

RECORD

PREMIUMS AND DIVIDENDS—PARTICIPATING INSURANCE

Moderator: ROBERT D. SHAPIRO.

Panelists: JOHN A. FIBIGER, ROBERT D. HOGUE, BRUCE E. NICKERSON

1. The relationship of surplus goals, dividends, and equity principles ... and the annual splitting of "earnings" into:
 - a. Surplus contribution
 - b. Dividends, and
 - c. Growth (i.e., investment in new business)
2. Appropriate levels of surplus
3. The relationship of the assumptions to:
 - a. Recent company experience,
 - b. Future company plans, and
 - c. The perceived economic and competitive environment
4. Critical issues
 - a. Allocation of investment income between and within lines (consider IYM, policy loan recognition, expenses, and federal income taxes)
 - b. Preferred risk ... the basic decision whether or not to do it ... how it should be done ... the impact on other business, substandard, etc.
 - c. Upgrading existing business ... exchange offers
 - d. Recognition of variations in assumptions by issue age, plan, and size
 - e. Other unusual design and assumption decisions
5. Status of the Dividend Philosophy Report

MR. ROBERT D. SHAPIRO: An appropriate foundation for the discussion might be to define the current status of the Society of Actuaries' Dividend Philosophy Committee activity. Where is this committee in its work?

MR. JOHN A. FIBIGER: Actuaries involved in dividend distribution are almost in the same situation that pension actuaries might have been in the 1970's. Starting the decade I think there was a general public interest in the work of the pension actuary in the early 1970's, a general consideration of what practices and principles were really appropriate and the general feeling that somehow the public (as represented by legislative or regulatory bodies) was going to have a great deal more to say about what the pension actuaries were doing. This culminated with the passage of the Employee Retirement Income Security Act of 1974 and certainly the world of the pension actuary has been markedly different since then.

You are going to find that if you think about 1990, the individual dividend actuary is going to have a great deal more public scrutiny, and a great deal more public responsibility than has been the case in the past. Up until now, I think in a lot of situations a dividend scale has been presented to a company's board of directors on the basis of—"here it is, I'm an actuary, trust me." That has been the real extent of a board's ability to assess the dividend recommendation. Certainly not true in all cases, but it's been true in a substantial number of cases. You are starting to see a good deal more public recognition that the method of distributing dividends can be used as a competitive device. In this regard, note the public controversy that has erupted with respect to the investment generation method versus the portfolio method. Similar controversies occasionally surface with respect to terminal dividends. Implicitly, the insurance regulatory authorities have in essence blessed the use of dividend illustrations as a competitive device because of the interest adjusted net cost method that many states now require and which is used by many companies in all jurisdictions.

The Academy's Committee on Dividend Principles and Practices has a recommendation which will be presented to the Academy's board at its June 4, 1980 meeting. I am going to quote from that report because I think it summarizes very well exactly where we are:

"In the early 1970's, there was concern regarding the apparent proliferation of bases for calculating actual and illustrative dividends. There was also concern that departure from a close relationship between dividends paid and dividends illustrated may have taken place for some companies."

A Committee of the Society of Actuaries, chaired by Bartley L. Munson, who is in the audience, circulated a questionnaire in the mid-1970's designed to develop information concerning dividend practices for most life insurance companies selling participating business. After analyzing the results, this committee determined that there was a much broader range of practices than had existed earlier. In early 1976, the Society of Actuaries established the Committee on Dividend Philosophy to explore possible courses of action to deal with this problem. In the fall of 1978, this Committee recommended that the best solution would be to establish standards of dividend allocation and illustration and that the actuary responsible for recommending a dividend scale to corporate management provide a written opinion with regard to the extent that this scale complied with such standards.

It is important to note that the Committee looked at the idea of establishing a particular standard for factors, such as investment experience and expenses, and concluded that there was no such factor which could be said to be the best. Rather, there was a range of acceptable practices, so that you really could not produce comparability of illustrations without mandating one practice with respect to each factor. The only practical way to go without mandating one uniformly accepted way of dividend distribution was the idea of disclosure.

The Society of Actuaries' Board of Governors then directed this Committee to develop a recommendation with regard to such actuarial principles and practices. It also requested that the Academy and the Canadian Institute form committees to implement these recommendations in the United States and

Canada, respectively. The Society, Academy and Institute Committees were directed to coordinate their work in this matter. In the fall of 1979, the Society Committee published Draft 7 of its recommendations with regard to dividend principles and practices. This draft was distributed to Society members and discussed at the annual meeting of October 1979.

This report did not deal with practices of stock companies issuing participating policies, nor did it deal with deferred annuities, these two subjects having been set aside temporarily in order to concentrate on the major problem. It is also true that there was far more knowledge because of the Bart Munson Committee work on practices for individual life insurance for mutual companies than there was either for stock companies or for deferred annuities. Questionnaires are now being drawn up to enlarge the information that the Society Committee has. The Society Committee has handed to the Academy Committee in May of 1980, Draft 11 of its recommended principles and practices. Having been on the Committee, I can attest to the fact that the language has been very carefully worked over. In the ensuing year since publication, there have been four additional drafts.

This Draft is offered as a reasonable starting point for implementation of both mutual and stock company practices with respect to at least some of the participating business. Still open are remaining stock life and deferred annuity issues. I might summarize the thrust of Draft 7, reading the first four recommendations that were contained in this exposure Draft. Recommendation 1: Whenever an actuary advises an insurance company on dividends, either illustrative dividends or current dividends, he or she should prepare a written report which documents the advice. The thrust, therefore, is the disclosure--the written report. Such a report should include a statement describing the framework of facts, assumptions and procedures upon which the advice was based. In particular, if an actuary uses assumptions and procedures which deviate materially from those described in his recommendations, he or she should support the use of such assumptions and procedures, and should include in the report an appropriate and explicit statement with respect to the nature, rationale and effect of such deviations. Recommendation 2: The use of the contribution principle in determining dividends is generally accepted practice. The actuary's report should include a statement that this principle has been followed and, if it has not been followed, the report should explicitly state any deviations in their rationales. Recommendation 3: The actuary's report should include a description of the process used to determine dividends, as well as the manner in which the policy and experience factor are reflected in that process. The report should also include the specific formulations used to calculate dividends. Recommendation 4: When it would be impractical to apply these recommendations directly to all policies and benefits, the actuary may continue a dividend scale or use approximations or simpler processes and formulations. When such actions are taken, their rationale and impact should be disclosed in the actuary's report.

