

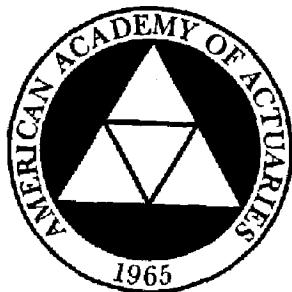
NUMBER 6

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# JOURNAL

AMERICAN ACADEMY  
*of*  
ACTUARIES

1980



ANNUAL MEETING—NOVEMBER 20, 1980  
STATEMENTS RELEASED IN 1980

The *Journal* is published annually

by the

AMERICAN ACADEMY OF ACTUARIES

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Suite 515  
1835 K Street, N.W.  
Washington, D.C. 20006

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208 South LaSalle Street  
Chicago, Illinois 60604

The following persons acted as Recorders for the Concurrent Sessions:

Stephen P. Lowe

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NOTICE

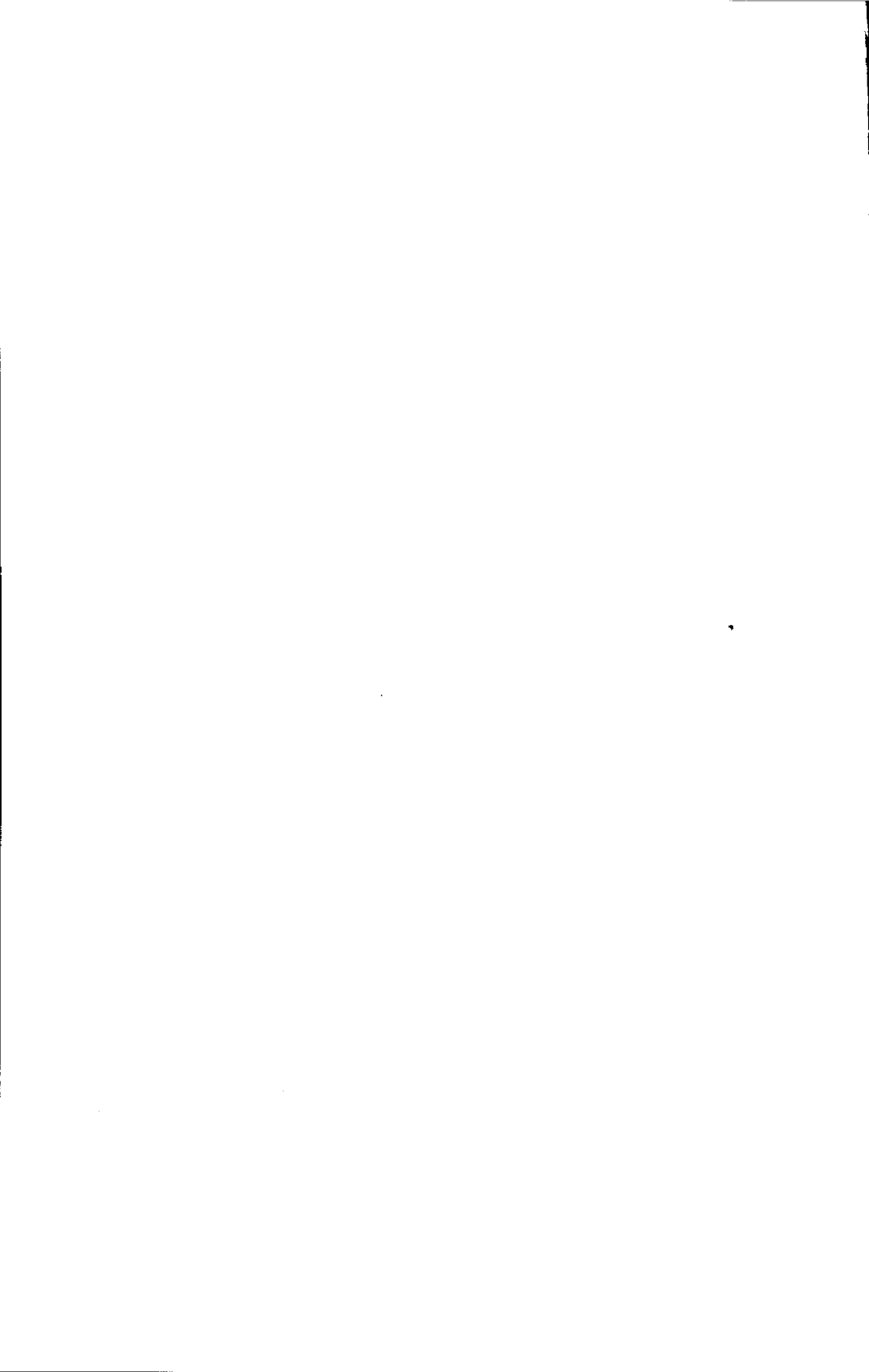
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MANUFACTURED FOR THE ACADEMY IN THE PRINTING DEPARTMENT  
OF THE UNIVERSITY OF CHICAGO, CHICAGO, ILLINOIS

PRINTED IN THE UNITED STATES OF AMERICA

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# JOURNAL

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## ANNUAL MEETING

November 20, 1980

Atlanta, Georgia

MR. RONALD L. BORNHUETTER: I wish to welcome you all to the Annual Meeting of the American Academy of Actuaries. It is a pleasure for us to be here in Atlanta and we appreciate the opportunity to hold our meeting here today.

The Academy's Annual Meeting is traditionally held in conjunction with the Annual Meeting of one of the constituent organizations. We are pleased to be able to join with the Casualty Actuarial Society on this occasion.

In addition to those reports which are typically presented at the Academy's Annual Meeting, we will be hearing from Bart Munson this morning on current activities in the risk classification field.

This afternoon there will be two panel presentations on the subject of loss reserves and professional conduct.

**BUSINESS SESSION**  
**REPORT OF THE SECRETARY**  
**CHARLES B. H. WATSON**

During the past year, meetings of the Board of Directors of the American Academy of Actuaries have been held on four occasions: November 30, 1979; February 25-26, 1980; June 4, 1980; and October 31, 1980.

The meeting held in February of this year was a special Board meeting, in that it focused upon a review of the activities of the various Academy committees and their proposals for future activities. The other meetings were more normal, in that they dealt with business which was more immediately at hand.

Actions taken at the first three Board meetings have previously been reported to you through the medium of the Academy Newsletter. In this report I intend to describe for you the non-routine items of business which were dealt with at the Academy Board meeting on October 31.

1. Pursuant to the Bylaws Amendment relative to the time of election of officers recently adopted by the membership, the Board elected the Academy officers for the year 1980/81. The results of this election have previously been reported to you by the Chairman of the Nominating Committee.
2. The Board agreed that the membership dues for calendar-year 1981 will continue at the same level as for calendar-year 1980. The dues amount is \$125 for all members, payable as of January 1.
3. One of the issues which has caused considerable concern among the membership has been the length of time required to process applications for Academy membership. This question has been thoroughly reviewed by a special working party. As a result several changes have been implemented in the administrative procedures relative to the processing of applicants for membership. The overall goal of these changes is to reduce the time needed for processing of applications.
4. Earlier this year, Recommendations as to Dividend Principles and Practices were distributed in exposure draft form to the membership. These Recommendations, with certain revisions reflecting comments received from the membership, were adopted by the Board of Directors. They will be distributed to the members in booklet form in the near future.
5. It was agreed that the Committee on Risk Classification will make a study as to the "cost impact" of the proposals made in HR Bill 100 (the "Dingell Bill") relative to the elimination of classification by sex in insurance products. The Chairman of that Committee has earlier in this meeting reported to you more fully on this subject.

6. A revised version of Opinion A-3 ("Professional Communications of Actuaries") was approved for distribution to the membership in exposure draft form. It was also agreed, though, that such distribution will not take place until all of the other actuarial organizations have acted upon the proposal for exposure of this Opinion.
7. The Board adopted two recommendations with respect to the educational qualifications of actuaries for Blue Cross and Blue Shield plans. These recommendations were adopted in light of the requirements for actuarial certification contained in the "Baucus Amendment" relevant to loss reserves for Medicare supplement plans and the possibility that the NAIC will require actuarial certification of the financial statements of Blue Cross and Blue Shield programs.

For the long term, the Board will approach the Society of Actuaries and the Casualty Actuarial Society, asking that those societies introduce an educational track for "health actuaries" into their systems of examinations. In the short term, the Board has authorized the development of a voluntary program for certifying individuals as meeting appropriate requirements for qualification as a "health actuary," as may be needed to meet Federal and state legislation and regulations. This program would be administered by the Academy.

8. The Board authorized entering into discussions with the Casualty Actuarial Society relative to that Society and the Academy serving as joint sponsors of an annual seminar on loss reserving. It was anticipated that such seminars would be similar in administrative structure to the meetings for Enrolled Actuaries currently jointly sponsored with the Conference of Actuaries in Public Practice.
9. The Board approved new guidelines for appointments to Academy Committees. These guidelines will be published in the 1981 Year Book.
10. A Guide to Disciplinary Procedures has been developed by the Academy Counsel, Mr. Hager. It will shortly be available for distribution.
11. Summary reports of the activities of the various Academy Committees were reviewed by the Board. They will be distributed to the membership in the near future.

It is also of significance to note that, since October 1, 1979, 693 applications for membership in the Academy have been received. Of these, 576 have been approved, seven were not proceeded with, and the remainder are in process.

**BUSINESS SESSION**  
**REPORT OF THE TREASURER**  
**KEVIN M. RYAN**

I would like to report to you briefly on the Treasurer's 1980 functions.

Membership in the Academy has increased from 5,501 members on November 1, 1979 to 6,208 members as of October 31, 1980. It is anticipated that membership will continue to increase, although at a more moderate rate, with membership exceeding 7,000 by the end of 1981. Continued growth is significant of the integral role the Academy plays in the actuarial profession.

The principal means of support for the Academy and its activities is the collection of dues from its membership. The dues, as you are aware, increased from \$75 to \$125, effective for 1980. No change in the present dues structure is anticipated through 1981.

By year end 1980, income is anticipated to exceed projected expenses by approximately \$170,000 leaving us with cash assets of approximately \$177,000. Our 1980 expenses are currently projected to be approximately \$550,000. Membership growth, administrative economies, and projected investment income from improved cash management should yield an excess of income over expenses in 1981 of approximately \$150,000, which would then bring our December 31, 1981 fund balance close to \$327,000. This amounts to a reserve equal to approximately five months' expenditures.

Academy expenses are anticipated to grow in proportion to the increase in activity on behalf of members. Publication and distribution of Opinions, Recommendations, and Interpretations, and professional testimony have utilized an increasingly substantial portion of Academy resources and are projected to do so in 1981.

Legal expenses amounted to an average of 11% of our budget in 1978 and 1979. In 1980 this percentage has decreased to 6%. This decrease is due to the development of in-house legal capability in the person of William Hager. This change reflects a dollar savings while activity increases.

The Executive Director and professional staff continue to exercise a high caliber of accountability in the management of Academy resources and in assuring superior levels of service to the membership. In 1980 the major accounting functions were transferred to our Washington office from the Chicago office of the Society of Actuaries.

Detailed financial reports of the Academy are reviewed regularly by the Board and a certified audit is conducted annually at the close of the fiscal year.

**BUSINESS SESSION**  
**REPORT OF THE EXECUTIVE DIRECTOR**  
**STEPHEN G. KELLISON**

This report is designed to provide a brief summary of developments in the Academy offices and of other Academy activities, not covered elsewhere in this program, since the 1979 annual meeting. The scope and volume of Academy activities have grown substantially during the past year, both internally within the actuarial profession and externally with the Academy's public interface activities. The growth of Academy activities is largely the result of the rapid transformation of the actuarial profession over the 15 years of the Academy's existence from a private inward-looking group to a true outward-looking public profession, with public responsibilities and accountability.

No better example of the increase in professional responsibilities of the actuarial profession exists than the requirement for statements of opinion on loss reserves which was added to the Fire and Casualty Blank by the NAIC at its June, 1980 meeting. Most of you are well aware of the history of the debate on this issue over the past several years. The final requirement which was adopted, although perhaps not totally ideal from the perspective of the actuarial profession, is vastly preferable to earlier drafts which would have automatically placed all CPA's on an equal footing with actuaries. This favorable result is attributable to the yeoman efforts of a large number of actuaries within the Academy and the Casualty Actuarial Society, many of whom are in this room today.

The Washington office of the Academy has received several inquiries concerning which states will require these opinions. Bob Bailey informs me that the central office of the NAIC plans to survey the states and tabulate the results after the December NAIC meeting. The results of this survey can be obtained from the librarian at the NAIC office around Christmas. We anticipate that a few states will require the opinion for 1980 statements and considerably more will require it for 1981.

The past year has been one of considerable growth in the scope and volume of activities in the Washington office of the Academy. We currently have a staff of eight employees and it is likely that proposals now on the drawing boards to strengthen our communications and government relations program will raise that number. At this time, I would like to publicly recognize two people from my office who are with us today: Bill Hager, our General Counsel, and Cyndy Sharp, our Director of Administration. Bill and Cyndy work very hard on your behalf and I hope you will have a chance to meet them during this meeting.

The past year has witnessed a realignment of responsibilities between the Washington and Chicago offices of the Academy. As a result of that realignment certain non-computer-related functions have been transferred from Chicago to Washington. Foremost among these was the entire bookkeeping and financial reporting system. Although the transfer is very recent, it is

already paying off in providing us with better day-to-day management control of expenditures and should allow us to improve the format of our financial reports in 1981.

Another administrative project being implemented at the present time is an improved admissions system which should shorten the length of time it takes to process an application. We are very sensitive to the concerns expressed by applicants concerning the time it takes to go through the admissions process and we do hope to accelerate the process considerably.

The Washington office is also working hard to develop better monitoring systems for the various arenas in which the Academy's public interface activities occur. We have a good system for our multi-faceted relationships with the accounting profession and, during the past year, we have been refining our Federal legislative monitoring system. This latter system should be in good working order by the time the 97th Congress convenes in January, 1981. Still on the drawing boards are improved procedures for monitoring Federal regulatory activities and for monitoring NAIC activities. These will be major priorities for the upcoming year.

You have probably noticed a number of Academy exposure drafts during the past year. Based on our experience with these, the Washington office is working on a procedures manual for handling exposure drafts which will systematize the handling of drafts, establish a permanent record of the handling of a draft, and disclose more fully to the membership the deliberations that led to a final pronouncement. Also it should help put us on a sounder legal foundation in terms of "due process" requirements and provisions of administrative law.

In addition to the monitoring and exposure draft activities just mentioned, the Washington office also provides support for committees in such areas as help in statement preparation, legal advice where applicable, and coordination of administrative activities. Academy committees are currently in the midst of submitting their formal plans of action for 1981 to the Academy Executive Committee. Several Academy committees are of particular interest to casualty actuaries. You have just heard from Bart Munson on risk classification, which is of vital concern to all actuaries. Also, I would call your attention to the Committee on Property and Liability Insurance, chaired by Warren Cooper, and the Committee on Property and Liability Insurance Financial Reporting Principles, chaired by Don Trudeau. Both Warren and Don are at this meeting and, I am sure, would welcome your suggestions in developing their 1981 agenda.

The 1980 election is still very fresh in our minds. I am certain that all of you who watched the debates between President Carter and Governor Reagan were struck, as I was, by Governor Reagan's use of the word "actuarial" in his remarks no fewer than three times. We have used his remarks as the opening wedge in approaching some of Reagan's team and offering the services of the Academy for consultation in such areas as insurance, pensions, and Social Security. Although, as you might imagine, planning among Reagan's advisers is still very preliminary and tentative, there seems to be a general receptiveness to our basic message of the need for proper cost estimation and financing of economic security programs, both public and private, and the key role actuaries play in maintaining the financial integrity of such programs. We hope to build on these initial contacts in the weeks ahead.

In its government relations program, the Academy is also taking steps to assist government, both Federal and state, in attracting more highly qualified actuaries into governmental service. We are currently engaged in discussions with the Office of Personnel Management which may lead to greater recognition of actuarial examinations under Federal Civil Service. Also, we are planning to add a listing of available governmental actuarial positions as a supplement to the Newsletter. This supplement will appear for the first time with the November issue.

The November Newsletter also contains, on the first page, a reference to our new "Suggestions and Criticisms Procedure." The Academy is very sensitive to the need to involve members more directly in the decision-making activities of the Academy and to encourage a broad range of views from the membership on Academy deliberations. We think the new "Suggestions and Criticisms Procedure" is a step in the right direction and should facilitate membership input. I encourage you all to read page one of the November Newsletter carefully and become familiar with this new opportunity to participate.

In closing, I would like to mention four handouts which will be available this afternoon:

1. Bart Munson's material on risk classification which has just been discussed.
2. The November Newsletter (without the governmental position listing supplement) which was just printed on Tuesday and has not yet been mailed. Featured in this issue is a guest editorial from Jim MacGinnitie.
3. The statement developed by Jim Berquist's task force to the AICPA on discounting loss reserves. I know this is of great interest to all casualty actuaries and will be discussed this afternoon at Concurrent Session D.
4. The Antitrust Guide prepared by Bill Hager. This has been sent to all members but we have some extra copies available in case the postal service did not succeed in getting it delivered to you. Incidentally, Bill is currently working on another document, a handbook on disciplinary procedures, which should be available in the near future.

On behalf of myself and the staff, I would like to express our gratitude to the officers and directors of the Academy, to the committees and task forces, and to the general membership for the outstanding support which we have been afforded during the past year. The staff always welcomes your comments and thoughts as to how we can better serve the needs of the membership in the years ahead.

Thank you.

## BUSINESS SESSION NOMINATION AND ELECTION OF DIRECTORS

MR. EDWIN F. BOYNTON: A change has been made this year in the election procedure. In past years, the officers of the Academy were elected at a Board of Directors meeting immediately following the business session of the Annual Meeting. Mustering a quorum of the Board at that time often caused problems. Therefore the procedure was changed. As reported in the Newsletter, the Bylaws were amended; and the officers of the Academy for the coming year were elected at a Board Meeting in Boston on October 31, 1980. At that meeting, the following officers were elected:

President-Elect, William A. Halvorson

Vice President, Norman A. Crowder

Vice President, Bartley L. Munson

Secretary, Charles B.H. Watson

Treasurer, Kevin M. Ryan

The Nominating Committee is pleased to place in nomination, at this time, the names of the following members for three-year terms on the Board of Directors:

Paul E. Barnhart, Fellow of the Society of Actuaries.

James R. Berquist, Fellow of the Casualty Actuarial Society.

Harold J. Brownlee, Fellow of the Society of Actuaries.

Warren P. Cooper, Associate of the Casualty Actuarial Society.

William W. Hand, Enrolled Actuary.

William H. Odell, Fellow of the Society of Actuaries and Member of the Conference of Actuaries in Public Practice.

Since Norm Crowder is presently serving on the Board, with one year of his term remaining, we are nominating Mary H. Adams to fill that one remaining year.

Are there any other nominations? Hearing none, I would entertain a motion that the nominations be closed and that the Secretary cast a unanimous ballot for the slate. (It was so moved, seconded and carried that the Secretary cast a unanimous ballot in favor of the nominees.) Congratulations to the new members of the Board of Directors.

**BUSINESS SESSION**  
**DIALOGUE BETWEEN THE PRESIDENT AND**  
**THE PRESIDENT-ELECT**  
**RONALD L. BORNHUETTER AND WALTER L. GRACE**

**MR. BORNHUETTER:** Traditionally, the Academy's Annual Meeting has closed with some remarks from the retiring and incoming Presidents in the form of a brief dialogue. Walt and I will continue to follow this practice.

This report is part of an overall program of bringing the Academy to its members. Walt Grace reported at the spring meetings of the Society of Actuaries and of the Casualty Actuarial Society. I reported at the fall meetings of the Conference of Actuaries in Public Practice and of the Society of Actuaries.

I wish to advise that the Academy is alive, is sound and is flourishing on behalf of the profession. During the past eleven months, our membership has increased from 5500 to nearly 6300. In addition, there are approximately 350 applications pending for admission. We will be approaching a membership of 6500 in the very near future.

During this past year, the Academy sent out five important exposure drafts to the membership for their review. There have been 27 statements made to various organizations on your behalf. To give you a flavor of some of the work that the Academy has been doing for you, we made nine statements to the AICPA and FASB; five statements to the U.S. Congress; six statements to other federal agencies; and four statements to the NAIC.

Before addressing the issues we are presently facing, I would like to touch on relations with the AICPA. Many scars remain on both sides from the independence issue. However, I would like to make note of several cooperative activities that are going quite well. Most of these have a direct impact on the property/casualty specialty.

First--the property/casualty audit guide in which we have had a significant amount of input.

Second--the subject of discounting of property/casualty loss reserves. The AICPA has turned directly to us for help in this area and you will hear more about that this afternoon.

Third--the reinsurance audit guide is being revised and the Academy's special committee in this area is making suggestions to the AICPA.

Fourth--the now-in-place property/casualty certification program.

Fifth--the AICPA has been very helpful to us in building a close rapport with the FASB.

## 10 BUSINESS SESSION—DIALOGUE OF PRESIDENT AND PRESIDENT-ELECT

Six weeks ago we had a dinner program in New York which brought together the Chief Executive Officers of the "Big Eight" accounting firms and of the largest consulting actuarial firms. Everyone made an effort to be there and, of the 18 principals involved, we had all but one or two attend. That's certainly a good sign that both professional organizations can get together.

To provide some order to our comments, we have classified this year's Academy activities into three categories; yesterday's, today's and tomorrow's issues. As you know, Walt and I have our own specialties, and do not claim expertise in other areas. However, we will try to touch on most activities which have taken place. Walt, would you want to comment on yesterday's issues?

MR. GRACE: Thank you, Ron. As to yesterday's issues, let me cover just a few of them.

Membership Requirements--About two years ago we made a significant change by bringing in, as members, enrolled actuaries, Associates of the Casualty Actuarial Society, and Associates of the Society of Actuaries. We now have approximately 85% of all enrolled actuaries as members of the Academy. This is a fine achievement following the implementation of that change. In addition, 60% of the enrolled actuaries belonging to the American Society of Pension Actuaries are now members of the Academy.

Enrolled Actuaries Meetings--Now there is a true joint effort between the Academy and the Conference. This was a job which needed to be done. The two organizations worked together and now have a smooth running operation. We had a productive meeting last winter, about 950 members attended, and we look forward to another fine event this coming January.

Outward Actuarial Identity--For years this has been a significant problem for the actuarial profession. It has been, and will continue to be, a major goal of the Academy to improve this image. We have come a long way in this area, and soon a new public relations initiative, on the part of all of the actuarial organizations, will commence. You will be hearing more about this later.

Pensions--With the finalization of FASB 35, a major project in the pensions area is now in force. There are many other issues yet to be addressed, but we have in place a wide range of different pension committees to address these issues. These committees are hard working groups having representatives from all the different kinds of pension constituencies in our profession.

Reorganization--A number of reorganization ideas have been proposed and, for one reason or another, found wanting. This issue is definitely on the "back burner." The leaders of our organizations have recognized that more true progress can be made for our profession through effective cooperation and coordination of the efforts of the individual organizations.

Independence--In recent years, a specific policy position on the subject of self-review was developed by all the actuarial organizations. Soon, we hope to see an exposure draft of a Professional Conduct Opinion in which the independence issue is specifically covered.

Ron, that summarizes yesterday, tell us about today.

MR. BORNHUETTER: Some of the issues I would classify as today's issues are:

Exposure Drafts--Three are out, two are to come. You are familiar with risk classification, life dividend principles and practices, and pension interpretation number 3. What is to come, are two very important exposure drafts: one in the area of professionalism and the other in the area of qualifications. We ask that you pay close attention to these and contribute your thoughts on the exposure drafts as they come out.

Membership--We all had some misgiving when the dues were raised as to whether we might lose some support, but we did not. In fact, as mentioned before, we have close to 6300 members and have enrolled over 700 new members this year. More important is your involvement in professional affairs. Today we have nearly 400 individuals working on various task forces, committees, special assignments and other Academy activities. We still need more help. Please become involved with your profession.

HR 100--The report presented earlier today covered much of the current efforts on risk classification. Testimony was given last month, and we will need to return to submit additional testimony. You will be hearing a lot more about this as a current topic in the federal government.

Antitrust Guide--This is an excellent document by Bill Hager, one copy of which has been mailed to each member. Take time and read it. I think it will help you in the actuarial work that you do, not just here, at the CAS, but at other meetings in which you become involved.

Inward Public Relations--"Operation Contact," as we have called it, was an effort by the Executive Committee to talk to the membership. During the year, we reported to a number of local actuarial clubs, as well as to the various memberships at their spring and fall meetings. Today's report is part of that program. Also, much effort was made in improving the Newsletter.

There are many other issues which would be classified as "today's," but we should now take a look at what's ahead. Walt.

MR. GRACE: I see many things in the Academy's "tomorrow." Let me briefly comment on a few.

Public Statements--Ron mentioned the 27 public statements the Academy has made so far this year. In making these public

## 12 BUSINESS SESSION—DIALOGUE OF PRESIDENT AND PRESIDENT-ELECT

statements, the Academy has a special responsibility to be sure its statements reasonably reflect current actuarial thinking within our profession. Not that our statements can reflect the views of every individual of our profession, that's a "Utopia" which neither we, nor any other profession, can attain, but our statements should represent the reasonable mainstream of thinking. This is a sensitive area and one which deserves continuous monitoring. To that end, a special high-level task force is being appointed to review our process of making public statements and to recommend to the Board a set of guidelines for use by our committees as they develop future public statements. This task force will be chaired by Vice President Norm Crowder and will consist of four others, either current or former Board members.

Risk Classification--Bart Munson, Ron and I mentioned this earlier. It's one of those yesterday, today and tomorrow issues. The risk classification "ship" is sailing in uncharted waters where there are real dangers in terms of potential conflict and controversy which impact all aspects of the insurance business and our profession.

Long Range Planning--The Academy's Long Range Planning Committee will be reporting to the Board in January. This committee is not only looking at broad requirements of our profession, but will also be recommending specific steps the Academy should take to improve its service on behalf of the membership. The leaders of our constituent organizations are very interested in this report; it will be shared with them.

Professional Conduct and Discipline--Steve Kellison mentioned that President-Elect Reagan used the term "actuarial" at least three times. I was advised it was four times. This is but another indication that our profession is becoming better known to the public. A stronger indication is the number of consulting actuaries in public practice. Five years ago, these comprised about 850, or 26%, of the Academy membership. At the beginning of this year, they comprised over 2,000, or 37%, of Academy members. As we become more public, it becomes imperative for our profession to effectively regulate itself through standards of conduct and practice. Much remains to be done in this area.

In the ethical conduct area, we must strive to be sure our guides and opinions are currently appropriate, easy to understand, and effectively communicated to our membership.

In the standards of practice area, we must strive for a delicate balance in which standards represent sound actuarial thinking and permit experimental development of new approaches, but are not burdensomely restrictive.

In the area of discipline, the process must be administered in a fair and timely manner, protecting the rights of the individuals involved. We must keep in mind that the basic objective of a discipline process is to protect the public.

My remarks about the Academy's tomorrows are concerned with on-going activities within our profession. As a public profession, we must continue to speak up when asked—and many times when not asked. We must continue to develop and refine our self-regulatory process. This is not easy work, the solutions are not black or white, but optimal results can be achieved through maximum participation of our members.

Outwardly, we are the profession's public interface; inwardly, we are here to serve our members.

I would like to close my part of the dialogue with words of praise for our retiring President, Ron Bornhuetter. Ron has worked very hard this year as our leader and, through his leadership, we have made important progress in several areas. Through "Operation Contact," word about the Academy has been carried, as never before, to our members through actuarial clubs. Ron brought about the special Houston Board Meeting which gave all our committee chairmen an opportunity to communicate directly with Board members on important issues concerning the Academy. One of Ron's most important responsibilities involved improving relations with the leaders of our constituent organizations. This was accomplished through personal efforts as a member of the famous "Steakhouse Gang." I think all of us will agree that relations among the four U.S. organizations have never been better. And, finally, Ron, on a more personal note, I'm truly thankful that, under our system, you will be working with me as a member of the Executive Committee next year, for I will need and seek your guidance. I turn the meeting back to you. Thank you.

MR. BORNHUETTER: I would like to close with two passing thoughts. First, this is your profession and mine, we all owe it something. We are always looking for help with both the Casualty Society and the Academy; it's a debt that each of us owes. Second, I have learned in the past few years, while working with the Academy, that we do have our specialties, but we are one profession and we have to think that way. If we don't, we are going to be the losers and somebody else is going to do our thinking for us.

The Academy meeting stands adjourned.

**BUSINESS SESSION**  
**SPECIAL REPORT ON RISK CLASSIFICATION**  
**BARTLEY L. MUNSON**

It's fitting that the Annual Meetings of the American Academy of Actuaries and the Casualty Actuarial Society coincide this year because this is a time when "risk classification" is capturing much of the Academy's attention and involvement. And "risk classification" is a subject known to the casualty actuary longer than to actuaries in other fields.

Risk classification procedures have been challenged for some time in your field. That's recognized by us life actuaries; even members of the public understand the position in which Boston's single young male drivers find themselves. And members of the public, thanks in part to EEOC and "women's lib," are more recently recognizing risk classification differences in other insurance fields.

That cutting edge gives you a dubious distinction. I'd argue these challenges are of dubious value, but they are not dastardly.

On the one hand, they are disruptive. They are often made by uninformed, naive, self-appointed "experts." They force us to wearily repeat what seems to us obvious--or to struggle to express that which is very hard for us to put into words. And therein lies at least part of the value in the challenges. It often does no harm, and maybe even produces considerable good, if a profession is required to make an articulation of its principles and practices.

Times do change. And we, as actuaries, do function within a social and legal environment where parameters on behavior often are set by those outside of our profession. It is hoped that, as those "outsiders" exercise their authority, they will do so with due regard to the input needed from our profession. And it's hoped that we are up to the obligation we have, as a profession serving the public, to provide appropriate input.

Nobody is more concerned about some of the developments which I'm about to summarize than I am. But rather than just play the game of "ain't it awful?" maybe we can balance our attitudes a bit if we recall Alfred North Whitehead's observation: "In every age of well-marked transition there is the pattern of habitual dumb practice and emotion which is passing, and there is oncoming a new complex of habit." We, as a profession, and those publics we serve can profit by minimizing our "habitual dumb practices and emotion."

Let's focus our attention on these four areas:

- I. The challenges to the pension field.
- II. Where matters stand on sex discrimination charges beyond pensions.
- III. Other activities of the Academy Committee on Risk Classification.
- IV. The Academy and the health of the profession as seen through the risk classification effort.

- I. A brief review of challenges to the pension field. These are focused on alleged unfair discrimination against females. They trace to Title VII of the 1964 Civil Rights Act which provides that "It shall be an unlawful employment practice for an employer... (1) to fail or refuse to hire or to discharge any individual, or otherwise discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin...."

The most notable legal case traced from this is the Manhart case in which, in 1978, the U.S. Supreme Court ruled it unlawful for the city of Los Angeles Department of Water and Power to withhold 15% higher contributions from the pay of Marie Manhart and other female workers than from similarly situated male workers in order to provide equal periodic benefits under their defined benefit pension plan. The court gave a decision that was applied specifically to a rather unusual set of facts (for there are very few defined benefit pension plans which are contributory and at different rates by sex). But the case, in which the Academy and Society of Actuaries filed jointly an amicus brief, has been used to allege--and even find--unfair sex discrimination in several other court cases where the facts are different.

The most prominent are a series of actions by the EEOC (Equal Employment Opportunity Commission) and various female employees of colleges and universities against TIAA/CREF (Teachers Insurance and Annuity Association and College Retirement Equity Fund). These have been referred to as the Wayne State, Colby College and Long Island University cases. To date, the EEOC has fared far better than the defendant schools. While status and judicial conclusions differ in these three cases, suffice it to say the schools and TIAA have lost, and were told by the courts they could not pay different periodic retirement benefits to similarly situated male and female employees.

In a surprising move at the end of 1979, TIAA announced it was proceeding to attempt a settlement without further court action by adopting unisex, or merged gender, mortality tables for the application of future accumulated contributions under its annuity contracts. Negotiations since then between the parties at interest, in order to settle out of court, apparently have not been successful. Reportedly, EEOC wants unisex mortality applied to all accumulated contributions, past as well as future, and no periodic benefits are to be reduced. This, TIAA reportedly is not willing to do. Thus we now find Peters v. Wayne State University in the U.S. Court of Appeals and the matter appears headed for judicial conclusion after all. That's not likely to be achieved soon nor short of the U.S. Supreme Court.

- II. It's worth commenting that the challenges to sex distinctions are reaching beyond the pension field (to say nothing of well beyond the cutting edge of your auto rates). The most celebrated example of this is HR 100 or the Dingell Bill, named after Congressman John Dingell of Michigan.

First introduced on January 15, 1979, and then reintroduced in the fall of 1979, with what has grown to 83 cosponsors, the bill is titled "The Nondiscrimination in Insurance Act of 1979" and would prohibit

"discrimination in insurance on the basis of race, color, religion, sex, or national origin." Clearly the only prohibition that's controversial relates to sex distinctions.

The bill applies to all forms of insurance issued by all forms of insurers and to business contracted before the adoption of the law as well as that issued after its effective date. It is truly sweeping.

On March 25 of this year, a parallel bill, S. 2477, different only in its enforcement mechanism, was introduced in the Senate by Senator Hatfield. He was joined by four other Senators, including Senator Metzenbaum, who held a half-day hearing on April 30 for his Antitrust and Monopoly Subcommittee. (The Academy attempted, unsuccessfully, to be granted an opportunity to be heard.)

Back on the House side, HR 100 was discussed for two days in August, at hearings chaired by Congressman James Scheuer of New York. The Academy testified on August 28 and has been given a charge by Congressman Scheuer to bring additional information to an expected future hearing. In a moment I'll comment on our response to that charge.

III. Let's look at the various activities of our Committee this past year and where some matters stand as we look to the future.

You can correctly infer that we've been pretty interested in the TIAA-related pension developments and the HR 100 matter just touched on. This led to these three identifiable efforts:

- A. During the last half of 1979 we nearly finished development of an amicus brief which we intended to file in the federal appellate court at the first appropriate opportunity in the series of TIAA cases. Just when it appeared these cases would reach the appellate briefing stage in early 1980, the entire matter went on "hold" as TIAA announced its intention to go to unisex. Now that their out-of-court negotiated settlement apparently is not achievable, we are dusting off and finishing that brief for possible use in 1981.
- B. As a result of TIAA's announcement that it intended to use unisex, we felt a need to let our publics know that there were unique circumstances in the TIAA case, by virtue of its plan design and relation to teachers and their employers, and that the TIAA decision should not be casually extrapolated to all pension plans.

The result was a carefully worded statement released to the news media on April 2. Its lead paragraph stated our position: "Where there are demonstrable differences between the risks presented by males and females, the continued freedom for actuaries to differentiate by sex in the pricing of insurance and pension coverages is favored by the Risk Classification Committee of the American Academy of Actuaries."

We believe this was a successful news release. It was carried in many trade and some general newspapers.

- C. For the HR 100 hearings, we worked at some length to develop a written statement; and as the August hearings were set we also developed an oral presentation. The 30-page written statement, of course, will be included in the 1980 issue of the Academy's Journal due out next spring. These were truly Committee efforts, as all our work has been; but special mention should be made of Charlie Hewitt's leadership as these pieces went through many drafts.

Looking to the future on HR 100, a further word is in order, for it's descriptive of the Committee's efforts, and it's a further indication of the role of the Academy as representative of the profession.

Congressman Scheuer did challenge us at the hearing to do a rather complete analysis of the bill and its potential economic impact. That's not easily done. . . But Congress seems understandably reluctant to move on the bill unless it better understands its implications--that's good--and it is looking to the actuarial profession for answers on that--and that's very good. It's a sign that the Academy is doing its job of public interface and that the profession is growing in more than just numbers.

You should know that the Academy's Committee on Risk Classification eagerly, but somberly, wanted to accept the challenge, because it believed there is a clear need for actuarial input, that we are a logical source, and that we may well be the only practical source. The Academy's Executive Committee promptly gave unanimous support for doing so. And the Board supported it without dissent at its October 31 meeting. The Committee on Risk Classification knows it has its hands full, but with the new leadership and the membership it has--which I'll comment upon momentarily--they'll get the job done. They've organized into four task forces by product line (life, health, retirement plans, and property/casualty) and will be developing the response in this fashion:

1. The insurance marketplace will be described, including types of benefits, types of insurers, and the size of each type of operation. The politicians need an understanding of this; they have little. And it frames the rest of the report.
2. Two scenarios will be considered: first, that the bill applies to all insurance, whether contracted before or after the bill's effective date; and, secondly, that it applies only to business issued or renewed after the bill's effective date. Though it's drafted to have the sweeping effect on all existing, as well as new, contracts, it seems possible that retroactive reach could be forbidden.

3. The economic impact will be described in four categories: 1) administrative costs and problems; 2) individual insurance costs, both for the individual and extrapolated to the entire U.S.; 3) effects on the private insurance marketplace, including growth and availability of coverage and development of new risk classification factors; and 4) the financial impact on insurers--both insurance companies and other insurers.

As you can imagine, the Committee, being reasonably sane, doesn't take this task lightly. It will work hard to honor our profession and responsibly serve one of our very important publics, Congress. It intends to have its product completed fairly early in 1981.

- D. The Committee's principal efforts, during this past year, were devoted to the development of a Statement of Principles. Soon after the Committee was created, two years ago, it was recognized that such would be very useful--useful to the Committee as a guide and useful to our publics.

We went through untold drafts. (Dale Nelson observed at one meeting that we'd come full circle and a key part of then-draft 10 was the same as he'd advocated back in draft 2 but which we'd explicitly abandoned in the interim.) But all agreed it is not easy to articulate what has generally been merely assumed, and that articulation must be carefully crafted. The task of blending the language and practices from many different fields of actuarial application into one generally applicable statement of principles just can't be done hastily.

The most important redraft was that done after the document was exposed in October 1979 and before its June 1980 final adoption. Thirty-eight letters were received by the Committee, some representing the discussions and considerations of sizable actuarial staffs. They were very helpful in arriving at the final statement.

The statement has been distributed, not only to all Academy members, but also to all state insurance departments, to many of our Washington office's media contacts, and it has been included, on occasion, with testimony presented in Washington. It has also been added to the Syllabus for the examinations of both the Casualty Actuarial Society and the Society of Actuaries. Finally, it has served to provoke our membership into thinking about the subject, in itself a very important objective.

- E. The Committee monitored the development of S. 2474, the Metzenbaum Bill, introduced March 25, 1980. Entitled the "Insurance Competition Improvement Act," it would "amend the McCarran-Ferguson Act to limit the antitrust immunity of insurance companies." It has considerable implications for the actuarial profession. While we did not seek an opportunity to testify at Metzenbaum's quickly-called

May 29 hearing, if future hearings are held--as Senator Metzenbaum promises--the Committee will consider whether to seek an opportunity to be heard.

- F. Most of our focus, and certainly my remarks here, have been on the federal scene, whether legislative or judicial. That's not entirely fair. Developments abound on the state level as well. I saw one tabulation of some 49 pieces of risk classification legislation which were introduced in the various states in 1979. And while we can't effectively or efficiently deal at that level, we do interface with the NAIC. For example, in 1980, the Committee's Health Subcommittee, under Bill Halvorson's active leadership, communicated with the NAIC (C4) Technical Subcommittee on Life and Accident and Health. Bill's subcommittee gave comments on the NAIC (C1) task force's report on sex discrimination as related to health claim costs and on NAIC observations on the relationship of female and male disability costs.

- IV. This area of focus is the Academy and the health of the profession as seen through the risk classification effort.

The Committee was organized, over a year ago, into a parent committee of 12 members and five subcommittees, with 22 additional Academy members, organized along insurance and pension product lines. The Committee has been truly ecumenical. Of the 12 members on the parent committee, the current Year Book shows four Fellows of the Casualty Actuarial Society, seven Fellows of the Society of Actuaries and one Fellow of the Conference of Actuaries in Public Practice. Subcommittees have had the biases toward organizational affiliation which fit their product line.

The Casualty Actuarial Society has been well represented on the Committee by Charlie Hewitt, Dale Nelson, Sandy Squires and Mavis Walters. All four have done much work for the Committee. Sandy, of course, serves as the CAS' Risk Classification Committee chairman. Charlie has consented to serve as Vice Chairman of the Academy's Committee this coming year, supporting the Committee's new Chairman, Jay Ripps.

In a sense, this Committee is a reflection of what the Academy is, and should be. We've seen challenges made to our profession, expressed in different ways and impacting in different ways on each of our individual fields of endeavor. We've noted common threads to the challenges facing us, while noting some of our areas are coming unraveled earlier, or later, than others. We've honed our ways of expressing our principles and practices as we've pooled our knowledge and communicated with each other. We've learned from each other. The public sometimes seek input on well defined special fields and sometimes on all product lines at once. The public rarely, if ever, discern the possible compartments within our profession from which to seek advice. They do, with increasing regularity, seek our advice and almost always are willing to accept it when offered. All of this I view as pleasant, as responsible, as what we corporately, as the Academy, exist for.

For these efforts—and results—I'd like to give a brief, but very important, word of thanks to three groups.

One, the Academy staff, particularly General Counsel Bill Hager. They do a large amount of work for us Academy members, the committees and particularly the Committee on Risk Classification. To the extent we volunteers have done things, and if we've done them well, it's very much a credit to them.

Two, the Committee itself. We've been active, meeting almost monthly. And we've met only when homework was done outside of the meetings. To the Committee members, go my personal thanks and I'm sure those of the Academy members.

And it's those members who are the third group. Through their elected Board, we've been strongly supported. Through helpful comments on exposure drafts, we've been appreciably assisted. Through silent support and lack of destructive dissent, the members have said we and the Academy are on the right track. I believe that's so, and we're glad, through the risk classification efforts, to be a part of that movement.

## CONCURRENT SESSION PROFESSIONAL CONDUCT AND DISCIPLINE

**Moderator: DALE R. GUSTAFSON. Panelists: WILLIAM D. HAGER,  
CHARLES C. HEWITT**

MR. DALE R. GUSTAFSON: I'm Dale Gustafson, moderator and panelist. I'm a life actuary with the Northwestern Mutual in Milwaukee and I'm a past president of the American Academy of Actuaries. Charlie Hewitt seated on my left is one of your own. He is the president of Metropolitan Reinsurance. On his left is Bill Hager, the General Counsel of the American Academy of Actuaries. He has been on our staff for about a year and I swear I don't know how we ever got along without him. He's a marvel and you'll see some of that here.

Our panel is going to be divided up into five segments, not counting my little introduction, that are roughly equal in time. Mr. Hewitt will take the first segment and he'll talk about where we are--the we in this case encompasses all the North American actuarial bodies and to a certain extent will also include the Joint Board for Enrollemt of Actuaries--with regard to discipline; how the process works; how it coordinates among the organizations; what the normal interrelationship cooperation and parallelism is. Mr. Hager will then take the second segment and at that time, we will take a minute and distribute among you a document that Bill is going to review with you. The document which Bill has put together is a guide to the discipline process. While it's designed for the Academy our processes are similar enough that it is at least 99% useful for each of the other organizations as well. It's a nice piece of work. And then I will come back on in the role of a panelist with a little bit of emphasis on the kinds of issues and some of the "nitty gritty" specifics that are of current interest. Both Bill and Charlie will be talking about unprofessional conduct from a theoretical and generalized perspective. I will try to point up some specific examples and a little bit about the pace and scale of activity within the Academy. Fourth, we will have just a brief comment or two by us on the subject of whistle blowing--who should, when should and why should. Whistle blowing is kind of an uncomfortable thing in our culture. We don't like the idea of tattling, but that's a part of the disciplinary process and we need to take that out and look at it and talk about it. And then the fifth and final part, we will give you an opportunity to throw rocks at us, ask questions or bare your soul if you want help. With that, I'll turn it over to Mr. Hewitt for where we are.

MR. CHARLES C. HEWITT: Thank you, Gus. The hallmark of a profession is the standards that it sets for itself. Standards are really two types--one, how do you get into the profession and then two, how do you stay in the profession. All of you here have met whatever the requirements were in your professional organization for admission so I don't have to review those standards with you.

The second set of standards are those that permit you to continue to practice your profession. There are three ways basically that you keep in touch with your profession and maintain your ability to practice. First is by on-the-job experience; by actually practicing your profession. Second

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is by attending meetings like this one, exchanging ideas with your fellow actuaries and listening to other actuaries talk about subjects that are common to the profession. The third way of keeping current is the process of continuing education.

How do we judge whether or not you are capable of practicing your profession? Basically, there are two parts to the process. First, we set up certain guidelines for professional conduct and we let you know what those are. Second, we have a whole process of disciplinary procedures which will take place if someone is accused of, or indicated as, not having met the standards of the profession. As Gus indicated, I'd like to spend most of my time allotted to me today by talking about the discipline procedures rather than the professional conduct standards. However, let me refer briefly to the standards. Since none of us reads, I don't believe, the Guide to Professional Conduct every day, let me quote the first paragraph of the Academy Guides:

Professional conduct involves the actuary's own sense of integrity and his professional relationship with those to whom he renders services, with his employer, with other members of the profession, with the world at large. In all these relationships every member of the profession is concerned with his own behavior and, as the good name of the profession is the concern of all of its members, with the behavior of its colleagues.

The Guides themselves are rather brief and very broad. This is deliberate. Supplementing the Guides, the Academy and all the other actuarial bodies periodically publish Opinions or Interpretations of these Guides to Professional Conduct. I'd like to read from the Opinions to Professional Conduct, the two introductory paragraphs which explain the function that they perform.

The Board names a Committee on Guides to Professional Conduct to have continuous oversight of the Guides to Professional Conduct, and to recommend revision or repeal of specific guides and also new guides. The Committee also issues interpretive Opinions on the Guides. Under a new procedure, established by the Board of Directors in 1976, after preliminary approval by the Board, an Exposure Draft of any new or revised Guide or Opinion is circulated to the membership for comments, and a final version may then be published after approval by the Board.

The Committee answers inquiries about professional conduct, including both general inquiries and those relating to particular situations but not to a named actuary. (Complaints and questions involving named members should be directed to the Chairman of the Committee on Discipline or to the President rather than to this Committee.)

