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NON-PARTICIPATING LIFE PRODUCTS WITH NON-GUARANTEED PREMIUMS

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1. What are the basic concepts and purposes of the product:
 - a. With respect to Permanent Insurance?
 - b. With respect to Term Insurance?
2. What is the market potential?
3. What considerations (including state requirements) are involved in setting the premium rates?
 - a. At issue-maximum and illustrated premiums.
 - b. Premium change mechanism.
 - (1) Retrospective "Experience" or "Future Expectations"
 - (2) "Discretion of Management"
 - (3) Considerations of equity
 - (4) Policy form wording
4. What other problems must be addressed?
 - a. Reserves-basic and deficiency
 - b. Nonforfeiture values; work of the American Council of Life Insurance Task Force
 - c. Approval as nonparticipating insurance.
 - d. Other state requirements.
5. What are the tax considerations?
6. What are the reinsurance implications?

MS. DENISE F. ROEDER: Working in Reinsurance, I talk daily to pricing actuaries at Occidental and at various companies around the country. During this time I have discovered that the non-guaranteed premium policies are a "hot" item. I have found that the product design is fairly simple and almost uniform among the companies I have seen. I also found that despite the simplicity of the basic concept behind non-guaranteed premium products, there is a multitude of regulatory problems. Now, putting all of this information together was pretty easy, but it wasn't until the Hartford meeting that I really came to understand the need for the product and convinced myself that it wasn't just a gimmick to get around deficiency reserves.

Hartford was a very timely and well-planned meeting. For those of you who didn't attend, three economic scenarios were presented for 1986. One involved continued double-digit inflation and increasing "entitlements - consciousness". The second involved a return to moderate inflation and an "incentive-investment" policy. The third presented a change to a social democracy. It was a rather gloomy meeting, but then its hard not to be gloomy when you're dealing with the economy these days. It's especially hard when you start on Monday morning, suffering from jet lag and hear a

prediction attributed to a presidential economic advisor that inflation might drop to a more liveable rate of 10% by the end of the year. Then, while you're trying to work out what's so liveable with 10% inflation, another speaker predicts that there won't be any stock companies left in 1986, which is an even less reassuring thought especially for those of us who are employed by stock companies.

Still, it was an exciting meeting. Each economic scenario presented a challenge and the challenge was one of change. The sophisticated buyers of the 1980s are not going to allow insurance companies to profit from investment earnings as they have in the past. Rather, the buyers will want to participate in the investment risk, either in the form of the traditional participating policy, the universal life concept, or the non-guaranteed premium policy. The challenge we face as actuaries is to lead the industry into the 1980s developing the products to pass along the investment success . . . and likewise, the investment failure, to develop the systems to support them and to work with and I must emphasize work with the state and Federal regulators to develop the environment to govern them.

As I said earlier, the non-guaranteed premium policy is one of the methods that stock companies can use to offer the policyholder the chance to share in the future expected investment earnings assumption. This is done by varying the premium charged, rather than varying the rate at which the cash value accumulates, as is done with the Universal Life product. Each such non-guaranteed premium policy has at least two sets of rates. The guaranteed rates are the maximum that may be charged and are based on somewhat conservative assumptions and almost always seem to be as high as the 1958 CSO CRVM net premiums. This eliminates the need for deficiency reserves as long as the current rates charged are not guaranteed for over one year. All cash values and reserves are based on the guaranteed premium rates. This avoids fluctuations in these values when premiums change.

The second set of rates are the current premiums. These are sometimes subdivided into smoker/non-smoker or preferred risk categories. There are many variations on how the current premiums are priced. At Occidental, they are priced on current rate book assumptions, as any other non-participating plan would be, but the surplus requirements are lower, since we have the flexibility to raise the rates if necessary. On the other hand, at Trans-america Life Insurance and Annuity Company, our pension affiliate, the current premiums are priced using a level interest assumption, rather than the more normal assumptions that interest rates will decline.

For most of the products on the market, the current premiums are guaranteed not to be raised for a period of any where from one to six years from issue. During this period when the current premiums are guaranteed, deficiency reserves would have to be set up based on the current premiums. The surplus strain related to these deficiency reserves is, of course, much smaller than it would be if the current rates were guaranteed for the life of the policy. After the guaranteed period has expired, the premiums may be raised or lowered subject only to the maximum guaranteed premium stated in the policy. A typical premium change provision would state that "any premium change will apply to all policies issued on the same plan and for the same amount of insurance, with the same values and provisions as this policy and on an insured with the same age, sex and class of risk as the insured under this policy."

The premium change mechanism is the thorniest problem with this product and it is subject to much philosophical and regulatory debate. The various regulatory problems covering disclosure, determination of non-forfeiture values, tax treatment and the pricing change mechanism itself will be covered in more detail later by Mr. Geyer and Mr. Burrows.

Philosophically, I believe the consensus of actuaries would agree that the pricing of any subsequent changes in the current premium rate, should be done on a prospective basis. That is, when the premiums change the readjusted premiums will not include any distribution of past profit or loss, but any past experience could be used to re-evaluate the pricing assumptions for the future premiums. This is consistent with the philosophy behind non-participating insurance of guaranteeing the premiums based on future expectations, but it carries this philosophy one step further by limiting the guarantee to a few years and allowing the actuary to re-evaluate future expectations. It does seem certain that any attempt to price premium changes on a retrospective basis distributing past profits or losses, would be construed by the state insurance departments and the Internal Revenue as taking a participating approach. These regulators would be more than eager to classify such a policy as a participating policy and thus subject to the laws governing participating insurance.

Another question regarding the premium change mechanism is whether future premium changes should be left to the discretion of management, or if the changes should be tied to a specific formula at the inception of the policy which places it beyond the control of management. A commonly mentioned method is one that directly relates the premium changes to changes in the Consumer Price Index.

Many insurance company actuaries would agree that premiums charged on any life insurance policy should be left to the discretion of management; an exception to this might be made in the case of a policy sold purely as a "total investment participation plan," which might be viewed as a variable life type policy, where the premiums vary rather than the benefits. Generally, however, factors other than investment return may vary, and the use of a locked-in formula will not solve the problem of maintaining equity, and use of an external index could conceivably cause solvency problems.