The recommendations then detail how the actuary is expected to deal with various factors (i.e., claim factors, investment factors, expense factors). Draft 11 differs in three major respects from the earlier Draft 7:

- 1) There have been, based on comments received, some changes in language to improve clarity.
- 2) There has been material added about termination dividends because termination dividends represent a very difficult area in which practices differ widely. Again, additional responsibility has been put on the actuary to certify that termination dividends are appropriate and

reflect experience. 3) This is a fairly significant change--Draft 7 allowed for placement in a class only on the basis of factors existing at issue. For example, that meant that a policy could be in a class for investment experience based on the policy loan rate, but not on the utilization of the policy loan privilege. That has been changed in the Draft 11 to state that a policy should not be placed in a class solely because of claim experience--experience that is out of the control of the insured. Now, this change essentially means that you could divide people into classes according to, for example: their utilization of the policy loan privilege, their utilization of an optional purchase rider contained in the policy or not, or excessive utilization of the right to change beneficiaries, for example.

Essentially, the work of the Committee in looking at acceptable practices has been to review current practices and, unless they are manifestly inappropriate, to incorporate them in the Draft. That might almost be saying that we drew a very large circle of accepted practices. Anything that falls within that is now considered to be an accepted practice unless we feel that it is inappropriate. The thrust of the Society Committee is to make sure that certain practices must be disclosed.

The Academy Committee believes that the Society Committee Draft 11 represents an appropriate starting point for recommended principles and practices for mutual life insurance companies with regard to dividend illustrations. They recommend that the Draft 11 and their recommended procedures be circulated to the members of the Academy for comment. First is Draft 11 of the Society Committee, which is essentially the modification of Draft 7.

Second is a proposal about disclosure of dividend principles and practices to state regulators. In other words, the whole idea is disclosure. There would be interrogatories such as the following that would relate to the ability of the company to pay dividends illustrated: 1) The use of projections for more than two years beyond the effective date of the dividend scale--it is recognized that you must assume some projections because many smaller and medium-sized companies only make a dividend change every four or five years. If you expect that your 1980 scale will last through 1983, it is indeed appropriate to project to the mid-range of the period. 2) Improper treatment of termination dividends. 3) The actuary may have to certify that it is the expectation that the current scale can be maintained, or else state that he or she does not feel that it can. 4) You have to state if there is an expected deterioration of experience creating the substantial probability that the currently illustrated scale will have to be reduced. Do you see inflation getting out of hand, mortality experience turning against you, or what have you? So that is the second thing--disclosure in an actuarial certification, extensively beyond what is now in Schedule M. Third, is an expansion of consumer's disclosure as contained in the buyer's guide. In summary, the Academy is proposing three things: 1) Adoption of the principles and practices for dividend distribution proposed by the Society, 2) Substantially increased disclosure and certification, and 3) Expansion of the language in the buyer's guide.

MR. ROBERT D. HOGUE: I have a general question. In reading Draft 7 I followed two things with interest. One was Committee comments made in the

earlier reports on the deviations from standard practices and the exclusion of the use of projected experience rates in determining dividend scales. The second was an attempt, which was rather abbreviated, to develop some test of consistency between projected dividends on current ratebook policies and currently paid dividends on inforce policies. Is there anything coming out of the final Academy recommendations that would cover those two issues?

MR. FIBIGER: I don't believe so other than the requirement that you must disclose if you are projecting experience beyond two years. The whole thrust of this is disclosure, and a certification that you are indeed following generally accepted actuarial principles. About the second point, trying to test existing scales against projections, I think the committee came up with the fact that there was almost no way to encompass all of the possible variations. First of all, you had companies going to, say, an 8% policy loan rate. Well, there had been no experience for most companies with an 8% policy loan rate, but you are making estimates in a dividend scale of the degree of borrowing and non-borrowing on a particular class of policies. That is just an example, and by the time the committee went to all of the practical difficulties, they concluded that it really was not possible to come up with any general rules to compare current distribution for inforce policies with projected experience. It really does, however, say that the distribution should be based on current experience and you can get into many complications with your definition of current experience.

MR. BRUCE E. NICKERSON: The restriction on projections beyond two years continues to concern me. From one point of view, almost everything that an actuary does is a projection. Our profession has taken this position in other contexts - for example, with accountants as to whether ignoring interest discounts is not the same as projecting a 0% interest rate. It would be easy to interpret the Dividend Philosophy Report as encouraging the projection of an 8 or 9% investment return (because that is current company experience) while preventing the projection of trends in expenses which are consistent with that level of investment return.

MR. FIBIGER: The thrust of the certification is that a scale can continue but there is a prohibition against using projections beyond two or three years unless it is disclosed. This puts a responsibility to have a reasonable amount of conservatism on the actuary. If something is going to go wrong, it has to be considered, it has to be disclosed. Obviously, if you don't think that current expense trends, if continued, will allow you to maintain your scale, you must disclose that. The idea is that if it is good news that you expect to come you really shouldn't use it, but if you are expecting bad news you really should take that into account and disclose it. The responsibility tends to be put on the individual actuary.

I think that some people are uncomfortable with the whole idea of projecting dividends. However, with the regulatory world as it is, there is no question that for competitive reasons you really have to project something in the nature of future dividend experience. Competition says you must do that - it is actually even included in the buyer's guide. So that the world that you are dealing with essentially forces the actuary to make some type of responsible projection. Now the responsibility of the actuary is to make sure that the projection isn't overly optimistic. For example, use your current mortality experience, but don't assume that favorable trends will continue. Be a realistic pessimist. It is true that you find a few people assuming that 8% interest will continue and yet there will be no more inflation.

That is an unrealistic assumption, but I think what the Academy is going to do will be not only to issue these principles and practices but also some explanatory material because typically you have guides to professional conduct and explanatory back-up material.

MR. SHAPIRO: Let's take a simple example regarding mortality. A company might review its last ten years of mortality experience and conclude, "our experience has averaged 85% of intercompany select and ultimate mortality, and this is what we wish to use in our projections." The company might alternatively look at a graph of the ten years of mortality experience and observe that mortality ratios started at 90% ten years ago and reduced 1% per year to 80% of intercompany mortality today, and conclude, "our experience is a decreasing mortality function, beginning at 80% today and reducing 1% per year for the next x years." What would your reaction be to the company deciding that "past experience" is a decreasing mortality function?

MR. FIBIGER: I think at least the thrust of what we are doing is to say 85% is certainly acceptable as representing an average. 80% is also acceptable because 90% has come down to 80% and if you assume that is a trend rather than just a fluctuation, 80% represents current experience. 78%, may be acceptable if you project for a couple of years. That is getting a little hazy, but certainly to project a scale in which your dividends, for years beyond that for which you are developing the scale, assume that kind of continuation to, say, 75% is really unacceptable. Even though in your heart of hearts you may think that this level of mortality improvement will continue, you still have to play fair with your existing policyholders. The actuary also is presumed to have the professional responsibility to play fair with other companies with whom your company is competing. That is the whole thrust. If the actuarial profession itself cannot develop rules for fair play, then the regulators are going to step in and mandate fair play. If the regulators step in, the only logical extension of that is to tell actuaries precisely how to distribute surplus.

