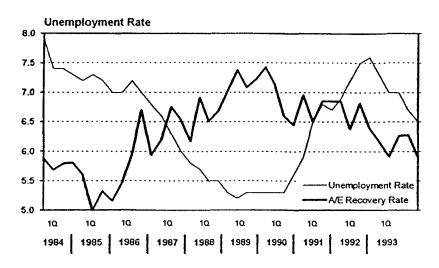
Using UNUM's data, we've put the unemployment rate, or more precisely the change in the unemployment rate, up against incidence (see Chart 2). There is a fairly good correlation. As the change in the unemployment rate moves from 5% to 6% to 7%, the incidence rate rises accordingly. Once unemployment levels off at a high level, the change is zero, and the incidence rate actually drops back down. It's as though there has almost been a purging of claimants from the work force. This pattern is starting to break down a little bit right now in the early 1990s, and I think it's because of some pretty good reasons. Our economist doesn't actually like us saying this, but we've noticed that incidence tends to actually be a little ahead of the change in the unemployment rates. We haven't actually announced this as a leading indicator of unemployment, but it certainly seems to say that.



\*Incidence will remain in the mid-three's as corporations continue to restructure and focus more on productivity

Let's skip from the incidence side over to recoveries. There is a fairly good inverse correlation between the unemployment rate and actual-to-expected recoveries (see Chart 3). When we look at incidence we look at just the raw number. A better way to look at recoveries is to compare it to what you're expecting. As the actual-to-expected recovery rate rose in the late 1980s it seemed to go along hand in hand with the unemployment rate falling to all-time lows. Just the reverse has been happening in the last three years, very much in line with the numbers that John Antliff presented. As the unemployment rate has risen back up to the 6–7% level, our actual-to-expected recovery rate has fallen back down.

CHART 3 UNEMPLOYMENT ACTUAL-TO-EXPECTED RECOVERIES\*



\*The unemployment rate will remain high as the economy struggles to create enough jobs to outpace layoffs and the growth of the labor force.

The previous charts have been based on our old model. Now I'd like to throw out a few of the new indicators that we're looking at. The first one is initial jobless claims (Chart 4). A big part of this for us is to try to make the model work, without being blind to the underlying causes. By looking at the initial jobless claims, you really have the earliest indication of markups, which are those claims that are knocking at the door. They may not be through the elimination period. When we take a look at what's happening and make a connection between those claims coming in the door to some outside indicator, we think we have a better insight into what's going to be happening over the next 12-18 months. Initial jobless claims have been a pretty good indicator of markups. But something that's been a little bit more exciting has been the consumer confidence level. Now I take you back to the idea that disability is subjective anyway. Consumer confidence is based on a survey, and nothing is more subjective than a survey. So it was kind of nice that when we laid those two things on top of each other-the markups, the number of claims actually knocking on the door, and consumer confidence-we have the strongest inverse correlation of any part of the analysis we've done so far (see Chart 5). If anything, it seems to be the best indicator out there as to what's going on. So pay attention to the consumer confidence level. You can decide for yourself whether these two subjective measures have some relationship to each other.

CHART 4 EXTERNAL INDICATORS

**Initial Jobless Claims** 

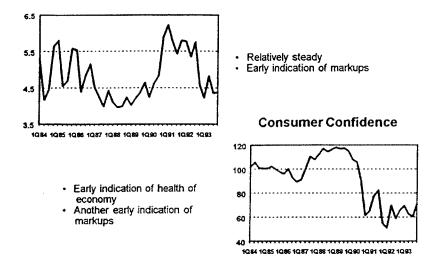
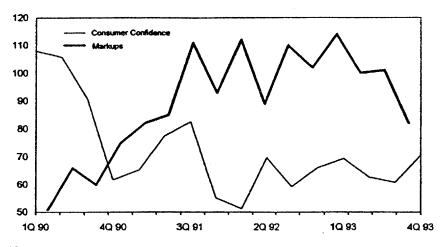


