RECORD OF SOCIETY OF ACTUARIES 1979 VOL. 5 NO. 1

Vol. 5, No. 1

April, 1979

RECORD

FUTURE PROFIT OUTLOOK FOR NON-PARTICIPATING LIFE INSURANCE

Moderator: C. DAVID SILLETTO. Panelists: JAMES C. H. ANDERSON, THEODORE J. NEWTOWN, JR.*, STEVEN A. SMITH

- 1. What have been the historic trends in profitability of non-participating life insurance?
 - a. Mortality
 - b. Expense
 - c. Investment income
- 2. To what extent is it likely that these trends will be different in the future?
- 3. What can be done to protect future profitability of non-participating life insurance portfolios and explore new opportunities for profitable growth?
 - a. Marketing planning
 - b. Market diversification
 - c. Product changes
 - d. Changes in product distribution methods
- 4. What is the prospect for non-participating life insurance in an inflationary environment?

MR. C. DAVID SILLETTO: My role as moderator is twofold: first, to provide background material for our discussion of the future outlook for non-par life insurance; and second, to comment from the standpoint of a stock life insurance company selling both par and non-par insurance through a career agency force. Before focusing on the future, let us look first at what has happened in the past. We shall begin with non-par permanent insurance. Premiums for non-par permanent life insurance today are much lower than in the past, and many of the factors which make such low premiums possible also impact favorably on the profitability of in-force business. That premiums for new issues have decreased so dramatically in the face of rapidly increasing acquisition costs suggests even more dramatic increases in the profitability of old business.

On the premise that Lincoln National is reasonably representative of the industry, let us look briefly at what has happened to non-par premiums over the past 60 years. The Lincoln's standard premium per \$1,000 for \$25,000 of life insurance issued to a male age 35 was \$20.65 in 1919. It remained relatively level at \$19.91 in 1929 and \$20.78 in 1939, but increased to \$22.39

^{*}Mr. Newton, not a member of the Society, is Senior Vice President of Blyth Eastman Dillon & Co, Inc., New York, NY.

in 1949. Then the rates went down dramatically to \$19.10 in 1959, \$18.48 in 1969, and \$14.69 today. Although lower surrender values account for a large part of the most recent reduction, much is also due to lower mortality and higher investment income.

If we look at Lincoln National's pricing assumptions, we can obtain some idea of the magnitude of today's profits on in-force business. Original asset share calculations show that for a \$7,500 ordinary life policy (then our average size) issued to a 35 year old male in 1959, our expected statutory after-tax annual profit per \$1,000 for a policy in its 20th year was \$5.00. Substituting current experience factors and assuming a Phase 1 tax situation results in an additional profit of \$8.10, made up of an additional profit of \$1.10 from mortality, and \$7.90 from investment income, and an additional loss of \$.90 from expenses.

One can make certain predictions about the future with a high degree of confidence. With new money rates at modern highs and portfolio rates not much lower, the likelihood of earning additional investment income on today's sales of the magnitude now being earned on old business seems remote. Based on typical interest assumptions today compared with 10 years or more ago, even if the interest rates continue forever at today's level, we would earn additional investment income on today's sales of only about half the amount now being earned on policies issued more than 10 years ago.

We can also predict that continually higher expense levels will impact negatively on future profits, but work we have done shows the effect should not be dramatic.

The area of mortality is where a crystal ball would be most helpful, and it is the one area where excess earnings could be even greater than current mortality gains on past sales. This element of uncertainty, plus the offsetting annuity exposure for most companies, should result in premium levels which will continue to make this a potential source of additional profits in the future.

There are people who say that non-par permanent life insurance sales will continue to shrink and perhaps disappear. Before leaving this difficult question for the panelists to analyze, I shall at least agree that inflation and alternative investment opportunities will continue to make traditional non-par permanent life insurance a relatively less important product than in the past.

While plan mix will vary considerably from company to company, Lincoln National's experience helps to illustrate the declining popularity of non-par permanent life insurance. In 1968, non-par permanent policies accounted for about 35% of Lincoln's total paid sales by number, and 29% by amount. In 1978, the percentages were 17% and 9%, respectively.

As you might expect, the relative decline in the popularity of Lincoln's non-par permanent insurance is primarily attributable to the tremendous increase in the popularity of term insurance, which accounted for only 19% of paid sales by number in 1968, compared with 25% in 1978. The increase in popularity of term insurance was even more impressive when measured by amount of insurance: from 41% of paid sales in 1968 to 56% in 1978.

While surging term sales have accounted for most of the decline in non-par permanent's popularity, usage of non-par permanent has also slipped consid-

erably relative to participating permanent insurance. In 1968, Lincoln National's participating permanent policies outsold non-par permanent policies 32% by number. Sales by amount were approximately equal. By 1978, the percentages had increased to 230% by number and 276% by amount. We expect that non-par permanent life insurance will continue to decline in importance relative to both term insurance and participating permanent insurance.

At Lincoln National, much of the current usage of non-par permanent life insurance is confined to markets where low premium, permanent life insurance is particularly important:

- the Pension Trust market, where low premiums permit a greater investment in a side fund;
- the Employer Sponsored Salary Savings market, where policies are sold on a money purchase basis with an emphasis on simplicity; and
- 3. at the older ages, where term insurance becomes less popular, and where premium differentials between non-par permanent insurance and par permanent insurance become substantial.

Although Lincoln National has not been particularly active in the Pension Trust market in recent years, it is illustrative to note that non-par permanent sales accounted for about 65% of all Pension Trust sales (by amount) in 1978.

In the Employer Sponsored market, non-par permanent policies outsold par permanent policies by about 2 to 1.

As I mentioned a minute ago, our non-par permanent sales are concentrated much more heavily at the older ages than are term or par permanent sales. In 1978, for example, about 26% of our non-par permanent sales (by amount) were at ages 50 and over; by way of contrast, only about 9% of term sales and 10% of permanent sales were at those ages.

Traditional non-par permanent life insurance policies are probably more vulnerable to replacement than most other products. Consumer publications, for example, are often critical of permanent life insurance, and they are particularly critical of non-par permanent life insurance. Such publications often recommend replacement of non-par permanent policies, and comparisons of our own non-par policies with newly issued par policies confirm that replacement is often advantageous, at least in the long run.