You have to come to the conclusion that there is no comparability; you really cannot illustrate between an investment generation method and a portfolio method, or between companies. There are companies which take all of their selection costs and excess first year full expenses and distribute them over all policies on the grounds that the continuity of the company demands additional investment in new business; and, therefore, it is just as much an expense of existing policyholders as it is of new business. Other companies obviously take such expenses and charge them to that block of issues. So you have those two categories. Well, you cannot really have full comparability of dividend illustrations. Really, the whole thrust of this is: disclosure, responsibility on the profession to play fair, otherwise our freedom to act is going to be taken away.

MS. DAPHNE D. BARTLETT: John, you mentioned this change in the report which is going to allow the rules to be changed about classes of policyholders after a policy has been issued. I think, when we discovered there was a difference in mortality by sex, we did develop different dividend scales for males and females. Now we have the issue of smokers and non-smokers. I do not know whether mutual companies do have different scales or not. But, certainly it is a new discovery. There is some existing business which covers smokers and non-smokers. Are we going to have different dividend scales? Policy loans is one area where everybody in this room who has anything to do with it would like to have different classes for loaned policies and unloaned

policies. I believe there are some court decisions that make that a little difficult. What is the thinking behind this whole thing? I am wondering if changing the rules after the game has started is really playing fair.

MR. FIBIGER: First of all, on your comment about court decisions--we concluded that unless it were legal in all jurisdictions we would not attempt to substitute our judgment for courts or regulators. For example, we have concluded that at least it is possible to make a strong case that some of the requirements of the New York Insurance Department could be said, and this is speculative, to actually mandate what some of the committee members felt was a non-equitable distribution of dividends. So there is some language in the new Draft 11 saying that regardless of what the principles and practices are, even if you feel it is somewhat non-equitable, if the appropriate regulatory jurisdiction makes you do it, you have to do it that way. In particular, termination dividends; where there is a mandate that it cannot be paid only on account of selected termination. There is some legitimate debate as to whether a termination dividend should be paid in the event of a death claim, since after all, part of the theory behind a termination dividend is a release from surplus for risks that you no longer have to cover. Obviously, the ultimate release of surplus, far more than just a termination dividend, is a death claim. So you can make the case that on death, since you need the surplus to provide for the risk, you should not pay the termination dividend. On the other hand, it tends to be mandated. So we tried not to get into the question of court decisions, or what is legal.

There are companies which currently are varying the dividends paid on policies with and without loans and it is acceptable in certain jurisdictions and known to the regulatory authorities in those jurisdictions. So, therefore, while there may be court decisions saying you shouldn't do this, there are companies in certain jurisdictions which are doing it with the full knowledge of the regulatory authorities.

The one that we really debated is a very fascinating one. I think there is absolutely no question in today's environment, that those policies which have a policy loan on them provide different earnings to the company than those policies which do not. There is not only a difference, there is a material difference, and it is one that is known to the company. In the case of smokers and non-smokers, we may be classifying for new business. It is an impractical situation to go back and ask all of your existing policyholders whether they smoke or don't smoke, so you may not have those records. Some companies do separate applicants between male and female, but in many companies the older policies do not have an easily available distinction and the policies are of such a size that it is more expensive to go back and get the records than it is to just pay one dividend. But you can separate current policy loan experience. Then you get into the question--Is there an implied contract of dividend distribution? Are the rules established at the time of sale of the policy? Must we separate smokers and non-smokers at the time of sale, or tell you in the policy or in the sales literature that we are going to separate borrowers and non-borrowers? Well, clearly, just because it is an acceptable actuarial practice to segregate does not mean that we are mandating it for companies, nor does it mean that we feel it is acceptable if an appropriate court or regulatory jurisdiction says it is not appropriate. What we are trying to do is again draw a very broad circle around permissible practices. These may be appropriate if the individual company can do it, wishes to do it, and if it is acceptable to regulatory authorities, and is legal. These debates will go on. It was our committee's

judgment not to walk away from it, but rather to say, "there are other circumstances that are going to apply, but if those are acceptable then we will not, in our Draft 11, say that you cannot do it or that you are a bad actuary or not playing fair because you do this."

MR. NICKERSON: We must keep in mind - sometimes, strongly in mind - the abilities of the policyholders themselves to change the contract through replacement. If certain material factors are being recognized in the sale of new business, but are not being recognized in the treatment of existing policyholders, it may be in the interest of a significant subset of existing policyholders to replace their policies. Replacement is inherently wasteful, but if the distinctions made in the new-issue marketplace are sufficiently material, replacement becomes worthwhile and proper.

The first obligation of a mutual company is to provide services to its current policyholders at a low, but appropriate cost. The mutual company actuary must recognize those cost factors and rating practices which have changed since many inforce policies were sold - perhaps 30 or 40 years ago. The policyholder should not have to replace his contract in order to receive today's fair value. If the policy is small and the cost of making the change is out of proportion to the benefit, then there is no problem. But if there is a real distinction which would justify replacement and the company does not recognize the change in its treatment of existing policyholders, then, in terms of the current marketplace, I suggest that the company may not be treating its policyholders fairly.

MR. HOGUE: I have followed the work of the Committee since the days of the old Munson Committee when they were looking at cost comparisons and dividend illustrations, and especially the results of the survey that went out. When those answers came back and were distributed to the body politic of the Society, as it were, it was very interesting. Through it all, I can tell a Tale of Two Cities. I was in City A a long time ago, developing a new dividend scale. I was very young and not as foolish in those days. I sat down and studied actual experience, developed a three-factor formula, applied it to all the current policies in force, did a model office, came out with projected dividends and sent those projected dividends to marketing where they developed cost illustrations and whatever. As of late I have found myself in City B where we have reversed the process. Most of the recommendations that I have read in Draft 7 and the material that was sent to the Academy Committee would deal with the work that is being done in City B as compared to City A. In City B we start with a cost illustration and determine what we have to do to be competitive. We go from there to the three-factor dividend scale and develop experience needed to support the dividends.

In City A we did study our actual experience. We did not project. We had five-year trends. We took the average of those five years, developed the dividend scale. That was a long time ago. The competitive environment was much different. My company is developing a preferred risk dividend scale today; those factors are fairly fresh in my mind. When we saw what we had to do to become competitive and worked back to our experience factors, we found some rather amazing results. We looked at what other companies had, looked at what they had experienced in annual statements and went over and talked to some friends in the companies and found out what they did. If you ever want to find out what another company does in terms of dividends, do not look at schedule M, because it provides rather useless information. I hope that that is one of the Committee's recommendations to the NAIC. I

saw the experience assumptions that would have to be made to meet the dividend scales of some newly issued policies. Interest rate assumptions are about 9%. Expense assumptions are at about the level currently in their NAIC blanks and in Best's reports. Persistency assumptions are normally better than what are in their history pages in the NAIC blank. Mortality is about 80 to 82% of the current 1965-1970 Basic Tables, a little below the current annual Society experience. There is the question of the new and the old which the Committee has looked at from a lot of different ways. How does the Committee reconcile that difference? They have addressed it well in the recommendations, and I certainly support the practices and the recommendations. I fully agree with John on the question of terminal dividends. Some terminal dividends simply are not being paid. One of the strategies that would tempt a company which does not have the financial resources to develop a very competitive dividend scale to meet the needs of their particular market and agents is to not pay some terminal dividends. It was inherent in the Munson Committee report a long time ago. It was not addressed as such and I am glad to see that it is being addressed now. In the process of going from A to B, working in two different cities, I can certainly attest to the fact that these recommendations are going to have far reaching impact on the work of mutual company actuaries that set about determining new dividend scales. If my impressions are correct, I would think that the body politic of the Society has not taken them quite as seriously yet as it should when they go to the Academy. There seems to be some liaison between the Academy and the NAIC. There should be a short time to react now that they are within the Academy. Then we should wait until the NAIC adopts the recommendations and comes out with some kind of standard practices or regulations that will apply to the NAIC blank. Do you have a scenario on what is going to happen there John?