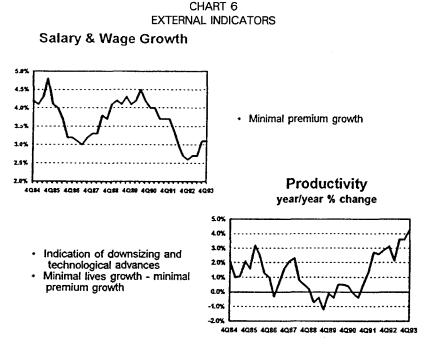
CHART 5 MARKUPS VERSUS CONSUMER CONFIDENCE\*



\*Strong inverse correlation between consumer confidence and markups

This is one aspect that's going to be problematic going forward in the 1990s. Trying to make a dollar in this business is not related to the CPI per se, but to the salary and

wage growth that is probably not going to be there the way it once was (see Chart 6). We may have to get used to the idea that a 2–3% annual salary increase is going to be standard in the economy. When you look at gross domestic product (GDP) or something like that, you may have a false sense of security if you think the economy is picking up, because the gain has been coming from productivity.

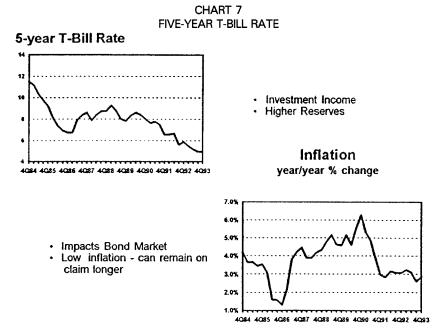


I think we're very much aware of what's been happening with investments (see Chart 7). I guess if you're out there refinancing your mortgage, you have no problem with these low rates. But if you have a couple of billion dollars in reserves, it's kind of a pain. These rates are down, although they have turned up quite nicely in the last quarter. But the pressure that the lower rates have put on the investment income is a major driver of some of the lower profits.

Inflation, which sometimes is a friend of LTD (because it sometimes helps get people off of claim), is down. Years ago, 60% of your salary was not something you wanted to live off of when there was 10%-a-year inflation. But all expectations are that inflation will stay somewhere around the 3% range, so living on 60% of income is easier. The only positive thing is that within the industry, we've all gotten much smarter and stopped selling 6% and 8% cost-of-living adjustment riders.

Let's switch and go to some of the scary aspects of taxation. Let's compare the taxation picture with the shift that has been taking place away from employer-pay plans. If you put these two together, it's rather startling what you can see. First of all, we're all aware of the higher tax rates. In our example, we have used some high marginal tax rates. One big thing to remember is that the Federal Insurance

Contributions Act (FICA) does kick out six months after being disabled, so you're no longer making your payment of 6% or 7% to FICA. So there's a natural force behind the scenes causing your postdisability tax rate to be lower than your predisability tax rate, for no other reason than you're not paying social security taxes. The predisability total tax rate was 41% in 1992 and 48% in 1994. The postdisability total tax rate was 33% in 1992 and 37% in 1994.



Now put that together with the idea that the employer is more often, especially in the face of health care reform, going to be moving away from paying 100% of the LTD plan premium (see Table 8). If you go back to 1992, for a high-paid individual in a 100% employer-paid plan, which was providing a two-thirds or 70% benefit, you were replacing between 75% and 80% of the after-tax income. If you had a plan where the employer contributed 50% toward the cost of the plan, you were getting close to 100% after-tax replacement by anything much over a two-thirds benefit. You can see some obvious reasons why a 100% employee-paid plan didn't make a lot of sense if you were offering anything much above a 50% benefit.

In 1994, many employers have a 70% plan and like the idea of being able to tell employees that they are receiving 70% replacement, but at the same time want to cut back on their contribution. Watch what happens. The 70% plan which was paid for 100% by the employer now replaces over 100% if the employer decides to pay only half for the plan. A message must be delivered to employers, or there will be a backlash when they find out what's happening and they wonder why their LTD experience has gone through the roof. LTD sales representatives should be able to explain to the employer when they think they want to provide a 70% plan, that they

really should provide a 79-80% after-tax replacement. We (the industry) need to get that into their heads.

If the employer would provide a 50% plan, but only pay for half of the premium, it could still replace 78–80% of the after-tax salary. So in a way, we're going to endanger ourselves if we do not make sure employers are fully aware of the implications as they're shifting away from employer-paid plans. It makes all the sense in the world to take these high replacement ratios and restructure the plan a little bit to something that looks like a lot less benefit. But quite frankly, it is doing exactly the same thing as the old plan. I think that's a major point that we must pay attention to as we design plans.