Non-par permanent policies are also most vulnerable to replacement by the replacement specialty products, such as single premium life and deposit term. Continued high activity in the replacement area could have a distinctly unfavorable impact on the future profitability of non-par permanent insurance.

Some of my earlier statements also apply to non-par term insurance. The major differences are the lack of opportunity for excess investment income and the even greater mortality gains. These mortality gains are partially offset by the effect of anti-selection through the healthy lives purchasing new term insurance at lower rates reflecting current mortality.

Opportunities for substantial mortality gains in the future are probably minimal. Dramatic mortality improvements which result in much lower term

rates would also generate massive replacement, except for ratable or uninsurable lives.

Whereas chances for high profits per \$1,000 on term insurance appear slim, sales should continue to grow as fast as in the recent past, for the same reasons that non-par permanent sales are falling. There also appears to be little chance that par products will have the impact on non-par term sales that they have on non-par permanent sales.

With this background, let me comment briefly on aspects of this subject of particular interest to a stock company writing both par and non-par products.

The Lincoln's long standing philosophy regarding par and non-par permanent products has been that each has advantages under particular circumstances, and that the agent should sell the type most appropriate for the situation. We implement this philosophy by pricing both types as competitively as possible.

Generally speaking, profit margins on non-par permanent plans are higher than on similar par plans. Non-par also offers the greater chance of additional future profits. But we feel that any efforts to promote non-par over par would not succeed and would be contrary to our stated philosophy.

Even in our so-called career agency force, we feel we have very limited ability to affect the mix of non-par and par sales. Such efforts would be overcome or ignored nearly as much by our agents as if we were selling through brokers.

MR. STEVEN A. SMITH: In trying to look at today's subject as Chief Actuary of a medium-sized, fairly rapidly-growing brokerage company, I found it difficult to focus strictly on non-participating (as opposed to participating) life insurance. Since the problems that non-participating life insurance has are magnified in permanent insurance, I have included some thoughts on the permanent-versus-term controversy as well as some general comments on life insurance products and how they might be changed to be appropriate in today's inflationary times. Some of these are as appropriate for participating as for non-participating insurance.

In the last few years, an increasing percentage of the total volume of ordinary life insurance sold in the United States has been term insurance. One major cause of this has been the high levels of inflation in today's economy. Consumers expect that this inflation will continue and, hence, demand salary increases to keep pace. High levels of government spending and automatic cost-of-living adjustment clauses in union contracts and social security benefits cause inflation to be almost self-perpetuating. The problem has been worsened by the inevitable dislocations and shortages and by the well-publicized "energy crisis". There is, unfortunately, no end to inflation in sight.

A major problem that non-participating permanent life insurance has is in competing for the savings dollar against not only participating whole life but other savings media as well. Competition for the savings dollar has been a problem of the life insurance industry for a long time. With high rates of inflation, and, hence, high interest rates, this problem area has substantially worsened--particularly for non-participating permanent products.

This situation has led to an increase in the use of the "buy term and invest the difference" philosophy which, in turn, has caused problems in agents' compensation. When term replaces permanent, it is rarely sold on a premium equivalent basis. Even if it were, commission rates are generally lower on term. The result is that it has become more difficult to support an agency force. The size of the industry agency force is slowly decreasing.

Insurance companies, particularly stock companies selling non-participating insurance, have lived in recent times on increasing excess interest and mortality profits. Participating companies have found it easy to regularly increase dividend scales. I wonder how long increasing interest gains can continue to be counted on to be a major source of non-par profits.

Expense inflation tends to impair the profitability of term insurance more than it does that of permanent insurance. To the extent that permanent insurance is replaced by term insurance, high rates of expense inflation will not be offset by interest gains caused by high interest rates. The shift from permanent to term tends to reduce the aggregate amount of new premiums. Unless a company can increase sales volume substantially, the permanent-to-term shift will lead to increasing rather than decreasing unit expenses. A few companies, including my own, have had some success, at least in the short run, in reducing unit expenses through increased term sales (and other innovative products). But while a few companies can do it, the industry as a whole probably cannot.

Another part of the same problem is that in today's inflationary times, fixed benefit insurance is of limited value for a long-term need. Whole life with its level premiums and level death benefits usually is just not an attractive product for the consumer to buy. Term insurance is sold instead. The availability of cheap term insurance undoubtedly hastens the switch from permanent to term.

The outlook for non-par permanent in its current form does not appear promising. I would not be optimistic about my company's future if we had to depend entirely on selling the non-par whole life that we sell today. Non-par is not quite as strong as par in the permanent market. Fortunately, however, this fact has been incidental to my company's growth which has primarily been caused by doing innovative, competitive things.

The difference between par and non-par products is substantially reduced in the term and substandard areas since the value of the interest element is reduced. For yearly renewable term insurance (YRT), the par/non-par choice approaches being a toss-up for the consumer.

These, then, are some of the problems that non-par insurance has. How can they be addressed? What difference in solutions might there be between a large stock or mutual company and a small but rapidly-growing non-par brokerage company like my own?

The solution to the "non-par problem" involves product and other changes that all stock companies and even the mutuals, where appropriate, should make to increase the likelihood of producing the desired aggregate level of profit or surplus contribution.

What can or should be done to protect non-par profit levels and to increase the outlook for non-par generally?

1. Develop Products with Increasing Death Benefits

The face amount increases could be fixed at issue or they could move up or down in relation to some index such as the Consumer Price Index (CPI). Premiums could range from products with level premiums all the way to strictly YRT coverages. For CPI-indexed type products, premiums could vary in relation to the index. The public may well be ready for increasing-premium coverages since the "price" of everything else, including property/casualty insurance, is going up. Why shouldn't life insurance premiums?

Of course, before products with increasing face amounts can be marketed, the obvious questions involving calculation of cash values, retention limits and reinsurance, the basis of underwriting, and agent's compensation must be answered.

The concept of increasing face amounts has many advantages besides marketing necessity. Premiums will be higher because of the inflating death benefits; higher premiums should increase the potential for both profits and agents' compensation.

A possible alternative would be to have all or a part of the face amount payable in some store of value, rather than the dollar--such as gold, silver, or hard foreign currencies such as Deutschmarks or Swiss francs. The point here is that to market life insurance contracts with level or anything approaching level premiums, it seems necessary to have the death benefit be of more real economic value than is the case with current level face amount contracts. A participating whole life contract may more nearly achieve the desired result, at least in part, from use of its dividends. A non-par contract must use some other method.

