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INSURANCE REGULATION AND LEGISLATION

*Moderator: JOHN K. BOOTH.
Panelists: E. JAMES MORTON, RICHARD W. KLING,
RICHARD CHARLES MURPHY*

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MR. JOHN K. BOOTH: This Spring the American Council of Life Insurance (ACLI) submitted a set of proposed amendments to the Standard Valuation and Nonforfeiture Laws to the National Association of Insurance Commissioners (NAIC) Technical Subcommittee on Valuation and Nonforfeiture Matters. Some have said that this set of amendments is the most far reaching of any that we have seen in recent years. James Morton will give us a general discussion of these amendments and of their effect on the design and pricing of participating ordinary life insurance and group pensions.

MR. E. JAMES MORTON: On March 12, 1980, the ACLI officially proposed (by letter) to the NAIC Life, Accident and Health Technical Subcommittee a package of proposed amendments to the NAIC Standard Valuation and Nonforfeiture Laws. The proposed amendments encompass the following:

(1) Adoption of a new mortality table (Table K) for Ordinary Life Insurance;

(2) Establishment of a system for automatically updating the statutory valuation and nonforfeiture interest rates for new business (the so-called dynamic interest rate system);

(3) Changing the initial expense allowance, and making other technical improvements in the Standard Nonforfeiture Law for life insurance.

Each of these proposals has been exposed to and discussed by the Society membership. The new mortality table is the result of a three-year effort by a Society committee headed by Charles Ormsby. That table was adopted by the Board of Governors in January of this year to be forwarded to the NAIC for legislative action.

The amendments to the Nonforfeiture Law stem from recommendations by another Society committee headed by Henry Unruh, while the changes in the excess initial expense allowance were those recommended by Charles Richardson in a 1977 paper in the Transactions (XXIX 209-241). Finally, the dynamic interest rate proposal was developed over several years by a subcommittee of the ACLI's Actuarial Committee, and was discussed at last October's Annual Meeting of the Society.

My job is to describe briefly these changes and what their effects might be on group pensions or participating life insurance.

First is the dynamic interest rate proposal. Right now this is still just a proposal, and is likely to undergo some modification, because the NAIC Technical Subcommittee remanded this matter to an Advisory Committee headed by Charles Greeley of the Metropolitan Life for further study. However, it is hoped that whatever changes are to be made can be agreed upon in time for the Technical Subcommittee to propose dynamic interest rates along with the other amendments to the NAIC at its December meeting.

You may be interested to know that the Technical Subcommittee assigned the Greeley subcommittee several other projects, including dynamic mortality tables, expense rates, and policy loan rates.

Since Richard Kling is going to cover the development of the dynamic system in some detail, I will try to give only a broad outline. The proposal defines a valuation rate, within the law, as a formula. That formula is a weighted average of 3% and a reference interest rate. The reference interest rate is a recent 12 or 36-month average of published Utility Bond Averages, while the weighting factors produce rates which vary closely with the reference rate for some products and distantly for others. For example, Guaranteed Interest Products with guarantee periods of ten years or less and a market value adjustment for payout, will have a maximum valuation rate equal to 100% of the reference interest rate. What that means is that if the dynamic interest basis had been in effect at the end of 1979, the money received in 1979 under those Guaranteed Interest Contracts which I just described could be valued at 9.5% which was the reference rate for 1979 of 9.6% rounded to the nearer 1/4%. The reference rate in turn was equal to the 12-month average of Moody's Seasoned Aa Public Utility Bonds ending on June 30, 1979. So you see in this case, the valuation rate is very responsive to the reference rate.

At the other extreme is life insurance. Here, there are three factors dampening the response of the valuation rate to the reference rate. The first is a provision that the reference rate itself will be the lower of the 36-month average and the 12-month average. This would bring the 9.6% which I mentioned earlier down to 8.94%.

The second dampening factor is that a one-year lag is required in order to provide time to gear up for the change (yet another year is permitted for nonforfeiture values). This brings the 8.94% down to 8.66%. Finally, and most importantly, the weighting factor provides for going only 35% of the way from 3% to 8.66%, which results in a valuation rate of 4.98% which in turn is rounded to 5%. I won't go through the arithmetic required to produce the maximum nonforfeiture rate, but the result would be 6.5% for 1979.

In between these two extremes are weighting factors for deferred annuities, immediate annuities and guaranteed interest contracts with book value payout. All this is described in great detail in General Bulletin #2895, March 21, 1980 of the ACLI.

What might one expect to happen in the product area were this proposal to be adopted and enacted into law? In the group pension area, one would certainly expect to see a somewhat more aggressive marketing of those products which have been restricted by surplus strain considerations, expecially GIC's with or without extended payout provision. This would especially be true of those companies operating in New York were New York to replace their existing reserve requirements with the dynamic proposal.

The proposal might bring more smaller companies into the market who are now excluded because the surplus strain is too great.

Perhaps we might also see the development of products with dynamic interest rate guarantees tied to future changes in the reference rate.

With respect to individual life insurance the major effect is likely to be on pricing, rather than products. Federal Tax savings resulting from higher permissible valuation rates can have a profound effect on prices, especially at today's portfolio interest rates. And, of course, reductions in deficiency reserves are always welcome to both the company and the policyholder.

With respect to the new Mortality Table, now called Table K, but which will undoubtedly be known as the 1980 CSO Table, some changes from the 1958 CSO Table are particularly worth noting.

First, there are separate rates for males and females. This raises a question of how to deal with joint life values, and it is expected that an actuarial note on this subject will be submitted to the Society recommending a table of uniform seniority approach, with perhaps several tables depending on the combination of sexes.

The new table preserves the experience "hump" in the late teens in the male rates reflecting the high mortality from accidents at those ages.

And, in general, the new table produces lower premiums, reserves, and cash values for most life insurance plans and distributions of business.

Certainly, the adoption of sex-distinct rates will have a significant effect on most companies' pricing of life insurance policies issued to female risks. Several different approaches are used today for the pricing of female policies; from gross premium discounts only, to various age setbacks up to six years, with variations in the treatment of dividends and nonforfeiture values. A reasonable expectation is that with the new mandatory minimum

standard for females and the growing importance of the female market all companies will move to entirely separate price structures - premiums, cash values and dividends by sex. All this assumes that unisex rates are not mandated in the interim. One would also anticipate separate rates for accidental death benefits and disability waiver benefits to follow shortly thereafter.

Turning to changes in the Nonforfeiture Law, probably the most significant is the change in the excess initial expense allowance from 65% of premium, plus $20 per thousand of insurance to 125% of premium and $10 per thousand of insurance. I refer you again to Richardson's paper which provides the rationale for this change.

It is obvious that the effect is to reduce expense allowances for lower premium plans and increase them for higher ones. Thus, minimum cash values in the early durations for younger ages are increased and for older ages are decreased. And for high premium plans, such as twenty-year endowments, the early minimum values are decreased while those for level term to age 65 policies are increased. These are the kind of changes which the Richardson study indicated were needed, and I think the effects on pricing are clear.