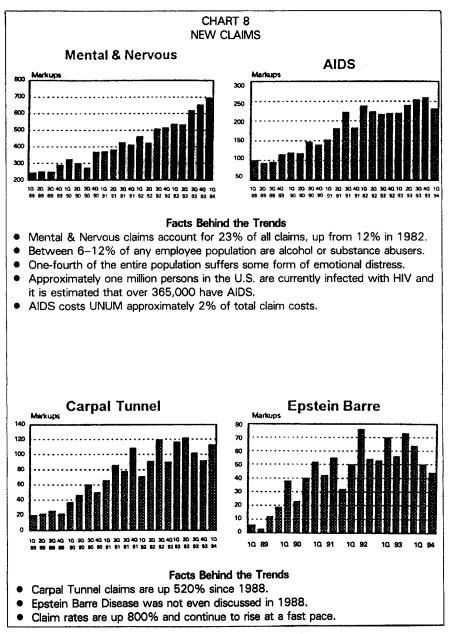
1992	Employer Contribution Percentage			
LTD Benefit	100%	50%	0%	
50% 60 66.6 70	56% 68 75 79	70% 84 94 98	84% 101 112 118	
1994	Employer Contribution Percentage			
LTD Benefit	100%	50%	0%	
50% 60 66.6 70	61% 73 81 85	78% 94 104 110	96% 115 128 135	

# TABLE 8 AFTER-TAX REPLACEMENT LEVELS EMPLOYER CONTRIBUTION LEVELS

I see several trends impacting our industry. UNUM was mostly a white-collar insurer in the 1970s moving toward blue collar. Many of you were already there. It's no surprise that many large cases are looking now to at least test the waters for an insured bid as opposed to just staying self-insured. Finally, there is a general move to individualized group products, or to the idea of the voluntary plans with some type of core coverage, where the employer is only paying for a portion and the employee can buy some additional coverage after that. It's kind of an individual plan on top of a group plan. So some shifts in business have been taking place. The key with respect to trends is something that has been touched upon a few times. There are some new disabilities out there; for example, carpal tunnel syndrome, mental and nervous conditions, emotional stress, AIDS, and chronic fatigue. Chart 8 shows a few numbers associated with these.

Chart 8 shows UNUM's actual claim counts for both mental and nervous and AIDS. Although we're all very aware of the situation, I think the most startling aspect of these figures is the dramatic increase in AIDS claims. They have risen from a level of about 100 claims five years ago to about 250 claims per quarter, about 2.5-times increase. Mental and nervous condition claims went from about 250 claims to about

700. These are dramatic increases. Mental and nervous condition claims had been about 6% or 7% of all claims. They've now risen to well over 10%. The Social Security Administration has seen them go from 12% in 1983 up to 23% recently.



Finally, carpal tunnel syndrome and Epstein-Barr virus are the true new disabilities of the 1990s. It's interesting that I couldn't find any reference to Epstein-Barr, which is a chronic fatigue disease. It was not even discussed prior to 1988. There have been some dramatic increases there.

As John and Barry discussed, the fact that these new disabilities—some of which are caused by changes in the workplace, technological and otherwise—are out there has implications for the LTD industry.

So I'll leave you with that. I won't comment on the name of the session, "Are LTD profits on the decline?" The LTD profits were on the decline, and if you pay attention to what's out there, you can do something about it.

MR. EDWARD W. O'NEIL: John, in your paper I happened to notice something interesting. I was wondering if you and the other members of the panel might want to comment on it. If you look at the percentage of gain, the first one that's shown is 9.9% and the next one is 14%. If you continue down and compare each year with the preceding year, and put a plus or a minus, you wind up with two pluses, three minues, three pluses, three minues, and now you're saying that next year is going to be a plus. Do you think that there's some sort of an underlying cycle similar to the health cycle that we've known and loved for 25 years?

MR. ANTLIFF: No, I don't believe that I would subscribe to that kind of a theory. I don't think you got the dramatic turnaround in LTD that we've had in the small-group medical field and in the property/casualty field, where the underwriting cycle is caused by excessive rate competition, which corrects itself every 3-6 years. I've always believed that the external factors are more causative in the LTD field. As far as the pressure of excessive competition, I think that's ebbing and flowing much more slowly than it is in property/casualty or medical. Maybe that has been happening in the last 15 years, But it is not necessarily what's going to happen in the next 15 years.