This latter point is one of the most common misconceptions about the way the process operates. Most people think that if they have a specific complaint about a specific member, they refer it to the Committee on Professional Conduct. This is just not so. The Committee on Professional Conduct handles interpretive situations of an academic nature. If you have a specific complaint against a member, you generally refer it either to the Chairman of the Committee on Discipline or in some cases to the President of the Academy.

Recently there was formed a Joint Committee on Discipline with representatives from all of the major North American bodies with the idea in mind that even though the discipline procedures are pretty much the same from one actuarial organization to another, there could be some improvement in the way they are administered. That committee is made up of one representative from each of the bodies, the American Academy of Actuaries, the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the Canadian Institute of Actuaries, and the Society of Actuaries. Also as Gus has mentioned, to the extent that time permits I will review briefly with you the procedures of the Joint Board for the Enrollment of Actuaries, which as you all know, is basically a governmental body.

The discipline procedures among the organizations that I've just named are remarkably similar and it's just not coincidence. They have been looking over one another's shoulders as each organization's procedures were written or revised. The basic function is performed by a committee, the Committee on Discipline. The one exception to that is the Casualty Actuarial Society which does not have a standing committee on discipline. If you read the bylaws of the Casualty Society, you'll find that the de facto Discipline Committee is the Board of Directors itself. The Board of Directors performs the function of the Discipline Committee in the Casualty Society.

The Discipline Committee can and often does appoint investigating committees. Investigating committees are fact-finding groups. They have no authority to recommend or to hold hearings, or anything else. They simply investigate, obtain the facts, and propose charges. This is somewhat akin to the function of a grand jury. The Discipline Committee then takes over and either meets as a whole or appoints Discipline Boards which will hold hearings. Hearings are reasonably formal. Proper notice must be given to the parties involved. Parties involved may appear with or without counsel, and may examine witnesses or cross-examine witnesses who are unfavorable. Testimony is given on your word of honor or parol, not under oath. Transcripts are made of the testimony.

The decision with respect to disciplinary action is made initially by the Committee on Discipline. They can generally do two things on their own. They can warn or admonish. If they feel that the actions under discussion are sufficiently severe, they can go to the Board of Directors and recommend either a reprimand, suspension or expulsion. There is then an opportunity for the hearing process to take over again; the individual accused may go to the Board and have a hearing on the matter. If he is not satisfied with the Board decision, there is even another step to the process. He may appeal to the full membership of the organization in question.

Important elements in this process are confidentiality. In order to protect the good name of the individual in question all of the proceedings are held in confidence until he is found to have committed the violation. However, once a decision is taken to either suspend or expel the individual then all of the members of the professional body must be notified and of course the Board also has the option of notifying appropriate newspapers or journals about the suspension or expulsion.

A brief word about the Joint Board of Actuaries. The flavor of what they do is quite similar to what I've talked about and what you will hear from Bill Hager later on. However, the Joint Board is a governmental organization. Most often the complaints will therefore be initiated by someone in

the government: from the Treasury Department, the Pension Benefit Guarantee Corporation, or the Labor Department. The complaint goes to the Executive Director of the Board who is a gentlemen named Les Shapiro. He has the authority to negotiate with the person complained against. He may issue a reprimand, or he may recommend that the individual be suspended, or he may recommend that his enrollment be terminated. If he reaches his decision and the individual in question does not accept it, then there is a hearing held before an Administrative Law Judge within the Federal Government. This Administrative Law Judge will have stenographic testimony taken, the witnesses will be under oath and rules of evidence will not be controlling in this situation. It is not a full legal hearing. If the individual does not go along with the decision of the Administrative Law Judge then he has a final appeal to the Joint Board itself. If the Joint Board finds the individual has in fact committed the "sins" that were alleged, it will notify all of the appropriate governmental authorities with respect to the suspension or termination of the enrollment.

Recently, the Joint Committee on Discipline that I referred to has had several meetings. We have found that we do indeed have a great commonality of practices in this area. It has been decided, that since today many of us are members of more than one society, that matters pertaining to discipline should be handled with as much openness and communication among the various bodies as is possible while still maintaining the necessary confidentiality. It is even being suggested that we try, if it is appropriate, to hold joint investigations rather than to make an individual go through one investigation for the Academy and a second one for the Society of Actuaries or the CAS. And it's even possible that, if the individual agrees, joint hearings may be held so that the parties involved do not have to go through the same procedure twice. Joint hearings, lest you be concerned, would not mean that there has to be one decision. Each individual organization is its own boss. A joint hearing simply would then break up into the various elements and each would make its own decision on the case.

Thank you.

MR. WILLIAM D. HAGER\* First I want to thank the Casualty Actuarial Society for the invitation to appear here today. I think it's critical in all professions that there be an infusion of ideas from several different directions, particularly from persons on the outside. I appreciate this opportunity and I think it's a good precedent to continue in the future.

The topic of this panel, as you know, relates to disciplinary activity and enforcement. The topic is certainly worth some time and it is valuable for each of us as professionals to become cognizant of it. In that light I prepared the disciplinary handbook that has been handed out to you. When I first joined the Academy it struck me that we needed to draw together into one document a summary of all the principles of law, administrative law, due process, that apply to the disciplinary proceedings; then we have everyone working from the same framework. This is particularly necessary because you've got a complex body of law and you've got a changing cast of characters, as the membership on the Committee on Discipline and the various subcommittees changes.

\*Mr. Hager, not a member of the Academy, is the Academy's General Counsel in Washington, D.C.

The first question ought to be, why are disciplinary procedures required in the first place? The answer is very, very simple. Membership in the Academy, as well as the other organizations, has a commercial advantage. It is in many instances an entry to employment. As a result, expelling or disciplining someone without applying appropriate procedures subjects the organization to both civil and criminal liability, subjects the participants to liability, and also may place the organization's tax-exempt status in jeopardy. That's the legal reason for applying the procedures.

The question then is appropriate steps in the process for discipline. Charlie has mentioned a number, let me touch on some others. Sources of applicable law are: (1) the U.S. constitution, due process clause, (2) common law, (3) principles of administrative law and (4) the bylaws of the organization.

I would like to turn now to the guide and highlight some areas that are worth some thought. The first would be the act of filing a complaint. That's the initial step. Who's eligible? Anybody is eligible. That includes the Committee on Discipline itself. There is no requirement that the Committee stand idly by while it observes something that it thinks is inappropriate. Non-actuaries can file a complaint; so can public agencies. It seems to me organizations ought to be receptive to complaints from anyone and not to define a complaint out of existence merely because it came from a non-actuary.

The next topic that I would like to dwell on is the area of actionable activities. The question there is, what can an actuary be disciplined for? Fundamentally in law there are two areas for which a professional can be disciplined. The first is for unprofessional conduct. What are we talking about? We are talking about unprofessional conduct such as fraud, dishonesty, breach of trust. We are really talking about character performance as opposed to work product. An example is conviction of a criminal offense under the laws of the United States which evidence fraud, dishonesty or breach of trust. Another example is knowingly filing false or altered documents, affidavits, financial statements or other papers. A third example is knowingly making false or misleading representations in writing or orally. This extends to disreputable conduct or unprofessional demeanor. An example would be maliciously injuring a professional reputation of another actuary. These are character types of behavior against which professional action could be brought.

The other area relates to the professional's work product. Simply put, this involves a work product that evidences incompetency or evidences erroneous selection of methodologies and assumptions. Criteria against which this performance is measured are set forth in the Academy's purposes, the Academy's guides, opinions, recommendations and interpretations and generally accepted actuarial principles. Before you discipline an individual you simply have to have criteria against which to measure his performance and behavior. It has to be professionally accepted criteria. This is where care has to be applied. We are talking about specific criteria--criteria of professional standards and we are talking about alleged behavior which violated those criteria. Again, it isn't that we liked or disliked what the person did, we are alleging that he violated specific, articulative standards.

In the Academy procedure, a complaint is filed. The Chairman of the Committee on Discipline refers the matter to an investigating subcommittee. What are its functions? Its functions are to gather all the information and evaluate the question of whether the case ought to proceed to a hearing or ought to be terminated. In that process the subcommittee is free to use any number of tools. General provisions of due process do not apply at the investigative stage. The subcommittee is free to talk to people and evaluate available evidence. A report to the Committee is issued and let's assume that the Committee elects to go to hearing on the matter. Then you get into the provisions of due process, which we'll touch on very briefly later.

Another area that I would like to emphasize begins on page 15 of the outline. Page 15 is entitled "Miscellaneous Hearing Considerations - Part A, Complaints Based on Fear of Competition." As the actuarial profession moves into a very intense era of competition -- competition that will come with open rating, competition that will come with increased consultant activity -- it's inevitable that competition is going to draw to the forefront actuarial complaints about professional competence. The care that we have to use is to recognize that antitrust law prohibits the use of the disciplinary process to inhibit competition. It becomes critical then that all complaints be scrutinized. It becomes critical that the disciplinary process not be used to inhibit competition and, as a result, again when we evaluate professional performance we must assure ourselves that we are evaluating it against a standard criterion.

Another area that is often overlooked in the disciplinary activity is voluntary resolutions. There is no requirement of a hearing. That is, the parties, if mutually agreeable, can come to a determination that is basically a negotiated plea and elect the level of discipline they choose to enter, waive formal hearings, and close the case. That becomes appropriate after notice of hearing has been issued.

Again simply for your cognizance, page 16 relates to evidence and procedure at hearings. The formal rules of evidence used in the traditional judiciary, of course, do not apply. A relaxed set of rules applies. Hearsay evidence by way of example is freely admitted. A lot of defense attorneys have a lot of problems when they get into a hearing of this nature because in the open court room, hearsay evidence is classically and correctly objected to. The administrative hearings are more wide open, and any evidence that relates to the question is generally admissible.

We've summarized the due process requirements that relate to a hearing. Let's assume we've investigated a complaint. We've determined that the respondent probably has violated provisions, and we are going to test that question in a hearing. We issue a notice of hearing. What kinds of requirements relate to the organization initiating the hearing and to the respondent? The rights of the respondent are these: (1) the right to a notice of hearing, (2) the opportunity to present evidence in his own defense, (3) the opportunity to rebut adverse evidence, (4) the right to appear with counsel or without counsel, (5) the right to have the decision that is entered based only on the evidence introduced in the record, and (6) the right to have a record of the hearing itself.

The last item I'll cover is communicating with the accused, the respondent. Legally the respondent does not have a right to hear about the activity until the notice of hearing is issued. From a practical standpoint because

of the limited size of the Academy, people generally become apprised of the situation simply because people pass information along. I recommend a letter to the respondent simply suggesting to him that there is an evaluation of his performance, suggesting not that he's required to participate but that if he would elect to participate it would certainly be appreciated. His decision not to participate at the investigating level does not jeopardize his subsequent right to a full hearing.

MR. GUSTAFSON: My remarks here will be somewhat fragmented because I just want to touch on a few real life examples to try to make the issues a little more real. First of all, if you want to call somebody a name; if you want to tell him what you think of him and it's not positive, go right ahead. Tell him orally or tell him in writing, especially if you want to convey constructive criticism, but don't give any copies to anybody and don't do it in the presence of witnesses. The point is you haven't damaged the individual professionally if he's the only one who hears what you think.

We have an individual in a major city who has not been subject to discipline but he has been a problem for years. He loses his temper frequently and scrawls terrible obscenities across letters. Then he sends copies to everybody he can think of. We've tried to talk to him a time or two. But that's another example of what shouldn't be done.

I remember an individual when I first became a member of the Society of Actuaries. I didn't think much about it at the time and the individual finally straightened out. But he'd come to meetings, Society meetings and business meetings, dressed like a tramp. He was not clean in his personal habits and he wore clothes that he picked up out of the trash. I thought about that several times more recently. That was demeaning to the profession for an individual to do that and I suspect that if there were an extreme case of that today, we might want to deal with it through the Discipline Committee.

Our concern about professional conduct is growing very rapidly in the profession. The reason for this is the advent of what everybody erroneously refers to as certification. The proper phrase is statement of actuarial opinion. Enrolled actuaries are required to perform formally in preparing reports with regard to pension plans. Life insurance actuaries are required to append a formal professional statement of opinion to the financial statement of the company with which they are associated. Casualty Actuaries are on the brink of entering a statement of opinion on a loss reserves. There is upcoming within a year probably a procedure that will call for life actuaries to express an opinion about their company's dividend process. All of those are fraught with potentials for discipline.

Obviously, because of the secrecy, we can't tell you very much about the level of discipline activity but I want to tell you enough to indicate to you that there is a level of activity. I think that in the last three years or so the Academy Committee has dealt with 34 situations. That involved more than 34 people. None of the situations produced public actions, such as suspension or expulsion. Most of them were resolved. Either the case was closed and the individual was told there was no action taken or more commonly a letter of concern was sent saying: "here's what went on and this is what we found out and here's what we think - maybe you ought to think a little harder about this when you do it the next time." These letters very carefully avoid any of the key buzz words, such as warn,

admonish or reprimand. As you well know, there have been for the Academy and the Society of Actuaries two celebrated cases in connection with the Equity Funding affair. Two actuaries were involved in that. They were convicted of felonies, served time in the federal prison and were both expelled from both the Society and the Academy.

One of the areas of particular concern at the moment between the specialty groups is, to put it into provocative terms, casualty actuaries are worried about life actuaries working in areas outside of their competence. That is an area where there have been some issues brought to the Discipline Committee. There are two dimensions to it. Failure of an individual to have the letters FCAS after his name does not prima facie identify him as incompetent to perform Casualty work, just as failure to have FSA after the individual's name doesn't define him as incompetent to perform in the life insurance area. There are many members of both organizations who would like to have it that simple, but it's not that simple. It has to go beyond that. It is true that with the FCAS or FSA designation there is a certain presumption of competence. That presumption is lacking without such designation. My boss is great at aphorisms and one of his that applies here is, "Nothing should ever be done for the first time." In a way that's what our guides say about new things. For example, there aren't any existing experts in legal insurance therefore there never shall be. And yet, somebody has to do it. There is real concern on this issue.

Now, I'll go back and we'll talk a couple minutes about whistle blowing.

The success of the actuarial profession in becoming a publicly recognized and trusted and accepted profession partly depends upon the development of a credible discipline procedure. Thus, we need to have a process that is in existence and is ongoing, and through which we can show some evidence of activity. We don't have to have expulsions and suspensions to gain sufficient credibility. While protecting the anonymity of individuals we can credibly go to regulators or sceptical legislators and say we are enforcing the guides to professional conduct. It's tempting to say that, therefore in order to help the profession, you ought to look around for cases and report them. Well, that's tough; our culture is such that we have negative feelings towards whistle blowing. However, it is true that if any of you are aware of what in your mind is clearly unprofessional conduct, you are not doing the profession a service by not wanting to be the one to blow the whistle.

One final point. Bill said something in his remarks that might have been misunderstood. When he was talking about a reconciliation between the two parties, the two parties he was referring to were not the complainant and the complaine. The two parties are the Academy Discipline Committee and the person against whom the complaint is lodged. The complainant does not get any feedback or opportunity to learn what is going on routinely in this process because of our concepts of privacy and confidentiality.

Do either of you want to add to that?

MR. HAGER: It seems to me that there is only one way that any profession will retain its ability of self-regulation and that is to illustrate to all the other parties that would prefer to regulate that body that (1) they have standards of performance, standards of conduct, (2) they have a viable, assertive, aggressive mechanism to enforce those standards of performance.

It strikes me that it is really that simple. Now, obviously, carrying out those two elements is where the complexities enter. It strikes me again that every actuary has an obligation to report fellow actuaries that are engaged in fraudulent activities, activities that evidence professional dishonesty, activities that evidence breach of trust. Failure to report and failure to take action, in my mind, is a clear recipe for the government to take over the regulation of the profession.

MR. HEWITT: The thought occurs to me that if one were to return to the 19th century and walk into a Gunsmoke-type town or one like we saw in the movie "High Noon," and ask how many people in that town had ever been hanged for murder, and the answer was nobody; then the person asking the question would either conclude that there had never been any murders committed in that town, or that the citizens of that town had chosen to look the other way and ignore them, or that the people who were responsible for enforcing the law had turned a deaf ear to the complaints of the citizens. I think the same thing applies to our profession. If somebody asks whether anybody in our profession has ever been found guilty of unprofessional conduct, and we say no, we have to say that nobody ever committed unprofessional conduct or the citizens in our profession did look the other way or the authorities chose not to heed the citizens.

MR. GUSTAFSON: Thank you. Who's got a burning comment or question that they want to get in? Do I see a hand? Do I see two? Do I see three? Here's one. Go back to the microphone and identify yourself.

MR. MICHAEL WALTERS: Bill, when you gave us your advice on seeking out some examples of misconduct and exhorted us to do something about cases of misconduct, you didn't refer to the already existing Academy guide or opinion which says in effect that if you are aware of misconduct and do not report it you are condoning it, and therefore guilty of misconduct yourself (sort of an honor code). Is that because the Academy is thinking of changing that?

MR. HAGER: The answer is we just overlooked it.

MR. GUSTAFSON: We had some fine and deep discussion on that sort of business in connection with a similar panel discussion at the Society of Actuaries meeting several years ago. It's really a tough question. Suppose a friend comes to me and says; "I've got a problem. I don't know whether I am involved in unprofessional conduct or not and I need your help and advice." Technically I've got to say, "you'd better not talk to me because if in my mind I think you are engaged in unprofessional conduct, I will become a party to it unless I report you." And that's a tough dilemma. You are going to call a lot on that bond of friendship because you are going to ask the individual to become a co-conspirator with you. That's tough because you often like to seek advice.

Thank you; that is all we have time for.

## CONCURRENT SESSION DISCOUNTING LOSS RESERVES

*Moderator: JAMES R. BERQUIST. Panelists: MARTIN BONDY,  
JAMES A. FABER*

MR. JAMES R. BERQUIST: The topic for this session is the issue of discounting loss reserves for property and casualty companies. The panelists are Marty Bondy, Jim Faber and myself. To start off the discussion, we will present the statement to the AICPA Insurance Company's Committee from the American Academy's Task Force on the AICPA Audit Guide. Each of the panelists is a member of that Task Force.

Reserves for losses and loss adjustment expenses generally comprise the largest single liability in a property/liability insurance company financial statement. Therefore, the extent to which a property/liability company's financial statement properly reflects the true financial condition of the company at a given point is dependent on the accuracy of these reserves. Further, the fair statement of a company's earnings in a given accounting period is also dependent on the accuracy and consistency of those reserves at the beginning and ending of the accounting period.

Where losses are settled within a year of the date of the accident, the time value of money is a relatively minor factor. In contrast, where losses are settled over an extended period of time, the money held for reserves is earning interest and the time value of money becomes a significant consideration.

This statement explores the concept of recognizing the time value of money in establishing and accounting for loss and loss expense reserves.

### Categories of Claims

For purposes of discussion, claims may be categorized into four general types:

#### 1. Short Term Claims

On certain lines of business such as fire, windstorm and auto physical damage, loss payments are normally made within a year or at most within two years. General inflation may push these costs up, and some investment income is earned while reserves are held. However, the effect of these factors tends to be modest in comparison with the other variables involved in reaching agreed settlement costs.

#### 2. Long Term Uncertain Amount Claims

Certain general liability claims (including claims associated with medical malpractice and products liability) and auto liability claims may take several years to settle, and during such period of time, the impact of inflation and investment earnings on reserves can be quite sizable. The determination of the settlement value is uncertain and varies widely.

### 3. Long Term Reasonably Certain Amount Claims

Claims involving periodic payments projected to extend over many years, though not fixed as to amount or timing, can be reasonably projected using appropriate mortality tables. Examples of this type of claim are payments for continuing medical treatment over many years such as occur under workers' compensation medical coverage, certain automobile coverage, high limit accident and health coverage, or unlimited medical payments coverage.

Such claims are usually large and future payments increase or decrease directly with inflation. The investment earnings associated with these types of claims generally will be sizable because of the long period of time reserves are held.

### 4. Long Term Claims With Fixed Payments

Adjudications of some workers' compensation claims call for fixed amounts being paid periodically for an extended period of time. These can be quite accurately projected using mortality tables where lifetime payments are involved. As a variation, benefits are escalated for inflation in some jurisdictions requiring the introduction of an escalation or inflation factor. Again, the investment earnings on reserves generally will be sizable due to their long duration.

Jim Faber will next present the case for discounting of loss reserves. Martin Bondy will then present the arguments for not discounting reserves.

MR. JAMES A. FABER: The following principles are generally accepted:

1. It is appropriate to recognize the time value of money.
2. Workable assumptions with regard to cash flow (claims payment) patterns and appropriate related interest rates can be made.
3. Less certain estimates require greater margins of conservatism.

In practice, claims tend to be placed into two groups, i.e., those for which settlement patterns are estimable on an individual claim basis and those for which settlement patterns are better estimated in some aggregate manner, e.g., by coverage, by accident or reported year.

For the most part, claims in categories (3) and (4) described earlier fall into the first group. One is reasonably able to determine for an individual claim the existence of liability and the schedule of periodic payments although for unlimited medical claims the impact of variables can be severe. To reflect the time value of money, a discount factor can be applied to each periodic payment scheduled or estimated.

Claims in categories (1) and (2) described by Jim Berquist basically fall into the second group. Actuaries tend to project the ultimate settlement value of a body of these claims by estimating aggregate loss payment patterns using historical data. While the value and payment date of

individual claims are not projected, estimated total loss payments by calendar periods are obtainable. The time value of money can be reflected by applying the appropriate discount factor to the projected payments for each calendar period, although as observed previously, the results obtained for type (1) claims may not justify the exercise.

#### Rate of Interest

It is generally agreed that any rate of interest applied to loss reserves should be somewhat conservative and reasonably stable. In the absence of conditions to the contrary (for example, a specific investment program affecting a particular block of claims) the insurance company's average rate of return on investments may serve as a guide to an appropriate rate to be applied. Specifically, this would mean that rates appropriately would vary among companies.

Another approach could be the use of a risk-free rate of discount, since some companies choose a more or less risk-free investment policy. The discount rate could be described as that rate of return on U.S. Treasury Bonds or Notes.

MR. MARTIN BONDY:— If the principal purpose of company statements and reports is to provide a method of determining the value of that company or a means to evaluate the capability of its management, then the discounting of loss reserves may serve this purpose poorly. Loss reserves are a substantive part of the liabilities of property and casualty companies, in most cases being larger than the net worth of companies and in many cases being larger than the earned premiums. The effect of selecting varying interest rates from period to period which would be necessitated by changing economic conditions from time to time, might be so powerful as to cause great changes in perceived net worth from one year to the next, or even from one day to the next. Furthermore, the effects of changes in the interest rate would be such an overwhelming force in the determination of operating results as to diminish the importance of the remaining factors (such as underwriting and even investment income) and, in some cases, to render them trivial. Far from providing a consistent base for measuring a company's results from year to year or improving the comparability of results from company to company, discounting would be destructive to these purposes.

In addition, the testing of loss reserve adequacy, one of the more important measures of management capability, would be much more difficult. The most popular tests of loss reserves are of the type which compare reserves as of a given date with the payments which history shows have been required to pay those claims. It is clear that if reserves were discounted, they would automatically be mismatched against payments.

While it is possible to adjust for this situation, no one will claim that the discounting of loss reserves will simplify or clarify the loss reserve evaluation problem faced by the investor or regulator.

Thus, the main purpose of periodic company reports - the furnishing of information to interested parties such as shareholders (actual and potential), regulators and the public in general would be subverted by the introduction of this concept.

As important as these considerations are, there are several more practical reasons why discounting is a dangerous idea. Determination of proper loss

reserves is a difficult task. One need only to look at recent history to know how true this is. Over the recent past, many companies and not just small, unsophisticated ones, have had to "strengthen" these reserves by material amounts. It was only by dint of investment income that these companies remained unimpaired. If they had, at their starting positions, been discounting their loss reserves, very likely many of these would now be in the hands of liquidators. After all, the fact that a company discounts does not improve its capacity to estimate future payments. And this is to say nothing of the difficulty in discounting in the first place. How does one estimate the timing of loss payments for classes whose payments are not periodic but spasmodic--and this describes most casualty classes.

When one adds to the difficulty of reserving the additional problems inherent in discounting (both rate and time) it is clear that any operating or net worth evaluations which use discounted reserves are, to say the least, of questionable reliability. In the same vein, the comparison of several companies by an investor for the purpose of making a choice among them would be made much more difficult.

There are other considerations worthy of mention. The use of discounted loss reserves would make the difficult problem inherent in the making of property and casualty rates much more so. This, in turn, could be damaging and introduce an unacceptable degree of instability into the property and casualty insurance business.

There would also be tax considerations involved in the transition to discounted reserves if this practice were adopted for statutory accounting. Dick Snader of U.S.F. & G. has done some preliminary work, which he may want to comment on, that indicates that the tax impact of discounting could be substantial.

Incidentally, one might ask, if it is desirable to anticipate investment income on loss reserves, why is it not equally so to anticipate investment income on unearned premium reserves. Surely one cannot agree that such income is less certain--it is more so.

I would like to add one final comment. In my opinion, we cannot, as actuaries, divorce ourselves from the real world consequences of our recommendations. For too long, actuaries were not important members of management, precisely because their viewpoint was too narrow or too puristic. We insisted on clinging to theories which did not work in practice, or so we were accused. I think that is a danger we have to avoid. I think practical consequences of the theory of discounting are more than we are going to be able to stomach as time goes by! Thank you.

MR. BERQUIST: Now we will open the discussion for questions and comments from the audience.

MR. RICHARD H. SNADER: Marty commented on work that I did when I was on the Task Force, regarding the possible income tax implications. What I had done was taken data from our company and taken the position: "Suppose the IRS did tax us on the basis of discounted loss reserves...what would it mean?" And assuming that calendar year incurred losses are the basis for taxation, I simply took the opening and closing reserves for a typical year or two and determined a hypothetical pay-out pattern and discounted the cash outflow at various arbitrary, but constant rates of interest. The results were,

I thought, a little surprising because the amount of additional tax that would occur in these calendar years was more than I had expected--millions of dollars for a company our size. There would be additional income tax payable on an ongoing basis--and if you took the situation where you had a change in accounting method imposed upon you, that was quite a significant amount of additional taxable income. Tens of millions.

MR. FABER: I agree that there would be a large one-time effect assuming discounted reserves became the basis for taxation. Yes. Maybe the tax effect of the transition would be spread over ten years. Really, what we are talking about is a timing difference with a relatively small ongoing effect.

MR. SNADER: On the income tax issue, Jim, you mentioned all we are talking about is a timing difference, and I'm not really sure that that is so. I can imagine one scenario where the IRS takes the position that discounted loss reserves should be the basis for taxable income and they treat it as a change in accounting method. If that were to occur, then prior reserves could not be restated and that would be a permanent loss of income...a permanent additional tax and not just a timing difference.

MR. FRANK HARWAYNE: From a ratemaking standpoint, discounting would be a grievous error. In reality, historical errors in estimating reserves have been much greater than the discount amount. This is particularly true for a line of business such as workers' compensation where one must contend with such areas of uncertainty as mortality and remarriage rates.

When considering discounting you must also consider the deviations and fluctuations inherent in interest rates. Interest rates are not predictable, even for so-called risk-free investments.

MR. ROBERT MICCOLIS: From a company management point of view, I can see both advantages and disadvantages to discounting loss reserves. The previous comments concerning the possible tax implications point out the most serious disadvantages. However, for a presentation of financial worth, the value of a company can be substantially underestimated without discounting.

MR. IAN RUSHTON:\* I find it interesting that this subject comes up at a time when there is a very high rate of interest, and that really puts pressure on us to do the discounting. But I find it equally surprising that the paper has no reference to the word "inflation" and I would suggest that high rates of interest and high rates of inflation in the community tend to move together. They are not linearly linked or anything like that, but they do move in the same sort of direction. I have worked in a different environment where inflation has been much heavier than here, varying in the last ten (10) years between a low of 8% for about two months and up to 20 odd percent; and in that period, the problem in property and casualty insurance has been the impact of inflation in the community. I believe here it has been more the impact of social inflation, but once you get high inflation in the community, that tends to take over. I would suggest that the approach of the panel to separate the rate of interest and the inflation in the claims reserve is not quite the right approach. What they are doing, in effect, if they discount loss reserves, is assessing reserves on a net

\*Mr. Ian Rushton, not a member of the American Academy, is a Fellow of the Institute of Actuaries.

rate, either plus or minus, of the inflation and the rate of interest. I would suggest even further, that that factor is a less variable factor than the rate of inflation we have used so far and which we have allowed to affect our results; and that, therefore, discounting would produce a more stable result in the market.

The second point I would like to comment on is that Martin Bondy's views were very much to me not from an actuarial standpoint but from a managerial standpoint. I agree with him from a managerial point of view. I have some difficulty agreeing with him from an actuarial point of view. However, if any change in the use of discounting loss reserves was to come forward and be adopted, I think that before we were to do that, it would be desirable to have papers produced showing what the actual impact would be on a number of companies. I think we need to see what the impact is over the whole market. I would suggest, however, if we are in an inflationary period, (and that goes with the high interest rates), then we have our premiums going up with inflation and we have our reserves going up with inflation. If we have big margins built into those reserves, we are tucking away profit into reserves.

Now, you suggested that your management wouldn't like it if you were causing more taxes to be paid. But if I was a stockholder, I would be very pleased to see your company showing bigger profits; and the stock market tends to see bigger profits even if tax has to be paid on them. I would suggest that if you doubled your loss reserves and showed no profit, there would be quite a big reaction! So, what I am really suggesting is that there is more than one approach on the managerial point of view, and the stock market tends to prefer higher profits, however they are produced.

MR. BERQUIST: I would respond to you on one point that we did not clarify the environment in which we were approaching this problem. The initial phases of the development of the AICPA Audit Guide did agree on the definition of an "ultimate loss."

That definition was based on the principle that the reserve that you set today should be for the amount of money that you think you will be paying at the time you expect to settle the claim. Therefore, it was implicit in the work of our Task Force that discounting was to be considered in light of loss reserves that have already addressed the inflation question.

MR. BONDY: I have two reactions to what Mr. Rushton has said. Since what was said was basically critical of my approach, you can imagine the reaction is not favorable. The first thing said about the managerial approach, as opposed to the actuarial approach, to me is anathema. I think if the actuary is regarded as a single-minded, narrow-gauged technician, his value to the organization is severely limited.

With regard to the last point, in my experience, which probably isn't as great as Mr. Rushton's, the amount that a potential stockholder is willing to pay is not based on this year's profit. It is based upon the anticipated or perceived string of profits over a number of years and it is based upon what the stockholder can expect to receive--net after taxes.

MR. FABER: A primary consideration, as far as fair presentation of a financial statement, is the attraction of capital into the industry. In that regard, the insurance company is competing with other companies in

other industries as to what the investor perceives to be the most attractive place to put his capital. Particularly in times of high inflation, where loss reserves are to be on an ultimate settlement basis and therefore are very substantial, we are presenting a financial statement that is not as strong as it should look to the investor. So what we are simply saying is if we present-value those reserves, we now have a better picture of what the true worth of that company is today to attract capital from a potential investor today.

MR. C. K. KHURY: I can't help but think in terms of people who own stamps or coins and they want to sell them. You look in the stamp book and it tells you what the thing is worth. Then you go and you want to sell it and you find the world is quite different. And I have the same feeling about what we are talking about here. We seem to be concerned that the statement that we publish is an accurate assessment of a company's financial condition. OK. I think we agree on that. It also seems to me that the acid test for this is when one company is being sold (changing hands), when the buyer is trying to assess what the thing is worth, does he discount loss reserves? And why? Those actuaries who are consultants in the room will answer the first part of the question without any difficulty--the answer is obviously "yes."

MR. BONDY: If I may. Clearly, the answer is "Yes" but equally clear, the answer is that he does so making his own assumptions about a proper discount rate. He does not take different companies' varying assumptions over time.

MR. KHURY: Well, if when things are changing hands like in stamps and coins, you recognize the time value of money, I think it is ludicrous to sit here and suggest we can forget about it because it's tough for whatever number of reasons may be. It just offends my sense of balance and I recognize the limitations in the state of the art, but imagine if life actuaries had attempted to think like we are doing now.

MR. ROBERT LOWE: I think we have to be very careful when we bring up these reasons and justifications to make sure that they are well grounded. It looks more professional to begin with. I think that the argument that it would foul up or worsen the presentation of financial results, in that we can't really predict rates of interest, belies the experience of a life insurance industry which has been doing it for a great number of years. We may argue as to what success, but they have been doing it, and they seem to be happy with it. We don't see life actuaries beating each other's brains out over the issue of whether they should discount or not. In my opinion, I think discounting is coming and we should really develop the ways in which we can best handle it. I have some problems with it that I would like to mention, and I think that these are going to be the issues that we will have to face when we get the disagreements over whether it should be done away from us. But just on the side, I believe I agree with our colleague that this is going to soften the cycles of the insurance industry. We call them underwriting cycles. I have always been of the opinion that as much of an underwriting cycle, this is at least as much of a loss reserving cycle. We have money in loss reserves and we permit these to either deteriorate or we find that we must strengthen them. The discounting can't help but soften that cycle. Now, clearly, we have to come up with the right price for the product. We have to be able to estimate what our costs are, and this must of necessity involve some form of indexing--counteracted, of course, by some form of discounting.

The other point is that there is no question that pursuing this is going to bring the discounting issue into rate-making. I think there are states now which mandate that this must be considered and they use different words to describe how it's to be considered, but at least it must be reflected.

MR. BERQUIST: Bob, you covered the area of three separate committees and we are talking about interaction with the AICPA Audit Committee. However, I would tell you that at the Board Meeting yesterday, the Reserve Committee did recommend to the Board (and the Board did agree) that another committee, namely the Theory of Risk Committee, ought to be looking at the other side of this whole spectrum. And the Reserve Committee is going to work with them on an interactive basis. That is, the question of what type of contingencies and what types of other things are needed on the plus side if, indeed, you must consider reserve discounting at all.

MR. BONDY: Bob, we are running out of time, and I know you have given a lot of time to this, but I must confess I have some problem with your logic. What you seem to say, to me, anyway, is "We have been doing a lousy job reserving for losses. What we think are easy cases to reserve turn out not to be easy cases to reserve--and we have just been doing a poor job." I think everybody will agree, that as an industry, we have not been doing a fabulous job. Yet, you turn around and say, so we should take these loss reserves, of which we are extremely unsure or should be, and discount them. I just can't make those two statements go together.

MR. FABER: I think there are a couple of things in that regard. One, I would say, in talking about the rate of discounting, this isn't a rate that has to be exact. I think it is a representative rate that we talk about, and it should be something that probably is conservative. It's an average rate of return for a company, or maybe it's the risk-free rate of return in the industry. I don't think that's an area to necessarily get hung-up on. In terms of present valuing a reserve, theoretically, that reserve is no less adequate than is the ultimate settlement cost reserve because one has to project what that cost will be before present valuing it.

MR. BONDY: Two things. In the first place, you speak of the risk-free rate of return as though that were somewhat invariable. But the fact of the matter is that risk-free rate of return changes from evaluation to evaluation. I just simply ask you to consider what the operating statement would look like after a year in which the ending rate of return was two (2) points different from that of the beginning rate of return. Nothing else that happened that year would make any difference.

MR. FABER: Perhaps it should be an average risk-free rate of return.

MS. RUTH SALZMANN: I'm Ruth Salzmänn from Sentry Insurance and I want to say that I am not in favor of discounting loss reserves, but I am in favor of recognizing the time value of money. Just as a dog is an animal, it doesn't mean that all animals are dogs. And similarly, discounting loss reserves is a way of recognizing the time value of money, but discounting loss reserves is not the only way of recognizing the time value of money. I think many of you are familiar with the alternative proposal that I have suggested, at least in my Presidential Address last year. Instead of discounting loss reserves, it would be appropriate to set up an asset which accrues the investment income that will take place because of the deferment of the payment of the liability. And with that note I will close.

MR. BERQUIST: Thank you Ruth. I think with that note it may be appropriate for us to close. I would like to, in closing, thank our panelists and our audience participants.

**STATEMENTS OF THE ACADEMY  
RELEASED IN 1980  
INTRODUCTION**

Each year's Journal includes the full text of the Statements released by the Academy in that year. Although most of the Statements are self-explanatory, knowledge of the circumstances giving rise to the Statement helps provide perspective. The following Summary of Statements section provides background information, including any cross-references to previous statements. For purposes of cross-referencing and indexing, Statements have been assigned numbers by calendar year and by order of release in that year, e.g., 1980-1 was the first statement released during 1980. The summary also gives the page number on which the full text begins.

Statements made before 1977 were not compiled, but copies of such statements may be requested from the Executive Office of the Academy, Suite 515, 1835 K Street, N.W., Washington, D. C. 20006.

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Statements of the Academy are not expressions of official positions embraced by the membership as a whole. Rather, they are intended as relevant responses to situations which appear to require a professional statement on actuarial matters.

**SUMMARY OF 1980 STATEMENTS**

Index Code: 1980-1

To: American Institute of Certified Public Accountants

Date: January 8, 1980

Length: 10 pages beginning on page 54

Concerning: Reinsurance accounting and auditing

Background: This letter was submitted to the AICPA Reinsurance Auditing and Accounting Task Force in response to a series of 23 questions posed in a letter received from the AICPA Task Force dated December 3, 1979. The AICPA Task Force was created to respond to an extensive letter dated July 18, 1979 from the Securities and Exchange Commission concerning reinsurance accounting and auditing practices. In preparing its response to the SEC letter, the AICPA solicited comments from a number of interested parties, including the Academy.

Drafters: The Task Force on Reinsurance Accounting, chaired by Ronald E. Ferguson.

## SUMMARY OF 1980 STATEMENTS

Index Code: 1980-2

To: Senator David F. Durenberger

Date: February 5, 1980

Length: 3 pages beginning on page 64

Concerning: Health insurance legislation

Background: This letter was sent to the staff of Senator David F. Durenberger on his bill S.1968, the Health Incentive Reform Act of 1979.

Drafters: William A. Halvorson, Chairman of the Committee on Health Insurance.

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Index Code: 1980-3

To: American Institute of Certified Public Accountants

Date: February 14, 1980

Length: 2 pages beginning on page 67

Concerning: Purchase accounting

Background: This letter was sent to Mr. Robert Posnak, who is a member of the AICPA Purchase Accounting Task Force. Mr. Posnak had written a position paper on purchase accounting on which the AICPA had requested comments from the Academy.

Drafters: Stephen D. Bickel, Chairman of the General Committee on Financial Reporting Principles.

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Index Code: 1980-4

To: Senate and House Conference Committee

Date: February 15, 1980

Length: 4 pages beginning on page 69

Concerning: Health insurance legislation

Background: This statement was submitted to the Senate and House Conference Committee on HR 3236. This bill concerns Medicare-supplement policies. The Academy statement is directed toward some provisions involving minimum loss ratios which was added on the floor of the Senate on motion of Senator Max Baucus.

Drafters: William A. Halvorson, Chairman of the Committee on Health Insurance.

SUMMARY OF 1980 STATEMENTS

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Index Code: 1980-5

To: Internal Revenue Service

Date: February 21, 1980

Length: 7 pages beginning on page 73

Concerning: Regulations on reasonable funding methods under ERISA

Background: This statement was submitted to the Internal Revenue Service at a public hearing on proposed regulations on reasonable funding methods under ERISA that appeared in the October 5, 1979 issue of the Federal Register. These comments supplement the previous written statement submitted to the Internal Revenue Service on December 3, 1979 (see statement 1979-28).

Drafters: The statement was presented by Executive Director Stephen G. Kellison and Mary H. Adams, Vice President and Chairman of the Pension Committee.

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Index Code: 1980-6

To: NAIC Accounting Practices and Procedures (A6) Subcommittee

Date: February 29, 1980

Length: 5 pages beginning on page 80

Concerning: Statutory accounting practices for insurance companies

Background: This statement was submitted to the NAIC (A6) Subcommittee in response to an Exposure Draft of the Property and Liability Accounting Practices and Procedures Manual being developed by the Subcommittee. The Academy had previously commented on the Life and Accident and Health Accounting Practices and Procedures Manual (see statements 1978-32 and 1979-13).

Drafters: The Committee on Property and Liability Insurance Financial Reporting Principles, chaired by Donald E. Trudeau.

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Index Code: 1980-7

To: NAIC Life, Accident and Health Technical Subcommittee

Date: March 13, 1980

Length: 3 pages beginning on page 85

Concerning: Risk classification in health insurance

1980-7 (Cont.)

Background: This letter was sent to the NAIC Life, Accident and Health Technical Subcommittee concerning the use of classification by sex in health insurance. The Technical Subcommittee had been asked to review and respond to the report of the Sex Discrimination Task Force of the Accident and Health (C1) Subcommittee. This report recommends the elimination of sex as a valid classification criterion for health insurance.

Drafters: The letter was developed by the Health Subcommittee of the Committee on Risk Classification. The chairman of the Subcommittee was William A. Halvorson and the chairman of the Committee was Bartley L. Munson.

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Index Code: 1980-8

To: President's Commission on Pension Policy

Date: April 1, 1980

Length: 3 pages beginning on page 88

Concerning: Indexing pension benefits

Background: This statement was submitted to the staff of the President's Commission on Pension Policy in response to request for some comments on the Rockefeller Foundation's approach to indexing pension benefits.

Drafters: The Actuarial Advisory Group to the President's Commission on Pension Policy, chaired by Harold G. Ingraham, Jr.

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Index Code: 1980-9

To: Press Release

Date: April 2, 1980

Length: 3 pages beginning on page 91

Concerning: Risk classification

Background: This press release was circulated in connection with the ongoing debate over the use of sex as a classification criterion in insurance.

The press release specifically mentioned the decision by Teachers Insurance and Annuity Association/College Retirement Equities Fund to base annuity purchase rates for future contributions on merged-gender, or "unisex," tables.

Drafters: The Committee on Risk Classification, chaired by Bartley L. Munson.

Index Code: 1980-10

To: American Institute of Certified Public Accountants

Date: April 3, 1980

Length: 3 pages beginning on page 94

Concerning: Employee benefit plan audit guide

Background: This letter was submitted to an AICPA task force developing an employee benefit plan audit guide. This audit guide is being developed to replace a previous audit guide which has been in effect since prior to the passage of ERISA. The audit guide being developed will cover both pension plans and health and welfare plans. The focus of this letter is strictly on health and welfare plans.

Drafters: The letter was drafted by the Subcommittee on ERISA Health and Welfare Plans of the Committee on Health Insurance. The chairman of the Subcommittee was Wilbur H. Odell and the chairman of the Committee was William A. Halvorson.

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Index Code: 1980-11

To: Senate Committee on Finance

Date: April 11, 1980

Length: 2 pages beginning on page 97

Concerning: Pension legislation (HR 3094 and S 1076)

Background: This letter was sent to the chairman of the Subcommittee on Private Pension Plans and Employee Fringe Benefits of the Senate Committee on Finance in connection with HR 3094 and S 1076, which is proposed legislation on the multiemployer termination insurance program. This letter supplements the previous statement to four congressional committees on the same proposed legislation (see statement 1979-26) which was attached to this letter.

Drafters: This statement was prepared by the Task Force on Multiemployer Plans of the Subcommittee on PBGC of the Pension Committee. The respective chairmen of the above groups are Fenton R. Isaacson, Martin J. Frank, and Mary H. Adams.

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Index Code: 1980-12

To: American Institute of Certified Public Accountants

Date: April 16, 1980

1980-12 (Cont.)

Length: 10 pages beginning on page 99

Concerning: Discounting casualty loss reserves

Background: These three papers were presented at a meeting of the AICPA Insurance Companies Committee concerning the discounting of casualty loss reserves and the anticipation of investment income in the computation of premium deficiency reserves. The three papers were submitted by various members of the Academy task force working with the AICPA on this issue.

Drafters: The Task Force on AICPA Audit Guide, chaired by James R. Berquist.

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Index Code: 1980-13

To: Financial Accounting Standards Board

Date: April 28, 1980

Length: 1 page beginning on page 109

Concerning: Accounting for regulated enterprises

Background: This statement was submitted to the Financial Accounting Standards Board in response to a Discussion Memorandum on the Effect of Rate Regulation on Accounting for Regulated Enterprises dated December 31, 1979.

Drafters: The General Committee on Financial Reporting Principles, chaired by Stephen D. Bickel.

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Index Code: 1980-14

To: Office of Personnel Management

Date: May 29, 1980

Length: 4 pages beginning on page 110

Concerning: Actuarial employment in government

Background: This statement was submitted to the Office of Personnel Management in connection with the Civil Service description of actuaries employed by the Federal Government.

Drafters: President Ronald L. Bornhuetter.

## SUMMARY OF 1980 STATEMENTS

45

Index Code: 1980-15

To: General Release

Date: June 4, 1980

Length: 1 page beginning on page 114

Concerning: Social insurance

Background: This resolution was passed by the Board of Directors to address the issue of actuarial estimates for social insurance programs in the United States.

Drafters: The Committee on Social Insurance, chaired by John A. Fibiger.

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Index Code: 1980-16

To: Internal Revenue Service

Date: June 6, 1980

Length: 3 pages beginning on page 115

Concerning: Regulations on vesting under ERISA

Background: This statement was submitted to the Internal Revenue Service in connection with proposed regulations on vesting under ERISA that appeared in the Federal Register on April 9, 1980 (45 FR 24201-24203).

Drafters: The statement was prepared by the Task Force on ERISA Regulations of the Subcommittee on ERISA of the Pension Committee. The respective chairmen of the above groups are Gerald Richmond, Donald S. Grubbs, Jr., and Mary H. Adams. The statement was sent over the signature of Executive Director Stephen G. Kellison.

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Index Code: 1980-17

To: Financial Accounting Standards Board

Date: June 12, 1980

Length: 1 page beginning on page 118

Concerning: FASB study on accounting for interest costs

Background: This statement was submitted in response to the FASB Exposure Draft on Determining Materiality for Capitalization of Interest Cost (an amendment of FASB Statement No. 34) dated April 22, 1980. FASB Statement No. 34 on Capitalization of Interest Cost

1980-17 (Cont.)

was released in October 1979. The Academy has previously commented on this subject during the developmental period of Statement No. 34 on March 8, 1978 (see statement 1978-4).