One other important feature of the new expense allowance is that the 125% factor is based on the levelized net premium rather than the first year premium. This has important consequences for some policies with high first year premiums, and, in fact, affects all "modified" premium and other non-level premium plans.

In addition, there are a number of other changes which, it is hoped, remove some ambiguities and unnecessary complications. For example: policy fees or their equivalents may be excluded from the calculation provided they are stated in the policy; policies which produce only trivial cash values are exempted (here, "trivial" means no more than $25 per thousand of insurance); and term riders and spouse coverages are to be treated as separate policies.

Also, there are a number of changes designed to provide flexibility within the law. In this category are provisions designed to cover multi-track, life-cycle and so-called "open" policies as well as policies under which minimum nonforfeiture values cannot be "meaningfully determined." There is a provision allowing adoption of new mortality and morbidity tables if such tables are adopted by the NAIC. There is a provision covering the allowance of more liberal nonforfeiture options and paid-up additions than guaranteed in the policy and, as described before, it is hoped that the amendments will include a dynamic interest rate proposal.

Finally, I should mention that the Technical Subcommittee made two changes which were not recommended by the ACLI, both of which, if adopted could have far-reaching effects. One of these defines the Commissioner's Reserve Valuation Method similar to that included in the 1976 amendments to the Standard Valuation Law for Annuities. One interpretation of this provision is that it would require a minimum reserve to be held sufficient to cover the benefits which would be paid under any possible assumption as to termination of premium payments in the future. This amendment has no effect on level premium and benefit policies, but may increase reserves under other types, particularly those which produce negative reserves under the traditional interpretation of the law. There is an extension of this principle to nonforfeiture values.

The other change establishes a new system for minimum nonforfeiture values for policies under which the insurer has the right to change future premiums. Since Richard Murphy will discuss these changes in his section, I will not elaborate further.

MR. BOOTH: Certainly if there is a "sleeper" in this new legislation, it is the new Commissioner's Reserve Valuation Method just mentioned which will affect the minimum reserves and cash values for most non-level premium and benefit policies. It would behoove many actuaries to test their non-level premium and benefit products to determine how they might be affected by this proposal. There has been considerable discussion of this kind of proposal by a Council Task Force and a General Bullitin was distributed to the membership on May 21st of this year. In essence, the proposal says that if at any policy duration the present value of future premiums exceeds the present value of future benefits, reserves and cash values must be redetermined for that duration and prior durations as if the policy terminated at that duration.

The valuation treatment of deferred annuities is a key element in the development of both the dynamic and static interest rate proposals incorporated in the proposed amendments. This is so because annuities tend to fall right in the middle of the spectrum of products running from those that have the greatest investment risk to those with the least investment risk. Richard Kling will tell us more details about the dynamic interest rate proposal and the treatment of deferred annuities as well as some of the problems of potential disintermediation of deferred annuities.

MR. RICHARD W. KLING: This afternoon my remarks will cover some of the practical factors that were considered in the development of the dynamic valuation interest rate proposal, a comparison of valuation interest rates that would have been developed under the dynamic proposal with current valuation rates, the potential effect of the dynamic proposal on pricing deferred annuities, and some comments on the disintermediation risk.

As James Morton indicated, the dynamic proposal involves the determination of a statutory valuation interest rate by weighting a rate of 3% and a reference interest rate representative of current new money interest rates. One of the key factors in this formula is the reference rate. We felt that the basis for the reference rate had to meet several criteria. For example, the basis should be easily determined, readily available and representative of the investments of a cross-section of life insurance companies. An industry basis was finally ruled out since consistent information would be difficult to obtain in a short timeframe. In addition, an industry basis would probable be heavily weighted by the investment results of the larger companies and therefore would not necessarily be representative of the investment results of many smaller companies. This led to an investigation of several public indices. The subcommittee ended up recommending Moody's Seasoned AA Public Utility Bond Index as the basis for the reference rate. A subsequent study of the historical yields on new investments for 55 companies showed a high correlation with this index, further substantiating its choice as the basis for the reference rate.

The other key element in the formula is the weighting factor. Before we did any theoretical testing, we did a lot of looking at the valuation structure from a practical viewpoint. We determined that the valuation interest rates probably fell across a broad spectrum. A relatively low interest rate would seem to be appropriate for annual premium life insurance since long term guarantees are substantial and the initial asset buildup is minimal. Conversely, a relatively high interest rate would be appropriate for immediate annuities and guaranteed investment contracts. Other types of products appeared to fall in between.

We looked at the existing categories in the current valuation law in an attempt to sort out some problems. For example, should there be different valuation interest rates for annual premium life insurance and single premium life insurance? Theory would seem to support different rates and, in fact, this was the approach taken in the 1976 amendments. While the various states were in the process of adopting the 1976 model amendments, substantial industry objection to this rate differential surfaced. The primary concern appeared to evolve around potential replacement problems. As a result of this objection, many of the states that had not yet enacted the model legislation adopted a single valuation interest rate for individual life insurance. The experience with the 1976 amendments made it quite clear that a single rate was the only practical alternative for individual life insurance.

Input from regulatory officials indicated that there was a strong feeling that valuation interest rate categories should be consistent. Specifically, elimination of separate valuation interest rate categories for annual premium and single premium life insurance should lead to elimination of separate categories for annual premium and single premium deferred annuities. As a result, we concluded that annual premium and single premium deferred annuities should not be separate valuation interest rate categories. This conclusion eliminated a category in the current law.

The current law has a separate category for group annuities. Today the distinction between group and individual annuities, particularly in the deferred annuity area, is becoming increasing blurred. As an example, these annuities may have identical policy provisions, the same asset/liability structure and similar markets. Therefore it does not really make sense to have separate valuation interest rates for individual annuities and group annuities. This conclusion eliminated another category in the current law.

We were then left with four basic categories: life insurance, deferred annuities, immediate annuities, and guaranteed investment contracts. The next step was to tie these categories together with appropriate weighting factors. As I indicated earlier, we assumed that a relatively low valuation interest rate seemed appropriate for life insurance and relatively high rates appeared to be logical for immediate annuities and guaranteed interest contracts. The key "link" between the low rate and high rate categories is the deferred annuity category. This was one of the more difficult problems - finding a way to structure the deferred annuity weighting factor such that the "link" was reasonable. After studying several alternatives, issue age weighting factors were chosen for deferred annuities. The issue age subcategorization for deferred annuities was selected for several reasons, e.g., it is the best way we could find to objectively define duration (the preferred theoretical basis); it is not subject to manipulation and it resulted in a "link" that appeared reasonable.

An additional question considered in the development of the dynamic proposal was the basic structure of a dynamic valuation interest rate. Should the rate be static or grade down by duration from issue? Although there was considerable sentiment for a declining rate, the concept was abandoned since it tended to produce undesirable side-effects, e.g., high nonforfeiture values. In addition, a declining rate was viewed as being impractical for many companies.

Considering the charge of the subcommittee and all of the practical and political considerations, I believe that the dynamic valuation interest rate proposal is a considerable improvement over current procedures for updating valuation interest rates and deserves the support of the actuarial community.