MR. FIBIGER: Well, I think the scenario that we are hoping to happen is that the exposure of what the Academy is planning to propose is approved by the Academy board on the 4th of June. Then, it is exposed to the membership of the Academy and is available for final vote by the Academy in September or October. Comments are received by September with the hope that the recommendations that involve both schedule M and the buyer's guide are adopted by the NAIC at its December meeting. I think it is very true that we have tended to underestimate the real world impact of some of these changes. To use your City A - City B analogy, if City A gives you a certain dividend scale and City B, working back from the product your marketing department has designed to the assumptions that have to go into it, gives you a different dividend scale, implicit in your comments is that this dividend scale would be a lower dividend scale rather than a higher dividend scale. It becomes incumbent then on the actuary, if he is to serve as a professional, to certify that in his judgment he does not expect the City B dividend scale or the current dividend scale to be continued.

Now I know of at least one case in which an actuary refused to sign an annual statement and in that circumstance at least he did find other employment. I think you are going to find more confrontations like this. My personal feeling is that it is going to be very beneficial for the profession. I think a lot of pension actuaries are coming to realize that they are a little better protected in dealing with very aggressive clients in the fact that they can fall back on the fiduciary requirements that ERISA has placed on their clients and the professional responsibility that ERISA has placed on them to act on behalf of the plan participants. They no longer are under the same kind of pressure to give in to what I would call a sort of Gresham's Law of

assumptions in that the bad assumptions sort of drive out the good assumptions. Your actuary only assumes 8% interest. I can find you an actuary that assumes a 10½% interest rate over the next three years, and so, therefore, you go to that kind of actuary. That is not happening any more in the pension area - not that it really happened to any extreme degree, but I think the actuary's hand is strengthened. I think that this is going to be much the same thing. I think the difference is that in the pension area you very frequently have actuaries working for clients. Here, the mutual company actuary may tend to work for one client and one client alone, and that is his company. There isn't the possibility of enforcing your standards and losing perhaps one client out of ten, or one client out of twenty. In this case you have one client, if you lose that client, you are effectively out of a job. I don't believe that the ramifications in general will be that extreme. I do think that these are going to have some significant impact in certain cases, and I think that in general it will strengthen the hand of the actuary as a professional - in this case responsible to the policyholders of the mutual company as well as to its management and its board.

MR. SHAPIRO: Often the statement is made that competitive necessity "requires" the company set premiums and dividends near prevailing market-place levels. Say for illustrative purposes, aggressive assumptions are rationalized to permit the development of sufficiently competitive products. Although short term competitive pressures may be alleviated by such action, it is likely that substantial long term competitive problems will be created. Several years from today, the company may well find itself in one of the following positions:

1. Position 1: Experience worked out as assumed ... since the company was "aggressive," other less aggressive companies are increasing dividend scales while the illustrative company has no room to improve their scales.
2. Position 2: Experience emerged less favorable than assumed ... the prospect of decreasing dividend scales while other less aggressive companies maintain theirs looms larger and larger.

Keep in mind also that with the increasing public nature of our dividend scale work, the companies who are not "keeping up" in dividend scale adjustments will be much more visible in the future than they were in the past.

MR. FIBIGER: One of the other things that may happen is that this may put more pressure on company management if they have been in City B where they work back to the assumptions. To really make those assumptions come true, management says, "yes, I agree, we have really got to reduce expenses, or we have got to improve our investment results or we have got to have better mortality selection, or better persistency in order to make this dividend scale really actually be a sound one." In the past actuaries have tended to be bailed out by a couple of things. One is the rather continual improvement in interest rates that we have seen over the last thirty years, another is the mortality improvement that has been at least fairly steady with some fits and starts ever since 1945. There is the question, particularly at some of the younger ages, of how much more mortality improvement can you find because you are really getting a lot of companies that up to ages 30, 35, maybe even as high as 40, particularly in select mortality periods, are experiencing mortality rates of under one per thousand. Well, you know, even a twenty-five percent improvement in mortality rates is not going to provide

much more for the dividend scale. So, that the source of improvement, particularly at the younger ages, is pretty well gone. The application of the United States Federal Income Tax law with the extreme results that you get out of a 10 for 1 ratio, up to the ridiculous extreme where the marginal rate on new investments is over 100%--you actually are better off to force your policyholders to take loans and get your average rate down. So the net impact is that even if you expect interest rates to continue to increase, most of the improvement from the increase will be lost to Federal Income taxes. So, therefore, you come with the problem that we can't look to the same things to bail us out. Inflation seems to have accelerated and you cannot look to mortality improvement or to investment improvement to bail us out the way they have in the past. So, company management, to the extent that they do control unit expense rate and so forth, may be under a greater pressure to really make the assumptions happen, rather than to acknowledge that they should do something and then go right ahead and not do it.

MR. SHAPIRO: Let's shift gears for a while. We've been talking about dividends and dividend philosophy. Dividends "start" with earnings. What are earnings in a mutual company and what is an appropriate way to measure such earnings?

MR. NICKERSON: In a mutual environment, I have difficulty seeing earnings as anything other than the increase in total assets over the increase in assets required to meet the future contract obligations and other liabilities. This amounts to a comparison of successive gross premium valuations. If both valuations are made using realistic asset values and "best estimate" actuarial assumptions, the result is a reasonable approximation of the financial results for the interval. If provision is made for plausible adverse experience and asset value fluctuations in both valuations, the result will indicate potential distributable surplus "earned" over the interval. Actual distributable surplus is, of course, affected by other considerations, such as statutory valuation constraints and cash flow projections.

Our usual concept of earnings is profit, or increase in equity, to the proprietors of the enterprise. This concept is not meaningful in the case of a mutual company. With a few minor exceptions, all of the amounts shown on the right side of the balance sheet are held for the benefit of the same people, the policyholders. Some amounts are labeled as liabilities and others as surplus, but the distinction is form only, not substance.