Drafters: The Committee on Life Insurance Financial Reporting Principles chaired by Jack E. Wood.

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Index Code: 1980-18

To: NAIC Life Insurance (C3) Subcommittee

Date: June 16, 1980

Length: 13 pages beginning on page 119

Concerning: Dividend principles and practices

Background: This statement was presented at a meeting of the Life Insurance Cost Disclosure Task Force of the NAIC Life Insurance (C3) Subcommittee as a status report of the activities of the Committee on Dividend Principles and Practices. This statement preceded by three weeks the distribution of a major report of the Committee involving the establishment of dividend principles and practices. Exhibit B of this report contains a sample of the type of disclosure which could be incorporated into Schedule M of the Life and Accident and Health Annual Statement Blank. Exhibit C of this report contains a sample of some possible changes in the Life Insurance Buyer's Guide. Copies of these two Exhibits are attached to the statement, since copies were made available to the NAIC. This statement follows a previous submission on this subject on May 29, 1979 (see statement 1979-14).

Drafters: The Committee on Dividend Principles and Practices, chaired by John H. Harding.

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Index Code: 1980-19

To: General Release

Date: June 30, 1980

Length: 22 page booklet; text begins on page 132

Concerning: Risk classification statement of principles

Background: This final Risk Classification Statement of Principles was released by the Committee on Risk Classification following a previous Exposure Draft to the membership dated October 19, 1979. The Statement of Principles is being distributed to a

1980-19 (Cont.)

number of interested parties working on risk classification issues.

Drafters: The Committee on Risk Classification, chaired by Bartley L. Munson.

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Index Code: 1980-20

To: American Institute of Certified Public Accountants

Date: July 1, 1980

Length: 12 pages beginning on page 154

Concerning: Reinsurance accounting and auditing

Background: This statement was submitted to the AICPA Reinsurance Auditing and Accounting Task Force in connection with its study in this area. This statement follows a previous Academy submission dated January 8, 1980 (see statement 1980-1).

Drafters: The Task Force on Reinsurance Accounting, chaired by Ronald E. Ferguson.

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Index Code: 1980-21

To: Internal Revenue Service

Date: July 8, 1980

Length: 3 pages beginning on page 166

Concerning: Regulations on benefit and contribution limitations

Background: This statement was submitted to the Internal Revenue Service at a public hearing on proposed regulations concerning limitations on benefits and contributions under ERISA (Section 415 of the Internal Revenue Code). These proposed regulations appeared in the Federal Register on January 24, 1980 (45 FR 5754 5780).

Drafters: The statement was presented by Mary H. Adams, Vice President and Chairman of the Pension Committee.

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Index Code: 1980-22

To: NAIC Life, Accident and Health Insurance (C4) Technical Subcommittee

1980-22 (Cont.)

Date: August 13, 1980

Length: 26 pages beginning on page 169

Concerning: Risk classification in health insurance

Background: This statement was submitted to the NAIC (C4) Technical Subcommittee in response to a request from the Subcommittee for data on the difference in disability experience between males and females.

Drafters: The statement was developed by the Health Subcommittee of the Committee on Risk Classification. The chairman of the Subcommittee was William A. Halvorson and the chairman of the Committee was Bartley L. Munson.

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Index Code: 1980-23

To: American Institute of Certified Public Accountants

Date: August 19, 1980

Length: 9 pages beginning on page 195

Concerning: Discounting casualty loss reserves

Background: This submission to the AICPA is a refinement of the three papers previously submitted on this subject (see statement 1980-12).

Drafters: The Task Force on AICPA Audit Guide, chaired by James R. Berquist.

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Index Code: 1980-24

To: House Committee on Interstate and Foreign Commerce

Date: August 28, 1980

Length: 30 pages beginning on page 204

Concerning: Risk classification

Background: This statement was presented at a public hearing of the Subcommittee on Consumer Protection and Finance of the House Committee on Interstate and Foreign Commerce. The subject of the hearing was H.R. 100, the Nondiscrimination in Insurance Act, sponsored by Rep. John D. Dingell. This bill would outlaw the ability to classify risks on the basis of race, color,

1980-24 (Cont.)

religion, sex, and national origin. The Risk Classification Statement of Principles was attached to the statement (see statement 1980-19).

**Drafters:** The Committee on Risk Classification, chaired by Bartley L. Munson.

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**Index Code:** 1980-25

**To:** Internal Revenue Service

**Date:** September 8, 1980

**Length:** 2 pages beginning on page 234

**Concerning:** Actuarial reports under ERISA

**Background:** This letter was submitted to the Internal Revenue Service in response to proposed regulations concerning actuarial reports under ERISA. These proposed regulations appeared in the Federal Register on July 8, 1980 (45 FR 45926-45927).

**Drafters:** The letter was prepared by the Task Force on ERISA Regulations of the Subcommittee on ERISA of the Pension Committee. The respective chairmen of the above groups are Gerald Richmond, Donald S. Grubbs, Jr., and Mary H. Adams.

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**Index Code:** 1980-26

**To:** American Institute of Certified Public Accountants

**Date:** September 30, 1980

**Length:** 19 pages beginning on page 236

**Concerning:** Audit guide on employee benefit plans

**Background:** This statement was submitted to the AICPA in response to the Exposure Draft of the Audit Guide on Employee Benefit Plans released on June 30, 1980

**Drafters:** One section of the statement was developed by the Subcommittee on Pension Accounting Matters of the Pension Committee and the other section was developed by the Subcommittee on ERISA Health and Welfare Plans of the Committee on Health Insurance. The law firm of Shea and Gardner participated in the drafting.

## SUMMARY OF 1980 STATEMENTS

Index Code: 1980-27

To: House Committee on Education and Labor

Date: October 1, 1980

Length: 9 pages beginning on page 255

Concerning: Pension legislation (H.R. 6525)

Background: This statement was presented at a public hearing of the Task Force on Welfare and Pension Plans of the Subcommittee on Labor-Management Relations of the House Committee on Education and Labor on H.R. 6525, the Public Employee Retirement Income Security Act (PERISA), jointly sponsored by Rep. Frank Thompson, Jr. and Rep. John N. Erlenborn. This bill is a major legislative proposal affecting public employee retirement systems of state and local governments.

Drafters: The statement was developed by the Subcommittee on Public Employee Retirement Systems of the Pension Committee. The respective chairmen are Thomas P. Bleakney and Mary H. Adams. The statement was delivered at the hearing by Executive Director Stephen G. Kellison.

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Index Code: 1980-28

To: NAIC Accounting Principles, Procedures and Blanks (A1) Subcommittee

Date: October 10, 1980

Length: 1 page beginning on page 264

Concerning: Simplification of the annual statement

Background: This letter was sent to the Task Force to review the current blanks of the NAIC Accounting Principles, Procedures and Blanks (A1) Subcommittee concerning their study of various changes being proposed in the Life and Accident and Health Annual Statement Blank.

Drafters: The Committee on Life Insurance Financial Reporting Principles, chaired by Burton D. Jay.

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Index Code: 1980-29

To: Financial Accounting Standards Board

Date: November 7, 1980

1980-29 (Cont.)

Length: 2 pages beginning on page 265

Concerning: Accounting for foreign currency translations

Background: This statement was submitted to the FASB in connection with an FASB Exposure Draft entitled "Foreign Currency Translation" released on August 28, 1980. The Academy had previously submitted a statement to the FASB on this subject in 1977 (see statement 1977-19).

Drafters: The Committee on Life Insurance Financial Reporting Principles, chaired by Burton D. Jay.

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Index Code: 1980-30

To: President's Commission on Pension Policy

Date: November 14, 1980

Length: 15 pages beginning on page 267

Concerning: Funding Standards

Background: This statement was presented at a public hearing of the President's Commission on Pension Policy devoted to the subject of funding standards. The last page of the statement is a supplementary submission made immediately after the hearing. There were four appendices attached to the actual statement submitted which are not reproduced. Appendix A was a copy of Section A of the Pension Plan Recommendations from the Academy Year Book. Appendix B was the Call for Information that accompanied the Exposure Draft of Interpretation No. 3. Appendix C was a copy of Opinion A-4 from the Academy Year Book. Appendix D was a copy of Interpretations Nos. 1 and 2 from the Academy Year Book.

Drafters: The Actuarial Advisory Group to the President's Commission on Pension Policy, chaired by Harold G. Ingraham, Jr. The witness at the hearing and the primary author of the written statement was George B. Swick.

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Index Code: 1980-31

To: NAIC Life Insurance (C3) Subcommittee

Date: November 21, 1980

Length: 4 pages beginning on page 282

## SUMMARY OF 1980 STATEMENTS

1980-31 (Cont.)

Concerning: Life insurance cost disclosure

Background: These two letters were submitted to the Life Insurance Cost Disclosure Task Force of the NAIC Life Insurance (C3) Subcommittee in response to the Draft Model Life Insurance Disclosure System Regulation released by the Task Force on November 5, 1980. They were submitted for the record of a public hearing held on November 24, 1980.

Drafters: One letter was from the Committee on Life Insurance, chaired by Jack E. Wood, while the other letter was from the Committee on Dividend Principles and Practices, chaired by John H. Harding.

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Index Code: 1980-32

To: NAIC Life Insurance (C3) Subcommittee

Date: November 30, 1980

Length: 2 pages beginning on page 286

Concerning: Dividend principles and practices

Background: This statement was presented at a meeting of the Life Insurance Cost Disclosure Task Force of the NAIC Life Insurance (C3) Subcommittee as a status report of the activities of the Committee on Dividend Principles and Practices. This statement followed the formal adoption of the new Recommendations Concerning Actuarial Principles and Practices in Connection with Dividend Determination and Illustration for Individual Life Insurance Issued by Mutual Companies by the Board of Directors on October 31, 1980. This statement follows previous submissions on this subject to the NAIC (see statements 1979-14 and 1980-18).

Drafters: The Committee on Dividend Principles and Practices, chaired by John J. Harding.

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Index Code: 1980-33

To: NAIC Competition (B3) Subcommittee

Date: December 2, 1980

Length: 1 page beginning on page 288

Concerning: Competitive rating for property and liability insurance

1980-33 (Cont.)

**Background:** This testimony was presented at an open meeting of the NAIC Competition (B3) Subcommittee concerning the adoption of the proposed Model Open Competition Rating Law for property and liability insurance which was being developed by the Subcommittee. The most recent draft of the Model Law was dated November 7, 1980.

**Drafters:** The Committee on Property and Liability Insurance, chaired by Warren P. Cooper.

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**Index Code:** 1980-34

**To:** House Committee on Interstate and Foreign Commerce

**Date:** December 16, 1980

**Length:** 10 pages beginning on page 289

**Concerning:** Risk classification

**Background:** This letter is a supplementary submission to the testimony on H.R. 100 presented at the public hearing on August 28, 1980 (see statement 1980-24). It was submitted in response to questions posed in a letter dated September 29, 1980 from Rep. James H. Scheuer, Chairman of the Subcommittee on Consumer Protection and Finance which conducted the hearing. The September 29, 1980 letter is attached at the end.

**Drafters:** Daphne D. Bartlett, who was one of the Academy witnesses at the August 28, 1980 public hearing.

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**Index Code:** 1980-35

**To:** International Accounting Standards Committee

**Date:** December 30, 1980

**Length:** 1 page beginning on page 299

**Concerning:** Accounting for retirement plans

**Background:** This statement was submitted in response to Exposure Draft 16 on "Accounting for Retirement Benefits in the Financial Statements of Employers" released by the International Accounting Standards Committee on April 1, 1980.

**Drafters:** The Committee on Pensions, chaired by Douglas C. Borton.

STATEMENT 1980-1

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. • SUITE 515 • WASHINGTON, D.C. 20006 • (202) 223-8196

January 8, 1980

Mr. J.E. Hart  
Chairman  
Reinsurance Auditing & Accounting Task Force  
American Institute of Certified Public Accountants  
1211 Avenue of the Americas  
New York, New York 10036

Dear Jack:

The American Academy of Actuaries appreciated your invitation to work with the AICPA Task Force. As you may know, the Academy has set up a corresponding Task Force (see Exhibit A) and I am Chairman of that Task Force.

Following the instructions of your December 9th letter, we have developed "informal written responses to each question". I must stress though that due to the relatively short lead time, vacations, holidays, and the slow mail service, we have not had sufficient time to work and rework our answers and thus this really is an "informal response".

We were hampered by two factors in developing an approach to the questions. First, it was difficult to understand the thread or motivation(s) behind some of the questions. Second, very few of the questions were actuarial in nature. Our group, while comprised of actuaries, represents many years of experience in virtually all aspects of reinsurance and we, in the end, decided to respond to all of the questions.

1. It is our experience that the techniques used to assess the financial stability of assuming companies vary enormously from ceding company to ceding company. In fact, it is almost impossible to generalize to a typical situation. Many ceding companies due to either a lack of time or sophistication do no screening whatsoever. On the other hand, some ceding companies have set up elaborate screening processes and in at least one case that we are aware of, the ceding company hired an actuarial consulting firm to analyze--including an on-site inspection--a proposed assuming company.
2. The criteria set forth as the preface to question #2 appear to be of little value in the assessment of the financial stability of an assuming company. None of these conditions in and of themselves provide useful information about the assuming company although perhaps each can serve as a warning flag. In these cases and indeed all cases, a more thorough review such as discussed below (see #3) should be undertaken.
3. A thorough investigation of the assuming carrier would have to proceed along four lines:
  - (1) First of all, the reputation and competency of the management and staff must be assessed. There is, after all, more to reinsurance than just numbers.
  - (2) Second, a review of the assuming company's financial situation must be undertaken to determine whether the company has the staying power to match the long-term nature of some of the commitments. The (absolute) size and the quality of the balance sheet can be plumbed by analyzing the Annual Statement, NAIC Early Warning System results, Annual Report, Examination Reports, 10 K's, etc.
  - (3) As a subset of the financial assessment, one must really understand the underwriting philosophy--the type of underwriting leverage the company practices and on the other end of the spectrum, the soundness of the assuming company's retrocessional program.
  - (4) The financial review must include an assessment of the company's investment strategy/philosophy. The net worth of the company, from a risk theory point of view, is leveraged or exposed from both the underwriting operations, and the investment operations.

Finally, in many instances, management may look beyond the actual strength of the corporation to whom they are ceding. Often, management is influenced by the backing of this corporation (subsidiary or affiliate of a much larger concern) even though this larger concern may have no obligation to guarantee the performance of its daughter company. If the transaction is sufficiently large, a cedent sometimes seeks/receives a cut through guarantee from the parent, or evidence that part of the risk has been retroceded to a more substantial carrier. Letters of credit are also used in "marginal" situations.

4. Except for the last two items in #4, the steps suggested could be useful in conducting the four types of assessments we set forth in our answer to item #3 above. One member of our Task Force has suggested that pursuing these items could be a waste of time. Consider:

- (1) Reputation of persons controlling reinsurer. I feel that the reputation of both the management and the ownership of the reinsurer should be uppermost in the mind of the cedent. However, this is an extremely sensitive area. Even if an auditor felt that reinsurance was ceded to a company whose management or ownership he considered less than desirable, what does he do?
- (2) Contacting State Chief Examiners concerning the reinsurer. I doubt that, as a rule, such individuals would (or should) respond in a useful way (if at all). In his letter, Mr. Sampson said (and I largely concur) that "we cannot place any substantial reliance on the existence of the regulatory structure to ensure the viability of a reinsurer."
- (3) Obtain and review current financial statement of reinsurer, etc. I believe that any instruction to an auditor should be such that he has a clear idea what to do if his investigation brings out something which he feels may be material. This type of instruction, in my opinion, would fail that test. The auditor has to audit his client not every other company with which his client does business.
- (4) Determine why business is reinsured with a particular reinsurer. This is largely a useless question. No company is going to admit that the selection of a particular reinsurer may have something to do with the fact that the presidents of the two companies play golf together.
- (5) Business purpose. For conventional reinsurance, business purpose is usually self-evident. Risk is in excess of the retention limit set by the company's board of directors, or it involves a risk which the company for technical underwriting reasons does not want to retain for its own account.
- (6) Terms of agreement. This is generally not a problem with respect to conventional reinsurance.

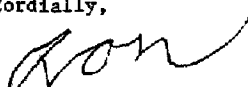
We question whether useful information can be developed under the last two points. The business purpose of the transaction will usually be self-evident but will only rarely be documented. There is no such thing as a normal or typical reinsurance agreement, and any effort to follow up on the last point is likely to be fruitless.

5. Documenting the business reason or purpose of the reinsurance contract seems to be an unnecessary expense or nuisance. As long as the negotiations are conducted on an arms-length basis, there would appear to be no need to question the business purpose.
  6. Assuming companies satisfy themselves as to the accuracy and reliability or important data in a variety of ways. The assuming companies rely on the account executive or brokers (depending on their method of marketing) to discuss data requirements with the ceding company. In addition, there are various feedback loops as experience is developed under the contracts. If there are adjustable commissions or premiums, statements are rendered to the ceding company and those statements or reports would generate discussions about data if problems existed. In addition, many assuming companies have their own staff of auditors, i.e., company employees that check on the ceded data from time to time.
  7. Yes.
  8. It is probably not necessary from an assuming company's point of view to perform such audits, but if the external auditor feels it is necessary, he should be allowed to make such contacts. It should be noted, however, that:
    - (1) Many cedents have no external auditors;
    - (2) Those that have them may be reluctant to incur the expense of asking these external auditors to comply.
  9. Same as #8.
  10. It is reasonable for the auditor to review reinsurance contracts.
- 1/12/13. Reinsurance agreements are undertaken for a variety of reasons and represent a blend of underwriting risk, investment risk, credit risk, and service requirements (i.e., sometimes the prime motivation may be simply a desire to have a partner or gain expert advice). The degree of risk that is inherent in the business, be it investment underwriting or credit, is, of course, a matter on which reasonable men might differ. Whatever the motivation, intent, or risk level, there is, of course, a balance sheet and income statement effect. It does not appear to be feasible or useful to grade the level of risk and develop different accounting procedures.
- If there are contractual provisions that obviate any risk of underwriting, investment, or credit loss, paragraph 44 of FASB #5 would apply.

14. Yes.
15. No.
16. No.
17. As a practical matter, there is no way to enforce such a requirement.
18. There does not appear to be any circumstances or logic which would suggest that the various types of reinsurance should be accounted for and reported separately. First of all, it is difficult and sometimes impossible to draw a line between the various types of reinsurance. Secondly, reinsurance should follow the traditional insurance accounting practices. Thirdly, separate treatment would not appear to provide useful information to those who deal with the financial statements.
19. Commission terms under reinsurance treaties are a function of: (a) the acquisition costs of the ceding company; (b) the actual or anticipated experience under the contract; and, of course, (c) the competitive environment. Commission allowances are generally a negotiated item.
20. It is appropriate for auditors to review reinsurance contracts with an eye toward determining contingent liabilities. In such reviews, two things must be kept in mind. First, most reinsurance contracts are the codification of an expected long-term relationship. Second, there needs to be an appreciation for the difference between a right and an obligation. For example, if a cedent has a right (not an obligation), accounting treatment should be no different, or at least no more onerous, than if he did not have the right.
21. Cancellations do, of course, occur from time to time and are "triggered" by ceding or assuming companies, but retroactive negotiations are quite rare. It must, of course, be understood that a reinsurance pricing is often based on empirical data and thus, arguably, much reinsurance pricing might be considered retroactive negotiations of a sort.
22. To the extent that retroactive negotiations generate changes in the terms, it may be necessary to book revised entries or set up accruals.
23. It may not be unreasonable to require written confirmation from management concerning reinsurance accounting but it is not clear why such confirmation is needed more in this area than in other areas of operations.

Again, we appreciate the opportunity to be involved in the dialogue on this important subject. I look forward to meeting with you and the members of your Task Force on January 15, 1980.

Cordially,

A handwritten signature in cursive script, appearing to read "Ron", written in dark ink.

Ronald E. Ferguson

REF:rak

cc: Mr. Paul Sanchez  
AICPA  
Mr. Ronald L. Bornhuetter  
Committee Members

REINSURANCE AUDITING AND ACCOUNTING TASK FORCE  
QUESTIONS FOR GENERAL DISCUSSION PURPOSES

1. What procedures does a ceding company employ to obtain satisfaction concerning the financial stability of the assuming company?
  
2. It has been suggested that the risk of loss may be increased when the reinsurer:
  - "(a) meets only the minimum surplus requirements in the state where it is licensed;
  - (b) is licensed in a state with less than vigorous enforcement of insurance regulations and/or relatively small surplus requirements;
  - (c) is controlled by one or a few individuals whose personal reputations are not known; or
  - (d) has only been in business a short time."

If these circumstances exist what additional procedures are performed by management?

3. Are there factors other than financial matters that management would review and monitor to insure that the reinsurer will be able to honor its contractual obligations?
  
4. It has been suggested that the following procedures may be useful for evaluating the solvency and financial responsibility of the reinsurer:
  - Inquire into the reputation of the persons controlling the reinsurer.

- Contact the chief examiners of the state insurance commissions where the reinsurer does business for information concerning the reliability and financial integrity of the reinsurer.
  - Obtain and review current financial statements of the reinsurer for questionable or unusual assets, liabilities or transactions.
  - Determine why the business is being reinsured with the particular reinsurer.
  - Identify the business purpose for the transaction.
  - Determine whether the terms of transaction conform to those normally found in the particular kind of reinsurance agreement.
5. Is the business reason(s) for each reinsurance contract documented? If so, in what form and where?
  6. How does the assuming company satisfy itself concerning the reliability and accuracy of the data reported by the ceding company?
  7. Is it reasonable for auditors (internal or external) to periodically review the underwriting, premium processing and claim settlement controls and examine the records and documents of the ceding company as they relate to the reinsurance contract?
  8. Is it reasonable for the external auditor of the assuming company to request that the external auditor of the ceding company provide written assurances concerning the description of internal accounting controls of the ceding company and whether they appear to be functioning as designed?

9. Is it reasonable for the external auditor of the assuming company to request that the external auditor of the ceding company provide written confirmation concerning the reasonableness of the amounts reported by the ceding company under the reinsurance agreement?
10. Is it reasonable for the auditor to obtain (from either the ceding or assuming company) written confirmation of the specific terms of reinsurance contracts?
11. When financing arrangements are written, in which the intent is not to transfer risk, do the ceding and assuming companies separately identify the type of transactions and do they account for them in accordance with paragraph 44 of FASB Statement No. 5?
12. What are the characteristics that separately distinguish financing arrangements from reinsurance contracts?
13. Both financing arrangements and reinsurance (transfer of risk) arrangements are currently being written. Are there any underlying reasons why the accounting treatment for these arrangements should not be different?
14. Do you view participations in pools and associations as an element of the reinsurance business that should be accounted for in the same manner as other reinsurance transactions?
15. Do you consider participation in pools and associations as equity investments which should be accounted for in a manner similar to the requirements of APB Opinion No. 18?
16. Should there be a difference in the accounting for voluntary and involuntary pools and associations? If so, what should the difference be?

17. May pools and associations provide audited statutory financial statements to member companies. Do you believe that GAAP Financial Statements or GAAP Supplemental Information should be provided to member companies to properly record their participation?
18. Do you believe there are circumstances where the cost of certain types of reinsurance (such as catastrophe reinsurance or certain excess of loss contracts) should be accounted for and reported separately?
19. In those circumstances where commissions are a consideration, what procedures or factors are used to determine the appropriate commission allowance to the ceding company?
20. In determining the appropriate accounting treatment for reinsurance contracts, how much significance should be given to the cancellation or the renegotiation provisions of the reinsurance contract?
21. How widespread are cancellations or retroactive renegotiations in reinsurance contracts?
22. How are retroactive renegotiations in reinsurance contracts currently accounted for?
23. Is it reasonable for the external auditor to obtain specific written representations from management that reinsurance transactions have been accounted for and reported in a manner consistent with their underlying business purpose? These representations may include but are not necessarily limited to contracts that may not transfer risk, collectibility of receivables, completeness of treaty documents, etc.

## STATEMENT 1980-2

Questions Raised to Christopher Saudek, M.D. by William A. Halvorson, F.S.A., M.A.A.A.

Concerning Senate Bill 1968 as introduced by

Senator Durenberger, entitled

"Health Incentive Reform Act of 1979"

The Bill proposes to modify the Internal Revenue Code to limit the exclusion from personal income of a taxpayer's employer's contribution to a health or dental benefit plan to a specific monthly amount. (Initially \$50 for the employee only, \$100 for an employee and spouse, \$125 for an employee and family).

The Bill requires employers with 100 or more employees to offer at least three options for coverage, each by a separate carrier.

The Bill requires the employer to contribute the same amount, regardless of the option chosen by the employee, and if the option chosen is less than the limits, the employee will have the option of receiving such difference in cash.

The Bill requires that one of the options must be a catastrophic benefit covering 100% of costs (for types of services now provided to Medicare participants) after out-of-pocket expenses of \$3,500 in any calendar year.

### Questions

1. Would the Bill permit an employer to "go" with less than three carriers if it can't find three carriers that want to bid, or to bid a reasonable price and/or reasonable benefits?

We discussed the problem of each carrier obtaining a reasonable cross section of employees, so that each would have a sufficient number of healthy lives enrolled to offset those most likely to use the benefits, who are usually the first to enroll. In group insurance plans, 75% enrollment is usually required before a carrier will waive its right to underwrite each individual applicant. An exception to this rule has been where an HMO option has been offered, or when there has been a clear difference in benefits such as the government-wide service plan versus the government-wide indemnity plan offered to Federal employees. It appears that where different styles of benefits are offered, there has been less adverse selection against any one of the programs than occurs where two indemnity plans are offered to the same group of employees. Since the Bill seems to promote competition between like benefit plans, adverse selection can occur, to the extent that for smaller employers, it is probable that many will not be able to find three alternative and viable carriers that want the business. Perhaps for employers with less than 1,000 employees, three carriers would not be mandatory. The Bill could still permit a single carrier to offer two option levels of benefits, perhaps, to reduce the degree of adverse selection.

2. If a carrier offers only a very limited set of benefits, at a low cost, does the employer have to accept it?

In order to understand this question, it is necessary to understand that employees who choose low benefit options under medical plans have considerably lower average health care costs than those who elect higher benefits (up to 35 to 40% lower). Therefore, a good marketing plan for a carrier responding to this Bill could be to offer a limited set of benefits to all employers, at a low price. This would assure the carrier of a profitable cross-section of all employees in the area, but would leave the remaining employees with a higher average cost, not necessarily in the best interest of the employer's employee relations. Therefore, thoughtful employers would want to reject carriers offering only low option benefits.

3. Does the employer have the right to reject any and all bids that it considers inimical from an employee relations point of view?

There could be many reasons for rejection. For instance, the possible lack of financial soundness of the carrier, or lack of adequate local service facilities, or lack of adequate claims control methods, or inadequate statistical data capability.

4. If an employer has a self-funded program for its employees, can he select two carriers with very high premiums as alternatives to the self-funded program, thereby minimizing the number of employees that are likely to select something other than the self-funded programs?

Obviously, an employer who self-funds is attempting to save premium taxes, and preserve working capital, as well as reduce administrative expenses. For these reasons, it would not favor offering competing plans.

5. Will carriers be permitted to experience rate their portion of the enrollment, so as to adjust rates to the actual experience of their enrollment?

From the viewpoint of maintaining actuarially sound plans, there is little question that carriers must have the right to experience rate, both prospectively as well as retrospectively. Since the Bill is silent in this regard, I presume that no prohibition is contemplated. But because of the ability of employees to switch from one carrier to another periodically, there will be severe competitive limitations on the carrier's freedom to experience rate, if its initial rates are not close to the actual costs that develop for its enrollment. That leads to the next question.

6. Will carriers be permitted to use rates that are appropriate to each ten-year age category of employees (for instance) and to the gender of employees, or sensitive to other rating characteristics of expected enrollees, in order to avoid adverse selection?

If actuarially sound plans operating in a competitive environment are to be encouraged, it appears essential that carriers be permitted to use the same types of rating structures that are now used by carriers for small groups (with rating by age, sex and area) since the single group rating conventionally used on larger groups would no longer be appropriate. Using an average group-wide rate structure is possible only where the enrollment by age, sex, health and other characteristics can be safely predicted, which would not be the case for the bulk of smaller employers under the Bill's provisions. I am enclosing a copy of a talk given last summer that referred to this problem. Basically, my point is that if open competition between carriers, or between alternative health care delivery systems is to succeed, it is also necessary to permit these systems to use pricing and rating methods that will give each of them the best chance to succeed in avoiding adverse selection.

Although it may sound obvious, it is my belief that no system should be ruled out because of artificial biases. Systems should be encouraged to provide the most efficient health care possible for the least cost. But if there are artificial restrictions on how they price their products in the marketplace, there will be unexpected and possibly unfortunate results. Actuarial soundness of all plans is desirable, which means pricing that is both adequate and competitive.

Now that I've had a chance to read the Bill, there are certain other questions that come to mind. But rather than bend your ear further, I'll circulate the letter to my committee members for their reactions, and possibly we can discuss this again.

WAH/rep

## STATEMENT 1980-3

February 14, 1980

Mr. Bob Posnak  
Ernst & Whinney  
153 East 53rd Street  
New York City, NY 10022

Dear Bob,

I understand from Ed Bader that the Purchase Accounting Task Force will be meeting in March. Since the Academy Committee will not be meeting before then, I offered to write to you with some personal observations about your October 1979 paper. These observations represent my personal views, and are not necessarily the same as the views of the Academy Committee.

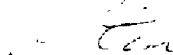
1. The first observation is that you didn't quite follow the "book" (Interpretation I-D) in developing the example for the Defined Valuation Premium Method starting on page 23. Instead of using the valuation premium applicable to the currently issued new business (\$183.55), you reduced it to \$174.42, which is based on 8% interest both before and after the purchase.
2. If this is corrected, the present value of the profit loading becomes \$50 rather than \$145. Under the Defined Valuation Premium Method, the \$50 should end up in goodwill, as you state on page 27. Under the Defined Reserve Method \$26 of the \$50 winds up in goodwill, and the balance is part of the unitary reserve.
3. The difference between the two methods is academic if the Company is not a going concern, since I-D states that goodwill should be amortized in proportion to future premiums. If the purchased company is a going concern, goodwill can be amortized on a 40 year straight line basis, and the two methods produce a different incidence of earnings.
4. I don't think the difference in earnings will be in the same direction in all cases. The direction of the difference will depend on the discount rate chosen and the incidence of the earnings being discounted.
5. The choice between the two methods should be based on which unitary reserve best represents the "fair value" required by APB 16, i.e.,
  - (a) The gross premium reserve less a portion of future premiums consistent with the profit loading on new business, or
  - (b) Statutory or historical GAAP reserves, less future profits discounted at a risk rate of return.

Mr. Bob Posnak  
February 14, 1980  
Page 2

6. There are several reasons why I feel the Defined Valuation Premium Reserve is preferable:
- (a) The GAAP profit loading on new business is a determinable fact. There is no generally accepted method of determining a risk rate of return.
  - (b) If the Defined Valuation Premium Method is used, the percentage of premium profit will be the same for old and new business. This result seems consistent with accounting for inventories under APB 16, as I understand it.
  - (c) The technique of discounting earnings to determine purchase prices may not be as widely used as you suspect. Many people prefer to work with GAAP book values and P/E ratios. Others may prefer to discount dividends rather than earnings. It seems undesirable to tie the purchase accounting procedures to any one technique.

I hope these thoughts are helpful to you. If you have any comments, please let me know.

Sincerely,



Stephen D. Bickel

SDB:ab

cc: General Committee on  
Financial Reporting Principles

Mr. Edward F. Bader

## STATEMENT 1980-4

# AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. . SUITE 515 . WASHINGTON, D.C. 20006 . (202) 223-8196

### MEMORANDUM

TO: Senate and House Conferees on HR3236

FROM: American Academy of Actuaries

RE: Senator Baucus' Amendment

DATE: February 15, 1980

Senator Baucus' amendment of HR3236 has just been brought to the attention of the American Academy of Actuaries. The Chairman of the Committee on Health Insurance, in reading the language of the Bill as it pertains to defining the minimum loss ratio believes that changes in the language are necessary if the intent of the Bill is to be carried out without major disruption of the availability of individual policy Medicare supplements.

Section 1882(c)(5) of the Bill makes reference to "accepted actuarial principles and practices" in determining loss ratios. This is an optimum way of handling this problem, since there have been some recent developments that define loss ratios fairly specifically. But the Bill is inconsistent with actuarial principles and practices when it refers to meeting the minimum loss ratios over a period of "not to exceed one year". It is necessary for minimum loss ratios to be applied over "the entire period for which rates are computed to provide coverage", rather than during any single year, or shorter period; unless, of course, the intent of Congress is to have each carrier change its rates charged to its policyholders every year, and issue only one year renewable term coverage.

A change in language would eliminate this problem. First, if the Bill refers to the numerator and denominator that make up the "loss ratio", it should refer to "incurred claims" and "earned premiums", since these are the only definitions that would produce meaningful loss ratios from either an actuarial or regulatory point of view.

The second change is to change the term from "not to exceed one year" to "the entire period for which rates are computed to provide coverage".

We note that Section 1174(b)(5) of HR4000, which was reported out of the House Committee on Ways and Means on November 5, 1979, contains language of similar intent to the language in Section 1882(c)(5) of HR3236. Although we are proposing language that is somewhat different than either of these bills, the language in HR4000 is preferable to that contained in HR3236.

The NAIC Model Guidelines for filing rates for individual health insurance policies, which are developed after years of discussion and actuarial input, refer to the time period as "the entire period for which rates are computed to provide coverage". The NAIC model also requires the loss ratio to be based on (a) accumulated benefits, from the original effective date of the policy form and to include the present value of future benefits, and (b) accumulated premiums for the same past period and the present value of future premiums, all for the entire period for which the rates are computed to provide coverage.

Recognition of this entire period is necessary for Medicare supplements because many carriers issue policies that carry level premiums for life, while others provide that increases in premiums will take place at either specific ages or from time to time as may be required by trends in inflation.

Since accepted actuarial principles and practices are being defined for the purpose of regulating minimum loss ratio requirements at the state level, it would be chaotic and counterproductive to have Federal legislation that contradicts these accepted actuarial principles and practices.

As a professional association of actuaries, the American Academy of Actuaries has no position on whether the Federal Government should or should not apply standards of minimum loss ratios for Medicare supplements. Nor do we have any position on the appropriate level of any such loss ratios (e.g. the 75% and 60% levels contained in HR3236). But we are very concerned if any Federal language does introduce actuarial requirements that are in conflict with accepted actuarial principles and practices, since the result would be unnecessary confusion and controversy.

The NAIC model recognizes the problem of developing reasonable definitions of minimum loss ratios, and the definitions they have adopted have been accepted by the NAIC Actuarial Advisory Committee. To implement these minimum loss ratio requirements, the NAIC has appropriately required a certification by a qualified actuary that, to the best of the actuary's knowledge and judgment, the rate filings are in compliance with the applicable laws and regulations of the state and the premiums are reasonable in relation to benefits. This provides the regulators with assurance that the minimum loss ratios will not be abused, and that objective information will be available.

A qualified actuary for the purpose of most state regulator's of insurance companies is defined as: "A member in good standing in the American Academy of Actuaries, or a person who has otherwise demonstrated his or her actuarial competence to the satisfaction of the insurance regulatory official of the domiciliary state."

Attachment A is proposed new language for Section 1882(c)(5). Attachment B is some additional background on the American Academy of Actuaries.

Prepared by William A. Halvorson, Chairman, Committee on Health Insurance  
American Academy of Actuaries

APPENDIX ASECTION 1882 OF HR 3236  
SENATOR BAUCUS AMENDMENTPresent Wording

(c)(5) can be expected (as estimated for such period, not to exceed one year, to the maximum extent appropriate, on the basis of actual claims experience and premiums for such policy and in accordance with accepted actuarial principles and practices) to return to policyholders in the form of aggregate benefits provided under the policy, at least 75 percent of the aggregate amount of premiums collected in the case of group policies, and at least 60 percent of the aggregate amount of premiums collected in the case of individual policies; and

Proposed Wording of American Academy of Actuaries

(c)(5) can be expected (as estimated for the entire period for which rates are computed to provide coverage, on the basis of incurred claims experience and earned premiums for such policy and in accordance with accepted actuarial principles and practices) to return to policyholders in the form of aggregate benefits provided under the policy, at least 75 percent of the aggregate amount of premiums collected in the case of group policies, and at least 60 percent of the aggregate amount of premiums collected in the case of individual policies; and

Note: If it is desired to require a certification by a qualified actuary, then insert in the above wording between "policy" and "and" the following:

" , as certified by a qualified actuary, to the best of his or her knowledge and judgment, "

APPENDIX BBACKGROUND INFORMATION ON THE  
AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional organization of actuaries which was formed in 1965 to bring together into one organization all actuaries in the United States and to seek accreditation and greater public recognition for the profession. It includes members of four founding organizations---the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the Fraternal Actuarial Association, and the Society of Actuaries. These organizations, or their predecessors, date back many years, one of them to the late 1800's, so that despite the relatively short duration of its formal existence, the Academy, its founding organizations and their predecessors have represented the actuarial profession in the United States for about 90 years.

The Academy is unique as the national accrediting actuarial organization for actuaries in all areas of specialization. Requirements to become a member of the Academy can be summarized under two broad headings: (1) education and (2) experience; an individual must satisfy both in order to be admitted. At the present time, the education requirements for membership can be satisfied by passing certain professional examinations given either by the Casualty Actuarial Society or the Society of Actuaries or by becoming an "enrolled actuary" under the Employee Retirement Income Security Act of 1974 (ERISA). The experience requirement consists of three years of responsible actuarial work.

As of November 1, 1979, Academy membership stood at 5,500. These actuaries have a variety of types of employment, including insurance organizations, consulting firms, academic institutions, and government. A large majority of those individuals who have satisfied the rigorous education and experience requirements of the Academy do, in fact, join the Academy. The entire Academy membership is subject to rigorous guides to professional conduct and standards of practice.

# STATEMENT 1980-5

## COMMENTS OF

STEPHEN G. KELLISON, EXECUTIVE DIRECTOR

AMERICAN ACADEMY OF ACTUARIES

IRS HEARINGS ON REASONABLE FUNDING METHODS

FEBRUARY 21, 1980

My name is Stephen G. Kellison and I am the Executive Director of the American Academy of Actuaries. With me today is Mary H. Adams who is a Vice President of the Academy and also serves as Chairman of our Pension Committee.

The Academy has a great interest in the proposed regulations being discussed today in view of the fact that these regulations very significantly affect pension actuarial practice under ERISA. Within the Academy membership there exists a diversity of views on most issues, and these regulations are no exception. However, I believe that all of our members would agree that these proposed regulations are of fundamental importance to pension actuarial practice under ERISA.

By way of background, the Academy was established in 1965 as an umbrella organization of four actuarial organizations - the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the Fraternal Actuarial Association, and the Society of Actuaries. Full Academy membership has been available to enrolled actuaries since January, 1979. As of November 1, 1979 there were 5,500 members of the Academy, of which 2,429 were enrolled actuaries which is approximately 83% of all enrolled actuaries.

Thus, you can see the interest of the Academy in having its views heard today. These views are developed within the Academy through a broad-based committee structure. Each committee's members in a specialty area are selected because of their training and experience in that specialty. In the case of pensions, all of our pension committees are composed of enrolled actuaries who are virtually all members of the Society of Actuaries with a large majority also being members of the Conference of Actuaries in Public Practice.

The main point I would like to stress today is a general one; and was contained in the transmittal letter of our December 3rd submission:

"We believe that, consistent with his responsibility for overseeing sound funding on behalf of plan participants, the enrolled actuary should be permitted maximum discretion in selecting appropriate funding methods and assumptions to assure the sound funding of pension benefits."

In this connection, we are disturbed that the proposed regulations contain blanket prohibitions against certain methods that are recognized by the actuarial profession and are being successfully used in practice. I think we would all agree that not all methods are appropriate in all circumstances, and that certain methods may be more susceptible to producing an unsatisfactory pattern of plan costs than other methods.

However, we would encourage that actuaries who believe that it is appropriate under certain conditions to use a less conventional method be given the opportunity to justify the appropriateness of the method. Perhaps tightening the circumstances under which such a method would be acceptable would be a more appropriate way for the IRS to go than outright prohibition. Our December 3rd statement contains one possible approach along these lines.

At this time, I would like to turn the podium over to Mary Adams who will discuss our December 3rd written submission and elaborate upon the points I have just made.

AMERICAN ACADEMY OF ACTUARIES,  
COMMENTS FOR IRS HEARINGS ON REASONABLE FUNDING METHODS  
FEBRUARY 21, 1980

COMMENTS - by Mary H. Adams

On December 3, 1979, the Academy submitted written comments on the proposed regulations as to reasonable funding methods. We will not repeat these since we have no changes in the details of the technical items already presented. However, there is one additional technical concept which we feel might be clarified. Namely, that it is suitable to use different funding methods for separate formulas under a single plan. For example, a plan might have a flat dollar benefit per year of service, or a final average pay per year of service formula, under which a frozen initial liability and level normal contributions method would be used. And in addition, the same plan has a contributory, career excess benefit under which unit credit funding might be more appropriate.

Primary Reason

And now for the primary purpose of our participation in today's hearings.... This purpose is to discuss the view that there should not be a blanket prohibition of any actuarial cost method recognized in general by the profession.

First, I want to emphasize that we feel it is not only proper for the Service to issue regulations (reference - ERISA Act Sec. 3(31). "The Secretary of the Treasury shall issue regulations to further define acceptable cost methods"), but IRS must.

We have attempted to offer constructive comments on the proposed regulations, in a spirit of cooperation and the understanding of your task, as indicated by our December 3 submission.

We do, however, feel strongly that actuarial principles should be developed within the profession - and the actuary must exercise his professional, as well as legal, responsibility for his work. This responsibility includes both selection of assumptions and a proper funding method in each particular situation.

I would be very remiss as a representative of the Academy if I did not mention that differing views among our members do exist.

For example -- There is an Academy Task Force assigned to prepare comments on regulations involving actuarial matters under ERISA. That Task Force prepared most of the written comments submitted December 3. However, in the Task Force's original draft, there was no mention at all of agreement, or disagreement, with the proposed regulations with respect to open group methods or with respect to the compensation-prorated, accrued-benefit cost methods. The Task Force's rationale was that there is division of opinion as to the propriety of these methods. Further, some of the members agreed with the proposed regulations; specifically, some felt the compensation-prorate method is absolutely unacceptable. And -- back to the rationale -- because of the division of opinion, the Task Force felt it inappropriate to comment at all on these methods. As I will now discuss, there was not wholehearted agreement with this Task Force's approach, and modifications of the draft were made.

Had the Academy's comments excluded reference to these methods, it might have been interpreted by many to indicate that the Academy, i.e. all, or a majority of its members, agreed with the IRS proposed blanket exclusion of these 2 cost methods, and in principle, a blanket exclusion of any generally recognized cost methods not on the basic approved list. This is not the case.

We had the views of the Committee on Pension Actuarial Principles and Practices (the CPAPP after this). The charge of this Academy Committee, as its name indicates, is to examine and develop actuarial principles and practices for actuarial calculations in connection with pension plans. This is done through Recommendations (general principles) and Interpretations of specific items in the Recommendations.

In this Committee's Recommendation A, (4-4) it is indicated that under a unit credit method, proration may be made by compensation if appropriate. Further, it is known that the method is in use for funding standard purposes. It is the view of this Committee that, provided the computations are made on the proper basis, the method should be suitable for continued use under certain conditions. Further, in the future new methods may be developed and the precedent of having blanket prohibition against presently recognized methods may preclude their use.

The sentiments of these two committees were discussed at the Academy's Board of Directors meeting at the end of November. The comments submitted December 3, indicated the view that there should be no blanket prohibition against any actuarial cost method recognized by the profession, provided that it produces appropriate results on a case by case basis. The comments indicate further

that the Board directed the CPAPP to draft an Interpretation as to the appropriate application of the compensation-prorated method. The Board also requested an interpretation as to the proper use of the open group method.

The CPAPP has, in fact, come up with a draft of an Interpretation with respect to the compensation-prorated accrued benefit cost method. This is being submitted to the Academy's Board at its meeting on February 25, with a request for a distribution as an exposure draft to the Academy membership. This Committee concluded that, while they have seen certain improper ways of using this method, under certain strict rules of computation the method produces results that could give a better funding pattern and better employee benefit security than would be provided for certain types of plans under methods which already have blanket approval. As I mentioned before, we expect an exposure draft of this interpretation to be circulated if the Board should so approve next week.

With respect to the open group method, we cannot let it get lost in the shuffle. However, we should point out that at the present time, it could get lost temporarily because no one, at least no one on the CPAPP, is using it for funding standard purposes. We can also point out that we have observed that some multiemployer plans have used (misused) methods that appear to be somewhat akin to open group methods, and have produced serious reserve deficiencies or more dramatically, have produced bankruptcies. Open group methods properly applied are being used successfully now for long range corporate planning. It will be interesting to see how, over a period of time, the long term planning methods may fit into and be demonstrated to be suitable for funding standard purposes, especially taking into account the prospect of further development of computer technology.

In summary then, the Academy holds the view that blanket prohibition of any generally accepted method is undesirable. First, it could disrupt the funding pattern of plans which have long used a particular method and have in fact maintained a reasonable funding basis. Second, it could inhibit creativity, the development of new and perhaps superior techniques, especially in view of the advances in computer technology. We also take the view that the actuary has a professional, as well as legal responsibility, to be able to defend his use of any set of assumptions and any funding method for a particular plan -- we might expect the responsibility to be heavier in the case where the funding method is not one which has basic blanket approval.

STATEMENT 1980-6

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. • SUITE 515 • WASHINGTON, D.C. 20006 • (202) 223-8196

February 29, 1980

Mr. James W. Schacht  
Office of the Director  
State of Illinois  
Department of Insurance  
Springfield, IL. 62767

RE: Accounting Practice and Procedures Manual for Property and  
Liability Companies

Dear Mr. Schacht:

On behalf of the American Academy of Actuaries Committee on  
Property and Liability Insurance Financial Reporting Principles, I  
would like to thank the NAIC (A6) Subcommittee for the opportunity  
to comment on the rough draft of the above mentioned manual.