There is little doubt that the combination of sophisticated buyers and the fierce competition will pressure companies into lowering premiums when future expectations as to interest, mortality, lapse, and expenses change in that direction. A tougher question is whether we will increase premiums when future expectations indicate such an increase is needed. The actuary would then face the dilemma of choosing between the increase in premiums, which should result in the deterioration of the persistency and mortality, or maintaining an inadequate premium. The reluctance of mutual companies in the past to lower dividends when it became necessary is an indication of just how difficult this problem will be.

While the non-participating, non-guaranteed premium policy may sound like an entirely new concept, it isn't. Occidental introduced the first such plan, called Commercial 90, back in 1963. It was designed to offer the policyholder advantages similar to participating insurance. Obtaining state approval for the product proved to be very difficult. In the end, only 30 states approved Commercial 90, and the conditions placed on the plan were very restrictive. The trouble centered around the cash values. The cash

values were calculated on a level premium scale, and when the premiums were decreased, the cash values set forth in the policy became deficient. In effect, the states put a floor on the premium, beyond which the premiums could not be lowered. That was definitely a handicap for this type of product, and given the limited number of state approvals, and the state of the market, we withdrew Commercial 90 from the rate book in 1976.

In 1980 the Occidental family introduced four new non-guaranteed premium policies. Three are permanent, the fourth is term.

Transamerica Life Insurance and Annuity Company, which is our pension company, has just come out with the Trans-Innovator, which they believe is the first and as yet only non-guaranteed premium policy designed for the exclusive use with qualified pension plans. It was designed to compete with participating plans and to have the lowest possible going-in cost, hence the non-guaranteed premium feature.

Occidental has introduced Trendsetter 100. It too should be competitive with participating plans. It is felt that it is particularly attractive, because of its low cost, for clients in their 50's and 60's and in the business insurance market. The third permanent plan is Occidental's Graded Premium Protection. It comes in both participating and non-guaranteed premium, non-participating flavors. The premiums increase each year until the policyholder attains age 75, at which point the premiums level out and cash values develop. It is the sales leader so far this year, amounting to 18% of annualized first year premium. The non-participating version was developed principally for use in states where the participating plan was not approved. It has, however, been filed in all the states, should we decide to market it on a nationwide basis.

The only non-guaranteed premium term plan at Occidental is Term 90. It really is more of a second cousin to the other non-guaranteed premium plans and it can best be described as a hybrid revertible term. During the first six policy years, the premiums increase annually. Anytime during the first six years, the policyholder can re-enter or convert to any other policy with limited evidence of insurability. The premium on re-entry is not guaranteed. Those who do not revert or convert by the 7th year have a level premium term to 90 policy.

Now, you've noticed that while we have "standard American" non-guaranteed premium whole life plans, we don't have a "standard American" non-guaranteed term. This doesn't mean there aren't an abundance of them on the market. Obviously investment earnings have a lesser impact on the cost of term protection, and those companies who write a great deal of term can tell you that a term policy moves about every three years. Because of this, the lack of premium guarantee might have less affect on the marketing of term. Yet, the deficiency and renewability reserves can be quite heavy on a competitively priced guaranteed premium ART, and many stock companies, and at least one mutual company, have non-guaranteed premium ART's on the market. Many of those companies who haven't taken this approach seem to have turned to the revertible term, which because of its structure, also eliminates the deficiency reserve problem.

Ignoring the deficiency reserves, there is further justification for non-guaranteed premium term based on mortality considerations. Mortality has continued to improve, but how long this trend will continue, and what

the ultimate effect of the improvement will be is debateable.

There is a certain danger inherent in projecting mortality improvement on term when the premiums are guaranteed. Why not limit the guarantee and allow the actuary to project the expected mortality improvement as he sees fit and let the policyholder benefit. If the actuary is correct, the policyholder will not need to replace his ART a few years later. If the actuary is incorrect, and the premiums need to be raised, the policyholder should still be paying what is an appropriately priced, competitive premium.

On the reinsurance side, the majority of the business we are seeing is of the non-guaranteed premium type, or the regular participating type. While there is no problem reinsuring either of these types on a YRT basis, we are faced with similar problems when pricing coinsurance.

These problems center around setting the assumptions where the direct writing company is in control, such as premium, investment income, persistency and mortality. When a reinsurer is quoting on a coinsurance basis it usually must guarantee the allowances based on the premiums given. For example, if a 20% allowance is quoted and the premium happens to be \$10 the reinsurer will always receive \$8. As long as that premium is in effect, the allowances cannot be changed; therefore, the reinsurer has to price on assumptions that it can live with forever.

This guarantee of allowances prohibits the reinsurer from pricing with the same high, level interest assumption or with the reduced surplus requirements that the direct writing company might use. When a non-guaranteed premium scale is changed, or likewise, when a dividend scale is changed, the assuming company may be having different experience and different expectations for the future than the ceding company. We feel it is appropriate that the allowances which were developed on the original scale and guaranteed for the life of the policy, should continue to apply only to that original scale. In other words, should the direct writer reduce the premium from \$10 to \$9, the reinsurer would still receive \$8 rather than \$7.20. Of course, at the inception of the treaty, both parties could agree that the ceding company could be given the option to have coinsurance allowances quoted on the new scale at the time the new scale is developed.

Now, for one final word on the market potential. Everyone that I have talked to seems very optimistic about the market potential of these non-guaranteed premium products. To quote one senior officer, "We won't be able to sell anything else in our market."

Let me point out now that I am referring to the "Up market," those people who buy the \$100,000 plus policies. Those companies who write in the \$25,000-\$30,000 average size market might not find the need for the non-guaranteed premium policy. These companies are dealing with people who buy almost strictly because they feel they need the protection. These companies are also the ones who are not experiencing the large declining sales of permanent insurance and the increasing policy loan and surrender activity which is plaguing so much of the industry today.

For those companies geared toward the "Up market," the potential buyers have become very sophisticated. They understand their money better and they are much more attuned to how they spend it. Furthermore, these consumers have more investment alternatives than ever before in the form of the money market, savings and loans, flexible annuities and the like.