MR. ALLEN: I'll agree with what John just said. I would offer up that, of course, as we're doing segmentation and trying to convince people—sales representatives or managers—that there's a problem. It's one of those things where you show them a down here, and they say, well, are you sure? Then you have a chance to debate about what they can do from a sales perspective or plan-design perspective to change something. And to the degree they change it, that's great. To the degree they don't, you're back the second year saying, OK, now it's one thing to have one year of problem segments, and another thing to have two years of problem segments, so now we're going to make a change. So there's some aspect of an underwriting cycle, which should be just a normal part of segmenting the business and understanding where the problems are, and being willing to make a movement—not immediately as soon as you see a problem, but once it's really manifested itself you ought to be able to get those changes out there.

MR. ROBERT B. CROMPTON: I have a question and a comment, both based on something that Barry had said. But they're addressed to the panel at large. The first comment, Barry, relates to your discussion about the involvement of addressing contact with current clients, new business on old clients. If you're advocating some

sort of actuarial involvement in the marketing process, I believe I concur with that. Any comments you want to make in response to that will be appreciated. And then the question would be, what source of profit analysis do you do by market (especially for the target market that you mentioned)?

MR. ALLEN: Well, new business on old clients is generally a systematic approach if you use it. If you don't use it it's just whatever falls into your lap. But it's a systematic approach. You're approaching the client with an offer. Let's say I have a new contract out, and I have some features that I've been selling. Well, let them buy that new contract. Now in reality, the extreme situation is, I have some extra wording in that contract that I really want them to have. I don't like the wording in the old contract, but I have something else I can sell in the new one. And I'll let them have that new contract for one more cent on the rates. That's the extreme example of where you have something that's profitable.

Other examples might be that you want to add something else. Gee, I really think that the cost may be a quarter of a cent on the raise, but I'll charge him a whole cent. You have to decide, as a marketing thrust with your marketing people and with management, what it is you want to sell. How are you going to go about it? More important, are they willing to commit the expenses and the resources? You have to computerize this and keep the offerings as inexpensive as possible. And that's where many people have fallen. I really can't do that today, I don't have the computer capabilities, and so forth. But over the long haul, year after year, you will get the computer capabilities, and a good marketing arm, and a good marketing thrust. It takes a lot of things to come together. Then you can continually offer something extra.

A new rider comes out in the marketplace; for example, the employee assistance program (EAP) was hot. Just going and offering it sometimes keeps you in touch. And even if they don't take it, I really believe that it does have a serious impact on your persistency.

With respect to target markets, my personal approach in the MIS system is trying to decide case by case what we think are appropriate reserves. I take off the valuation actuary's hat, where you're trying to judge appropriate reserves in the aggregate. I go case by case, and say, what are my appropriate reserves?

For instance, take the probabilities of social security. I take everything into account so that on a case-by-case basis I have a good idea of what's going on. Now put that on a computer, even if it's just on a spreadsheet, and slice it and dice it in many different ways. Put in your case characteristics and sort by those case characteristics. When you do that, for instance, one of the first things you're going to do is look at your data by standard industrial classification (SIC) code. Well, OK, that's probably on our computer already. But don't be lazy. Go out and take a look at doctors. Doctors are probably subdivided into three very general SIC codes. Even if you have to hire somebody—a summer student or a clerk temporarily—go and recode those cases. You could have a specific set of 20, 30 or 40 different specialties. Then maybe you can see what's hurting you.

No matter how you slice your business, you ought to evaluate the sales offices and the producers—who's giving you better business? Again, you can only do all of this if you make sure that your reserve analysis on a case level is good. If you try to bury a lot of plus and minus assumptions in the aggregate so the valuation actuary is satisfied that the total reserves are sufficient, and you go and blindly take that reserving system, you will have many anomalies. New issues will probably look absolutely terrible because you haven't anticipated social security yet, and it hasn't come in the door. That's one of the big assumptions you must address.

MR. HITCHCOX: I guess the aspect with NBOC is critical. Again, not to belabor the point, the employers may be out there changing their plans, trying to figure out how else to do it. The actuary should be there to help the sales representative understand why there's a certain plan design that it ought to be changed to. So it is not necessarily NBOC itself, but just simply the proper design of the plan in the first place, and how it should be set up in the 1990s as opposed to the 1980s.