The AAA FR Committee believes the work of the A6 Subcommittee  
on this project to be a fine beginning to the revision of this manual.  
We have met as a committee to review the draft of the manual and would  
offer the following comments for your consideration.

Chapter 1 - Bonds

A suggestion to include definitions concerning short term  
debt instruments such as commercial paper and variable rate offerings

Chapter 12 - Taxes, Licenses and Fees

A suggestion to include reference in this chapter to the matter  
of insolvency fund assessments and assessments for certain Workers'  
Compensation funds in states where applicable

Chapter 15 - Losses

We have suggested language for amending portions of this chapter.  
The entire chapter, up to the Statutory Reserve Computations section,  
is attached. Where amended or additional language is suggested, it is  
underlined.

During our review, we noted the absence of reference to certain  
Annual Statement Schedules. We would suggest that the A6 Subcommittee  
consider appropriate comments in the following areas:

1. Schedule D - Part 1A  
Maturity Distribution of Bonds Owned December 31, Current  
Year at Statement Values

Mr. James W. Schacht  
February 29, 1980  
Page Two

Reason: This distribution can be compared with a distribution of expected loss payments over the future and can in part measure probable surplus loss due to realized capital losses on sale of bond less than market in order to satisfy the payment schedule.

2. Statement of Changes in Financial Position

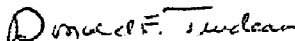
Reason: This relatively new page in the Annual Statement is important in the analysis of assets and liabilities.

3. Schedule P - Part 1F - Incurred but not reported losses

Reason: Appropriate language in Chapter 15 - Losses to refer to the distribution of IBNR by accident year. It is just as important to have the IBNR properly distributed as it is to have a proper total IBNR.

Thank you for your time in reviewing our suggestions.

Very truly yours,

  
Donald E. Trudeau

DET:bjs  
Enc.

cc: Mr. James Hanson  
Mr. James F. Mack  
Mr. Stephen G. Kellison

CHAPTER 15LOSSES

The single largest liability reported by most insurance companies is their unpaid losses. Incurred losses is usually the largest single deduction from income reported by companies. There are many methods used to calculate unpaid losses. This chapter will discuss the recognition, valuation and estimation of the ultimate cost of unpaid losses. In addition, incurred losses and statutory reserve requirements will be discussed.

## Recognition

There are many methods of estimating unpaid losses; the underlying goal is to have unpaid losses reflect the ultimate liability outstanding for losses that have occurred as of the valuation date. Losses are recognized as they occur and not as they are reported to the company. Because of this basis of recognition, unpaid losses are grouped into (1) reported and (2) incurred but not reported (IBNR). Reported losses are those of which the company has been notified. The incurred but not reported losses are those losses that have occurred but have not yet been reported to the company. As a practical matter, losses which have been reported to the company but not yet entered into the system may be included as IBNR. With respect to claims made contracts, losses are recognized as they are reported to the company.

## Valuation

Excluding certain types of losses in which the settlement consists of periodic payments of specified amounts, and which may properly be discounted with conservative interest assumptions, statutory accounting practices require that for every dollar of future losses the company reserve a whole dollar for the payment of those losses. Thus, the company is required not only to determine the current value of its claims liabilities but to estimate when the various claims will be settled and what the value of those claims will be.

Estimation

Unpaid losses for claims that have been reported may be determined in many ways. One way is for the claim to be assigned to an individual and the individual estimates the value of the claim as needed facts are gathered. This is known as the individual case estimate method. (Note that Schedule "P" in the annual statement refers to all loss reserves, regardless of the way they are determined, as case-basis reserves.)

## CHAPTER 15

Page two

The following illustrative examples use information that may be maintained on an accident or report year basis. If historical information is maintained and used by accident year then the unpaid losses estimated are inclusive of IBNR unpaid losses and the IBNR unpaid losses must be split from the total. If report year data is used, then the result is an unpaid loss figure for reported claims and IBNR unpaid losses must be estimated separately.

Ultimate losses may be estimated based on paid loss patterns. This method determines the pattern of prior years paid losses as they relate to ultimate losses. A percentage of paid losses to ultimate losses is calculated at each stage of development. This percentage is then divided into the paid losses for other years in the same stage of development to determine the estimated ultimate loss dollars. The paid losses are then subtracted from the ultimate loss dollars to determine the required unpaid loss amounts. The sum of these amounts for all years is the total estimated unpaid losses.

Another means of establishing unpaid losses is to estimate ultimate loss counts and estimate the average ultimate cost per claim. These two estimates are then multiplied against each other to establish an ultimate cost. Paid losses to date are subtracted from this ultimate cost figure to arrive at total estimated unpaid losses.

The ultimate loss count may be determined by developing a percentage of losses reported at the particular stages of development of prior years. These percentages may then be divided into current reported losses to determine ultimate numbers. This, of course, is assuming that a reasonable pattern is present for prior years. The average cost of incurred losses may be determined by developing average closed costs for prior years at various states of development. After review of prior years average closed cost, a factor is developed and used to simulate trends in total loss costs. This trend factor is then applied to the average closed cost of prior years to determine an estimated average ultimate cost for the year being reviewed.

Another method that may be used is unpaid loss counts and average values of unpaid losses. The average value of unpaid losses multiplied by the unpaid loss count to arrive at an ultimate figure. From this figure, partial payments are subtracted to arrive at a current unpaid loss amount. Average values of unpaid losses are determined by reviewing prior years information as it develops.

Some of the other methods that may be used include frequency and severity analysis and projection of loss ratios.

The foregoing are only examples of the many general methods in use. Also in practice there are many variations to these methods. Some companies use a combination of methods to establish their unpaid losses. For example, the reported liability losses that require a great deal of time to investigate

## CHAPTER 15

Page three

average unpaid loss amounts may be assigned until adequate information is compiled. Then the individual case estimate method may be used.

With reported losses representing the liabilities for reported claims, the company must also record a liability for losses that are incurred but not reported. Various methods are used for estimating IBNR losses. Following are two illustrative examples.

In a formula method, IBNR losses are related to some base, such as incurred losses, reported losses, premiums and exposures. When a formula approach is used in estimating total unpaid losses, the IBNR losses are separated from the reported losses by factoring.

In the average method, separate projections are made of IBNR claim counts and the average cost for which those claims will settle. The product of these two estimates is the IBNR.

Whatever methods are selected for establishing unpaid losses, the goal should always be reserve adequacy.

While the methods illustrated above are normally adequate, loss reserving cannot be reduced to a purely mechanical process and judgment is required at many critical junctures. There may be changes in functional operating areas which may make the illustrative reserving techniques inadequate and the interpretations of the data will require more complex procedures.

STATEMENT 1980-7

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. • SUITE 513 • WASHINGTON, D.C. 20006 • (202) 223-8196

March 13, 1980

TO: Ted Becker, Chairman  
NAIC Life, Accident and Health Technical Subcommittee

FROM: American Academy of Actuaries Health Subcommittee,  
Risk Classification Committee

RE: Use of Sex in Health Insurance Rating

Our Subcommittee on Health Insurance of the American Academy of Actuaries' Risk Classification Committee appreciates the opportunity to be of assistance to your NAIC Technical Subcommittee, and we will do our best to be at your meeting in Tampa on March 27 and 28.

As actuaries involved in a professional organization, we have to tell you where we are coming from. Our interest is in keeping health programs financially healthy in a competitive environment, with prices that are fair and equitable, so that the plan participants can be assured of receiving the benefits they have been promised. Our aim is to be useful to regulators and legislators as an objective resource on actuarial matters, as well as keeping our own Academy members informed.

We believe that voluntary insurance, with full public disclosure of companies' financial status, can best meet the needs of most insurance consumers. For this reason, we urge regulators and legislators to carefully review the probable consequences of any proposed new restrictions on the freedom of choice that health plans have in operating in a competitive market place. Perhaps this reflects the general feeling of Americans in favor of maintenance of a delicate balance between private initiative and government involvement.

Your Subcommittee has been asked to respond to the C-1 Committee's Task Force on Sex Discrimination. Our Subcommittee understands the desire of the Task Force to achieve general equality of opportunity for women, and to develop and maintain full and equal access to all forms of needed insurance protection. As actuaries and citizens of the U.S., we agree with these goals, and we want to remain sensitive to meeting these needs, based on objective criteria.

We want your Subcommittee to know that our Subcommittee on Health Risk Classification believes that some statements made in the Task Force's 1978 Report concerning actuarial and insurance principles were incorrect, and do not necessarily lead to the conclusion that health policies should be priced on a unisex basis, as suggested by the Task Force. It is likely that a statutory requirement of unisex rating of individual health insurance could have a disruptive economic impact on the availability of coverage, and could adversely affect the financial soundness of some insurers.

The Academy's Risk Classification Committee has stated that proper risk classification serves three purposes; namely, to prevent adverse selection, to permit equitable treatment of those covered by insurance and pensions, and to allow economic incentives inherent in the free market place to operate in a favorable manner. By serving these goals, risk classification systems that are based on demonstrated cost differences encourage insurers to provide coverage for all who want or must purchase insurance, since they can reasonably expect that each class of business will be self-supporting.

If insurers are not permitted to recognize significant cost differentiating factors in pricing competitive products, the financial condition of insurers could be adversely affected. Therefore, the Risk Classification Committee urges caution by all who would attempt to extend principles of fair employment standards (Title VII of the Civil Rights Act of 1964) to the voluntary insurance market place, since these are separate issues operating in different environments.

Significant differences in medical and disability costs for men and women do exist. These differences in costs explain the differences in prices. We would refer your Subcommittee to the New York Insurance Department's study of disability insurance which reviewed the most pertinent and extant data on cost differentials by sex, and concluded that 1) disability insurance for women has different claim cost characteristics than for men, after adjustment for other known factors, such as age and occupation, and 2) price differentials should be based on these demonstrable differences in cost by sex.

If regulators prohibit price recognition of these significant differences in costs, the economic impact could be to cause individual insurers to alter their marketing emphasis - namely, to seek the lower cost risks, and to reduce the availability of coverage for the higher cost risks, in order to avoid the adverse selection that could otherwise threaten their solvency. Since availability of coverage to people of both sexes is socially desirable, mandatory unisex pricing within a voluntary and competitive market place is potentially counter-productive.

Thank you for giving us this opportunity to provide input. We would be pleased to respond to any questions you would like to address to us.



William A. Halvorson, Chairman  
Health Subcommittee  
Committee on Risk Classification

WAH/bh

Members of Committee

Samuel Gutterman  
CNA Insurance Companies

Raymond McCaskey  
Health Care Service Corporation

Robert Shapland  
Mutual of Omaha

Barbara J. Lautzenheiser  
Bankers Life Nebraska

Joseph W. Moran  
New York Life Insurance Co.

Peter Thexton  
HIAA Liaison Representative

## STATEMENT 1980-8

### GENERAL COMMENTS ON INDEXING

If inflation is large enough, and continues long enough, it will destroy the soundness of any funded pension plan. This is because inflation will first destroy the financial markets that funded plans must use to preserve and grow their assets.

In considering indexing, the question arises -- how will the costs of an indexed plan compare with the costs that a plan sponsor expected when he adopted the plan? The answer is -- if the plan can earn a specified return, say 3%, in real dollars, whatever the level of inflation, then the cost of a fully indexed plan in the presence of inflation is the same as the cost of an unindexed plan in the absence of inflation.

If the plan sponsor can indeed continue to gain, on average, a specified positive real return (after inflation), then his costs will not rise. Experience shows, however, the fragility of that "if," - at least for short periods. Thus, it is quite true that (1) the plan sponsor never expected to get 13% returns on government bonds, which he can do today; (2) such yields clearly go hand in hand with present substantial inflation; and (3) he nevertheless can easily have an experience loss from his interest assumption, because his bond portfolio had to drop greatly in market value in order to produce equivalent future returns, and his stock portfolio had to drop greatly in order to provide prospective returns competitive with the higher bond yields.

Hence there is great difficulty in obtaining a positive real return, at least over certain intervals, but that is the real problem rather than the apparent enormous increase in pension costs that comes from indexing.

### GENERAL COMMENTS RE: "HEATON" PLAN

Before considering this approach, first consider a simpler model. Suppose you establish now a fixed benefit plan that provides an acceptable benefit result (in the absence of inflation) at an acceptable cost, using a 3% interest assumption. You recognize that inflation can substantially erode the value of the plan, and that the pensioner needs protection year-to-year, not on average over a 10-year or 20-year horizon. You are not willing to go to full indexing, but you understand that substantial inflation produces not only the need for higher benefits, but also the higher yield that can help to pay for them. Finally, you observe that pulses of inflation cause severe concurrent losses, not gains, in stock and bond portfolios, but that short-term investments preserve capital and capture the rise in interest rates.

Hence you decide that, as each employee retires (on a fixed benefit), you will transfer plan funds to a short-term paper account, in an amount equal to the value of his pension on a 3% interest assumption. You then agree to increase his pension each year to the extent that the earnings in that account exceed 3%. For example, if the 3% interest assumption requires that your retired life reserve be

\$1 million but you in fact earned 10%, then your fund is actually \$1.07 million (since everyone died according to your table) and you can afford a one-time 7% increase in the lifetime incomes.

You don't promise to compensate for inflation; you do promise to spend whatever you have earned over 3%. That is the essence of the Heaton plan, and an excellent illustration of the common source of benefit erosion and higher yields. It should greatly appeal to plan sponsors who want to compensate for inflation but are afraid of the financial consequences.

Note that this approach fits an uninsured defined contribution plan, also. If the employee retires on a \$1,000 per month income instead of the single sum equivalent (on a 3% basis), his income can be increased in the same way.

The actual Heaton plan is more generous. An initial level of inflation is compensated for, regardless of investment results, and the experience yield is taken to be the average prime rate, which is, of course, currently well above the yields available on short-term paper. Indeed, Heaton's own Appendix 4 shows that yields on commercial paper over the last 20 years have exceeded the CPI usually by 1% to 2%, and never as much as 3%. Hence the "trigger" would have had to be 0% rather than 3% -- i. e., all investment return would have had to be used for increasing benefits -- in order to help with inflation. Indeed, the Ibbotson-Sinquefeld data for 1926-1978 show that the average excess of 90-day Treasury bills over the CPI was, alas, 0%.

Still, the main point remains: if one can obtain on average a positive real return, i. e., after inflation, the means exist to compensate benefits for inflation. Indeed, funded plans are far better able to compensate than unfunded indexed plans, like Social Security, which is in serious jeopardy because of its inability to capture an offsetting higher yield.

### CRITICAL COMMENTS RE: "HEATON" PLAN

#### Cost

The Rockefeller Foundation material is misleading where it alludes to the "no cost" aspect of the proposal. In fact, the program has real and substantial cost, which can be readily measured in terms of the difference between, say, 3% reserves for retirees and the 7% or higher reserves that the employer might otherwise set up.

#### Public Pension Plans

The basic concept, of investing segregated retiree funds in short-term securities, is intriguing. But while this would be possible in most private plans, it would not work in a great many public plans where the retiree reserves -- especially if computed at 3% interest -- would substantially exceed the assets of the entire pension fund.

In Pennsylvania, Connie Siegel points out that the two major funds, which are considered reasonably funded based upon public employee standards, each have assets approximately equal to their retiree liability plus active member accumulations. If these funds, totalling approximately \$7 billion in assets, were to be converted from their present balanced investment portfolio of stocks, bonds and mortgages to a portfolio consisting entirely of short-term securities, the results would be truly upsetting in many ways.

CPI Changes and Short-term interest rates

The proposal seems to be substantially dependent upon the continued future correlation between CPI changes and short-term interest rates. As of this writing, the CPI is predicted to rise 12.8% from the fourth quarter of 1979 to the fourth quarter of 1980 -- while the prime rate has ghosted up to 19.5%.

This situation, if prolonged, could prove costly to the Rockefeller Foundation, which has indexed its pensions to the prime rate instead of actual fund earnings, and which, therefore, has accepted the risk that investment returns might fall well short of the prime rate for an extended period of time. As put by Cecil Nesbitt, "I would prefer adjustments be tied to the excess of the actual earnings rate over 3%, and not to a figure outside the plan's ability to influence."

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STATEMENT 1980-9

## NEWS RELEASE



AMERICAN ACADEMY OF ACTUARIES  
1835 K Street, N.W. • Suite 515 • Washington, D.C. 20006

*For further information, contact:* FRED HUNT  
Director of Communications & Government Liaison  
(202) 223-8196

April 2, 1980

AMERICAN ACADEMY OF ACTUARIES  
RISK CLASSIFICATION COMMITTEE

### FAVORS FREEDOM TO DIFFERENTIATE SEXES IN RISK CLASSIFICATION

Where there are demonstrable differences between the risks presented by males and females, the continued freedom for actuaries to differentiate by sex in the pricing of insurance and pension coverages is favored by the Risk Classification Committee of the American Academy of Actuaries.

The Committee statement follows a recent announcement on sex-based price differentiation by Teachers Insurance and Annuity Association and College Retirement Equities Fund (TIAA-CREF). Recently TIAA-CREF announced that--subject to approval from the New York Insurance Department--it will begin using merged gender, or "unisex," tables for the determination of benefits purchased from accumulated future contributions under its annuity contracts. The provider of annuities and life insurance for some 600,000 employees of colleges and universities, TIAA-CREF had been defending in federal courts its right to use annuity prices which differ by sex.

While supporting the principle that TIAA-CREF has the latitude to use pricing practices which are appropriate to its particular operations, the Academy's Committee stated that TIAA-CREF functions within a unique set of circumstances which are not necessarily characteristic of the general marketplace.

The Committee observed that since the passage of the Civil Rights Act of 1964, there has been a major effort by governmental agencies and other interested parties to eliminate unfair discrimination based on an individual's sex. The Committee supports these efforts. However, some of this activity has focused on eliminating sex-distinct mortality tables, as currently used by actuaries in the pricing of annuities and life insurance. The Committee does not agree that such tables are necessarily unfair or that their use should be prohibited. In addition, the Committee pointed out that court interpretations of the Act do not universally bar the use of sex-distinct tables.

All available statistical evidence strongly indicated that females live longer than males. Better mortality for females exists even prior to birth; perinatal mortality rates are over 20% higher for males than for females. Furthermore, the difference in life expectancy between males and females has been steadily increasing rather than decreasing. In 1900 the male life expectancy at age 65 was 11.5 years, and the female expectancy was 12.2 years--or about 6% greater. By 1976 the male expectancy had increased to 13.7 years and the female expectancy to 18.0--or about 31% greater. Furthermore, there is no statistical indication that this trend is changing. Although these figures are based on general population statistics, comparable life expectancies based on insured life statistics are similar. Because of the longer life span of the average female compared to the average male, the cost of a lifetime annuity benefit to a female is significantly greater than the cost of an identical benefit to a similarly situated male. For the same reason, the cost of life insurance protection is lower for females than for males.

The American Academy of Actuaries Committee states that proper risk classification serves three purposes:

- to prevent "adverse selection," i.e. the tendency for good risks (where the artificially imposed rates are too high) to leave a program while poor risks (where the artificially imposed rates are too low) remain behind. This results in deteriorating experience, spiralling costs and reduced numbers of insureds, all of which is counterproductive and eventually benefits no one.
  
- to permit equitable treatment of those covered by insurance and pensions, by giving each person the fairest possible price commensurate with the risk involved.
  
- to allow economic incentives inherent in the free marketplace to operate, which results in the broad availability of coverages to all segments of society.

By promoting these goals, risk classification systems which are based on demonstrated cost differences are generally appropriate and favored by the Risk Classification Committee of the American Academy of Actuaries.

## STATEMENT 1980-10

April 3, 1980

Mr. Andrew J. Capelli  
Peat, Marwick, Mitchell & Co.  
345 Park Avenue  
New York, NY 10022

Dear Andy:

As promised in my letter of February 15 to Dane Charles and Albert Morrison we do have some substantive comments on the Audit Guide, Chapter 10.

The press of seasonal work has held up these comments and I confess to being the main culprit for the delay.

The Academy Subcommittee feels the need for personal dialogue with the members of your committee most familiar with this subject. We had hoped very much to come up with some specific suggested wording but feel a little at a loss to understand your needs well enough to do so without further dialogue. We hope this can be arranged in spite of the late hour.

In any event, here are the comments. In some cases, because of our lack of knowledge, they are not as specific as we would like them to be:

1. Section 10-27 of the draft (Page 19) might include or be followed by an enumeration of some of the difference types of plans. This is already done in a general way. Discussion of specific plans such as Taft-Hartley, Multiple Employer Trust, Voluntary Associations, would appear in order.
2. In connection with the determination of liabilities Page 20 might point out very specifically that the "plan benefit document" should be closely examined.
3. This is probably a good point to mention that while Chapter 10 gets very specific about defined benefit contribution plans specifics are generally not included with respect to health and welfare plans. You will notice that the preceding comments and, generally speaking all of the comments that follow, relate specifically to health and welfare plans.
4. At some point Chapter 10 might mention that the actuary is the major specialist in determining the contribution rates or the budgeting for accident and health benefits and for the claims liabilities and claim reserves for accident and health benefits.

Mr. Andrew J. Capelli  
PMM & Co.  
April 3, 1980  
Page 2

5. By way of another example of the additional specifics that might be added concerning health and welfare plans, a specific list of the types of benefits might be included such as hospital and surgical reimbursement plans, short term disability plans, etc.
6. We think it is extremely important that good guidance be given concerning the gathering of claims data. Something like the following might be included. "Claims summaries which show claims paid by date reported, date incurred, and date paid. The data should be separated by employee, dependents; male, female; single, family; eligible for Medicare, not eligible for Medicare; or whatever combinations are necessary for the specific health-welfare benefit."

The accountant, we urge, should audit the entries to the claim summary to make sure the totals are complete and the separations are accurate. The accountant and the actuary, ahead of time, should have agreed on definition of terms so that the numbers will mean what everyone thinks they mean. The actuary would be responsible for requesting the specific format and the data needed and for making the calculations which would lead him to the estimate of the claim liability and the claim reserve. Perhaps it would be well to include a rather detailed description of the different elements of claim reserves and liabilities.

7. The actuary determining contribution rates for future periods will use not only the prior incurred claims data but will take into account inflation and increases in benefit levels. It might be well to point this out specifically.
8. In a more general vein perhaps in one place or throughout Chapter 10 further guidance should be given concerning the definition of roles of the actuaries and accounts.
9. Distinguishing between plans involving a fund and no trust, plans involving a fund with a trust, and those where the employer directly disburses money would probably help. As you aware even better than we, some rather complex accounting questions are involved in this. We will be glad to assist in helping with some specific wording for Chapter 10 that will define the total liability.
10. A situation which is a fruitful source for error on everyone's part are combination plans where a plan document guarantees certain benefits, others are understood by practice, etc. Also, there are situations where some benefits are insured and some are not insured. It is very easy in each of these situations to deal with one element of the puzzle but not all. Perhaps this should be specifically pointed out in Chapter 10.

Mr. Andrew J. Capelli  
PMM & Co.  
April 3, 1980  
Page 3


11. Under insured plans, there may be a liability for an additional premium which is not immediately apparent.
12. Also, there are various provisions extent which provide "extended" cover under various conditions.
13. There is some question whether HMO's could be included with employee welfare plans for purposes of this document or handled separately. We point out the question. We are not 100% sure of the answer.
14. There is a whole host of questions related to the ability of the plan continuing to operate. This includes not only levels of future contributions but gets into such questions as the probability of going bust, contingency reserves (or absence thereof), etc.
15. We agree with the approach in paragraph 10-20a. We suggest that the second sentence be changed slightly to read "Membership in the American Academy of Actuaries is generally regarded as evidence of qualification of an actuary; however, actuaries are subject to guides to professional conduct. According to these guides not all actuaries may consider themselves qualified to serve in all actuarial capacities."

Andrew, I apologize for the tardiness of these comments. I will give you or Dana a call in a few days to see how we may be of further service to you.

Our subcommittee is continuing to study this chapter and if we can come up with some specific wording which we feel comfortable suggesting to you we will do so. We will also get in touch with you if we come up with further comments.

However, in any event, I will give you a buzz in a day or so.

Sincerely,



W. H. Odell, F.S.A., M.A.A.A.

WHO/dw

cc: Mr. Albert Morrison, Jr., Mr. Dane W. Charles  
Subcommittee on ERISA Health & Welfare Plans

## STATEMENT 1980-11

April 11, 1980

The Honorable Lloyd M. Bentsen, Chairman  
Subcommittee on Private Pension Plans &  
Employee Fringe Benefits  
Russell Senate Office Building, Room 240  
Washington, D. C. 20510

In re: Minimum Contribution Requirements  
Under S. 1076

Dear Senator Bentsen:

As Chairman of the American Academy of Actuaries Task Force on reviewing the pending Federal legislation on the Multiemployer Termination Insurance Program (S. 1076 and H.R. 3904), I am very deeply concerned to learn of the Senate proposals to omit from S. 1076 certain key provisions of the minimum contribution requirements in H.R. 3904 aimed at encouraging sound actuarial funding of multi-employer pension programs. Specifically, I am referring to the Senate proposal to exclude the "excess normal cost" provision contained in paragraph (2)(A)(i)(II) of H.R. 3904 (as adopted by certain House Committees) under the House bill section entitled "(j) MINIMUM CONTRIBUTION REQUIREMENTS FOR MULTIEMPLOYER PLANS," and the Senate proposal to exclude the "asset test" which is in that same House bill section under the heading "(5) APPLICABILITY OF MINIMUM CONTRIBUTION REQUIREMENTS REGARDLESS OF REORGANIZATION."

The American Academy of Actuaries' Task Force on Multiemployer Plans made a report dated November 7, 1979 (copy attached) in which one of our major findings was to strongly support minimum funding standards for multiemployer plans, as you may note on page 3, item 4 of our report. As professional actuaries, one of our main concerns is to encourage proper funding of the multiemployer pension programs -- that is the sole purpose of this letter.

The Honorable Lloyd M. Bentsen

April 11, 1980

I strongly urge that the above referenced items in H.R. 3904 are a vital part of a carefully designed minimum contribution mechanism and should be included in S. 1076.

Respectfully submitted,



Fenton R. Isaacson, F.S.A.  
Chairman, AAA Task Force  
on Multiemployer Plans

FRI:jn  
Attachment  
cc: Senate Finance Committee Members

# STATEMENT 1980-12

April 16, 1980

## PAPER #1

### RECOGNITION OF THE TIME VALUE OF MONEY IN LOSS RESERVES

Reserves for losses and loss adjustment expenses generally comprise the largest single liability in a property/liability insurance company financial statement. Therefore, the extent to which a property/liability company's financial statement properly reflects the true financial condition of the company at a given point is importantly dependent on the accuracy of these reserves. Further, the fair statement of a company's earnings in a given accounting period is importantly dependent on the accuracy and consistency of those reserves at the beginning and ending of the accounting period.

Where losses are settled within a year of the date of the accident, the time value of money is a relatively minor factor. In contrast, where losses are settled over an extended period of time, the money held in reserves in earning interest and the time value of money becomes a major factor. For those companies with substantial "long-tail" reserves, the recognition given future investment earnings can have an important bearing on reserve levels.

This statement explores the concept of recognizing the time value of money in establishing loss reserves.

#### Categories of Claims

For purposes of discussion, claims may be categorized into four general types, and it is desirable to recognize that the time value of money has a different impact on the reserves for each type.

##### (1) Short-Term Claims

On certain lines of business such as fire, windstorm and auto physical damage, loss payments are normally made within a year or at most within two years. General inflation may push these costs up, and some investment income

is earned while reserves are held. However, the effect of these factors tends to be modest in comparison with the variables involved in reaching agreed settlement costs.

(2) Long-Term Uncertain Amount Claims

Certain general liability claims and auto liability claims may take several years to settle, and during such period of time, the impact of inflation and investment earnings on reserves can be quite sizable. The determination of the settlement value is uncertain and may vary widely.

(3) Long-Term Reasonably Certain Amount Claims

Claims involving periodic payments not fixed as to amount or time can be reasonably projected but are not precise. Examples are claims for continuing medical treatment over many years such as occur under compensation medical and automobile or health high limit or unlimited medical payments coverages.

Such claims are usually large and increase or decrease directly with inflation. The investment earnings generally will be sizable because of the long period of time reserves are held.

(4) Long-Term Claims with Fixed Payments

Many long-term compensation claims call for fixed amounts payable for a long period of time. These can be quite accurately projected using life expectancy tables where a lifetime payment is involved. As a variation, benefits are escalated for inflation in some jurisdictions requiring the introduction of an escalation or inflation factor. Again, the investment earnings on reserves generally will be sizable due to their long duration.

Application of Discounting

The following principles are generally accepted:

1. It is appropriate to recognize the time value of money.
2. Workable assumptions with regard to cash flow (claims payments) patterns and appropriate related interest rates can be made.
3. Less certain estimates require greater margins of conservatism.

In practice, claims tend to be placed into two groups, i.e., those the settlement patterns of which are estimable on an individual claim basis and those that are better estimated in some aggregate manner, e.g., by coverage, by accident or reported year.

For the most part claims in (3) and (4) above fall into the first category. One is reasonably able to determine for an individual claim the existence of liability and the schedule of periodic payments although for unlimited medical claims the impact of variables can be severe. To reflect the time value of money, a factor can be applied to each periodic payment, scheduled or estimated.

Claims in (1) and (2) above basically fall into the second category. Actuaries tend to project the ultimate settlement value of a body of these claims by estimating aggregate loss payment patterns using historical data. While the value and payment date of individual claims are not projected, estimated total loss payments by calendar periods are obtainable. The time value of money can be reflected by applying the appropriate factor to the projected payments for each calendar period.

Rate of Discount

It is generally agreed that any rate of discounting applied to loss reserves should be somewhat conservative and reasonably stable. In the absence of conditions to the contrary (for example, a specific investment program affecting a

particular block of claims) the insurance company's average rate of return on investments may serve as a guide to an appropriate rate to be applied. Specifically, this would mean that rates appropriately would vary among companies.

#### Viewpoints

It should be noted that some actuaries are concerned over the possibility of the concept of present valuing of loss reserves extending to statutory accounting with the attendant tax and ratemaking implications. They view this as a primary consideration, irrespective of principle.

Other distinguish between individual claims that are established liabilities and ones which are among a group of claims the total cost of which is projected in a reserve analysis without distinguishing specifically from which claims in the group the ultimate liabilities will emerge. In making this distinction they would consider present valuing only those individual claims of established liability.

Conversely, with the acceptance of the concept of recognizing the time value of money, many, arguing principle, find difficulty in separating those claims to be present valued and those not. They believe that the concept should be applied universally.

April 16, 1980

## PAPER #2

DISCOUNTING OF LOSS RESERVES

If the principal purpose of company statements and reports is to provide a method of determining the value of that company or a means to evaluate the capability of its management, then the discounting of loss reserves serves this purpose very poorly indeed.

Loss reserves are a substantive part of the liabilities of property and casualty companies, in most cases being larger than the net worth of companies and in many cases being larger than the earned premiums. The effect of selecting varying discount rates from period to period which would be necessitated by changing economic conditions from time to time, would be so powerful as to cause great changes in perceived net worth from one year to the next, or even from one day to the next. Furthermore, the effects of changes in the discount rate would be such an overwhelming force in the determination of operating results as to diminish the importance of the remaining factors (such as underwriting and even investment income) and, in some cases to render them trivial. Far from providing a consistent base for measuring a company's results from year to year or improving the comparability of results from company to company, discounting would be destructive of these purposes.

In addition, the testing of loss reserve adequacy, one of the more important measures of management capability, would be much more difficult. The most popular tests of loss reserves are of the type which compare reserves as of a given date with the payments which history shows have been required to pay those claims. It is clear that if reserves were discounted, they would automatically be mismatched against payments.

While it is possible to adjust for this situation, no one will claim that the discounting of loss reserves will simplify or clarify the loss reserve evaluation problem faced by the investor or regulator.

Thus, the main purpose of periodic company reports - the furnishing of information to interested parties such as shareholders (actual and potential), regulators and the public in general would be subverted by the introduction of this concept.

As important as these considerations are, there are several more practical reasons why discounting is a dangerous idea. Determination of proper loss reserves is a difficult task. One need only to look at recent history to know how true this is. Over the recent past, many companies and not just small, unsophisticated ones, have had to "strengthen" these reserves by material amounts. It was only by dint of investment income that these companies remained unimpaired. If they had, at their starting positions, been discounting their loss reserves, very likely many of these would now be in the hands of liquidators. And this is to say nothing of the difficulty of discounting in the first place. How does one estimate the timing of loss payments for classes whose payments are not periodic but spasmodic - and this describes most casualty classes.

When one adds to the difficulty of reserving the additional problems inherent in discounting (both rate and time) it is clear that any operating or net worth evaluations which use discounted reserves are, to say the least, of questionable reliability. In the same vein, the comparison of several companies by an investor for the purpose of making a choice among them would be made much more difficult.

There are other considerations worthy of mention. The use of discounted loss reserves would make the difficult problem inherent in the making of property and casualty rates much more so. This, in turn, could be damaging and introduce an unacceptable degree of instability into the property and casualty insurance business.

Incidentally, one might ask, if it is desirable to anticipate investment income on loss reserves, why is it not equally so to anticipate investment income on unearned premium reserves and even on capital and surplus. Surely one cannot agree that such income is less certain - it is more so.

April 16, 1980

## PAPER #3

DISCOUNTING LOSS RESERVES - GAAP VS. STATUTORYStatutory Statements

The statutory annual statement is designed to exclude any discounting of loss reserves. The loss development schedules (O and P) make no provision for discounted reserves, and a company that uses such a procedure automatically shows an adverse development pattern. Further, question #31 on page 15 of the annual statement form asks for a reporting of any discounting and the amount involved, and a footnote in Schedule P asks for the rate of interest used in valuing future compensation payments.

A scanning of the statement of 30 large companies reveals:

- 11 report that they are not discounting, and confirm this by a 0% or equivalent in footnote (f) following Schedule P, part 1F.
- 3 report that they are not discounting but quote a discount factor (3½ or 5%) in their Schedule P footnote.
- 3 report something like "No, except where permitted under statutory accounting", and quote a discount factor in their Schedule P footnote.
- 13 report that they are discounting, with some noting that their discounting is limited to workers compensation.

Not clear from this summary is the extent of "implicit" discounting - cases where, for example, the present level of medical payments is multiplied by the expected period of payment to arrive at the reserve carried in the statement. Since the medical payments can be expected to escalate from future inflation, this procedure in effect assumes that future inflation will be offset by future investment income - "implicit" discounting. "Implicit" discounting is not an unreasonable procedure, but should be recognized as discounting. The best information available indicates that there is a great deal of unreported "implicit" discounting taking place.

The arguments against permitting explicit or implicit discounting in statutory statements include:

1. Statement not designed to recognize discounting.
2. Discounting creates automatic adverse development unless statement form is adjusted in some way.
3. Use of discounting speeds up federal income tax liability.

The advantages of discounting the long term fixed amount and reasonably certain claims include:

1. Properly recognizes the different operating impact of a claim paid quickly and a claim paid over a long period of time.
2. Encourages proper reserving of very large long-term claims.
3. More nearly pictures true results by accident year.

Other major discussion points which can be argued either way include:

- a. If discounting was generally practiced, would companies tend to consistently underreserve?
- b. Is it practical to apply discounting to some but not all reserves?
- c. Would discounting encourage regulators to further depress rates?
- d. What is the most reasonable and acceptable level of discounting or non-discounting at which the industry could hope to achieve consistency?

#### GAAP Statements

The AICPA Audit Guide deals with discounting of loss reserves from a different perspective than the statutory statement. The intent, at least, would be to arrive at an appropriate pattern for GAAP statements without necessarily disturbing the statutory procedure. Whether or not this could be accomplished is a matter

of considerable concern, and therefore the potential impact on statutory statements needs to be fully reviewed. In this connection, the rather considerable extent of present discounting of workers compensation reserves in statutory statements is quite pertinent.

If it is feasible to adjust GAAP statements for discounting without disturbing statutory statements, then the advantages listed for discounting the long-term fixed amount and reasonably certain claims are generally applicable, while the arguments against discounting tend to lose some of their force. However, there are several questions remaining to be resolved, including:

1. Defining general guidelines as to which claims can be discounted
2. How the discount would be taken into the GAAP statement (i.e. a reduction in reserves vs. an increase in accrued income)
3. Suitable procedures for recognizing both implicit and explicit discounting procedures.

STATEMENT 1980-13

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W., • SUITE 515 • WASHINGTON, D.C. 20006 • (202) 223-8196

April 28, 1980

DIRECTOR OF RESEARCH AND TECHNICAL ACTIVITIES

File reference 1043-013P

Financial Accounting Standards Board

High Ridge Park

Stamford, Connecticut 06905

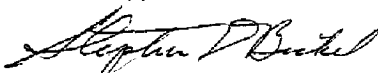
Dear Sir:

The following comments on the December 31, 1979, Discussion Memorandum on the Effect of Rate Regulations on Accounting for Regulated Enterprises are submitted on behalf of the American Academy of Actuaries General Committee on Financial Reporting Principles:

Issue 2.19:

1. The committee believes that most actuaries feel that rate regulation in the insurance industry does not provide a basis for applying generally accepted accounting principles on a basis different from that followed by non-regulated enterprises.
2. Many actuaries believe that the regulatory accounting system should be considered generally accepted accounting principles for mutual insurance companies. However, the reason for this position does not rest on the impact of rate regulation, but rather on the absence of a stockholder interest.

Sincerely,



Stephen D. Bickel

Chairman

General Committee on Financial  
Reporting Principles

SDB:fm

cc: Mr. Stephen G. Kellison, M.A.A.A.  
Executive Director  
American Academy of Actuaries  
1835 K Street, N. W., Suite 515  
Washington, D. C. 20006

STATEMENT 1980-14

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. • SUITE 515 • WASHINGTON, D.C. 20006 • (202) 223-8196

RONALD L. BORNHUETTER, M.A.A.A., President  
c/o GENERAL REINSURANCE CORP.  
600 STEAMBOAT RD.  
GREENWICH, CT 06830  
203/622-4000

May 29, 1980

Mr. Paul A. Katz  
Director  
Standards Department Center  
Staffing Services Group  
Room 3609  
Office of Personnel Management  
Washington, D.C. 20415

Dear Mr. Katz:

The American Academy of Actuaries is interested in working with you to update the X-118 Qualification Standards for the Actuary Series, GS-1510, and the associated rating schedule. We understand that the standards were last updated in the 1960s. Since then there have been important changes in the actuarial profession which would make a review of these standards appropriate.

Professional actuarial positions have been in the OPM's Management Shortage categories for many years. Chief actuaries of governmental agencies tell me that it is extremely difficult to recruit highly qualified candidates primarily because federal salaries are not competitive with the private sector.

The present X-118 Qualification Standards are written appropriately for professionals, such as economists, doctors, and lawyers, where professional training is normally done by graduate schools. These standards fail to recognize the unique educational system of the actuarial profession. Most aspiring actuaries elect to pursue their professional goals by the actuarial examination process rather than attend graduate school.

The most widely accepted standard of professional qualification for actuaries is Fellowship in either the Society of Actuaries or the Casualty Actuarial Society. Admission to membership in either society is by examination only. Both societies offer Associate status to individuals who have completed a certain portion of the entire examination program. The first four examinations of each society are identical. Fellowship in either society is widely acknowledged to be the equivalent of a Ph.D. in mathematics.

The American Academy of Actuaries was formed by the joint efforts of both societies, as well as two other actuarial organizations (the Conference of Actuaries in Public Practice and the Fraternal Actuarial Association), in order to include all qualified U.S. actuaries within one organization and to represent the profession with government, other professions, and the public. Membership in either the Society of Actuaries or the Casualty Actuarial Society together with three years of responsible actuarial experience qualify an actuary for membership in the Academy.

In recruiting actuaries, private industry recognizes the importance of these actuarial examinations by graduating starting salaries based on the number of actuarial examinations completed. The enclosed table included in the 1979 Actuarial Salary Survey, prepared by the Life Office Management Association, illustrates the emphasis placed on actuarial examinations in the recruitment of actuarial students by private industry.

Comparison of starting salaries for private industry for 1979 with federal salaries, indicate parity for the average actuarial student (0 or 1 examination) to a difference of over \$6,000 for the outstanding actuarial student (five examinations). It is assumed in the preceding example that the individual has little or no work experience, received a bachelor's degree, and was given credit for superior academic achievement (GS-7).

Actuarial examinations and their use in the evaluation process are described in the X-118 Qualification Standards for the Actuary Series, GS-1510, which states that: "The ranking of candidates is not based on length of experience, but on an evaluation of the scope and quality of each candidate's experience, education, success in passing the examinations of the Society of Actuaries or the Casualty Actuarial Society, and abilities and personal characteristics."

It has been our experience that the successful completion of these examinations does indeed serve as a strong indication of a candidate's potential ability to perform professional actuarial duties, when considered together with the other factors described above. Completion of these examinations also indicate a strong commitment and dedication to the actuarial profession. We feel that the actuarial examinations are a valuable assessment tool and predictor, and that candidates for employment in the federal sector who have passed these very difficult examinations should receive more credit than is presently the case.

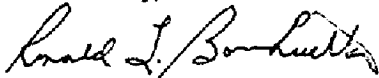
In view of the importance of the actuarial examinations and the difficulties governmental agencies have encountered in hiring highly qualified candidates for actuarial positions, we are requesting that the X-118 Qualification Standards for the Actuary Series be amended so individuals may substitute actuarial examinations for graduate study. We feel that the suggested change would enable the agencies to compete more effectively with private industry in the recruitment of actuaries.

I hope that we can begin to discuss the standards in the near future. The Academy can arrange for appropriate professional and governmental people to meet with you as needed. We are looking forward to your reaction.

Please address all communications to the Washington office of the Academy:

Stephen G. Kellison  
Executive Director  
American Academy of Actuaries  
1835 K St., N.W., Suite 515  
Washington, D.C. 20006  
(202) 223-8196

Sincerely,



Ronald L. Bornhuetter

RLB:cal

Table 3—Average Starting Salaries by Exam Level

1979

NO. OF EXAMS PASSED AT HIRE	GEOGRAPHIC REGION							ALL REGIONS
	N.Y. MET.	NORTH- EAST	SOUTH- EAST	MID- WEST	SOUTH- WEST	WEST	CANADA	
<b>NONE</b>								
MINIMUM	12.367	11.826	10.746	12.712	12.033	--	12.391	12.137
AVERAGE	13.309	12.439	11.510	13.356	12.850	--	13.014	12.804
MAXIMUM	14.151	14.761	13.629	16.198	15.700	--	13.777	14.677
NO. COS.	9	10	7	17	3	0	6	51
<b>1 EXAM</b>								
MINIMUM	13.392	12.733	11.623	13.359	13.678	12.425	13.124	12.966
AVERAGE	14.332	13.750	12.917	13.900	13.720	13.110	13.564	13.718
MAXIMUM	15.660	16.079	13.864	16.331	17.426	16.693	14.252	15.780
NO. COS.	9	14	8	21	5	4	6	66
<b>2 EXAMS</b>								
MINIMUM	14.195	13.409	12.528	13.258	14.197	12.850	13.546	13.358
AVERAGE	15.333	14.566	13.901	13.977	14.740	14.125	14.760	14.379
MAXIMUM	16.553	16.685	15.118	16.571	19.557	17.426	15.776	16.464
NO. COS.	9	16	10	24	4	4	10	76
<b>3 EXAMS</b>								
MINIMUM	14.989	14.381	13.511	14.580	14.684	13.337	14.426	14.365
AVERAGE	16.318	15.793	14.273	15.322	15.657	15.881	15.781	15.593
MAXIMUM	17.755	18.858	15.002	18.032	18.847	18.022	17.161	17.795
NO. COS.	8	15	7	22	7	4	13	75
<b>4 EXAMS</b>								
MINIMUM	15.291	16.452	15.464	16.212	16.563	14.400	15.775	16.004
AVERAGE	17.695	17.283	16.602	16.901	19.881	19.000	17.105	17.461
MAXIMUM	18.714	20.086	16.940	19.846	20.617	21.000	16.539	19.265
NO. COS.	5	11	5	10	5	1	12	48
<b>5 EXAMS</b>								
MINIMUM	16.315	17.940	17.441	15.703	18.647	15.600	17.164	17.137
AVERAGE	19.487	19.087	16.976	18.064	20.600	22.000	18.564	19.072
MAXIMUM	19.644	25.095	19.376	21.688	22.232	24.120	20.338	21.978
NO. COS.	3	10	4	8	4	1	7	37

## STATEMENT 1980-15

SOCIAL INSURANCE RESOLUTION  
AMERICAN ACADEMY OF ACTUARIES  
BOARD OF DIRECTORS

JUNE 4, 1980

Whereas actuarial projections and cost estimates based on work of the highest professional quality and integrity have been an important force for fiscal prudence in the historical development of social insurance programs; and

Whereas the growth of these programs and their commitments to future generations of beneficiaries makes it more important than ever that these programs be managed in a fiscally prudent manner;

Therefore, be it resolved that this organization believes that it is in the best interests of the public that (1) the actuaries who are responsible for the projections and cost estimates be free to use their best professional judgment and expertise independent of pressures for political expediency, and (2) the actuaries ultimately responsible for this work be required to issue an opinion letter accompanying the appropriate annual report stating whether the actuarial assumptions used in the projections contained therein (a) are in the aggregate reasonable taking into account the experience and expectations of the plan and (b) represent their best estimates of anticipated experience under the plan.

## STATEMENT 1980-16

### COMMENTS ON PROPOSED IRS VESTING REGULATIONS AMERICAN ACADEMY OF ACTUARIES PENSION COMMITTEE

JUNE 6, 1980

Prior to the enactment of ERISA, the Congress had actuarial studies made of the costs of alternative vesting schedules such as the ones adopted in ERISA Section 203, as well as more stringent vesting schedules such as full vesting after five years. The Congress rejected vesting requirements more stringent than those adopted because of the cost implications. However, to prevent abusive or discriminatory situations, the bill included the addition of Internal Revenue Code Section 411(d)(1), which would enable the Internal Revenue Service to require more rapid vesting when necessary to prevent abuse or discrimination.

