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INDIVIDUAL HEALTH INSURANCE RESERVE ISSUES

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Panelists: E. PAUL BARNHART
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Recorder: JAN P. O'SULLIVAN

MR. ROBERT H. DOBSON: We are fortunate to have three excellent actuaries here to represent the viewpoints of three papers. E. Paul Barnhart, who has his own consulting company in St. Louis, will present the first paper, the "Report on Reserve Standards for Individual and Group Health Insurance Contracts." Mr. Barnhart chairs the American Academy of Actuaries (AAA) Committee on Health and also chairs the Liaison Subcommittee to the NAIC. He has also authored a paper on the subject for Volume XXXVII of the Transactions. Mark Litow of the Milliman & Robertson Milwaukee office will present the second paper, "Reserve Principles for Individual Health Insurance." Mr. Litow was not one of the authors of this paper; however, he is sympathetic to the viewpoints espoused in the paper. He has also authored a discussion on Mr. Barnhart's TSA XXXVII paper. Finally, we have W. H. Odell, President of W. H. Odell & Associates, Inc. in North Carolina. He chaired a group which presented the paper, "Structure for Consideration of Health Coverage Valuation Standards."

The NAIC is considering this session to be an important exposure of the material involved. It is important that we get as many different viewpoints on the record as possible.

MR. MARK E. LITOW: I am pleased to be able to speak on behalf of the Committee for Accident and Health (A&H) Valuation Principles, which includes Robert Shapland, Francis T. O'Grady, Spencer Koppel, and Gary N. See.

This committee was formed in 1981 at the request of the Society of Actuaries. The specific charge at that time was to examine principles underlying valuation of A&H benefits and in the process to review both traditional and alternative approaches in use. The valuation principles subsequently developed were derived with statutory, not GAAP, accounting in mind.

The initial report was issued to Society members in 1982 as an exposure draft. Thereafter, commentary was received that disagreed with some

of the underlying principles as presented in the draft; most notably, principles relating to incurral dating and the basis for policy reserves were questioned. This disagreement was clearly apparent at the Society's 1982 annual meeting in Washington, where a rather lively discussion occurred on these topics.

Because of the various viewpoints within the industry, other committees were formed in the following years to provide an opinion. Given these circumstances, the report by the Committee for A&H Valuation Principles was published as a paper in TSA XXXVII instead of as a committee report.

The report of the Committee for A&H Valuation Principles can be briefly summarized by noting the key phrase, "rating principles." This term conveys the appropriate matching of revenue and disbursements in regard to both claim and active life reserves. It encompasses all the assumptions used in pricing and rerating as well as the development of contract provisions, underwriting, marketing, and administrative practices. This means that rating principles are necessarily related to all aspects of valuation, including reserving principles.

The question may be asked, "Why concentrate on rating principles instead of the contract or other items?" The underlying reason is that rating principles provide the starting point for pricing, drafting the contract, and all functions related to developing an insurance policy. In other words, until such principles are established, how can the contract be finalized, morbidity and other pricing assumptions be derived, underwriting guidelines be developed, or administration and marketing practices be defined?

With this interdependence in mind, I am not sure how rating principles can be ignored in the development of principles for valuing A&H benefits. Nevertheless, the reports of the various committees represented here do not appear to agree as to the importance of rating principles, and perhaps we can find out why in this presentation.

MR. E. PAUL BARNHART: The primary topic that I am responsible for presenting is the "Report on Reserve Standards for Individual and Group Health Insurance Contracts," a report developed by a subcommittee of the AAA Committee on Health, which I have been chairing. This report was submitted to the NAIC in June of 1985. The NAIC has accepted that report on an exposure draft basis with the tentative goal of considering adoption of that report or some revision of that report, depending on the outcome of the exposure period, at its December meeting. Whether or not that will actually happen depends obviously on the magnitude of the differences of opinion and the problems that may be raised. But that report is currently in its exposure process authorized by the NAIC, and the timetable, as it stands, is to consider adoption of the report or a revision of the report at its December meeting. The NAIC people also have been counting on this session as being an important part of the open forum discussion on this report.

A. The Topic. The "Report on Reserve Standards for Individual and Group Health Insurance Contracts" submitted to the NAIC in June

1985 by the AAA Committee on Health: Subcommittee on Liaison with NAIC Accident and Health (B) Committee. This report presents new minimum reserve standards recommended to supersede the present NAIC minimum reserve standards for health insurance.

B. Role of the AAA Subcommittee.

1. History and responsibilities of the subcommittee--This Academy subcommittee is the successor to an Actuarial Advisory Committee for Health Insurance, appointed by the NAIC to provide actuarial advice and assistance. The former committee drafted the present NAIC Reserve Standards for Health Insurance. This committee was absorbed into the Academy, in its present subcommittee status, to serve as a standing liaison and advisory group assisting and advising the NAIC Standing Technical Actuarial Task Force on actuarial matters affecting health insurance generally.

2. The task assigned by the NAIC to the subcommittee--The topic of this discussion is a project assigned by the NAIC to this subcommittee approximately two years ago. The subcommittee commenced its work in the spring of 1984 and has progressed through a series of working drafts to its final report, submitted to the Actuarial Task Force in April 1985. Appendix A of my paper "A New Approach to Premium, Policy and Claim Reserves for Health Insurance" which appears in TSA XXXVII, contains an intermediate working draft which was under study as of December 1984.

   The paper was accepted by the Society and published in preprint form in early April 1985 to accelerate exposure and discussion of the concepts under study by the subcommittee.

C. The Basic Problems Addressed by the Subcommittee in Development of the Report.

1. Lack of definition and clarity, in practice, with respect to the function of each of the three reserve categories.

   There has been a gray area, in particular, between claim reserves and policy (premium and contract) reserves, which in the subcommittee's judgment has seriously weakened the perception among actuaries of the importance of contract (additional) reserves in the total fabric of health insurance reserves and liabilities. This is the area of recurrent and continuing claims, not as yet incurred under contract provisions but highly probable or imminent because of their direct causal relation to claims that have been incurred.

   This has led to:

2. Ambiguous and conflicting views and practices, among companies and actuaries, concerning incurred claims and claim incurral dates.

Some adhere strictly to contractual determination of incurred dates and incurred claims. Others stretch claim liability to encompass varying degrees of recurring or continuing claim liability, even though, by contract, such claims should be considered incurred during the unearned premium period or even beyond.

This gray area of liability gives rise to confusion concerning the respective roles of the three reserve categories and, at times, even manipulation of reserves by some insurers for purposes of allocating profits or adjusting surplus.

3. Prohibitive escalation of losses and premium rates on deteriorating blocks of business.

   Regulators have become increasingly concerned with this tragic phenomenon, which eventually renders health insurance protection unaffordable to policyholders who have become severely substandard or uninsurable risks. The subcommittee considered various possible devices for alleviating this sad problem.

4. Shortcomings of the traditional tabular policy reserve system.

   a. Unclear and unrealistic, related to policy liabilities.

      Tabular morbidity standards rapidly become outmoded or often need massive adjustment to fit certain benefit structures. Their validity, adequacy, and margin of conservatism tend to grow increasingly uncertain. Such relevant factors as lapse assumptions are generally not provided for.

   b. Unresponsive to volatile cost trends and forces.

      The usual tabular morbidity standard contains no mechanism to adjust to fluctuations or to changing trends or new forces affecting morbidity costs. Normally, there is no provision for select period morbidity. As a result, tabular standards have been:

   c. Unresponsive to cash flow and matching of income and outgo.

   d. Cumbersome to adjust, to fit premium increases.

   e. Poorly adapted to handling effects of premium rate regulation.

   Most of these shortcomings tend to be much more serious with respect to volatile benefits subject to rapid changes in cost due to variant forces.

D. Principles Followed in Attacking the Problems.

1. There must be clear definition and division of the roles of the three basic health reserves, so there is consistent general understanding of what each one covers. Clear, objective claim incurral dating rules are a necessary ingredient of this definition and division.

2. Minimum statutory reserve standards require objectivity, specificity, and consistency in order to function effectively as a regulatory tool.

3. Tabular reserve systems are too inflexible and too complex and diverse to serve as a practical, objective, and dependable means of determining policy reserves under volatile benefits subject to frequent rate increases. They remain reasonably workable with respect to stable benefits not subject to repeated rate increases.

4. An alternative to tabular reserving must be found that is both simple and responsive to the variety of reserving problems under volatile benefits. The "balancing reserve" concept fits these criteria.

5. The problems of deteriorating blocks of business cannot be solved readily by simple or fixed regulatory rules or limitations. Voluntary transfer of balancing reserves from excess margin to deficient margin blocks of business may help to ameliorate this problem and also establish regulatory recognition that excess losses in some areas need to be offset by excess gains in others.

E. Advantages of Balancing over Tabular Reserves as Method for Volatile Benefits.

1. Readily understandable in relation to policy liabilities being valued.

   Using the anticipated policy lifetime loss ratio as a leveling and measuring device, the liability valuing function of the balancing reserve can be readily understood. Reserves are valued on the basis of a valuation net premium expressed as a constant percentage of a potentially variable gross premium.

2. Based on realistic assumptions--if premiums and expected loss ratios are.

   If the gross premiums and expected loss ratios are realistically determined in reference to morbidity levels and trends, persistency and investment return expectations, the balancing reserve basis is automatically realistic.

   The balancing reserve valuation net premium, due to its automatic relationship to the gross premium is also:

3. Flexible, responsive, adaptable:

a. to rate changes.

b. to select period loss ratios and trends--hence, to cash flow.

The resulting reserve adjusts and adapts instantly and automatically to these factors.

4. Readily corrected, as experience indicates, to stronger or weaker basis.

5. Readily adapted to gain versus loss transfer.

6. Simple, compared to tabular systems.

F. Weaknesses of Balancing Reserves.

1. Simplicity can lead to poor monitoring and to undervaluing.

2. Liability is prospective. Minimum basis is retrospective.

3. Flexibility can become subjective and prone to manipulation.

MR. W. H. ODELL: On October 9, 1983, at the Diplomat Hotel in Hollywood Beach, Florida, the Health Subcommittee of Standing Technical Advisory Group on Structure for Consideration of Health Coverage Valuation Standards was assigned the task of developing a compendium of topics that require consideration to develop an objective valuation standard based on traditional reserving concepts.

The subcommittee's assignment was to enumerate the topics that need to be considered. It was not the task of the subcommittee to recommend the resolution of each topic. Also, the subcommittee was asked to confine its inquiry to the possibility of an objective valuation standard based on traditional reserving concepts. It was not asked to undertake the issue of whether or not there should be an objective valuation standard nor was it asked to address the issue of whether or not the reserve standard should be along traditional lines or whether it should follow a new approach. The subcommittee was to confine its deliberations to the situation of an objective valuation standard based on traditional reserving concepts.

The NAIC Life, Health and Accident Standing Technical Actuarial Task Force has certain responsibilities for technical concerns facing life and accident and health insurers. It is this task force which makes recommendations to the Accident and Health Insurance NAIC (B) Committee and the Life Insurance NAIC (A) Committee. Those committees, in turn, take action which is subject only to the concurrence of the NAIC Executive Committee on certain matters and refer other matters to other committees, such as the Blanks Task Force of the Financial Condition Subcommittee of the Executive Committee of the NAIC.

The Standing Technical Advisory Group (STAG) is a committee chaired by Charles Greeley, Vice President, Metropolitan Life Insurance in New

York. The role of the committee is to provide advice to the NAIC, particularly to the NAIC Life, Health and Accident Standing Technical Actuarial Task Force, from an industry point of view. The NAIC group can and does ask STAG for its comments on various matters. STAG's comments are advisory in nature and in no way do they represent recommendations. They do not represent industry position. The comments simply are designed to give the NAIC group some idea of the feeling of members of the industry and to provide some technical advice.

For many years, the NAIC has been grappling with the question of how to develop and implement objective valuation standards. The recommendations of Task Force (4), with which we are all familiar from our readings on the syllabus, were actually not adopted in anywhere near complete form by many states. There are other causes of concern. The NAIC's attempt to get a handle on the question of a minimum valuation standard had met with more frustration than success. The matter in recent years has taken on a sense of urgency because of three pervasive conditions:

1. Insolvencies--there is no question that insolvencies occur with the frequency considered by many to be relatively high.

2. Lack of objective valuation standards combined with an expectation of such standards.

3. Grossly divergent determinations of policyholder liabilities in specific instances.

Therefore, in the fall of 1983, the NAIC quite naturally approached STAG to seek its advice as to specifically what topics have to be considered to develop an objective valuation standard along traditional lines. The end product would (a) help determine the desirability of such a standard, (b) be useful in the long-term undertaking of working toward such a standard if such a standard were considered desirable, and (c) bring into focus certain matters of interest in any valuation system.

STAG assigned the undertaking to its health subcommittee of which I am chairman. The scope of the charge included all types of carriers and all types of health coverages.

The first task was to add to the subcommittee the people who, together with its existing members, would bring the needed resources to bear on the assignment. The subcommittee members are John M. Bragg, Anthony J. Houghton, James Olsen, Charles Habeck, and Willis W. Burgess. The subcommittee was purposefully and thoughtfully assembled giving a great deal of weight to in-depth experience in many different environments and lines of business.

This made it possible to achieve another objective which was considered important, namely to keep the group small enough to encourage free and uninhibited discussions.

One of the first things the subcommittee did was to try to list some specific causes or conditions which underlie the previously mentioned three pervasive factors. These causes or conditions include:

1. inadequacy of claim reserves and liabilities,

2. lack of understanding of liabilities for health insurance, especially as regards the claim reserves and liabilities,

3. bottom line pressures,

4. lack of adequate data bases and experience tables, and

5. lack of consensus as to a range of accepted practice.

Next we identified five guides for our inquiry prescribed or implied by the scope of our charge.

1. The traditional purpose of traditional statutory reserves, to us, is one of solvency. This is important because if we considered reserves to be serving another primary purpose, then we would have ended up with a different list of issues.

2. The traditional statutory approach embraces the concept of conservatism.

3. An objective valuation law is one so constructed that a number of practicing actuaries will come to approximately the same conclusion as to the reserve liability.

4. The role of the valuation actuary and the related matter of the definition of minimum standards are changing.

5. There appears to be tension between the role of the federal government and state regulation related to a solvency objective. The reserve system must stand on its own.

The reserve determination therefore requires a quantification of a liability (which must be matched by an asset amount which measures the excess of future cash disbursements over future available cash incomes) and further extends this perception to examination of the timing of these flows. An objective determination therefore is needed of:

1. the nature and amount of benefits provided by the contract and their value and, for certain purposes, of the expenses as well;

2. the future cash incomes available for this purpose; and

3. the term of the period with respect to which the liability is being established.

Turning to the matter of the environment in which the minimum valuation standard would operate, we identified three aspects of the valuation processes:

1. A minimum valuation standard specified by law

2. An examination of prospective incomes and disbursements

3. A determination of adequate provision for plausible future events

Notice it is only the first of these matters which we perceive as being addressed by law. Also, it is only the first matter with which the subcommittee is directly concerned. We assume that the role of the valuation actuary will reach legal fruition and that he or she will be asked to opine on whether a company's reserves satisfy the minimum valuation standard, whether prospective cash flows are satisfactory, and the amount of any additional provision required to meet plausible deviations over and above normal deviations.

Our group met eight times, each time for a full day, over a period of eighteen months. Our final report was submitted on April 29, 1985, and the Standing Technical Advisory Group asked that we transmit it to the NAIC Life, Health and Accident Standing Technical Actuarial Task Force. We were pleased to do so on May 22, 1985. It is impossible to more than scratch the surface of those deliberations or to convey the exact thoughts of the subcommittee members in this short presentation.

It is important to keep in mind that the work of this subcommittee was to identify and elucidate issues, not to resolve them. Also, we were working within the specific framework of an objective valuation standard built on traditional reserving concepts.

We did indeed compile an imposing list of issues that must be addressed to develop such a minimum standard. We did not try to adopt a point of view on these issues, because, for a number of issues, we could express almost directly contradictory points of view. Also, we certainly did not try to describe the best way of implementing the type of reserve standard we were asked to consider. Our wisdom overcame our valor, and we have left that to others.

In a moment we will look at some of the difficult issues we have left for the attention of our successors.

MR. DOBSON: That completes the review of the background. I hope everybody is straight on why the three different committees were looking at the same issue and how they all came into being. We will discuss the controversial issues now emphasizing those that we hope will generate discussion.

MR. ODELL: Let's talk about some of the substantive issues considered by the subcommittee that have not yet been the subject of that much conversation.

The table of contents shown in exhibit I gives you a good idea of the range of topics we covered. Some of the topics shown in sections A and B were mentioned earlier. You will notice a long list of items under active life reserves and another considerable list under claim reserves and liabilities.

EXHIBIT I

STRUCTURE FOR CONSIDERATION OF HEALTH COVERAGE VALUATION STANDARDS

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Reserve Term, Section C3 of the Report

If there is to be an objective reserve standard, the term over which the reserve is computed must be objectively determinable. The reserve is the present value of the excess of future disbursements over future income. To compute the present value, the period of time over which the computation is made needs to be defined. This is certainly not a startling revelation, but the matter isn't discussed that much in the literature on health reserves.

In performing a reserve determination in practice, upon what is the length of the reserve term based? In years gone by it often, and perhaps we could say almost always, coincided with the term of coverage. But today, is that the case? Hardly. We felt that different terms were probably being used in practice by different actuaries for very similar policy forms. Also, if we consider the multiplicity of policy forms in use and the unevenness of present minimum valuation standards, it appears that, for a number of different combinations of policy forms and circumstances, arguments could be advanced for using different reserve terms. In other words, in today's environment we felt we could identify situations where the reserve term was not objectively determinable.

To have an objective valuation standard, the reserve term in a particular circumstance must be subject to objective determination. Upon what sources of information can this determination be based? The reserve term doesn't have to be explicitly stated in the policy form. There is no particular reason why it has to be the coverage period.

However, from the facts in a given case, it will be necessary to have some way of making an objective determination of the value of this variable. It seemed to us that to satisfy the objectivity criterion, the reserve term should be determinable from a reading of the law and the policy form together. In other words, a number of people looking at the same policy form and reading the applicable law would come to the same conclusion about the reserve term. If this were not the case, then obviously they wouldn't come to the same conclusion as to the reserve except by chance.

This simple concept, an objectively determinable period of time over which the present values utilized in the reserve computation are determined, casts a long shadow. For example, if the reserve term is tied to the period over which it is anticipated that the premium rate scale will not change and if that intent is not committeed to writing, such as in the policy form, then there is a question as to whether or not an objective reserve standard can be operable. It also raises a question about the appropriateness of today's terminology as regards classifications used in policy forms concerning renewability and concerning the extent, if any, of premium guarantees.