Insurance salesmen in this market are also more sophisticated than in the past. They need something to sell and guaranteed premium policies have lost a lot of glamour in their eyes. This combination of salesmen and consumers is pointing companies in the higher size market in the direction of selling only participating or non-participating non-guaranteed premium policies in the future.

There is a certain danger in this, should the economy ever settle down to a moderate 5%-6% inflation and the glamour of non-guaranteed premium policies fade. During the deflationary period that would proceed such an economy, when premium rates should be rising, we can all imagine the problems and the pressures we will have to face in making the decision to raise premiums.

MR. RICHARD A. BURROWS: At the Society's meeting in Atlanta during the spring of 1977 Jim Anderson, Jack Moorhead and Dave Gregg debated the issue: "Resolved...The Life Insurance business, as transacted today, is in its terminal stages."

Let me pull some quotes from that debate. Jim said, in debating the positive side of the resolution: "I do not believe that fixed premium, fixed benefit, permanent, cash value life insurance has any relevance to this potential buyer's financial requirements over 30 years, considering only the consequences of inflation."

Later, in his summarization, he said: "My preferred scenario is that the industry itself - hopefully, lead by the actuarial profession - will recognize its own problems and shortcomings and initiate changes from within."

Jack Moorhead, responding on the negative, said: "We must demonstrate to those who are looking at us that competition with its desirable features as envisaged two centuries ago by Adam Smith does exist and does cause life insurance companies in their own self interest to provide products that are as close as possible to matching the best that are available in the market today."

Jack went on to say: "The actuary calculating a non-participating premium is faced with a more painful dilemma than has ever been the case in the actuarial profession before. He is in the position of believing one thing and making his calculations on a different set of assumptions. He believes in general that interest rates will stay up; he makes his calculations on the assumption that interest rates will remain at present levels during the time when the reserve is so small that it does not make any difference what assumption he uses, and that they will decline at the time when the value of the policy increases to the point when the interest element is significant. The answer is the abandonment of non-participating insurance except on low investment element short term policies."

Concluding, Jack asserted: "Finally, both company actuaries and, of more importance, consulting actuaries need to approach the matter of calculation of premiums, cash values and dividends from a different angle that has been traditional in the business these many years."

In concluding the debate, the Moderator, Ardian Gill, asked each what he would recommend at the first step for the industry to take, if he were the consultant to the entire life insurance industry. Let me extract from their replies.

Jim Anderson: "It would be an overhaul of the form of our permanent insurance products to make them more flexible..."

Jack Moorhead: "...It must be up to...the actuaries of the companies...to announce more steadily and more clearly...that there is a reason for the public to turn to attractively priced products without fear of being short-changed in quality or service."

Dave Gregg: "...We must talk about life insurance as savings institution... we must be competitive and creative."

Flexibility and Imagination!!

The industry's new non-guaranteed premium non-par product represents just those qualities.

It is not participating life insurance, but it is a stock company's alternative to par insurance.

I will discuss Philadelphia Life's product of this genre, our AVANT GARDE, because it is representative and yet somewhat different from other companies products.

The policy form we use for the AVANT GARDE is simply a whole life form, with the computer-produced table of maximum annual premiums showing premiums increasing every 5 years, and with one additional provision: the "PREMIUM ADJUSTMENT PROVISION." This provision reads, in part, as follows: "...On or about the first day of December next following the third anniversary of the Policy Date, the Company will redetermine the annual premiums for policy years six through ten...Such redetermination will be made using the assumptions currently in use by the Company at the time of such redetermination for determining the premium rates for its then currently issued individual non-participating whole life insurance policies for the same face amount, premium class, age and sex of the Insured..."

Most other plans of this type have a level maximum guaranteed premium and the minimum non-forfeiture values are close to level premium whole life values. Philadelphia Life's AVANT GARDE maximum guaranteed premium pattern, increasing continually as it does (until attained age 60-65, or for 30 years) produces minimum non-forfeiture values much lower than a level premium plan would.

We illustrate both the maximum premium scale and the level premium scale consisting of the initial premium projected in successive five year periods.

A controversy has developed over whether a plan such as the AVANT GARDE may be illustrated holding the initial 5 year premium level for the life of the contract. The initial premium would be charged in successive periods only if the assumptions prevailing at issue did not change.

However, in any reasonable pricing context, level premium cash values could not be assumed together with the initial premium being held constant at such a low rate.

This controversy began during the summer of 1979 when the ACLI appointed a Task Force to report to the ACLI Actuarial Committee on this product. The Actuarial Committee was preparing to recommend a new valuation and non-forfeiture law to the NAIC and wanted to know whether this type of product needed special consideration.

The Task Force consisted of actuaries from stock companies that either already had such a product or were seriously considering having one.

The Task Force concluded, late in 1979, that neither valuation nor non-forfeiture statutes need make special accommodation for this product. The maximum guaranteed premium stated in the contract would be the basis of calculation for minimum values.

However, the Task Force then proceeded to recommend that there should be a restriction on what a company could illustrate to the prospective buyer. The point made was that a company should not illustrate a projected premium scale if such a scale would not support the policy's cash values (even though the maximum premium scale would be illustrated with equal prominence).

The only company affected by this restriction, at least at that time, was Philadelphia Life because our AVANT GARDE has maximum premiums increasing in 5 year steps, reflecting greater conservatism in the future.

We carried our dissenting vote to the Actuarial Committee but that Committee nonetheless unanimously accepted the Task Force's recommendation. The recommendation was that the state insurance commissioners could enforce this cash value requirement through their power to disapprove policy forms.

The Actuarial Committee duly reported to the ACLI Legislative Committee, but the Legislative Committee felt that the legal basis was not sound, in extending the commissioner's authority to cover non-forfeiture requirements properly covered by statute. It sent the problem back to the Task Force to consider the legal aspect.