*We believe that cost was not only an important factor in the development of this statutory scheme, but in fact was the major factor — since other considerations (except that of allowing pensions to be a reward for job longevity) would have led to a simple statutory requirement for immediate vesting. A logical question may then be asked: What cost of vesting was envisioned by Congress in its statutory endeavors? Even without recourse to Committee Reports of ERISA it seems clear that the existence of three specific alternative vesting requirements in conjunction with a general more rapid requirement tied to certain situations indicates a Congressional intent that the latter requirement would be the exception rather than the rule because of the cost. Examination of the Committee language confirms this conclusion.*

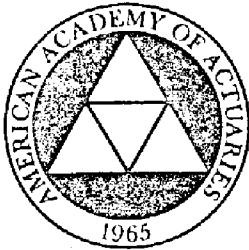
We note in this regard that the IRS agrees with the need to consider Committee language in its regulatory activities since so-called "4-40 vesting" appears only in the Conference Report (i.e., not in the statute itself). The general theme of Proposed Regulation Section 1.411(d)-1 is that if the prohibited group (as defined in the proposal) of employees under a retirement plan achieves more vesting than other employees, this is prohibited discrimination. But this will almost always be the case, since it is the longest service employees who generally get promoted to supervisory positions. Thus, the theme of the proposal translates into the premise that prohibited discrimination almost always occurs and, in doing so, ignores Congressional intent as the proper degree of vesting cost that should be incurred in the private plan sector.

ERISA Section 3022(a)(1) calls for the Joint Pension Task Force to make a full study of the effect of the requirements of Section 411 of the Internal Revenue Code and of Section 203 of ERISA to determine the extent of discrimination, if any, among employees in various age groups. Moreover, in the Conference Report, the Task Force is directed to examine problems of the interrelationship of the vesting and anti-discrimination rules carefully. The Conference Report asks the Treasury Department or Internal Revenue Service to supply information with respect to patterns of benefit loss for different categories of plans under the vesting schedules of ERISA Section 203. Such information should be based upon actuarial calculations using realistic withdrawal rates and other appropriate actuarial assumptions.

In the Conference Report the Internal Revenue Service is directed not to require vesting more stringent than 4-40 "except in cases where actual misuse of the plan occurs in operation". Moreover, 4-40 vesting is intended to apply until responsible Congressional committees can review the situation after receiving the report of the Task Force and any studies by Treasury or IRS. Ironically, even 4-40 vesting would not meet either "safe harbor" provided in the proposed regulations.

For these reasons we believe that the proposed regulations should be reconsidered and any final promulgation delayed until the studies referred to above are completed. The Academy would be pleased to discuss with the IRS the design and implementation of such studies.

STATEMENT 1980-17



AMERICAN ACADEMY OF ACTUARIES  
208 South La Salle Street • Chicago, Illinois 60604  
312/782-4204

June 12, 1980

Director of Research and Technical Activities  
File Reference 1017-022  
Financial Accounting Standards Board  
High Ridge Park  
Stamford, Connecticut 06905

Dear Sir:

I have reviewed the exposure draft of the proposed Statement of Financial Accounting Standards "Determining Materiality for Capitalization of Interest Cost." This draft does not appear to have any actuarial implications, and I have no comment on it.

However, the general subject of capitalization of interest cost, involving as it does the basic concept of the time value of money, is of continuing interest and concern to actuaries. The American Academy of Actuaries is always available for consultation on this or any other subject which may have actuarial implications.

Very truly yours,

A handwritten signature in cursive script that reads "Jack Wood".

Chairman,  
Committee on Life Insurance  
Financial Reporting Principles  
American Academy of Actuaries

JEW:ma

## STATEMENT 1980-18

### MEMORANDUM

TO: Erma Edwards, Chairman  
Life Insurance (C3) Cost Disclosure Task Force

FROM: American Academy of Actuaries' Committee on  
Dividend Philosophy and Practice

DATE: June 16, 1980

RE: Status Report

I am pleased to report that we are on schedule, moving as indicated to you in earlier reports.

The Society of Actuaries' Draft 11 has been received. It is an update of Draft 7, on Recommendations Concerning Actuarial Principles and Practices in Connection with Dividend Determination and Illustration. This draft was circulated to Society of Actuaries' membership last fall. The Academy Committee has made only one significant change. While the Society of Actuaries automatically included some participating business issued by stock companies and excluded other business, we have provided for optional inclusion of that business which had been automatically included. The Society of Actuaries' Committee is still working on this issue, and we believe that some stock companies would have trouble in reaching compliance. However, we believe any business which does not comply should be labeled "not comparable."

The Academy Committee report was submitted to the American Academy of Actuaries Board of Directors on June 4th. They voted approval for distribution and comment. Because of its potential significance to the life insurance business, it will be mailed not only to all Academy members, but also to all others who are members of the Society of Actuaries, the Conference of Actuaries in Public Practice and the Casualty Actuarial Society. I would be happy to make copies available to this Task Force when they are published.

At this point I would like to describe the Committee report. The first section contains background, a description of the problems as seen by the Committee. There is a lack of formal standards with regard to dividend determination and illustration which undermines our system of cost to disclosure. Identification of work that has been done to date is also made in this section. The second section includes the general framework for implementation.

Publication of this report is in itself the first step. This report includes three exhibits. The first exhibit, Exhibit A, is the Academy version of the Dividend Principles and Practices. It is being published for comment. The covering letter from American Academy of Actuaries President Bornhuetter makes it clear that unless essential problems are found through commentary, Exhibit A could be adopted this year. In other words, now, or else.

Exhibit A sets standards and requires that the Actuary responsible for the dividend scale report in detail to his company annually on how the standards are being set. But, while this report can have a substantial impact upon corporate practices, it is not a good vehicle in itself for public disclosure.

Exhibit B of the report is not a recommendation of the Committee. Rather, it is an example of a way the Committee believes the Actuary's report could be used for public disclosure. It consists of an addition to Schedule M of the Annual Statement. Exhibit B is being published at this time to show how the public disclosure contemplated in Exhibit A could be implemented.

Exhibit C depends upon the existence of Exhibits A and B. It also is an example of how this disclosure process could be made useful at the consumer level.

The next section of the report deals with commentary on Exhibit A. This is not light reading, nor is Exhibit A, itself. Perhaps it can be summarized in this way:

Exhibit A does not dictate how much surplus should be distributed and how much should be retained to protect solvency. Rather, it says that the surplus which is distributed must be returned to those blocks of business which generated it. In essence, this is the Contribution Principle.

As a practical matter, dividends currently paid must be based upon current levels of mortality, investment and expense experience. Otherwise, too much or too little surplus will be distributed. But, Exhibit A makes it clear that dividends illustrated must also be based on the same level of experience. And, the actuary must make tests to assure that all dividends illustrated could be paid if current experience continues.

The next section deals with commentary on Exhibit B. As stated earlier, it is an example, not a recommendation. Here are the items covered in the example Schedule in addition:

Identification of any blocks of business not conforming to standards.

Description of the methods used to determine dividends.

Description of the experience factor classes.

General Interrogatories -- these are designed to identify items which could affect the comparability of dividend scales.

Statement of Actuarial Opinion with respect to dividends illustrated and dividends paid.

The next section deals with commentary on Exhibit C. Once again, this is an example. Consumer disclosure could be of two types: Buyer's Guide information and Dividend Illustration Language.

First, consider the Buyer's Guide information. The example in the first part of Exhibit C is intended to give more insight to what dividends are, as well as what they are not. The language underscores the principles that dividends paid and illustrated are based upon current experience and are subject to actuarial standards. Also, there is a clarification of the conditions under which dividends illustrated would be matched by actual payment.

The dividend illustration portion of Exhibit C is linked directly to the Interrogatories suggested for Schedule M. There would be required disclosure for items identified as affecting comparability.

Perhaps at this point it would be worth following through on two items which are relevant to comparability and see how Exhibits A, B and C will deal with them.

First, let's look at investment income allocation. Until recently, all companies used, or claimed to use, the average rate for their life insurance portfolio to determine current investment experience for all policies. Recently, a few companies switched to an investment generation method which gives full effect of current investment rates to new policies. These two methods can generate significant differences both in dividends paid and in dividends illustrated.

Both the Society and Academy Committees spent more time on this specific problem than on any other. The Society Committee has concluded that both methods constitute acceptable practice.

The Academy Committee has tried to deal with comparability through a number of possible means. But, as our report concludes: "There is no simple fair statement which can be made to resolve the differences in result between the two methods."

What is the answer? Let's follow Exhibits A, B and C in order to see how the problem could be dealt with.

First, consider Exhibit A, Recommendation 19. "The Actuary's report should include the statement as to the length of time used to determine investment rates for the generation of policies which include the policies to which illustrated dividends apply."

Next, look at the General Interrogatories in Exhibit B. Interrogatory 4 says, "In the basis of determining investment income experience factors, state whether the company uses (A) a portfolio average approach, (B) an investment generation approach, or (C) a combination of the two approaches." If (B) or (C), describe the general basis used, including the issue year groupings.

In the Buyer's Guide portion of Exhibit C, there is the following statement: "There are standards which apply to the combination of dividends. Under these standards, there are many ways to determine dividends, including several permissible methods to recognize investment earnings. A statement of the method used should accompany any figures presented which involve dividends."

Finally, a disclosure statement in a dividend illustration made by an investment generation company would be as follows: "Illustrated dividends are based upon the dividend scale applicable to currently issued policies which reflect current investment earnings on all policies issued since 19\_\_\_. (The earliest year of the issue year grouping used to determine the investment earnings on currently issued policies.) Dividends are neither guarantees or estimates and future dividends which you actually receive will differ from those illustrated to the extent that future expense, claims and investment experience differs from current experience."

This trail through Exhibits A, B and C still leaves the problem somewhat unresolved. The issue is clearly raised. However, resolution has not really been made. We believe that the best answer is to let each competing company deal with its method of allocating investment income in comparison with methods used by competitors. In this manner, statements made by companies will probably shed enough light on the problem to provide resolution.

My second example is a clear "no, no" under the proposed standards. Suppose a company wants to improve its twenty-year interest adjusted indices. It decides to take its currently illustrated scale, which it can afford to pay, and add one dollar to each illustrated dividend between year 10 and year 20. It could do so today without any problems. There are no formal standards to stop the practice, and no increase in dividend outlay would occur for at least nine years. Thereafter, a company could use several methods to avoid paying that dollar added.

Looking at Exhibit A, Recommendation 17 says as follows: "The actuary should conduct tests of illustrated dividends which are adequate to determine whether those illustrated dividends could be paid, if current experience continues. For this purpose, current experience is that which underlines the current scale of dividends payable.

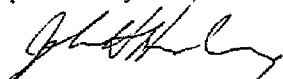
In Exhibit B, Interrogatory 6 asks: "Does the undersigned believe illustrated dividends can be paid if current experience continues?"

If the answer to that Interrogatory is "no," the second portion of Exhibit C would require a statement that illustrated dividends may not be payable even if current experience continues.

I would also like to suggest that this report deals effectively with each of the types of "malignant manipulation" suggested in Mr. Reiskytl's Letter of March 26, 1979, to the Advisory Committee on Manipulation. If you follow a path as we just followed in these two previous examples, you will see how each of Mr. Reiskytl's problems can be dealt with in Exhibit A, B and C.

Without question there are still parts of the Recommended Principles and Practices which will need interpretation or elaboration. I expect that the Academy Committee will be dealing with these for quite some time. However, I also believe that we are at a point where we can start putting theory into practice.

Respectfully submitted,

  
John H. Harding, Chairman

**EXHIBIT B****POSSIBLE SCHEDULE M DISCLOSURE  
STATEMENT YEAR 1979**

Identify the participating ordinary life business which is not subject to the actuarial standards which apply to the determination of dividends paid by mutual companies. Answer the questions and state the opinion below which apply with respect to any other participating business.

**Process of Dividend Determination**

Describe the general methods and procedures used to determine dividends.

**Description of Experience Factors**

Describe the basis used in making any distinction in experience factors which underlie the determination of dividends. The description should specifically include:

- (a) investment income factors;
- (b) claims factors;
- (c) expense factors;
- (d) termination factors;
- (e) any other factors which have a material effect on the dividends of any group of policies.

Also, describe in a qualitative way any material changes made in the bases used to determine those factors since this Schedule was last filed.

**Example**

**General Interrogatories**

1) Has the Contribution Principle been followed in determining dividends? Answer:

If no, describe:

2) Since this Schedule was last filed, has any material change from past principles occurred with respect to the basis of determination of policy factors? Answer:

If yes, describe:

3) Does the dividend scale incorporate, for any period in excess of two years beyond its effective date, the use of projections or forecasts of future results? Answer:

If yes, describe:

4) In the basis of determining investment income experience factors, state whether the company uses (a) a portfolio average approach, (b) an investment generation approach, or (c) a combination of the two approaches. Answer:

If (b) or (c), describe the general basis used, including the issue year groupings.

**Example**

## STATEMENT 1980-18

- 5) Does the company pay termination dividends on its policies? Answer:
- a) If yes, do the termination dividends reflect the incidence, size and growth of amounts previously accumulated prior to termination which may be attributed to the policies in question? Answer:
- b) For issue ages and durations where termination dividends exist, are they payable on death, surrender and maturity and payable or credited upon the exercise of a non-forfeiture option other than surrender? Answer:

If not, describe the system used.

- 6) Does the undersigned believe illustrated dividends can be paid if current experience continues? Answer:
- 7) Does the undersigned foresee a deterioration of experience under which there is a substantial probability that the illustrated dividend scale cannot be maintained for at least two years? Answer:
- 8) Describe any aspects of the determination of the dividend scales that are not covered in the answers to the interrogatories above, and involve material departures from the actuarial standards of the American Academy of Actuaries applicable to the determination of dividends paid by mutual companies.

**Example**

- 9) Describe any material changes in the basis of determination of dividend scales which were made since this Schedule was last filed and which are not covered in the answers to the interrogatories above.

### Actuarial Opinion

I, \_\_\_\_\_ (name, title) \_\_\_\_\_ am (relationship to company) and a member of the American Academy of Actuaries. I have examined the actuarial assumptions and methods used in determining dividends under the dividend scale for the individual participating life insurance policies of the company. The dividends encompassed by this scale are both:

- i) those apportioned for payment during 1980; and
- ii) those in effect as of January 1, 1980 which are illustrated for payment in 1981 and later and which are authorized for illustration by the company.

My examination included such review of the actuarial assumptions and methods of the underlying basic records and such tests of the actuarial calculations as I considered necessary. In my opinion, these dividends have been determined, as described above, in accordance with applicable actuarial standards.

---

Dated

---

Name and Title

**Example**

**EXHIBIT C****POSSIBLE CHANGES IN SOME SECTIONS OF  
THE LIFE INSURANCE BUYER'S GUIDE**

(The Committee believes that the "What is Cost?" and "How Do I Use Cost Indexes?" sections of the Buyer's Guide could be enhanced by the following.)

**What is Cost? (Replacement Section)**

Cost is the difference between what you pay and what you get back. If you pay a premium for life insurance and get nothing back, your cost for the death protection is the premium. If you pay a premium and get something back later on, such as a cash value, your cost is smaller than the premium.

Some policies are called "guaranteed cost" or "non-participating" policies. Every feature of a guaranteed cost policy is fixed so that you know in advance what your future cost will be.

Other policies are called "participating" policies, which pay dividends. While the premiums and cash values of a participating policy are guaranteed, the dividends are not. Premiums for participating policies are typically higher than for guaranteed cost policies, but the cost to you may be higher or lower, depending on the dividends actually paid.

**What is a Dividend? (New Section)**

A dividend is a refund or return of part of the premiums paid. Each company pays those dividends which it believes to be appropriate, based on its current expenses, claims and investment earnings. Dividends illustrated for a policy are generally based on current experience. If levels of current experience continue unchanged, the company should be able to pay those illustrated dividends. Dividends which you actually receive will reflect the extent that future expenses, claims and investment earnings differ from current experience.

**Example**

There are standards which apply to the determination of dividends. Under these standards, there are many ways to determine dividends, including several permissible methods to recognize investment earnings. A statement of the method used should accompany any figures presented which involve dividends.

**Example**

**EXHIBIT C**  
**Continued**

**POSSIBLE MODIFICATION OF EXISTING STATE  
REGULATIONS WHICH DEAL WITH  
DIVIDEND DISCLOSURE**

The Committee has not addressed itself to each possible regulation where the following modifications might apply. However, most of the regulations involved deal with solicitation and advertising. In principle, information relevant to the comparability of dividend scales could be added to the normal dividend caveats:

- A. For those policies which are specified in Schedule M as not subject to the actuarial standards which apply to the determination of dividends paid by mutual companies, it would be appropriate to include a statement in the dividend caveat that "this policy is issued by a stock company whose illustrated dividends are not comparable to those of a mutual company."
- B. For all other policies, the method of allocation of investment earnings could be identified.
- 1) If a company is more than 10 years old, and states in Schedule M that it uses a portfolio average approach, it would be appropriate to state:  
"Illustrated Dividends are based upon the dividend scale applicable to currently issued policies, which reflects current investment earnings on all policies. Dividends are neither guarantees nor estimates and future Dividends which you actually receive will differ from those illustrated to the extent that future expense, claim and investment experience differs from current experience."
- 2) For other companies it would be appropriate to state:  
"Illustrated Dividends are based upon the dividend scale applicable to currently issued policies, which reflects current investment earnings on

**Example**

all policies issued since 19\_\_\_\_." Dividends are neither guarantees nor estimates and future Dividends which you actually receive will differ from those illustrated to the extent that future expense, claims and investment experience differs from current experience."

\*(The earliest year of the issue year grouping used to determine the investment earnings on currently issued policies.)

- C. Under the conditions defined below, with regard to the answers to the Interrogatories in Schedule M, disclosure of areas of specific concern would be appropriate.

Interrogatory 3. An affirmative answer to Interrogatory 3 would need a description of the period of projection.

Interrogatory 5. A negative answer to question 5a would need a statement that termination dividends are not in conformance with standards of practice for payment of dividends. A negative answer to question 5b would need disclosure of the types of termination on which terminal dividends are not paid, once they are available.

Interrogatory 6. A negative answer to 6 would need a statement that illustrated dividends may not be payable even if current experience continues.

Interrogatory 7. A positive answer to 7 would need a statement that there may be a deterioration of current experience under which the currently illustrated scale would have to be reduced within a few years.

**Example**

## STATEMENT 1980-19

### I. Summary

Insurance is a means for dealing with the economic uncertainty associated with chance occurrences. It does so by exchanging the uncertainty of the occurrence, the timing, and the financial impact of a particular event for a predetermined price.

To establish a fair price for insuring an uncertain event, estimates must be made of the probabilities associated with the occurrence, timing and magnitude of such an event. These estimates are normally made through the use of past experience, coupled with projections of future trends, for groups with similar risk characteristics.

The grouping of risks with similar risk characteristics for the purpose of setting prices is a fundamental precept of any workable private, voluntary insurance system. This process, called risk classification, is necessary to maintain a financially sound and equitable system. It enables the development of equitable insurance prices, which in turn assures the availability of needed coverage to the public. This is achieved through the grouping of risks to determine averages and the application of these averages to individuals.

It is also important to understand what risk classification is not. Determining average experience for a particular class of risk is not the same as predicting the experience for an individual risk in the class. It is both impossible and unnecessary to predict experience for individual risks. If the occurrence, timing and magnitude of an event were known in advance, there would be no economic uncertainty and therefore no reason for insurance.

It is also not the purpose of risk classification to identify unusually good and bad risks or to reward or penalize certain groups of risks at the expense of others. Risk classification is intended simply to group individual risks having reasonably similar expectations of loss.

Difficulty in risk classification comes with the introduction of concepts such as "fairness" and "similar risk characteristics." Each individual, each business, each piece of property is unique; to the extent that the risk classification process attempts to identify and measure every characteristic, it becomes unworkable. On the other hand, because there are differences in risk characteristics among individuals and among properties which bear significantly upon cost, to ignore all such differences would be unfair. Most of the controversy surrounding risk classification involves where the lines are to be drawn.

To achieve and maintain viable insurance systems, the process of risk classification should serve three primary purposes. It should:

- . protect the insurance system's financial soundness;
- . be fair;
- . permit economic incentives to operate and thus encourage widespread availability of coverage.

Striking the appropriate balance among these is not always easy; however, they are clearly in the public interest and are not incompatible.

The following basic principles should be present in any sound risk classification system in order to achieve the above purposes:

- . The system should reflect expected cost differences.
- . The system should distinguish among risks on the basis of relevant cost-related factors.
- . The system should be applied objectively.

The system should be practical and cost-effective.

The system should be acceptable to the public.

Risk classification is only one factor in an entire set of factors which bear on private, voluntary insurance programs. Other factors--such as marketing, underwriting and administration--combine with risk classification to provide an entire system of insurance. Changing one factor has possible implications on other factors. Changes must be considered in the context of the entire system.

## II. Economic Security and Insurance

Society requires various mechanisms for coping with the financial impact of chance occurrences, both natural and societal, the prospect of which generates economic insecurity.

### A. Hazard Avoidance and Reduction

Some hazards may be avoided. For example, most of the chance of airplane accidents may be avoided by not flying. The incidence and severity of other hazards may be reduced significantly by taking appropriate safety precautions. For example, the installation of smoke detectors or automatic sprinklers may reduce the chance of fire losses. However, the practical application of hazard avoidance and hazard reduction is limited. Although some financially insignificant hazards may be retained and offset by accumulated savings or reserves, the retention of major financial uncertainties may be undesirable and unwise. Accordingly, a number of programs which involve a transfer of financial uncertainty have been developed.

**B. Transfer of Financial Uncertainty**

Programs for transferring financial uncertainty include: sharing among families and friends; charitable activities by individuals and organizations; governmental assistance and insurance programs; self-insured group pension and welfare plans; and private insurance programs.

Certain basic distinctions can be made among these various programs. For example, charitable organizations and governmental assistance programs generally provide benefits based on demonstrated need, whereas self-insured group pension and welfare plans, and governmental and private insurance programs, provide benefits based on defined contractual rights.

**C. Public and Private Programs**

A comparison of governmental and private programs indicates both similarities and differences.

Both types involve the transfer of financial uncertainty from one party to another and the subsequent pooling of risks. In both cases, the exposure to loss by the sharing mechanism should be broad enough to assure reasonable predictability of the total losses.

On the other hand, governmental programs are provided by public law, whereas private insurance is provided through an individual contractual arrangement. Governmental programs usually are compulsory, while private insurance programs are often voluntary. Hence, competition plays a large and vital role in private insurance but little or no role in governmental programs. Governmental programs are often devised or needed to provide coverage for those hazards which cannot be effectively covered by the private insurance system. In governmental programs, the value or cost of benefits received by, or paid on behalf of, a class of recipients need not have

any long term relationship to the amounts paid into the program by that class. That is contrasted with private voluntary insurance programs, where such a long term relationship is essential.

The private insurance programs are highly diverse. Coverage is available for a wide variety of risks, on an individual or group basis, with a variety of underwriting, marketing and pricing procedures. As a result, it is often difficult to make uniformly applicable general statements about private insurance programs.

### III. The Need for Risk Classification

#### A. Rationale for Risk Classification

Though an individual exchanges the uncertainty of occurrence, timing and magnitude of a particular event for the certainty of a fixed price, that exchange in no way makes the uncertain known. Nor need it. The insurance program assuming the financial uncertainty is not able to fix the occurrence or, often, the magnitude of a specific risk merely because it assumes that risk. But it should find a way of establishing a fair price for assuming it.

One way to estimate a price is to rely exclusively on wisdom, insight and good judgment concerning the nature of the particular hazard involved and the exposure to loss. This usually is not the best method but sometimes is the only one available (as, for example, when insuring persons in new occupations which did not exist in the past, or persons in unusual occupations for which statistical histories are not meaningful).

A second, theoretically possible way to determine a fair price for the transfer is to observe the risk's actual losses over an extended period of time. This is often not appropriate,

however. Such an approach offers no solution for risks such as those covered by life insurance, where actual observation would show no claims paid while the insured individual is alive but an immediate and substantial claim at the time of death. Many other risks have this similar characteristic; hindsight suggests there's little or no cost as the individual risk moves to a likely or even certain eventual occurrence. Other hazards change so gradually over the period of time needed for the observation that the information obtained by observing the past may not be applicable to the current or future exposure to financial uncertainty.

A third method is to observe the losses of groups of individual risks with similar risk characteristics, which frequently can be done over a shorter period of time. These groups are referred to as classes. While any individual risk in a given class is no more predictable than it was before the transferring or pooling of the risk occurred, a reasonable price may be established by observing the losses of the class and relating the price to the average experience of the class. This third approach is the one most often used for determining the value of the uncertainty transferred.

A major difficulty with this approach is the need to choose the relevant similar risk characteristics and related classes before the observation period. There often is not a clear-cut optimal set of characteristics. Over time, in a perfectly competitive market, the optimal set of characteristics tends to emerge through the competitive mechanism. However, in practice, perfectly competitive markets are seldom achieved, and the risk characteristics commonly used reflect both observed fact and informed judgment.

B. Three Primary Purposes of Risk Classification

A risk classification system serves three primary purposes: to protect the insurance program's financial soundness; to enhance fairness; and to permit economic incentives to operate with resulting widespread availability of coverage.

1. Protection of Program's Financial Soundness

The financial threat to an insurance program's solvency is primarily through a complex economic concept called adverse selection. It results from the interaction of economic forces between buyers and sellers of insurance. In markets where buyers are free to select among different sellers, normally with a motivation to minimize the price for the coverages provided, adverse selection is possible. In such markets sellers have a limited ability to select buyers and have a basic need to maintain prices at a level adequate to assure solvency.

In many cases, these economic forces are in equilibrium; occasionally, they are not. The freedom of choice and the economic incentive of price may create a dramatic movement of buyers to different sellers within an insurance market, or even movements into or out of a market. This relocation is the concept of adverse selection, which creates economic instability and can threaten the insurance program's financial stability.

In the early 1900's some assessment societies offered life insurance benefits to members without making price distinctions on known mortality differences for different age groups. Some younger members of those groups were gradually attracted to lower priced competitors, while others decided not to insure at all. This opting out

resulted in higher prices for remaining members. Some of those remaining then opted out. An upward spiral of higher prices resulted for the fewer remaining older lives.

Risk classification is one means of minimizing the potential for adverse selection. It reduces adverse selection by balancing the economic forces governing buyer and seller actions.

Risk classification is not the only answer to controlling adverse selection. In certain types of governmental insurance, where participation is mandatory and choices are restricted or non-existent (e.g. social security), adverse selection is controlled by a restriction of the buyer's freedom. In a competitive environment, however, risk classification is the primary means to control the instability caused by adverse selection.

## 2. Enhanced Fairness

Since adverse selection occurs when the prices are not reflective of expected costs, a reasonable risk classification system designed to minimize adverse selection tends to produce prices that are valid and equitable--i.e., not unfairly discriminatory. Differences in prices among classes should reflect differences in expected costs with no intended redistribution or subsidy among the classes.

Ideally, prices and expected costs should also match within each class. That is, each individual risk placed in a class should have an expected cost which is substantially the same as that for any other member of that class. Any individual risk with a substantially higher or lower than average expected cost should be placed in a different class.

### 3. Economic Incentive

Any economic system that relies primarily on private enterprise for the distribution of goods and services relies on companies and individuals to seek out potential customers and develop means of successfully selling and servicing the needs of those customers. The companies that prove to be the most successful in servicing customers' needs will be rewarded with the largest proportion of the potential customers.

Insurers offering private, voluntary insurance programs are no different in this regard. They have incentives to expand their markets and to achieve a high penetration of the markets they choose to serve.

In developing marketing strategies, and in pricing the products needed in their markets, insurers need a risk classification system that will permit them to offer insurance to as many of their potential customers as possible, while at the same time assuring themselves that their prices will be adequate to cover the customers' financial uncertainty that they assume.

Generally, competition for the lower cost risks will be the most intense. Therefore, prices for these better risks must be different from the prices charged the higher cost risks within that market. Also, insurers generally desire to sell insurance to the higher cost risks within the same market, in order to achieve better market penetration. Increased market penetration provides economies of scale in the marketing or distribution function, and it also makes it possible for an insurer to provide better service to risks in areas where they are more plentiful. Therefore, insurers need the ability to price insurance in accordance with the expected costs of each identifiable class of risks within their markets.

To be more successful than its competitors would motivate an insurer to become more refined in its risk classification system and thus its pricing structure, so that it could serve both lower cost and higher cost risks in the marketplace. Thus, there is an incentive for risk classifications, as used by competitive insurance programs, to become more refined and to more accurately reflect the differentials in expected costs among identifiable classes of risks.

Economic incentive also requires the risk classification system to be efficient. The additional expense of obtaining more refinement should not be greater than the reduction in expected costs for the lower cost risk classification. Thus, there is a practical limit to the incentive to add refinements to the classification system.

In general, economic incentive operates over time to favor classification systems that result in a price for each risk which most nearly equals the expected cost associated with the class to which that risk is assigned.

There is a close, and reinforcing, relationship among these three primary purposes of risk classification. Each is a distinct purpose, yet the system which serves any one tends to serve the other two as well.

#### IV. Considerations in Designing a Risk Classification System

The ability of any risk classification system to achieve the three described primary purposes is substantially influenced by many factors. In particular, this ability is inextricably tied to these many design considerations.

A. Underwriting

Development of an appropriate risk classification system is done without specific regard to any of the individual risks to be assumed. It is done a priori and establishes the framework within which underwriting can be performed.

Underwriting is the process of determining the acceptability of a risk based on its own merits. In contrast to the assignment of a risk to a class based on general criteria, the underwriting process involves an evaluation of the individual and possibly unique characteristics of each risk.

The design of a risk classification system must recognize that it is applied through the underwriting process. In practice, the application of the underwriting function controls the practical impact of the classification system, and misapplication of the classification system in the underwriting process will achieve results different from those intended.

B. Marketing

The establishment of a class and a price for that class does not necessarily mean that many risks that would be assigned to that class will participate in the insurance program. The insurer's marketing program has an important influence on its mix of business--i.e., what products are sold and to whom. In particular, if those who market private, voluntary insurance products are to be held accountable for the program's ultimate economic soundness, arbitrary restrictions on or adjustments to the risk classification system by others may produce unintended changes in the mix of business.

### C. Program Design

Certain elements of the design of an insurance program relate quite directly to risk classification.

#### 1. Degree of Choice Available to the Buyer

The design of a risk classification system is affected by the degree to which the insurance program is compulsory or voluntary. For programs which are largely or entirely compulsory and where there is no voluntary choice among competing institutions, broad classifications are sometimes used, the extreme being a single class.

Conversely, where participation in the insurance program is voluntary, or where there is a voluntary choice among competing institutions or plans, a system that classifies risks more broadly than competing systems could invite adverse selection.

#### 2. Experience Based Pricing

Some insurance programs provide for price adjustment after the insurance is acquired, based at least in part on the risk's actual emerging experience.

In the case of insurance purchased by or through an organization, such as an employer or association, for a specific group of individuals, this price adjustment is referred to as an experience rating adjustment. If the number of individual risks in the specific group is large enough to produce credible experience data, only that group's actual experience is used. If the group's data is not adequately credible, its experience is merged with that from other comparable groups and the collective experience is used to adjust the price.

In the case of insurance purchased for an individual risk, not grouped risks, the price adjustment is made by adjusting the premium paid or by paying a dividend. These adjustments are determined by collecting the experience of the several individual risks in what is defined as a dividend or equity or experience class. The classes used for collecting this experience may or may not be the same as the risk classes established and utilized for the original pricing.

To the extent that prices are adjusted based on a risk's emerging actual experience after the insurance and its initial price have been established, less refined initial risk classification systems are needed. The experience rating refunds, premium adjustments or dividends ultimately produce a refined classification system, reflecting at least in part the actual experience of the specific risk.

3. Premium Payer

Under some insurance programs (typically group insurance), the individuals insured do not pay the entire price. Such a separation between payer and insured can affect the risk classification system in various ways.

If the price is paid by other than the individual insured, the classification system is generally a matter of indifference to that individual. It is possible that broad classification systems may be appropriate, since the distinction between payer and insured can operate to reduce the likelihood of adverse selection.

#### D. Statistical Considerations

Risk classification systems are generally based, whenever possible, on statistical analysis, modified by informed judgment. Accordingly, certain considerations of a statistical nature are involved in designing such a system.

##### 1. Homogeneity

The expected costs for each of the individual risks in a class should be reasonably similar. In a given class, there should be no clearly identifiable subclasses with significantly different potential for losses. Significantly dissimilar risks should be assigned to different classes.

The concept of homogeneity is based upon expected costs as viewed when the risk is originally classified. It does not suggest the system can or should precisely anticipate the subsequent actual claim experience of a given insured risk. The occurrence, timing and magnitude of an unforeseen event for a specific risk cannot be predicted in advance. Thus, it is inevitable that not all risks in a class will have identical actual claim experience. Instead, the individual risks' claim experience will be statistically distributed around the average experience for the class. The concept of homogeneity in no way is compromised by this inevitable outcome.

By the same token, differences in expected costs between classes do not preclude the actual claim experience of some risks in one class from being the same as the actual claim experience of risks in another class. This overlap phenomenon is both an anticipated and, indeed, statistically inevitable ramification of any sound risk classification system.

## 2. Credibility

A general statistical principle is that the larger the number of observations, the more accurate are the statistical predictions that can be made. Therefore, it is desirable that each of the classes in a risk classification system be large enough to allow credible statistical predictions about that class. This does not necessarily mean that each class must be large enough to stand on its own. Accurate predictions for relatively small, narrowly defined classes often can be made by appropriate statistical analysis of the experience for broader groupings of correlative classes.

## 3. Predictive Stability

A major consideration in the construction of risk classification systems and the determination of prices for risks in the classes is the prediction of future costs. To this end, it is important that elements of a risk classification system be useful for predictive purposes. The predictive capability must be responsive to changes in the nature of insurance losses, yet stable in avoiding unwarranted abrupt changes in resulting prices.

Some statistical tools exist for measuring the historical predictive stability of specific risk classification variables. But the actuary must also exercise judgment in evaluating noninsurance trends which might reduce the future effectiveness of predictive power or the practicality of obtaining risk classification information. An example of changing predictive value might be seen in the recognition of the impact of automobile bumpers meeting certain federal safety standards. At one time very few cars had safe bumpers; now, most do.

These statistical considerations--homogeneity, credibility and predictive stability--are somewhat conflicting. For example, increasing the number of classes may improve homogeneity, but at the expense of credibility. Consequently, there is no one statistically correct risk classification system. In the final analysis, the system adopted will reflect the relative importance ascribed to each of these considerations. The decision as to the relative weights to be applied will, in turn, be influenced by the nature of the risks, the management philosophy of the organization assuming the risk and the judgment of the designer of the system.

#### E. Operational Considerations

##### 1. Expense

One important element of a risk classification system is its operational expense. These expenses include those for obtaining and maintaining the data required to establish classes, for assigning each risk to a class, and for determining a price for each class. For reasons of efficiency and competitiveness, the expenses should be as low as possible, while effectively permitting the system to minimize adverse selection and maximize equity.

Further, the cost of utilizing a given variable for classification purposes should be reasonable in relation to the benefits achieved, for the insurance program and those insured.

##### 2. Constancy

It is desirable that the characteristics used in any risk classification system should be constant in their relationship to a particular risk. This constancy should prevail over the period covered by the insurance contract

or, alternatively, over the period for which a class is assigned. This does not preclude the possibility of periodic reclassification of the risk to take into account changes in the magnitude of the classification characteristics. However, the lack of constancy in such a characteristic tends to increase the expense and reduce the utility of that characteristic, thus reducing the reliability of the classification system.

### 3. Availability of Coverage

It is also desirable to provide all of the individuals or groups desiring to transfer financial uncertainty the ability to obtain coverage. This means that it is desirable to have a classification system which maximizes the availability of insurance. To the extent that the classification system properly reflects the expected costs of each class and determines the price accordingly, overall availability of coverage should be enhanced.

It should be recognized, however, that in some instances the expected cost for the highest cost risk class may be of such a magnitude as to make the price, from a practical standpoint, unaffordable for some insureds. On balance, however, a more refined risk classification system properly matching expected cost and price paid will, in the long run, enhance rather than inhibit availability of insurance through the voluntary market.

There are instances where the risk classification system may actually define some risks as necessarily uninsurable. However, even under such circumstances it may be possible to minimize the size of the uninsurable class by requiring a specific limitation on the coverage available to the otherwise uninsurable risk. For example, if an individual has been totally disabled by back trouble

several times in his life, an insurer might require exclusion of disability caused by back trouble from coverage as a pre-condition for issuing a new disability policy.

4. Avoidance of Extreme Discontinuities

There should be enough classes in the system to establish a reasonable continuum of expected claim costs but few enough so that differences in prices between classes are reasonably significant. Particular attention is often required in defining classes at the extreme ends of the range, in order to reduce large differences in anticipated average claim costs between the extreme class and the adjacent class.

5. Absence of Ambiguity

The definition of classes should be clear and objective. Once a factual assessment of an individual risk has been made, no ambiguity should exist concerning the class to which that risk belongs. The classes should be collectively exhaustive and mutually exclusive.

6. Manipulation

The system should minimize the ability to manipulate or misrepresent a risk's characteristics so as to affect the class to which it is assigned.

7. Measurability

The variables used for classification should be susceptible to convenient and reliable measurement. Age, sex, occupation and geographic location are examples of factors that are generally reliably determinable. Moral

character, driving pattern and psychological characteristics are examples of factors that are not currently so readily determinable.

F. Hazard Reduction Incentives

Risk classification systems can be designed to provide incentive for insureds to act to reduce expected losses and thus operate to reduce the overall costs of insurance in total. For example, recognizing sprinklers for classifying risks for fire insurance coverages may encourage their installation and thereby reduce expected losses. Or reduced life insurance prices for non-smokers may encourage people not to smoke, thus reducing the hazard of premature death caused by diseases linked to smoking.

Such incentives are desirable, but not necessary, features of a risk classification system. Although worth pursuing, it must be recognized there are limits to which a risk classification system can be extended in an attempt to solve society's problems and still serve the necessary and useful purposes for which such a system is designed.

G. Public Acceptability

Any risk classification system must recognize the values of the society in which it is to operate. This is a particularly difficult principle to apply in practice, because social values

- . are difficult to ascertain;
- . vary among segments of the society; and
- . change over time.

The following are some major public acceptability considerations affecting risk classification systems:

- . They should not differentiate unfairly among risks.
- . They should be based upon clearly relevant data.
- . They should respect personal privacy.
- . They should be structured so that the risks tend to identify naturally with their classification.

Laws, regulations and public opinion all constrain risk classification systems within broad social acceptability guidelines. Legislative and regulatory restrictions on risk classification systems must balance a desire for increased public acceptability with potential economic side effects of adverse selection or market dislocation.

#### H. Causality

Scientists seek to infer some cause and effect relationship in natural phenomena, in order to attempt to understand and to predict. It is philosophically satisfying to some when data exhibit such a cause and effect relationship.

Risk classification systems provide a framework of information which can be used to understand and predict future insurance costs. If a cause and effect relationship can be established, this tends to boost confidence that such information is useful in predicting the future and will produce some stability of results. Thus classification characteristics may be more acceptable to the public if there is a demonstrable cause and effect relationship between the risk characteristics and expected costs.

However, in insurance it is often impossible to prove statistically any postulated cause and effect relationship. Causality cannot, therefore, be made a requirement for risk classification systems.

Often causality is not used in its rigorous sense of cause and effect but in a general sense, implying the existence of a plausible relationship between the characteristics of a class and the hazard insured against. Living in a river valley would not seem to cause a flood insurance claim, but it does bear a reasonable relationship to the hazard insured against and thus would be a reasonable basis for classification.

Risk classification characteristics should be neither obscure nor irrelevant to the insurance provided; but they need not always exhibit a cause and effect relationship.

#### I. Controllability

Controllability refers to the ability of a risk to control its own characteristics as used in the risk classification system. While controllability is in many cases a desirable quality for a characteristic in a risk classification system to have, because of its close association with an effort to reduce hazards and the resulting general acceptability by the public, it can easily be associated with undesirable qualities, such as manipulation, impracticality and irrelevance to predictability of future costs.

Judgement must be used when considering the controllability of a classification variable. Both positive and negative aspects must be evaluated.

## V. Conclusion

The classification of risks in order to group those with similar risk characteristics is fundamental to any true insurance system. This is done to determine average claim costs and to apply those averages to individual risks.

If a viable insurance system is to be achieved, those who design, manage and regulate risk classification systems must recognize three major purposes of such systems: to protect the insurance system's financial soundness; to be fair; and to permit economic incentive to operate. Striking the appropriate balance as risk classification designers pursue these major purposes is not always easy; but these legitimate needs are in the public's best interest and are not incompatible.

It's essential to recognize that any risk classification system is only part of an entire insurance structure and does not operate in a vacuum. The many factors which bear on the design of the system and its effective utilization include the many discussed in this Statement of Principles.

STATEMENT 1980-20

AMERICAN ACADEMY OF ACTUARIES

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July 1, 1980

File Ref. No. 3155

TASK FORCE ON REINSURANCE AUDITING AND ACCOUNTING  
COMMENTS ON THE AICPA'S DISCUSSION MEMORANDUM  
"AUDITING PROPERTY AND LIABILITY REINSURANCE"

AICPA Point #1. The first section of the discussion memorandum -- which attempts to describe the reasons a ceding company enters into reinsurance arrangements -- is incomplete and lacks depth. There are at least three major reasons a ceding company may buy reinsurance which are either not touched on in the AICPA draft or are treated in a shallow way.

Oftentimes, reinsurance will be purchased (especially facultative reinsurance) simply because the ceding company lacks the underwriting, pricing, and reserving skills to deal with a particular line, class, or risk. Reinsurance then provides a vehicle for the company to cede some or all of the risk it has undertaken and yet accommodate its client and/or agent.

The second major reason for buying reinsurance, which was not adequately developed in your text, is catastrophe protection. The stabilization of losses and thus the reduction in the probability of ruin by reinsuring on an event or catastrophe basis is not sufficiently highlighted with the AICPA simple "conflagration" examples.

The third area which was shortchanged in the AICPA Task Force's draft is the matter of keeping underwriting commitments in line with financial resources (this problem, of course, has yet a third leg which is investment strategy including immunization techniques, but no one seems to want to talk about that). Although poorly understood and sometimes totally misunderstood, it is nevertheless true that all reinsurance cessions have a financial effect. The magnitude of the financial effect varies from transaction to transaction and by type of reinsurance but it always exists. It must be remembered that reinsurance arrangements are undertaken for a variety of reasons and represent a blend of underwriting risk, investment risk, credit risk, and service requirements. Whatever the motive, intent, or risk level, there is, of course, a balance sheet and income statement effect.

Enclosed is Chapter 2 of a recently published textbook from the College of Insurance. Perhaps some of the material in this chapter could be abstracted and included in AICPA point #1.

AICPA Point #2. No comment.

AICPA Point #3. No comment.

AICPA Point #4. No comment.

AICPA Point #5. No comment.

AICPA Point #6. The second point under paragraph (a) seems to imply that incurred but not reported losses are often reported by ceding companies. This may be true under proportional type reinsurance arrangements but is not true with the non-proportional reinsurance arrangements that are usually used for liability and workers' compensation business.

The quality and comprehensiveness of ceding company data will vary from case to case. It follows then that the first three points under paragraph 6 (b) may or may not be correct in any given situation. There does not appear to be anything fundamental or basic in the role or operation of a broker or intermediary that would support these three a priori assessments.

It is not clear whether the heading for sub-paragraph c is correct. Did you mean to say, "Information received from a foreign insurer" or ceding company?

AICPA Point #7. The AICPA footnote in point #7 seems to imply that the words foreign and alien are synonymous. Most state insurance departments use these two words in a rather precise way to define "out of state" and "out of the country" companies respectively.

AICPA Point #8. We suggest the eight items listed are not sufficient to assess the financial solidity of the assuming company.

The review must include an assessment of the company's investment strategy and philosophy. The net worth of the company is, of course, leveraged or exposed by both the underwriting operations and the investment operations.

Item e under paragraph 8 is important but is only half the story. There must be an understanding and assessment of the underwriting philosophy -- the type of underwriting leverage the company practices. This, of course, implies that at the other end there be an assessment of the soundness of the assuming company's retrocessional program if the retrocessional program is a critical factor in the financial solidity of the company.

Finally, and most importantly, you have left out the most critical item -- loss reserves. The eight items listed can all look magnificent, but the real story is in the loss reserves. The integrity and leverage of the loss reserves is the critical element in assessing the financial solidity of the assuming carrier.

AICPA Point #9. No comment.

AICPA Point #10. We suggest it would be more accurate and would minimize misunderstandings if the wording in sub-paragraph c, which introduces FASB Statement No. 5, paragraph 44, were changed. The point of paragraph 44 of FASB Statement No. 5 is not to ferret out financing arrangements -- indeed, as noted above, all reinsurance contracts have financing aspects. Rather, the point is to focus on reinsurance arrangements where there is no transfer of underwriting risk. Thus, it would appear to be more accurate to have sub-paragraph c read: "Determine whether the contract lacks underwriting risk and should be accounted for according to the provisions of FASB Statement No. 5, paragraph 44."

AICPA Point #11. The specifications for the auditor of the assuming company seem reasonable on the surface but in fact involve a serious but subtle problem. To the extent the American accounting fraternity imposes additional information and procedural requirements on assuming carriers, especially those which in one way or another get passed on as burdens to the ceding company, you will place the U. S. reinsurance industry at a serious disadvantage with those assuming carriers based outside the U. S. operating in laissez faire accounting and regulatory environments.

AICPA Point #12. See below.

AICPA Point #13. The wording in sub-paragraph (b) of point #13 should be changed as we suggested in our response to AICPA point #10.

A general comment which in part cuts across AICPA points 11, 12, and 13.

One should be aware that there is one major distinction between reinsurance assumed and reinsurance ceded that perhaps should call for a different type or scope of auditing treatment. A typical ceding company will do a reinsurance business with a relatively small number of reinsurers. On the other hand, an active reinsurer can be conducting a reinsurance business with hundreds of cedants. Just as it may be difficult when auditing a direct writing company to verify that company's statements by contacting all the insureds, reading all the contracts, etc., so it is also difficult and burdensome to audit a reinsurer by attempting to study each and every piece of business coming in. Perhaps the auditing procedures for a reinsurer should be more akin to those of a direct writing company by using sampling techniques.