How would valuation interest rates under the dynamic proposal compare with current valuation rates? The table in Appendix A is my attempt to compare valuation interest rates produced by the proposed dynamic system with current rates for the year 1979. Guaranteed interest contracts are excluded from this comparison since current valuation interest rate legislation is very sketchy in most states. The dynamic proposal would have generally produced valuation interest rates 50-100 basis points higher than current rates. However, there are exceptions. The differences at higher ages for deferred annuities are quite startling, with the dynamic valuation interest rates exceeding current rates by as much as 375 basis points. There are also areas where the proposed dynamic system produces lower valuation interest rates. For example, the dynamic system produces valuation interest rates as much as 200 basis points lower than current rates at the younger issue ages for group deferred annuities. It appears that the dynamic proposal would produce still higher 1980 valuation interest rates for all categories but life insurance. The categories using the June 30, 1980, 12-month average of the Moody's index as the basis for the reference rate would be particularly affected. As an example, the 1980 dynamic valuation interest rate for immediate annuities will likely exceed 10%.

How will the dynamic valuation interest rate proposal affect the pricing of deferred annuities? The valuation interest rate primarily affects the level and length of the interest guarantees. To guarantee a competitive interest rate for a significant period of time can produce enormous surplus strain. Consequently, some companies have attempted to limit the surplus strain by making relatively modest initial interest guarantees. Often times these guarantees are periodically updated or additional interest is predeclared on a prospective basis. Since the dynamic proposal generally produces higher valuation interest rates for deferred annuities, we may well see higher interest guarantees for longer periods of time in order to increase the marketing appeal of these products. Increased interest guarantees may also reduce the Federal Income Tax burden associated with these products. However, increased interest guarantees imply increased risk. Therefore, a company that increases interest guarantees should also consider increasing margins to accumulate additional surplus to provide for the increase risk. The dynamic proposal also presents some interesting dilemmas. For example, the age breaks may result in substantially different levels of surplus strain for the same contract issued to individuals of different ages. How this might actually be reflected in the pricing process is only a guess right now, but I am sure that enterprising actuaries will find solutions.

The last point I would like to cover is the so-called disintermediation risk. This is a potential risk with many of the products we offer today, e.g., whole life insurance, guaranteed investment contracts with a book value cash-out and deferred annuities. The classic disintermediation scenario for

deferred annuities goes something like this: Interest rates are rising rapidly. At the same time the termination rate for these contracts is also rising. In order to raise cash to pay the termination benefits, it is necessary to sell assets at depressed prices, i.e., incur capital losses. Should the disintermediation risk be provided for through the reserving process? Since a reserve provision would probably lock up dollars at precisely the time they are most needed, I do not believe this is necessarily the best approach. The strongest argument for a reserve approach is that at least some provision will be made for the disintermediation risk.

What alternatives are there to provide for the disintermediation risk? One approach is to provide for the risk in surplus. Although this approach appears logical, there is no assurance that surplus funds will actually be accumulated at the time they might be needed. Another approach is to attempt to alleviate the risk through appropriate product design. As an example, consider the deferred annuity termination provision. Some type of market value adjustment is a possibility. If this is not practical, the best alternative would appear to be permanent surrender charges at relatively high levels, possibly as high a level as the law permits. Another approach is appropriate investment strategy. By this I mean a reasonable matching of assets and liabilities. For deferred annuities this would seem to imply an investment policy geared toward assets with relatively short maturities.

My preference is to provide for this risk through a combination of surplus, sound product design and appropriate investment strategy. For deferred annuities, I believe that margins need to be increased to accumulate additional surplus, that the products need to be designed with substantial and permanent surrender charges, and that assets need to be invested to better match liabilities. In the short run, a company following this strategy may well suffer from a competitive disadvantage. In the long run, it may be the company that survives and prospers.

MR. BOOTH: Having heard about the effect of these proposed amendments on participating ordinary insurance, it is important to consider how they affect nonparticipating insurance. The effects of the new mortality table and some of the problems and questions in designing a non-participating portfolio under the new proposal will be discussed by Richard Murphy.

MR. RICHARD CHARLES MURPHY: My remarks will address three issues - the effect of the new mortality table on guaranteed cost products, the effect of the proposed Nonforfeiture Law on these products, and other current miscellaneous valuation and nonforfeiture topics.

<u>How the New Mortality Table Effects Non-Participating Insurance</u>

The principal effect of the introduction of the new mortality table will be the use of separate female mortality rates for determination of cash values and reserves. I am sure many companies will be guided by this table in determination of their premium rates. Up to this date, it has been common to see three to six year setbacks on cash values with similar setbacks on premium rates. While I am sure there has been a proper analysis in the determination of the age setback for females, it is not possible to develop a fully equitable relationship of males to females at all ages by use of the single age setback. Introduction of separate female mortality rates will solve that dilemma by introducing yet another complexity, that is, the need to price female products separately from male products. Our own analysis of the new female mortality rates indicates that they will produce approximately a 5 year setback on cash values. The relationship of the mortality factors

in the new table indicates that female term rates based on this table would be equivalent to using a 10 year setback on male rates. The expectation is that the introduction of new female mortality rates will require the development of independent cash values for females and the determination of rates for females which produce the same profits as for males. This will certainly produce a greater equity.

As a caution, it is proper to note that the female mortality rates are based primarily upon non-medical experience. A recent analysis of our own company's experience indicates that the male to female relationship is significantly more favorable to the benefit of the females for non-medical policies vs. medical policies. This experience gives additional evidence to the belief held in some quarters that as females enter the work force in greater numbers and at higher organizational levels, their mortality relative to males will deteriorate. In any case, you might remember this company's experience.

Although basic reserves might decrease something in the neighborhood of 8% by implementation of the new mortality tables, of greater interest is the impact on deficiency reserves for those companies offering low premium, guaranteed cost permanent insurance. A few years ago, my primary interest in a new mortality table was with respect to the effect on the deficiency reserves that would have to be set up. Because of our company's introduction of non-guaranteed premium products, this deficiency reserve problem has gone away and the new mortality table will really not have that much of an impact on us. Of course, we will be busy handling other questions with the various states and possibly with the Internal Revenue Service on our non-guaranteed products. Perhaps worrying about deficiency reserves was a better alternative.

The deficiency reserves on standard guaranteed cost non-participating products will be significantly affected by introduction of this table. The net premium for a whole life policy decreases about 10% for males and about 16% for females. For term insurance, the net premiums are down about 15% for males and 20% for females at the most popular ages. These changes in net premiums will certainly lessen deficiency reserves at least for a while.

The reductions in the net premiums and basic reserves are consistent with a reduction in the nonforfeiture values. Nonforfeiture values will decrease about 10% for males and 10-15% for females on a typical ordinary life policy. Of course, these are the minimum values and the companies will be allowed to offer values in excess of these minimums.

In the aggregate, the new mortality table should allow us to lower premiums principally because of lower cash values and, once again, we will be able to explain to our agents how they can sell more and earn more because the premiums per $1,000 are decreasing.