Nondeath Decrements, Section C8

Perhaps no topic better illustrates the nature of the deliberations of the subcommittee than nondeath decrements. I'll discuss briefly some of the

pros and cons of utilizing nondeath decrements (i.e., lapse rates) in the reserve determination.

There is the disadvantage of removing an element of conservatism. It will be hard to define an objective standard. The process is subject to manipulation. In regard to the latter, we reviewed an example which showed that the introduction of lapse rates would not change the result of the reserve calculation. Then we reviewed another example which showed the introduction of lapse rates cut the reserves in half. I am sure that with a little imagination we could have constructed some more examples.

In favor, is the argument for realism. It is simply a fact of life that people do stop paying premiums for reasons other than sudden death. It would avoid unwarranted conservatism which, carried to an extreme, results in what can only be called a "false" opinion. The word false is really too strong, but it makes the point. Consider a company issuing only long-term level premium health insurance.

Depending on the pattern of actual and anticipated lapse rates, isn't it quite possible that the liabilities, and hence the financial condition, reported with respect to such a company, if lapse rates are ignored, would be so far on the conservative side as to be downright misleading and "false"?

Carrying the same thought further, what would happen if the financial statements of such a company utilizing no lapse rates in the calculation showed no surplus, and hence statutory insolvency, but the same statements using a conservative lapse rate showed a healthy surplus position? We could anticipate a rather interesting insolvency hearing, I believe, after which the stockholders might have a few unkind comments about a number of the participating parties.

Statement Presentation, Sections B4 and D4 of the Report

There appeared no inherent reason why statements of different enterprises should present the same information differently.

This includes various types of traditional insurers, health maintenance organizations (HMOs), and so on. However, the subcommittee was quick to recognize that there are certain differences inherent in the nature of the different enterprises which logically lead to different statement presentations. One example is that health business generally is of less importance to a fire and casualty insurance company than it is to a life and accident and health insurance company. The products sold by the different enterprises may have differences which are difficult to separate from the businesses themselves. An example is the differing termination provisions found between traditional insurance policies on the one hand and prepayment plans on the other. Also, environmental factors may differ significantly between the different types of carriers. An example is the difference in taxation between fire and casualty companies on the one hand and accident and health companies on the other.

We point out that whoever undertakes the development of an objective valuation standard should consider the inherent differences in types of carriers in prescribing statement presentation.

Another dimension to the question of statement presentation is the one of the desirable form of disclosure and reporting. One such issue which will need to be addressed is whether more or less claims development data are appropriate. The property and casualty statement is much richer in this type of information than the life and accident and health statement. Incidentally, much of the health portion of the life statement is derived from the casualty statement.

Another matter is whether the present reporting of each piece of the claim reserves and liabilities shown in the life and accident and health statement should be expanded to other statements, retained as is, or presented in less detail. As you will note in reading the subcommittee's report, we saw some rather vivid examples of mislabeled reports of claim reserves and liabilities and, we believe, some misunderstandings of their nature which might well have been avoided by closer adherence to the divisions of these items. In terms of reducing the chance of a portion of these reserves and liabilities being overlooked and in terms of enhancing the understanding of them on behalf of all interested parties, there is much to be said for retaining and more rigorously adhering to the present form of presentation of the life and accident and health statement. On the other hand, the methods of calculation often utilized and the aggregate nature of some of these liabilities are arguments for reducing the extent of classification.

Experience Tables, Section D2 of the Report

With respect to disabled lives, there is a lack of good experience tables. Does an objective minimum valuation standard imply that there must be an objective definition of the minimum liability with respect to claim reserves and liabilities as well as with respect to the reserve for active lives? There are arguments for both sides of the question. If the answer is yes, specific tables would be needed for determination of claim reserves and liabilities if the valuation standard is to be objective with respect to those items.

Whether or not prescribing such tables is desirable is a question which will need to be addressed. There are cogent arguments for basing the claim reserves and liabilities upon a company's experience. Can one picture basing loss reserves from medical malpractice on a prescribed table? For that matter, can one picture basing the loss reserves for property and casualty companies, in general, on prescribed tables? Well, if that would be improper, why single out the one line of health insurance for different treatment?

On the other hand, if tables are not prescribed, then with respect to these items, we do not have an objective valuation standard. Also, why not use, for disabled lives, the same tables that are utilized for the standard as it relates to active lives? If an experience table utilized for active lives is not appropriate for use with disabled lives, then how can it be appropriate for use with active lives? In other

words, it seems inconsistent to say that a table is appropriate for reserve determination with respect to active lives but is inappropriate for reserve determination with respect to disabled lives. Is the answer to say that the minimum, with respect to disabled lives, is the greater of the reserve determined according to the table applicable to active lives or the determination based on company experience? In any event, compiling the tables suitable for valuation of the disabled life items will be no small undertaking.

We will not take this time to address further specific issues. The preceding, I believe, gives you a feel of the approach of the subcommittee. We were asked to look at the specific topic of a minimum reserve standard and further look at it within the traditional concept of an objective standard. We were asked to set forth those issues which must be addressed if such a standard is to be created. We think we have uncovered some real problems and raised some substantive issues.

The subcommittee noted a few items which you should find interesting:

1. Need for more clearly defined actuarial procedures and practices. It seemed to us that the range of practices now going forward is so great as to significantly reduce the meaning of financial reports. In preparing these notes, in fact, an interesting example came to my attention.

   While reviewing, for another purpose, the AAA's interpretations and opinions on financial reporting and also the latest exposure draft of material on the valuation actuary, all of which make a point that a certain amount of conservatism in determining the liabilities is appropriate, two other actual financial reporting situations presented themselves. In one of these, the liabilities were presented on a realistic basis with full knowledge that the surplus might be no greater than the legal minimum, and in the other the liabilities were presented on a basis which would provide for all future payments under almost any conceivable circumstance.

   With respect to claim reserves and liabilities, the subcommittee identified two generally accepted methods: the development method and the tabular method. The report includes appendixes which briefly review these methods.

2. Policy classifications--The words which we use to describe policy forms and which are incorporated in them no longer convey the clear meanings they did in the days when the Task Force (4) report was new. Terminology problems go beyond the descriptions of renewability and premium guarantees and seem to permeate health insurance considerations in general.

3. "Guaranteed renewable" inflation sensitive products--The term guaranteed renewable is now being used to describe both policies on which, by practice, the company practically never increases the premium and policies on which premiums will increase almost every year. As has already been suggested, the answer may be to not

use this term in connection with inflation sensitive products, but in any event, the issue needs to be addressed.

4. The "level premium policy" which is not level premium--There are policies in the marketplace which give the buyer the impression that premiums will not be increased, when in reality an appraisal of the benefits offered and a review of the gross premium scale clearly indicate that premium increases will be needed to mature the policies. The subcommittee raised the question of whether the interests of all parties would be better served by full disclosure of the anticipated need for premium increases, such as is found in the policies of some of the companies represented at this presentation and of companies represented by some members of the subcommittee.

In conclusion, there are significant issues which need to be addressed if an objective minimum valuation standard along traditional lines is to be formulated. These are listed in the report.

The subcommittee did not consider whether or not such a standard is desirable. The extent of the problems elucidated raises the question whether or not such a standard is possible, especially with respect to disabled lives. We did not consider what the alternatives to an objective minimum valuation standard might be.

It will be interesting to see whether the tide of events leads us to solving the problems of articulating an objective minimum valuation standard or to solving the problems of not having one.

MR. LITOW: The following remarks will cover the areas that I find controversial. My comments will be divided into two sections, one for the claim reserve, the other for the active life reserve.

Claim Reserve

The principle that most actuaries appear to agree with is that the claim reserve is funded by past premiums, with only a few minor exceptions. On the other hand, the principles that stir the most disagreement are rules relating to incurral dating.

Two major questions are:

1. What should be the underlying basis for establishing such rules?

2. Should a termination assumption or a going concern concept be followed?

Basis for Establishing Incurral (Loss) Dating Rules

One point of view is that the contract, current laws, and statutes should be the focal point of all rules. However, how many contracts exist that clearly state what the loss date should be? In addition, current laws and statutes generally offer little or no specific assistance in this regard. Under these circumstances, it is argued that specific

rules need to be established that tell us what various contract provisions mean. This seems onerous, since many exceptions will likely occur.

A second viewpoint is that rating principles should be followed. This would take into account all considerations used in pricing, development of contract provisions, and so on, and therefore, seems to clearly allow for different situations. The flexibility of this approach is seen as a disadvantage by some, however.

Termination Assumption Versus Going Concern Concept

The termination assumption espouses the idea that all policies are terminated as of the valuation date with the claim reserve established via this principle. This may mean that contingencies occurring after the valuation date, or unaccrued liabilities, are ignored, depending on contract wording.

The going concern concept generally recognizes the possibility of contingencies occurring after the valuation date that are related to events before the valuation date. As such, unaccrued liabilities would be recognized more often in these situations.

For instance, if a policy provision requires the policy to be in force for benefits to be paid, the termination assumption would not establish a reserve for services rendered after the valuation date. However, the going concern concept would establish a reserve in some cases, if the services were related to earlier service or loss dates proceding the valuation date.

On this topic, questions would include:

1. Is a termination assumption reasonable for establishing reserves and testing for the solvency or going concern capability of a company?

2. Shall the actuarial profession appear to promote funding programs that are approaching pay-as-you-go?

In examining these questions further, let's look at current loss dating practices or rules within the insurance industry. In general, four types of rules exist.

1. Per-cause Rule

   The loss date is the initial date of an injury or sickness, or the date on which such injury or sickness manifests itself. This rule is almost always used for disability and accident only policies with recognition of recurrences, benefit periods, and coverage termination. The rule, with the same types of modifications, is also frequently used for individual medical expense policies without calendar year deductibles or calendar year benefit periods. However, it may certainly be used even if a calendar year distinction exists. Ther per-cause rule can be used with either the term

assumption or the going concern concept. If the latter is used, the reserves tend to be much longer.

2. Service Date Rule

The loss date is the date of the treatment or service, if covered under the policy.

This rule is frequently used for medical expense group policies because they are usually rated based on services provided during a certain period (normally one year). One modification commonly applied here is that for a continuous hospital confinement, the first day of the confinement is used as the loss date for all days of such confinement. This seems reasonable in that hospital data are generally separated by calendar year according to the date of hospital admission.

The service date rule represents a termination assumption. This is reasonable for group policies in most cases since they are rated one year at a time and do not include a renewable promise.

3. Calendar Year/Per-cause Rule

The loss date is the earliest date of treatment or service in the calendar year for that cause.

This rule is generally used for medical expense policies with some benefit provisions relating to a calendar year. Since the method keeps track of a claim on a per-cause basis during the calendar year, recurrences and other modifications may be recognized as in per-cause loss dating.

In situations where a hospital confinement begins in one calendar year and ends in the following year, claims may be assigned to either year depending on the rating principles employed. (This also applies to rule 4 following.)

The calendar year per-cause rule produces a low or termination type reserve at year end but much higher results during the calendar year. The reserve is relatively high in the first half of the year, but decreases steadily for a stable block of business in the second half of the year.

4. Calendar Year/All Cause Rule

The loss date is the earliest date of treatment or service in the calendar year regardless of cause.

This rule, as with rule 3, is generally used for medical expense policies with some benefit provisions relating to a calendar year. Recurrences or intervals between service dates can be used as a basis for closing and opening new claims, but this has a minimal effect here.

One modification sometimes made to this rule is the use of a batch rule or method. The loss date under this method is the earliest date of treatment or service in the calendar year for a group, or batch, of bills that are sent in together. Otherwise, the general rules for calendar year/all cause dating are followed.

The effect of calendar year/all cause rules on reserves is similar to that of the calendar year/per-cause reserve, except that mid-year reserves under this method are usually larger.

Examples of results under each method in a generally common form are shown for one calendar year only. Note how results vary by rule and/or rating principles.

Illustrative Quarterly Loss Ratios by Method

	Per-cause Method	
	Growth Scenario	Declining Volume Scenario
1Q	63%	57%
2Q	63	57
3Q	63	57
4Q	63	57
Total	63%	57%

	Service Date Method	Calendar Year Per-cause	Calendar Year All Causes
1Q	60%	105%	120%
2Q	60	60	60
3Q	60	45	40
4Q	60	30	20
Total	60%	60%	60%

In the example, the loss ratio for the per-cause method is greater than the other methods during a growth scenario and smaller under a declining business scenario. This occurs because the other methods employ a termination type concept and, therefore, push claims forward into later years. As a result, the termination concept will produce lower loss ratios with growth but higher loss ratios as business volume declines. This pattern may not be desirable since rate increases are often necessary in later policy years due to secular influences alone, and the additional burden of increased claims in those years may make control of the loss ratio difficult.

Now, how does a company establish loss dating rules that match its intentions? The best answer would seem to be that rating principles should form the basis for establishing such rules; the intent then is that these rules would be carried either implicitly or explicitly into the contract. In many cases, however, rules are currently established as a matter of convenience to the claims administration department.

Active Life Reserve

General agreement on this concern revolves around methods of calculating the unearned premium reserves. Controversial issues appear to include the amount of the unearned premium reserve and policy (contract) reserve, as well as methods of calculating the contract reserve.

In general, the reserves currently used or under consideration are as follows:

Unearned Premium Reserve	Policy Reserve
- Gross Unearned Premium (GUPR)	- Net Level
- Net Unearned Premium (NUPR)	- One Year Preliminary Term
	- Two Year Preliminary Term
- 75% (NUPR) + 25% (GUPR)	- Balancing Reserve

Current statutory standards require the GUPR as a minimum, but stipulate the NUPR plus policy reserve if greater. The method adopted by the NAIC for an exposure period would allow 75 percent of the NUPR plus 25 percent of the GUPR plus the balancing reserve, but without any additional minimum requirement. (This is referred to hereafter as the proposed method.) A general comparison of the two methods is shown below, where the statutory reserve for illustrative purposes is based on the NUPR plus a two year preliminary term policy reserve.

Case 1 Actual Claim Experience Equals Expected Result

Year 1:	Proposed method reserve	statutory reserve
Year 2-3:	Methods may produce similar results	
Year 4+:	Proposed method reserve (in most cases)	statutory reserve

A lower active life reserve in the first year will reduce surplus strain, which may be desirable, except when such a reduction encourages uncontrolled growth, i.e., growth that may threaten surplus adequacy.

Case 2 Actual Experience is Better than Expected

Same as Case 1 except that the proposed method reserve increases when this is true. Thus, in years 2 and 3, proposed method reserves would often exceed statutory reserves.

Case 3 Actual Experience is Worse than Expected

Proposed method reserves will decrease and the balancing reserve equals zero if the actual cumulative loss ratio exceeds the target lifetime loss ratio. Thus, the proposed method reserve may always be less than the statutory reserve.

Note that the proposed method reserve does not appear to produce a desirable result when actual experience deviates from expected. If experience is better than expected, the reserve increases where a decrease might technically be more legitimate. Likewise, poor experience will decrease the reserve and could put the reserve only slightly above the NUPR, or with little, if any, margin.

Therefore, the question should be asked, "Does the balancing reserve provide a reserve when it is most needed?"

In addition, the following questions need to be addressed in regard to the balancing reserve:

1. What are the tax implications of this reserve?

2. Is the balancing reserve consistent with a termination assumption for incurral dating of claims?

3. Has the balancing reserve concept been developed to be consistent with the NAIC formula for rate increases? If so, does this make sense?

4. What are the intended reporting requirements for the balancing reserve in the annual statement?

Whatever method is used to develop the active life reserve for statutory purposes, we should recognize that the result will probably need to be artificial. Since these reserves have generally served as the major fund of conservatism for insurance companies, absence of an appropriate margin here would clearly correspond with a significant risk of surplus deterioration. Accordingly, any principles and laws developed for active life reserves will have to first address the conservatism desired in these reserves.

Where does all this controversy on reserving principles leave the actuarial profession? Actually, it puts us in a better position than we were in 1980 and 1981 when these issues were seldom discussed. However, this is not the time to rush into a valuation law that does not properly address the considerations at hand.

Instead, the current situation would seem to dictate a review of all considerations for valuing A&H benefits on both a statutory and GAAP basis; most of this work has already been done by Mr. Odell's committee. Thereafter, close scrutiny of principles as currently proposed, or newly developed ones, will be necessary before the adoption of principles or related standards of practice.

Let's take some time to get to the point where the industry in general believes in the final product and feels that it is both reasonable and practical.

MR. BARNHART: I believe the principles, the perspective, and the approach that our subcommittee has taken to these problems are much closer to those of the Odell subcommittee than what is described in the

paper written by the four members of the original Society Principles of Valuation committee. I don't see too much there of basic controversy or basic difference in viewpoint, but there are some differences in emphasis. As I see the Odell subcommittee report, their emphasis on objectivity goes to a greater degree of specificity than does ours. We believe our approach is also an objective approach, as distinguished from that in the paper by the Shapland committee, which we believe is heavily subjective and even dangerously subjective. We would regard the effort of the Odell committee to be objective as good in theory. In our own subcommittee deliberations, we are trying to come up with actual minimum reserve standards, and we felt that objectivity as visualized in the Odell committee report is unattainable from a practical standpoint. An example is the idea of a tabular minimum claim reserve standard for major medical benefits. There is simply too much variation among companies, among benefits, and among provisions of all kinds for any sort of minimum tabular reserve standard to be a practical device in a law or regulation.

We think that the goals of the Odell subcommittee in attaining objectivity in terms of contract reserves are again somewhat beyond practical attainability. For example, we think the idea that one can include sufficient definition of rating structure, expectations as to future trends and claims, and so on, in the policy form simply goes beyond what one can achieve as a practical matter.

So while our viewpoint is objectivity, our approach is to place emphasis on the role of all these reserves in measuring liability, e.g., claim liability, future policy liability. Our view is quite similar to that of the Odell subcommittee with the difference primarily being in how objectivity is realized and how far one goes in boiling that down to a totally defined tabular base. We think that as a practical matter that is unattainable, particularly in the area of volatile benefits. That's why we abandoned the tabular reserve approach for what we have described as volatile types of benefits. We feel that the balancing reserve addresses this much more easily and effectively. We think that when you get into those areas where you have a lot of pressures in terms of inflationary trends and other secular outside pressures, reliance on a tabular reserve mechanism is simply going to fail. So while both committees are seeking objectivity as contrasted with subjectivity, our emphasis and our perspective is somewhat different. But I do not, beyond that difference in perspective, see any serious controversy or conflict of viewpoint.