DRAFT FOR DISCUSSION PURPOSES ONLY

File Ref. No. 3155  
May 14, 1980

AUDITING PROPERTY AND LIABILITY REINSURANCEDescription

1. Insurance companies bring together a great many persons subject to insurable hazards and collect from them amounts that are expected to be sufficient in the aggregate to pay all losses that will be sustained by the insured persons in the group during a given period of time. To accomplish this purpose, the number of persons brought together must be large enough for the law of averages to operate; otherwise it will be impossible to make a reasonable estimate of the amount of losses that will be incurred by the group. Frequently, however, an insurance company may be offered, or may be compelled to accept, insurance of a class of which it does not have enough volume in the aggregate to permit the law of averages to operate. Ordinarily all, or some part of, a risk of this type is passed on to another company. It also frequently happens that a company may write a policy on a risk for an amount that is beyond its financial capacity to absorb. It will, therefore, pass a part of the risk to another insurance company retaining only as much as it can absorb. It may also be, particularly in the case of fire insurance, that a company has too great a concentration of policies in one locality and, therefore, will pass on some of the risks in the locality to another company so as to reduce its conflagration hazard.

2. Reinsurance is a transaction whereby the reinsurer, for a consideration, agrees to indemnify the reinsured for all or part of the loss the latter may sustain under the policy or policies it has issued. The insurer transferring the risk of loss is said to have ceded reinsurance and may be referred to as the original or primary insurer or the ceding company. The insurer to which the risk is transferred is said to have assumed or accepted reinsurance and is referred to as the assuming company. The transaction by which reinsurance is ceded is known as a cession of reinsurance, and the portion of the exposure not reinsured is known as the ceding company's retention. An assuming company may in turn cede to another insurer a portion of the exposure reinsured. That transaction is known as retrocession, and the second reinsurer is known as a retrocessionaire.

3. By ceding reinsurance, the ceding company does not discharge its primary liability to its insureds. Insureds rarely are aware of the existence of reinsurance. As a result of reinsuring, the ceding company simply reduces maximum exposure in the event of loss by acquiring the right to obtain reimbursement from the assuming company for the reinsured portion of the loss. The ceding company remains fully liable to its insureds as though there were no reinsurance.

4. The accounting entries for reinsurance ceded transactions are the opposite of the entries that arise from direct sales of business. The amounts for reinsurance transactions are usually netted against the related accounts in financial statements.

5. Statement of Position 78-6, "Accounting for Property and Liability Insurance Companies," issued by the American Institute of Certified Public Accountants, describes in paragraph 47 the accounting for ceded reinsurance:

Amounts recoverable from reinsurers that are related to paid losses and loss adjustment expenses, if applicable, should be classified in the financial statements as assets, subject to appropriate valuation allowances. Estimated amounts recoverable from reinsurers that are related to unpaid losses and loss adjustment expenses should be deducted from the unpaid losses and loss adjustment expenses with disclosure of the amounts deducted. Ceded unearned premiums do not represent receivables; therefore, those amounts should be netted against the related unearned premiums. Receivables and payables from the same reinsurer, including funds withheld, should be offset. Reinsurance premiums ceded and reinsurance recoveries on losses may be netted against the respective earned premiums and incurred losses in the income statement.

6. The accounting entries for reinsurance assumed normally parallel those for direct insurance. The extent of the detail in the information provided by the ceding company can vary significantly as outlined below:

- a. Information received directly from ceding company.
  - Normally, sufficient policy, claim, and unearned premium reserve (UPR) detail is provided.
  - Incurred but not reported losses (IBNR) and bulk reserves are more readily determinable.
  - Information is received on a timely basis.
- b. Information received from broker or intermediary.
  - Often policy, claim, and UPR detail is not provided, but summary reports are provided.
  - IBNR and bulk reserve information is not normally provided.
  - No classification by lines of business is provided.
  - Some timeliness is lost because of data accumulation

and reporting cycles.

- c. Information received from foreign reinsurer.
- Premiums are reported on a collected, written, or earned basis.
  - Normally, no UPR is provided.
  - Normally, no unpaid loss information is provided.
  - Normally, information is reported late.
  - There is a lack of foreign currency translation information.

#### Auditing Procedures for Ceded Reinsurance

7. The independent auditor of the ceding company should review the ceding company's procedures for evaluating the ability of the assuming company<sup>1</sup> to honor its commitments under the reinsurance contract. The auditor should also perform tests of the ceding company's procedures to obtain reasonable assurance that they are in use and operating as planned.

8. The ceding company's procedures to evaluate the financial responsibility and stability of the assuming company may include:

- a. Obtaining the assuming company's most recent audited financial statements and independent auditor's report.

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1. Both domestic companies and foreign companies (sometimes referred to as alien companies).

- b. Obtaining copies of recent financial reports of the assuming company filed with the Securities and Exchange Commission.
- c. Obtaining and reviewing statutory financial statements of the assuming company.
- d. Checking available sources of information on the assuming company, such as--
  - A. M. Best's Reports and ratings.
  - Insurance department examination reports.
  - Dunn & Bradstreet reports regarding payment practices.
- e. Inquiring into the assuming company's retrocessional policies.
- f. Inquiring as to the general business reputation of the assuming company and the background of its owners and management.
- g. Ascertaining whether the assuring company is an authorized reinsurer.

9. The absence of procedures by the ceding company to evaluate the ability of the assuming company to honor its contractual commitments or the lack of reasonable assurance that such procedures are in use and operating as planned, may constitute a material weakness in the ceding company's system of internal accounting control (see SAS No. 1, section 320.68). In such circumstances, the auditor should extend his procedures to evaluate the collectibility of amounts recoverable from the assuming company. The auditor's extended procedures may include, but are not necessarily limited to, those specified in the preceding paragraph.

The auditor's inability to perform the procedures he considers necessary, whether as a result of restrictions imposed by the client or by circumstances such as the timing of the work, the inability to obtain sufficient competent evidential matter, or an inadequacy in the accounting records, constitutes a scope limitation which may require the auditor to qualify his opinion or disclaim an opinion (see SAS No. 2, paragraphs 10-13 /Section 509.10-.137). In such circumstances, the reasons for the auditor's qualification of opinion or disclaimer of opinion should be described in his report.

10. To determine whether the transactions are accounted for in accordance with the provisions of the reinsurance contract, the independent auditor of the ceding company should perform procedures which include the following:

- a. Obtain, read, and abstract the reinsurance contract and related correspondence,
- b. Inquire as to the business purpose of the transaction and the reasons for selecting the particular reinsurer, and
- c. Determine whether the contract is a financing arrangement which should be accounted for according to the provisions of FASB Statement No. 5, paragraph 44.<sup>2</sup>

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2. Paragraph 44 states:

To the extent that an insurance contract or reinsurance contract does not, despite its form, provide for indemnification of the insured or the ceding company by the insurer or reinsurer against loss or liability, the premium paid less the amount of the premium to be retained by the insurer or reinsurer shall be accounted for as a deposit by the insured or the ceding company. Those contracts may be structured in various ways, but if, regardless of form, their substance is that all or part of the premium paid by the insured or the ceding company is a deposit, it shall be accounted for as such.

Auditing Procedures for Assumed Reinsurance

11. The independent auditor of the assuming company should review and test the assuming company's procedures for assessing the accuracy and reliability of data received from the ceding company. The assuming company's procedures in this regard may include:

- a. Maintaining an underwriting file with information relating to the business reasons for entering the reinsurance contract and anticipated results of the contract. The underwriting file may include--
  - Historical loss ratios and combined ratios of the ceding company.
  - Anticipated loss ratios under the contract.
  - An indication of the frequency and content of reports from the ceding company.
  - Prior business experience with the ceding company.
  - The assuming company's experience on similar risks.
  - Information regarding pricing and ceding commission.
- b. Monitoring the actual results reported by the ceding company and investigating the reasons for and the effects of significant deviations from anticipated results.
- c. Visiting the ceding company and reviewing and evaluating its underwriting, claims processing, loss reserving, and loss reserve development procedures.
- d. Obtaining from the ceding company's independent accountant a special report (SAS No. 14 report) regarding the ceding company's internal accounting controls relating to ceded reinsurance.

- e. Obtaining the ceding company's most recent audited financial statements and independent auditor's report.
- f. Obtaining from the ceding company reports of its internal auditors regarding the ceding company's internal accounting controls relating to ceded reinsurance.
- g. Inquiring as to the general business reputation of the ceding company and the background of its owners and management.

12. The absence of procedures by the assuming company to obtain assurance as to the accuracy and reliability of data received from the ceding company, or the lack of reasonable assurance that such procedures are in use and operating as planned, may constitute a material weakness in the assuming company's system of internal accounting control (see SAS No. 1, section 320.68). In those circumstances, the auditor should extend his procedures to obtain assurance as to the accuracy and reliability of the data received from the ceding company by performing procedures at the ceding company or by requesting the independent auditor of the ceding company to perform and report on the results of agreed upon procedures (see SAS No. 14, paragraphs 15-17 /Section 621.15-.17). The auditor's inability to perform the procedures he considers necessary, whether as the result of restrictions imposed by the client or by circumstances such as the timing of the work, the inability to obtain sufficient competent evidential matter, or an inadequacy in the accounting

records, constitutes a scope limitation which may require the auditor to qualify his opinion or disclaim an opinion (see SAS No. 2, paragraphs 10-13 [Section 509.10-.137]). In such circumstances, the reasons for the auditor's qualification of opinion or disclaimer of opinion should be described in his report.

13. To determine whether the transactions are accounted for in accordance with the provisions of the reinsurance contract, the independent auditor of the assuming company should perform procedures which include the following:

- a. Obtain, read, and abstract the reinsurance contract and related correspondence.
- b. Determine whether the contract is a financing arrangement which should be accounted for according to the provisions of FASB Statement No. 5, paragraph 44.<sup>3/</sup>

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<sup>3/</sup> See footnote 2.

## STATEMENT 1980-21

### AMERICAN ACADEMY OF ACTUARIES

COMMENTS FOR IRS HEARINGS ON MAXIMUM BENEFIT LIMITATIONS - IRC SECTION 415

MARY H. ADAMS, VICE PRESIDENT

JULY 8, 1980

I am Mary Adams, a Vice President of the American Academy of Actuaries and Chairman of its Pension Committee. The Academy was established in 1965 as an umbrella organization of the Society of Actuaries, the Casualty Actuarial Society, the Conference of Actuaries in Public Practice and the Fraternal Actuarial Association. The Academy's function today is to bring to the public forum the views of the actuarial profession. At the latest count (11/1/79) there were 5500 members of the Academy. Of these, over 2400 (2419) were enrolled actuaries. Thus, you can see the interest of the Academy in having its views heard today.

Our comments today are not concerned with the text of the proposed regulations themselves, since the regulations relate to benefit design rather than to purely actuarial matters, and are therefore outside the purview of the Academy. Rather, they are concerned with the statement in the introduction to the proposed regulation: "The effect of this limitation will preclude the making of deductible contributions based on anticipated increases of the dollar limitation."

A first objection to this statement might be that it presupposed that the proposed Section 412 regulations (1.412(c)(3)-1(d)(1)) relating to funding for benefits not yet in effect - were, in fact, final. That objection, however, is pale compared to the dilemma which actuaries would have to face if the quoted statement were to become a "final" IRS regulation.

As background under the law, Code Section 415(d) provides that the Secretary of the Treasury shall adjust annually the \$75,000 (as applicable for 1975) limit using procedures similar to those used to adjust primary insurance amounts under the Social Security Act. It is important to note, first, the use of the words "shall adjust annually." There is no question as to whether or not there will be an annual adjustment. There will be an adjustment. Second, the adjustment procedures must be similar to those used to adjust the primary Social Security benefits.

Code Section 404(a)(1)(A) states that deductible contributions shall be based on the same actuarial assumptions as used under Code Section 412.

Code Section 412(c)(3) requires the actuary to use assumptions and methods which offer the actuary's best estimate of anticipated experience under the plan for purposes of determining the amounts of contributions needed for maintenance of the funding standard account.

In preparing actuarial valuations for any plan involving the projection of Social Security benefits or the FICA tax base, and, similarly, the maximum benefit limitation, the actuary's "best estimate" would include assumptions for such projections consistent with the rate of inflation inherent in the salary increase assumption used for that plan. An actuary who knows that cost of living adjustments must be made with respect to benefit payments, and does not take them into account on a basis consistent with the other actuarial assumptions would appear to be in violation of Code Section 412(c)(3).

This is a true dilemma for the actuary. Does the actuary purposely violate the law, by signing an untrue statement that assumptions used in developing funding standards are based on "best estimate" assumptions, jeopardizing his status as an enrolled actuary, in order to comply with an IRS regulation?... or...Does the actuary comply with the law, maintaining funding standards consistent with his best estimate of anticipated experience, and subject plan sponsors to potential questions from the IRS or to disallowances of contributions and to possible costs for appeals or litigation?

We strongly urge that, rather than putting the actuary in such a position, any admonitions as to funding, either in introductory material or in regulations themselves, emphasize the enrolled actuary's responsibilities...not prohibit him from using his "best estimate" assumptions...in maintaining adequate funding standards.

STATEMENT 1980-22

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. • SUITE 515 • WASHINGTON, D.C. 20006 • (202) 223-8196

August 13, 1980

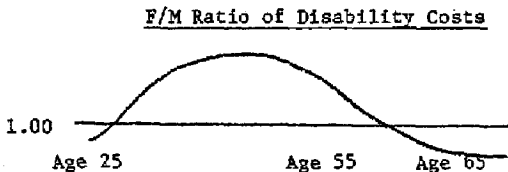
Mr. Ted Becker, Chairman  
NAIC(C-4) Life, Accident and Health  
Insurance Technical Subcommittee  
State Board of Insurance  
Austin, Texas 78786

Dear Mr. Becker:

The American Academy of Actuaries' Committee on Risk Classification's Health Subcommittee appreciates the opportunity to respond to Mr. Larry Gorski's summary of the relationship of female to male costs of disability.

The facts we present in the attached Comments, based on published information demonstrate that:

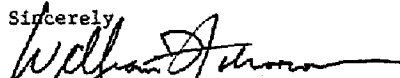
1. The costs of disability for women follow a different pattern than for men by age, with female costs exceeding male costs at ages 25 to 55 - by up to 100% or more - and then falling below male costs at ages 55 to retirement ages. The pattern looks somewhat like the following, exclusive of normal pregnancies:



2. Trends in the female/male cost ratios are very difficult to ascertain, because of the lack of homogeneous exposure data over time, and the occupational and income achievements of women; and
3. The female/male differences are largely due to the frequency of disability, and the nature of such disabilities, and not to the duration of disabilities.

We will continue to look for up-to-date information on these cost differences, and be available for consultation to your Committee.

Sincerely

  
William A. Halvorson, Chairman  
Health Subcommittee  
Committee on Risk Classification

WAH/bh

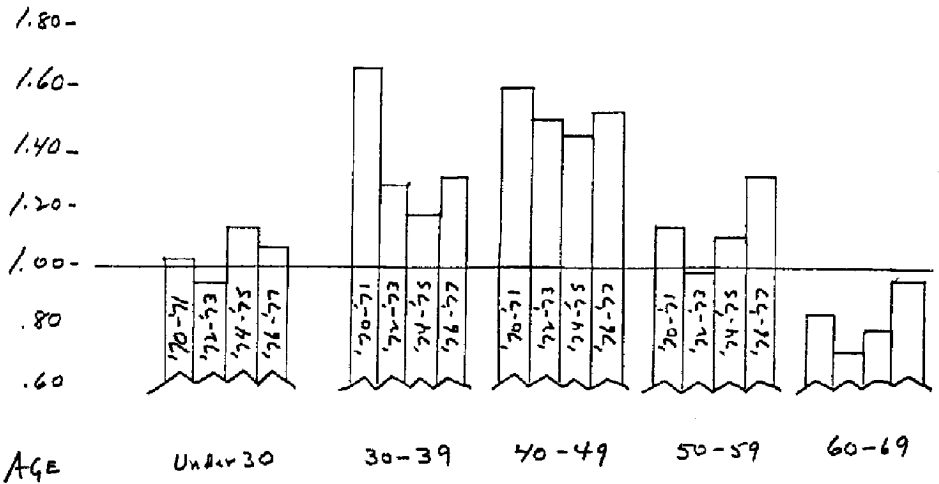
Comments on Relationship of Female to Male Costs of Disability

The following comments were prepared for the NAIC(C-4) Life, Accident and Health Insurance Technical Subcommittee by the American Academy of Actuaries' Committee on Risk Classification's Health Subcommittee in response to Mr. Larry M. Gorski's May 12, 1980 letter.

1. Women have a different pattern of disability cost by age than men, which is demonstrated by Mr. Gorski's summary of the Reports of the Society of Actuaries for 0-day accident, 7-day sickness elimination period plans, for Occupation Group I, non-maternity:

Ratio of Female to Male  
Claim Costs  
0.7 Elimination Period  
One Year Benefit  
(By Years of Exposure)

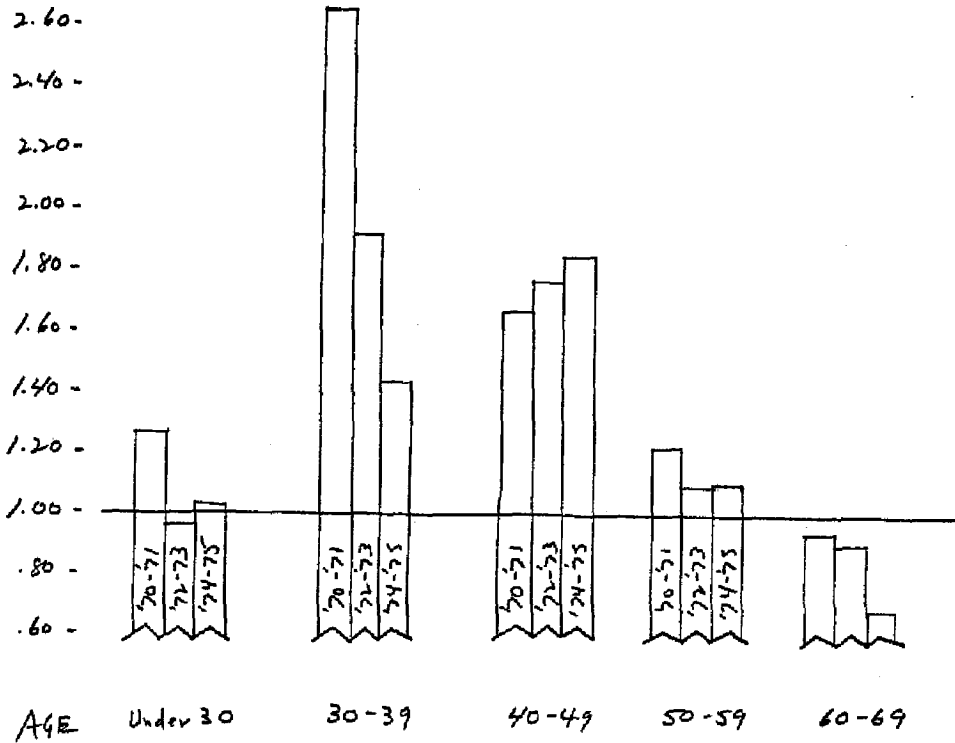
Table 1



The above Table 1 demonstrates the general pattern of female/male cost relationship for disability. The exposure for the 0, 7 day elimination period plan in SOA studies has been decreasing since 1970-71. Perhaps a more significant example of the cost relationships is shown by the 30-day elimination period plan, as follows:

Table 2

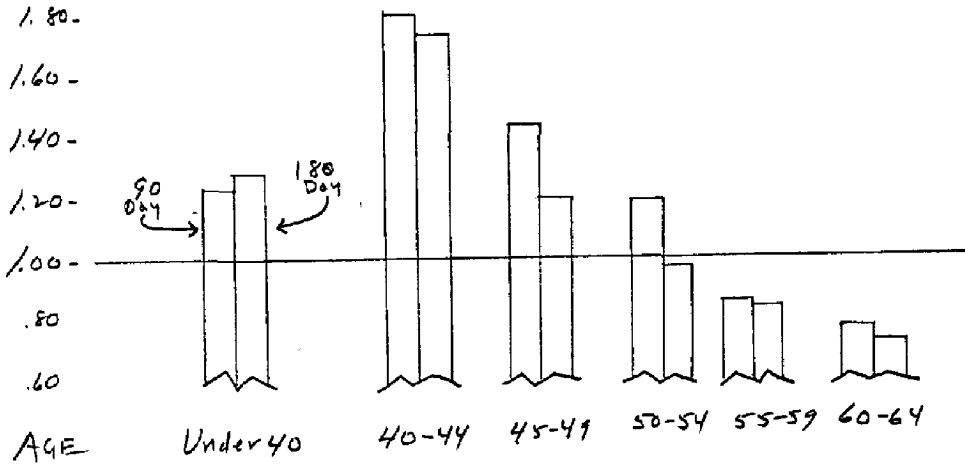
Ratios of Female to Male  
Claim Cost  
30 Day Elimination Period  
One Year Benefit  
(By Exposure Years)



The Society of Actuaries also reports on the frequency of disability under group long term disability programs. These reports show the following female/male relationships:

Table 3

Ratio of Female to Male  
Incidence of Disability  
Group Long Term  
By 90 & 180 Day Elimination  
1972-76 Exposure

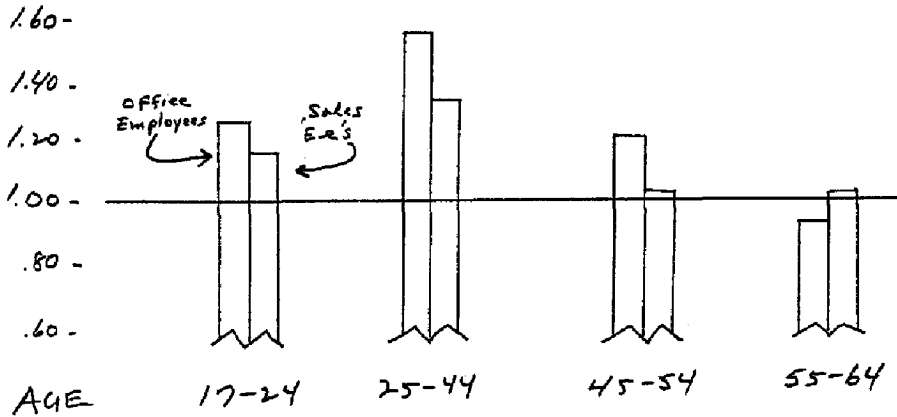


The individual policy experience shown in Table 1 and 2 do not include disabilities due to normal (or non-complicated) pregnancies, nor does the group LTD experience. It should be noted that there is a similar pattern of female/male relationships for both sets of data, under different underwriting conditions.

A similar pattern is shown under non-insurance exposures, as demonstrated by the disability experience of the employees of a large insurance company, as shown in Table 4.

Table 4

Ratio of Female to Male  
Incidence of Disability  
Large Employer  
By Sales and Office Employees



An article published in the Statistical Bulletin of Metropolitan Life Insurance Company also provides some insight on the causes of disability. A photo copy is attached to this report. (Attachment #1)

We believe that the tables of female/male cost and incidence relationships, taken from published data, demonstrate the general

pattern of these relationships, all of which show that women below age 50 to 55 have higher disability costs or disability incidence than men, to a significant degree.

2. Trends in the female/male cost ratios are difficult to ascertain.

An analysis of the 0, 7 elimination period ratios as published in the SOA Reports reveals that the exposures varied considerably over the period for which ratios are published, and we have also learned that different companies contributed significantly different exposures from study period to study period. Thus the resulting ratios as shown may reflect the diverse weighting of alternative companies from period to period. Thus we would urge the Technical Subcommittee to refrain from deducing any trends in the female/male relationships from the SOA Reports. (See Limitations, Attachment #2.)

Also, we believe that it is possible that the general improvement in the earnings and occupations of women over this period may also distort the reading of trends. Some studies have hinted that as the income of employees increase, or employees enter professional or executive occupations, that the incidence of disability decreases.

The pattern (or shape) the female/male cost or incidence relationship is retained if comparisons are made for similar occupations

on an age-adjusted basis. This is demonstrated by the comparison of the data published in the Statistical Bulletin for office employees and sales personnel.

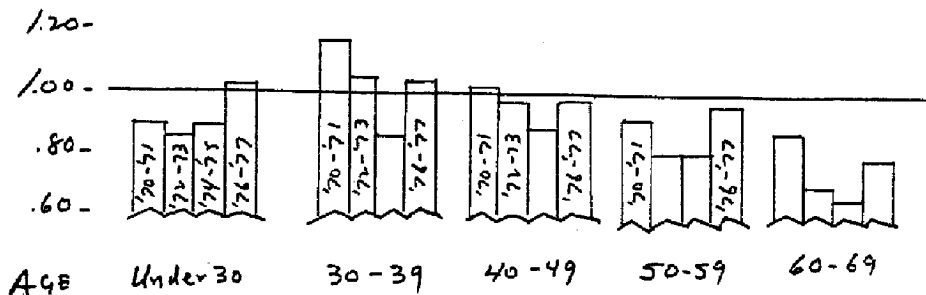
The Technical Subcommittee is aware that most individual disability insurance sold is classified by occupational class and age, and any analysis of trends in the female/male cost relationship to be statistically valid should be standardized by age and occupation, as well as by earnings level (if possible).

3. The female/male differences in cost appear to be due primarily to the differences in incidence, and not to differences in duration of disability, at least for the first year of disability.

Differences in duration appear to exist, with women recovering faster than men during the first year of disability, but are of a secondary magnitude to incidence at ages under 50.

Table 5

Ratio of Female to Male  
Claim Durations  
1st Year of Benefit  
0, 7 Day Elimination



4. Our Subcommittee wishes to emphasize that disability insurance results are also influenced by economic conditions, as they affect an industry, or a geographic area, or even particular occupations or professions. This tends to make disability experience difficult to analyze, and difficult to obtain homogeneous data that is free from distortion caused by such economic conditions.

Comparisons of costs between females and males that are not standardized by age, area, occupation, income levels, and by similar economic conditions can be misleading. Unfortunately, data of the type needed are hard to come by.

The June 1976 study by the New York Insurance Department entitled "Disability Income Insurance Cost Differentials Between Men and Women" looked closely at the Social Security Disability Experience, which at first glance seemed to indicate that the female and male costs ranged from under 1.00 below age 30, to 1.00 to 1.13 in the 30's and 40's, and again dropping below 1.00 over age 50. The Department's study group obtained data from the Social Security Administration by industry in order to remove the bias caused by a higher prevalence of hazardous occupations among men.

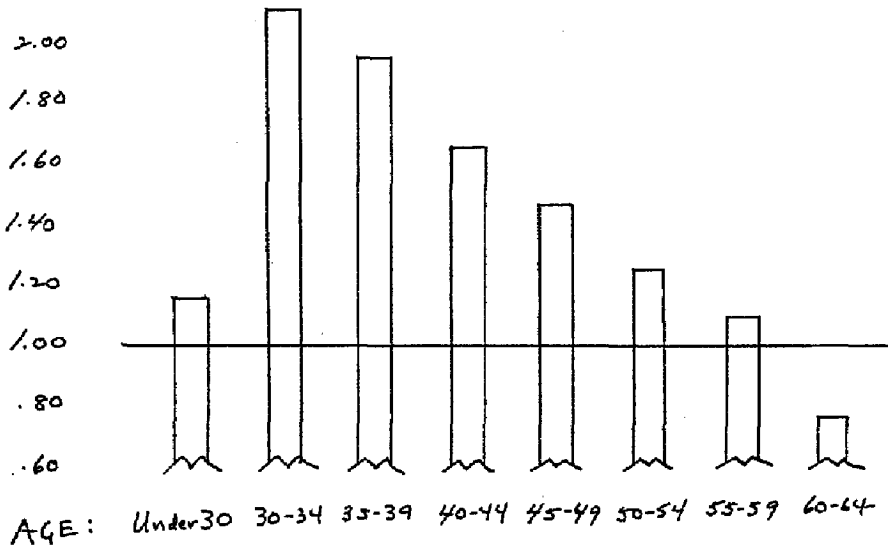
Once the study group obtained a better matching of disabilities and exposures for non-hazardous occupations, it concluded that:

"All of this evidence suggests that if it were possible to obtain truly homogeneous occupational groups so that the factor of occupation could be held constant, the female-male claim cost ratios by age disclosed by the social security data would be reasonably comparable to those disclosed by the Department study of commercial disability income insurance." (See Attachment #3)

This is demonstrated by their table of female/male ratios for non-hazardous occupations as derived from the Social Security Disability Experience:

Table 6

Social Security Disability Experience  
Ratios of Female to Male Claim Costs  
For Non-Hazardous Occupations  
As Interpreted by 1976 New York  
Department of Insurance Study



Summary

The above demonstration of female/male ratios of costs for disability summarizes readily available data for the NAIC Technical Subcommittee. All data that our Subcommittee on Health have seen show the distinctly different pattern of costs for women as compared to men, as illustrated. As women gain more management, sales and professional jobs, it is likely that the incidence of disability for such women will decrease, but it also appears likely that the distinctive pattern of the female/male cost relationship will remain. The increasing availability of such data enables actuaries to reflect such cost differentials in the prices filed with state regulators.

Health Subcommittee  
Committee on Risk Classification  
Sam Gutterman  
Barbara J. Lautzenheiser  
Raymond F. McCaskey  
Joseph W. Moran  
Robert Shapland  
William A. Halvorson, Chairman

August 13, 1980

## Disability Among Metropolitan Employees in 1977-78

**P**ersonnel of the Metropolitan Life Insurance Company were disabled at an appreciably higher rate in 1977-78 than in 1976. Among employees in the Home Office, Head Offices, and Field, new cases of disability lasting longer than a week occurred at an average annual rate of 155 per 1,000 during this two-year period, compared with 138 per 1,000 in 1976. Although increases were registered among both men and women, the rate of disability among women would have shown a decline were it not for the inclusion for the first time of maternity and related claims.

The highest disability rates were recorded among women—203 per 1,000 for office personnel and 153 for sales personnel. Disability rates among men were far lower at 125 per 1,000 for office personnel and 126 for sales personnel. (See table on page 9.)

The incidence of disability lasting longer than a week showed a steady rise with advance in age among men. The annual frequency of disability among male office personnel increased from 93 per 1,000 at ages under 25 to 246 per 1,000 at ages 55-64; the rates for sales personnel were 100 and 181, respectively. The pattern of disability among women was generally similar to that among men, except for the marked rise in disability among women at ages 17-44, because of the large number of pregnancies at those ages.

The chart on the back page shows the wide seasonal variation in the frequency of disability. Generally, the highest rates occur during the colder months of the year, largely because of the increased frequency of respiratory conditions in the winter months. The difference in the disability rate between the peak month and the low month of the year has usually been greater for women

than for men. In 1978, however, the differential widened for men and narrowed for women.

Among male office personnel, accidental injuries were the leading cause of disability, followed closely by diseases of the respiratory system. These two causes, together with diseases of the digestive system, accounted for more than half of all disabilities lasting longer than a week among male office employees during the two-year period. Accidental injuries were a major cause of disability in every age group, ranking first at ages under 45, and second only to digestive diseases at ages 45-54. Diseases of the circulatory system, principally those of the heart, were the leading cause of disability at ages 55-64; diseases of the respiratory system ranked second at these ages.

Among male sales personnel, accidental injuries were the most frequent cause of disability, followed by diseases of the digestive and circulatory systems. About half of all disabilities among male sales personnel were attributed to these three disease categories. Accidental injuries were the ranking cause at ages under 45; circulatory diseases led after these ages.

Respiratory diseases were the most frequent cause of disability among female office and sales personnel. Ranking second among leading causes of disability were maternity and related conditions for office personnel and accidental injuries for sales personnel. Among office personnel, maternity and related conditions led at ages under 45 while respiratory diseases led at ages 45-64. Almost one of every 15 women aged 25-44 in the Home and Head Offices were disabled in 1977-78 because of pregnancy. Among sales personnel, respiratory diseases and acci-

**INCIDENCE OF DISABILITY LASTING LONGER THAN A WEEK**  
**Personnel of the Metropolitan Life Insurance Company,\* 1977-78**

Statistical  
 Bulletin  
 Oct-Dec  
 1979

Cause of Disability	Office Personnel					Sales Personnel†				
	Ages 17-24	Ages 25-34	Ages 35-44	Ages 45-54	Ages 55-64	Ages 17-24	Ages 25-34	Ages 35-44	Ages 45-54	Ages 55-64
<b>Male</b>										
All Causes .....	124.8	92.6	95.9	162.8	245.6	126.0	99.7	102.5	142.2	181.4
Diseases of respiratory system .....	22.4	15.9	18.8	24.1	43.7	13.8	16.8	13.4	13.2	14.2
Diseases of digestive system .....	19.0	17.5	13.6	29.6	32.7	19.8	17.1	14.4	23.4	30.9
Diseases of circulatory system .....	14.2	‡	8.6	25.0	50.0	18.5	3.5	6.8	26.3	47.5
Diseases of heart .....	8.4	‡	2.6	18.5	30.9	10.9	‡	2.9	15.4	31.7
Diseases of genitourinary system .....	5.7	‡	4.3	‡	10.0	5.3	‡	3.5	6.5	10.1
Diseases of bones and other organs of movement .....	15.9	10.8	10.7	22.2	37.3	16.5	10.4	14.5	19.4	21.1
Neoplasms, total .....	4.8	‡	3.0	10.2	‡	4.1	‡	2.7	5.4	6.9
Benign .....	2.5	‡	2.1	‡	‡	2.3	‡	2.0	2.7	2.5
Psychoneuroses and psychoses .....	3.7	‡	3.0	‡	‡	7.8	4.4	8.2	9.0	6.9
Accidental injuries .....	23.5	20.9	22.4	28.7	26.4	24.3	29.4	25.9	22.0	20.6
<b>Female</b>										
All Causes .....	203.1	166.5	215.5	197.2	228.1	152.9	133.8	157.7	142.3	183.2
Diseases of respiratory system .....	39.7	29.5	34.7	44.5	60.7	22.5	22.7	20.7	20.8	34.2
Diseases of digestive system .....	18.3	20.6	16.5	19.3	18.3	15.9	13.5	15.0	21.2	13.1
Diseases of circulatory system .....	10.1	2.6	5.9	18.1	22.6	9.6	‡	8.3	12.5	20.2
Diseases of heart .....	2.8	‡	‡	5.5	7.6	3.3	‡	2.1	5.6	8.8
Diseases of genitourinary system .....	20.4	12.0	25.8	26.5	13.7	19.0	13.0	23.5	18.6	8.8
Maternity and related conditions .....	39.3	48.6	65.9	—	—	13.9	18.9	21.0	—	—
Diseases of bones and other organs of movement .....	16.1	7.7	14.5	21.9	25.7	16.3	11.3	15.0	16.0	30.7
Neoplasms, total .....	11.3	7.2	11.4	13.2	14.6	9.7	8.1	8.3	13.8	10.5
Benign .....	9.0	7.0	9.8	10.4	8.5	7.7	7.0	7.9	8.6	‡
Psychoneuroses and psychoses .....	5.8	4.7	7.1	7.2	3.3	7.6	‡	9.6	6.9	‡
Accidental injuries .....	20.4	15.2	18.0	22.2	35.7	21.4	20.0	21.4	15.6	35.4

\*Personnel in the Pacific Coast States and Canada are not included.

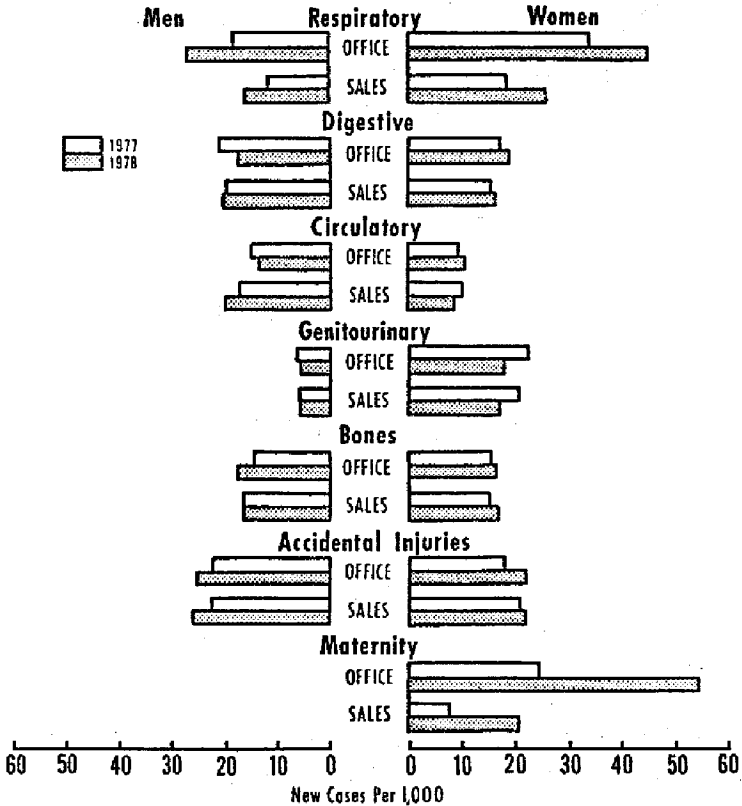
†Employees in the District Offices and Field (including clerical).

‡Fewer than 10 cases in this category; rate not computed.

Statistical  
Bulletin  
Oct-Dec  
1979

## Leading Causes of Disability, 1977 and 1978

### Personnel of the Metropolitan Life Insurance Company



Disability lasting longer than a week. Personnel in the Pacific Coast States and Canada are not included. Sales personnel include employees in the District Offices and Field (including clerical).

dental injuries were major causes of disability in every age group. Respiratory diseases were the leading cause of disability at ages under 25 and ranked second at ages 45-64. Accidental injuries led at ages 55-64 and were second at ages under 45.

The chart above shows the experience by major causes of disability separately for 1977

and 1978. Disability rates for both sexes and employee classes rose from 1977 to 1978. There was also a general increase in diseases of the respiratory system, diseases of the bones and other organs of movement, accidental injuries, and disabilities arising from pregnancy. Only genitourinary disorders were less frequent in 1978 than in 1977.

Limitations of Intercompany Studies in General and the Individual Loss-of-Time study in specific:

1. The experience is a combination of the experience of several different companies and is generally not indicative of what any one particular company can expect. The experience will contain variances due to widely differing practices in underwriting, administration, claim handling, etc.
2. The contributing companies, or the amount of experience they contribute, for a particular study in different years may not be the same. Because of this, the exposures in the Individual LOT study vary widely between some periods, particularly on the plan/age/sex level. This may affect an analysis of trends.
3. The exposure and claims of a particular plan/age/sex cell may have been entirely contributed by one or two companies. There may also be limited or no experience in certain plan/age/sex cells. Both of these are occurring in the Individual LOT study for (a) accident disability - other than 0 day elimination period, and (b) sickness disability - other than 7 day elimination period. These may affect comparisons between different plan/age/sex cells.
4. The Individual LOT study derives total disability experience by assuming that the "sum" of accident disability and sickness disability equals total disability. For example, this study derives the claim frequency for a 0 day accident, 7 day sickness plan by adding the claim frequency from the 0 day accident experience and the 7 day sickness experience. The validity of this assumption can be questioned.
5. The Individual LOT study ignores other factors which may affect experience such as maximum benefit period and benefit amount. Also, the occupation class groupings used in this study are broad to a large extent (only two occupation classes are used); Thus the data may not be entirely homogeneous with respect to occupation.

## CONTRIBUTORS TO INDIVIDUAL DISABILITY INCOME STUDIES

<u>COMPANY</u>	<u>68-69</u>	<u>70-71</u>	<u>72-73</u>	<u>74-75</u>	<u>76-77</u>
Prudential	X	X	X	X	X
Monarch		X	X	X (only 75)	X
Metropolitan	X (only 69)	X	X	X	X
Mutual of Omaha	X	X	X	X	
New York Life	X	X	X	X	X
Mutual of New York	X	X	X	X	X
John Hancock	X	X	X		X
Pacific Mutual	X	X	X	X (only 74)	
Business Men's Assurance	X	X	X	X	X
Loyal Protective	X	X	X	X (only 74)	
Woodmen			X	X	X
Guardian Life		X (only 71)	X	X	X
Continental Assurance	X	X	X	X	X
Provident Mutual	X	X	X	X	X
Lincoln National	X				
Provident Life & Accident					X

## STATEMENT 1980-22

## OCCUPATION GROUP I

0 Day Accident 7 Day Sickness Elimination Period

Trends In Ratios of Female to Male  
Claim Costs Limited to First Year of Benefit Period

Age	66-67	68-69	70-71	72-73	74-75	76-77
Under 30	120%	125%	102%	94%	111%	106%
30-39	184%	153%	164%	127%	117%	129%
40-49	182%	168%	158%	148%	141%	149%
50-59	118%	118%	112%	99%	108%	129%
60-69	86%	79%	83%	69%	76%	93%
All Ages	133	125	121	104	108	119

Trends In Ratios of Female to Male  
Annual Claim Rates

Age	66-67	68-69	70-71	72-73	74-75	76-77
Under 30	124%	123%	113%	112%	126%	103%
30-34	137%	131%	142%	123%	137%	133%
40-49	151%	166%	156%	154%	162%	145%
50-59	123%	130%	123%	124%	134%	132%
60-69	106%	111%	95%	99%	116%	118%
All Ages	135	141	132	129	140	120

Trends In Ratios of Female to Male  
Claim Duration Limited to First Year of Benefit Period

Age	66-67	68-69	70-71	72-73	74-75	76-77
Under 30	97%	102%	89%	83%	88%	102%
30-39	135%	117%	116%	103%	86%	92%
40-49	122%	101%	111%	96%	87%	103%
50-59	96%	90%	91%	80%	80%	97%
60-69	82%	71%	87%	70%	65%	79%
All Ages	98	88	92	81	77	92

## STATEMENT 1980-22

185

## OCCUPATION GROUP I

## Total Disability

	<u>0-Day Elimination</u>		F/M	<u>7-Day Elimination</u>		F/M
	Male	Female		Male	Female	
<u>1966-1967 Exposures</u>						
20-29	4227	261	6.2%	10987	2747	25.0%
30-39	14392	574	4.0%	32363	4585	14.0%
40-49	27844	1761	6.3%	47448	4585	17.9%
50-59	36797	3050	8.3%	40563	7421	18.3%
60-69	<u>21322</u>	<u>1324</u>	<u>6.2%</u>	<u>12020</u>	<u>530</u>	<u>4.4%</u>
	104582	6970	6.7%	143381	23790	16.6%
<u>1968-1969</u>						
20-29	3490	605	17.3%	12357	3812	30.8%
30-39	12214	427	3.5%	30392	5203	17.1%
40-49	20961	1477	7.0%	40629	9108	22.4%
50-59	29983	2481	8.3%	37445	8512	22.7%
60-69	<u>20016</u>	<u>1559</u>	<u>7.8%</u>	<u>12471</u>	<u>727</u>	<u>5.8%</u>
	86664	6549	7.6%	133294	27362	20.5%
<u>1970-1971</u>						
20-29	13508	3400	25.2%	15914	5513	34.6%
30-39	12139	606	5.0%	35013	7226	20.6%
40-49	21319	1123	5.3%	54522	11816	21.7%
50-59	36289	2487	6.9%	60739	13211	21.8%
60-69	<u>29478</u>	<u>1513</u>	<u>5.1%</u>	<u>24471</u>	<u>1780</u>	<u>7.3%</u>
	112733	9129	8.1%	190559	39546	20.7%
<u>1972-1973</u>						
20-29	12500	5261	42.1%	14388	7101	49.4%
30-39	19480	1369	14.4%	36430	11350	31.2%
40-49	19098	1781	9.3%	51551	14753	28.6%
50-59	29913	3167	10.6%	62235	18322	29.4%
60-69	<u>20697</u>	<u>1868</u>	<u>9.0%</u>	<u>24120</u>	<u>4697</u>	<u>19.5%</u>
	91688	13446	14.7%	188724	56223	29.8%
<u>1974-1975</u>						
20-29	7354	4414	59.9%	9452	4970	52.6%
30-39	22245	7406	33.3%	25170	9775	38.8%
40-49	20218	6587	32.6%	29812	12459	41.7%
50-59	23286	9607	41.3%	50393	15738	31.2%
60-69	<u>13788</u>	<u>4346</u>	<u>31.5%</u>	<u>19227</u>	<u>4391</u>	<u>22.8%</u>
	86901	32360	37.2%	134053	47333	35.3%
<u>1976-1977</u>						
20-29	12354	2514	20.3%	11825	3643	30.8%
30-39	4983	365	7.3%	20351	6289	30.9%
40-49	6754	467	6.9%	28179	7478	26.5%
50-59	13049	936	7.2%	38103	9461	24.8%
60-69	<u>7011</u>	<u>558</u>	<u>8.0%</u>	<u>17674</u>	<u>1473</u>	<u>8.3%</u>
	44151	4840	11.0%	116132	28344	24.4%

State of New York  
Insurance Department

DISABILITY INCOME INSURANCE  
COST DIFFERENTIALS BETWEEN  
MEN AND WOMEN



June 1976

THOMAS A. HARNETT  
Superintendent of Insurance

### Group Long Term Disability Experience

A recent study published by the Society of Actuaries of group long term disability income experience under policies with a six-month elimination period shows the following rates of disablement per 1,000 persons insured:

TABLE 10  
GROUP LONG TERM DISABILITY EXPERIENCE

Attained Age	Rates of Disablement, By Sex		Ratio F/M
	Male	Female	
under 40	0.78	1.02	1.51
40-44	2.15	3.68	1.71
45-49	3.33	4.57	1.37
50-54	6.35	6.48	1.02
55-59	10.89	8.45	0.78
60-64	16.57	12.35	0.74

Source: *Group Long Term Disability Insurance*, TRANSACTIONS OF SOCIETY OF ACTUARIES, 1974 Reports of Mortality and Morbidity Experience, 1975, No. 2, p. 155.

It should be noted that the sex-age pattern for group long term disability is similar to the pattern developed in this study in that female claim rates rise relative to male claim rates in the mid-years and fall below those of males with increasing age.