Nonforfeiture Law Effects on Non-Participating Insurance

In March and April, the ACLI and the NAIC Technical Task Force discussed new Nonforfeiture Law changes. These changes were distributed widely in actuarial circles. I will comment on a few of these changes and the expected impacts on non-participating life insurance products.

The expense allowance is 125% of a nonforfeiture premium plus $10. The nonforfeiture premium is the equivalent level premium for the benefits offered under the policy.

The effect of these expense allowances will be to increase the cash values at younger ages and decrease them at older ages. Initially, I indicated a considerable concern about this matter to the ACLI, since our asset share studies indicated a justification for decreases in minimum values at young ages and the requirement for an increase in minimum values at old ages. However, if these changes are taken together with the mortality table changes, we should see a relatively modest effect on the cash values offered at younger ages versus older ages. All of the cash values will decrease, but they should decrease in a uniform proportion. I am sure there will be plans and combinations of circumstances, however, where the Nonforfeiture Law changes will produce higher values for younger ages and lower values for older ages.

For deposit term insurance the new regulation's use of a "nonforfeiture premium" rather than the first year adjusted premium will significantly cut the expense allowance and result in higher cash values. This will significantly impede the further development of this coverage, but I expect we will see actuaries adapt to the changing circumstances pretty quickly.

Current Topics in the Valuation Area

With the introduction of the 1976 Amendments, many of us thought we had finally found a way to claim basic life insurance reserve treatment for the deficiency reserves we had been holding. This was done by coining the phrase minimum reserve and including it in the 1976 Amendments. Those more knowledgeable in the tax law have now told us that we have got some significant problems in the 1976 Amendments which will carry over to the new amendments being offered by the NAIC. It appears that there are three ways that the 1976 Amendments can be interpreted for tax purposes.

1. First, for tax purposes we could argue that the statutory minimum reserve is, in fact, the IRS basic reserve and there is no such thing as a deficiency. Most tax people believe this has little chance of success.

2. We could argue that the difference between the basic reserve calculated without reference to a minimum reserve and the minimum reserve itself is a deficiency reserve. This would minimize deficiency reserves and with proper choice of a valuation basis, would maximize the basic reserve.

3. The IRS could argue that the deficiency reserve is fixed by the net premium used in the basic reserve calculation and the deficiency reserve determined by use of the net premium of the basic reserve should be subtracted from the minimum reserve to determine the tax qualified reserve. This would, in fact, lead to lower tax qualified reserves than was the case prior to the 1976 Amendments.

I believe there is a private letter request being presented to the IRS which should clarify some of these issues.

When the dynamic interest rate proposals were presented quite recently, the need for a dynamic mortality table was also discussed. For deficiency reserve purposes (particularly term) the mortality element is frequently more important than interest. Initially, envisioned was the idea of reducing each q by a rate reflecting the improved mortality and length of time from the period 1970 - 1975. Mr. Charles Greeley was asked to examine this alternative and recommend whether such a dynamic mortality table was feasible and desirable. Due to the need to recommend some changes in the dynamic interest rate proposal, Mr. Greeley has postponed addressing this problem till later this year. We should note, however, that the draft of new amendments includes allowance for the use of any mortality tables adopted by the NAIC - hence, circumventing the need to change the tables by changes in law.

Current Topics in the Nonforfeiture Area

Non-guaranteed Premium Contracts

With the introduction of the non-guaranteed, non-participating product, the ACLI appointed a task force to rcommend whether there was a need to introduce changes in the Nonforfeiture Law to specifically reference this product. That Task Force concluded the Nonforfeiture Law was adequate in its present and proposed state and no alteration in the Nonforfeiture Law was required. However, that Task Force went on to conclude that there was a requirement for a policy approval guideline which would require that the illustrated premium not produce cash values which were in excess of those included in the contract. In essence, they urged that if a policy was sold on a level premium illustration, it should include level premium cash values. Illustrated premiums, which were inconsistent with the cash values included in the contract, would not be allowed to be presented to the client during the sales process. The committee recognized that, legally, the cash values in the contract could be based on the maximum premiums. However, it further recognized the influence of the illustrated premium in the sales process and recommended that the illustrated premiums be controlled so that they be consistent with other features of the contract itself; if the cash values were based upon an increasing premium assumption, then illustrations should be based on an increasing premium. This position has been adopted by the ACLI Actuarial and Legislative Committees.

Mr. Ted Becker of the NAIC Technical Subcommittee and the Texas Insurance Department felt that some states did not have the authority to implement such a guideline. For that reason, Mr. Becker has suggested that there be an addition to the nonforfeiture amendements proposed which would specifically cover this plan and require that the cash values be based upon a level premium assumption unless there is both an illustrated and a guaranteed premium scale included in the contract itself, in which case the cash values would be the higher cash values produced by application of either premium scale. This proposal will eliminate the need for a maximum premium in the contract and that may eliminate the IRS argument that income for such policies is the maximum premium.

Paid-Up Values on a 5½%/4½% Basis

With the implementation of the 1976 Amendments, a number of companies have realized that utilization of a 5½% cash value scale and a 4½% reserve will, if the cash values are other than minimum cash values, create a situation where conversion to reduced paid-up will create a reserve strain. The premium-paying reserve at the time of reduced paid-up conversion will be insufficient to fund the reserve for the paid-up insurance amount. Preliminary work indicates that if the 5½% cash value scale grades to a 5½% net level premium scale at 20 years, the strain at time of conversion to reduced paid-up will be about 3-6% of the reserve. Standard actuarial techniques might require the establishment of a type of deficiency reserve at issue of the contract assuming that all policies lapse to reduced paid-up at the point where the strain is greatest. At the Tampa meeting, the NAIC Task Force recommended that the strain of the paid-up value be only recognized at the time of lapse and not at the time of issue. This lessens the problem but does not remove it.

Some are suggesting that the reduced paid-up value be always based on 4½% rather than the cash value interest in the contract. This would eliminate the immediate problem but it creates a discontinuity in paid-up values at the point when a limited pay policy would become paid-up.

It has also been suggested that proper wording of the contract description of the nonforfeiture interest rate can go a long way toward eliminating the problem. This involves a little stretching of the meaning of words and we had better be careful.

In any case, if anyone is considering a 5½%/4½% scale, watch out for those strains.

MR. BOOTH: Certainly the comments presented so far show some of the complexities that we are wrestling with as we move forward with changes in the Standard Valuation and the Nonforfeiture Laws. We turn now to the Securities and Exchange Commission (SEC) impact on our products and to other NAIC topics.

SEC Impact on Annuities and Guaranteed Investment Contracts

The Securities and Exchange Commission's interest in annuities and guaranteed investment contracts within the meaning of Section 2(1) of the Securities Act of 1933 depends upon the meaning of Section 3(a)(8) of the Act which exempts from registration requirements:

> "Any insurance or endowment policy or annuity contract or optional contract, issued by a corporation subject to the supervision of the insurance commissioner, bank commissioner, or any agency or officer performing like functions, of any State or Territory of the United States or the District of Columbia."

This exemption is based on a Congressional decision at the time of passage of the 1933 Act not to regulate certain forms of investment and savings products issued by companies which were already subject to extensive state regulation.