When it comes to the concepts expressed in the paper written by the Shapland committee, we see an enormous gulf. We think that what is being proposed there is light years away from what we feel is a responsible and reasonably objective type of reserve standard. I would have to say that we think that Mark Litow has incorrectly identified the basic difference involved in this incurred dating matter. We would not agree at all. Our view does not call for placing claim liability on unincurred claims. We would say that the contract reserve should cover that. We try to put substantial emphasis on the necessity for these reserves to be adequate, and on the necessity for the responsible actuary to periodically review the contract reserve, whether it is tabular or

balancing, in order to prospectively ascertain whether that reserve is adequate.

The loss ratio examples that Mr. Litow showed are simply the result of a kind of rote formula application of the rules. Obviously, if someone tries to follow through this balancing reserve concept and merely applies formulas without constant updating and careful monitoring, some of the admittedly absurd outcomes that Mr. Litow showed can result. This places quite a bit more direct responsibility on the actuary responsible for the valuation. He or she must do this intelligently. If mindless rote application of formulas against an anticipated loss ratio is done without adjustment as experience unfolds, you can certainly get ridiculous results. But we would suggest the same thing is happening right now; there is rote application of tabular standards simply complying with minimum statutory requirements with no consideration whether this realistically measures prospective liability. There is far too much of that taking place right now in the valuation and certification of statement reserves and contract reserves.

In this connection, I want to remind all of you about the language that you have to certify to, in the actuary's opinion, for the life and health statement. It contains statements like this: "The reserves are based on actuarial assumptions which are in accordance with or stronger than those called for in policy provisions." Or this: "The reserves make a good and sufficient provision for all unmatured obligations of the company guaranteed under the terms of its policies." Notice the emphasis on the terms of the policy. We frankly do not see how any actuary trying to do a realistic and adequate job of valuing a company's reserves can do that without close attention to the policy provisions. We feel that anyone following rules as to incurred dates or other policy provisions that simply do not conform to the provisions of the contract is living in a world of make-believe. Our position is that there is only one source that gives rise to the benefit liabilities of an insurer, and that is its contracts. Its liability is the result of the benefits for which it is obligated and responsible under the provisions of its policies. We would say that there is no escaping that. You just can't look elsewhere and adopt some other set of guidelines as to dating or as to how you're going to treat incurred versus unincurred liabilities. You cannot measure what you are supposed to be measuring if you don't do it in terms of the provisions of the contracts. The opinion statement is right on target; you are certifying that the company has reserves adequate to meet its obligations under its policy provisions.

We differ quite a bit from the emphasis in this paper on rating principles. For example, our position is that the determination of incurred but unpaid claim liability that exists on December 31, 1985, is independent of any rating principles. We do not see at all how rating principles, particularly different rating principles applied by the same company, can possibly result in different outcomes as to the value placed on the incurred but unpaid claim liabilities that exist for that insurer at the valuation date. We say that is totally unrelated to any rating principles. That liability is there. It is what it is. It will be what it will be as it unfolds. And it has nothing whatever to do with rating principles or with the notion of being funded from either past or future

premiums. It is an objective liability, and the amount of that liability is the amount that the company is going to have to pay on those claims that are incurred as of that date, regardless of rating principles. The paper suggests quite openly that you can come up with different claim liabilities and with different contract liabilities purely as a result of choosing to follow different sets of rating principles. We quite agree that the proper development of contract reserves obviously has to be determined in relation to rating principles viewed in terms of premium structure and what is being anticipated by way of future trends and future inflationary rates. Obviously, intelligently valued contract reserves must be dependent upon the rating structure--what the assumptions are and what is covered. But the existing incurred claim liability is another matter.

Another thing that troubles me personally a great deal about this paper is that it virtually never touches upon the question of sound rating principles. It lays heavy emphasis on rating principles and seems to suggest that you can almost do what you please. You can go to one extreme or another. You can go on a pay-as-you-go basis or you can go on a very conservative basis providing reserves against future claim losses. I found it rather interesting that the paper doesn't mention the question of whether some rating principles might be unsound until virtually the end, and there it only makes passing reference to that possibility in talking about claim expense reserves. When talking about claim expense reserves it says, "future expenses," meaning future claim administrative expense, "to be covered by future premium income would not be reserved (unless the rating principle involved is not viable or regulatory conservatism calls for its disregard). In most instances, the rating principles and their viability would be consistent regarding both the related future claim payments and the claim administration expense." I feel that's the worst failing of this paper. It totally fails to examine the issue of sound versus unsound rating principles. It permits far too wide a spectrum of subjective preference on the part of insurers and on the part of actuaries working with the reserves.

Another point that would differ between our committee and the viewpoint of the paper is that we would start from the premise that your reserves must adequately cover the liabilities. The paper appears to start from the premise that you want to match revenues and expenditures and that your basic concern is actually with properly reflecting the earnings to be allocated to each statement year. We would say absolutely not. We would start from the totally different premise that the liabilities of the company must be adequately valued and represented by the reserves. We feel that at times the rating principles proposed in the paper become almost a matter of hocus pocus. For example, depending on your rating principles you can cause the unpaid claim liability to vanish. Thus, if your whole rating scheme is based on a completely cash pay-as-you-go basis, then you don't need to set up any liabilities at all, because you're simply going to count on future premium income to pay for that.

We think there has to be continuing regulation that is workable and practical. We think that the end result of this wide spectrum of rating principles which leads to all kinds of different valuations of reserve

liabilities from one company to another and even from one policy form to another, could only exist in the real world if there were total deregulation. The idea that subjective rating principles can drive the determination of all liabilities can only operate in an environment of total deregulation so far as minimum reserve standards are concerned.

MR. KRISS CLONINGER III: I want to ask a question about the temporary adjustment provision. You said in the paper that the purpose was to develop a method that was similar to the two-year preliminary term. And yet, the temporary adjustment provides for an expense allowance that's determined consistent with the one year preliminary term method and a four year straight-line amortization period. Could you comment on how that came to be?

MR. BARNHART: In calling them similar, all I meant is that both proposed systems do make some provision for offsetting first year expenses. What we've got there might be described as a disappearing preliminary term reserve, because by the fifth year you would be up to 100 percent of what might be viewed as your net level reserve. We felt that was necessary in order to permit both regulators and companies to directly recognize the anticipated loss ratio. We felt that down the road you can't leave out the first year or the first two years entirely without losing track of what you're measuring against. Eventually you've got to get to a net level basis which goes back and picks up the first year.

I received a letter from William Bugg--I hope he doesn't mind me anticipating what he might say--on what you are talking about here. His suggestion is to use a real two year preliminary term method and then, instead of going by the anticipated loss ratio over the entire life of the contract, use an adjusted ratio for the third and later years. That could be done, but we felt that if we went that route, there would be two problems. For one thing, it would become more difficult for regulators and others concerned with the statement to understand the relationship. Suppose your lifetime ratio is .55 and for the third and later years it has to be .65. We felt that the connection between the two would tend to be hard to appreciate. The second reason is that depending on what the actual experience was during the first two years, you may or may not have the right ratio for the third and later years once you take into account actual experience as it emerges in the first two years. We felt that, in order to keep this thing on track and for it to be meaningful and understandable to both the insurer and the regulator, at some point we needed to get to the lifetime anticipated loss ratio itself. That may oversimplify some of our reasoning, but that is why we came out the way we did on it.

MR. CLONINGER: It seems to me you build the possibility of creating a suggested dichotomy between the level of reserves provided for under the balancing reserve approach and that provided for under the tabular reserve approach.

MR. BARNHART: There can be a difference in what the real level is. But we felt that when it comes to these volatile benefits, the types of benefits that we believe need a different type of reserve than the

tabular reserve, the considerations involved were important enough that, even if there might be some difference in what the reserves really are providing for in terms of conservatism, and so on, those differences were justified by the radically different nature of the benefits involved.

Again I'll jump the gun here and comment a bit on Mr. Bugg's letter. He pointed out that there is less of an expense allowance provided for under the balancing reserve approach. On the other hand, he also pointed out, at least in terms of what he had tested, that the contract reserves tended to run 140-150 percent on the conservative side. So I think there is a substantial offset there. One provides less expense allowance, but apparently the other one, at least in what Mr. Bugg tested, provides a far more conservative tabular reserve basis. There are some offsetting factors on both sides of that equation, but there's not necessarily a complete equivalence in the provision for first year expenses or in the level of conservatism that might emerge, depending on what the particular reserve assumptions and reserve standards are.

MR. JOHN O. MONTGOMERY: The NAIC actuarial task force is going to take up these matters in its next meeting. We are going to discuss the feasibility of recommending that the NAIC adopt the AAA proposal in December. We may make some changes. I don't know yet; it depends on what comes out of the discussion. I want to point out that this is an interim statement of valuation standards that depends on where we go with the valuation actuary, and the purpose of Mr. Odell's report was just to set up the framework. Mr. Odell's report still requires a lot more work. It does give us the framework to work with, and I appreciated that.

MR. BARNHART: Let me say one thing here, because I don't want anyone to get the wrong idea. Our report is still an exposure draft, and it's subject to revision. And we are listening to everything that everybody is saying here.

MR. MONTGOMERY: In that case you shouldn't propose for adoption in December until you've gotten full exposure.

MR. BARNHART: There are several proposed revisions that I wanted to suggest for consideration at the NAIC actuarial task force meeting, which are intended to be responsive to some of the comments we received. I would certainly feel that we are free to at least propose possible changes up to the point of your next meeting.

MR. MONTGOMERY: I know there are conditions actually to do this, but at the same time there are some loose ends. I don't think we would want to propose it for adoption in December and another six months is not going to hurt.

MR. BARNHART: If the various viewpoints that come out in this type of forum do suggest there are too many loose ends, or there may be too many things that ought to be refined or reconsidered, then I think we would certainly say, "We aren't ready." More may need to be done here before we come in with a final recommendation.

MR. ANTHONY J. HOUGHTON: I want to comment on a couple of items. One involves the claim liability and claim incurred date coding. I agree with many of the remarks made by Mr. Barnhart and Mr. Litow, but there is a sentence in section 182 of the draft that reads, "Liability should be determined on the same basis as if the contract ceased to be in force after date of valuation." That is something that I disagree with 100 percent. Whether you assume all policies terminate or stay in force, it should be adequate regardless. I agree one must know exactly what the contract says. You simply cannot do anything without knowing what the contract says. In the same way, Mr. Barnhart pointed out it would be silly if someone filed a rate filing with the insurance department that said, "I have calculated the rates from rating principles. Everything is on a cash basis, and all cash payments will be made three months after the service date. Therefore I'll never have any claim reserves."

It would also be silly to have a contract for a nursing home policy that pays for five years, but the policy must remain in force day by day to collect benefits. Therefore there would not be any reserve for benefits from nursing home stays after the date of valuation since there is the possibility that the policy will cease to be in force; the benefit would disappear. Although it seems silly that people would actually make an argument like that, we have been involved in testimony before courts with the IRS where an actuary has said that a proposal was actually written offering indemnity for nursing home care or disability that to collect benefits one had to be in force each day, and it would not be required to have any reserves for unaccrued liabilities.

Saying that you should not allow a sentence in a contract to eliminate a reserve that is necessary in reality is a lot different than saying you want to disregard entirely the language of the contract. The language of the contract is not just a single sentence as to what you have to do to keep the policy in force, or whether an incurred date should represent the date of the services rendered. There are state laws that say termination shall not be prejudicial to a claim which originated while the policy was in force.

The most common example I see of claims which could disappear if a policy terminated but in reality would not disappear in most cases because it was not terminated, are the per-cause major medical where you can satisfy the deductible and then have a three year benefit period where for that one cause you can collect benefits without satisfying the deductible again. The second example is a disability income policy where, if you have a recurrent disability from the same cause within a specified time, it is considered a continuation of the first disability. All the companies we are aware of calculate the claim liability for per-cause major medical from the date of the deductible. Almost all the disability companies that I am aware of date the recurred disability back to the original claim. Those companies looking at their own experience to determine how to calculate rates add the claim cost for the current disability to the one for the original disability and rate it that way. I would guess that's what the intercompany experience showed. I'm sure that's true on most of the ones to which I have submitted data.

With regard to the other point on the balancing reserves, if I understand correctly, if two policies were filed by different companies, each with the same premium, and one indicated an anticipated claim ratio of 55 percent and the other company gave an anticipated claim ratio of 65 percent, if each had exactly the same claim experience, one would show, because of the higher balancing reserve, its experience had been higher than the other, 65 versus 55 percent. Or if two companies with different premium rates, and the same anticipated claim ratio had exactly the same experience, one would show in dollars much higher claims than the other. I don't think that makes sense. I don't think that would show people in management or in the insurance department or anyplace else what's responsible for what really happens.

MR. BARNHART: Mr. Houghton, I don't think we are disagreeing with you at all on the question of liability. All we're saying is that in some of the situations you described, we would cover less of it under the incurred but unpaid claim reserve and more of it under the premium and contract reserve. We are saying that the "going concern" liability that you're talking about should be covered by the contract reserve.

MR. HOUGHTON: I think the problem is that the industry is doing per-cause major medical one way, and yet it's not the liability that would result if, in fact, everybody terminated. People don't terminate and people don't get charged back to the date they started the deductible. I don't think it's a problem in reality; the only problem is if you put in a sentence like that, the IRS may say that if everybody terminated, your liability would be less and we don't want to give you credit on your income tax. Or you even can have some actuary (or company) who, in order to make his statement look better, is deliberately writing in a contract a sentence that will have no real application to allow the company to lower claim reserves. I wouldn't want to be an actuary in a position of having to tell management this, even though there is some actuarial literature that says you could have something less; in my professional opinion, I don't think you can. It doesn't represent reality. I would hate to have to argue it if the literature said that you can assume everybody lapses and you don't have to have any liabilities. I worry about any language that makes it appear that you can use that as your standard. That doesn't mean you shouldn't look at the contract; you have to. I don't think that should be the sole determinant. Especially when you make the assumption that everyone will terminate or, alternatively, everybody will stay in force.

MR. DONALD M. PETERSON: I don't have the technical expertise to comment at this time on the details of the papers, and I don't know who is right and who is wrong; but we certainly seem to have a significant divergence of opinion among well-know and respected health actuaries. They seem to be either viewing the same thing from different perspectives or seeing different things from what should be similar vantage points. As a profession, therefore, we should not rush to possibly premature conclusions via published papers, exposure drafts, committee recommendations, proposed legislation, or anything else.

We have the opportunity to approach this issue from a much more logical standpoint having aired the subject publicly here today, even

with the rather limited time and small audience in attendance. Now we must provide the appropriate forum for further discussion and debate. This can be done readily through both Society and Academy mechanisms, and I would hope that steps are taken so that those actuaries who have the interest and knowledge to contribute to the dialogue have ample opportunity to do so, whether through half-day meetings, an all-day session, or whatever.

I also encourage those actuaries who have the power to control the speed with which this potential legislation seems to be developing to take their time and be sure we don't embarrass either ourselves or our profession.

MR. ODELL: I would like to second your comment. During the last two years, it has been both a personal and professional privilege to work with a group of people who, as you say, are experts in their field, and believe me, they didn't always agree. Two of them who are here can attest to that. Especially in that environment, exploration is worthwhile. There were issues I am sure that all three of us could raise right here and now which haven't been discussed.

MR. WILLIAM J. BUGG, JR.: Our business would be classified as guaranteed renewable, level premium, with controlled benefits. We typically use the tabular reserve approach with the two year preliminary term method. We use lapse rates in the calculation of the reserves. We have made some calculations and have found that by eliminating lapse rates our reserves increased in the magnitude of 45 percent. We know that the reality of the situation is that many of these policies will lapse. It is our feeling that a viable reserve standard should give recognition to this reality and permit lapse rates to be reflected in the reserve calculation.

Another comment I'd like to make is in regard to the unearned premium reserve. If you are using the two year preliminary term method as called for in the contract reserve section of the proposed standards, why not use the net premium associated with that method in the calculation of the unearned premium? Still in that same area, we recognize the need for including unaccrued expenses. Rather than using an empirical and somewhat arbitrary method for calculating this liability or reserve, why not base it on current expense levels or possibly on the expense assumptions which were involved in the original rate filing?

Regarding the interest assumption, the proposed standards call for a flat 5 percent rate for all submissions, I believe, after January 1, 1987. It would seem preferable to have a more dynamic approach for determining the interest rate, perhaps like the one used for life insurance reserves.

MR. BARNHART: We have discussed the interest rate some with Duane Kidwell's committee. I haven't had a chance to poll our subcommittee about this, but I'm inclined to think that our subcommittee would be willing, given the viewpoints that have been expressed, to revert to the existing rule regarding interest rates. Basically that is that the maximum interest rate that can be used for a claim incurred at a given

date or a policy issued at a given date would be the same as the maximum rate permitted on whole life insurance issued on that same date. In effect, that would move us back to the dynamic interest rate provided for under the existing minimum standards regulation.

At the time we went to 5 percent, the impression we had was that a lot of companies were not particularly happy with all the mechanical reconstruction and variation that they had to deal with under a dynamic or variable interest rate basis. As we have listened to feedback from a wider spectrum of companies, such as you are talking about, I think we are going to have to recognize that we misread the industry preference. A realistic dynamic interest rate itself, I think, is more important. The other decision was more a question of reserve valuation mechanics and tabular systems of carrying out the valuation process.

MR. LITOW: I would like to make one comment on behalf of Mr. Shapland's committee. No one representing that committee is present in the room, and I wish they could speak out. I know most of those individuals well, and I don't believe that sound rating principles ever was a question in their minds. Therefore I do not believe they felt that sound rating principles even needed to be defined in the report, because this was something that could be regulated and would have some limitations upon it. That's based on my reading of the report.

MR. RICHARD H. DIAMOND: Mr. Barnhart, you emphasized the need to monitor the reserves to ensure that the balancing reserve is adequate for liabilities. I don't believe you addressed what constitutes adequacy. Currently, in the case of issue age rated contracts, reserves are required for aging, however inadequate they may be. Your proposal could be interpreted as saying you can reserve for aging or you can deal with aging through rate increases.

Another issue which is not clear is cumulative antiselection, which has traditionally not been recognized as a liability, but I believe it needs to be recognized in order to deal with the problem of deteriorating blocks of business. Again, your proposal seems to leave it up to the company whether to reserve for this or to rely on future rate increases.

Competitive pressures could influence this. A company choosing to recognize these liabilities in determining reserves may not be able to compete for new business with a company that keeps the initial rates low and relies on future rate increases. Could you comment on this?

MR. BARNHART: It may be that we presumed a more general understanding and recognition of rating structures than actually exists. An example is the point you made about whether or not you are prefunding cumulative antiselection. We would say, certainly the contract reserves have to be consistent with the rating structure in terms of what is anticipating as to aging, as to projection of cumulative antiselection or inflation trends. The present minimum standard as to tabular reserves simply mentions policies rated on the level premium principle and says no more than that. We went considerably beyond that in trying to illustrate or define what we mean when we talk about a level premium

basis; but we didn't feel that the minimum standard should become a textbook or a cookbook. We felt that at some point you have to rely on the general state of actuarial expertise, competence, and education. We felt that including a lot more detail would be too much out for a minimum standard regulation as such.