The Task Force again reviewed the matter and came to the same conclusion as it had before. In turn the Actuarial Committee supported the Task Force, but with 2 negative votes and several abstentions. Late in May, the Legislative Committee again considered the recommendation. Again, it accepted the recommendation of the Actuarial Committee, but with a somewhat closer vote. Paradoxically, it put the ACLI in the position of extending an insurance commissioner's power, via his power to disapprove a form, beyond what the non-forfeiture statute allowed, while recommending that a commissioner's authority not be extended to a rate approval power. This latter point came up in connection with the South Carolina guideline for this type of policy. The South Carolina guideline requires that premium rates be submitted for approval 60 days before their use. The ACLI is recommending that this requirement be removed.

Various states have promulgated regulations for this type of plan. No state, on its own, has raised the issue that the ACLI Task Force has raised, even though they have given a good deal of time and thought to this product.

Here is a summary of state Regulation as it stands now:

Texas requires an actuarial certification when the form is filed that the pattern of maximum premiums is not unreasonable (so as to produce unduly low cash values).

The rate approval requirement in South Carolina has been mentioned.

Mississippi requires that rates be submitted for review, but does not go so far as to state their approval is required.

Oregon requires an actuarial certification at the time of premium redetermination that risk classes are not being changed. They also require a proportional relationship between the new and the old "expected" premiums that is at least confusing, and maybe unworkable.

No state, to my knowledge, has imposed a requirement like the ACLI is recommending. In fact, Texas, in its deliberations, specifically rejected such a requirement, and substituted the actuarial certification mentioned previously.

MR. JAMES A. GEYER:

I.A. Introductory Remarks

The title of this session is Non-Par Life Products with Non-Guaranteed Premiums. I find that name rather negative; something like "adjustable premium life, or life with periodic premium review" would be more positive.

My fellow panelists have described several reasons for a product with non-guaranteed premiums. I would like to begin by commenting on one of these points.

I do not agree that this product allows us to "pass along" favorable experience as does Par. The foremost objective of the plan is to assure inforce policyholders that they will always be treated equitably compared to new policyholders. Thus this product directly addresses the problem of replacement. Replacement occurs because older policies were priced with less favorable mortality and interest factors than those now used for new policies. With this product, there should not be a future replacement problem.

The other advantages, namely more competitive rates and the minimization of deficiency reserves, do not need further elaboration.

I am surprised that no one ever discusses the disadvantages of this policy form. In my view, the disadvantages include:

- .Uncertain tax treatment (which I will address later).
- .Administrative complexities of rerating in-force policies frequently.
- .Risk of increased lapses if premiums are increased.
- .The elimination of more favorable profits than expected should conditions improve.
- .Regulations that vary from state to state, some of which smack of rate regulation.

These issues need to be considered before jumping on the bandwagon.

I.B. AEconomaster

I would like now to briefly describe the "AEconomaster" product that my company, the AEtna, introduced in January of 1979. The initial premium is guaranteed for 2 years; thereafter, the premium is declared annually, subject to a level maximum premium. The initial premium is 6 - 10% less than our comparable Guaranteed Cost whole life premium while the maximum premium is 5 - 8% greater than the Guaranteed Cost premium.

Cash values are identical to those under our Guaranteed Cost contract. Since the actual premium will not vary from the initial premium unless our outlook for the future changes, we believe that this is essentially a level premium contract. Also, applying the Non-Forfeiture requirements for multitrack policies in the revised NF Law at the point of any premium change would result in level premium cash values for this policy, if the premium remains level from that point forward.

We now have approval in all jurisdictions, except New York and Montana. We understand that the New York Commissioner now approves of the concept, and that the Department is preparing a set of guidelines for it. We expect Montana to approve when New York does. The enthusiastic acceptance of this product by our field force and by our clients has been encouraging. In fact, for the first 4 months of 1980, this product accounted for over 70% of Non-Pension permanent sales over \$100,000. With New York's approval, this figure would have been closer to 80%.

Before I continue, let me outline for you the issues I wish to discuss this morning:

1. First, the considerations involved in determining the initial premiums at issue.
2. Second, the principles involved in premium redetermination and several alternatives for actually redetermining premiums.
3. Lastly, I will address the Federal Income Tax issue and the related Par or non-Par question.

II. Premium Determination - At Issue

The major underlying principle for this contract is that premiums will remain level as long as the current outlook for our pricing variables remains unchanged. We feel that in order to keep the price for this contract consistent with that for new issues, we must include all pricing variables; these include interest, mortality, lapse rates, expense, and taxes, but not profits, as I will explain later. (I should mention, however, that some companies have chosen to reflect only interest or only interest and mortality in their premium redetermination process.)

Theoretically then, the initial premium might be determined using more favorable assumptions for all of these variables than one would use for a standard Guaranteed Cost product. Practically, you should only

vary those assumptions that you feel appropriate. For example, in pricing a standard Guaranteed Cost product, we use mortality assumptions that reflect most recent experience. For our AEconomaster, one could argue that more liberal assumptions are appropriate, reflecting perhaps the recent decreasing trend in mortality rates. We were not comfortable with this and so chose to use the standard Non-Par assumptions.

Of course, we used deficiency reserves based on the guaranteed premiums since these are the premiums that we could charge to meet our liabilities. Our maximum premiums are equal to or greater than the valuation net premiums; however, since we guarantee the next year's premium at each calendar year-end, we may have a small deficiency reserve equal to the present value of the next year's premium deficiency.

III. A. Principles of Premium Determination

Paul Barnhart presented a paper in 1960 entitled "Adjustment of Premiums Under Guaranteed Renewable Policies." I strongly recommend this paper for anyone designing and/or pricing an indeterminate premium policy (It can be found in Volume XII of the Transactions). Most of the principles presented for Guaranteed Renewable Health apply directly to the corresponding Life product. I would like to briefly outline some of these for you.

1. First, the insured has certain rights. These are:

- a. Right to an initial rate contemplated as level in terms of then current assumptions (for a term product, this would translate to: "premiums will follow the illustrated scale as long as current experience continues"). This right implies that the profit margin must be fixed at issue. Otherwise, premiums might change without any change in experience assumptions.
- b. Right to later premiums again determined to remain level under then current experience assumptions.
- c. Right to the level premium equity resulting from past premium payments. Thus issue age and duration should be recognized; the redetermined premium cannot be a function of attained age only, (except perhaps for 1 year term).
- d. Insurer may not reclassify the insured with respect to premium class nor alter the original coverage in any way after issue. I should emphasize that practical considerations have to be taken into account. For example, if at some point you split the standard class into smokers/non-smokers, it would not be right to split your inforce. To do so would result in much higher premiums for smokers. A split which results in a rate change for only a very small segment, leaving the greater part unaffected, should not give rise to serious objections.