Inflating death benefit policies may be more difficult to sell, at least at first, for two reasons:

- (a) if the premium is level, or nearly so, they will have a higher initial premium than existing level benefit policies; and
- (b) selling anything new requires more effort and training.

I believe that relatively simple products can be developed, however, and that the more companies that sell these products, the easier they will be for everyone to sell. This subject, I am told, will be covered, in part, in Concurrent Session M under the title Alternatives to Adjustable Life.

2. Get the Company Off the Interest Rate Guarantee

It has become almost impossible to guarantee the high interest rates necessary to have competitive premiums and net costs. Two possible alternatives suggest themselves. The first alternative is a non-par term policy with an attached savings vehicle which could be a flexible-premium side fund (load or no-load) with guaranteed minumum and excess interest credits. These interest credits would presumably be taxable (but would ideally be made non-taxable) to the consumer. ("Buy term and invest the difference with us".) A number of such excess interest contracts are already in existence.

Another alternative, which I personally like, is to have a policy where the premium is guaranteed at a low level for, say, two years. After the first

two years the premium is guaranteed to be at a level not in excess of an amount close to or just slightly above current non-par whole life premiums (or some non-deficient level). Looking at this the other way around, the company charges a guaranteed maximum premium for the contract, but during the first two years, the company guarantees to charge less than this maximum premium. After the first two policy years, the company reserves the right to adjust the premium, but not to exceed the maximum level. Each year the company bills the insured for the then current premium. The premium change, if any, for later policy years is, of course, done on some uniform basis by issue age, duration, sex and table rating, without any adjustment for deterioration in health.

Contracts following this general concept have been developed and sold successfully by a number of companies, in some cases, by the simple expedient of nothing more than a premium reduction provision endorsement for existing policies. These policies and forms have been approved and are in use in more than forty states.

This kind of product can compete directly with participating insurance and has the "par advantage" of requiring low or non-existent deficiency reserves. It is, hopefully, not "participating" and hence, would not be subject to any participating profit limitations.

After the first two years, the current premiums may be adjusted to a level below the maximum guaranteed premium subject only to <u>future</u> expectations as to interest, mortality, expense, lapse, etc. This is the main difference between this product and participating insurance which is based on retrospective distribution of premium overcharges based on past experience. The "future discount" approach ignores the past and only looks at the future.

The premium for the first two years is initially intended to be used for the entire premium paying period and might be based on typical current mortality, expense, and lapse assumptions, but with a higher interest assumption than the usual downward-sloping rate typically chosen. Premium revisions, when they occur, might be calculated using the past actual premiums paid, the assumptions (rather than actual experience) appropriate to those past policy years, and assumptions as to the future, taking into account any possible change in lapse pattern or mortality due to the premium revision. Unlike the treatment for par, company gains or losses from past experience are ignored. Alternatively, the future premium could be developed using gross premium valuation techniques. The low current premium would be likely to continue to be used only as long as expected future interest rates, for example, did not fall below those assumed for the future in the most recent premium revision.

If cash values are calculated with the assumption that the low initial premium remains level, any increases in premium after the first two years would generally have the effect of reducing statutory minimum cash values below those guaranteed in the policy.

This kind of a policy also will probably be a little more difficult to sell at first than policies we are selling today. But I believe it can be sold without too much difficulty. In fact, it has been. And once again, the more of us that sell it, the easier it will be for all of us.

Another thought is that perhaps this discount approach can be combined with the concept of increasing face amount policies that I mentioned earlier.

The discount approach can also be used for YRT to avoid both deficiency reserves and participating profit limitations. One need only guarantee renewal at 1958 CSO net premiums and administratively charge less. With today's low YRT premiums, this approach may have become a necessity.

3. Other Ideas

Other things that might be done to protect the profitability and the viability of non-participating insurance vis-a-vis participating insurance include the following.

- (a) Be able to react more quickly than the large mutual companies. Nonpar products generally can be developed more quickly and less expensively than a participating version of the same product because there are no dividends. Non-participating products are less expensive to maintain for the same reason.
- (b) Change the agent's compensation packages to reflect better the desired results. <u>Effective</u> use of persistency and production bonuses are possibilities here.
- (c) Persistency and, perhaps, mortality results may be able to be improved by more effective communication with policyholders.
 - (i) Computer-generated correspondence can remind policyholders of the many conversion options, alternative premium modes, options to increase face amounts, etc.
 - (ii) Billing envelopes can contain stuffers to keep policyholders informed of recent developments in the treatment of cancer or diabetes, the hazards of high blood pressure and smoking, the advantages of regular exercise and weight control, etc. Insurance companies typically have not used this method of communication effectively in the past. We are all used to receiving energy saving tips with our heating or electric bill. Why shouldn't insurance companies include mortalitysaving tips with their bills?
 - (iii) The premium notice envelope can also be used to offer increases to existing coverages to keep pace with inflation. Of course, agent's compensation, anti-selection, retention limit, and reinsurance problems must be solved here.
- (d) Stock companies may have to be more aggressive in the term market where the differences between par and non-par are minimized. Deficiency reserve considerations may be paramount in this respect, however.
- (e) The business market may be able to be tapped in a larger degree through additional and improved employee benefit and tax-favored products.
- (f) An increased use of mass merchandising techniques may also help. This probably involves simplification of products and better use of computer power. CPI-indexed products may be difficult to mass market.

In conclusion, to protect our profitability it seems essential that we remain in the individual savings market. To do so requires development of policies with benefits that reflect the effect of inflation on the value of the dollar, i.e. increasing face amounts, and which change the nature of the interest guarantee from what it has been in the past.

Finally, when all of you are busy developing the products to which I have alluded this afternoon, do not be too aggressive in your pricing. We want to have the best products ourselves.

MR. THEODORE J. NEWTON, JR.: As the only member of the panel who is not an actuary, I am forced to look at trends in profitability of non-participating ordinary life insurance from a somewhat different standpoint. The securities analyst has neither the information nor the technical skills to study profitability from the same perspective as the actuary. Nevertheless, using information available in public documents, such as convention statements, annual reports to stockholders, and the lOK forms, it is possible to develop statistics on profitability.