MR. CLONINGER AND MR. BUGG: (further comments submitted by mail.)

PREMIUM RESERVES

The unearned premium reserve should be sufficient to provide for expected incurred claims and reserve accretions, net of interest, that will occur during the unexpired premium term. In cases where the two year preliminary term valuation method is applied, current valuation standards permit the use of a mean reserve diminished by appropriate credit for valuation net deferred premiums, as long as the aggregate reserve for all policies valued on this basis exceeds the gross pro rate unearned premiums under such policies. Assuming the aggregate reserve exceeds the gross unearned premium, the current valuation standard permits the use of the valuation premium in valuing the portion of the aggregate reserve that represents net unearned premium. We believe the current valuation standard is appropriate in that the unearned net valuation premium is sufficient to provide for expected incurred claims and reserve accretions, net of interest, that will occur during the unexpired premium term.

The proposed standard for unearned premium reserves incorporates a benefit portion, represented by the gross unearned premium times the anticipated loss ratio filed, and an additional portion. We believe that the required benefit portion is excessive, for the situation just described, because policies that are in the preliminary term period will have an unearned premium that significantly exceeds the unearned valuation net premium. The excess portion of the unearned premium will not be needed to provide for incurred claims or reserve accretions and is therefore redundant. We recommend the proposed standard be modified to permit the use of the valuation premium, consistent with the reserve method, in calculating the benefit portion of the unearned premium.

The additional portion of the proposed unearned premium reserve is a provision for unaccrued expenses. Rather than determining this item in a somewhat arbitrary manner, we recommend that it be determined using the expense assumptions contained in the rate filing. Alternatively, the provision might be based on actual expense rates at the time of the valuation.

CONTRACT RESERVES

In the following sections, we offer our comments and observations on the proposed standards for contract reserves.

Balancing Reserves: The proposed balancing reserve may be characterized as a modified net level reserve calculated on the basis of assump-

tions used in determining the anticipated lifetime loss ratio filed for the contract form. We will refer to these assumptions as the filing assumptions.

We endorse the concept of using filing assumptions in calculating contract reserves. We believe that if the proposed methodology for calculating balancing reserves is modified as described below, the proposed valuation method will be a significant improvement over present requirements.

Section IV. D.1 of the proposed standards describes the calculation of the balancing reserve. Except for the adjustment described in Section IV. D.2, the balancing reserve represents a net level reserve based on filing assumptions. The proposed adjustment is in the nature of a first year expense allowance that is amortized straight-line over four years.

The amount of the expense allowance is the excess of (a) over (b) where (a) is the product of the earned premium in the first contract year and the anticipated lifetime loss ration and (b) is the incurred claims for the first contract year. An alternative description of the expense allowance is the excess of the filing assumption net level premium earned in the first contract year over the actual claims incurred in the first contract year.

The proposed amount of the expense allowance is significantly less than the expense allowance available under the present two year preliminary term valuation method. In fact, the proposed expense allowance approximates the amount available under a one year preliminary term method. Consequently, for most types of guaranteed renewable health insurance contracts, the proposed expense allowance is only slightly more than half of the present allowance available under the two year preliminary term method.

The period over which the expense allowance is amortized under the proposed method is four years. This period is dramatically shorter than the premium paying period, which is the amortization period provided for in the two year preliminary term method, the one year preliminary term method and the Commissioners Reserve Valuation Method. In our judgment, the effect of the reduction in the amount of the expense allowance combined with the unprecedented reduction in the amortization period will be to produce an unamortized expense allowance that is unreasonably less than current allowances and inadequate for most companies.

We suggest that a minor refinement to the proposed valuation methodology can alleviate the problems associated with the amount of the expense allowance and the amortization period. Our proposed refinement is intended to modify the balancing reserve calculation to a two year preliminary term basis. To accomplish that objective, it is necessary only to modify the definition of R in Section IV. D.1.b. to stipulate that the applicable filed anticipated lifetime loss ratio for the third and later policy years is to be utilized in the calculation and that the experience of the first two policy years is to be permanently excluded

from the determination of C and G. Section IV. D.2 would be eliminated. No other sections would be affected.

Tabular Reserves: There are several significant inconsistencies between the balancing reserve and tabular reserve methodologies. Our recommended changes to the method of calculating balancing reserves would eliminate two of those inconsistencies. However, another significant inconsistency remains. The filing basis lifetime loss ratio used to calculate balancing reserves reflects the economic effect of voluntary termination of policies (lapses) whereas tabular reserves do not. In reality, lapses have a significant effect on premium rate levels. Lapses also have a significant effect on appropriate contract reserve levels.

We calculated tabular and balancing reserves for a representative distribution of our cancer business. Both reserves were based on claim costs shown in the 1985 NAIC Cancer Claim Cost Tables. The balancing reserve was calculated under our proposed methodology and reflects the assumption that actual claims experience will match the claim costs shown in the 1985 Table. The tabular reserve was based on the two year preliminary term method. We found that the tabular reserve exceeded the balancing reserve by approximately 45 percent. The sole reason for the difference in reserve levels is that the balancing reserve reflects the effect of the reasonably conservative lapse decrement that was used in determining the anticipated lifetime loss ratio for the third and later policy years, whereas the tabular reserve ignores the effect of the lapse decrement. In our judgment, the 45 percent reserve redundancy that arises, because the effect of the lapses is ignored in the calculation of tabular reserves, is clearly excessive.

We find it unreasonable that an insurer is implicitly permitted to reflect the economic effect of lapse under one valuation method, but not under another. We recommend that this inconsistency be eliminated by providing that, in the calculation of tabular reserves, an insurer be permitted to incorporate the assumption as to voluntary termination of policies that the insurer used in determining the anticipated lifetime loss ratio filed for the contract.

Other Comments: In comparison with the tabular reserve method, the balancing reserve method appears to deal more effectively with the actual economic factors that impact health insurance products. In our judgment, there are many situations where the balancing reserve method would be more appropriate than the tabular reserve method for Type B contracts. We recommend that the proposed standards be amended with respect to Type B contracts, to permit the responsible actuary to select the valuation method that will be used to calculate contract reserves on that form.

REPORT OF HEALTH SUBCOMMITTEE OF STANDING TECHNICAL ADVISORY GROUP TO NAIC LIFE, HEALTH AND ACCIDENT STANDING TECHNICAL ACTUARIAL TASK FORCE ON STRUCTURE FOR CONSIDERATION OF HEALTH COVERAGE VALUATION STANDARDS

APRIL 29, 1985

PANEL DISCUSSION

TABLE OF CONTENTS

INDIVIDUAL HEALTH INSURANCE RESERVE ISSUES

SUMMARY

Your Subcommittee was asked to determine those things which should be considered in developing a health insurance model valuation law or model valuation regulation which is to be an objective standard. ("Law" is used to encompass both legislation and regulation unless the context indicates otherwise.)

We are pleased to submit our findings.

The remainder of this summary is presented under three headings: A) charge and background, B) special matters, and C) structure of report.

A) Charge and Background
The subcommittee's charge was given because of a number of general problems facing the industry in general and regulators in particular, namely:

1. Insolvencies
2. Lack of Objective Valuation Standards
3. Grossly (and perceived to be unreasonably) divergent determinations of policyholder's liabilities in specific instances.

Your Subcommittee agrees that the above difficulties do indeed exist. We have identified the following interrelated causes and conditions which have led to or exacerbated the situation:

1. Inadequacy of claim reserves and liabilities
2. Lack of understanding of policyholder reserve liabilities for health insurance, especially as regards claim reserves and liabilities
3. Bottom line pressures
4. Treatment of the subject as an "internal mystery" involving information not generally available to the public
5. Lack of adequate data bases and lack of experience tables
6. Lack of consensus as to range of accepted practice

B) Special Matters

In the course of its deliberations the Subcommittee noted a few items of such a high level of importance that they deserve mention here:

1. The primary purpose of statutory reserves relates to solvency ("solvency" has various connotations which are discussed in the body of the report). We believe that this is appropriate and recommend no change in this regard.

2. We understand an objective standard valuation law is one so constructed that a number of practicing actuaries would come to approximately the same conclusion as to the reserve liability. This matter is discussed in the body of the report.

SUMMARY
continued

3. The matter of the role of the valuation actuary and the related matter of the definition of minimum standards are changing.

4. There appears to be tension between the role of the federal government, particularly recent legislation regarding the taxation of insurance companies, and state regulation related to the solvency objective.

A discussion of two matters may be helpful in reading the body of the report.

The first is the tremendous importance of claim reserves and liabilities. They are significant with respect to their absolute amount and in many instances in respect to their relative magnitude compared to the total policyholder liabilities. Their importance (all lines considered together) receives far more attention for Fire and Casualty insurance companies than for Life and Accident and Health insurance companies.

The second matter is the overall perspective of reserves. Your Subcommittee views the reserve determination as a quantification of a liability (which must be matched by an asset amount) which measures the excess of future cash disbursements over future available cash incomes and further extends this perception to examination of the timing of these flows. The concern, therefore, centers around an objective determination: 1) of the nature and certain purposes of the expenses as well as (future cash disbursements), 2) of the future cash incomes (valuation portion of the premiums) available for this purpose, and 3) of the term of the period with respect to which the liability is being established. The deliberations of the Subcommittee went directly to these matters.

To comment further on this second matter, the perspective just mentioned has led current thinking, with which the Subcommittee concurs, to identifying three aspects of the valuation process: 1) a minimum valuation standard specified by law, 2) an examination of prospective cash incomes and disbursements, and 3) a determination of adequate provision for plausible future events. The first of these matters should be addressed by law. The deliberations of the Subcommittee are concerned mainly with this matter of the legal minimum standard. Our approach in this regard is based on the proposition that the role of the valuation actuary will reach legal fruition. The valuation actuary will be asked to opine on whether or not a company's reserves satisfy the minimum standard, whether projected cash incomes are satisfactory, and the amount of any additional provision required to meet plausible deviations over and above normal deviations. These matters are further discussed in the body of the report.

SUMMARY
continued

C) Structure of report

The table of contents of this report serves as a ready reference list of our findings. Our charge was to determine those things which should be considered in developing a health insurance model valuation law. The table of contents, generally speaking, is such a list. Our report has been prepared in this manner so that the table of contents refers to sections and subsections each of which generally represent a topic which needs to be considered in the next law.

This material also includes appendixes presenting other information and related recommendations.

Each topic is presented by first, presenting discussion about the nature of the subject and its scope, reasons for its importance, options which have been identified and so on.

For some topics one or more paragraphs of comments are also presented. Many of these comments deal with how a topic may be studied, possible approaches to resolving a question, or other matters of methodology. Our charge did not include presenting ideas as to how questions should be resolved. However, with the thought that they might be helpful to those charged with preparing a law and that duplication of effort might be saved thereby, such ideas have been included on an editorial basis to the extent the deliberations of our group reach that degree of completeness.

With respect to terminology, as noted above "law," is used to encompass both legislation and regulation unless the context indicates otherwise. Also, terminology differs between the Fire and Casualty insurance company annual statement, and the Life and Accident and Health insurance company annual statement. The terminology adopted, where it is desired to refer to a specific reserve or liability, is the terminology of the life and accident and health insurance company annual statement, unless the context indicates otherwise. Where all or nearly all of the policyholder reserves and liabilities are being referenced, the term "reserve(s)" is often used.

The report, to provide a logical flow, has been prepared beginning with general matters and moving through the reserves considering the active life reserves before considering the claim reserves and liabilities.

We will be glad to answer any questions you may have.

Respectfully submitted,
W. H. Odell, Chairman
John M. Bragg
Willis W. Burgess
Charles Habeck
Anthony J. Houghton
Jim Olsen

PANEL DISCUSSION

A. PERVASIVE MATTERS

1. PURPOSE OF POLICYHOLDER RESERVES AND LIABILITIES

DISCUSSION:

The primary purpose for which the reserves and liabilities are established for statutory financial reporting is of utmost importance in the development of guides and criteria for use in that determination. Guides and criteria designed to develop a quantity to serve one purpose may not produce a quantity suitable for another purpose. It is important that the purpose for which the calculations are being made be kept in mind when developing guides and criteria. Traditionally the purpose of minimum standards for reserves and liabilities for statutory financial reporting is to assist in providing assurance that the reporting entity is solvent by statutory standards.

"Solvency" has different connotations. The first is the determination of the excess of assets over liabilities. The committee understands that the purpose of the valuation law is to define a minimum standard for the reserves entering into the determination of this excess (see also Role of Valuation Actuary).

The matter of premium rate adequacy is at least as important to solvency as adequate reserving. The timeliness of requests by companies for premium rate increases and any appropriate regulation thereof, are matters beyond the scope of this report. However, they are directly pertinent to the matter of solvency. IF PREMIUMS ARE INADEQUATE INSOLVENCY MAY OCCUR REGARDLESS OF RESERVING PRACTICE (SEE RELATED COMMENTS); SOLVENCY CANNOT BE PRESERVED IF PREMIUMS CANNOT BE QUICKLY RAISED AS NEEDED OR PREMIUM RATE LAWS ARE INCONSISTENT WITH RESERVE LAWS OR EXPERIENCE.

COMMENT:

The purposes for which reserves are established should be kept clearly in mind in preparing the law. The traditional "solvency" purpose is still primary.

INDIVIDUAL HEALTH INSURANCE RESERVE ISSUES

A. PERVASIVE MATTERS

2. CONSERVATISM

DISCUSSION:

Conservatism is both an actuarial and an accounting concept. It is discussed in the American Academy of Actuaries' recommendations with regard to financial reporting. A working definition of conservatism is that the value of assets not be overstated and the value of liabilities not be understated and that particular attention be paid where there is uncertainty. Another working definition traditionally used in accounting (but given less attention in recent decades with respect to GAAP accounting) is to anticipate no gains but provide for all losses. To the extent the concept of conservatism is followed, the amount of reserves should tend to be adequate even under adverse developments and seldom deficient under any circumstances.

COMMENT:

The concept of conservatism should be followed in developing regulations. Attention should be paid to whether any specific matters in the regulations, such as specification of any mortality or morbidity tables or interest rates, tend to provide the desired degree of conservatism.

PANEL DISCUSSION

A. PERVASIVE MATTERS

3. ROLE OF VALUATION ACTUARY

DISCUSSION:

Considerable activity is currently taking place concerning the role of the valuation actuary. These deliberations, it is anticipated, will reach fruition within the next few years. This timing might well coincide with the timing for adoption of new valuation regulations.

Your Subcommittees' work is based on the supposition that the role of the valuation actuary will be as currently proposed. This includes:

1. a legal requirement for an opinion of the valuation actuary as to whether the reserves are at least equal to the legal minimum standard,

2. the opinion of the valuation actuary as to whether projected cash incomes are sufficient to meet projected cash disbursements with consideration as to the timing of such cash flows,

3. the opinion of the valuation actuary as to additional requirements to provide for plausible deviations,

4. reporting arrangements for the valuation actuary at least to the level of the Board with suitable arrangements for notice to interested parties of changes of valuation actuaries.

COMMENT:

In preparing the valuation law the role of the valuation actuary needs to be considered and if it is not as presently envisioned then portions of this report might apply only with substantive changes.

We stress that this report addresses a quantifiable minimum standard and assumes the law would require higher reserves if the valuation actuary believes they are necessary.

INDIVIDUAL HEALTH INSURANCE RESERVE ISSUES

A. PERVASIVE MATTERS

4. MINIMUM STANDARDS

DISCUSSION:

We have identified a number of matters which will need consideration.

1. The relative degree of conservatism to be built into the minimum standard.

   If the minimum standard is relatively weak then: 1) the valuation actuary should allow for relatively greater margins in the reserves to provide for plausible adverse experience, 2) this may generate heightened concern by management and others, 3) the federal tax burden may be increased. On the other hand if the minimum standard is set relatively high, then some companies may have to hold more assets against the reserve liability than would be reasonable under even plausible circumstances of adverse deviation with the effect that their surplus may appear unduly low, whereas in reality their true financial condition is quite sound.

2. The matter of how to describe the minimum standard.

   This matter is particularly important in the case of claim reserves and liabilities. For claim reserves and liabilities, the definition of a standard must include reference to methods. The difficulty of quantifying a standard for claim reserves and liabilities is well recognized. This difficulty is one of the reasons leading to the charge given to this Subcommittee. The difficulty stems from a lack of adequate data basis, experience tables, multiplicity of types of benefits, multiplicity of contract provisions as to premiums and renewability, etc. Progress toward a quantifiable objective minimum standard will be made most easily if these difficulties are recognized and specific action is taken to overcome them. This report is intended among other things to bring these difficulties into focus and present some ways in which they may be overcome or minimized. This report describes minimum standards to the extent possible at this time.

3. Standards of practice in the determination of reserves.

   To the extent the minimum standard is not precisely quantifiable from the facts presented to the valuation actuary matters of technique, methodology, and judgment may each become involved. The degree of variation which may appropriately arise in the reserve determination from these factors is in turn a function of the degree of latitude permitted under standards of practice. At present, standards of practice are generally not well defined.

A. PERVASIVE MATTERS
4. MINIMUM STANDARDS
.....continued

COMMENT:

In the course of developing a legal minimum standard it will be helpful to the drafters to formulate an idea of the degree of conservatism to be embodied in the standard. For the standard to be quantifiable, considerable effort is needed along the lines of developing data, experience tables, and practice standards.

INDIVIDUAL HEALTH INSURANCE RESERVE ISSUES

A. PERVASIVE MATTERS

5. FEDERAL TAXATION

DISCUSSION:

The recently enacted federal tax laws redefine the role of the federal government in federal tax financial reporting. The federal legislation specifies maximums for tax reserves which, to a certain extent, are a function of state law. The matter of solvency of companies is not addressed in the legislation. In fact, we understand that during the hearings a federal official indicated that the solvency of the companies was not the concern of the federal government. To the extent a company maintains reserves, which during the taxable year increased by a greater amount than the allowable tax reserves, then that additional increase is not a deduction for purposes of computing taxable income. Such situations naturally result in a tax penalty to shareholders, management, and policyholders. It is probably a safe assumption that the action of regulatory authorities and management will be brought into question in these cases more rapidly than the actions of the tax collector. At this time, a perfect solution to this question does not readily appear.

COMMENT:

The Subcommittee does not recommend a departure from the solvency concept on account of federal tax law. The problem of the tension between the two concepts needs to be recognized, its effects minimized, and a solution sought.