In a sense, a mutual company is a form of consumer cooperative. Its objective is to provide service to its members (its policyholders) at the lowest feasible cost and to share the cost fairly. The "profit" line of the financial statements is of little value, unless the viability of the company itself is in doubt. Performance must be judged in terms of more basic measures. Is the service provided of good quality? Are the expenses low in relationship to the service provided? Is the mortality or morbidity experience homogenous within each rating class? Is the return on invested assets favorable? Is the company viable and growing, so that it will continue to be able to provide services economically and efficiently over the long run?

There is one sense in which earnings are important, however. A mutual company must pay careful attention to the return on its investment in new business if current policyholders are to be treated fairly. All of the assets

are held for the benefit of the present policyholders. Some of these assets must be invested in new business to assure the viability of the company and its ability to meet its obligations over the long term. But there are many circumstances in which investments in new business can be in the interest of the company, viewed only as an organization, while being against the interest of most of the policyholders, the "owners" of the organization.

Each policyholder's interest in the company is temporary; it expires without further value when the policy terminates. If a greater investment is made in new business, then distributable surplus is lowered. If the company objective of sound growth is realized, then the long term result would be an increase in distributable surplus through the return of the investment with "profit." We can easily recognize the need for a reasonable "investment yield" on the policyholders' funds spent to acquire new policyholders. But the timing of this return is also important, because the policyholders making the investment are an expiring group. If the return is too far in the future, then many of them will never receive the benefit of the investment. So, it is important for the mutual company actuary to consider whether the premium and dividend structure for new business will indeed benefit the present policyholders in the aggregate in a realistic time frame.

MR. SHAPIRO: Say you have \$1,000 of surplus to invest and one alternative is to buy a 9%, 25 year bond/(i.e., 9% of \$1,000) and receive \$90 a year for 25 years. The \$90 then flows back into the surplus and can be considered each year in the distribution process. As an alternative investment you might look at a block of policies that could be written in the next year where the expected return is 12% per year but you don't get any money back for several (say ten) years. At the end of one year, perhaps 30% of the people who existed at the point where the investment was made are gone. How would you rationalize this investment?

MR. FIBIGER: This consumer cooperative that we have certainly has to continue in existence. It has been tempting sometimes to start one of the world's greatest tontines and see who are the ultimate beneficiaries. You wrestle with some mutual life insurance companies that are over 140 years old now and have built up an enormous surplus and you wonder exactly what would happen if you stopped selling any new business. The last few policyholders would really reap an enormous windfall. Robin Leckie has covered that in a paper that he wrote for the Society. The company really should continue to be in existence. There are some very good reasons for that: 1) The broader the pool of risks that you can assemble, the lower the cost of insurance is likely to be for those people already in the pool. The fixed costs are spread over a broader group. 2) The mutual life insurance company equivalent of compensation to employees frequently revolves around the growth of the company rather than the earnings of the company which might be appropriate for a stock company. Without any stockholders who can be specifically the focus of the company, the more the company grows, the bigger the jobs in the company and therefore, the more attractive jobs there are and the more compensation that is appropriate as people are dealing with a much larger group of policyholders. Certainly you think of companies that may be entering a declining phase that may not be expanding or growing. Many people would not be attracted toward managing these companies and, therefore, failure to grow may lead to less than competent management which may actually mean that older policyholders are getting poorer managers and thus, are paying higher costs for their insurance than they would if the company was growing.

The concept that I would like to focus on is that the new policyholders should be brought into the company in such a way that it does not impair the soundness or the solvency of the company because you have to have a sound, solvent and continuing company to meet all of its long-term obligations. You cannot put so many people on that you impair solvency and you should bring them on in such a way that when the last of the new generation of policyholders leaves, the company is in the same relative position of strength that it was when these people came on the books. Each new generation of policyholders should leave the company in as strong a position as it was when they were first brought into the company.

As far as looking at the question of return to current policyholders, that is a judgment that the actuary and the management of the company must make. Suppose it appears that there will be no return for 20 years on investment in new business or for that matter let's take a low yielding common stock as another possibility - yielding only 1% where clearly you do not get the investment return for a long time to pass on to the policyholders and you do not feel that you can spend unrealized capital gains. Then you have to make a judgment as to what price your existing policyholders should be willing to make for perhaps long-term greater stability, long-term greater investment, but certainly giving something up in the short run. You cannot say that there is any arbitrary limit, e.g., that unless it benefits at least 50% of present policyholders within eight years, you should not make this alternate investment. You have to look at that on a case-to-case basis.

MR. HOGUE: Mutual company earnings philosophy, measurements, results, etc. will become much more like stock company practices have been. The dividend and premium scales are definitely declining. Mutual companies are now seeing the wisdom (the marketing wisdom) of coming out with competitive term insurance. They are being forced to do that. As this is done, the pricing structures of mutual and non-par policies will become very similar. If stock and mutual companies are competing in pricing structure and policy values, if both on the same basis, then the stock companies have one advantage that alludes to John's comment and that is that they can operate under GAAP accounting principles. They can look at new business, determine its cost, and set up a deferred acquisition asset on their balance sheet. At least within their own circles they can cover those acquisition expenses - this gives them an almost unlimited growth. Any mutual company actuary that has sat down and gone through all the variances in a model office will realize that there is always a balance that has to be sought between the current competitive position on these sales and inforce business and the limitation on company growth. Unless you are very well run and organized, you cannot grow beyond the industry average and still remain competitive. The reason for that is that even though some dividend scales do contain an element which amortizes acquisition expenses, they cannot reflect that on a balance sheet. Since mutual companies do not do gross premium valuations, they are still holding statutory reserves which are getting lower all the time for most companies. This is for tax purposes more than anything else. The basic pricing methodologies for stock and mutual companies seem to be merging, but stock companies still seem to have an advantage that the mutual companies will never have.

MR. NICKERSON: In most cases, the implicit assumption that the company should keep going is entirely valid, but it always needs to be examined. Possibly there are companies which are in such a position today that the best thing they could do for their policyholders would be to merge the company into another more viable mutual company. Policyholders clearly would

benefit from a merger if the alternative were a gradual decay, with rising expenses destroying the existing value. But an alternative often considered is a massive investment of current surplus to rejuvenate the company and return to a viable situation. Policyholders still would benefit from a merger unless this investment could provide a better return to most of them before their policies terminated.

My comments on gross premium valuations imply a change from the traditional approaches to setting participating dividends. Regardless of whether you are setting dividends for new business or for existing policyholders, you should be looking forward. Treating old policyholders equitably involves going forward from where you are on a basis at least as favorable as is offered to new policyholders. You cannot ask any one class or group to make up for past events. A realistic gross premium valuation means a realistic analysis of your current financial position, as well as a realistic projection of future experience. The first question is whether the company will continue to be viable. The second question is whether the existing policyholder will be treated as well under the company's dividend scale as he would if he replaced his contract with a new policy.