### Social Security Disability Experience

One of the coverages included in the federal social security program is disability income protection. Almost all gainfully employed persons in the Nation are covered under the program and eligible for disability benefits if the insured individual has been disabled for at least five months and the disability lasts or is expected to last for at least twelve months or to result in death. With millions of men and women covered under the social security disability program, it provides a voluminous source of data relating to disability experience. Critics of the insurance industry's premium rate structure for disability income insurance point to the social security system's disability statistics as evidence that women are not disabled more than men and should not be charged higher premiums for commercial disability income insurance. In view of this criticism, an analysis of the social security disability data is warranted.

The Office of the Actuary of the Social Security Administration provided the Insurance Department with unpublished statistical data relating to the social security disability experience. Table 11 furnished by the Office of the Actuary of the Social Security Administration, presents the incidence rates, annuity values and net single premiums (claim cost) separately for men and women based on the experience of the social security disability program. Graph 7 illustrates the results of Table 11 and compares these results with those of the Department study. The experience indicates that while the incidence rates for men at all ages are greater than the incidence rates for women, the net single premium (claim cost) required to provide \$1,000 of annual benefit when compared by sex indicates a different age-sex pattern. The social security experience indicates that women remain disabled longer, on the average, than men, which causes the annuity values to be greater for women. At the younger and older ages, the female to male claim cost ratios reflect the more favorable experience of women, while at the central ages 32 to 47, the experience of men is more favorable. The pattern of sex ratios by age for social security disability experience is somewhat similar to the pattern of ratios for commercial disability income insurance but it is apparent that the magnitude of the ratios is not nearly as great.

Should this social security disability experience be used to test the validity of the experience of private insurance companies writing disability income insurance? To answer this question the characteristics of the data under the social security system and that under the private insurance system were evaluated.

In reviewing both systems, two major differences appear:

1. The social security coverage is of a universal nature insuring almost the entire workforce, regardless of other disability coverage. Those persons covered by private insurance companies are selected risks who do not regard themselves as adequately insured for loss of income by government programs.

2. The social security disability experience is reported without making distinctions by occupation class. One of the basic criteria used by private insurance companies in both underwriting and rating risks for disability income insurance is occupation class.

In order to obtain a comparison of female claim costs to male claim costs for a given occupation class using the social security data, the Department computed claim costs for three occupational categories ("non-hazardous," "hazardous," and "all other occupations") and one

**TABLE 11**  
**SOCIAL SECURITY DISABILITY EXPERIENCE—ALL OCCUPATIONS**  
 Incidence Rates, Annuity Values, and Net Single Premiums Based on 2.50% Interest and Experience of the Disability Insurance Program

Central Age	Male			Female			Ratio Female Claim Cost/Male Claim Cost
	Incidence Rate Per 1,000 <sup>a</sup>	Annuity Value \$1,000/Yr <sup>b</sup>	Net Single Premium (Claims Cost) Per \$1,000 <sup>c</sup>	Incidence Rate Per 1,000 <sup>a</sup>	Annuity Value \$1,000/Yr <sup>b</sup>	Net Single Premium (Claims Cost) Per \$1,000 <sup>c</sup>	
22	1.460	\$12,834	\$ 18.74	0.600	\$16,365	\$ 9.32	0.50
27	1.750	12,747	22.31	1.080	15,883	17.15	0.77
32	2.320	12,131	28.14	1.980	15,032	29.76	1.06
37	3.390	11,299	38.30	3.120	13,866	43.26	1.13
42	4.990	10,437	52.08	4.460	12,426	55.42	1.06
47	7.830	9,302	72.84	6.810	10,836	73.80	1.01
52	13.020	7,783	101.34	11.150	8,843	98.61	0.97
57	23.090	5,649	130.45	18.660	6,113	114.09	0.87
62	32.990	2,360	77.88	19.740	2,368	46.75	0.60

Source: Office of the Actuary, Social Security Administration, March 26, 1976.

<sup>a</sup> The incidence rates are based on estimated experience through 1975.

<sup>b</sup> The annuity value represents the present value of a continuous annuity to someone who becomes disabled at age  $X$ , has a 6.5 month waiting period, and receives payments until attainment of age 65. The 6.5 month waiting period represents the nominal five month elimination period plus an average lag of 1.5 months before payments actually commence. The termination rates used in the calculation of the annuity values are based on 1968-74 experience.

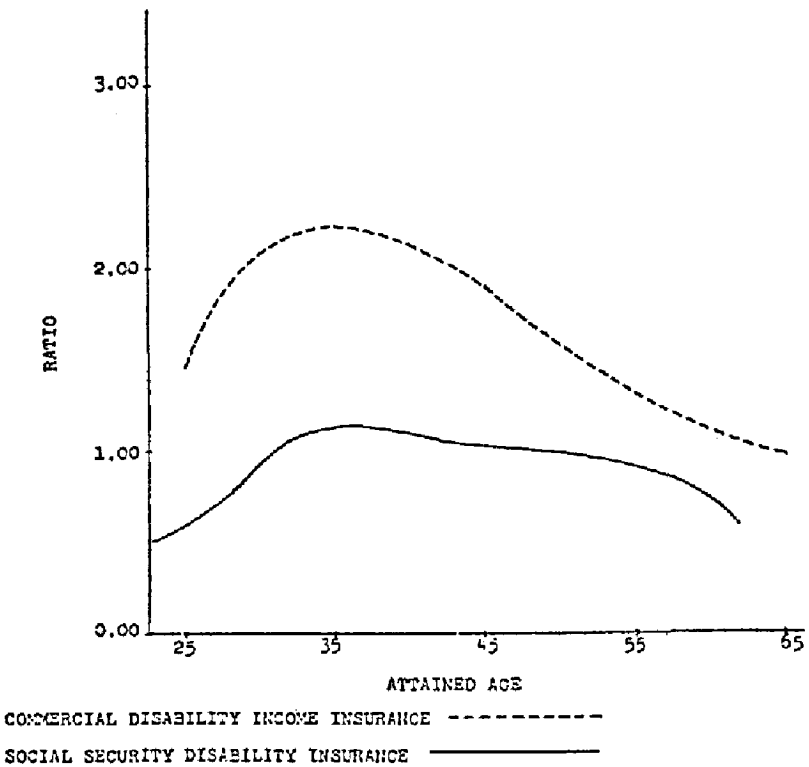
<sup>c</sup> The net single premium is for a one year non-renewable term disability policy.

"hazardous industries" class. The Department used the number of new applicants for disability benefits accepted in 1972 as provided by the Social Security Administration and the annuity values shown in Table 11. These data were related to exposures by occupation classes and age groups developed by the Department from 1970 census data and adjusted to conform to the total exposures to disability within each age group, as furnished by the Social Security Administration. The comparison of female to male claim costs by occupation class and age as

GRAPH 7

ACCIDENT AND SICKNESS INSURANCE EXPERIENCE  
RATIOS OF FEMALE CLAIM COSTS TO MALE CLAIM COSTS  
BY AGE

COMMERCIAL DISABILITY INCOME INSURANCE  
EXPERIENCE COMPARED WITH SOCIAL SECURITY  
DISABILITY INSURANCE EXPERIENCE



developed by this method is shown in Table 12 together with a distribution of exposure in terms of numbers of persons in the social security disability program. Graph 8 presents the results of Table 12.

If the female-male claim cost ratios for all occupations (Table 11) are compared with the ratios for non-hazardous occupations (Table 12) it is apparent that the ratios are larger for the non-hazardous occupations, a consequence of the fact that in the labor force as a whole (as reflected by Table 11), a larger proportion of

TABLE 12  
SOCIAL SECURITY DISABILITY EXPERIENCE  
RATIOS OF FEMALE CLAIM COSTS TO MALE CLAIM COSTS  
AND DISTRIBUTION OF EXPOSURES (APPROXIMATED)  
BY OCCUPATION CLASS

Occupation Class	Attained Age							
	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64
Non-Hazardous Occupations <sup>b</sup>	1.15	2.10	1.94	1.65	1.47	1.24	1.09	0.76
Hazardous Occupations <sup>c</sup>	0.25	0.35	0.70	0.52	0.80	1.23	0.97	0.90
All Other Occupations <sup>d</sup>	0.96	1.00	1.04	1.12	0.90	1.16	1.12	0.78

	Estimated Distribution of Exposures			
	Percent Distribution		Number Exposed (in thousands)	
	Male	Female	Male	Female
Non-Hazardous Occupations <sup>b</sup>	43	66	21,327	16,896
Hazardous Occupations <sup>c</sup>	5	1	2,611	167
Hazardous Industries <sup>e</sup>	16	(f)	7,595	(f)
All Other Occupations <sup>d</sup>	36	33	18,011	8,587
Total	100	100	49,544	25,650

<sup>a</sup> See Appendix M for detailed table of experience from which this summary table was drawn.

<sup>b</sup> Consists of Professional, Technical, Managerial, Clerical and Sales Personnel.

<sup>c</sup> Consists of Firemen, Military personnel, Police and Farmers.

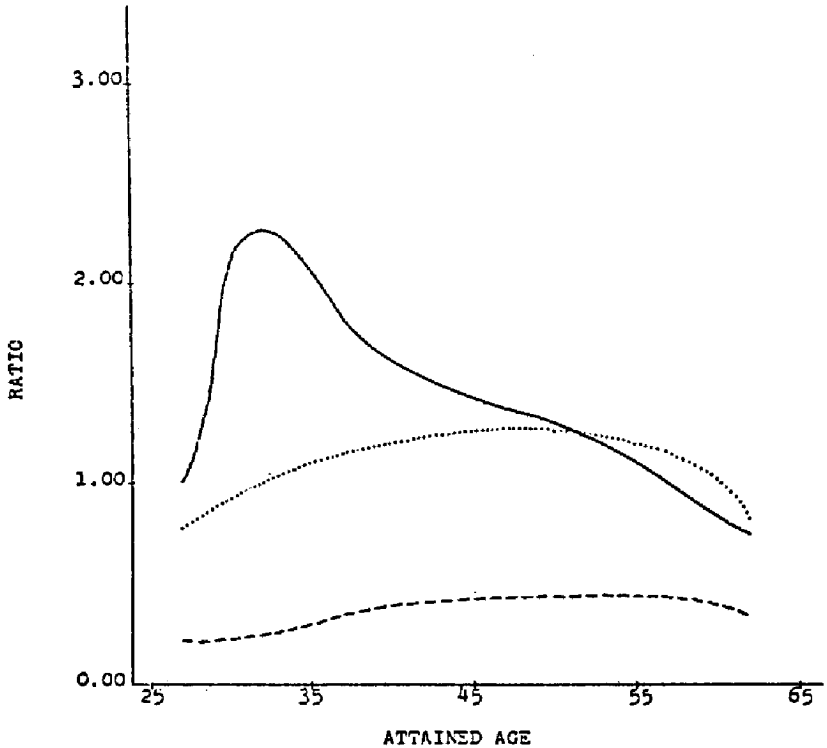
<sup>d</sup> Consists of employees in food and beverage service, apparel and furnishings, building maintenance, machine trades, bench work, packaging and handling, and all other occupations.

<sup>e</sup> Consists of Structural Work, Transportation (excluding railroads) and Mineral Extraction.

<sup>f</sup> Included in Non-Hazardous Occupations because women in Hazardous Industries are primarily engaged in such positions (e.g., typists in mining industry).

GRAPH 8

SOCIAL SECURITY DISABILITY EXPERIENCE  
 RATIOS OF FEMALE CLAIM COSTS TO MALE  
 CLAIM COSTS BY OCCUPATIONAL GROUP AND AGE



NON-HAZARDOUS OCCUPATIONS —————  
 HAZARDOUS OCCUPATIONS - - - - -  
 ALL OTHER OCCUPATIONS ·········

men are engaged in hazardous occupations, thereby bringing their claim costs up relative to female claim costs, at all ages.

Comparing the experience of women with that of men on an aggregate unclassified basis with respect to occupation is similar to comparing the average risk of disability of five men: a teacher, an executive, a factory worker exposed to high risk, a telephone linesman, and a quarryman; with the average risk of disability of five women: a

teacher, a technician, a secretary, a sales clerk, and a factory worker doing light assembly work at a bench. The Department's analysis of insurance data and of the social security data, insofar as available occupational subdivisions permitted, indicate that when men and women in occupations of equal risk are compared, a higher incidence of disability is evident among women, especially at ages 30-50.

It is also of interest to note that the claim cost ratios shown in Table 12 for non-hazardous occupations are quite similar in size and pattern to the ratios shown in Table 1 for commercial disability income insurance.

The Department's source of population data by occupation is the U.S. Census.<sup>1</sup> While professional, managerial, sales and clerical categories are clearly occupational in character, such categories as Operatives, Laborers, and Service Workers are further subdivided by industry categories rather than occupation. It would appear that most women working in *hazardous industries* hold *non-hazardous jobs* e.g., a clerical employee in the construction industry or a timekeeper in steel mill production or mining. This explains the low claim costs ratios among women in "hazardous occupations".

It was not feasible to match claims with exposures in occupations other than those included among either "non-hazardous" or "hazardous." The remaining occupations were therefore grouped together in an "all other" category. For men, the "all other" claim costs lie between the non-hazardous and the hazardous in every age group as would be expected (see Appendix M). For women, however, the "all other" category produced higher claim costs than either of the other two groupings except for age groups 50-54 and 60-64. This confirms the above conclusion that women in hazardous industries are generally doing non-hazardous work.

All of this evidence suggests that if it were possible to obtain truly homogeneous occupational groups so that the factor of occupation could be held constant, the female-male claim cost ratios by age disclosed by the social security data would be reasonably comparable to those disclosed by the Department study of commercial disability income insurance.

It will be seen from the foregoing analysis why the social security experience, in the aggregate, cannot be used to test the validity of the experience of private insurance companies writing disability insurance.

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<sup>1</sup> 1970 CENSUS OF POPULATION: DETAILED CHARACTERISTICS (Vol. PE(1) D-1) and OCCUPATIONAL CHARACTERISTICS (Vol. PC(2) 7A), U.S. Dept. of Commerce, Bureau of the Census.

### CONCLUSIONS

1. Sex is a major factor affecting the cost of disability income insurance.
2. For accident and sickness benefits, female claim costs are consistently higher than male claim costs up to age 60 after which they fall below male costs. The highest relative differential in claim costs appears in the age group 30-39.
3. For accident-only benefits, female claim costs are generally less than male claim costs below age 30 and show ratios which increase with advancing age. Thus, cause of disability affects claim-cost ratios.
4. Where reliable homogeneous occupational data are available, differences between occupations reflect differences in degree of hazard and therefore affect costs.
5. Where male and female workers are properly grouped in the same occupation class, claim-cost differentials are attributable to sex and age and not to occupation.
6. Benefit structure features such as elimination periods and maximum benefit periods or type of renewal guarantee provision (such as guaranteed renewable or optionally renewable by the company), while they affect claim costs overall, are not significant factors affecting relative female to male costs.
7. There is no evidence of significant change in female-male claim cost ratios during the years 1963-1973; *i.e.*, the ratios by sex and by age have remained relatively stable.
8. A review of social security disability benefit experience exhibits a pattern of claim cost ratios not inconsistent with those derived from commercial disability income insurance experience.

### GENERAL RECOMMENDATIONS

#### Annual Claim Costs for Accident and Sickness Benefits

Annual claim costs for accident and sickness benefits with the same elimination periods should first be calculated for men. To arrive at the annual female claim costs, the male claim cost should be multiplied by the individual ratios presented in Table 1 of this study as follows:

	Attained Age				
	20-29	30-39	40-49	50-59	60-69
Accident and Sickness Insurance*	1.43	2.22	1.90	1.31	0.96

\* Elimination period same for accidents as for sickness. Maternity excluded.

STATEMENT 1980-23

August 19, 1980

John L. McDonough, Jr., Chairman  
Insurance Companies Committee  
American Institute of Certified  
Public Accountants  
1211 Avenue of the Americas  
New York, NY 10036

Dear Jack:

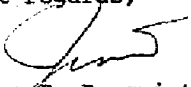
RE: Considerations Relative to the Discounting of  
Loss and Loss Expense Reserves

You will recall that the members of the Academy  
Committee presented a rough draft of considerations  
for and against the recognition of investment  
earnings in GAAP financial statements at the joint  
meeting of our two committees on April 16, 1980.

Our committee has finalized those documents and we  
are herewith submitting them to you. As in our  
previous presentation, we have attempted to set  
forth a rather complete discussion of the subject  
from both points of view. Please keep in mind that  
the views presented herewith are the views of our  
committee only and, thus, do not purport to be the  
views of the entire membership of the Academy.

Once again, I would like to take this opportunity  
to thank you and the members of your committee for  
affording us the opportunity to present these  
considerations to the Insurance Companies Committee.

Best regards,



James R. Berquist

JRB:br

cc: Members of AICPA Insurance Companies Committee  
Members of American Academy of Actuaries Task Force  
R. L. Bornhuetter  
W. L. Grace  
S. G. Kellison

RECOGNITION OF THE TIME VALUE OF MONEY IN LOSS RESERVES

Reserves for losses and loss adjustment expenses generally comprise the largest single liability in a property/liability insurance company financial statement. Therefore, the extent to which a property/liability company's financial statement properly reflects the true financial condition of the company at a given point is dependent on the accuracy of these reserves. Further, the fair statement of a company's earnings in a given accounting period is also dependent on the accuracy and consistency of those reserves at the beginning and ending of the accounting period.

Where losses are settled within a year of the date of the accident, the time value of money is a relatively minor factor. In contrast, where losses are settled over an extended period of time, the money held for reserves is earning interest and the time value of money becomes a significant consideration.

This statement explores the concept of recognizing the time value of money in establishing and accounting for loss and loss expense reserves.

Categories of Claims

For purposes of discussion, claims may be categorized into four

general types:

(1) Short Term Claims

On certain lines of business such as fire, windstorm and auto physical damage, loss payments are normally made within a year or at most within two years. General inflation may push these costs up, and some investment income is earned while reserves are held. However, the effect of these factors tends to be modest in comparison with the other variables involved in reaching agreed settlement costs.

(2) Long Term Uncertain Amount Claims

Certain general liability claims (including claims associated with medical malpractice and products liability) and auto liability claims may take several years to settle, and during such period of time, the impact of inflation and investment earnings on reserves can be quite sizable. The determination of the settlement value is uncertain and varies widely.

(3) Long Term Reasonably Certain Amount Claims

Claims involving periodic payments projected to extend over many years, though not fixed as to amount or timing,

can be reasonably projected using appropriate mortality tables. Examples of this type of claim are payments for continuing medical treatment over many years such as occur under workers' compensation medical coverage, certain automobile coverage, high limit accident and health coverage, or unlimited medical payments coverage.

Such claims are usually large and future payments increase or decrease directly with inflation. The investment earnings associated with these types of claims generally will be sizable because of the long period of time reserves are held.

(4) Long Term Claims with Fixed Payments

Adjudications of some workers' compensation claims call for fixed amounts being paid periodically for an extended period of time. These can be quite accurately projected using mortality tables where a lifetime payment is involved. As a variation, benefits are escalated for inflation in some jurisdictions requiring the introduction of an escalation or inflation factor. Again, the investment earnings on reserves generally will be sizable due to their long duration.

THE CASE FOR DISCOUNTINGApplication for Discounting

The following principles are generally accepted:

1. It is appropriate to recognize the time value of money.
2. Workable assumptions with regard to cash flow (claims payments) patterns and appropriate related interest rates can be made.
3. Less certain estimates require greater margins of conservatism.

In practice claims tend to be placed into two groups, i.e., those for which settlement patterns are estimable on an individual claim basis and those for which settlement patterns are better estimated in some aggregate manner, e.g., by coverage, by accident or reported year.

For the most part claims in (3) and (4) above fall into the first category. One is reasonably able to determine for an individual claim the existence of liability and the schedule of periodic payments although for unlimited medical claims the impact of variables can be severe. To reflect the time value of money, a discount factor can be applied to each periodic payment scheduled or estimated.

Claims in (1) and (2) above basically fall into the second category. Actuaries tend to project the ultimate settlement value of a body of these claims by estimating aggregate loss payment patterns using historical data. While the value and payment date of individual claims are not projected, estimated total loss payments by calendar periods are obtainable. The time value of money can be reflected by applying the appropriate discount factor to the projected payments for each calendar period, although as observed previously the results obtained for type (1) claims may not justify the exercise. Meanwhile the requirements for greater margins of conservatism dictated by type (2) claims may make discounting impractical.

#### Rate of Interest

It is generally agreed that any rate of interest applied to loss reserves should be somewhat conservative and reasonably stable. In the absence of conditions to the contrary (for example, a specific investment program affecting a particular block of claims) the insurance company's average rate of return on investments may serve as a guide to an appropriate rate to be applied. Specifically, this would mean that rates appropriately would vary among companies.

THE CASE FOR NOT DISCOUNTING LOSS RESERVES

If the principal purpose of company statements and reports is to provide a method of determining the value of that company or a means to evaluate the capability of its management, then the discounting of loss reserves may serve this purpose poorly.

Loss reserves are a substantive part of the liabilities of property and casualty companies, in most cases being larger than the net worth of companies and in many cases being larger than the earned premiums. The effect of selecting varying interest rates from period to period which would be necessitated by changing economic conditions from time to time, might be so powerful as to cause great changes in perceived net worth from one year to the next, or even from one day to the next.

Furthermore, the effects of changes in the interest rate would be such an overwhelming force in the determination of operating results as to diminish the importance of the remaining factors (such as underwriting and even investment income) and, in some cases to render them trivial. Far from providing a consistent base for measuring a company's results from year to year or improving the comparability of results from company to company, discounting would be destructive of these purposes.

In addition, the testing of loss reserve adequacy, one of the

more important measures of management capability, would be much more difficult. The most popular tests of loss reserves are of the type which compare reserves as of a given date with the payments which history shows have been required to pay those claims. It is clear that if reserves were discounted, they would automatically be mismatched against payments.

While it is possible to adjust for this situation, no one will claim that the discounting of loss reserves will simplify or clarify the loss reserve evaluation problem faced by the investor or regulator.

Thus, the main purpose of periodic company reports - the furnishing of information to interested parties such as shareholders (actual and potential), regulators and the public in general would be subverted by the introduction of this concept.

As important as these considerations are, there are several more practical reasons why discounting is a dangerous idea. Determination of proper loss reserves is a difficult task. One need only to look at recent history to know how true this is. Over the recent past, many companies and not just small, unsophisticated ones, have had to "strengthen" these reserves by material amounts. It was only by dint of investment income that these companies remained unimpaired. If they had, at their starting positions, been discounting their loss reserves, very likely many of these would now be in the hands of liquidators. After all, the fact

that a company discounts does not improve its capacity to estimate future payments. And this is to say nothing of the difficulty of discounting in the first place. How does one estimate the timing of loss payments for classes whose payments are not periodic but spasmodic - and this describes most casualty classes.

When one adds to the difficulty of reserving the additional problems inherent in discounting (both rate and time) it is clear that any operating or net worth evaluations which use discounted reserves are, to say the least, of questionable reliability. In the same vein, the comparison of several companies by an investor for the purpose of making a choice among them would be made much more difficult.

There are other considerations worthy of mention. The use of discounted loss reserves would make the difficult problem inherent in the making of property and casualty rates much more so. This, in turn, could be damaging and introduce an unacceptable degree of instability into the property and casualty insurance business.

Incidentally, one might ask, if it is desirable to anticipate investment income on loss reserves, why is it not equally so to anticipate investment income on unearned premium reserves. Surely one cannot agree that such income is less certain - it is more so.

STATEMENT 1980-24

**AMERICAN ACADEMY OF ACTUARIES**

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STATEMENT ON H.R. 100  
A BILL TO PROHIBIT DISCRIMINATION IN INSURANCE

Submitted to the  
House Subcommittee on  
Consumer Protection and Finance  
August 28, 1980

by

Charles C. Hewitt, Jr.

on behalf of the  
AMERICAN ACADEMY OF ACTUARIES  
RISK CLASSIFICATION COMMITTEE

## AMERICAN ACADEMY OF ACTUARIES

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My name is Charles C. Hewitt, Jr., and I am a member of the American Academy of Actuaries and a Fellow of the Casualty Actuarial Society.

I am appearing before you today on behalf of the Risk Classification Committee of the American Academy of Actuaries, the professional organization of actuaries which was formed in 1965 to bring together into one organization all actuaries in the United States and to seek accreditation and greater public recognition for the profession. It includes members of the four founding organizations: The Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the Fraternal Actuarial Association, and the Society of Actuaries. These organizations or their predecessors date back many years, one of them to the late 1800's, so that despite the relatively short duration of its formal existence, the Academy, its founding organizations and their predecessors have represented the actuarial profession in the United States for about a century.

The Academy is unique as the national accrediting actuarial organization for actuaries in all areas of specialization. Requirements to become a member of the Academy can be summarized under two broad headings: (1) education and (2) experience. An individual must satisfy both in order to be admitted. At the present time, the education requirements for membership can be satisfied by passing certain professional examinations given either by the Casualty Actuarial Society or the Society of Actuaries or by becoming an "enrolled actuary" under the Employee Retirement Income Security Act of 1974 (ERISA). The experience requirement consists of three years of responsible actuarial work.

Academy membership stands at about 6,000. These actuaries have a variety of types of employment, including insurance organizations, consulting firms, academic institutions, and government. Well over 90% of those individuals who have satisfied the rigorous education and experience requirements of the Academy do, in fact, join the Academy. The entire Academy membership is subject to rigorous guides to professional conduct and standards of practice.

Actuaries are known for their scientific approach and demanding standards, and because the human events and financial implications involve very long periods of time, an actuary is a researcher, planner, decision maker, and may be knowledgeable in a number of other disciplines, such as law, medicine, and finance.

Actuaries may be asked to arrive at conclusions based upon their own observations and judgments, or they may simply be asked to provide a scenario of the future—generally with appropriate numbers—from which others may draw necessary conclusions.

In any event, the conclusions are based upon facts, observations and judgments which are not confused with wishes, hopes and social goals. Actuaries, as human beings, have their own view of the world and of society. However, as previously stated, an actuary's training and professional standards are designed to minimize application of their personal views in actuarial interpretations.

Additionally, as actuaries we have a professional obligation and dedication to keep insured and trustee plans and programs sound and healthy; for a plan which is unable to deliver the benefits which it promises is of no value to the persons entitled and expecting to receive benefits therefrom. Whether in public or private employment, whether as a consultant or salaried employee, the actuary has a professional responsibility to "blow the whistle" on any attempt to weaken the integrity of public or private insurance programs. Actuaries are not merely persons who determine prices—contrary to some popular opinions—we also deal in financial integrity - and that's one important reason we offer this testimony.

Let me state at the outset that the American Academy of Actuaries is confident that insurance, as conducted in the United States, does not classify individual risks on the basis of race, color, creed or place of national origin. Therefore, the only issue which we wish to discuss is whether or not sex (I prefer to use the term "gender") should be a basis for classification of risk in the insurance business. The Risk Classification Committee of the Academy has recently completed a major work in this area entitled Risk Classification, Statement of Principles. (See Appendix C.)

#### Cost Differentiation versus Discrimination

Classification in insurance is based fundamentally upon cost differentiation among different groups of persons purchasing insurance. The act of differentiating on the basis of cost is not of itself discriminatory and is certainly not unfairly discriminatory. It merely represents an expectation that individuals or groups purchasing insurance should pay their own economic cost for such insurance. For example, should we ask the person who owns an all brick home to pay the same price for fire insurance as a person who owns the same size wooden home? If insurers charged the same price in this situation, the person who owns the brick home could clearly claim unfair discrimination.

Classification is not peculiar to insurance. However, in most noninsurance situations, price differentials (or failure to price-differentiate) among classes of persons are based upon societal attitudes or expediency. Customers may be classified on the basis of age or gender and charged different amounts for services provided.

For example, many sporting events, theatrical events, and other forms of entertainment charge a lower admission rate for children than they do for adults; and today many of these same events will provide a special rate for senior citizens. Some sporting events will have ladies' days in which women will be admitted free or admitted for the payment of some small amount to defray admissions taxes.

Another example of classification among customers is public transportation. In most instances, children may travel for half fare; on urban transportation, school children often get a special discount on school days; senior citizens often may ride for half fare or some amount less than normal. Railroads at one time provided special rates for servicemen and the clergy. Airlines follow the same practice, and even permit families of employees to travel at reduced rates. In government, the Internal Revenue Service classifies persons on the basis of marital status.

Speaking of government, (state and federal) it, too, classifies groups of persons. It says, for example, that 16-year-olds may be qualified to drive automobiles, but that 15-year-olds may not be. It says that 17-year-olds may not be qualified to vote, but that 18-year-olds may be. It says that 17-year-olds should not be served alcoholic beverages in a public place, but that 18-year-olds may be. The United States Constitution says that a 34-year-old is not eligible of being President, but that a 35-year-old is.

None of the above is offered in support or condemnation of the practices described—it is merely intended to remind the members of this Committee that when insurance classifies, it is using practices which have often been accepted by the general public.

However, it should be realized that the cost differentials in insurance recognized in the rating process are generally not minimal and are often substantial. For example, in automobile insurance, a 21-year-old single male living in the District of Columbia and driving a 1978 Chevrolet Nova might pay approximately \$450 per year (105 percent) more than a 21-year old single female in the same situation (for basic coverages).

Is cost differentiation by gender in insurance necessarily unfairly discriminatory?

Let's review the record with respect to some major lines of insurance:

1. In purchasing life insurance, women are charged less than men because women live longer than men.
2. On the other hand, for exactly the same reason, women are charged more than men for life annuities (pensions).
3. In automobile insurance, generally speaking, women are charged the same as men at almost all ages above 30. For ages below 30, women are charged substantially less than men.
4. In homeowners' insurance, there is no differentiation by gender.
5. In health insurance, women, generally speaking, are charged more than men up until about age 55; beyond that point, there is no differentiation, or women may even pay less than men.

It should be clear from these examples that there is no attempt to discriminate unfairly against women (or against men) in the purchase of insurance. In some instances, women are charged more; in other instances, men are charged more. It is just as clear that there is cost differentiation where such differences are demonstrable, and where no differences are demonstrable, no differentiation.

The United States Government, through the Pension Benefit Guaranty Corporation (PBGC), cost differentiates between males and females in its valuation of terminated pension plans. (See for example the Federal Register for November 3, 1976.) The PBGC also cost differentiates between healthy persons and disabled persons in these valuations for purposes of determining tax obligations.

In summary, actuaries, using analyses of statistics collected by themselves—or by others—will cost differentiate by gender where such cost differentiation is demonstrable and significant. Such cost differentiation does not attempt to discriminate unfairly against either gender. It does attempt to guarantee soundness and financial integrity.

It is assumed that the underlying purpose of the subject legislation is for each gender to be treated equitably and not a guarantee that all resultant costs be the same for both males and females. Within limits, Congress may order persons or businesses to ignore reality and to create the fiction that males and females do not differ. However, it is beyond the ability of Congress to command reality to correspond to its mandates.

### Overlap Theory

Proponents of the elimination of gender-distinct rates and statistical tables have twisted reality. Using mortality tables (see Appendix A) for male and female lives and starting with a hypothetical 1,000 lives of each gender, male and female deaths at the same age are paired. The result is a matching of about 85 percent of the male and female deaths. The unmatched male deaths occur at the younger ages while the unmatched female deaths occur at the older ages. The conclusion of the unisex proponents is that the different annuity rates are not justified because about 85 percent of men and women in the starting group have the same year of death. This conclusion is not only incorrect, it is also irrelevant to the matter of cost.

Let's provide a cost (or dollars and cents(?)) perspective to the overlap theory using the same mortality tables as the proponents. Appendix A illustrates the dollars paid out to the groups of 1,000 males and 1,000 females if each person were to receive \$10,000 per year at the beginning of each year from age 65 onward. A shortened version of Appendix A is set out below:

Excess of Payments  
To Females Over Males

<u>Age</u>	<u>Cumulative Total</u>
65	\$ 0
70	1,410,000
75	5,530,000
80	12,620,000
85	22,090,000
90	31,690,000
95	38,230,000
100	40,610,000
105	40,980,000

Aggregate benefits to 1,000 females would be \$215,180,000 and to 1,000 males \$174,200,000; the excess payments to females are thus \$40,980,000 - simply because women live longer than men. If these benefits were for one million females and one million males, the excess payments to females would be about \$41 billion. THIS IS THE REALITY THAT NO AMOUNT OF LEGISLATION CAN CHANGE.

If the "pairing" argument were to be used correctly in terms of cost, it would be to pair males and females on the basis of the order in which death occurs. Then we could see how many payments the first man and the first woman to die would have received respectively, how many payments the 100th man and the 100th woman to die would have received respectively, and so forth. Appendix B illustrates the excess of payments to females over males on this basis. Generally speaking, individual females will receive somewhere between \$40,000 and \$50,000 more than their male counterparts. If each purchaser of one of these annuities were to be charged the same amount, there would be clear discrimination against every one of the 1,000 males in this example.

Marketplace Effects

A free marketplace is affected by the attitudes of both the buyers and the sellers. Insurance is an aleatory contract. This means that the buyer pays a fixed premium in exchange for which the seller assumes certain responsibilities or liabilities on a contingent basis. The risk insured against may never occur in some lines of insurance. In many, but not all lines of insurance even if the event insured against does occur, the amount of loss paid by the seller is often indeterminate and, in some instances, may not be fixed for several years after the event occurs. An example of the latter situation would be an annuity contract: while the person receiving the benefit is still alive, it is not known how long such person will continue to live and hence, how much will ultimately be paid in benefits.

Another example would be medical malpractice insurance: where the claim is in the process of litigation and the actual amount to be paid will depend upon an agreed upon settlement between the claimant and the insurance company, or upon an award to be determined by a jury trial.

When this transfer of risk takes place upon the payment of the premium, the seller (the insurance company) is assuming that a certain set of conditions which surround the risk it has accepted have been properly assessed in advance and will remain as expected during the term of the insurance contract. If a company is issuing annuities payable for the duration of the lifetime of the annuitant, it must continue such payments regardless of changes in future conditions. If some miracle cure for heart disease or cancer is discovered, the insurance company must still continue periodic payments to all of its annuitants even though the increased longevity of these same persons might not have been anticipated at the time the contract was issued.

All of the above is recited in order to remind this Committee that the attitude of the seller who is going to assume an indeterminate risk is as important in the marketplace as the attitude of the buyer. As long as the seller is permitted to cost differentiate among purchasers on the basis of a classification system which it accepts and, of course, which has been proven to be acceptable to the buyer also, there will be market stability. This stability is often in very delicate balance--the buyer consciously or subconsciously by payment of the premium has accepted the charge for the transfer of risk as being reasonable. On the other hand, the seller who assumes the indeterminate risk has accepted a classification system which to this seller has the effect of making the charge for different groups of buyers reasonable and proper. If at any point the seller views the charge for a particular group of buyers as inadequate, it will, in order to protect its solvency, avoid through whatever means possible the solicitation and acceptance of the risk transfer from this group of individuals. This attitude on the part of the sellers, if continued for any length of time, is disruptive to the stability of the marketplace and will cause arbitrary realignments.

These arbitrary realignments in the marketplace may take a number of forms:

1. A forced discrimination among different groups of buyers in which the seller prefers certain classes of buyers over other classes. This leads to an unwillingness to insure those classes which are deemed by the sellers to be inadequately priced. This situation is not hypothetical--virtually every state in the United States has some form of automobile insurance market for those buyers unable to purchase insurance voluntarily. These methods are alternatively known as assigned risk plans, facilities and joint underwriting associations.

2. A second form of selection on the part of the seller is to create a specialty insurance company or specialty group plan. Examples would be automobile or accident and health insurance companies which insure only teetotalers or nonsmokers. Another example would be local automobile clubs which provide insurance only for members of the automobile club itself.
3. A rather radical effect of disruption in the marketplace is the withdrawal of the seller entirely from providing certain forms of insurance. Again, this is not a hypothetical situation; a number of major property and liability insurers have, within the recent past, withdrawn entirely from certain states, or at least from certain lines of insurance in those states largely because of inability to price or to select risks upon what they considered a reasonable basis.
4. Legislated and administrative proscriptions in California's disability insurance program virtually drove private insurance out of this market. Premium volume of private insurers under the voluntary plan alternative to state-administered disability benefits have decreased from \$55,000,000 in 1959 to less than \$60,000 in 1977 (latest available information.)

The brunt of this type of disruption in the marketplace eventually falls upon the buyer. The buyer either finds it necessary to purchase insurance in the substandard market at some rate in excess of what the buyer is used to paying, or the buyer may not be able to purchase insurance at all.

The proposed legislation (H.R. 100) clearly has as a primary goal, the availability of coverage to all persons desiring to purchase insurance. Insurers have a fundamental duty to their present policyholders to be sufficiently sound financially to be able to meet all future obligations as they become due. Therefore, an insurer which disregards the proper pricing and selection of its future policyholders is not only risking its own well being, but that of its present policyholders as well.

It is because classification systems cost differentiate among prospective (and present) insureds that insurers are satisfied that each class of persons or groups are insurable, and are priced on a basis which promotes ongoing total financial soundness.

Failure to properly cost differentiate (by classification) may make the undesirable risk an unselected customer. That system which minimizes the proportion of unselected customers has ipso facto achieved the desired goal of maximum availability.

Persons who do not participate in the insurance marketplace on a day-to-day basis sometimes fail to appreciate the delicate balance which does exist; and having failed to appreciate this delicate balance, dependent upon buyer and seller attitudes, such persons are unlikely to anticipate the disruptive effect of some arbitrary change in the system such as eliminating the use of gender in classifying insurance risks, where cost differentiation on the basis of gender is indicated.

Some of those lines of insurance where such cost differentiation is used have been indicated above. Any action by Congress which would place restrictions on the use of gender would have adverse effects on the marketplace and those lines of insurance which utilize this type of differentiation.

Perhaps the most significant effect would be in the area of insured pensions field, and a scenario as to what would happen if differentiation on the basis of gender were eliminated is set forth below.

Under H.R. 100, actuaries would be forced to come up with what has been referred to as a "unisex" or "merged gender" mortality table. Since different male/female tables have been in use since the Nineteenth Century, the construction of a single table would require an assumption with respect to what proportion of males and females would be insured in the future.

The actuary who overestimated the proportion of females to be insured would have prices which were too high, and these prices would attract very few, if any, male annuitants and not too many more female annuitants. This would lead inevitably to a higher proportion of female annuitants than had been originally supposed. There would then be, on the basis of demonstrated longer life expectancy for females, adverse results which, if not corrected by price increases, might lead to insolvency. If the actuary had the foresight to adjust prices to allow for the increased proportion of female annuitants, then the actuary would eventually be setting almost the same prices as are now being charged for female annuitants (only).

On the other hand, the actuary who underestimated the number of female annuitants would produce relatively low prices which would be very attractive to female annuitants. As a result, there would inevitably be an excess of female annuitants over male annuitants as compared to the original estimate on which the unisex table was based. The scenario from here is virtually the same as previously described--either an insurance company would become insolvent because it would not have a sufficient amount of money to pay annuities to the higher percentage of female annuitants, or the actuary would have to produce a new mortality table based upon a higher proportion of female annuitants and hence, with higher prices.

A numerical example will bring this point home: Under the current Congressional plan, a member of Congress with twenty years of service would be entitled to retire at age 60 with a pension of just under \$2,500 a month based on present salary levels. In the open market, this pension would cost about \$325,000 ignoring the gender of the member; i.e., on a unisex basis.

However, a male's cost would be about \$315,000 whereas a female's cost would be about \$340,000 - \$25,000 more. If, as forecast in the preceding comments, annuity rates approach the level for females, what could a male, who is not a member of Congress, do to avoid paying this additional \$25,000? Very simply, he could go to Canada where there are a number of reputable insurance companies that would still be using male/female class distinction. Thus, prospective male annuitants desiring to purchase individual annuities would be driven out of the U.S. market!

What about group pension plans? If H.R. 100 is intended to apply to such plans, will insured pension plans for groups with any measurable percentage of males cease being insured; i.e., will they elect to become self-insured, or elect to be placed with Canadian insurers?

Congress must ask itself whether this scenario agrees with the intended result. Does Congress want to provoke a series of insurance company failures with annuitants unable to collect on the contract which they had purchased? Does it want to create a marketplace so sensitive to male/female percentages of insureds that male annuitants are driven out by the high price for annuities and female annuitants who remain in the marketplace eventually pay as much as they are now paying?

Causal Relationships

Some groups have come up with a new requirement—that a causal relationship must clearly exist between a factor and the hazard to be measured in order that such factor may be used to establish a classification system. Legislators, Insurance Commissioners and the insurance industry are currently being asked to adopt this idea which, to some, may sound appealing.

However, let us ask this Committee to examine the idea more carefully. Would the insurance business or the National Flood Insurance Program be expected to charge the same actuarial rate for flood insurance to persons who live on the top of the mountain as would be charged to persons who live in the river valley? I hope you will agree with me that the correct answer is "of course not." And yet the fact of living in a river valley does not of itself cause the river to flood, although it does bear a reasonable relationship to the hazard being insured against.

By way of further example, in life insurance or in evaluating pensions, the fact that an individual is 65 years old is not of itself a cause for being more susceptible to death than the fact that the individual is 45 years old. It is merely an indication that there is a greater likelihood of factors being present which do cause death.

As yet another example, let this Committee ask itself the following question: "If we really know what caused all or even some of the automobile accidents which kill more than 50,000 persons in this country every year, shouldn't we make every effort to eliminate the cause and, hence, prevent the accidents in the first place?" If drunken drivers cause one-half of our traffic fatalities, good sense tells us we should get the drunken driver off the road.

The purchase by the customer of insurance presumes that there will occur from time to time events which are not foreseeable. The willingness of the seller, the insurance company, to make such insurance available presumes that these events are not preventable; in other words, that the cause of the accident or event may not be removed prior to its actual happening. Classification in insurance (for non-preventable events) therefore must, of necessity, be done on some basis other than cause.

An acceptable system of classification—acceptable to both the buyer and the seller—requires merely that the seller (insurance company) identify factors that are indicators of proximate cause, then determine that these factors are related to costs and that they are significant in terms of differentiating costs. Finally, the seller is obligated to assure the buyer that the classification system can be and will be applied fairly.

We actuaries are not saying that age or gender is a specific cause of death, automobile accidents, sickness, or any other form of risk. However, these factors are often related to mortality, accident frequency or frequency of illness. Actuaries show this, statistical agencies verify it, and the public knows or senses that these relationships exist. Just as society accepts age as an indication of the ability to drive, to vote, to be served alcoholic beverages in a public place and to become President, without insisting that causal relationship must exist between the age and the ability to do these various things, society has accepted over the years the use of classification systems in various forms of insurance without insisting upon repeated demonstrations of causal relationships.

As long as actuaries can properly demonstrate statistical relationships between such things as age and sex and the hazard to be measured, and as long as these factors are recognized by the public as being relevant to hazard, there would seem to be no injustice.

This is not to say to this Committee that a classificatoin system may be justified solely upon the basis of actuarially demonstrated cost differentials among the classes. Current social and political standards must, of course, be recognized. They have been in the past, and they will be in the future. If society, through the legislative bodies or through the courts, dismisses a particular factor as being no longer acceptable as a basis for a classification system, then the use of this factor will disappear. However, society must recognize that the result of such action may be unavailability or reduced availability of insurance coverage for some persons or groups of persons.

People favoring the elimination of gender-based classifications and mortality tables allege a similarity with the now extinct use of classification plans and mortality tables based upon race. No insurer that we are aware of today classifies risks by race.

Indeed, race is a much different factor than sex. To the extent that there may be a relationship between race and longevity, closer scrutiny shows that race is actually a surrogate for other factors: diet, housing, medical care, education, and employment opportunities. Let us make a more precise actuarial examination of the factor of race as found in mortality studies.

The facts are that, indeed, as all races develop equal access to the quality of diet, housing, medical care, etc., the disparity between the mortality of whites and non-whites in the United States has been declining. The 1979 Life Insurance Fact Book indicates that in 1900, the differential of life expectancy at birth between whites and non-whites was 14.6 years. In 1950, the differential was 8.3 years; in 1960, it was 7.0 years; in 1970, 6.4 years; and in 1977, the differential was 5 years. The Fact Book makes the point:

"...the difference in life expectancy between white and non-white Americans has been greatly reduced in this century.

"In 1977, the difference in life expectancy between white and non-white persons at birth was 4.6 years for females and 5.4 years for males and this difference decreased with age."

In the pension and annuity age range, whites and non-whites have closely comparable life expectancies:

Expectation of life at indicated Ages in the U.S. in 1977\*

<u>Age</u>	<u>WHITE</u>			<u>ALL OTHERS</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
85(over)	5.3	6.8	6.2	7.3	9.6	8.7
80	6.8	8.8	8.0	8.7	11.3	10.2
75	8.6	11.5	10.3	9.7	12.5	11.2
70	11.1	14.8	13.1	11.4	14.5	13.1
65	13.9	18.4	16.3	14.0	17.8	16.0
60	17.1	22.3	19.8	16.5	21.0	18.7

\*National Center for Health Statistics, U.S. Department of Health, Education and Welfare.

As this table emphasizes, there is now no substantial difference between the mortality rates of whites and non-whites at the older ages. However, there continues to be a disparity between the life expectancy of non-white males and non-white females just as there continues to be a disparity in the life expectancy of white males and white females.

In summary, analysis of all available data suggests that race is no longer a meaningful classification factor. Gender is, as we shall now see, another matter.

Let us consider the possibility that some causal relationships do exist between gender and the hazard being measured for a particular type of insurance. In life insurance, we have just mentioned that women do, in fact, live longer than men regardless of race. The most recent Statistical Abstract of the United States indicates that this variation is quite uniform geographically.

The same source indicates that death rates overall are 29 percent greater for males than for females, and that a real difference occurs at all ages in the population.

By far the two greatest causes of death in the United States are heart disease and cancer. In both instances, the mortality rate among males substantially exceeds the mortality rate among females. For heart disease on an overall basis, the rate is 31 percent higher for males; and for males over age 65, it is 43 percent higher than for females. For cancer, the rate for males is 26 percent higher than for females; and for persons over age 65, cancer mortality is 70 percent greater for males than for females. In studies like this, we are getting closer to identifying the relationship between cause and the hazard itself.