PANEL DISCUSSION

A. PERVASIVE MATTERS

6. ACQUISITION COSTS

DISCUSSION:

In some accounting methods the amounts spent to acquire business are treated as assets. This has not always been the case and is not the case today in statutory reporting. Statutory financial reporting does recognize the expense born by the insurer in acquiring new business through the use of modified valuation systems. Early English writers pointed out explicitly the connection between the modified reserve methods and acquisition expenses. The modified reserve systems produce an impact on account of the acquisition expenses phenomenon even after the end of the preliminary period. This is true because the valuation premium in renewal years is generally greater under the modified reserve systems than under the level premium reserve systems.

COMMENT:

The Subcommittee believes that recognizing the expenditure of insurance companies on account of acquiring new business by modified reserve methods (for other than claim reserves and liabilities) continues to be appropriate. On the other hand, the Subcommittee finds no objection to exploring other methods of recognizing the phenomenon providing that the concepts of solvency and conservatism are followed. (However, since assets should measure cash incomes, the Subcommittee sees no justification for counting amounts spent as an asset.)

A. PERVASIVE MATTERS

7. CASH FLOW

DISCUSSION:

We believe this matter is most appropriately addressed by the opinion of the valuation actuary. However, the importance of cash flow must be considered in drafting any valuation legislation.

Until recently relatively little attention has been paid to the questions of cash flow, liquidity, immunization, maximization of investment return, etc. The present economic environment implies that a significant excess of the value placed on assets over the value placed on liabilities is not by itself an assurance of solvency. A sudden demand for assets to satisfy liabilities can result in an insolvency if the assets must be utilized at less than their statement value.

To assure solvency the anticipated cash incomes, including premiums and investment income and if appropriate borrowed funds, must generally be at least sufficient to meet the cash disbursements indicated by the maturing of liabilities.

COMMENT:

The work of the Subcommittee anticipates that the opinion of the valuation actuary concerning the adequacy of cash flow will be required (via the annual statement instructions). In the absence of such a requirement the comments in this report would differ substantially.

PANEL DISCUSSION

B. SCOPE AND GENERAL MATTERS

1. LAW AND REGULATION

DISCUSSION:

Valuation requirements may be formalized by laws or by regulations or both. The vehicle, law or regulation, can be suited to the particular situation and the regulatory content. A regulatory requirement may be embodied partly in law and partly in regulation.

COMMENT:

The form of regulatory pronouncement, law and/or regulation, selected should be the one most suitable to the circumstances and the content of the regulatory requirements finally adopted. The Subcommittee suggests that the standards be incorporated in a NAIC Model Regulation which will be adopted (perhaps with local modifications) by the several states.

B. SCOPE AND GENERAL MATTERS

2. TYPES OF COVERAGE

DISCUSSION:

There are many types of health coverages extant in the market place. These range all the way from individual contracts to stop-loss reinsurance arrangements with attachment points expressed in complex language. The existence of this broad range of coverages makes it important that valuation laws clearly indicate to what types of coverages they apply.

The Subcommittee concerned itself with the nature of the contract more than the nature of the parties to the contract.

The deliberations of the Subcommittee, however, were generally confined to those contracts which are: a) written, b) would generally be considered insurance, c) clearly indicate that one party is assuming a risk from another party, and d) within the jurisdiction of state insurance authorities. (In this context financial reinsurance matters are included.) This question should be considered in connection with the question of types of carriers.

Some types of coverages and contracts are mentioned more often than others in this report because they provide more and better examples of the matters addressed.

COMMENT:

Laws at some point are desirable for all types of coverages for which the regulatory agency has responsibility. Precedence in context of the law should be given to contract provisions over organizational characteristics of the parties.

B. SCOPE AND GENERAL MATTERS

3. TYPES OF CARRIERS

DISCUSSION:

There are a multiplicity of types of carriers: traditional insurers, self-funded plans, Blue Cross/Blue Shield organizations, private (uninsured) organizations, etc.

As mentioned earlier, the very complexity on the market place requires careful attention in drafting any law. The Subcommittee considered this matter not so much from the point of view of the legal form organization as from the point of view of the function of the organization. This report reflects that line of thinking. To the extent an organization is carrying a risk then to that extent the contents of this material would apply. An exception, of course, would occur where the nature of the organization by itself changes the appropriate amount of policyholder liability for a given contract. We believe such different treatments between organizations for the same type of contract would be rare. Our deliberations explicitly include traditional reinsurers. Subject to further study, they may hopefully be extended directly or by analogy to such organizations as Blue Cross/Blue Shield, HMO's, fraternals, etc., taking into account, of course, any differences in the nature of the contracts.

It appears that in the past, valuation laws have been prepared with regard to one type of insurer for a given type of coverage and then applied to other types of insurers for the same type of coverage. This has sometimes led to practical problems for the second group of carriers which could have been avoided if their needs had been taken into account in the initial drafting of the law. Alternatively, separate laws have been drafted for the same coverage for different types of companies with results which at a minimum produce troublesome inconsistencies. The Subcommittee believes this situation can be relatively easily avoided.

The Subcommittee concerns itself with basic questions with regard to the things that must be considered in a valuation law. We do not consider it within our charge to thoroughly explore the affect on each type of carrier of each of the possible solutions to each of the questions we have raised. We urge that this be done when the law is drafted. With respect to each matter covered in the law, it is quite possible that the nature of the different types of carriers may produce different results from any given legal requirement or that a different requirement will be appropriate for each type of carrier. For example, the treatment of interest in claim reserves and liabilities may produce different tax consequences for different types of carriers and the fact that health insurance is relatively a more important line of business for Life and Accident and Health insurance companies than for Fire and Casualty insurance companies may indicate different annual statement presentations for that line.

B. SCOPE AND GENERAL MATTERS
3. TYPES OF CARRIERS
.....continued

COMMENT:

The laws should clearly indicate the type of organization to which they apply and consideration be given at some point to all organizations for which the regulating agency is responsible.

As the law is drafted the needs and nature of each of the types of carriers should be considered at that same time to provide assurance that an approach reasonable and appropriate to all types of carriers covered by the law is selected.

B. SCOPE AND GENERAL MATTERS

4. ANNUAL STATEMENT PRESENTATION

DISCUSSION:

There are many ways to present information in the annual statement of an insurance company. Presently, Property and Casualty insurance companies file a different form of Annual Statement than Life and Accident and Health insurance companies. There are other types of insurers which file different statements. The treatment of reserves between the statements is presently not consistent.

This inconsistency between Annual Statements can be confusing especially when there are insurance companies of different types in the same ownership group. There are also many possibilities as to how reserve and liability information should be classified in the Annual Statement and where subdivisions of this information should appear. Between the Property and Casualty statement and the Life and Accident and Health statement, there is a difference in the method of premium revenue recognition as regards unearned premiums and in some cases there is a difference as regards the definition of unearned premiums.

COMMENT:

The Subcommittee suggests:

1. The reporting format for a given type of coverage generally be the same regardless of the type of organization issuing that coverage to the extent feasible. However, differences between the reporting of different organizations are appropriate to the extent they arise from the nature of the respective organizations. Since organizations do, indeed, differ, then it is reasonable to suppose there will always be some differences between the reporting for a given type of coverage between types of organizations. However, those differences should presumably exist for a reason.

2. Matters of Annual Statement presentation be considered together for each type of carrier to be covered by the law. We believe that this will provide more meaningful financial statements, better take into account the needs of each type of carrier, avoid undesirable but unanticipated consequences of any course of action adopted, and reduce both real and apparent inconsistencies.

3. The presentation of certain items requires, we believe, careful study. These are mentioned throughout this report. In this regard, especially with regard to troublesome items the possibility of providing disclosure of information, in addition to the mathematical entries provided in the main pages of a financial statement, may resolve a number of financial reporting problems.

B. SCOPE AND GENERAL MATTERS
4. ANNUAL STATEMENT PRESENTATION
.....continued

4. Consideration be given to modifying annual statements for all carriers so that the specific contents of claim reserves and liabilities (including expense of investigation and settlement of policy claims) be clearly identified and distinguished for all carriers. (See, also, particularly subsection D4.)

PANEL DISCUSSION

B. SCOPE AND GENERAL MATTERS

5. INFLATION

DISCUSSION:

The extent of future inflation is difficult if not impossible to predict. The strong possibility of continued inflation must be recognized. There is a question whether this is a "reservable" parameter. The value of paper money has historically been determined politically and undirectionally. In fact, inflation is often recognized in the pricing process.

COMMENT:

The law should neither prohibit nor require explicit recognition of inflation. However, it should require that any explicit recognition of inflation not operate to reduce the reserve. More definitive actuarial practice, as to recognition of inflation in reserves if it has been recognized in pricing, is desirable.

C. ACTIVE LIFE RESERVES

1. GENERAL

DISCUSSION:

The Subcommittee concluded that there are ambiguities in present valuation requirements. Also, there are variations in actuarial practice. The latter phenomenon is brought about, at least in part, through different interpretations of contract provisions and by different ways of administering identical provisions. It is believed the ambiguities in the present valuation requirements were neither intended nor are desirable.

The causes of confusion and variation can probably be accounted for by a combination of factors: a) lack of precision of the definition of the term over which premium guarantees and reserving calculations apply; b) an unstable value of the denominator (currency) in which benefits are expressed; c) variations in management practice and objectives; d) outdated methodologies of classifying policies.

The Subcommittee submits in Appendix A, comments with regard to policy classification and other matters related to this particular subject as well as comments related to other subjects. (Appendix A gathers various comments not directly applicable to preparation of a new valuation law but which we hope will be helpful to those considering such law and related topics.) Specific matters, such as the policy term, premium guarantees, etc., that are, at least, to some extent an inherent part of consideration of a valuation law, are discussed in following subsections. We suggest the valuation question be dealt with without waiting for a complete resolution of some of these other matters which relate to laws concerning policy wording and premium rate filings.

The thrust of the immediate sub-topic is the existence of lack of objectivity in present laws, policy forms, rate guarantees, etc., as regards valuation requirements.

C. ACTIVE LIFE RESERVES
1. GENERAL
.....continued

COMMENT:

The valuation law should contain objective criteria by which, with respect to any given policy form, for valuation purposes an objective determination can be made of a) the term over which the reserves are to make provision (called "reserve term"), b) the benefit guarantees of the policy, and c) premium rates scale during the reserve term, so that an objective determination may be made of the benefits, premiums, and reserve liability inherent in the contract. If these quantities cannot be objectively determined, the Subcommittee believes that there can be no objective valuation guide or standard. This is because the quantification of the reserve liability is simply a quantification of the excess of the value promised by the contract over the available income stream therefrom. The three subjects of benefits, reserve term, and premium rate scales are addressed in the next three subsections.

Establishment of objective criteria for these items may require legislative improvements in the areas of policy forms, premium rates, etc. However, improvements in the valuation law should not be made to wait upon changes in such related legislation.

C. ACTIVE LIFE RESERVES

2. BENEFITS PROVIDED FOR

DISCUSSION:

The active life reserve provides for active lives only*. (There is a view with which the Subcommittee does not concur that the active life reserve also may make some provision for a portion of the cost associated with future cash payments with respect to lives already in loss status.) The active life reserve may be looked upon as a "sum" set aside as a liability to fulfill future contingencies.

Policy forms in use today are generally clear as to benefits provided.

COMMENT:

The active life reserve relates only to claims which have not yet been incurred and should be sufficient for that purpose. It is not intended to provide a "margin" which might be considered available for claim reserves and liabilities.

* This sentence should be read together with the comment paragraph. The active life reserve is actually "held with respect to disabled lives" as well as active ones. This confusing terminology is leading actuaries to seek new terms. An alternative suggested for "active life reserve" is "contract reserve." The contract (active life) reserve provides only for claims which have not yet been incurred and is determined in practice by developing contract reserve factors without a "disablement" decrement and applying those factors to all policies in force whether they are "active" or "disabled," i.e., without respect to whether or not they are in claim status.

C. ACTIVE LIFE RESERVES

3. RESERVE TERM

DISCUSSION:

One of the underlying causes of the variation in reserving practices which led to the Subcommittee's charge is, we believe, ambiguities surrounding the period with respect to which reserves are to be computed. We call this the reserve term. It may or may not be the same as the policy term.

This question has not generally been pressing with respect to group policies. This is because group policies usually contain very clear provisions as to the policy term and the policy term has generally been used as the reserving term. This term is usually one month or one year. The contract usually contains very clear provisions as to renewability or non-renewability.

With respect to individual policies, however, there exists ambiguity as to the term of many policies themselves (let alone their reserve term). There is presently a gray area between a) policies looked upon as applying throughout the lifetime of the insured with premium rates never to be increased or to be increased only under certain circumstances and b) policies which run for a term of one year but which may be renewed upon mutual agreement of the parties at rates to be determined at the time of renewal. Much of this ambiguity arises from the related matters of premium guarantees and/or administration practices. In any event, for purposes of determining reserves, it is necessary to determine the term over which the reserve calculation is to be made.

The Subcommittee has proceeded on the basis that the reserve term will be objectively available from the law and the policy form. The policy form does not have to explicitly mention the reserve term. (In fact, a good case can be made that the policy should not explicitly refer to reserves because reserves are not part of the premiums or benefits and reserves are aggregates not applicable to individual policies.) But from reading the law it must be possible, if there is to be an objective valuation standard, to determine the reserve term of each policy.

As mentioned in Appendix A the Subcommittee believes that changes in policy form legislation will be helpful in making the reserve term clearly evident from the law and the policy form itself.

In the meantime, the valuation law will have to carry the burden of specifying the determination of the reserve term of the policy in spite of the ambiguity of today's policy forms.

C. ACTIVE LIFE RESERVES
3. RESERVE TERM
.....continued

In making a decision in this regard, it will be necessary to bear in mind related matters such as premium rate guarantees, administrative practices, present industry practices, etc. It will also be necessary to consider the interreaction between the requirements of the valuation law in each of these regards.

The objective is to place in the law an objective criteria by which the reserve term can be determined from the law and the policy form. This is no easy task. It could be made easier by changes in related legislation concerning policy forms, premium rate scale filing and refilings, etc., but should not wait until then.

By way only of example and not even as a suggestion, some possibilities with a brief mention of some of their possible consequences, are as follows:

a. Suppose the valuation law defined the reserve term for all policies as one year. In this event, all reserves would be calculated for purposes of minimum standard as one year term reserves. In the case of a guaranteed renewable policy providing lifetime coverage with premiums which it was not planned to change in absence of unforeseen circumstances and covering a risk for which the claim costs increase by age, such a law would define the minimum reserve as the relatively low one year term reserve, whereas today a relatively high reserve is required.

b. Assuming the same law as in (a), then for a policy non-renewable at the option of the company but which the company very clearly planned to renew and with respect to which it had built provision in the premium rates to lessen the need for future premium increases, the minimum reserve required would be relatively small (being calculated on the one year term basis) compared to the much larger reserve the actuary would probably establish under present reserving practice.

c. Suppose, on the other hand, that the valuation law said that the reserve term will end on the earliest date which in the policy form is specified as the date on which the company expects the premium rate scale to be increased. Suppose one of the policy forms currently issued which contains very little information about the premium rate scale and reserves to the insurer the right to change premium rate scales every year, and further, is issued by a company which does have the practice of increasing premium rate scales every year, but which policy contains no statement to the effect that the company expects to change premium rates on a certain specified date.

C. ACTIVE LIFE RESERVES
3. RESERVE TERM
.....continued

Then the end of the reserve term would be the end of the benefit period of the policy which might be the end of life. The company would probably under existing reserving practice be carrying relatively small reserves and if this wording were incorporated in the law then the minimum standard would require reserves "for all of life." (Notice the future premium entering this reserve calculation is very important so this subject interrelates with premium rate scales discussed in the next subsection.)

Also, such a provision in the law for determining the end of the reserve term would not override any right of the insurer to change premium rate scales during the reserve term. On the other hand, a policy which stated that the insurance company expected to change premium rate scales each year would be reserved on a one year term basis. Such wording was found by the Subcommittee in one policy providing comprehensive medical benefits.

If the law were so worded it is quite possible that the insurer issuing the first policy discussed in this paragraph (c) would change future issues to clearly indicate that it expected to change premium rates every year.

d. Another possible approach is the one used in the individual accident and health policy provisions law stipulating that if an insurer includes provisions of a certain type in a policy, then the provision must be worded according to the model law. Such a law might indicate that an insurer could either:

   i. include a provision that rates could not be changed for a certain period, or
   ii. include a provision that the insurer expected to change premium rate scales at the end of a certain period but also reserved the right to change premium rate scales for unforeseen circumstances during that period, etc.

   Such wording might make it easier to draft a valuation law enabling easy determination of the reserve term but such legislation gets into the realm of changes in policy form regulation upon which changes in the valuation law should not be made to wait.

Incidentally, the Subcommittee proceeded on the basis that the minimum reserve at the end of the reserve term is zero. The wording of any proposed law as regards reserve term should be considered in light of whether a zero at the end of the reserve term is reasonable.

C. ACTIVE LIFE RESERVES
3. RESERVE TERM
.....continued

A full discussion of this topic is clearly beyond the scope of this report.

COMMENT:

For a valuation standard to be objective, it must be possible to objectively determine the reserve term from the valuation law for each policy.

In drafting the valuation law specific attention needs to be given to the matter of reserve term. Unless the reserve term is objectively determinable then the reserve is not objectively determinable. The Subcommittee has taken the approach that the reserve term should be determinable from the policy form and the law.

PANEL DISCUSSION

C. ACTIVE LIFE RESERVES

4. PREMIUM RATE SCALES

DISCUSSION:

There is in the market place a multiplicity of treatments with respect to the frequency and ease with which premium rate scales may be changed on inforce policies.

The Subcommittee notes that it is necessary to distinguish between a number of different types of premium rate scales. It is necessary to distinguish between 1) step rate policies with respect to which premiums increase on policies already in force as attained age advances in accordance with the premium scale determined at the time of issue and 2) policies under which the premium rate scale treats premiums as a function of age at issue with no change indicated in that rate scale for advancing age on inforce business. It is also important to distinguish with respect to a given rate scale whether it is printed in the policy form itself, filed with the state regulatory authorities, or neither. (And, of course, for both premium rate scales (1) and (2) the insurers right to change the scale may vary all the way from no right at all to the right to change almost at will.)

With respect to group insurance, premium rate scales (as the term is used here), are usually incorporated implicitly in the contract. Although numeric values of the premiums are not indicated in the contract, the means of determining such values from given sets of circumstances is described in the contract. These calculations can become complex especially when deposit premiums and other such premium rate refinements are involved. Due to the short term of group contracts, the matter of identifying the rate scale to be used for valuation purposes is generally not as critical as is true for individual contracts.