2. The insurer must also have certain rights:
 - a. The right to make rate revisions to keep the business self-supporting on a prospective basis, including reasonable margin for contingency and profit.
 - b. The insurer should not have to suffer an actual loss before changing rates. (This point and the next are really extensions of the first.)
 - c. The insurer does not have the right to recoup past losses.

From these rights, several Premium Determination Principles follow:

- a. First, projected deterioration or improvement (relative to the last redetermination) in any of the basic assumptions could be used to revise rates.
- b. Second, in calculating the revised rate, assumptions relating to past experience cannot be altered from those used in the last rate adjustment.
- c. And finally, the purpose of the premium adjustment is to adjust premiums to match any change in the present value of future policy costs and benefits. It is not to distribute surplus or recoup past losses.

I stressed earlier that future premiums under this contract will be consistent with premiums under new contracts. Note that I did not say they would necessarily be the same. If premiums on new issues change because of a change in profit targets, or because of higher first year expenses, or because of a split of the standard class into, e.g. smokers and non-smokers, or for a variety of other reasons, it would be contrary to the principles and rights I have outlined to use this new Issues premium for the in-force business.

III. B. Safeguarding These Rights

A question that naturally is raised at this point is how these rights of the Insured and of the Insurer can be protected. We believe that the main requirements must be that:

1. Profits are fixed at issue, based on the premiums then set and the pricing assumptions used.
2. Premium redetermination formulas must be purely prospective.
3. At time of rerating, the assumptions used for future policy years must not be less favorable than the company is then using for the corresponding policy years for new issues.

Naturally there is room for some discretion in this process, as there always is in any pricing. But normal competitive pressures will force the company to use the most favorable assumptions possible for new issues. Then using these assumptions in the

prospective rerating formulas with profits fixed assures equity between new and in-force policyholders.

III. C. Premium Redetermination Alternatives

I have stressed the importance of consistency between the pricing assumptions used for new and in-force business. Likewise, there should be some consistency between the way one prices new policies and the process used for premium redetermination.

I am sure that every company with such a product has in mind its own approach to redetermine premiums. I would like now to present several alternatives that we have considered:

1. Anderson Book Profits

At time of rerating, calculate future book profits under assumptions in use at time of last rerating, including the last premium charged. Find the present value of these book profits using the original internal rate of return. Then find a new premium, such that the present value of future book profits with the new premium and new assumptions equals the first present value. Using the internal rate of return keeps the new premium in line with the original profit objectives.

2. Retrospective and Prospective Valuations

At time of rerating, first calculate the retrospective fund (accumulated value of past premiums less benefits, costs, profits) based on past premiums and assumptions in use for past reratings. Then find a new premium such that the prospective fund (present value of future benefits, costs, profits less premiums) under the new assumptions equals this retrospective fund.

3. Change in Prospective Fund

At time of rerating, determine the prospective fund under assumptions and premiums from last rerating. Then find a new premium such that the new prospective fund with new assumptions is equal to the first. This method balances the change in present value of premiums to the change in present value of benefits, expenses, and profits.

In the first, or book profit approach, the method assures that profits are fixed at issue. For the other two alternatives, the profits used in the formulas should be set at issue; using your prospective formula, profits should be determined such that the present value of premiums equals the present value of benefits, costs and profits. (The premium here is the initial, not maximum premium.)

IV. A. FIT Alternatives & Impacts

A very important question has been raised regarding Federal Income

Tax treatment: should this product be treated as Par, Non-Par, or something in between for purposes of calculating Life Company income taxes.

At least two companies (the AETna is one) have asked for a private letter ruling from the IRS to resolve this question. The IRS's initial reaction seems to be that this is Par, or at least similar enough to Par so that the maximum less actual premium should be treated as a dividend. We have filed a brief with the service arguing against this position, but have heard nothing further.

Actually, there are several alternative views that are possible; the basic split is Par and Non-Par, but the details for each are not automatic.

First, if Non-Par, the companies involved have argued that the premium actually charged is the amount to be used in computing GFO. It is conceivable, however, that IRS could require the maximum premium to be used. Even this position offers two alternatives: the difference between the maximum and actual premiums could be considered a rate credit, or a return premium. A rate credit is a special deduction, like dividends, while a return premium is not.

Second, if the Service takes the position that this is Par, it is possible that the initial premium charged would be included as income for GFO, with future differences between the initial and actual premium charged (if lower) treated as dividends. Of course, the usual Par view would have the maximum premium used in GFO with the maximum less actual premium considered a dividend.

The importance of these alternatives varies greatly with your tax situation, or phase. In phase I, i.e., Taxable Investment Income, all views produce the same tax.

In Phase II, i.e., one-half of Taxable Investment Income plus Gain from Operations after specials, the only impact concerns the 3% non-Par deduction. If Par, you lose it; if Non-Par with rate credit or return premium, the 3% deduction would apply to the maximum premium, producing a slight tax advantage.

Phase II Negative, or Gain from Operations - before Specials, is where the position taken by the IRS is most critical. Under the Par - maximum premium alternative, taxes would be increased considerably. For example, if the maximum premium is 20% greater than the current premium, your tax would be increased by 46% times 20%, or about 9% of the premium. A company in tax Phase II Negative should this Par-Maximum premium view prevail probably could not develop a sufficient reduction from its traditional Non-Par product to justify the development of such a product.

In Phase II Negative, the Non-Par - rate credit interpretation would yield the same result as just described for Par. The Non-Par - return premium result would be no different from the Non-Par alternative since a return premium is not a special deduction. The Par - initial premium view would only matter if future premiums were reduced; in this case, the amount of premium deduction would

have to be only 54% of what it could otherwise be under the basic Non-Par alternative.