The development and marketing in recent years of new contracts and arrangements that appeared to be quite different from the contracts in use at the time the 1933 Act was passed caused the SEC to question whether such contracts were intended to be covered by the exemptions of Section 3(a)(8). In the SEC's view these contracts differed from traditional annuity contracts in that they (1) were marketed through broker-dealers as tax-deferred investment alternatives to other securities such as certificates of deposit and municipal and corporate bonds, (2) were written for short periods of time rather than as traditional long-term annuity contracts, (3) lacked meaningful annuity purchase rate guarantees, (4) involved the prospective crediting of excess interest as distinguished from traditional participating annuities where dividends were determined retrospectively, and (5) were not subject to state laws that required the type of disclosure provided by the Federal securities laws. On May 17, 1978, the SEC proposed Rule 154 which essentially would have set forth the criteria mentioned above as factors which might be considered in determining whether a contract issued by an insurance company and called an "annuity" would be eligible for exemption from registration under Section 3(a)(8). In addition, the proposed Rule would have specifically defined deposit fund riders and contracts with no permanent annuity purchase rate guarantees as securities that are ineligible for exemption under Section 3(a)(8). Proposed Rule 154 was vigorously opposed by nearly all segments of the life insurance business.

On April 5, 1979, the SEC withdrew Proposed Rule 154 since it had concluded that because of numerous interpretative and substantive problems raised in comments on the proposed Rule and because of the great variety of contracts issued by insurance companies, ~~that~~ it would not be feasible at that time to define conclusively in a rule the terms "annuity" and "optional annuity" as used in Section 3(a)(8). Instead, the Commission, in Release No. 33-6051, announced a general statement of policy regarding exemptive provisions relating to annuity and insurance contracts.

The SEC in its general statement of policy points out that a significant assumption by an insurance company of both mortality risks and investment risks is required for a contract to be exempt under Section 3(a)(8) from the full disclosure and prospectus delivery requirements of the Securities Act of 1933. It goes on to say that a determination of whether such risks are assumed will depend upon the total facts and circumstances connected with the offer and sale of a contract or class of contracts. This means that relevant advertising and promotional materials and the manner and method of selling and distributing the contract as well as the actual contract terms and guarantees must be reviewed as a whole in determining whether the contract is exempt under 3(a)(8). The SEC placed the responsibility for making such a determination squarely on the issuer and underscored this by announcing that it had instructed its staff not to respond to routine requests for no-action or interpretive advice regarding most insurance or annuity contracts except in compelling circumstances.

In determining whether an insurance company assumes a significant mortality risk, the SEC states that with respect to an individual making his own purchase decision there is no meaningful mortality risk unless the contract provides for permanent guarantees of annuity purchase rates. However, for group annuity contracts under which contributions are received in bulk by the insurance company for all participants and no separate allocations are maintained for individual members of the group, meaningful mortality risks are assumed by the insurance company where there are guaranteed annuity

purchase rates for a reasonable period of time. Although recognizing that the annuity purchase rate guarantee period necessary for an insurer to assume a meaningful mortality risk under a group annuity contract will vary with the size and composition of the group, the Commission indicates that a five-year guarantee period will generally involve the assumption of a meaningful mortality risk depending upon the facts and circumstances surrounding the group and the contract sold. The SEC in its statement also discusses the economic reality of annuity purchase guarantees and notes that if individuals can make individual decisions to buy annuities under a group contract, the contract can be characterized more accurately as an aggregation of individual investment decisions. This implies that the assumption of meaningful mortality risk for this kind of group contract involves the provision of permanent annuity purchase rate guarantees. In addition, if contracts are issued which involve annuity purchase rates that are so low or other contractual guarantees that are such that no reasonable purchaser could be expected to annuitize, then in economic reality there is no meaningful assumption of mortality risk by the insurer.

In addition to assuming a significant mortality risk, the SEC statement requires that an insurance company assume a significant investment risk as determined by the total mix of facts and circumstances surrounding the offer and sale of the contract in order to obtain the Section 3(a)(8) exemption. The Commission notes that it does not appear appropriate to make a distinction between contracts that have participating features and those that do not since either can be promoted as investments under circumstances which would make them ineligible for the Section 3(a)(8) exemption. It emphasizes the importance of advertising and sales promotion, in determining whether a meaningful investment risk is assumed, by noting that annuity contracts which emphasize high current discretionary excess interest and relegate mention of traditional annuity features to fine print must be viewed as appealing principally to investors, who wish to assume the investment risk of not realizing the high excess interest, because their objective is to maximize tax-deferred capital accumulation rather than to acquire conventional annuity plans.

With respect to deposit fund riders, the Commission states that it does not believe certain traditional arrangements that are minor incidental features of insurance products involve a substantial investment risk to the purchaser of the related insurance product. However, the mere fact that a deposit fund rider is attached to a life insurance policy or annuity contract which is exempt under Section 3(a)(8) does not by itself bring under the exemption those deposit fund riders that are offered primarily as investments where the purchaser assumes substantial investment risks.

In its withdrawal of Proposed Rule 154, the SEC took note of the fact of the continuing effectiveness of its no-action letter of March 18, 1977 to the American Council of Life Insurance regarding Section 3(a)(2) of the Act with respect to the offer and sale of guaranteed investment contracts to corporate pension and profit-sharing plans qualified under Section 401 of the Internal Revenue Code of 1954, as amended, which meet certain minimum size and other requirements.

The Commission also notes that it continues to believe that an insurance company engaged primarily in issuing securities required to be registered under the 1933 Act, as measured by its total mix of business and the relationship of its securities business to its conventional insurance business, is an investment company for purposes of the Investment Company Act of 1940.

Although the SEC's General Statement of Policy recognizes that it is not possible to adopt precise rules to cover all the facts and circumstances which might be determinative of whether or not a particular contract is exempt under Section 3(a)(8), its statement that both a meaningful mortality risk and a meaningful investment risk must be assumed by the insurance company and that for certain types of annuity contracts only permanent annuity purchase rate guarantees will make the mortality risk meaningful seems to aim for just that kind of precision. These specific requirements have been particularly troubling to life insurers, and consequently, the American Council of Life Insurance submitted a letter to the SEC on February 28, 1980 seeking a clarification. The letter argues on the basis of legislative history and subsequent case law that the assumption of mortality risk was not intended as a requisite condition for exemption of an annuity under Section 3(a)(8). To the extent that mortality risk assumption is a factor in the overall facts and circumstances used to determine whether an annuity is exempt, it is argued that a meaningful assumption of mortality risk can be demonstrated for both individual and group contracts even in the absence of permanent annuity rate guarantees. The Council's letter asks that SEC Release No. 33-6051 be clarified to indicate that mortality risk assumption is not essential to obtain an exemption for an annuity contract under Section 3(a) (8). To the extent that mortality risk assumption is a factor, the letter asks for clarification to indicate (1) that insurance companies may assume meaningful mortality risks under both group and individual contracts with less than permanent purchase rate guarantees and (2) that the meaningfulness of mortality risk assumption should be evaluated for a particular contract in the aggregate market to which the contract is addressed.