The difficulty of the valuation law providing an objective means in determining the premium rate scale for calculating the minimum reserve will be much less if a relatively easy method is found of having the valuation law define the reserve term. Once this is done, it becomes necessary to define the premium rate scale only during the reserve term. A reasonable starting point is for the law to indicate that the premium rate scale is the one shown in the contract. However, a company that plans to change premiums fairly frequently might not want to show a rate scale in the policy. On the other hand, it may be argued that if the company has a reasonable expectation of changing the ab initio premium rate scale then the first date on which it has a reasonable expectation of making the change should be stated in the policy and that might become the end of the reserve term.

C. ACTIVE LIFE RESERVES
4. PREMIUM RATE SCALES
.....continued

None of the above or what follows is intended to imply companies should be required to include premium rate scales except the initial one in the policy. In fact, to do so can be misleading in certain cases.

In any event, the matter of the law providing an objective means of determining the premium rate scale is not an easy one and a full discussion of the subject is beyond the scope of this report.

Again a source of the difficulty, we believe, is the fact that much currently used nomenclature was developed in simpler times and was not meant to carry the burden of today's environment of changing economic circumstances and multiplicity of coverages.

COMMENT:

Drafters of the valuation law will need to consider the fact that an objective determination of the premium rate scale to be used for valuation purposes is a condition precedent to an objective valuation standard. The law will need to clearly specify the objective means for determining the rate scale.

C. ACTIVE LIFE RESERVES

5. BENEFIT CHANGES

DISCUSSION:

Questions frequently arise as to the extent to which the possibility of future benefits and/or related premium rate changes are to be anticipated in the reserve calculation. This subsection addresses benefit changes. This question arises more frequently in the case of individual coverages than in the case of group contracts.

It is beyond the scope of this material to enumerate every possibility or to completely explore this subject.

It appears that in analyzing this matter the key distinction is whether we are dealing with:

1. matters concerning the amount of benefit which are of such a nature that the policy form together with circumstances existing preceding the time of claim determine the amounts of benefit available, subject to other policy provisions, available to a claimant or whether,

2. we are dealing with the impact of some other factor upon benefit amounts.

Examples of the former are policy provisions which define maximum benefit amounts as a function of the cost of living index, disability income policies under which the benefit is defined in the terms of the cost of living index, medicare supplement policies under which benefits are automatically adjusted based upon the then current law and so on. In each of these cases the benefits available are determinable from the contract and surrounding circumstances. The coverage provided by the policies changes as circumstances change. Further, the change is determinable. This subsection is concerned with this type of benefit change.

In the second type of situation we are thinking of the impact of such things as inflation upon benefit payments. Inflation, generally speaking will impact not upon policy limits and not upon specified amounts which will be payable but rather will impact upon the value of benefits, such as major medical coverage because inflation will affect the dollars paid at the time of claim. There may be other types of situations which operate to change the value of benefits other than inflation. Inflation is one such situation identified by the Subcommittee. This subsection does not address the question of inflation. That matter is addressed in another section. Generally speaking, the Subcommittee has not been able to identify means by which the impact of such other circumstances can be taken into account in the definition of a minimum valuation standard.

C. ACTIVE LIFE RESERVES
5. BENEFIT CHANGES
.....continued

With respect to the first type of benefit change, which is the type addressed here, there would seem to be little question but that under present reserving practices such changes are to be taken into account in determining the company's reserve liability. This is because such increases are inherently a part of the cash outflows which are to be anticipated. We do observe, however, that the benefits in question depend on future contingent events. For example, the benefit formula of a policy, which is tied to a cost of living index, provides an infinite number of variations of future benefit patterns by policy duration. Is it necessary to explore the affect upon the reserve liability of every single possible pattern and hold the greatest of the values of the liability determined thereby? We note that in these calculations each calculation successively assigns a probability of one to the benefit pattern being investigated. Whether a minimum valuation standard should utilize such a strict test is certainly worth exploration.

"Multi-track" policies are a related topic.

In many situations these determinable benefit increases will automatically carry with them premium increases. As mentioned in the next subsection, in these situations if the benefit increases are considered in the reserve calculation then it would seem also appropriate to consider the resulting premium increases.

COMMENT:

The Subcommittee believes that this matter should be kept in mind as the law is prepared because the law should not in its operation result in imposing limitations as regards providing benefits which increase in a manner agreed upon between the contracting parties.

The law should be constructed so as to encourage product innovation rather than inhibit product innovation.

C. ACTIVE LIFE RESERVES

6. FUTURE POSSIBLE PREMIUM RATE SCALE INCREASES

DISCUSSION:

As regards individual contracts particularly, and to a lesser extent with regard to group contracts, increases in premium rate scale (as the term is used in the preceding subsections) may be needed during the term of the policy. This possibility raises a number of considerations.

The matter of particular concern with respect to reserves is whether or not such possible future premium rate scale increases should be considered in the reserve computation.

Related matters, which do impact on the reserves determination indirectly, include the contract wording used to describe rate guarantees, administrative practices, etc. Comments, in this regard, are presented in Appendix A.

We believe it is helpful to separate rate increases into two categories:

1. Those determinable from the contract

2. Others

Rate increases determinable from the contract would include those tied to benefit increases which are themselves determinable from the contract, premium rate scale increases tied to a particular index (such as the cost of living index), etc. The distinctive feature is that the amount of premium rate scale increase, if any, is definitely determinable from each set of facts.

Premium rate scale increases falling in the second category are those which might arise from deterioration of experience compared to original pricing assumptions.

With respect to the first type of premium rate scale increases, there exist a number of possibilities for their consideration in an objective valuation standard. These include:

1. Simply not consider them and require reserving on the basis of no change in premium rate scale or benefits,

C. ACTIVE LIFE RESERVES
1. FUTURE POSSIBLE PREMIUM RATE SCALE INCREASES
.....continued

2. Permit the reserve calculation to take into account future premium rate scale increases but only to the extent the benefit increases which are prerequisite to such premium increases are also taken into account. With respect to premium rate scale increases tied to an index, such as the cost of living index, this approach would require that for premium rate scale increases to be considered in reserving the policy would have to indicate: a) the formula by which benefits would be increased based on the index and b) how the premiums would be affected if benefits were increased. Again, the essential ingredient to this approach is that the benefits upon which any premium increases are based as well as the premiums themselves are objectively determinable from any given set of facts.

3. Same as 2, but also require that the resulting reserve can be no less than the reserve which would be required without the consideration of the benefit/premium increases.

The matter of permitting consideration of premium rate scale increases of any type, even when the underlying benefit increases as well as the premium rate scale increases are objectively determinable, is a complex matter and full consideration of it is obviously beyond the scope of these deliberations.

With respect to the "other" type of rate increases, the deliberations of the Subcommittee did not suggest any means by which a valuation standard would permit their consideration in the reserve determination.

A related matter is the ambiguity surrounding the present classifications of policies as regards renewability. The term guaranteed renewable is now used less frequently in its traditional sense and more frequently in situations where the insurer anticipates frequent premium rate scale increases. This thought is not offered with an eye to inhibiting product innovation. To the extent that certain characteristics and provisions of "guaranteed renewable policies" are useful in the market place, there is no intent to prohibit their continuation. However, new wording reflecting today's practices is needed. (Also, as noted earlier, there is no intent to imply that companies be required to show explicitly in the policy any premium rate scale after the first.)

C. ACTIVE LIFE RESERVES
6. FUTURE POSSIBLE PREMIUM RATE SCALE INCREASES
.....continued

Careful consideration will have to be given to the possibility of permitting recognition of possible future increases in premium rate scales on inforce policies into the valuation standard. It appears consideration of this question must begin with the consideration of possible future benefit increases. If a policy form provides for possible future benefit increases which are determinable from the policy and such increases in turn would indicate determinable premium rate scale increases then it appears quite possible a valuation standard may be derived which permits consideration of such determinable benefit increases and determinable premium rate scale increases in the reserving calculation (presumably to the extent this does not reduce reserves). However, the matter is complex and will have to be considered carefully. It does not appear that other types of premium rate scale increases can be incorporated into a valuation standard.

C. ACTIVE LIFE RESERVES

7. RELATION TO PREMIUM RATE FILINGS

DISCUSSION:

A matter concerning premium rate scale filings is the extent, if any, to which the minimum valuation standard should be a function of the information contained therein. These materials envision a minimum valuation standard defined in terms of the law and the policy forms.

The thought that the active life reserves should provide for experience at least as bad as that in the filings naturally suggests itself. However, the connection between reserves on the one hand and premium rate filings on the other is, at best, a broad one. Further, the question here is whether or not the claim costs in the rate filings should be worked into the minimum standard, not whether or not the valuation actuary should take them into account in determining whether or not the reserves are sufficient. Indeed a company may have, for a number of years, claim experience more favorable than the rate filing.

COMMENT:

Hence, it appears that consideration should be given to more fully addressing in standards of practice, the connection between claim cost utilized in premium rate scale filings and claim costs utilized in reserve calculations. For example, if the claim costs underlying the reserve work are more favorable than that underlying the premium rate filings, the actuary presumably would be aware of this and be able to recite the reasons for it. On the other hand, a valuation standard requiring reserves recognizing claim costs at least as great as those utilized in premium rate scale filings would create difficulties and does not seem to be necessary. It is anticipated that the valuation actuary consider the matter of claim costs used in premium rate filings in his or her determination of whether or not the reserves make good and sufficient provision.

PANEL DISCUSSION

C. ACTIVE LIFE RESERVES

8. ACTUARIAL PARAMETERS AND RELATED MATTERS - NON-DEATH DECREMENTS

DISCUSSION:

Statutory reserve methods, in this country, traditionally have not widely utilized non-death decrement rates with respect to the calculation of active life reserves. This question relates mainly to individual as opposed to group policies. Non-death decrement rates have been considered with respect to the continuation of benefits on disabled lives. Especially with respect to longer term individual health coverage, questions may be raised as to whether or not non-death decrement rates reflecting all types of termination should be more widely utilized for the active life reserve termination. The impact on the reserve calculation can be greater than for permanent life insurance because the latter provides cash values.

A discussion of the pros and cons of each course of action is beyond the scope of this material.

We do observe, however, that: 1) policies do, in fact, terminate for reasons other than death, and to the extent that a minimum valuation standard does not use non-death decrements, it is not recognizing an aspect of reality. (But that does not necessarily mean that such non-recognition is "wrong."), 2) the Subcommittee reviewed examples of situations where the introduction of non-death decrement rates had little impact on the reserves and at least one situation where the impact was to nearly half the reserves, 3) this matter is related to the reserve method. For example, is a pattern of non-death decrement rates which decreases rapidly at the early durations a logical companion with the two year preliminary reserving system?, 4) the effect of non-death decrement rates upon the reserves is very definitely a function of their pattern by duration as well as a function of their magnitude.

COMMENT:

The Subcommittee urges that this matter be given thoughtful and thorough attention. There are different views in this regard. Because of the impact of the pattern of such rates, a law incorporating them in an objective standard would have to closely discipline their values. One possibility is for the law to provide for a total decrement rate (all causes combined) and place a maximum (except for ages and durations at which the death decrement rate would exceed such maximum) thereon.

C. ACTIVE LIFE RESERVES

9. ACTUARIAL PARAMETERS AND RELATED MATTERS - OTHER

DISCUSSION:

For the legal minimum standard to be quantifiable, definition of all parameters entering into the reserve calculation is necessary. These matters include mortality, interest, matters pertaining to selection and reserve methods. The state of the art is probably such that at the present time it may not be feasible to define "minimum" values for each of these parameters for all situations. However, such definition is a goal of an objective minimum valuation standard and, presumably, will come closer to realization as additional data, experience tables, and improvements in the arts are forthcoming.

There is some question whether the two year preliminary term reserve method is theoretically sound in all the situations where it is presently in use. On the other hand, there may be some question as to whether the other modified reserve methods (such as one year preliminary term, three year preliminary term or CRVM methods) are as precise as they might be in taking account, within the framework of solvency and conservatism, the acquisition cost. As with a number of other matters considered in this material, there are tax implications.

C. ACTIVE LIFE RESERVE

10. MATTERS UNIQUE TO GROUP INSURANCE

DISCUSSION:

There are certain matters which relate exclusively or almost exclusively to group insurance. Matters discussed previously relate to both group and individual although many of them are predominantly individual subjects.

The matters to be considered are deposit premium arrangements, experience rating arrangements, claim fluctuation reserves, liabilities recognized during active status for post retirement benefits, contingent liabilities, retroactive premium rate adjustments, ASO contracts, contractholder claims administration, minimum premium contracts, etc. Some of these techniques are more prevalent among Fire and Casualty insurance companies than among Life and Accident and Health insurance companies and vice versa. Also, the terminology with respect to these items is confusing in that the experience rating plan of one company may be the dividend plan of another company and so on.

The valuation law needs to be drafted with the above considerations in mind. The Subcommittee has no particular comments with regard to how if at all, they be explicitly handled in the law.

COMMENT:

There are several matters unique to group insurance. In drafting legislation, it will be essential to consider these matters to determine how they should be given consideration in the valuation law.

D. CLAIM RESERVES AND LIABILITIES

1. GENERAL

DISCUSSION:

The Subcommittee believes that the determination of claim reserves and liabilities is of extreme importance in computing the total liabilities of a company.

The claim reserves and liabilities consist of the five elements, one of which logically divides into two portions.

The claim reserves (i.e., for unaccrued items) are:

1. amounts not yet due on reported claims, and
2. amounts not yet due on unreported claims.
3. amounts for deferred maternity and future contingent benefits (may be treated as active life reserves in certain circumstances).

The claim liabilities (i.e., for accrued items) are:

1. amounts in course of settlement, and
2. amounts incurred but unreported.

Much of the inadequacy of claim reserves and liabilities and related insolvencies arise from a lack of understanding of these different portions of the claim reserves and liabilities and the absence of a conscientious effort to make provision for each of them in annual statements. The Subcommittee is, in fact, aware of practice such as the following:

1. Publishing statements containing clear indication that no claim liability has been held.

2. Preparing internal reports that are labeled "IBNR" yet purport to represent the entirety of all provision for claims to be made in the annual statement.

3. Using an arbitrary amount for the entirety of the provision to be made in the annual statement.

Enhancement of the understanding of claim reserves and liabilities is at least as much a function of practice standards as of minimum legal valuation requirements. The American Academy of Actuaries has had under consideration for a number of years preparation of additional information with regard to practice standards. Concurrent with the preparation of any new valuation standard, those efforts should be encouraged.

D. CLAIM RESERVES AND LIABILITIES
1. GENERAL
.....continued

The present actuarial literature does contain explicit discussion of these matters as regard Life and Accident and Health companies (see particularly items 1 and 14 of bibliography). However as just indicated the preparation of professional practice standards has not yet proceeded very far. Practice standards with respect to Fire and Casualty insurance companies, or more accurately with respect to members of the American Academy of Actuaries opining on Fire and Casualty insurance company's statements, do contain some specific guidance which would lead to consideration of each of the components of the claim reserves and liabilities. It is an interesting example of the confusion in the health insurance field that some of the most definitive standards relate to the Fire and Casualty insurance company annual statements while much of the insolvency difficulty related to health insurance has centered around Life and Accident and Health insurance companies.

A question, which the drafters of the law will need to address, is whether or not the law will allow an aggregate approach; in other words, the total amount of claim reserves and liabilities must be adequate to cover the total of the five items and that overages in one item may offset deficiencies in another. (Note that this is a different question than whether the method of calculation must explicitly recognize each of these elements and it is also a different question from the matter of annual statement presentation.)

The Subcommittee thinks of claim reserves and liabilities as covering all future cash payments which the insurer will have to make (even if on the valuation date the insurer makes a maximum effort to be relieved of liability under the contract within the framework of the contract) with respect to claims which were incurred on or prior to the valuation date. The claim reserves and liabilities amount must also be sufficient to cover such payments whether all policies terminate or whether no policies terminate or any combination thereof.

The question of whether the determination of claim reserves and liabilities should consider the claim costs set forth in premium rate scale filings needs to be addressed. There are cases where during the first few years after introduction of a new product company experience is lacking and published tables and premium rate scale filings become the primary, if not only, benchmarks. Hence, there appears to be good reasons why this relationship should be considered in actuarial practice (through use of a method similar to the tabular method described in Appendix D), but also good reasons why it should not be enshrined in the minimum valuation standards.

D. CLAIM RESERVES AND LIABILITIES
1. GENERAL
.....continued

It is also necessary to address the relationship between the claim reserves and liabilities on the one hand and the active life reserves on the other. The "division" of the total policyholder reserve between active life reserves on the one hand and claim reserves and liabilities on the other is for the most part determined by the definition of the incurred date. We therefore invite to the attention of those drafting the law the question of whether the law should specify the means for determining the incurred date. There appear to be cogent reasons for the law extending this far.

Claim reserves and liabilities are not affected by possible future premium rate scale increases.

Inadequacy of claim reserves and liabilities and lack of understanding of their components are two of the important causes which have contributed to the problems mentioned in the summary to this report.

COMMENT:

The law should clearly indicate that the total future cash payments should be covered by reserves and should be consistent with regard to which payments are to be covered by the active life reserve and which are to be covered by the claim reserves and liabilities.

PANEL DISCUSSION

D. CLAIM RESERVES AND LIABILITIES

2. NATURE OF MINIMUM OF STANDARD

DISCUSSION:

In view of the difficulties presently surrounding claim reserves and liabilities which have already been referred to, the nature of the minimum standard is of particular importance.

There are two concerns which the Subcommittee feels must be addressed. They are:

1. The need for the claim reserves and liabilities to make good and sufficient provision for policy liabilities based upon experience of the company (and for objective means to be available for testing of that determination).

2. The need for a quantifiable minimum standard.

The concern for a provision for adequate claim reserves and liabilities based upon company experience arises because of situations in which the experience of a particular company becomes far worse than what would generally be considered "normal" or "standard." This can arise because of general company practice, circumstances particular to the company, circumstances particular to its market, etc. Also, a situation may deteriorate extremely rapidly for many reasons which can be a function of economic time, peculiar geographic circumstances, lack of spread of risk, etc. In any event it appears clear that loss experience can vary so dramatically from time to time even within a company it alone between the experience of a given company at a given time and levels of experience generally applicable to the industry, that attention does need to be paid to the experience of the particular company if insolvencies are to be minimized.

The matter of a quantifiable minimum standard also suggests itself because of the huge disparity (perceived unreasonable disparity by many) between the results of calculations of the claim reserves and liabilities in specific situations. Presumably such disparity will be reduced as practice standards evolve. However, that project cannot be expected to reach fruition in a short time. In the meantime the need for a quantifiable objective minimum standard suggests itself. This objective is achievable only to the extent that data basis and experience tables are developed. Such work should be encouraged.