Historical Trends in Profitability of Ordinary Life Insurance

Table 1 shows data on the ordinary life insurance business of Southwestern Life Insurance Company for the years 1973-1978. Southwestern was chosen for this exhibit because its convention statements include an analysis of operations by line of business (page 5) on both a statutory and a Generally Accepted Accounting Principles (GAAP) basis. The footnotes to its annual reports to stockholders are also very complete and give detailed information on acquisition costs and on benefit reserves by year of issue. Southwestern is also one of the few companies that reports earnings on capital and surplus separately from the other lines of business. Since any study of the profitability of ordinary life is more meaningful if it is shown on a basis that excludes the profits from the capital account, Southwestern's convention statement presented the cleanest data for this work.

I found several of the calculations shown in Table 1 to be quite interesting. The profitability, for example, of Southwestern's ordinary life insurance has been very stable over the past six years. The table shows that statutory earnings (excluding interest on capital and surplus) have typically been equal to about 16-18% of ordinary life premiums, with the 1978 margin of 15.8% being about the same as the 16.1% return shown in 1973. GAAP operating income (after taxes and excluding interest on capital) has also been very stable at about 21-22% of premiums in each of the years 1973-1978. Estimated statutory renewal earnings have typically been at 30-31% of renewal premiums for Southwestern, except for 1978, when the margin dropped to 28.1%. Although excess investment income has grown every year, it accounted for only 55.3% of GAAP net operating income in 1978, and the portion of net operating earnings derived from excess investment income has actually declined slightly since 1976.

Table 2 shows the same data on seven companies (including Southwestern) for the year 1977. Statutory net income for ordinary life (excluding interest on capital funds) averaged 15.7% of ordinary life premiums for the seven companies, while GAAP net operating income (after taxes and excluding interest on capital) averaged 23.2% of premiums in 1977. Estimated renewal earnings from ordinary life business averaged 34.6% for six companies (excluding Connecticut General). Excess investment income accounted for an average of 41.4% of GAAP net income for the six companies.

Table 1

Southwestern Life Insurance Co. (Excluding Southwestern General Life)

	1978	<u>1977</u>	1976	<u>1975</u>	<u>1974</u>	1973	1972
Ordinary - single and renewal premiums Ordinary first year premiums Total premiums - ordinary Net gains from operations - ordinary Less: Interest on capital and surplus	\$90,953 9,571 100,524 15,898	\$83,859 9,812 93,671 16,871	\$79,854 9,006 88,860 15,915	\$79,606 8,452 88,058 15,685	\$75,154 8,526 83,680 13,576	\$75,289 8,401 83,690 13,500	\$67,006 8,305 75,311 10,512
Add: Taxes on above at 48% Net gain exclud. interest on policyholders Net gain as percent of premiums Increase in deferred acquisition costs GAAP adjustment to policy reserves Deferred taxes Other adjustments Estimated GAAP net income - ordinary (1) GAAP net as percent of premiums (1) Est. acquisition costs - current year Less: deferred taxes Stat. renewal earnings	15,898 15.8% 3,144 9,004 (4,223)E (1,713)E 22,110 22,0% \$12,753 (3,061) 25,590 28.1%	16,871 18.0% \$ 4,188 5,670 (4,393)E (1,206)E 21,330 22.8% \$12,332 (2,960) 26,243 31.3%	15,915 17.9% \$ 4,131 5,212 (4,050)E (2,227)E 18,981 21.4% \$11,448 (2,748) 24,615 30.8%	15,685 17.8% \$ 4,420 4,397 (3,435)E (1,592)E 19,475 22.1% \$12,387 (2,973) 25,909 31.5%	13,576 16.2% \$ 4,103 2,724 (2,817)E (423)E 17,163 20.5% \$12,643 (3,034) 23,185 30.8%	13,500 16.1% \$ 3,916 4,244 (2,781) (1,333) 17,546 21.0% \$12,325 (2,958) 22,958 23,007 30.4%	10,512 14.0%
Renewal earnings as percent renewal premiums Net investment income - ordinary Estimated GAAPinterest requirement Excess investment income before tax Tax on above at 48% Excess investment income after tax Excess investment income as percent net income (1) Underwriting income	\$53,715 (30,210) 23,505 (11,282) 12,223 55.3% \$ 9,887	\$50,584 (28,417) 22,167 (10,640) 11,527 54.0% \$ 9,830	\$47,220 (26,792) 20,428 (9,805) 10,623 56.0% \$8,358	\$43,413 (25,448) 17,965 (8,623) 9,342 48.0% \$10,133	\$40,530 (23,836) 16,694 (8,013) 8,681 50.6% \$ 8,482	\$38,106 (22,546)E 15,560 (7,469) 8,091 46.1% \$ 9,455	
Underwriting income as percent net income (!) GAAP interest rate requirement Yield on assets - statutory Mean life reserves - GAAP Non-par as percent total ordinary	44.7% 7.28% 99.0%	46.0% 3.68% 6.89% \$772,095 99.0%	49.0% 3.62% 6.61% \$740,477 98.9%	52.0% 3.59% 6.43% \$708,140 98.9%	49.4% 3.52% 6.23% \$677,300	53.9% 3.49% 5.95% \$646,893	

⁽¹⁾ Net operating income.