IV. B. Product Design Considerations

A company might consider several options in designing its product to escape adverse Federal Income Tax effects. For example, if there were no maximum premium, the only basis for a dividend would be the initial premium. In fact, this would then look exactly like a Guaranteed Renewable Health contract. It is likely, however, that many states would not approve such a policy form.

An approach that might defer the tax burden would involve maximum premiums that start lower, but increase with duration. Of course, larger deficiency reserves would result.

Since the maximum premiums for our AEconomaster contract do not apply until the third year, even if it is treated as Par with dividends based on the maximum premium, there are no such dividends in the first 2 years. If a company chose to extend the initial guarantee period to, e.g., 10 years, at least the tax problem would be deferred. Furthermore, if later guarantees are extended to periods greater than one year, the Service would have even less of a basis for calling the premium reduction a dividend.

IV. C. Par or Non-Par?

Since this Par or Non-Par question is an issue with the IRS, let us examine it more closely.

We now have approval for our product in all but 2 jurisdictions (New York and Montana); in none of these was the Par vs. Non-Par question an issue, although we did openly identify it as a potential question in our filing letter. Furthermore, many of the questions asked by New York indicate that they have carefully considered the Par - Non-Par question, and have finally concluded that the product is not Par.

It is interesting to note that this question was discussed at length with respect to Guaranteed Renewable Health insurance over 10 years ago. The following quote, from Mr. Barnhart's paper of 1960 is perfectly applicable to both products:

The function of the dividend is to allocate distributable earned surplus to the various ... classes recognized as significant for purposes of practical equity among participating policyholders. It deals with the total fund account retrospectively.

The function of premium adjustment is to adjust the value of future premiums to a change in the expected value of policy costs and benefits. It deals with the total fund account prospectively.

I would like to elaborate on this further.

First, the Company has no contractual right to the maximum premium at the time each premium is paid. At the end of each year we guarantee the premium due in the next year. The insured is only entitled to that premium by paying it. If he does not pay it, he cannot benefit by the lower premium.

In contrast, companies selling Par declare at the end of each year the dividends that will be paid the following year. In most states, the insured will receive this amount regardless of whether the next premium is paid. If he does wish to continue the contract, he must pay the full premium.

Second, a Par contract by definition is one in which the policyholder is entitled to share in the divisible surplus of the company. Our insured has no contractual rights to the company's surplus. The premium is based upon estimates of future experience plugged into a prospective gross premium formula, rather than upon an actual accounting of surplus generated by past experience.

Naturally, our estimates of future experience are influenced by past experience. If one argues that this makes AEconomaster Par, then it must follow that all insurance is Par. Also, we as actuaries rarely use actual experience directly in our pricing; we interpolate, smooth and adjust it to reflect what we conservatively anticipate will occur.

Finally, as I have stressed before, the purpose of this contract is to treat in-force Non-Par policyholders on an equitable basis (prospectively) with new Non-Par policyholders. It is similar to periodically replacing old contracts. The purpose of Par is to distribute past earned surplus. The difference between the two is clear and definite.

Closing Remarks

I have addressed numerous important issues this morning: Purpose of the product, premium determination and redetermination, Federal Income Tax treatment, and the Par or Non-Par question. More could of course be said, and many of you may disagree with me on some items. I believe strongly, however, that this is an appropriate product for stock companies, and that these and related issues must be dealt with. If properly priced and administered, I believe this product could completely replace the traditional Non-Par contracts we have offered for so long.

MR. ALBERT CHRISTIANS:

I have several comments that I would like the panel to discuss. First, I think you over stated the difference between this product and a Par product. In trying to establish it as completely different, you said that dividends are determined retrospectively and premium reductions are determined prospectively. In determining the amount of dividends to be distributed you said that dividends equal actual funds minus required funds. Required funds, however, are determined prospectively. Second, the Texas Regulation which Mr. Burrows discussed has a provision which states that you cannot illustrate an increasing premium in order to show a reduced cash value. They appear

to have regulated your motivation for doing something although not specifically prohibited. Do you think that this regulation applies to your product Mr. Burrows? Also, what do you think of this regulation? Third, I think that the principles that have been discussed on premium redetermination are very good. Does anybody on the panel think there is a possibility that there will be legislation or regulation adopting these principles as law? Finally, I see a consistency between this type of a product and an Accident and Health product. Why shouldn't the same legislative requirements apply to both? Do you think that there is room for a consistency of treatment between these two products?

MR. ZEFFERT:

I will take his question 1. Let's talk very down to earth on dividend redetermination which I am quite familiar with. I once worked on a pension series and I tried to price in all the special expenses of the pension trust line. We had spent about a million and a half dollars developing the system for servicing these pensions. That million and a half dollars was accurately determined. In successive dividends on our pension series I maintained that that million and a half dollars was a first lien and I was going to get it back. As it happened, I lost that argument. My point is that in this type of contract, as we see it, this is an improper argument. You cannot use that argument in repricing your premium. You may not try to get back past losses. By the same token you should not be looking at past profits. I think there is a definite philosophic break distinction between Par and this type of contract in that one element.

MR. GEYER:

I would also like to point out what happens practically between this type of contract and a Par contract with dividends. Suppose there is an interest rate change in the third or fifth year. Apply that interest rate differential in a standard Participating dividend formula vs. this Non-Par contract. You will see the dividends with a one percent interest change increase something like five cents this year, 10 cents next year, 15 cents the following year, and building up to a \$1.00 increase in dividends at the 20th year. With this type of contract the change is level for all durations. We look prospectively and we say premiums go down 30, 40, or 50 cents for all future years which is similar to the traditional Non-Par and Par at issue. At Par you pay a higher premium initially but eventually your dividends build up to reduce your cost. With Non-Par, you go in with the lowest possible cost. So I think that difference between Par and Non-Par is just as real with this contract as with the traditional Non-Par contract.