D. CLAIM RESERVES AND LIABILITIES
2. NATURE OF MINIMUM OF STANDARD
.....continued

It would appear that the only way to directly address these two concerns is a minimum standard which is along the lines of requiring that the claim reserves and liabilities make good and sufficient provision for future claim payments based upon experience of the company but in no event be less than the claim reserves and liabilities calculated according to specified tables. It is understood that the latter part of such a law would have increasing efficacy as tables and data bases are developed.

The tabular method described in Appendix D shows how such specified tables could be determined.

However, with respect to benefits which are limited as to their possible duration to a fairly short period of time, say under twelve months, the Subcommittee has identified two points of view:

a. One view is that without specified tables there is no objective minimum standard. Also, there are situations where upon introduction of a new policy form there is a period of time during which there is not sufficient volume of experience. If there are no specified tables, then the valuation actuary will have to call upon industry data, if any, his or her knowledge of the particular situation, experience gathered to prepare premium rate scale filings, such filings themselves, etc. Specification of tables in the valuation law would in these situations provide for a simpler and more objective valuation and might provide a balance to pressures for underreserving which might exist. Development of the specified tables is practicable and feasible.

b. The other point of view is that for benefits of relatively short duration, company experience builds up fairly rapidly. Also, where there is likely, as here, to be ample company experience there is an exception to any need that may apply in other situations for a quantifiable objective minimum valuation standard. In fact, imposing such standard may be unduly restrictive with respect to the majority of situations where there is sufficient company experience. Also, with respect to introduction of new products, there is likely to be sufficient guidance elsewhere than a company's experience for the valuation actuary. Further, there is a question whether it is practical and feasible to develop such tables.

Specification of tables in the standard is rather clearly called for for benefits which may run for longer periods.

PANEL DISCUSSION

D. CLAIM RESERVES AND LIABILITIES

3. RESERVE METHODS

DISCUSSION:

Legislative recognition of the fact that only generally accepted actuarial methods are to be used for claim reserves and liabilities determination would, it is believed, go a long way toward providing more meaningful financial information so that management could act in time to prevent insolvencies.

There are a number of degrees of specificity to which the law could go with regard to the designation of generally accepted actuarial methods, namely:

1. the law could specify simply that only generally accepted actuarial methods are to be used,

2. the law might indicate that only generally accepted actuarial methods are to be used and go on to specify those generally accepted actuarial methods which have been identified at the time it is prepared and go on to indicate that other generally accepted actuarial methods may be used, and

3. the law might prescribe those generally accepted actuarial methods which are to be used to the exclusion of other such methods.

There appears to be no reason why the law should not go at least as far as alternative 1. There are pros and cons for going as far as step 2. Step 3 could pose some real difficulties by way of perhaps impeding development of new actuarial concepts especially as regards newer products tailored to a changing environment.

The generally accepted actuarial methods which the Subcommittee have identified are:

1. The tabular method

2. The development (or pyramid) method

A discussion of these methods is also found in the actuarial examination syllabi and the materials cited in the bibliography.

Standards of practice should play a definitive role in this area. It will be helpful if invalid methods as well as acceptable ones are specified. It is in the practice standards area that the invalid methods can receive attention. An invalid method, we believe, is, for example, one which is completely arbitrary.

D. CLAIM RESERVES AND LIABILITIES
3. RESERVE METHODS
.....continued

COMMENT:

The matter of how far the law should go in specifying use of generally accepted actuarial methods needs attention. There seems to be no reason why the law should not specify usage of only generally accepted actuarial principles but the question of whether the law should go further than this needs to be considered. Also, this is another area where the role of professional standards is of considerable importance.

PANEL DISCUSSION

D. CLAIM RESERVES AND LIABILITIES

4. ANNUAL STATEMENT PRESENTATION

DISCUSSION:

The presentation of the elements of the claim reserves and liabilities is not the same in the Life and Accident and Health annual statement and the Fire and Casualty insurance company annual statement.

One question to be addressed is whether the presentation should be the same in the two statements or whether it should be different. This is a situation where the nature of the two types of enterprises may well have a bearing on the presentation selected.

The Fire and Casualty insurance company statement is designed to deal mainly with losses which have already been incurred. Over the years Schedules O and P (which given considerable detail about loss and loss expense and even provide a separate analysis in Schedule P - Part 1F of incurred but not reported losses), in particular, have received much attention and are the result of considerable thinking and study. The Life and Accident and Health statement, on the other hand, is geared mainly to losses which have not yet been incurred.

The health lines generally do not receive special attention in the Fire and Casualty annual statement but are accorded special attention in the Life and Accident and Health insurance company statement. This permits the presentation of information in the latter statement to be more tailored to the particular line of business.

The Fire and Casualty annual statement addresses mainly lines of business where the distinction between the accrued and unaccrued portion of claims has not loomed large in importance. The relatively greater importance in many cases of the individual health coverages has led to attention in this regard in the Life and Accident and Health insurance company annual statement. Both statements give attention to incurred but not reported claims, but their treatment is divergent between the two statements.

With respect to the examination of the sufficiency of prior claim reserves and liabilities the Fire and Casualty annual statement blank is much richer than the Life and Accident and Health insurance company annual statement.

It will be surprising if taking account of the needs of the two types of enterprises the same presentation is indeed appropriate and feasible for both. Although the subject of annual statement presentation should logically be approached with an eye to the needs of the line of business being reported upon, the nature of the reporting enterprise should not be overlooked.

D. CLAIM RESERVES AND LIABILITIES
4. ANNUAL STATEMENT PRESENTATION
.....continued

The next matter that will have to be addressed is the extent to which the various elements of the claim reserves and liabilities are to be presented separately as opposed to being combined. The traditional treatment in the Life and Accident and Health insurance statement is to show each element separately.

Presumably showing each element separately will lessen the chance that a given element is overlooked. (However, experience shows that such separate presentation by itself is not enough to accomplish this objective.) It should be noted that this matter of presentation is different from the matter of the requirement being placed upon the opining actuary to assert whether or not each of the elements have been provided for. It is also separate from the matter of the methodology of the calculation of the claim reserves and liabilities.

As data bases and experience tables become more readily available and a minimum standard is more readily quantifiable, it may be possible to more easily calculate the different elements of the claim reserves and liabilities separately. However, whether or not each element is originally developed separately, or whether the amount representing combinations of elements is developed and the portion thereof representing each element subsequently quantified, the question whether or not each element is presented separately in a statement should be addressed separately from the matter of methodology.

In considering this matter the Subcommittee noted that a lack of separate presentation of the elements would appear to give legitimacy to methods which obviously reflect a lack of understanding of the task at hand. On the other hand the Subcommittee also noted that as long as the opining actuary can demonstrate that the total claim reserves and liabilities adequately provide for the elements then matters of presentation should not dictate methodology. How the matter of presentation is resolved may well depend on the degree of assurance the regulators would like to have that each of the claim reserve and liability elements has been considered.

D. CLAIM RESERVES AND LIABILITIES
4. ANNUAL STATEMENT PRESENTATION
.....continued

COMMENT:

The Subcommittee believes:

1. The advantages of the five way classification in the Life and Accident and Health insurance statement of claim reserves and liabilities be carefully considered and any aggregation of these elements for financial reporting purposes be done only after thoughtful deliberation. The same thoughtful care should be accorded the Fire and Casualty classification before any aggregation thereof.

2. The two types of annual statements mentioned above should present data in the same format, subject to differences arising out of the nature of the enterprise.

D. CLAIM RESERVES AND LIABILITIES

5. INCURRED DATE

DISCUSSION:

There are many practices for assigning incurred date. One of the reasons for this is the complexity of products in the market place. For certain types of products there are more generally preferred methods of assigning the incurred date.

One view held strongly by some is that the incurred date should be determined from the contract. In any event, in computing reserves, the techniques in any given situation for assigning the incurred date must be consistent with the methods used in the same situation for computing the incidence rate utilized in the determination of the active life reserves.

The matter of incurred date relates not only to the reserve methodology per se but to an understanding of the meaning and usage of the experience data utilized to determine reserves.

Even a cursory discussion of the subject is beyond the scope of this material.

To the extent the law requires usage of generally accepted actuarial practice, the incurred date question will receive implicit treatment because such practice does pay close attention to the matter of incurred date assignment.

PANEL DISCUSSION

D. CLAIM RESERVES AND LIABILITIES

6. ACTUARIAL PARAMETERS - INTEREST

DISCUSSION:

The question arises whether or not interest should be required, permitted, prohibited, etc., with respect to claim reserves and liabilities calculation.

Practice in this regard is believed to differ between Fire and Casualty companies on the one hand, and Life and Accident and Health companies on the other hand. It is believed that this difference in practice is narrowing. Certain factors inherent in the operating environments of the two types of companies appear to have given rise to this previous difference in practice.

The Subcommittee wishes to point out that many groups have worked on this problem and there does not seem to be one generally accepted solution. The groups include the American Academy of Actuaries, the Society of Actuaries, the Casualty Actuarial Society, the AICPA, the FASB, and various subgroups, committees, subcommittees, joint committees, etc., of these and other organizations.

Further, some of these groups seem to be going in different directions. There is some considerable weight in Life and Accident and Health insurance company practice to use an interest rate while in Fire and Casualty insurance company practice there is some weight for not using an interest rate.

The use of an interest rate is of little importance for short term benefits for periods of twelve months or less, but becomes increasingly important for benefits which are for periods in excess of twelve months.

If interest is used, questions arise as to the level of the interest rate and disclosure requirements.

There are reasons for and against relating the interest rate on disabled lives to that for active lives. If the interest rate is no greater than the valuation rate associated with respective years of issue of the contracts, there appears not to be as great a need for disclosure of the rate as if a higher interest rate is utilized.

If an interest rate is used there are certain aspects of Fire and Casualty insurance company operations which may produce unintended effects from utilizing interest in the calculations. There are also tax ramifications.

D. CLAIM RESERVES AND LIABILITIES
6. ACTUARIAL PARAMETERS - INTEREST
.....continued

COMMENT:

We present for your consideration three thoughts which may be helpful in approaching this problem:

1. A survey of the opinions extant at the time the valuation law is written and of how that thinking has developed during the preceding year or so should prove quite helpful in coming to grips with the nuances of the question.

2. Progress may be most readily made if instead of seeking the "best" solution an effort is made to seek at least one solution which does not do violent harm or discomfort to any preparer or user of the financial statements.

3. Especially with the recognition now accorded the use of interest in the Fire and Casualty field, incorporating interest into the valuation standard with the maximum rate defined in a reasonable way would probably meet the criteria of 2 above.

PANEL DISCUSSION

D. CLAIM RESERVES AND LIABILITIES

7. ACTUARIAL PARAMETERS - OTHER

DISCUSSION:

With respect to claim reserves and liabilities, the literature concerning the generally accepted actuarial methods often does not make explicit statements as to mortality rates, claim costs, and so on.

However, in drafting the law, at least the following need to be kept in mind: morbidity, interest rates, selection, termination rates, mortality rates, recovery rates, etc.

INDIVIDUAL HEALTH INSURANCE RESERVE ISSUES

D. CLAIM RESERVES AND LIABILITIES

8. MATTERS UNIQUE TO GROUP INSURANCE

DISCUSSION:

The matters discussed in an earlier subsection in connection with active life reserves need to be considered also in connection with claim reserves and liabilities.

E. EXPENSE OF INVESTIGATION AND SETTLEMENT OF POLICY CLAIMS

DISCUSSION:

These future expenses relate to premiums which have already been taken into account. A liability, therefore, is appropriate.

This liability is very significant in Fire and Casualty insurance company financial reporting but is much less significant in Life and Accident and Health insurance company financial reporting. This difference in financial reporting practice may be attributed to the different emphasis by product line of the two types of insurers.

RECOMMENDATION:

Provision for this expense should continue to be made and the valuation law so indicate.

APPENDIX A

RELATED COMMENTS

This Appendix presents certain ideas, suggestions, and questions for further consideration which arose during the course of the Subcommittee's discussions. Each subject relates to a greater or lesser extent to the question of reserve determination. However, the subjects do not require specific resolution as a prerequisite to the preparation of a valuation law although such resolution would certainly be desirable and make the task of drafting such law easier.

1. Actuarial methods, tables, procedures, etc.:

   The need for further identification and elucidation of generally accepted actuarial methods is particularly acute in the area of claim reserves and liabilities. At least two such methods have been identified and well documented. Hence, there are sufficient tools for the job at hand but still additional tools might well be beneficial. Even if after extensive effort it is not possible to identify other actuarial methods which are generally acceptable, this fact by itself would be helpful.

   With respect to active life reserves, further work on actuarial procedures and methods would also be helpful. The CAST (Cumulative Anti-Selection Theory) concept is of considerable importance where reserves are being calculated for longer term coverages. Further work in this area would be helpful.

   There is a need for data bases, information on how to develop data bases, and claim cost tables in a number of areas.

   There is a need for other tables for use in determining claim reserves and liabilities for at least some benefits. Development of experience tables would be particularly helpful in applying the two actuarial methods mentioned in this material. The means of varying the tables to suit various circumstances would be quite helpful.

2. Policy classification:

   The present classification of policies: non-cancellable, guaranteed renewable, collectively renewable, etc., has almost surely outlived its usefulness.

   In its time, the proposed uniformed Individual Accident and Sickness Policy Provisions law of which one of the members of the Subcommittee, James Olsen was one of the authors, performed this service with respect to individual policies. However, circumstances have changed and the objectives and functions of that undertaking need to be again addressed. Although the need is more visible with respect to individual policies, it is also present with respect to group policies.

APPENDIX A
.....continued

The information needs generally fall into two categories. Each need involves clarifying the meaning of the contract.

1. providing that the policy clearly states and defines certain key elements thereof, and
2. providing that the policy when read in light of the law objectively indicates the applicable minimum valuation requirements.

Items of this first type which need to be clearly stated in the policy include:

1. the benefits,
2. the policy term,
3. the initial premium rate scale,
4. the extent to which the initial premium rate scale is guaranteed during the reserve term and the policy term (can the insurer change the premiums unilaterally at the end of each year?, can the insurer change the premiums only because of conditions not foreseen at the time of issue?, etc.), and
5. guarantees as to renewability.

Items which need to be determinable from the policy when read in light of the law include the reserve term and values of other parameters required for the reserve computation.

The reserve term, premium rate scale, and benefits must all be determinable from the policy and the law. Otherwise, there can be no objective minimum valuation standard.

This matter deserves considerable attention and is not a simple one to satisfactorily resolve. The objective is to classify what essentially are extremely technical parameters and communicate their values clearly through a written document.

Just by way of example and not by way of suggestion or to the exclusion of other possibilities, the following concepts are listed:

a. A dichotomy between policies are long term and those which are short term. This classification is already used for GAAP accounting in this country. The criteria on which the dichotomy between long term and short term is decided could, at least, in theory be any one of a number of items such as, the period over which the renewability is guaranteed, the period over which the premium rate scale is guaranteed, the period over which it is indicated the company will change premium rates only due to unforeseen conditions, or the term of the contract.

APPENDIX A
.....continued

b. A dichotomy between those policies with respect to which the insurer can change premium rate scales during the policy term and those with respect to which the insurer cannot change premium rate scales during the policy term. (This dichotomy is already in use.)

c. A dichotomy between those policies with respect to which changes in the premium rate scale can be made on a class basis for various reasons and those with respect to which such changes can be made only due to circumstances not foreseen at issue.

d. A dichotomy between policies which can be cancelled during their term and those which cannot.

The above comments are not offered with a view toward urging any particular type of classification. The thrust of the comments is that policy terminology clearly convey to interested parties the meaning of the contract with respect to guarantees (or lack thereof) as regards the various key elements mentioned above.

Incidentally, it would appear absent legislation clarifying policy forms the end of the reserve term can probably best be set as the earliest date at which the contract explicitly indicates either coverage will be discontinued or, that a new premium rate scale is expected to be introduced. (The mere fact that the rates may be changed does not constitute the end of the reserve term in this sense.)

A prerequisite to an objective minimum valuation standard is clear definition by the law and policy taken together of the benefits, reserve term, and applicable premium rate scale.

3. "Guaranteed renewable" inflation sensitive products:

The Subcommittee believes that such merchandise is causing confusion in a number of ways not the least of which is making it difficult for management to obtain sound financial data.

It is suggested that this term, if not dropped entirely, should not be used with inflation sensitive products.

The concern is not with the concept of "guaranteed renewability" in its technical sense. The concern expressed here is lack of clarity of the term in the present environment. (In an inflation sensitive product which is renewable at the option of the insured, and in which some of the current premiums are intended to provide for claims beyond the current premium period, it will not be an easy task to describe to the policyholder the portion of current premiums which is for current benefits, the portion which is for future benefits at current price level, or the portion which is to

APPENDIX A
.....continued

protect the current premium rate scale against future inflation. But is such description necessary? How is the rate guarantee described? Is there one?) Simply coining a new label to replace "guaranteed renewable" to designate the promise to the insured to renew is one possibility. Another possibility is to do that and also subdivide the new designation by the extent the premium guarantee, if any.

4. The individual level premium policy which is not level premium:

The Subcommittee believes that certain policies with respect to which the insurer has a right to increase premiums and which are indicated to be renewable for life or to a high age are sold at premium rates which based on the facts currently available cannot be maintained through the life of the contracts and realistically numerous premium rate increases will be needed.

There is certainly no objection to this if the policy clearly indicates the higher rates which will be charged in the future or at least clearly indicates that rates definitely will be raised in the future. (A very clear cut example of wording explicitly calling the insured's attention to future rate increases is"--premiums are expected to increase at least as frequently as each three years--.")

However, the Subcommittee believes that such policies without clear disclosure are inappropriate in the marketplace.

Policy form legislation requiring clear definitions as discussed in 2 above would address this problem. Absent such policy forms legislation then a valuation law might by indirection solve the problem. For example, if the valuation law indicated that the end of the reserve term was the earliest date at which the policy form indicated the company expected to introduce a new premium rate scale, then as a practical matter marketing of these policies would probably terminate. Under such a law if a policy were issued, renewable for life at a premium rate scale inadequate to support expected claim costs for all of life, and the policy contained no explicit wording indicating the insurer expected to raise the premium rate scale at the end of a certain period of time, then the reserve term of the policy would be all of life.

Because of the depressed premium rate scale level this would create severe surplus strain and the product would probably be redesigned. Of course, this would in no way prohibit an insurer from marketing a policy with a fully disclosed rating practice of increasing the premium rate scale periodically. For example, the policy could be issued with a promise to renew for all of life, priced at a premium rate scale believed to be sufficient to be kept

APPENDIX A
.....continued

level for, say, three years and with a clear cut statement in the policy that "--premiums are expected to be increased at least every three years--."