Since the SEC announced its General Statement of Policy, two large life insurers have filed registration statements under the 1933 Act for fixed dollar annuities funded through their general accounts. In December 1979, Nationwide Life registered the fixed side of a combination fixed and variable annuity contract which is to be marketed by broker-dealers registered under the Securities Exchange Act of 1934. In March 1980, Occidental Life filed a registration statement for fixed-dollar single premium annuity and flexible premium annuity contracts which are funded through the general account, involve the payment of excess interest and are to be marketed by broker-dealers.

In response to a request by the SEC for views from the life insurance business, the American Council of Life Insurance has formed a working group to prepare comments on the most appropriate form and content for a registration statement for use in connection with annuities and guaranteed interest contracts issued by life insurers.

Meanwhile, the NAIC and the National Association of Securities Administrators have appointed a joint committee to study all types of annuities and guaranteed interest contracts. It is anticipated that the joint committee will be discussing the interpretation and application of the SEC's General Statement of Policy with the SEC.

In connection with a recent variable annuity separate account registration with the SEC, the registrant pointed out that it would be paying the distribution expenses associated with its no-load variable annuity out of its general surplus. Its general surplus in turn would be augmented by the profits it realized on a mortality risk charge or "insurance premium"

charged against the variable annuity separate account. This observation caused the SEC to initiate an inquiry to all insurers who had registered variable annuity separate accounts to determine whether distribution expenses for the variable annuity contracts exceed amounts charged as sales load and, if so, how the distribution of the variable annuity contracts is financed. The SEC's concern is that it is improper to use separate account assets, directly or indirectly to fund distribution expenses. This appears to move the SEC very close to the regulation of insurance charges and insurance profit margins.

NAIC Profitability Reports

For a number of years, the NAIC's Central Office has been generating profitability reports for property and casualty insurers from annual statements filed with that office as part of the NAIC Regulatory Test and Profitability Program. Although these profitability reports have included caveats about their use in rate regulation, the caveats have been disregarded in some states.

More recently, the NAIC has encountered questions from the media, Federal officials and others, as to how much profit life insurers are making and whether that profit is reasonable. In response to these inquiries, the NAIC in 1978 appointed a Task Force on Life Insurance Profitability to develop profitability tests and reports for life insurers.

Rates of return or profitability for other industries are most commonly based on revenues, assets or net worth. In addition to profitability ratios based on these, the NAIC Task Force is also examining profitability tests based on the ratio of operating income to premiums and to "earned" revenue (defined as revenues less the increase in reserves).

The Advisory Committee to the NAIC Task Force has developed a number of criteria for acceptable measures of profitability. These include relating profitability measures to consumer costs, understandability, ease of availability of underlying data, provision for meaningful comparisons between stock and mutual companies, ease of comparison to similar indexes of other industries, and ease of being produced by line of business with reasonable accuracy.

The Advisory Committee noted that expressing profitability as a ratio of operating income to assets is inappropriate for life insurance because, unlike most other industries, assets are held in a semi-fiduciary relationship, and a large portion of earnings on assets is credited to the policyholder. In addition, asset valuation principles for insurance companies differ substantially from those of other industries, and it is not possible to determine by line of business a measure of profitability based on assets.

Profitability expressed as a ratio of operating income to net worth or capital and surplus is the least meaningful measure. It is improper and misleading to earmark a portion of capital and surplus as being applicable to a particular line of business since that implies that surplus stands behind something other than the whole company. Other problems are the different conceptual aspects of the rate of return on capital and surplus for stock and mutual companies and the fact that a high rate of return may actually indicate not superior earnings but only an under-capitalized insurer.

The Advisory Committee pointed out that profitability ratios based on "earned" revenues involves a property and casualty concept that is not used in the life insurance business, is not a measure used in other industries, produces noncomparable results between companies with different reserve bases and generates "revenues" whenever there is a claim or a surrender. The Advisory Committee's report also demonstrated that profitability ratios based on "earned" revenue are overstated every year except for the year of settlement when they are greatly understated. Profitability ratios based on premium income only tend to overstate profit margins as the duration increases due to interest on the accumulated profits.

The ratio of operating income to total revenue is the one measure which, in the view of the Advisory Committee, satisfies the criteria for an acceptable measure of profitability. This is the only measure that gives life insurance buyers an accurate measure of the rate of return based on their total costs which consist of both premiums and investment income on policyholder reserves.

The Advisory Committee has also suggested that earnings and reserves attributable to a Coporate Account be excluded from the profitability tests since they are not appropriately attributable to any line of business.

As the work of the NAIC Task Force continues and profitability tests are developed and released for different lines of business and individual companies, it is important that appropriate caveats and explanations be developed so that the results can be correctly understood by those who have an interest in the life insurance business.

MR. CHARLES E. WILSON: In your presentation on the effects of disintermediation, I believe the illustration was of rising interest rates. To what extent has consideration been given in the deliberations to the effects of declining interest rates on the exercise of calls on securities, or on other methods of refinancing mortgages or other investments.

MR. KLING: Certainly when I discussed the disintermediation risk I just touched around the edges of it. There are several other aspects of it. Cash flow can dry up for many different reasons and we are in a period of time now where although interest rates have been high, nobody has been able to obtain them anyway because cash flow is being used for other purposes. We will be faced with some of these situations. I don't know how serious it is or if it would necessarily change anything. The tremendous variation in the interest rate cycles that we have recently seen is something that nobody is very familiar with and I think we are all still trying to learn.

MR. BRADFORD S. GILE: While I am employed by the Wisconsin Commission of Insurance any remarks that I make should not be attributed to the Commission. I am also a member of the NAIC Technical Sub-Committee and likewise my remarks do not necessarily reflect any opinions of that Sub-Committee.

A basic problem in the Standard Nonforfeiture Law which currently exists and which, with the NAIC proposals, would still exist is that the Standard Nonforfeiture Law sets minimum values but sets no requirements as to consistency in actual cash values. For most products, of course, there's no real problem at all. However, I not too long ago came across a product which had minimum surrender values which were negative for the first 12 policy years. The Company elected to have actual cash surrender values of

zero for the first 20 years, except that cash values were positive values in years 5, 10, 15 and 20. The following is a description of how those cash surrender values were computed. There is a high first-year premium and then so-called low-term premiums followed by, in the 21st in later years, a whole life premium. The additional first-year premium is accumulated at 7.2 percent interest for five years. That's your fifth year cash value. The tenth year cash value is derived by taking the fifth year cash value and accumulating it for five years at 8 percent. One now gets the fifteenth year cash value by accumulating the tenth year cash value at 10 percent interest over five years. Finally, the twentieth year cash value is the accumulation of the fifteenth year value at a 12 percent "interest rate." Now I would submit that there is something horribly wrong with a statute that would permit such a policy design to be constructed and used in the United States. Among other peculiarities, for example, is that in going from, say, the ninth year cash value of nothing to the tenth year cash value of something very substantial, the increase in cash value greatly exceeds the premium paid by the policyholder in that year. That tells you that the set of cash values that exist for the policy can't by any stretch of the imagination be represented as following any type of asset share pattern, unless one has recovery rates from death with payment of the death benefit back to the Company, or very large negative expense allowances or something like that. So, in my opinion, the Standard Nonforfeiture Law must be changed and must be changed rather rapidly to have some sort of consistency requirement. However, this should be done without resorting to rate regulation and without requiring that actual cash surrender value scales be set forth in the law.