MR. FIBIGER: If you talk to a number of so-called knowledgeable observers of the insurance scene, you come away with the feeling that there really is going to be a strong pressure for merger of mutual life insurance companies. The same way that you have seen stock life insurance companies either merging into industrial firms, into other life insurance companies or being taken over by foreign interests for one purpose or another. The same pressures are going to apply to the mutual insurance industry.

You are beginning to see certain economies of scale returning to the larger companies. We have gone through at least several phases because certainly there are some economies of scale as you start to grow. Historically, there always were. However, then the ability to keep records effectively, the ability to cope with the masses of data and the many, many different files we had to have, made some dis-economies of scale for some of the larger companies until punch cards and, in particular, the electronic computer came along. We are now seeing the cost of electronic storage going down enormously. More data can be kept on line. But the cost of programmers, the cost of people to run the machines is going up sharply. The programming cost to do a particular thing for ten million policies is obviously not that much different than the programming cost if you would have to spread it over fifty to one hundred thousand policies. It may not be as complex in a smaller company, but nevertheless, there are clearly economies of scale because the unit cost that has to be recovered from each policy is much larger in a smaller company. So that you are now beginning to see the economies of scale shifting back away from smaller companies toward larger companies.

It may very well be that a merger or joining with other pools of risks through merger of mutual companies of one form or another, may be the only way for smaller companies to remain viable. There is a responsibility for the actuary because you cannot realistically set a dividend scale without making some assessment, not only of how well you can maintain that scale, but also how equitably you treat the various generations of policyholders as they do go forward. If only 1% of your current generation of policyholders will ever benefit from a certain action, then it is pretty hard to justify taking that action unless that action really is felt to be

necessary for the stability, solvency, or on-going ability of the company to function.

MR. SHAPIRO: One expectation that seemed to be shared by most of the speakers at the recent Hartford meeting was that the number of life insurance companies will decline over the next ten years. Many of the companies who are expected to disappear, be they stock or mutual, made it to 1980 because of "fortuitous" mortality and interest trends in the 1970's ... not because of successful marketing operations. As the mortality and interest margins reduce, ineffective marketing operations are exposed, and the continued existence of the company is placed in jeopardy.

Mutual company mergers are much more difficult to implement than stock company mergers. For one thing, there are equity issues that must be resolved to the satisfaction of the companies and interested regulatory authorities. Also, one of the management teams will likely not be present when the dust has cleared ... This issue does not have to be faced in many stock company mergers particularly where the buyer is an industrial or foreign operation that does not have the required insurance management expertise.

MR. RONALD L.W. TILL: This question has to do with the concept of equity and equity is such a nebulous thing to define and actually apply in practice. It certainly has been giving us some difficulty. Theoretical equity can be generally and traditionally considered to be embodied in the theoretical application of the contribution formula. But, there are a number of factors which in practice do not allow you to do that quite in the very theoretical way. Obviously the need to invest in new business has a deferring element to the amount of what might be theoretically available to the existing policyholders. The general requirement to maintain a growth in surplus for solvency purposes or for some form of management initiative which may be under consideration could further depress the amount available for current distribution. The decay problem has been mentioned, the potential for rollovers of existing business. This is particularly a problem in the deferred annuity area. It creates an incentive to do a little bit more than equity would suggest to try and prevent this terrible decay of your business and therefore, avoid some of this rollover. Obviously, current competition is a very significant point and this reflects more on the potential for future rather than current dividends. There are a number of very significant practical problems in applying equity. Some people say, "equity is in the eyes of the beholder." Certainly, even within a company, there are radical differences in opinion in how equity should be applied. As time goes on, public scrutiny of methods of developing and applying distributable surplus is going to more and more focus on what really is considered to be equity. Has the Committee any thoughts on defining some level of minimum standards of equity or any way of getting at this problem?

MR. FIBIGER: At the base of much of our efforts has been this fundamental difficulty of defining equity. The Committee has chosen to deal with a family of methods that we consider not in-equitable. It is a double negative rather than a positive. We have not necessarily said that the investment generation method is the only equitable method, or that the portfolio method is the only equitable method. In dealing with generally accepted actuarial practices, we have tried to draw the conclusion that neither method can be stated clearly to be in-equitable and thus to be a non-accepted actuarial practice. We have made the first try at drawing the larger circle. These practices are at least not determined to be in-equitable now.

Behind the whole concept of the actuarial certification and disclosure is our inability on the Committee to come up with specific standards of what is equitable. Let us take a look at the medical profession. You can have standards of accepted length of hospitalization, accepted practice in administering drug therapy, or in prescribing surgery, but ultimately the decision we would all prefer to see is to put it to the judgment of the individual doctor, rather than saying: "For anyone with an appendectomy, surgery is required." You really want to leave it to the judgment of the professional. That is what we have concluded, that you cannot really specifically define equity. What we are trying to do here is to provide a general family of methods that are equitable and to have disclosure so that management and the general public, through more education as to what the actuary is doing, can perhaps cope with changing standards of what might be equitable.

MR. NICKERSON: We need to give more thought to the relationship between equity and the contribution principle. The connection is really rather tenuous. In the group insurance business this has been recognized for several decades. A substantial group plan can get into the position of having made a large negative contribution through one or two years of poor experience. There are very real practical limits and, in one sense, equitable limits as to the degree to which this can be recognized in future dividend distributions to that group.

It has been easy and economical to roll over, or replace, business in the group lines. With our increasingly unstable economic environment, the replacement problem - or opportunity, for too many policyholders - is beginning to have a greater impact on the ordinary line. Where a block of policies has had a negative contribution, or a markedly lower contribution than other blocks, we have often reacted by cutting future dividends. This may be sound contribution theory, but is it equitable to charge more in the future if expected future costs are not greater, merely because of past losses? Increasingly, practical competitive forces (another measure of equity) limit the extent of possible recovery.

One other comment on equity: a good test is whether you can accept a marked shift in your distribution of business. Suppose all your inforce permanent insurance were suddenly changed into a mix of deferred annuities and term. Or, suppose that your ratio of term to permanent new issues were suddenly reversed. Would your dividend scale hold up, or would you conclude that a major change in your dividend scale was needed? If you can't stand such a marked shift - if you can't stand discontinuities - then there may be a question of equity. It doesn't prove that your scale is inequitable, but it certainly raises a doubt that would not arise if your scale could continue to be appropriate under the discontinuity assumption.

MR. GORDON LEAVITT: It is obviously inequitable to distribute your high interest earnings to one block of policyholders and not another. Is there any way the NAIC could enforce a distinction like that? Many companies in one way or another are distributing their high interest earnings to the new policyholders, without giving it to the old ones. Critics have pointed this out. How would the Committee solve this?