MR. BURROWS:

Regarding your second question, the Texas Regulation says that no insurer may incorporate an increment into a maximum premium in an indetermined premium reduction policy in order to be able to show an increased reduction in later policy years of the maximum premium, or to reduce cash values (as provided in Article 344A of the Texas Insurance Code) or to reduce reserves (as provided in Article 328 of the Texas Insurance Code). This is what the Actuary certifies to in Texas. We do not feel that this is adverse to our AVANT GARDE. We have not incorporated an increment in the maximum premium scales just to show a reduction in cash values. The maximum premium scale is justified in our minds strictly on the basis of the increasing conservatism that you normally apply as you perceive a guaranteed premium

scale. As you move away from the point of the decision you have to be more conservative. Furthermore, what is wrong in general with a modified premium contract? I think that the attitude that you cannot use it here would prohibit you from using it elsewhere. We do not feel that the Texas regulation applies to us. The fear brought up in the ACLI discussion was that some companies might come up with a maximum premium scale that would virtually eliminate cash values for several years, namely the years beyond the period of illustration. This would present a very unfair illustration to the prospect.

MR. ZEFFERT: Regarding your third question, New York does tend to oversee the dividend scales of domestic companies. Now whether they will take off on that principle and extend their regulations to this type of product, I do not know.

MR. BURROWS: I think that there is a fear that the states might get into the rate regulation area. That is why I think the ACLI's action on South Carolina is very good. They do not want that guideline to stand the way it is. When we filed in Arkansas they had a very similar requirement in response to our filing letter. Our response was that we do not want to extend to the Commission the power of rate approval. They were very cooperative and requested actuarial certification. I will have to put on file with Arkansas every year my pricing redetermination basis. So, at least some states are concerned about this product since it is new. They do not want it to get out of hand. They may be stating it rather closely to rate approval in South Carolina, but thus far they seem to be able to respond to a reasonable discussion on the question.

MR. GEYER: I would like to add one more point. There is a basic difference between our product and renewable health insurance that I think the states are cognizant of. We have a maximum premium and they do not. Also, the spread between our maximum and current premium is relatively small. With health insurance I think the states are concerned that an insurer could increase their rates dramatically in an effort to close out the block by forcing people to lapse. That is not likely here because of the small spread between the maximum and the initial premium. Furthermore, health insurance is under continuing pressures to increase rates because of increasing costs, whereas with this product we are currently looking at a likelihood of decreasing cost. Thus, with our contract states are concerned that we decrease premiums at the appropriate times, whereas with health insurance they are concerned that we do not overly increase premiums. I think there are some fine differences that are affecting the way states are approaching these two products.

MR. ROBERT COMEAU: In the Group insurance business we can recapture past losses. Regarding this product, however, the panel has said that the insurer does not have the right to recapture past losses. Is this because of regulatory pressure or is it because of philosophical reasons?

MR. GEYER: I believe that it is philosophical. We are getting quite paranoid about making this Non-Par. We want to avoid the similarities with Par. In Group insurance, rate credits are treated as dividends. We do not want that for this product.

MR. COMEAU: But do you think it will happen in actual practice?

MR. GEYER: I think some states are heading towards incorporating some of these points in their regulations. With guaranteed renewable health you have to be careful in some states not to include anything for recapturing past losses in a rate adjustment. I think that same type of thing will apply here.

MR. COMEAU: But from a practical standpoint, don't you think it will be very difficult to enforce?

MR. GEYER: It could be. As I mentioned, there is much discretion left in the process. I think, though, that by demonstrating to the states that we are using the same assumptions for in-force and for new business for the corresponding policy years, we will limit things. Suppose that you have a loss because of a huge increase in first year expenses and you have to increase premiums on your new business. You would have some trouble justifying to the states that you have to increase premiums on your in-force business. I think it can be controlled within reason but it will take more state involvement than we have had in the past.

MR. LAWRENCE AGIN: Do any of the companies have any guidelines as to how much of a change in premium is necessary before you actually go through the work of changing the premium?

MR. BURROWS: I think that our position is that we are going to change whenever the change is required because we contractually state the basis for the change. Remember that in Arkansas I have to file changes with the Insurance Department.

MR. ZEFFERT: You have to remember, as a practical matter, as in the case of dividends, that you do not make a change so small that they laugh you out of the reprint.

MR. BURROWS: Martin, I think there may be some advantage in making a change however small because then you instill the idea to the policyholder that the changes will be made as they reflect experience.

MR. MICHAEL H. BERKOWITZ: What would you do with regard to your GAAP assumptions if you change your premium rates because of your testing?

MR. GEYER: What we have chosen initially to do is to fix the GAAP factors at issue. We will keep those factors and premiums fixed from issue regardless of what happens. The theory is that when we make a premium change we are using some type of prospective evaluation. We are changing premiums to balance in effect the change in the prospective cost benefit profits with the change in the present value of premiums. We feel that if at a later point we change both the GAAP factors to reflect new assumptions as well as changing the premiums, we should theoretically over the long haul come up with the same profits. The whole basis for our premium change is to keep profits fixed and we feel that the GAAP profits should be one of those profits that remains fixed.

MR. ZEFFERT: Is there anyone from a public accounting firm that would like to comment?

MR. HOWARD BOLNICK: One of my colleagues came over and we discussed this very briefly. We disagree. That tells you how much we know too, but I will

state my opinion. It is not necessarily the opinion of Coopers & Lybrand or anybody else who may be from an accounting firm. I would agree with Mr. Geyer. Once you have priced your product initially, you keep the same assumptions unless you have a recoverability problem, in which case you would change the premiums.

MR. GALE E. EMMERT: I wanted to make a comment about the ACLI Task Force and the cash value question. Rich and I were both on the Task Force so we both had quite a few conversations concerning this. The basic idea that the Task Force was approaching was that you should not be able to do something outside of the contract that you would not be able to do inside the contract. In other words, if you are going to illustrate a level premium outside and if you think that is the premium you are going to charge, then you should establish a cash value basis as if the premium is level. We felt that to do otherwise would be unfair and that the states could prohibit that as an unfair trade practice or inequity or something along that line. Texas did not choose to follow that line. I think that Texas did not feel that their law had enough support to overcome any law suit that might come out of it. The NAIC Sub Committee is now considering making a proposal to actually change the law and require that the cash value basis be determined on a level premium basis. There was never any intent to prohibit an increasing premium product, but the idea is that if you actually have a modified premium product then you should not illustrate a level premium but rather illustrate a modified premium.