MR. MORTON: I'm really surprised to hear that because I know that the general approach was designed to pick up exactly that kind of policy. The NAIC Technical Task Force, which has developed an approach which is very similar to the one that's in the law, was asked to look into primarily deposit term. But it turned out that the kind of policy that you are describing is one that came up in their deliberation because it is similar to deposit term. I am surprised that the arithmetic did not produce intermediate cash values which were more reasonable than the zero ones that you described.

MR. MURPHY: There are several current industry developments that address exactly that kind of policy. The first is a sub-committee of the NAIC Cost Disclosure Committee that has been formed to address the question of manipulation of cost indices. The Manipulation Committee is quite obviously concerned with policies where the costs in the 10th and 20th year look much better than they do in the 9th and 19th year. This particular policy has been a topic of conversation in that group.

The Manipulation Committee recommendations will be exposed to the NAIC in June, and I believe the NAIC is intending to take some action in December. The Manipulation Committee is basically recommending that each of the state Insurance Commissioners use a certain analytic test for smoothness on the costs of a policy, and if the costs do not satisfy this test, then the policy would not be approved.

The Insurance Department itself would probably not perform the test, but would rely on an actuarial certification to the effect that the tests have in fact been done. This certification would be provided at the time that the policy is originally filed and probably on an annual basis if dividends are changed thereafter. The test basically says that the second differences in costs have to be somewhat smooth. There is no doubt that this particular policy would fail this test.

The second industry development is a distribution of a major report prepared by an ACLI Task Force. The chairman of that Task Force was Michael Mateja. That report was distributed by the ACLI last week and would, I think, also result in this policy being caught and would require greater cash values at the intermediate durations. Attached to that report are certain amendments to the Standard Nonforfeiture and Valuation Laws which would not implement the tests described in the report itself, but would rather implement a less stringent requirement. I think that's the language that Mr. Gile probably tested this policy against. I can't imagine that there isn't going to be enought creativity in the actuarial mind to beat anything that you can put down in the law. I really think that the Manipulation Committee approach is probably the best way to go because it would say to the Insurance Commissioner that, basically, you have the right and the obligation to require that the costs of these policies at the set ages be representative for other ages. If there is any manipulation apparent in the policy, it should not be approved or, alternatively, it should be approved with much more stringent disclosure requirements that would require that each policy be accompanied by a dictionary and a statement in red saying, in effect, "If you buy this, you're nuts." But I think there are ways around this besides the legal remedy of changing the law. I would be a little reluctant to change the law and then walk away and say we solved the problem because I'm sure that the problem would crop up in a different environment very quickly.

MR. BOOTH: You talked about the actuary certifying to the smoothness of the second differences of costs. How would costs be defined by the Manipulation Committee?

MR. MURPHY: As I understand it the test would involve costs measured by segmenting the interest adjusted net cost. Basically you would calculate an interest adjusted net cost for each and every year, and then you would take the second differences of those interest adjusted net costs from year to year. The sum of those second differences would have to meet certain screens. The policies that would generally fall out in that test are policies with termination dividends and policies with cash value scales that are similar to what has been described by Mr. Gile.

MR. BOOTH: If you had a policy with a split interest rate, would that fall out in the test?

MR. MURPHY: No, because initially the tests would be set at a level to catch maybe 5-10 percent of the policies, and there's enough problem in the termination dividend area so that I don't think split interest rate policies will initially come out in the screen. But the screens can be designed to catch 20 percent of the policies and then you might begin to see some of the split interest rate non-par policies come out. They are not, however, the major topic of conversation in the Committee.

MR. KLING: I would just like to make a few comments on what we seem to be getting into - the new CRVM valuation proposal which is first outlined in ACLI General Bulletin 2922, and then further described in great detail in Bulletin 2929. I have just received Bulletin 2929 and have not analyzed it in depth by any means, but it appears that this proposal could possibly have a profound effect on any non-level benefit/non-level premium, or any combination thereof, type policy. In trying to address a relatively normal problem by dealing with certain gimicky-type policies, we may create some very serious problems for products which have been around for years. For example, reserves for decreasing term insuance may increase by at least 20 percent and additional deficiency reserves would have to be held. This, to me, means a premium increase and I think that is a very unfortunate side effect of this particular type of proposal.

MR. BOOTH: If I interpret your remark correctly it would seem that you are suggesting that the approach of the Manipulation Task Force would be a better approach than changing the Nonforfeiture Law.

MR. KLING: Yes, that would seem to make more sense to me.

MR. BOOTH: I wonder if anyone on the panel or in the audience would like to express their views on whether there should or should not be a split interest rate in determining minimum valuation standards.

MR. JULIUS VOGEL: It would be nice if somebody could figure out a way of using split interest rates without getting the reserves up to ridiculous proportions. It is strange to say your reserves are at 6% interest followed by 3% interest, which is reasonably conservative, and then come up with a reserve factor that looks more like a 2% reserve or a 1% reserve. It seems to me that we should consider ways of changing, if necessary, the reserve formula at the cross-over point to avoid this anomaly and at the same time get the assurance that comes with a low reserve interest rate out in the future. While times are pretty strange now it is hard for me to think that interest rates will never go down to below 4½%. They did before and they might again and there will be a lot of dislocation when they do. That is one of the things that worries me about the dynamic interest rate proposal. When you put it in you are really putting it in for all time for that generation of policies.

MR. MURPHY: This also has application to nonforfeiture values. If you use a 5½% grading to a 4½% valuation interest rate, it produces cash values that are significantly in excess of the 5½% minimum if a single net premium is used. In examination of the law I always tend to take the view that what I want to do I could probably do, unless it is clearly prohibited. One of the things that I have been looking at lately is whether or not it might be possible, within the existing law, to use two different net premiums. If you have a 5½%/4½% basis for cash values or if you wanted to use a 4½%/3½% basis for reserves, why did we ever insist that it had to be one net premium? The law unfortunately talks about a uniform percentage. But I am not sure that that precludes the use of two net premiums. If you look around today, some of the more inventive Ordinary Life products are beginning to use two different net premiums in calculations of the cash values. I find that to be quite acceptable and I know most of the states find it to be acceptable, but I understand a few do not. But it does, I think, solve the problem of getting reserve above the 5½%/4½% or 4½%/3½% basis.

MR. MORTON: I am surprised to hear that the law does require a level premium. I think we may have been the first Company to use the split interest rate in valuation and for nonforfeiture values and, as I recall, we started out using two different net premiums during the two periods of time. The reason that we shifted to a level premium was not because we had to but, because first of all, it produced higher cash values and, furthermore, it produced higher reserves which gave us a substantial Federal Income Tax advantage. This latter point is still being debated by the IRS.