MR. FIBIGER: To show how reasonable men differ, a strong case can be made that it is obviously inequitable not to do that. A group of older policyholders are receiving the benefit of higher interest earnings on the new investments that can be made by attracting new policyholders. At the same time, those older policyholders and the assets supporting their business have sustained rather massive capital losses over the past year or so because of the fact that there is 3 or 4% interest earnings on some of the oldest business. How can this subsidy be justified in a competitive environment to these old policyholders by the new people that you are trying to attract? This is a very extreme case, but it can be argued that this difference is as material as that involving different policy loan rates. That is the kind of thing you get into when you talk about which one is right. That is why we came down on the idea of full disclosure rather than trying to solve this argument. It has been drawn in such a way that there is a total gulf between what you said and what I have said. When you apply it to expense amortization, when you apply it to the question of whether you offset select mortality gains with underwriting expenses, or whether you reflect the select mortality gains directly in the policy - it's very difficult to say what is equity.

MR. ROBERT C. JOHNSON: We are talking about rapid changes in the interest rates, dividends, etc. The corporation has decided they can afford a new dividend scale. At that point there is a time delay before you calculate the actual dividends for the individual policies. The salesman is always interested in having the maximum scale for a new sale. One of the questions is: "what kind of time restrictions do you have on announcements of new scales?" particularly if you do not know what the individual contracts are going to be, but you know that corporate objectives are changing. Perhaps there is a situation where the effective date of a new scale is known. Historically, we worked with the New York laws - 60 days in advance. Has there been any change in that because of the rapid changes in the economic climate that we are dealing with?

MR. FIBIGER: I think that the New York prohibition pretty well applies, at least to the bulk of the mutual life insurance companies. The bulk of them do operate in New York, whether measured by assets, inforce, sales, etc. There is a problem with this because policies can't be designed in a vacuum. You tend to want to bring field people in to take a look at potential policy designs, etc. It is just a matter of individual company management judgment as to the extent to which you confer with the field. All of it has to be done in the context of this New York requirement - that it really should not be disclosed to prospects.

Antitrust restrictions also should be considered. We in the industry have had a very, very relaxed time. We want to know what companies are going to do and so somebody in August or September calls up nine other competing companies and says: "what are you going to do about your dividend accumulation rate?" "Well, I do not know, we might be doing this or that." Some of the practices we have indulged in over the years are ones that we are going to have to re-examine over the next few years because of risks in the anti-trust area.

MR. RICHARD W. KLING: All of my experience has been with a stock company that writes only non-participating business, but some of my concerns today are similar to the concerns that have been expressed here. I have spent quite a bit of time in the last year or two looking at the asset side of the balance sheet, particularly at the investment question. We get into

considerations like investment generation practices. We look at some of the fluctuations and the economic disruptions that we have been through and get some strange effects. We are all offering contracts in the pension, annuity or life insurance area where book value cashouts are available, either on a loan basis or as a termination benefit. You must decide whether to reflect these high rates as a charge against the other lines of business, for example, that are actually experiencing the outflow. We are looking at new types of investments; we may not see 25 year long term investments as viable alternatives in the near future. We may not be able to rely on past practices from the point of view of investment strategy, setting investment assumptions or interest assumptions and even trying to figure out what interest experience or investment experience has been. Would any of the panelists care to comment on that general question?

MR. HOGUE: I have been through some exercises on that same point recently. In the good old days of the mutual companies, investments were made in long fixed income paper. We did not really get involved with maturity structures, immunization techniques, etc. That was left to the group pension people to wrestle with. Those good old days are gone.

There are two investment strategies evolving now in mutual companies. One is the heavy investment in policy loans that really cannot be controlled. The second is a possible shift in investment strategy from the long run to the short run. I have talked to more mutual company actuaries that are currently doing this with what cash flow is available. The future in a climate such as we have now would probably give a very uneven cash flow pattern which would disrupt the very solid, long-term oriented investment strategy that was mentioned. It is hard not to take advantage of the short term. The absence of a variable policy loan rate creates the policy loan percentages that have appeared in many of the larger companies. A variable policy loan rate is something that companies should have. Hopefully, there will be one in the not too far future. Those will probably continue to grow as long as interest rates remain high. The mutual companies are in a real bind and investment strategies are changing.

Most of the mutual companies I know of in the group lines are allocating investment income, by lines of business, on investment generation techniques. As the panel has discussed before, within line of business, it is split about 50-50. Going back to the old Munson Committee report, it seemed about 50% of the manner that John mentioned - the rate book class differential. I don't know of any mutual company that is doing a full investment year allocation within a line. The rate book class differential seems to be the thing to do there. The others are still on the portfolio average method. They would find out that if they got away from portfolio average to investment generation, they would look at current yield rates from policy loans as being a major investment in current cash flow, what little there is; they would look at the effect of the Menge rule that John mentioned and if they allocated taxes, also on an investment year basis, they would probably come out with current interest rates on new business that are a little bit less than old business, and handle everything equitably. The impact of all of that is a definite change and the amount of time that you would have to spend on the asset investment income allocation side, as well as the tax side for phase I, is increasing substantially. The ground rules are definitely very different. One actuary on the Dividend Philosophy Committee has indicated that his company will probably move to a dividend scale which splits the interest element from the three factor formula, and treats that

separately. They will pay an experience dividend which is based on everything but investment income, and they will generate a second bonus kind of dividend which will fluctuate wildly from year to year. The experience dividend being the mortality and acquisition expense, amortization, etc. will probably remain fairly level. The interest dividend will probably fluctuate from year to year, almost like single premium, deferred annuities or flexible premium annuities, in a wild investment climate.

MR. FIBIGER: I think that as an industry, it is very clear that the thing that has been best for us, at least under our past practices, is stability, having very slow movements rather than extremes of low interest or high interest. As long as your new investment rates were not that much different than your portfolio rates, there are not many material differences that you have to recognize. It is only when there are extreme economic fluctuations, extreme discontinuities in rates, that you have then had to recognize that there were differences between classes. That is one of the reasons that the ACLI has its current campaign against inflation. It hurts us two ways. It hurts us on the fixed expense guarantees that we have made, but it produces wide swings in interest rates. The worst thing for our industry--at least the individual permanent life insurance contract - is wide swings.

MR. NICKERSON: The purpose of our business is the assumption of risk - but only a certain degree of risk! Our pricing is subject to a fundamental tension, often described as adequacy vs. equity. When there can be wide swings in experience, then the margin between an adequate premium and an equitable premium becomes too broad. Even for participating insurance, there must be an implicit risk premium to provide for experience swings. When this risk premium becomes too large, the cost ceases to be attractive to the public. If economic conditions, in particular, continue to be unstable, then the insurance industry will continue to make fundamental changes in the types of products it offers. It will have to assume less risk and provide fewer guarantees than in the past in order to keep the risk charge down to a marketable level.

MR. FIBIGER: There is one mutual life insurance company that has stock subsidiaries. They declare and pay each year a performance dividend, based on the earnings of those stock subsidiaries. This is how that insurance company justifies its investment in downstream companies. This can get into the very interesting question of the extent to which you can illustrate. How do you illustrate projected dividends for that company? Do you make the assumption that your downstream subsidiaries will have a certain level of earnings? Do you project on the basis of the last year or two of experience? How do you get comparability there? That makes the question of comparability between the investment generation and the portfolio method seem almost trivial.