E - Estimated by Blyth Eastman Dillon & Co. Incorporated

	Connecticut General	Capital Holding	Jefferson- Pilot	NLT	Integon	Fidelity Union	South- western	Averages
INDIVIDUAL-Single & Renewal Premiums	283,352	187,858	153,568	235,706	42,079	70,995	83,859	
INDIVIDUAL-First Year Premiums	46,757	34,457	20,181	40,670	9,700	13,926	9,812	
Total Premiums-INDIVIDUAL	330,109	222,315	173,749	277,376	51,779	84,921	93,671	
Net Gain From Operations-INDIVIDUAL	64,670	47,205	43,293	79,716	3,697	10,979	16,871	
Less: Interest on Capital & Surplus	(8,560)	(18,642)	(23,838)	(37,275)	(1,297)	(2,947)		
Add: Taxes on Above at 48%	4,109	8,948	11,442	17,892	623	1,414		
Net Gain Excl. Interest on PHS	60,219	37,511	30,897	60,333	3,023	9,446	16,871	
Net Gain as % of Premiums	18.2%	16.9%	17.8%	21.8%	5.8%	11.1%	18.0%	15.7%
Increase in Deferred Acq. Costs		23,065	12,964	22,654	6,357	8,429	4,188	
GAAP Adjustment to Policy Reserves		3,351	10,465	4,768	279	1,960	5,870	
Deferred Taxes		(9,364)	(3,746)	(10,010)	(2,012)	(3,263)	(4,393)	
Other Adjustments		(4,671)	(1,927)	1,289	(293)	(27)	(1,205)	
Est. GAAP Net Income-INDIVIDUAL (1)	89,218	49,892	48,603	79,304	7,354	16,545	21,330	
GAAP Net as % of Premiums (1)	27.0%	22.4%	28.0%	28.5%	14.2%	19.5%	22.8%	23.2%
Est. Acquisition Costs-Current Year		42,000E	32,578	56,898	10,115	19,374	12,332	
Less: Deferred Taxes		(10,080)	(7,819)	(13,656)	(2,428)	(4,650)	(2,960)	
Stat. Renewal Earnings-INDIVIDUAL		69,431	55,656	103,575	10,710	24,170	26,243	
Renewal Earnings as % Renewal Premiums		37.0%	36.2%	43.8%	25.5%	34.0%	31.3%	34.6%
Net Investment Income-INDIVIDUAL	155,546	88,420	106,232	123,142	17,661	23,922	50,584	
Est. GAAP Interest Requirement		(54,353)	(53,910)	(65,855)	(12,393)	(14,966)	(28,417)	
Excess Investment Income Before Tax		34,067	52,322	57,287	5,268	8,956	22,167	
Tax on Above at 48%		(16,352)	(25,115)	(27,498)	(2,529)	(4,299)	(10,640)	
Excess Investment Income After Tax		17,715	27,207	29,789	2,739	4,657	11,527	
Excess Investment Income as % Net Income (1)		35.5%	56.0%	37.7%	37.2%	28.1%	54.0%	41.4%
Underwriting Income		32,177	21,396	49,245	4,615	11,888	9,830	
Underwriting Income as % Net Income (1)		64.5%	44.0%	62.3%	62.8%	71.9%	46.0%	
GAAP Interest Rate Requirement		4.25%	4.5%	3.66%	4.8%	4.91%	3.68%	58.6%
Yield on Assets-Statutory	7.71%	6.85%	7,58%	7.06%	6.61%	7.82%	6.89%	
Mean GAAP Life Reserves	** **	1,278,905	1,198,001	1,799,304	258,189	304,709	772,095	
Non-Par as % Total Ordinary	91.3%	99.0%	54.6%	99.8%	82.7%	94.4%	99.0%	
Acq. Costs Deferred as % 1st Year Premiums		122%	161%	140%	104%	139%	126%	132%
Yield on Assets Less GAAP Rate Required		2.60%	2.08%	3.40%	1.81%	2.91%	3.21%	2.84%

⁽¹⁾ Net Operating Income

Table 3 shows first year individual life premiums written by the seven companies covered in Table 2, for the period 1973-1977. The premium figures shown are those that appear in the convention statements. Table 3 also shows the compound growth rates in first year premiums for the period 1973-1977. Although the average growth rate for the seven companies was 7.4% per year, five of the companies recorded growth rates below that figure. Only two companies, Integon and NLT, recorded average growth rates in excess of 10% annually, while three recorded growth rates below 5% annually.

The Outlook For Future Profits

The results in the Tables 1 and 2 indicated that non-par ordinary life is very profitable, but Table 3 suggests that total profits in the future are in trouble because of the growing difficulties encountered in selling the product. The indicated profit margin, which averaged 23.2% after taxes and after excluding interest in capital for the seven companies surveyed, is simply too high for the protection that is needed by virtually every man, woman and child in America. One suspects that the public feels that whole life is overpriced, and is looking to other products—such as savings certificates, flexible premium annuities, group life, and term life—to satisfy their needs for protection. Non-par whole life insurance is actually becoming a Tiffany product attractive only to those buyers to whom price is no object.

I would strongly suggest that the life insurance industry utilize the huge renewal profits that are being generated by non-par whole life insurance to develop new, competitively priced, consumer oriented products that are likely to endure, rather than to continue to spend huge sums of money to produce modest amounts of new high profit margin premiums.

Life companies should develop--and aggressively market--products that have premiums and benefits that keep pace with inflation. The simplest product of this type would be an annual renewal term policy where the face amount and premium are automatically adjusted each year for the change in the cost of living index. This product would be conceptually similar to the homeowners policies, currently sold by most property-casualty companies, that are automatically adjusted in face amount each year to reflect changes in building costs. The agent's commission on this term product would be paid annually and would therefore be tied to a constantly rising premium. Although the premium and commission per policy would be lower than on traditional products, aggressive marketing could produce more total premiums, profits, and commissions than the hard-to-sell whole life plans.

Stock life companies should not continue to resist the public's preference for term life insurance. This is the one area where stock companies enjoy a clear advantage over the mutuals, because of the attractiveness and simplicity of the non-par premium. Properly priced and marketed, term life insurance is attractive to both the issuer and the consumer. Occidental Life of California, which sells more term insurance than any company in the country, maintains that its profit margins-when related to premiums-are actually higher on term insurance than on whole life. It also said, as I recall, that 36% of its whole life insurance in force is the result of term life conversions. From the insurer's standpoint, it would also seem to me that term life is a sensible product to market-at a time when interest rates may be near a long-term cyclical peak.

Table 3

	FIRST YEAR INDIVIDUAL LIFE PREMIUMS: 1973 - 1977						
	1977	1976	1975	1974	1973	Growth Rate 1973-1977	
Connecticut General	46,757	45,442	42,927	42,206	38,989	4.7%	
Capital Holding	34,457	31,417	27,873	27,159	26,671	6.6%	
Jefferson-Pilot	20,181	18,764	15,433	16,640	15,202	7.3%	
NLT	40,670	36,324	27,717	23,079	26,566	11.2%	
Integon	9,700	6,687	5,349	5,496	5,553	15.0%	
Fidelity Union	13,926	16,078	15,635	15,657	12,245	3.3%	
Southwestern	9,812	9,006	8,452	8,526	8,401	4.0%	

Almost all life companies have avoided the individual annuity area in spite of the fact that this is a business where they can compete very effectively against savings banks, because of the substantial tax advantages. It would appear that a primary reason that life companies have avoided individual annuities relates to the fact that the product is not saleable when saddled with ordinary life-type profit margins and commissions. One of the side benefits of an aggressive position in the annuity business would be the tendency of premiums to keep pace with inflation as customers recognize the need to increase coverages in a period of rising consumer prices. The annual adjustments in premiums and future benefits could easily be handled by the insurance company.