With respect to the question about target markets, that should be nothing more than simply segmentation taken to its extreme. If you want to be in every single market and try to be everything to everybody, that's one thing. It's another aspect of just making sure you know where you want to be. Maybe the other side of the coin is to know where you do not want to be. So identifying target markets sometimes is nothing more than just helping the sales representatives. So when they're out there, they're not trying to pick up every piece of business and just quote everything that's out there. Instead, just be patient and understand where you'd like to be from a strategic standpoint.

MR. JONATHAN ROSENBLITH: Do any of you see any new legislation or recently passed legislation at the state level that might adversely affect group LTD?

MR. ALLEN: No, I can't see that there's anything very recent. We're all aware of those states that have loss-ratio requirements. I know that we don't have very much business at least in one state that has a loss-ratio requirement. Fortunately for us it's extremely good, so we're trying to show them our aggregate business. I had a thought at this meeting after the session, "How Do You Make a Profit in Individual Disability Income?" Dave Simbro mentioned trying to create a rider that gives you a different benefit, depending on the tax basis that you personally have. He was talking about individual disability insurance (DI). One of the things that really bothers me is that when you have a combination of individual DI and group LTD, many companies will be satisfied with an 80% replacement ratio test on underwriting. Eighty percent wasn't even on Paul's chart. He talked about 70% for LTD. But when you look at the total composite of the coverage your professional people have with their DI and their LTD, you realize that's a tricky thing. So I think we have to go back and restructure.

Dave Simbro's idea may be a bit radical. But it's a real step in another direction. Take a look at an idea of where you want to be in the future. I personally would like an individual product that offsets with everything in the world, including other individual products and group products. But at the state level you wouldn't have the enabling legislation. So I'd like to turn that around. There's more of a challenge in answering your question. Putting your management-strategy hat on and deciding

where you want to go, are you in the DI business? Are you selling LTD to people where DI is in force? Perhaps you could think of some extra new products that we should be migrating to and work with your state to get some enabling legislation. That's a tricky thing. Now that's a little bit off the field of the question.

MR. ANTLIFF: I think we've been fortunate during the last eight or ten years. The legislators and regulators have either overlooked disability when they promulgated new restrictions on medical, or they have deliberately determined that disability should be exempt. There was another example of that just within the last week or two, an Academy Alert. But I've forgotten what it was about. Does anybody remember? But whatever it was, state legislation or regulation, disability was exempt.

MR. HITCHCOX: I believe what you are thinking about is that the risk-based capital formula proposal was transformed and came out sweeping disability under some other numbers that would, quite frankly, possibly triple the amount of the risk-based capital requirements that are out there. The only other one I'll mention is the issue of preexisting conditions. Many states are moving away from preexisting conditions. President Clinton and his wife seem to think that preexisting conditions are the most horrible thing that you could ever offer. As long as we can make sure that people understand that there's a good reason for preexisting conditions, and there is a good reason for continuity of coverage, we may be OK.

MR. R. DENNIS CORRIGAN: I have a question for John Antliff on the survey that you've shown us. It seems to me that the survey is most useful to the extent that the definition of profits is uniform among the different companies involved. I'm wondering if you could tell us what the definition is. Second, to what extent can you monitor and improve the uniformity among the reporting companies as to that definition? In particular, I'm thinking about issues with respect to allocation of expenses, taxes, and especially investment income between investment year and portfolio methods, amortization of reserve changes, in either the reserve basis that's used in the different companies, and factors of this sort.

MR. ANTLIFF: I guess I have to say that I have not specifically asked the contributing companies to give me details of their methods of allocation of expenses, or of investment income, or of assets. From time to time we put a specific question in the survey, when we're interested in a specific issue. And in the February 1995 survey I'm planning to ask them whether they're including investment gains or yields on surplus with their LTD profits. I know that one or two large companies do not do that, but I really don't know what most of the other companies are doing. So we'll find that out. Maybe we should add another two or three questions along the lines that you're raising.

MR. THOMAS R. CORCORAN: If you analyze the survey based on trends, then specific company allocation methods aren't so important.

MR. ANTLIFF: When you look at the estimate of the total industry premiums that's in my report and compare that with some other estimates that you'll see from other sources, you'll find that the numbers in my survey are smaller. The reason for that is that ASO premium equivalents are excluded in the numbers that are in this report.