MR. SHAPIRO: As a part of the process of planning for the 1980's, many companies are re-defining their mission in terms of two distinct businesses: protection and investment. Certainly by activities such as isolating the interest element of a dividend formula or paying dividends that fluctuate substantially from year to year, a company places itself in a new and completely different kind of investment game. For example, competition now includes other investment businesses beyond the insurance industry.

MR. JOHN E. JALOSZINSKI: We have seen in the past that in the process of creating a dividend scale management would determine the amount of surplus which should be returned to the policyholders over the next several years. Then it was the job of the actuary to determine what is fair and equitable. We have seen intrusions on the actuary's freedom in making the decision as to what is equitable. What do you think would be the effect of the regulatory agencies on the management decision as to what the level of surplus should be?

MR. FIBIGER: If you go to that next step, you run a very grave risk. The ultimate reason that you have regulatory authorities is not to insure a slightly lower cost or a more competitive marketplace, it is really to insure the solvency of these very long-term institutions. There has been a very substantial increase in concern on the part of directors about the liability they may have just for being in the position of the director. Because of the fact that you are seeing more and more cases which hold directors to a higher standard of knowledge and involvement in a company. If the regulators take over the decision as to what distributable surplus is, it would be very hard to find directors of the company who would be willing to serve. It basically means that what is almost the life blood of the management of the company has been taken away. Reasonable regulation certainly would more closely restrict the amount that should be distributed--for example, you cannot let surplus get over a certain point in New York and some other states before you have to distribute your earnings. Conversely, the regulator must insure the solvency of the company. There is a band within which it is appropriate to leave freedom to the board and to management. Any attempt to narrow that band and mandate the percentage of earnings that should be distributed would be resisted very, very strongly and would be very, very unwise.

MR. SHAPIRO: What are mutual companies doing in the area of preferred risk products?

MR. HOGUE: The biggest message we have discovered is that smokers are much less healthy than non-smokers. They do not live as long and are going to have hypertension and all kinds of cancers. The State Mutual study is probably the main document that indicates this. Most companies are keying off of that to develop different mortality assumptions. The research that we have found indicates there are about twenty companies with a preferred risk rating, either in the premium or the dividend scales.

Most will follow the usual underwriting class differential in creating a new, preferred class. It will pretty well have replaced their standard class. A smoker class will be created between their standard class and, say their first sub-standard class. That seems to be the general pattern. The reflection there is in premiums. A minority of companies make the reflection in dividends. About half the companies that we looked at are also adding build requirement to the smoker or non-smoker distinction. The 1979 Society report on build and blood pressure is probably the principal source document. It did not differ that much from the 1959 report. The mortality differences are measurable. Beyond that, the evidence gets very scanty. Other companies are throwing in blood pressure. One company had a super-select list of criteria that brought that basic list of three up to about seven. They had a debit system created, so that to qualify for the class, a person almost had to be super-human.

The competitive pressures in the marketplace are going to indicate that most companies will do that within about the next three years. The competitive appeal is pretty obvious. The statistics are fairly well supportive of making that underwriting distinction, reflected in cost and/or dividends. Those companies that do not have a preferred risk dividend scale under development now, should read the material and take a look at what is going on. Within the next year or two they will probably be forced to do it.

What is the definition of a smoker? We ended up with a question on the application regarding use of cigarettes only within the last year. I thought that the period should have been about two years and should have included pipe and cigar smokers. That is a competitive thing - your marketing people are going to have some input. The mortality distinctions were quite phenomenal at the major insured ages, up to about age 35-40. After that they begin to taper off and the State Mutual projection merged the two mortality tables at about age 85. If you lived as a smoker to age 85 then you are probably in good shape for other reasons. The State Mutual study seemed to tie in with the Surgeon General's report. The original report in about 1964, and the update last year showed the percentage of the general population that does smoke to be 1/3, and State Mutual backed that up. So we expect then to issue about 2/3 of our business under a preferred risk scale. The strategy that will follow is to take our current standard class and break it down into a 2/3's and a 1/3's group so that we end up in the same aggregate position that we are in now. Except the non-smokers will have a little better deal than the smokers.

MR. SHAPIRO: One comment on the question. Initially, most companies applied their preferred risk discounts to the premiums. Deficiency reserve problems were created in many cases. Mutual companies have the advantage of being able to apply their discounts into dividends; however, many agents believe this is less competitive because it is not as obvious as having the discount reflected in the up-front premium. On the other hand, agents do receive more commissions because of the larger premium per \$1,000. It is not just mortality that this non-smoker discount affects. They would seem to also affect persistency, expenses, existing business stability, and many other assumptions. Any comment on this?

MR. HOGUE: In discussions with some of the people that had done the State Mutual study it turns out that there are definite personality types. The social and financial characteristics of smokers and non-smokers definitely form two different groups. The difference in mortality is probably partly due to the smoking habit and partly due to the personal characteristics of the people that smoke as opposed to people that do not smoke. There is some financial underwriting going on that is not really looked at.

There is the question of how many people are telling the truth about smoking. We have a one year period. If we wanted to be nasty about it, we could get a specimen and easily find out if a person had smoked a cigarette within the previous 24 to 48 hours. If I could go off cigarettes for two days, if I was really motivated, I could be examined and then buy a non-smoker's policy. That is just something we deal with. We feel that relying on the agent is a fairly good test. It will be 90% reliable. We do have a specimen. We are not going to pay for that check because we will trust the question. A greater worry is people that are temporarily non-smokers or that stretch their three month or six month period out to sound like a year, when they fill out the application. Companies that we have talked to do not perceive that as being a problem.

MR. FIBIGER: You may find that that is one of the greatest benefits of continuing to get inspection reports on fairly sizable risks. There are cases where inspection reports have actually turned up the fact that somebody applying and certifying a non-smoking status has indeed turned out to be a smoker. There is some protective value there, but it is certainly not any discovery that is so wide-spread that would lead us away from our non-smoking preferred category.

MR. NICKERSON: Bob, since you have looked into this area recently, you might be able to shed some light on a related question. How are companies treating policyholders who become ex-smokers after they have purchased a smoker policy? Must the policyholder replace his policy to get the non-smoker rate, or are the companies making other accommodations?

MR. HOGUE: We are not going to do anything with the existing inforce policies. The practical problem is great. As John mentioned earlier, we do not have the records of who in our current inforce group is or is not a smoker. If we knew, we could differentiate in the future dividend scale changes. We cannot do that. If we made the offer we would end up with only some of the people switching. We would then come out with a higher dividend scale for some of the people. We would not include all of the non-smokers and then we would be faced with a very untasty chore of decreasing dividends on a standard class of business - a chore we really do not want to do. It would be post-issue underwriting. I do not think we really want to change the ground rules on those people.