If stock life insurers intend to maintain their market share in whole life insurance, it seems logical that they will be forced to sell more and more of this product on a participating basis in order to be reasonably competitive with the mutuals. As an investor, I would tend to welcome a shift to more insurance being written on a participating basis, because it would be expected to boost sales and revenue growth. Although profits per unit would be lower, this would be offset by substantially lower risk to the stockholder. I am especially concerned about the risk inherent in the constantly rising interest assumptions that life companies must use in order to keep non-par insurance reasonably competitive with participating plans. The next major turn in interest rates will almost certainly be downward, and I hope that non-par interest assumptions will prove to be conservative when that occurs. Although graded assumptions offer considerable protection against a long-term decline in interest rates, participating insurance offers even greater protection.

Life insurance companies should view product development and marketing from the standpoint of total premiums, total profits, and total commissions rather than trying to maximize profits and commissions per premium dollar. Present profit margins are so astronomical that they can only be maintained at the expense of unit sales growth. A 5% margin on an easy-to-sell product will produce more total profit than a 30% margin on a difficult-to-sell product. Yet I find that most companies are continuing to devote their entire efforts to selling the 30% margin product.

MR. JAMES C. H. ANDERSON: The historic trends in profitability of non-participating life insurance can be viewed in two ways: prospectively and retrospectively.

The prospective view relates to the <u>intended</u> profitability at the date of original pricing. The retrospective view relates to the <u>actual</u> profitability of the business as experience develops. Both views are <u>significant</u> in terms of evaluating the future. Viewed in a 20-year perspective, from 1959 to 1979, the prospective and retrospective trends in profitability of non-participating life insurance have moved in opposite directions: prospectively, the trend has been downward; and retrospectively, the trend has been upward. In other words, we have priced for progressively less profitability and obtained progressively more.

By coincidence, the paper which I wrote on the subject of pricing and profit measurement for non-participating life insurance was published exactly twenty years ago. The paper includes a "Summary of Standard Assumptions" and an exhibit of results based thereon which may afford some clues as to what the prospective and retrospective profitability of business issued at that time

was and has been. The profit criterion stated in the standard assumptions was that the present value at issue of future profits, discounted at 15%, be equal to 10% of the present value of commissions. The other assumptions were typical of the era and represented reasonable best estimates with specific contingency margins. The results produced weighted average premium rates for ordinary life at various ages and amounts which were 2½% higher than the mean of actual premium rates then charged by ten prominent stock companies. If the same exercise were repeated today, the premium rates required by a calculation based upon realistic assumptions in today's environment with the same profit criterion would produce a set of rates approximately 9% higher than the mean of those now available in the marketplace. This comparison convinces me that the trend in profitability, viewed prospectively at the date of issue, has been downward and substantially so. The change can be seen most dramatically in the pricing of term insurance.

The retrospective position is quite different. Looking again at the calculations included in the 1959 paper, I note that the calculated premium rate at age 35 for a \$12,000 policy produced an interest adjusted cost (based on 5%) in excess of \$10 per thousand. Today, on a policy amount of \$25,000 (the inflation-adjusted equivalent of \$12,000 twenty years ago), it would typically be less than \$6 per thousand. Clearly, from a retrospective viewpoint, the historic trend in profitability of non-participating life insurance has been upwards.

It is of interest to examine why there has been this historic upward trend in retrospective profitability. The program outline suggests mortality, expense, and investment income as causative factors, and other panelists have addressed these factors. I intend to direct my remarks to factors not included in the list.

The first of these is lapse rates. From the <u>Life Insurance Fact Book</u> (1978 Edition), it can be seen that voluntary termination rates have increased significantly. For the period 1960 through 1977 (the closest available comparison to the 20-year period used above), lapse rates on policies in force less than two years have increased from 14.5% to 19.5%, an increase of 34%, and lapse rates on policies in force for more than two years from 3.7% to 4.7%, an increase of 27%. Of course, these statistics include both participating and non-participating business. If non-participating business were analyzed by itself, I would expect that the increase in lapse rates would be even more dramatic. This increase has eroded profitability from the retrospective view.

The second factor not mentioned in the outline is the cost of capital. In the 1959 paper, the cost of capital was assessed at a rate of 15% per annum in the standard assumptions. My recollections of practices at that time suggest that most companies regarded such a yield on invested surplus as high, and, perhaps, a more representative figure for 1959 would be $12\frac{1}{2}\%$. Today, most calculations which I see are done at 15%. Accordingly, I think it is reasonable to assume that the cost of capital represents another unfavorable factor affecting the trend of both prospective and retrospective profitability. It is, however, consistent with the movement in interest rates.

The third factor not included in the list is federal income taxes. In the 1959 paper, in keeping with pricing techniques used at that time, federal income tax was provided for (if at all) through a relatively minor adjustment of assumed interest rates, since the implications of the Life Insurance Company Income Tax Act were not at that time clear. Even after the enactment

of the tax legislation which is still largely in effect, the effective tax rate borne by profits on non-participating insurance was relatively modest. In general, taxable gain from operations exceeded taxable investment income, and only half of the excess was subject to current tax. This was further mitigated by the use of exact or approximate net level reserve bases for tax purposes and by available special deductions arising on non-participating life insurance. Today, taxable investment income attributable to non-participating life insurance often exceeds taxable gain from operations. The full rate of corporation tax then applies, although it is still mitigated by the net level reserve election. Now more often, special deductions are not available in full to reduce taxes.