The Subcommittee does not believe that the level premium concept for coverages which are not inflation sensitive should be legislated out of existence. There are, however, some serious difficulties with the combination of the level premium concept with inflation sensitive merchandise.

In summary, this is another situation where clarity of communication in the policy form now appears to be lacking and needs thoughtful consideration.

APPENDIX B

CLAIM RESERVES AND LIABILITIES - REASONS FOR DEFICIENCY

The following have been identified as reasons for claim reserve and liabilities deficiencies:

1. Lack of understanding of how adequate claim reserves and liabilities are determined.

   It is often assumed that an almost cursory treatment of the data will lead to adequate loss reserves. There is often even unbelief that the detail treatment which is often necessary is indeed required, and this can enhance the difficulty of accepting a claim reserves and liabilities amount which is higher than anticipated by interested parties. This reason has much to do with the Subcommittee's recommendation that the law make specific reference to generally accepted actuarial methods.

2. Lack of understanding of the basic contents of claim reserves and liabilities.

   The five are listed elsewhere. It is this lack of understanding of each of the elements which enhances the likelihood of some or all of them receiving inadequate attention or being ignored.

3. Interreaction between the perceived need to increase the reported gain from operations and disbelief/lack of understanding of the claim reserve and liability phenomenon.

4. Treatment of the subject by various parties as an "internal mystery" generally not available to the public.

5. Lack of adequate data bases.

6. Perceived lack of regulation of certain carriers.

   The semi-insured and uninsured market is often partially regulated or unregulated. With respect to those carriers, adequate claim reserves and liabilities are often not provided. The inevitable result may take a few years to come about. In the meantime, competitive pressures are placed on insurers which establish adequate claim reserves and liabilities. The epitome of this pressure is literature which says in effect"--make your plan self insured because then you won't need any reserves--." Concerned managements of semi-insured and uninsured plans through experience are gaining an understanding of the problem and recent regulatory activity is also having an effect.

APPENDIX B
.....continued

Also, it should be recognized that the actual contractual obligation of some of these arrangements is indeed different than that of the typical insurance cover.

The Subcommittee believes that adequate reserving practice is governed by the contractual arrangement rather than the form of organization, generally speaking. Utilization of this principle should ameliorate the problems discussed above.

7. Tax deductibility of claim reserves.

Due in part to the methods which have on occasion been used to calculate claim reserves and liabilities, the increase therein has not always been allowed as a deductible business expense. They are most certainly, when properly computed, a business expense and it is believed that adherence to sound actuarial practice will buttress this fact.

APPENDIX C

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APPENDIX D

TABULAR METHOD

The Tabular Method is described in TSA XVI at page 26. Since that paper was written (1964), the great development of computers has made the method more practical. The characteristics of the method are as follows:

1. Results are analogous to life insurance reserves in that they are based on expected parameters. For life insurance, the principal such parameter is an expected mortality table. For health insurance the parameters are expected lag tables (accrual lag, reporting lag, and payment lag). As in the case of life insurance, the parameters can be made as conservative as desired.

2. The results are definite and calculable. Unlike the Development Method, the Tabular Method gives results immediately (before any runoff has been accumulated). Also unlike the Development Method, the Tabular Method gives results which are automatically broken down into the required segments (amounts not yet due, in course, unreported, etc.).

3. Since it treats the subject in a fundamental way, the Tabular Method may clear up questions of misunderstanding or philosophy. It forces consideration of all of the segments.

4. Provided the three lag tables are accurate, the Tabular Method gives results which are free from inadequacies in the runoff data; such inadequacies could arise from errors in assigning incurral date, mere fluctuations due to small size, and lack of mature runoff experience.

5. Results are based on an "expected loss ratio." This is also analogous to the basing of life reserves on an expected mortality table. Expected loss ratios are frequently filed with supervisory authorities; if they are not (as for example in the case of group insurance), they usually exist internally. If a company uses the Tabular Method, and uses an "expected loss ratio," it knows that its claim reserves and liabilities are consistent with its loss expectations. The "expected loss ratio" can be changed from time-to-time as experience unfolds.

6. Companies which wish to do so and have accurate data can substitute known actual information for portions of the theoretical tabular method results. That could, for example, be done for claims in course of settlement, and for the reported portions of amounts not yet due. However, it could not be done for the unreported liability or the unreported portion of amounts not yet due.

APPENDIX D
.....continued

Method of Constructing Claim Reserve and Liability Tables
Based on the Tabular Method
(see examples attached)

The objective is to produce percentage factors (in advance) which may be applied to premium income as it actually emerges. All reserve and liability results are determinable very easily as soon as premium income is known.

It is well known that rapid growth in premium income will result in high reserves as a percentage of income (and vice versa). As a practical approach, it is suggested that income be broken down quarterly, to reflect this phenomenon. The percentage factors also vary by calendar quarter.

In the example attached, it is assumed that the expected loss ratio is 37.5%. It is necessary to base the expected loss ratio on the modal distribution of the business. In this particular case it is assumed that all of the business is on a monthly mode and that the monthly premium is 10% of an annual premium. Thus the achievement of a 37.5% loss ratio is the same as the achievement of a 45% loss ratio based on annual mode (.375 x .10 x 12 = .45).

The percentage factors make use of the expected loss ratio and are based on the methods described at TSA XVI, page 26. See Table 1 on page 40 to find the information which can be traced through to the attached illustrations. Example:

Table 1 shows that for 1st quarter claims incurred, 88.56% have been paid by the end of the year. Therefore, 11.44% have not. This would be equivalent to 11.44% x .375 = 4.29% of premiums earned in the first quarter (as shown in the attached).

Table 1 shows that for 4th quarter claims incurred, 37.89% have been paid by the end of the year. Therefore, 62.11% have not. This would be equivalent to 62.11% x .375 = 23.29% of premiums earned in the first quarter (as shown on the attached).

It will be observed that the same percentage factors have been used (as a simplifying procedure) for each year's premium income. The block may however become less "select" as time goes on. If desired, this can be adjusted by simply changing the "expected loss ratio" as a block gets older.

See TSA XVI page 50 for the three lag tables which were used for the illustration. If lag tables are available or can be constructed, computers can be programmed to produce percentage factors such as those shown on the attached. This can be done well in advance. Results then flow easily as the premium income is earned.

APPENDIX D
.....continued

Interest Adjustments

As stated in TSA XVI pages 28 and 31, the "present value of amounts not yet due"--both reported and unreported--may be discounted at interest for statement purposes. The percentage factors appearing in claim reserve and liability tables could automatically include this adjustment. (This has not been done in the attached illustration.) The adjustment would be done by substituting a formula of the following type for CU_t, which appears as (4) and (12) on pages 28 and 31.

$$CU_t' = CI \left[\sum_{i=t+i}^{\infty} v^{\frac{i-t}{365}} \cdot A_i \right]$$

INDIVIDUAL LOSS OF TIME-TSA XVI Page 40

CLAIM RESERVE AND LIABILITY TABLE

COVERAGE: TWO YEAR DISABILITY-ONE WEEK ELIMINATION PERIOD

FIRST WRITING: AUG. 1, 1984

EXPECTED LOSS RATIO: BASED ON: ANNUAL PREMIUM 45.00%
MODAL DISTRIBUTION 37.5%

ACCRUAL LAG: TSA XVI PAGE 50

REPORTING LAG: SAME

PAYMENT LAG: SAME

TYPE: AMOUNTS NOT YET DUE ON REPORTED CLAIMS

YEAR	QUARTER	PREMIUMS EARNED	DEC. 31, 1984 %	DEC. 31, 1984 AMOUNT	DEC. 31, 1985 %	DEC. 31, 1985 AMOUNT	DEC. 31, 1986 %	DEC. 31, 1986 AMOUNT
1984	1	$0.00	4.03	$0.00				
	2	0.00	5.44	0.00				
	3	7500.00	7.73	579.75				
	4	25000.00	9.95	2487.50				
TOTAL 1984 RESULTS		$32,500.00		$3,067.25	1.67	$542.75	0.00	$0.00
1985	1	$35,000.00			4.03	$1,410.50		
	2	45000.00			5.44	2448.00		
	3	55000.00			7.73	4251.50		
	4	65000.00			9.95	6467.50		
TOTAL 1985 RESULTS		$200,000.00				$15,120.25	1.67	$3,340.00
1986	1	$75,000.00					4.03	$3,022.50
	2	85000.00					5.44	4624.00
	3	90000.00					7.73	6957.00
	4	90000.00					9.95	8955.00
TOTAL 1986 RESULTS		$340,000.00						$26,878.50

INDIVIDUAL LOSS OF TIME-TSA XVI Page 40

CLAIM RESERVE AND LIABILITY TABLE

COVERAGE: TWO YEAR DISABILITY-ONE WEEK ELIMINATION PERIOD

FIRST WRITING: AUG. 1, 1984

EXPECTED LOSS RATIO: BASED ON: ANNUAL PREMIUM 45.00%
MODAL DISTRIBUTION 37.5%

ACCRUAL LAG: TSA XVI PAGE 50

REPORTING LAG: SAME

PAYMENT LAG: SAME

TYPE: TOTAL CLAIM RESERVES AND LIABILITIES (see pages 2-5 for breakdown)

YEAR	QUARTER	PREMIUMS EARNED	DEC. 31, 1984 %	DEC. 31, 1984 AMOUNT	DEC. 31, 1985 %	DEC. 31, 1985 AMOUNT	DEC. 31, 1986 %	DEC. 31, 1986 AMOUNT
1984	1	$0.00	4.29	$0.00				
	2	0.00	5.85	0.00				
	3	7500.00	9.01	675.75				
	4	25000.00	23.29	5822.50				
TOTAL 1984 RESULTS		$32,500.00		$6,498.25	1.86	$604.50	0.01	$3.25
1985	1	$35,000.00			4.29	$1,501.50		
	2	45000.00			5.85	2632.50		
	3	55000.00			9.01	4955.50		
	4	65000.00			23.29	15138.50		
TOTAL 1985 RESULTS		$200,000.00				$24,832.50	1.86	$3,720.00
1986	1	$75,000.00					4.29	$3,217.50
	2	85000.00					5.85	4972.50
	3	90000.00					9.01	8109.00
	4	90000.00					23.29	20961.00
TOTAL 1986 RESULTS		$340,000.00						$40,983.25

INDIVIDUAL LOSS OF TIME-TSA XVI Page 40

CLAIM RESERVE AND LIABILITY TABLE

COVERAGE: TWO YEAR DISABILITY-ONE WEEK ELIMINATION PERIOD

FIRST WRITING: AUG. 1, 1984

EXPECTED LOSS RATIO: BASED ON: ANNUAL PREMIUM 45.00%
MODAL DISTRIBUTION 37.5%

ACCRUAL LAG: TSA XVI PAGE 50

REPORTING LAG: SAME

PAYMENT LAG: SAME

TYPE: INCURRED BUT UNREPORTED

YEAR	QUARTER	PREMIUMS EARNED	DEC. 31, 1984 %	DEC. 31, 1984 AMOUNT	DEC. 31, 1985 %	DEC. 31, 1985 AMOUNT	DEC. 31, 1986 %	DEC. 31, 1986 AMOUNT
1984	1	$0.00	0.00	$0.00				
	2	0.00	0.01	0.00				
	3	7500.00	0.23	17.25				
	4	25000.00	2.85	712.50				
TOTAL 1984 RESULTS		$32,500.00		$729.75	0.01	$3.25	0.00	$0.00
1985	1	$35,000.00			0.00	$0.00		
	2	45000.00			0.01	4.50		
	3	85000.00			0.23	126.50		
	4	65000.00			2.85	1852.50		
TOTAL 1985 RESULTS		$200,000.00				$1,986.75	0.01	$20.00
1986	1	$75,000.00					0.00	$0.00
	2	85000.00					0.01	8.50
	3	90000.00					0.23	207.00
	4	90000.00					2.85	2565.00
TOTAL 1986 RESULTS		$340,000.00						$2,800.50

INDIVIDUAL LOSS OF TIME-TSA XVI Page 40

CLAIM RESERVE AND LIABILITY TABLE

COVERAGE: TWO YEAR DISABILITY-ONE WEEK ELIMINATION PERIOD

FIRST WRITING: AUG. 1, 1984

EXPECTED LOSS RATIO: BASED ON: ANNUAL PREMIUM 45.00%
MODAL DISTRIBUTION 37.5%

ACCRUAL LAG: TSA XVI PAGE 50

REPORTING LAG: SAME

PAYMENT-LAG: SAME

TYPE: AMOUNTS NOT YET DUE ON UNREPORTED CLAIMS

YEAR	QUARTER	PREMIUMS EARNED	DEC. 31, 1984 %	DEC. 31, 1984 AMOUNT	DEC. 31, 1985 %	DEC. 31, 1985 AMOUNT	DEC. 31, 1986 %	DEC. 31, 1986 AMOUNT
1984	1	$0.00	0.00	$0.00				
	2	0.00	0.00	0.00				
	3	7500.00	0.07	5.25				
	4	25000.00	7.37	1842.50				
TOTAL 1984 RESULTS		$32,500.00		$1,847.75	0.00	$0.00	0.00	$0.00
1985	1	$35,000.00			0.00	$0.00		
	2	45000.00			0.00	0.00		
	3	55000.00			0.07	38.50		
	4	65000.00			7.37	4790.50		
TOTAL 1985 RESULTS		$200,000.00				$4,829.00	0.00	$0.00
1986	1	$75,000.00					0.00	$0.00
	2	85000.00					0.00	0.00
	3	90000.00					0.07	63.00
	4	90000.00					7.37	6633.00
TOTAL 1986 RESULTS		$340,000.00						$6,696.00

INDIVIDUAL LOSS OF TIME-TSA XVI Page 40

CLAIM RESERVE AND LIABILITY TABLE

COVERAGE: TWO YEAR DISABILITY-ONE WEEK ELIMINATION PERIOD

FIRST WRITING: AUG. 1, 1984

EXPECTED LOSS RATIO: BASED ON: ANNUAL PREMIUM 45.00%
MODAL DISTRIBUTION 37.5%

ACCRUAL LAG: TSA XVI PAGE 50

REPORTING LAG: SAME

PAYMENT LAG: SAME

TYPE: IN COURSE OF SETTLEMENT

YEAR	QUARTER	PREMIUMS EARNED	DEC. 31, 1984 %	DEC. 31, 1984 AMOUNT	DEC. 31, 1985 %	DEC. 31, 1985 AMOUNT	DEC. 31, 1986 %	DEC. 31, 1986 AMOUNT
1984	1	$0.00	0.26	$0.00				
	2	0.00	0.40	0.00				
	3	7500.00	0.98	73.50				
	4	25000.00	3.12	780.00				
TOTAL 1984		$32,500.00			0.18	$58.50	0.01	$3.25
RESULTS				$853.50				
1985	1	$35,000.00			0.26	$91.00		
	2	45000.00			0.40	180.00		
	3	55000.00			0.98	539.00		
	4	65000.00			3.12	2028.00		
TOTAL 1985		$200,000.00				$2,896.50	0.18	$360.00
RESULTS						$3,256.50		
1986	1	$75,000.00					0.26	$195.00
	2	85000.00					0.40	340.00
	3	90000.00					0.98	882.00
	4	90000.00					3.12	2808.00
TOTAL 1986		$340,000.00						$4,588.25
RESULTS								$4,588.25

APPENDIX E

ILLUSTRATION OF THE DEVELOPMENT METHOD
(Sometimes called the "pyramid" method)

The Development Method is described at TSA XVI page 24.

The method is illustrated below for an individual disability income policy with 2 year coverage and a 1 week elimination period. This is the policy described at TSA XVI page 40, and is the same policy illustrated in Appendix D.

Emerging Data

Emerging data are arranged in a format such as the following:

Year	Premiums Earned	Total Paid Claims	Paid Claims by Incurral Year 1984	1985	1986	1987
1984	$ 32,500	$ 5,690	$5,690			
1985	200,000	56,666	5,894	$50,772		
1986	340,000	111,349	601	20,508	$90,240	
1987	360,000	138,499	3	3,700	30,936	$103,860

The illustration is for a situation in which the premium income grows rapidly and then flattens off.

Application of the Development Method

The method cannot be applied at the end of 1984 because of the absence of runoff data. It cannot be applied at the end of 1985 with any accuracy, because of the shortage of runoff data. Even at the end of 1986 the data are slightly insufficient. The method can be applied at the end of 1987 with adequate data.

Results at the end of 1987 will be determined by the method shown on page 25 of TSA XVI. The steps are as follows:

1. Obtain the estimated "runoff" after the end of 1986 as follows:

   (a) on claims incurred in 1986:

   $$30{,}936 + 3{,}700 \left(\frac{340{,}000}{200{,}000} \right) + 3 \left(\frac{340{,}000}{32{,}500} \right)$$

   (b) on claims incurred in 1985:

   $$3{,}700 + 3 \left(\frac{200{,}000}{32{,}500} \right)$$

APPENDIX E
.....continued

(c) on claims incurred in 1984:

3

Premium earned in each calendar year has been used as the "stabilizing factor" to perform the calculations.

The total estimated runoff after the end of 1986 is $40,979. (It will be observed that this is very close to the result at the end of 1986 for the Tabular Method illustrated in Appendix D - i.e., $40,983.)

2. No discount factor will be applied

3. The 1986 runoff will be updated to the end of 1987 by using premiums earned as a stabilizing factor.

   Estimated runoff after the end of 1987:

$$40,979 \quad X \quad \frac{360,000}{340,000} \quad = \quad \$43,390$$

In making the step 3 adjustment it would be possible to take into account other factors such as the estimated trend in loss ratios between 1986 and 1987, known information about changes in reporting and payment lags, etc. It is not necessary to use the same "stabilizing factor" in step 3 as was used in step 1 also, each separate segment of the step 1 result could be updated by separate factors. Such refinements have not been used here.

4. A 10% margin for conservatism will be added.

   Total claim reserves and liabilities at the end of 1987:

$$= \quad 1.1 \quad (43,390) \quad = \quad 47,729$$

5. This result can be split into the various statement items by methods such as those described at TSA XVI page 26.

Comments about the Development Method

The accuracy of the development method can be improved if paid claims and earned premiums are tabulated by calendar month or calendar quarter. (The illustration above is only intended to demonstrate one way of applying the method.)

The method gives the total of claim reserves and liabilities. The breakdown into amounts not yet due, in course of settlement, unreported, etc., must be accomplished by some other means.

APPENDIX E
.....continued

The development method is open to some vagaries because it is sensitive to fluctuations in the detailed runoff patterns. For this reason an arbitrary addition is usually made (e.g., 10%) and some smoothing of results is accomplished.

The Development Method is valid in that it does take into account all of the various parts of a sound reserve and liability system. It works particularly well for a large, old, and well-established block of business.