MR. BURROWS: I think that there are a couple of points that need to be clarified. This came up in our work in the Task Force right from the beginning. The statement was, "the premium that we expect to charge." I do not expect to keep the initial premium level for the life of the contract with interest rates falling as they are. I fully expect that my first revision is going to have to be upward. We fully illustrate the maximum scale as well as the premium we expect to charge wherever a guideline requires that illustration. As a matter of fact, there was a rather amusing occurrence during the Texas hearing. In the Philadelphia Life suite, one of our outside counsels suggested that our illustration could be, "would you rather pay this premium or would you rather pay this premium," giving great prominence to the maximum premium. The real concern though is that and that is why I started my presentation with the Morehead vs. Anderson debate. I think that was a very lively debate and I think that we got a lot of attention among the actuarial profession. We do need to do something and we have a right to do something. Stock companies are selling Non-Par insurance and there is concern for survival. Why do we ask the regulatory people to be unduly restrictive at a time when in fact you need more imagination? Why are we asking the regulators to be overly strict? They are going to be strict enough any way. We do not know the direction that this product is going to take but for all the passion that we have put into it at Philadelphia Life, we are not selling very much of it. A major reason is the lack of approval in states where we sell most. Another reason is that when we came out with this product we also came out with a new whole life product that has very low rates and has been more popular. The third reason is the education of our agents. We have been waiting for all the approvals to come in before we go on a campaign. I do not think we should be setting a precedent with the insurance departments by asking for undue regulations.

MR. HOWARD ROSEN: If things stay as they were intended at issue, you would continue to charge the original gross premium for all durations and possibly

avoid the need to set up a deficiency reserve. Is not this concept of stating a maximum chargeable premium a method of avoiding the setting up of deficiency reserves? It could be construed that you are setting your maximum chargeable rates in the contract and then charging what you feel like to be as competitive as you want to be. I think that with the legislators doing what they are doing in order to raise revenues and set reserves in a conservative way, this could conceivably be a very serious point of contention.

MR. GEYER: Let's look at what deficiency reserves are for, theoretically speaking. If interest rates drop to 4% and mortality approaches 58 CSO, you will not have enough future income to cover your future liabilities. My point is that should anything like that happen, we do have the right to raise premiums to the maximum level. As long as we have that right and as long as we are planning on adjusting premiums upward if something like that happens, it seems fully consistent and appropriate to use the maximum premiums for deficiency reserves. Premiums are going to stay exactly where they are only if current conditions remain pretty much where they are. So I do not really see a problem.

MR. DANIEL F. CASE: I worked along with the Task Force and other groups that developed the ACLI recommendation for nonforfeiture requirements for these policies. My recollection is that rather than examine Philadelphia Life's product with a view to judging whether it constituted an abuse, we just tried to preclude the development of products that would represent clear abuses. The recommended requirement that has been described today was the best we could come up with. Let me mention that the NAIC may not buy our recommendation.

With respect to the South Carolina guidelines for these policies, we have discussed the matter with a member of the South Carolina Insurance Department. His major concern was that some policies may have such high guaranteed maximum premiums that the company has, in effect, a blank check for increasing its actual premium rate. My personal view is that we are going to have to get back to work and develop some kind of suggested control on the premium changes that we can offer to the regulators in lieu of outright rate approval.

MR. JOHN E. TILLER: There is a viewpoint in many other countries in the world that cash values are not guaranteed. In those countries, actuarial certification really means something. I sign a statement at Occidental every year and I wonder what does it really mean? We are so regulated here and we have so much surplus on top of the reserve. Does actuarial certification mean anything?

I would like to look at this product as a possible first step toward some meaningful actuarial dialogue where the actuary means something. We need to get rid of much of this regulation; if the actuary says it is affordable, then it is right. What is wrong with that? Does anybody want to respond? I know it's impractical today but why can't we work on having it in place by 2000?

MR. GEYER: I think that 10 different people could easily come up with a set of assumptions that they feel are appropriate and get maximum premiums to go with the scale that will produce zero cash values. There is nothing magical about the assumptions that you should use to get maximum premiums; so I really do not see the value of certification there.

MR. ZEFFERT: Don't forget about competition. If you push that maximum premium up fast, you will be surprised how quickly the general agents will spot it and tell you about it. I do not think that this is something we have to worry about.

MR. TILLER: I did not mean that we should have zero cash values. I am emphasizing the trend towards more responsible actuarial work in general. I am more interested in seeing the deficiency reserves eliminated. They are anti-competitive and distort the picture. If the actuary is pricing properly and making a certification that his pricing is correct, then there is absolutely no need for a deficiency reserve.

MR. GEYER: I would agree. I think this product will naturally lead to more actuarial responsibility. We are going to have to have it with the prospective nature of fixing profits in order to equitably treat new and old policyholders. With respect to the maximum premiums, I think that equity is very difficult to define. I really do not know how you would certify that these maximum premiums are more equitable than those maximum premiums.

MR. EDWARD G. SUITER: Many comments have been made about equity between in-force policyholders and new policyholders who buy this product. Are companies considering a replacement of guaranteed premium in-force policies with this new product? Obviously the premiums on these new products are 10, 15, or 20% lower.

MR. GEYER: When we introduced this new product we allowed all policyholders who purchased policies within the last three or four months to switch over. Since then we have also allowed all policyholders who purchased their policies after 1976 to switch over. This is a large block of our business. Right now we do not intend to do anything formally for the other policyholders. I think that we would allow the earlier policyholders to come in and switch also but we have not made a formal program of encouraging it. We do recognize our problem and we are trying to take steps to allow the older policyholders to switch over to the new product.

MR. SUITER: How is the agent affected in these switches?

MR. GEYER: He does lose a little bit because the premium goes down and he gets basically the same renewal commission percentage. However, our agents have not objected to that. They feel that they are more likely to be able to keep the business by replacing it. Hence, I think that they are generally in favor of it.

MR. TILLER: Have you considered a replacement program where you maintain the same premium and increase the face amount? The agent would not suffer under that arrangement.

MR. GEYER: We've definitely tried to encourage your suggestion; we allow it to go either way.