What do these observed trends suggest for the future? Obviously, it would be foolish to suggest with any conviction that history will repeat itself; but perhaps it would be even more foolish to suggest that it will not. The continuation of some trends seem clear. Improvements in mortality seem even more likely today than ever before although the significance of this factor is much diminished because the expected improvement is acting upon a much lower base. Inflation also seems likely to continue, and its significance may be greater than in prior years since it appears that most of the benefits of scale and mechanization have already been realized. In the past, those benefits have substantially offset the effects of inflation upon unit maintenance expenses. It would require a brave forecaster to predict that the trend of increasing lapse rates will reverse, but the outlook for new business may be better than the outlook for old because of the now permissible use of higher interest rates in the determination of minimum cash values.

Turning to trends less clear, the most difficult of the factors to predict is the future course of interest rates. For the purpose of pricing non-participating life insurance under today's circumstances, I generally suggest to clients the use of a declining series of assumed interest rates consistent with the assumption that new money rates on risk-free investments will decline from 9% today to an ultimate level of 6% in ten years. I do not pretend that this is a likely (let alone the most likely) assumption. Perhaps the most likely scenario is a level or increasing series of interest rates, but I would not bet my company (or a client's company) on such an assumption. Even if I were prepared to make such a wager, the required pattern of cash values would still make such products vulnerable to replacement at intermediate durations.

My views on the need for changes in the products offered by the industry and the methods used to distribute them have already been widely stated in this and other forums. I shall not this afternoon do more than to repeat my confidence in those views and to note that one company, based in California, has recently introduced radically revised products and is in a position to mobilize a different and powerful distribution system. Could this be the harbinger of things to come?

Finally, the prospect for non-participating life insurance in an inflationary environment clearly must diminish. However, the diminution relates more properly to the prospects for <u>permanent</u> life insurance, and participating life insurance is only marginally better off in this respect. More flexible product design, lower distribution costs, and higher valuation interest rates would improve the prospects for permanent life insurance of both types.

MR. JAMES W. KEMBLE: My comments touch on two points. First, I liked the idea, expressed by Mr. Smith, of providing for flexibility of both amount and premium. One of the principal reasons for additional insurance is the need to cover increased earnings. When this need arises, the ability to pay an increased premium will nearly always accompany it. The need to utilize term insurance, so that younger people particularly can afford adequate protection, should also be recognized. Flexibility in changing the basic plan, so that a switch to more permanent coverage when feasible and desirable can be easily accomplished, is also a goal which I think is more practical now. Such flexibility will require some breaks with tradition, which may be our only reason for not making changes.

I would also like to comment on Mr. Newton's statement that "you are making too much profit on your non-participating business." I don't believe that the policies being currently offered are over-priced. In fact, I fear some may be too optimistically priced, and that if interest rates should decline during the lifetime of such policies, profit margins could virtually disappear. What has happened is that companies have realized profits in excess of those anticipated on policies issued in the past because of the unexpectedly high interest earnings of recent years. To anticipate a continuation of such "excess profits" with a lower guaranteed rate would not be prudent. If we are to adopt a flexible approach, including some "semi-participation" in excess interest earnings, the companies may well be advised to consider doing something for the current long term policyholders - perhaps returning some of the excess interest which has been earned on their reserves in recent years. A basis of credibility for announced future intentions would, thus, be at least partially established.

MR. SYED A. ALI: My question is directed to Mr. Newton. When you recommend to your clients that the stock of a given life insurance company should or should not be purchased, how much importance do you attach to return on equity?

MR. NEWTON: Historically, I have not given much thought to return on equity. Perhaps I should. It is very difficult to arrive at a figure that one would call the equity attributed to the ordinary life insurance business of, let us say, Connecticut General. In order to take the investment income related to capital and surplus out of earnings, I simply took the relationship of Ordinary life investment income to total investment income and assumed that this is the relationship of total capital and surplus attributed to the line. This is obviously a very tenuous basis, but it was the only basis available. then applied this ratio to the mean capital and surplus of the company and applied the average yield on assets to it. With the merger and acquisition binge that the industry has been faced with the past couple of years, we are all becoming more aware of equity because the relationship of book value per share to the acquisition price is important. The companies that have high returns on equity also have rapid growth in earnings, whereas the companies with relatively low return on equity tend to be very overcapitalized. panies that are flush with excess capital are using it to acquire other life companies at fairly significant prices. They still increase their return on assets because the yield on excess investment income is less than 5%, so these companies are using 5% money to make their acquisitions.

MR. ERNEST J. MOORHEAD: The future profitability of non-participating life insurance, other than term, can be protected only if actuaries will redesign non-par whole life and similar products. The need to do this has been discussed at Society meetings since as long ago as 1963--see TSA XV, D220-221.

See also my remarks in the Record, Vol. 1, No. 2, pp. 344-345, and note that the response then to my doubts about the future of non-par whole life was: "I feel that we have the resourcefulness to adapt this product...." It seems to me that the need for that actuarial resourcefulness is even more pressing in 1979 than it was in 1975.

MR. BILLY N. JOYNER: Could Mr. Newton clarify my impression that he believes the premium rates of current non-participating sales are going to produce excessively high profits? Do the other panelists agree with this? If so, is this conclusion based upon return on investment or upon other factors as well?

MR. NEWTON: I did not suggest that presently sold policies are going to produce higher profits than they are already producing at present. I did not address myself to the profit on present policies, but I would point out the following. The excess investment income built into currently issued policies is probably the greatest that it has ever been, simply because no company in its right mind will assume interest rates even close to those now being enjoyed. Typically, you see companies using after-tax rates of 6 or 6½% graded to 4 or 4½% after 20 years. They have never had as much of a differential between the current investment return and the assumed interest rate for currently issued business. All the cash flow comes from very recently issued business. For most of these companies, 100% of cash flow will come from business issued in the past seven years.

MR. SMITH: I would like to respond to that. I do not know of any companies that are pricing their new products using interest rates of 6 or $6\frac{1}{2}\%$ graded to 4 or $4\frac{1}{2}\%$, and I have been in contact with quite a few. It seems that, particularly for the permanent products, a whopper of an interest rate is needed to justify the premiums of today's policies. Companies previously used lower interest rates for pricing, and interest rates have gone up significantly. In the past 10 or 20 years the average portfolio rate has doubled, producing large current excess interest gains. In order to get a similar effect for policies priced and sold today, interest rates will have to increase to 12% or more.