MR. GILE: It may well be that some companies would feel safe in using an interest rate as high as 8% say, for a period of twenty years. What about the small company that cannot even meet the maximum permissible valuation interest rate and yet sets reserves using that rate. It seems to me that there has to be some sort of regulatory protection against the occurrence of such a situation. If we went to a system where we had these split interest rates in those early years, the use of an 8% interest rate might well prove very difficult if in fact interest rates do drop and the company does not have surplus to beef itself up. It occurs to me that perhaps this type of problem is not addressed by a reserve law. It has been pointed out by some people that when you get into trouble you do not need reserves, you need surplus. Perhaps there ought to be a statute concerning itself with minimum surplus requirements. As it happens, Wisconsin has such a statute. What it does is to allow the Commissioner of Insurance to determine two levels of surplus; one is called compulsory surplus and the other one is called security surplus. The Commissioner is supposed to determine this for an individual company that looks like it might be headed toward trouble. The law is rather vague as to how the Commissioner actually sets these surplus levels but it lists a large number of things that must be taken into account. It is a very modern law. Unfortunately, it is very difficult to figure out how in the world to apply it. If a company's surplus falls below the level of complusory surplus set by the Commissioner, it would be grounds for liquidation of the company. If the level of a company's surplus is above compulsory surplus, but below security surplus, then the company could be considered to be potentially hazardous and, although the Commissioner would not be able to get a liquidation order on that basis, he may be able to get rehabilitation. Perhaps something along these lines is needed on a national basis, but also, of course, with a methodology developed for its implementation.

MR. BOOTH: I think your comments about the Wisconsin Law are interesting. It is certainly one of the most modern laws in terms of theory, but I am not sure that practice has ever caught up with it, or that anybody has ever figured out just what those various levels of surplus ought to be. It may be something that varies from company to company depending on the mix of business. There is a Society committee looking into long range valuation problems and the inter-relationships between surplus and assets and liabilities.

MR. WALTER S. RUGLAND: I am a member of the Greeley Advisory Committee but I am not speaking for that committee. As I have listened to and examined these several problems, it seems to me that the stock company actuary is driven by GAAP results and tax considerations as he works on pricing and in reporting financial results. The mutual company actuary is probably oriented toward responding to consumer concerns, as well as tax considerations. The regulator is trying to respond to the ingenuity of the company actuary as he responds to consumer considerations. What we seem to be addressing is how we can take care of everything with the Valuation Law, put together 40 years ago, based on

assumptions which very few of us think are still appropriate. To some extent, the Nonforfeiture Law is in the same boat. Yet we are still trying to refine through guidelines, through specific references and statutes, going further and further away from the professional responsibility of the actuary. I keep coming back to the conslusion that, in the short-term, we are probably going in the wrong direction. We probably ought to be trying to put more responsibility on the professional actuary, especially with regard to making sure that the asset side of the statement is being looked at actuarially the same way as the liability side. Many of us have never been trained to do that and I am not sure we have the basis on which to stand up and say that all actuaries who sign a statement of opinion on the convention blank are qualified to have done that examination. This leads me to the concern that the Society and the industry have a lot of work to do in terms of bringing us up to speed with regard to assets as they may impact on the products that we are selling and that we are valuing on the liability side. Now I get to your comment that we have a Society committee which has posed all these questions, written a landmark preliminary report, and asked for a lot of help with regard to research. They have said that we do not know the answers to some of these questions, and that we need to have some answers, some direction; and it has come up basically empty with regard to responses from the profession and from the industry. I think that the discussion we have had this afternoon keeps re-enforcing the fact that we do need these questions addressed. The more people here that would agree with me, the better, in terms of letting the Society and the industry leadership know that we are concerned about these questions.

MR. MORTON: I think that everything Mr. Rugland has said is absolutely true. I know that when the dynamic interest rate was being considered over the years, there was a lot of discussion about why we were dealing with just this one little piece of the whole problem, and why we were not talking about the valuation of assets and all the other things that go into the measures of safety for a Company's surplus. I guess it was felt that it was going to take a long time to get anything done, and at least the interest problem could be solved in the meantime. Consequently, all the proposals that came to our committee to expand the dynamic proposal to all the other cost elements, as well as the question of asset valuation, were considered, discussed, and then put aside.

MR. RUGLAND: With respect to Mr. Kling's concern about disintermediation, the analysis we have done of the dynamic interest rate proposal shows that the real danger is the upside interest scenario. It is my conclusion that there is no way that the Valuation Law can address that concern. If it did we would put major lines of business out of business and even some companies out of business. The only answer in the short-term is to ask the actuary to do the best he can with regard to an analysis of assets and liabilities and their match-up.

MR. WILSON: I was concerned about whether or not the committees have paid as much attention to dropping interest rates as rising interest rates. We all have myopia. When interest rates are going up, we expect them to go up forever, and when interest rates go down, we expect them to go down forever. We usually try to solve one problem, or one set of problems, at a time. But when we are considering these problems I still wonder if the other side of the coin has been looked at. We certainly cannot expect anything except a roller coaster in the future, although some of us have a tendency to think inflation is here forever. We have got to consider that we may be wrong and that interest rates may go down again.

APPENDIX A

Valuation Interest Rates for the Calendar Year 1979

Category	Dynamic Proposal: Reference Interest Rate*	Dynamic Proposal: Weighting Factor	Dynamic Proposal: Valuation Interest Rate	Current Valuation Interest Rate (1976 Amendments)
Annual Premium Life Insurance	8.66%	.35	5.00%	4.5%
Single Premium Life Insurance	8.66	.35	5.00	4.5% or 5.5%
Individual Deferred Annuities				
Annual Premium				
Issue Age < 45	8.94	.40	5.50	4.5
Issue Ages 45-54	8.94	.60	6.50	4.5
Issue Age > 54	9.60	.80	8.25	4.5
Single Premium				
Issue Age < 45	8.94	.40	5.50	5.5
Issue Ages 45-54	8.94	.60	6.50	5.5
Issue Age > 54	9.60	.80	8.25	5.5
Group Deferred Annuities				
Issue Age < 45	8.94	.40	5.50	7.5
Issue Ages 45-54	8.94	.60	6.50	7.5
Issue Age > 54	9.60	.80	8.25	7.5
Immediate Annuities	9.60	.85	8.50	7.5

*8.66% - 12 month average as of June 30, 1978.
8.94% - 36 month average as of June 30, 1979.
9.60% - 12 month average as of June 30, 1979.

MR. MORTON: The committee that presented the dynamic interest rate proposal was dealing with the adequacy of reserves. It was not dealing with cash flow problems, or the problems of disintermediation, or what happens when you are forced to sell assets or forced to borrow.

MR. KLING: I think the questions we have gotten on asset/liability matching, cash flow, disintermediation and interest rate fluctuations are all important considerations. They are important pricing considerations and important management considerations and are things that companies today must focus on. However, the purpose of the committee's work was basically to try to find, for the short term, a better way to update valuation laws, and this is initially what we attempted to do. We did not test some of the scenarios that we have just considered because we tested them last year and I do not think anybody would have predicted 20 percent interest rates six months ago. I have seen some bad times and I guess my next question is not will we go through this again, but when will it be and how much worse will it be?