MR. SILLETTO: As you might expect, we receive inquiries quite frequently from our agency force inquiring about the differentials in the interest-adjusted cost between our par and non-par lines. The answer, of course, lies basically in the interest assumptions. The interest assumption in the dividend formula for the participating line is a level one, generally consistent with today's interest rate levels. The non-par interest assumption, on the other hand, is a graded one. To bring these two together in any sense at all would impose a risk on us that is enormous. We are not being paid to take that risk and we cannot take it. Thus, trying to eliminate the cost differential between the two sides of the house is something we have stopped worrying about, and the result, as you learned from my other remarks, is a strong shift to participating permanent coverage within our company.

MR. SMITH: Mr. Anderson alluded to an increasing lapse rate in the industry. I have not yet seen the new lapse study of the Society, so perhaps I am in error, but it would certainly seem that the dramatic shift from permanent to term insurance could cause an increase in the industry lapse rate. We see a substantial increase in the percentage of the total block of in-force business that is term insurance. Most of us would probably agree that term insurance tends to have higher lapse rates than permanent insurance, particularly at the longer durations. Thus, the increase in lapse rate could be entirely due to term insurance.

Another comment that I would make is that if you have extreme expense inflation and your unit expenses inflate at say 5% (corresponding to a CPI index growth of 5%), and you look at an interest rate as a real interest return plus expense inflation, then you can use an 8% asset share interest rate. A permanent asset share will look great because the effect of the high interest rate on the reserve far outweighs the effect of the unit expense inflation. However, if you do the same thing on a term insurance asset share, it may look terrible because there is no large reserve. With term insurance, the name of the game is mortality and expense; with permanent insurance, it is interest rate.

I have a question that has to do with differences between par and non-par. My company sells strictly non-par insurance. We are a brokerage company, and, hence, use other companies' agents. Many of these agents are used to selling par, and they would like us to have a competitive par policy. One of the many reasons we do not have a par policy (although certainly not the overriding one) is uncertainty with regard to limitations on participating profits. A number of states limit the profit before dividends, but the application of these rules is not clear. In his book, Participating Life Insurance Sold by Stock Companies, Dr. Joseph Belth devotes 30 or 40 pages to the development of the 50 cents per thousand and 10% of profit rules as well as the reasons for these profit limitations. It seems to me that if you came out with a par whole life product that was as good or better than your non-par whole life product, and you had the same commission rates, the agents would sell the par product. To the extent that there are any limitations now, or that there would be such limitations, say, five years in the future, you would have to sell a great deal of business to justify it from strictly the stockholder If there is a profit limitation like 10% or 20%, you would have viewpoint. to sell five or ten times as much business to get the same bottom line profit dollars to the shareholders. Furthermore, if the par policy is really competitive, the multiples are even worse than that because the profit margin would be less on the par policy. So the question is: what is the profit limitation situation currently, and what is it expected to be in the future?

MR. NEWTON: New York has, of course, a law which restricts participating profits to 10% or 50 cents per thousand, whichever is greater, and that is applied to all states in which you do business and all business on your books. It applies to out-of-state companies that are licensed in New York as well as domestic companies. New Jersey has a similar law that applies to companies domiciled in the state. Illinois has a similar limitation on business in that state. It varies state by state, but the really tough limitations that I am aware of are the New York Statute for any company licensed there and the New Jersey Statute for domestic companies.

MR. SMITH: I believe Wisconsin also has limitations, but the question goes further than that. Suppose you add a par line to the business of a strictly non-par company. You come out with this par policy and lose 20% of your non-par sales, but you pick up twice as much as that in par--a total sales increase of 20%. In terms of what comes through to the bottom line, to the extent that there are profit limitations, you have taken a giant step backwards as far as the stockholders are concerned. Further, with regard to the 50 cents per thousand or 10% limitation, there is a real question--described on pages 82 through 84 of Dr. Belth's book--of whether or not you can take 50 cents per thousand when the entire par line is not producing a profit. Or if there is a par profit, can you take more than that profit or only a percentage of that profit? If you introduce a par line, it will be just like a

new company. You might not produce a profit in the par line for several years.

You also have to guess what the situation is going to be in the future. Suppose you introduce a par whole life policy based on the assumption that only a few states have profit limitations. If a few other states reverse their positions and introduce similar profit limitations, your stockholders would be adversely affected and could be worse off than if you had no par line.

The point is that the profit limitation situation, both currently and in the future, is not clear.

MR. NEWTON: I certainly did not suggest that companies who can and are selling increasing amounts of non-par whole life insurance stop selling it and switch over to participating insurance. My comment was not made in a vacuum. I was assuming that the industry and the companies involved are having a harder and harder time selling non-par ordinary insurance. Rather than spending tons of money to keep that flicker of new business coming in, it is better to switch over to participating or to develop new products.

MR. ROBERT C. TOOKEY: My comments allude to Mr. Smith's statements concerning relative persistency between term plans and permanent plans. Perhaps we actuaries still have our "sets" (logic-tight compartments) that term lapse rates are congenitally higher than permanent plan lapse rates. The evidence of the past seven years is quite interesting. Term plan lapse rates, especially on the low-cost annually renewable term plans (ART), compare favorably with "similar situation" lapse rates on permanent plans. There are several determinants.

- ART is ideally suited to the inflation problem of the <u>young</u> group (not necessarily the <u>less</u> young group).
- 2. Term plans are adaptable and adjustable.
- There has been an authentic improvement in mortality. Low term rates can be justified to the extent of the table of policy guaranteed rates and the ability of companies to contain costs.
- 4. Government interference has not aided the cause for permanent insurance (ergo, the FTC position).

The conclusion is that many more excellent persistency risks buy term--and exhibit the intrinsic persistency risk attributed to permanent insurance purchasers--than ever before.

MR. SILLETTO: Our recent sales results are interesting with regard to the par/non-par question. The last five years has been a significant growth period for us. An interesting statistic would be the relationship of par/non-par sales to how long the agent has been in the business with us. I am sure we would find—if we could obtain these figures—that our older, established agents who came into this business when the Lincoln was primarily a non—par company are, by and large, the agents who are still selling our non—par permanent policies. We would find that the new growth we have had in our field force in the past five to seven years is responsible for most of the par sales. Thus, we have had a basically level amount of non—par permanent sales coming from the mature agents who are not going to change their ways. It is

true that the training and orientation of the new people have been towards par permanent and non-par term, so that is where the growth has been.