Demonstrable differences in male and female mortality, some of which we have illustrated above, can be explained by biological differences. Some geneticists feel that these differences are biological and genetic, as illustrated by the following quotation of the geneticist, Amram Scheinfeld, in his work entitled Your Heredity and Environment:

"...the human female from before birth and throughout life today is favored far above the male."

"The reasons for much of this discrimination are now clear. First, there are the general sex differences in bodily makeup and chemical functioning, which are known to endow the female with advantages in resisting or overcoming most diseases. Second, the male is much more likely to be victimized by specific and directly hereditary diseases and defects.... Nor can we see anything but some inborn difference in the fact that when boy and girl infants are involved in exactly the same accidents, such as falling down stairs or being in an auto collision, the chances of fatality, as statistics show, are considerably greater for boys.

"To account for this in some detail, we go back to the moment of conception and the initial genetic difference between the sexes: the fact that the female is started off with two Xs, the male with one X plus a Y.... When a female gets a recessive wayward gene in one of her X chromosomes, the chances are that there will be a normal gene for the job in her other X. But if a male gets such a wayward gene in his single X, he's in a bad spot because there is no corresponding gene in his very small Y chromosome to do the job...

"That there is a greater prenatal hazard in having only a single X chromosome is further shown by this fact: in poultry where the sex-determination mechanism is the reverse of that in human beings and other mammals—the females having only one X whereas the males have two Xs—the embryonic deaths are much higher among the females."

In spite of these physiological differences, there are some who continue to believe that cost differentials in mortality between men and women are societal and hence, should not be recognized. These persons allege that mortality cost differentials will disappear as the societal roles of men and women approach one another.

Actually, there is current statistical evidence that the difference in the rate of mortality between men and women is widening even as the societal role differences are narrowing. According to data from the National Center for Health Statistics, in 1920, the age adjusted ratio of male to female mortality was 107 percent; in 1977, the ratio was 180 percent. Indeed, a recent Social Security actuarial report projecting mortality to the year 2000 estimates that the differences between males and females will continue to widen and increase the difference in life expectancies by another half year.

Is gender at the root of what appears to be unfair discrimination? Not if the subject matter of the particular insurance coverage is recognized.

For example, suppose there are two buildings to be insured against fire. One building is made of brick and is owned by a man; the other building is made of wood and is owned by a woman. Should the costs of fire insurance be identical because one owner is female and the other owner is male? Clearly the answer is "no" for it is the characteristic of what is to be insured that is important, not who owns it. This characteristic, when related to the hazard to be measured and when statistically documented, determines the existence (or non-existence) of cost differentiation (by gender or otherwise).

Let's look at this principle when applied to life insurance or pensions (annuities). The thing being insured here is the longevity of the human body. As we have shown, men and women do possess different physical characteristics affecting longevity. In fact, it's the very heart of the issue that the physical characteristics cause the cost-differentiation (classification).

It must be clearly understood, therefore, that it is physical characteristics (male physical characteristics, biochemistry or mortality, as distinguished from female physical characteristics, biochemistry or mortality) that makes the difference. This difference is the basis for classification by gender in life insurance, and in pensions (annuities) not the fact that the possessor is male or female.

Now let us turn to the situation in automobile insurance. It has long been demonstrated that young male drivers cost much more to insure than adult drivers, and even substantially more than young female drivers. It has been alleged from time to time that if one were to isolate the actual driving time for young males and young females that this difference might be attributed largely or entirely to the fact that young male drivers operate automobiles substantially more often than young female operators. Studies are available in which the amount of driving time has been isolated. While it is true that young males in general do drive more miles per year than young females, when allowance is made for this difference in amount of driving, the incidence of automobile accidents among young male operators is substantially greater than among young female operators.\*

Finally, let us turn to disability income insurance or protection. A study on the subject of cost differentials between men and women was conducted by the Insurance Department of New York, terminating in a report dated June 1976. Among the conclusions of this report are the following:

\*A recent British study shows the same phenomenon among young bicyclists.

1. "Sex is a major factor affecting the cost of disability income insurance.
2. "For accident and sickness (disability income) benefits, female claim costs are consistently higher than male claim costs up to age 60 after which they fall below male costs....
3. "For accident-only benefits, female claim costs are generally less than male claim costs below age 30 and show ratios which increase with advancing age....
4. "Where reliable, homogeneous occupational data are available, differences between occupations reflect differences in degree of hazard and therefore affect costs.
5. "Where male and female workers are properly grouped in the same occupation class, claim-cost differentials are attributable to sex and age and not to occupation.
6. "Benefit structure features such as elimination periods and maximum benefit periods or type of renewal guarantee provision...are not significant factors affecting relative female to male costs.
7. "There is no evidence of significant change in female-male claim cost ratios during the years 1968 - 1973; i.e., the ratios by sex and by age have remained relatively stable.
8. "A review of Social Security disability benefit experience exhibits a pattern of claim cost ratios not inconsistent with those derived from commercial disability income insurance experience."

The report, having made the findings indicated above, then recommends a method for calculating annual claim costs for disability income benefits. The method suggests calculating the costs for men separately and then applying specific loadings for females which at all ages up to 60 produce prices which are substantially greater than the price for males,

A similar recommendation for loading is made with respect to accident only benefits except that for ages below 30, the price for females is substantially lower than the price for males.

Parenthetically, it should be noted that this same report bans gender distinctions in the offering of amounts and types of coverages while at the same time approving gender-based prices.

#### Practical Limitations on Cost Differentiations

The benefits of cost differentiation are many and of great significance in the business of insurance\*—more so than in most, if not all, other lines of endeavor. This is so because of the aleatory nature of the insurance contract and because the insurer assumes the transfer of risk from the insured—as someone once said, "It's not like buying a loaf of bread!" However, this Committee should be reminded that there are practical limits on cost differentiation and that the public, in this case the buyers of insurance, subconsciously recognizes some of these practical limitations.

In private enterprise, this phenomenon occurs at almost every turn. The bald-headed man at the barber shop who has his hair trimmed may grumble somewhat when it comes time to pay the barber, but no revolution has been started by bald-headed men who refuse to pay the same price for a haircut as persons with a full head of hair.

In most clothing stores the charge for a suit of clothes, or shirt, or a pair of socks is generally the same regardless of the size, although it is obvious that there is more material used in fitting a 6'2", 220 pound man than in fitting a 5'6", 130 pound man. These examples illustrate that there are practical limitations on cost differentiation.

\*In some insurance transactions, the risk of the insurer is open-ended (in time) and without limit (in amount).

Even in the process of government, particularly in the areas of taxation, there is a recognition that cost differentiation cannot be carried to infinite extremes. In local government, the same aggregate tax rate is applied to all citizens who pay taxes, even though some of them may never use the public library, may not have children in the public school system, or may never use the park or recreational facilities for which tax monies go. Other examples of the practical limitations of cost differentiation in government could be supplied. Of course, government can mandate these limitations on cost differentiation—a fact of which we must be reminded periodically. Within the business of insurance, there are other practical limitations on cost differentiation. By way of example, very often a particular class of insurance risks contains so few persons or objects that the experience within the classification lacks sufficient credibility for rate determination solely on its own. In these instances, the risks are then normally combined with some larger grouping to produce a more reliable basis for insurance pricing.

In summary, cost differentiation (as opposed to discrimination) is a principal goal of risk classification in the business of insurance as long as it can be applied at a cost within reasonable bounds and supported by objective statistical information. Differentiation on the basis of gender fits well within these practical limitations.

### Conclusion

The questions must be asked:

1. What is the need for the proposed legislation?
2. Do the social benefits, if any, to be derived from the legislation, outweigh the disadvantages inherent in the elimination of cost-based pricing and disruption of the marketplace which it implies?

The first question has been partially answered in my opening remarks there is no need with respect to matters of race, color, creed or place of national origin. This left only the hypothetical need with respect to classification on the basis of sex (or gender). We have demonstrated herein that where classification exists on the basis of gender, such differentiation is even-handed--sometimes males must pay more than females and sometimes less. Where it exists, cost differentiation (the reason for risk classification) is made on the basis of the characteristics of the thing to be insured, not whether the possessor of the thing is female or male.

The second question presupposes that there are benefits to be derived. But hopefully, we have shown that if there are any benefits, they will be outweighed by the instability which will be created in the marketplace. Rather than increase availability of coverage for some, this legislation imposed upon a system of private insurance will actually interfere with free access by many customers to that same marketplace:

1. Insurers who use actuarial tables or rates insufficiently adjusted for merging of males and females may become insolvent.
2. Insurers compelled to insure persons at unacceptable rates will seek to avoid providing insurance at all to these persons--by whatever means--including withdrawal from certain lines of insurance.
3. Purchasers of annuities--individual and group--may be driven out of the United States market to Canada or "offshore", and
4. Insurers forced to adjust benefits and/or premiums retrospectively for the merging of genders may go into bankruptcy.

It must be remembered that insurance deals with uncertain future events. The insured passes the risk along to the insurer for a "certain" premium and the insured is no longer "at risk," but the insurer is at risk. Its willingness to assume this risk is conditioned upon its attitude that the premium which the insured pays is reasonable and fairly measures the hazard on a long-term basis.

This Committee must ask itself if it can expect a free marketplace to digest voluntarily a large number of incorrectly priced risks because that is exactly the question that this legislation poses!

## APPENDIX A

(000s omitted on \$ amounts)

Male and Female Pension Benefits Compared

Age	Survivors to Age†		Benefits*		Excess of Benefits to Females	
	Male	Female	Male	Female	Yearly	Cumulative
65	1,000	1,000	\$10,000	\$10,000	0	0
66	984	993	9,840	9,930	90	90
67	967	985	9,670	9,850	180	270
68	948	976	9,480	9,760	280	550
69	928	966	9,280	9,660	380	930
70	907	955	9,070	9,550	480	1,410
71	884	943	8,840	9,430	590	2,000
72	859	930	8,590	9,300	710	2,710
73	833	915	8,330	9,150	820	3,530
74	805	899	8,050	8,990	940	4,470
75	775	881	7,750	8,810	1,060	5,530
76	743	861	7,430	8,610	1,180	6,710
77	709	839	7,090	8,390	1,300	8,010
78	673	815	6,730	8,150	1,420	9,430
79	635	789	6,350	7,890	1,540	10,970
80	596	761	5,960	7,610	1,650	12,620
81	555	730	5,550	7,300	1,750	14,370
82	513	697	5,130	6,970	1,840	16,210
83	470	661	4,700	6,610	1,910	18,120
84	426	623	4,260	6,230	1,970	20,090
85	382	582	3,820	5,820	2,000	22,090
86	338	539	3,380	5,390	2,010	24,100
87	295	495	2,950	4,950	2,000	26,100
88	254	449	2,540	4,490	1,950	28,050
89	215	402	2,150	4,020	1,870	29,920

† 1949 Table Projected 25 Years - Modified

\* \$10,000 per year to each survivor at beginning of year.

APPENDIX A: Page Two  
(000s omitted on \$ amounts)

Age	Survivors to Age		Benefits		Excess of Benefits to Females	
	Male	Female	Male	Female	Yearly	Cumulative
90	178	355	\$1,780	\$3,550	1,770	31,690
91	144	308	1,440	3,080	1,640	33,330
92	114	263	1,140	2,630	1,490	34,820
93	88	220	880	2,200	1,320	36,140
94	66	180	660	1,800	1,140	37,280
95	48	143	480	1,430	950	38,230
96	34	111	340	1,110	770	39,000
97	23	83	230	830	600	39,600
98	15	60	150	600	450	40,050
99	9	42	90	420	330	40,380
100	5	28	50	280	230	40,610
101	2	18	20	180	160	40,770
102	0	11	0	110	110	40,880
103		6		60	60	40,940
104		3		30	30	40,970
105		1		10	10	40,980
Total			\$174,200	\$215,180		\$ 40,980

APPENDIX B

Excess Payments To Females Based Upon Order of Death

<u>Order of Death</u>	<u>Age</u>		<u>Benefits Received</u>		<u>Excess Received By Female</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
100th	70	73	\$ 60,000	\$ 90,000	\$30,000
200th	74	78	100,000	140,000	40,000
300th	77	81	130,000	170,000	40,000
400th	79	84	150,000	200,000	50,000
500th	82	86	180,000	220,000	40,000
600th	84	89	200,000	250,000	50,000
700th	86	91	220,000	270,000	50,000
800th	89	93	250,000	290,000	40,000
900th	92	96	280,000	320,000	40,000
1000th	101	105	370,000	410,000	40,000

STATEMENT 1980-24

## STATEMENT 1980-25

September 8, 1980

Commissioner of Internal Revenue  
Attention: CC:LR:T:EE-27-78  
Washington, D. C. 20224

Re: Periodic Report of Actuary: Proposed Rulemaking  
Comments by the American Academy of Actuaries

Dear Sir:

This letter presents the comments of the American Academy of Actuaries concerning the notice of proposed rulemaking published in the Federal Register on July 8, 1980, regarding the periodic report of the actuary.

Section 301.6059-1(c)(2) states, "An actuarial report does not satisfy the requirements of this section if the preparing actuary in any manner seeks to limit or qualify the statements required by subparagraph (1)(iv) and (v) of this paragraph." The Academy is concerned that this sentence is somewhat ambiguous, and might possibly be construed to prevent certain customary and proper professional practices.

The actuarial report often states that the actuary has relied upon asset information provided by the trustee, insurance company, auditor, or other source. Similarly it often states that the actuary has relied upon employee data provided by the employer or plan administrator. While the actuary usually checks the data for internal consistency, the actuary does not usually perform the functions of an accountant, and does not usually audit such data at its source. Such statements, identifying the sources of the actuary's data, are acceptable professional practices and are commonly used. It should be clarified that such statements are not limitations or qualifications which are disallowed.

The actuary has an obligation to perform his responsibilities in conformance with the statutes. This includes the requirements of Internal Revenue Code section 412(c)(3) to use "actuarial assumptions and methods which, in the aggregate, are reasonable (taking into account the experience of the plan and reasonable expectations) and which, in combination, offer the actuary's best estimate of anticipated experience under the plan," and similar provisions of ERISA section 103(a)(4)(B). At times some

Commissioner of Internal Revenue  
September 5, 1980  
Page Two

actuaries may conscientiously believe that certain regulations, rulings or form instructions published by the Internal Revenue Service are contrary to the statute's requirements. In good conscience, such an actuary may believe it necessary to follow his understanding of the statute, with disclosure of what he has done, with the expectation that any difference between his understanding of the statute and that of the Internal Revenue Service may be resolved in a court of law. The courts are the proper forum for the resolution of such differences. It should be clarified that disclosures of such differences in the actuary's report are not limitations or qualifications which are disallowed by this section of the regulation.

The Academy would be pleased to answer any questions the Internal Revenue Service may have concerning this matter.

Respectfully submitted,



Donald S. Grubbs, Jr., F.S.A.  
Chairman, ERISA Subcommittee  
Pension Committee  
American Academy of Actuaries

STATEMENT 1980-26

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. . SUITE 515 . . WASHINGTON, D.C. 20006 . (202) 223-8196

RONALD L. BORNHUETTER, M.A.A.A., President  
c/o GENERAL REINSURANCE CORP.  
600 STEAMBOAT RD.  
GREENWICH, CT 06830  
203/622-4000

September 30, 1980

American Institute of Certified Public Accountants  
Auditing Standards Division, File 3820  
1211 Avenue of the Americas  
New York, New York 10036

Attention: Andrew J. Capelli, Chairman  
Employee Benefit Plans and ERISA Committee

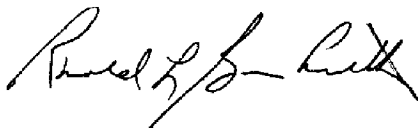
Dear Mr. Capelli:

Enclosed is a formal submission on behalf of the American Academy of Actuaries in connection with the Exposure Draft of the Audit Guide on Employee Benefit Plans released by the AICPA on June 30, 1980.

The Academy statement is in two sections. The first section addresses general issues posed in the Audit Guide, such as Statement on Auditing Standards No. 11, as well as portions relating to pension plans. The second section deals with aspects of the Audit Guide concerning health and welfare plans.

We greatly appreciate the opportunity to submit these comments for your consideration. We hope that they are useful to you in developing a final Audit Guide that will provide a satisfactory framework for both the accounting and actuarial professions to discharge properly their responsibilities under ERISA.

Sincerely,



Ronald L. Bornhuetter  
President

STATEMENT REGARDING THE JUNE 30, 1980  
EXPOSURE DRAFT OF A PROPOSED AUDIT  
GUIDE ON AUDITS OF EMPLOYEE BENEFIT PLANS

The subcommittee on Pension Accounting Matters of the American Academy of Actuaries welcomes the opportunity to comment upon the June 30, 1980 exposure draft of a Proposed Audit Guide of Employee Benefit Plans. Our comment will be devoted primarily to the important question of what the nature and scope of the audit process should be with respect to one item in the financial statement of a defined-benefit pension plan -- the actuarial present value of accumulated plan benefits. However, in an Appendix to this comment we offer additional comments on some of the specific paragraphs of the proposed Guide.

We would like to note, at the outset, that, for a number of reasons presented in statements to the Financial Accounting Standards Board and others, the Academy has taken the position on numerous occasions that it is inappropriate to include actuarial values in defined benefit pension plan financial statements. Actuarial values related to pension plans are prepared on different bases for a number of different purposes, and no single set of numbers can adequately present a measure of plan obligations under all circumstances. As a result, the inclusion of the actuarial present value of accumulated plan benefits in plan statements may very well be a source of confusion to readers of these statements. The Subcommittee wishes to emphasize that the submission of these comments does not reflect a change in the Academy's position on this subject.

The June 30, 1980 covering letter preceding the text of the Exposure Draft requested commentators to "consider the appropriateness and applicability of the guidance in SAS No. 11 to audits of employee benefits plans, and to consider whether reference to an actuary in the auditor's report should be permitted or required." The subject of reliance on experts as set forth in SAS No. 11 has been the subject of extensive discussions in the past few years between the AICPA and

the AAA. In 1978 the AICPA appointed a special task force to review the appropriateness of SAS No. 11 as it applied to certain specialists, including actuaries, and to consider whether any changes would be desirable. The Academy at the same time appointed a comparable task force to consider audit procedures with respect to representations that were based exclusively or primarily upon actuarial determinations. The two task forces met together on a few occasions to discuss the possibility of revisions in SAS No. 11 and the AAA task force prepared draft proposals that would have provided for express reliance upon the actuary. However, the AICPA task force concluded not to propose any changes in SAS No. 11, and accordingly, the matter was dropped.

The Academy welcomes the invitation extended in the covering letter to offer its views on this subject which is of great significance to both professions, particularly as it applies to actuarial determinations of accumulated plan benefits under defined-benefit pension plans. These comments apply only to such plans and not to the application of the proposed Guide to audits of defined contribution pension plans or health and welfare plans (separate statement prepared relating to health and welfare plans).

We are thoroughly aware that the issue is a difficult and vexing one. A basic tenet of SAS No. 11, repeated in paragraph 10-19 of the Proposed Audit Guide, is that an auditor does not divide responsibility with any specialist for his report on the financial statements taken as a whole. We recognize also that exceptions from this principle should be exceedingly rare. Moreover, there are ramifications to any decision to make an exception in this case because there are representations in or accompanying the financial statements of the plan sponsor that are closely related to items in the plan financial statements. Accordingly, any decision with respect to the scope of the audit of the plan statements may affect decisions concerning the appropriate procedures that should be followed with respect to the accounting entries with respect to pension cost required by APB

No. 8 and with respect to accumulated plan benefits required by FASB No. 36. We think that any decision with respect to the audit procedures for plan statements must take into account its possible impact on this related area.

Nonetheless, we believe there are persuasive reasons for permitting express reliance upon an actuary, subject to certain controls discussed below, for the acceptability of the methods and assumptions employed by the actuary in the determination of the value of the accumulated plan benefits. These reasons are:

1. As indicated earlier in the statement, it is open to serious question whether information regarding the actuarial present value of accumulated plan benefits should be included as part of the plan's financial statements at all. This decision of the FASB that this information should be included as a part of the financial statements of a defined benefit pension plan was made by a narrow majority of the Board, with the three-man minority making a very strong case for excluding actuarial liabilities from such statement. The minority expressed the view that "a plan's financial report should consist of financial statements accompanied by the report of the independent auditor and actuarial information accompanied by the report of the actuary, if expert opinions are desired." The minority pointed expressly to the probability that actuarial representations, if included in the financial statements, would be audited and stated their opinion that the conjectural benefits that such an audit would provide were not worth the unavoidable extra cost. The majority of the Board did not disagree with this opinion but rather avoided the issue. In paragraph 137 of Appendix B to its Statement, the Board said:

" . . . This Statement does not mandate auditor involvement in financial statements; matters relating to the attest function are not within the scope of the Board's authority. The Board recognizes, however, that both the auditing and actuarial professions have responsibilities under the Act and that their respective professional bodies have promulgated standards or recommendations regarding the conduct of their members. It is not within the Board's authority to attempt to resolve any issues relating to the relationship between those professions. The Board is aware of ongoing efforts by the

interested parties to resolve certain such issues and is hopeful that those efforts will result in prompt solutions that are acceptable to all involved."

Thus the FASB Majority expressly left for later resolution by others the question of what the scope of the audit should be, rather plainly indicating its hope that a way would be found to avoid auditor involvement in actuarial matters.

2. The proposed Audit Guide itself reflects this same objective that the auditing profession should avoid too deep an intrusion into the domain of the actuary, but the compromise it reaches, we fear, is not a satisfactory one. Section 10-19 calls for the auditor to "satisfy himself as to the professional qualifications of the actuary, obtain an understanding of the actuary's methods and assumptions, test accounting data provided to the actuary and consider whether the actuary's findings support the related representations in the financial statements." Significantly there is no explicit instruction with respect to what the nature or extent of the auditor's review should be, if any, of the actuary's methods and assumptions. It is not stated that the auditor should satisfy himself that the actuary's methods and assumptions are appropriate or reasonable. It is not even stated that the auditor must conclude that the methods and assumptions are not unreasonable. It is suggested that if the auditor finds the actuary's determinations to be unreasonable, another actuary might be consulted. But how any difference of opinion should be resolved is left open and ambiguous.

The problem is compounded by the fact that the value of accumulated benefits is not a liability in the ordinary accounting sense of that term, that it depends upon estimates and judgments about uncertain future events and that auditors, for the most part, do not have the training or expertise to make a true substantive review of these determinations. FASB No. 35 unequivocally recognizes that the representations in the financial statements as to the value of plan benefits will not be prepared or developed by persons with accounting background or training (even though the inclusion of this information is required if the

statements are to conform with "generally accepted accounting principles") but will be made by actuaries. In paragraph 134 of FASB No. 35 the Board states that "actuaries are best qualified to develop the benefit information . . . ." In Appendix D, in the notes to the illustrative financial statements, it is flatly stated, "The actuarial present value of accumulated plan benefits is determined by an actuary from the AAA Company . . . ." The Board believed, contrary to our view, that this did not foreclose the adoption of a requirement that this information be included as a part of the financial statements rather than in an accompanying report. The Board rejected the contention that it should take into account the effect of this conclusion upon the attest function and what interpretation would be given to an auditor's unqualified report by the public to which that report is addressed. That issue, however, is one that must be squarely faced by the Employee Benefit Plans and ERISA Committee and the Auditing Standards Board.

We believe that there is a general public understanding -- one that is wholly warranted -- that there is a significant difference in the reliance that may be placed upon an unaudited financial statement and one that is accompanied by an unqualified report by an independent auditor that it has been prepared in accordance with generally accepted accounting principles. In the latter case the public justifiably believes that the auditor has not only verified the accuracy of the data upon which the representations are based but that he has also verified, where the representations depend upon the application of methods, assumptions and principles to that data, that the methods, assumptions and principles are in conformity with those that are generally accepted and applied. In short, the public believes that there has been a true substantive review.

In the case of some representations, which are prepared by specialists with other than accounting training and background, this belief may not be wholly accurate. However, where the representation in question does not involve a major portion of the assets, liabilities or income of the financial statements, the

procedures required by SAS No. 11 appear adequate and the desirability that the auditor's report be unqualified is sufficiently strong to make unnecessary a disclosure that the audit process is somewhat less thoroughgoing in this respect than it is with respect to other representations. What distinguishes the actuarial liabilities of defined benefit pension plans most sharply from the values included in financial statements prepared by other specialists is the relative magnitude of this representation compared to the assets of the plan. In no other area where an auditor might rely upon a specialist would financial values prepared by the specialist so completely dominate the financial statement. In many cases the actuarial "liabilities" may be several times the assets of the plan, and may represent substantial portions of the net worth of the sponsoring organization, so there is no "balance sheet" in the usual sense, only a statement of assets and a statement of supplemental contingent liabilities which bear no direct relationship to each other. In this case we believe that the public may well be misled about the nature and extent of the audit process and the degree of reliance that may be placed upon the fact that there is an unqualified report by an independent auditor.

This leads to the conclusion that the audit should either be a true substantive audit, pursuant to which the auditor has satisfied himself as to the appropriateness of the actuarial assumptions and methods or that the report be expanded to disclose explicitly that the auditor has relied on the actuary's report or determinations.

The objection to adopting the first alternative is that most auditors or accountants are not trained in actuarial skills and matters, and therefore are not competent to make an assessment of the work of the actuary in a true audit sense. To be sure there are several major accounting firms that already have or, over a period of time, could acquire the necessary actuarial expertise. But this Audit Guide is also addressed to thousands of smaller accounting firms throughout the country, who will be asked to report upon thousands of plans established by smaller

employers, and those firms will simply not be able to do the work adequately by themselves. This means they will have to retain the services of another actuary, and we agree with the only members of the FASB who have expressed an opinion on this subject that the possible benefit of such a procedure will generally be outweighed by the considerable additional cost to plans that can ill afford it. Moreover, if the most important item in the financial statement has in fact been the subject of an actuarial audit, conducted by an actuary, then it would be a misrepresentation for the auditor not to mention this fact in his report. The principle that an auditor does not divide his responsibility will in fact have been violated, and it would be wrong to hide this fact from the public.

3. There already exists, in this area, precedent for the conduct of limited scope examinations and the corresponding issuance of a qualified report, so that the dramatic and adverse impact that so often is the effect of an unqualified opinion would not be a possible factor in this context. Paragraph 12-15 of the proposed Guide recognizes that, pursuant to Section 103(a)(3)(C) of ERISA and DOL Regulations § 2520.103-8, the auditor will sometimes be unable to perform auditing procedures with respect to plan assets held by a bank or insurance company and so will be unable to express an opinion on the financial statements taken as a whole. The statutory authority for this limited scope examination is in all respects similar to the authority granted by Section 103(a)(3)(B) of ERISA, which permits reliance by the auditor on the correctness of any actuarial matter certified to by an enrolled actuary. Indeed we believe that while the language of this section is permissive it was the intention of the Congress (and this is supported by the legislative history) that to the extent that the financial statements included actuarial estimates that had been prepared by the plan's enrolled actuary and included in his report, no audit would be conducted.

In sum we believe that if the Audit Guide is adopted in its present form one or more of three undesirable developments may follow, in a not inconsiderable

number of instances. In some cases, where the auditing firm has extensive actuarial capability, there will be unduly intrusive involvement by the auditor into areas allocated to the actuary by ERISA. Methods or assumptions will be questioned and conflicts will arise that will be difficult to resolve. There is some past history to support this statement. In other cases auditors without the requisite expertise will engage an actuary to assist in -- or, rather, perform -- the audit. The disadvantages are those to which we have already alluded -- unnecessary cost and a report that is less than scrupulously accurate. Finally, in some cases, auditors without expertise will mistakenly conclude that they can meet the requirements of the Guide without help and in actual practice they will have relied upon the actuary's determinations without disclosing this fact in their report. None of these developments would be desirable. All can be avoided if it is recognized that more limited audit procedures than those suggested in the Audit Guide are wholly acceptable and fully protective of the public interest if the report expresses the extent to which the auditor has relied upon the actuary's report.

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All this is not to say that we believe there should be no audit whatever of the actuary's estimate of the present value of accumulated plan benefits. Certain procedures are desirable and should be required. The best solution, in our view, would have been available if the Financial Accounting Standards Board had followed the precedents of FASB No. 25 and FASB No. 33. There the Board recognized that certain financial information was of obvious significance to persons interested in financial statements but was not suitable for inclusion in the financial statements themselves. The Board required that information to be disclosed as supplementary information accompanying but outside the financial statements. This enabled the Auditing Standards Board to prescribe more limited procedures for the examination of these representations without disabling the

auditor from furnishing an unqualified report on the financial statements themselves. But the probable unavailability of this "best" solution should not prevent the AICPA from reaching a better solution than that set forth in the proposed Guide. More particularly, we suggest that the following modifications be made:

1. All of the procedures called for by paragraphs 10-1 through 10-7 relating to participants' data should be retained.

2. Paragraphs 10-15 through 10-17 may also be retained without revision.

3. Paragraphs 10-18 through 10-23 should be modified. Without attempting to redraft these sections here they should be amended so as to:

(a) Authorize a statement in the auditor's report to the effect that his examination included, with respect to the information about accumulated plan benefits, such tests of the data upon which the representation was based as he considered necessary, that he was satisfied that this representation was arrived at in conformity with generally accepted accounting principles but that he had not reached an opinion as to the appropriateness of the methods and assumptions employed in making this determination, relying for that purpose upon the report of AAA Actuarial Consultants, a firm that possesses the necessary qualifications to make such determinations.

(b) Consistent with such a qualification to the report, subparagraph 10-20(a) should be retained or, if desired, we would be glad to assist in an expansion of this subparagraph.

(c) Subparagraph 10-20(b) should be modified to retain only the requirement that the auditor ascertain whether the methods and assumptions used are in conformity with FASB No. 35 (for which purpose he may rely upon a statement by the actuary). The additional statement in the draft that the funding method and assumptions are also in accordance with ERISA is inappropriate because, (1) a

single funding method (the unit credit method) for this purpose is in fact prescribed by FASB No. 35, and (2) it is not clear that assumptions consistent with FASB No. 35 will be consistent with ERISA requirements which relate to minimum funding standards.

(d) Subparagraph 10-20(c) is desirable as it stands.

(e) The Committee should consider whether subparagraph 10-20(d), rather than requiring unspecified "additional audit procedures," should require employment of another actuary (or the use of an actuary employed by the auditing firm) where there are reasonable grounds for questioning the objectivity of the actuary who made the initial determinations. In general, we believe that where the auditor has any doubts about his willingness to express reliance on the actuary's work, he should consult with another actuary, rather than substitute his judgment for the actuary's in matters of the appropriateness of the actuarial methodology or assumptions.

(f) Subparagraphs 10-20(e)(f) and (g) do not appear to require revision.

(g) The Sample letters included in Paragraphs 10-22 and 10-23 may have to be suitably modified to conform with the suggestions made above.

If these changes are made, the result, in our view, would be fully protective of plan participants and other persons interested in the financial status and condition of pension plans, would avoid unnecessary disputes and friction between the accounting and actuarial professions, and would result in auditors' reports that more accurately reflect the process through which the financial information relating to defined benefit pension plans is prepared and verified.

We hope that these comments will be helpful and would be pleased to arrange for representatives of the Subcommittee to meet with the Employee Benefits Plans and ERISA Committee to amplify them.

American Academy of Actuaries  
Subcommittee on Pension Accounting Matters  
Douglas C. Borton, Chairman  
James F. A. Biggs      Donald E. Fuerst  
Edwin F. Boynton      Paul A. Gewirtz  
Yuan Chang              Richard Q. Wendt  
Edward H. Friend      John Harry Williams

## APPENDIX

AMERICAN ACADEMY OF ACTUARIES  
SUBCOMMITTEE ON PENSION ACCOUNTING MATTERSDetailed Comments on 6-30-80 Exposure Draft of Proposed  
Audit Guide on Audits of Employee Benefit PlansParagraph 1 - 17

No reference is made to multiple-employer plans.

Paragraph 1 - 22

It would be helpful to note that the named fiduciaries are identified in the Summary Plan Description.

Paragraph 2 - 13

Assets transferred from another plan are an important source of funds in some cases.

Paragraphs 2-14 through 2-17

It may be clearer to reproduce the text of paragraphs 16 through 22 of Statement No. 35.

Paragraph 7 - 24

The word "legal" in the last sentence would more properly be "contractual."

Paragraph 7 - 32

Subparagraph b states "If the amount of investment yield credited to the (IPG) contract, based on current investment returns, does not appear reasonable, the auditor should apply additional procedures, . . ." This paragraph implies that insurance company investment credits should be directly related to current investment returns. In fact, there may be little direct relationship of interest

credits on prior years' deposits to current investment returns. Under the investment year method, which is commonly used for IPG contracts, the interest credits are based on investments made in the year of deposit and could be higher or lower than currently available returns on new investments.

A more pertinent recommendation might be that the auditor review whether investment returns are credited in accordance with the contract.

Paragraph 10 - 7

Regarding the second sentence, in multi-employer plans the actuarial valuation is made to determine if the assets and prospective future contributions will be sufficient to fund the plan benefits, rather than comparing accumulated contributions with the value of accumulated plan benefits.

Paragraph 10 - 9a

This method of allocation is widely used, but is not required by IRS regulations.

Paragraph 10 - 20b

As discussed in the body of the letter, the reference to the funding and assumptions being in accordance with ERISA is inappropriate with respect to an actuarial statement prepared to present value of accumulated benefits required by FASB No. 35.

Paragraph 10-22k and Paragraph 10-33h

These questions could conflict with the Academy's Guides to Professional Conduct regarding the confidentiality of an actuary's relationships with a client.

STATEMENT REGARDING HEALTH AND WELFARE PLANS  
AICPA AUDIT GUIDE ON EMPLOYEE BENEFIT PLANS  
SUBMITTED BY THE AMERICAN ACADEMY OF ACTUARIES  
SEPTEMBER 30, 1980

These comments are being submitted in connection with health and welfare plan aspects of the AICPA Exposure Draft on Audits of Employee Benefit Plans dated June 30, 1980. Thank you for this opportunity to comment. We offer these comments with respect to Chapter 10.

As pointed out in earlier commentary, we do not feel completely comfortable with the structure of the chapter. Accordingly, we feel some inadequacy in attempting to communicate our comments and suggestions. We believe substantial reorganization of the material and more depth of coverage of certain subjects is needed, especially regarding health and welfare plans.

Our concerns, regarding the material on health and welfare plans, can probably be best grouped in the following categories:

1. Analysis of claims data. More explicit guides than those in the draft are, we believe, needed by practitioners. The gathering of data can be difficult and the analysis of that data can be quite challenging. Actuaries performing this analysis with a view toward assisting in determination of the plan's financial position will need complete and accurate data with which to work. The conclusions they reach can be no better than the data examined.
2. Benefit analysis. The determination of the financial structure of a plan depends, of course, on the benefits provided. This entails a detailed analysis of plan documents with special care to making sure that all documents are examined. Although this is touched on

in the Audit Guide, we feel more emphasis would be appropriate.

3. Contribution level. The Audit Guide hardly touches upon this subject. This may not be an auditing question in the strictest sense of the term; however, we believe actuaries will be concerned about any plan which apparently does not have a sufficient contribution level. We think the auditing CPA would share that concern. The Audit Guide is generally silent on this point.
4. Recognition of expenses and liability recognition. A clear statement that incurred costs and liabilities should be recognized could, we believe, be an improvement. See Attachment I.

We have not had the opportunity to meet with the drafters of Chapter 10. We feel because of the nature of the subject matter and the present structure of the material, it has been difficult to communicate in writing. We hope these comments help you. We will be pleased to discuss them with the people working on the Audit Guide.

Thank you again for the opportunity to offer these comments.

Subcommittee on ERISA Health and Welfare Plans of the Committee on Health Insurance of the American Academy of Actuaries:

W. H. Odell, Chairman

Robert J. Dymowski

Anthony J. Houghton

Richard H. Loeber

Erwin A. Rode

Howard Young

Paragraph 11 - 10c

There is no ERISA provision which requires the plan administrator to agree with the actuarial methods and assumptions used by the Enrolled Actuary. Very few, if any, plan administrators have the actuarial knowledge or skill required to make such a statement, and such a certification appears unnecessary and inconsistent with the Enrolled Actuary's responsibility under ERISA. We suggest this paragraph be deleted, or at the most, require a statement from the administrator only that he "has no knowledge or belief that would make such methods or assumptions inappropriate in the circumstances."

Appendix A

It is virtually impossible to summarize a long and complicated law such as ERISA without overlooking or misinterpreting provisions which may be important in some circumstances. Therefore, it might be helpful to include references to sections of the Act in the summary. In addition, we suggest that the terminology of the Act should be followed as much as possible.

Appendix B

It is difficult to summarize actuarial concepts and techniques without omitting information which may be significant in some circumstances, or presenting certain statements as facts which are opinions or applicable only in certain circumstances. For example, the last sentence in paragraph B-1 is not always true. In paragraphs B-5, B-7 and B-8 the normal cost may be spread over future years of service instead of compensation.

Paragraph B-9 presents a subjective analysis and opinion of the characteristics of various actuarial cost methods. Because such characteristics of a funding method are influenced by many factors which will create widely varying results, any such simplistic categorization is impossible and can be very misleading. Therefore, we suggest that paragraph B-9 be eliminated.

#### Appendix C

On page 110, one of the examples refers to approval of the actuarial methods and assumptions by the plan committee or responsible officials. As noted earlier in connection with paragraph 11-10c, we believe this is inappropriate and should be deleted.

Recognition of Expenses and Liabilities

We believe that it is good actuarial practice for a risk-bearing entity to recognize losses (claim costs) as incurred. (There may be a few exceptions.) For example, under a medical expense plan paying for certain hospital expenses, if a covered life is hospitalized on November 1, 1980 and remained hospitalized December 31, 1980, then the financial statements for 1980 would require expense recognition of

- a. the covered costs of hospitalization from November 1, 1980 to December 31, 1980 and
- b. estimated covered costs of hospitalization for the future period of time after December 31, 1980 during which it is anticipated hospitalization will continue

and the amount in b. is a liability as of December 31, 1980. We believe that there has been some confusion as to the definition of the costs and liabilities to be recognized and also confusion as to when the costs and liabilities should be recognized. Practitioners appear to be in need of a clear definition of the accounting practice you desire. (This seems particularly true for non-trusted plans.)

This definition apparently needs to cover two areas:

1. The definition of the cost and liabilities under consideration. Apparently some of the confusion has been due to lack of understanding of what costs and liabilities are being referred to in the literature.
2. A clear statement as to when certain costs and liabilities should be recognized (or alternatively a clarification of when they should not be recognized).

With regard to the question of whether in a particular case the incurred cost (such as in the above example) and related liability should be recognized, we offer the following observations which have been made by actuarial practitioners in this field:

1. The substance as well as the form of the plan would appear to be pertinent. For example, what has been communicated to the employees as well as the plan document may be quite important.
2. It would appear that cost recognition and the determination of financial position should be a function of the nature of an obligation rather of its funding mechanism or current income tax consequences.

We realize expense and liability recognition is an important accounting question and understand it involves matters such as accounting for contingencies, objective support of the amounts in question and so on. We offer our assistance as you consider these accounting questions. We think we can help particularly by assisting in:

- 1) Defining terms
- 2) Exploring with you ways in which actuarial opinions may be used as objective evidential material to support the amount of costs and liability recognized.

## STATEMENT 1980-27

STATEMENT OF THE  
AMERICAN ACADEMY OF ACTUARIES  
ON HR 6525 ("PERISA")

October 1, 1980

Stephen G. Kellison, Executive Director

### I. INTRODUCTION

The American Academy of Actuaries ("Academy") is pleased to submit these comments on HR 6525, the Public Employee Retirement Income Security Act of 1980 ("PERISA"). The Academy is vitally interested in this bill, since the large majority of actuaries performing actuarial services for state and local public employee retirement systems are members of the Academy. Appendix A contains some background information about the Academy.

HR 6525 is a very comprehensive bill which has a number of provisions that would affect the work of actuaries in connection with state and local public employee retirement systems. However, we would prefer to make specific comments today on only three aspects of the bill; namely, the relationship between actuaries and accountants, the enrollment of actuaries, and the question of pension terminology.

Before making those comments, we would like to put on the record our appreciation to the Committee on Education and Labor, and in particular the staff of the Task Force on Welfare and Pension Plans, for the opportunity to review some of the technical material in this bill as it was being prepared. A committee of the Academy spent many hours reviewing Section 104 of the bill in this regard, and although the Academy takes no stand on this Section with respect to its desirability, we are satisfied with it from a technical standpoint.

## II. RELATIONSHIP BETWEEN ACTUARIES AND ACCOUNTANTS

The relationship between actuaries and accountants under the Employee Retirement Income Security Act of 1974 ("ERISA") is important background to consider, since the general framework of PERISA is analogous to that contained in ERISA in this area. However, despite the analogy between the two, PERISA contains some fundamental differences from ERISA which will be discussed in Section III of this statement.

ERISA has given rise to an unresolved problem in the auditing area. Section 103 of ERISA provides that the accountant may rely on the correctness of any actuarial matter certified to by an enrolled actuary, if he so states his reliance (and conversely, that actuaries may rely on the work product of qualified accountants in an analogous manner). However, this provision has never become operational in the manner which Congress intended. This results from audit guidelines (which predate ERISA) issued by the American Institute of Certified Public Accountants (AICPA) to the effect that any opinion of an auditor which expresses reliance on the work of others becomes a "qualified opinion," with all the resulting negative connotations attached to that term. The AICPA has not changed this position, despite the statutory authority for such an expression of reliance contained in ERISA.

### III. ANALYSIS OF HR 6525

Section 104 of PERISA is quite analogous to Section 103 of ERISA in dealing with the relationship between actuaries and accountants, with two notable exceptions:

1. Section 104(b)(1)(B) of PERISA provides that the accountant shall rely on the correctness of any actuarial matter certified to by an enrolled actuary. Likewise, Section 104(d)(2) provides for similar reliance by actuaries on accountants. Thus, PERISA changes the voluntary reliance of ERISA to compulsory reliance.

2. Section 103(a)(3)(A) of ERISA indicates that audits shall be conducted in accordance with "generally accepted auditing standards." Section 104(b)(1)(A) of PERISA contains the same wording, with the important addition that the reliance provisions described above are specifically authorized, even though departing from generally accepted auditing standards as presently defined by the AICPA.

The Academy strongly endorses these two provisions contained in PERISA. We believe that they would be quite beneficial in resolving the difficulties which have arisen under ERISA, as described in Section II of this statement. Furthermore, we believe that they are quite compatible with the division of responsibilities between actuaries and accountants intended by the Congress in the implementation of Section 103 of ERISA.

In addition, there are a few other amendments which could be made to further clarify the relative roles of the two professions. These amendments are consistent with the intent of HR 6525 and are submitted for the consideration of the Committee in Appendix B.

N. OTHER LEGISLATION

We would also like to call attention to the fact that a number of ERISA-revision bills currently before the Congress contain provisions similar to those contained in PERISA described above. Among these are HR 5337, HR 6053, and S 209.

We believe that these bills, along with HR 6525, are indicative of strong Congressional interest in resolving the relative roles of actuaries and accountants on a consistent basis in all areas of pension legislation. We strongly support these efforts.

V. ENROLLMENT OF ACTUARIES

When ERISA was passed in 1974, there was a provision for enrollment which allowed for a "grandfathering" of actuaries in practice at that time who met the qualifications and applied for enrollment prior to January 1, 1976. Those who did not so qualify or who did not apply by that date were subject to more extensive education or examination requirements and experience requirements after that date.

Actuaries practicing in the private field were, of course, quick to apply so as to be qualified for continued practice in their profession. On the other hand, actuaries dealing with public employee retirement systems did not have the same need for enrollment and, in some instances, did not therefore apply for enrollment.

If PERISA should become law, those actuaries who practice exclusively in the public sector but who have not become enrolled actuaries would not have the same advantages afforded to them as was the case for the private-pension actuaries in the initial enactment of ERISA. To correct this inequity, an appropriate amendment to Section 3042(a) of ERISA would allow to actuaries exclusively in the public sector the same privileges for initial qualification as were allowed under ERISA to actuaries for private plans.

#### VI. PENSION TERMINOLOGY

Over the years a variety of pension terminology has evolved in various laws and regulations and in the pension literature. We note that PERISA contains a number of terms for certain actuarial values which are not in common usage and which differ from those contained in ERISA.

The actuarial profession has appointed a Joint Committee on Pension Terminology composed of representatives from various actuarial organizations in an attempt to arrive at a more uniform, consistent and unambiguous set of terminology. Although no fixed timetable exists for the final report of this committee, we hope to have something substantial during the next year.

We recommend that any such report which is widely accepted within the actuarial profession be reflected in PERISA in order to prevent a further proliferation of existing terminology.

VII. SUMMARY

In summary, the Academy strongly supports the provisions of HR 6525 concerning the relationship between actuaries and accountants. We would also like to recommend additional amendments which are consistent with the intent of the bill to further clarify this relationship. We would recommend that the bill authorize special initial enrollment procedures for actuaries operating exclusively in the area of public pension plans. Finally, we would recommend that certain terminology be reexamined in light of an effort within the actuarial profession to develop uniform terminology.

APPENDIX ABACKGROUND INFORMATION ON THE  
AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional organization of actuaries which was formed in 1965 to bring together into one organization all actuaries in the United States and to seek accreditation and greater public recognition for the profession. It includes members of four founding organizations: the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the Fraternal Actuarial Association, and the Society of Actuaries. These organizations or their predecessors date back many years, one of them to the late 1800's, so that despite the relatively short duration of its formal existence, the Academy, its founding organizations and their predecessors have represented the actuarial profession in the United States for about 90 years.

The Academy is unique as the national accrediting actuarial organization for actuaries in all areas of specialization. Requirements to become a member of the Academy can be summarized under two broad headings: (1) education and (2) experience. An individual must satisfy both in order to be admitted. At the present time, the education requirements for membership can be satisfied by passing certain professional examinations given either by the Casualty Actuarial Society or the Society of Actuaries or by becoming an "enrolled actuary" under the Employee Retirement Income Security Act of 1974 (ERISA). The experience requirement consists of three years of responsible actuarial work.

As of August 1, 1980, Academy membership stood at 6,077. These actuaries have a variety of types of employment, including insurance organizations, consulting firms, academic institutions, and government. A large majority of those individuals who have satisfied the rigorous education and experience requirements of the Academy do, in fact, join the Academy. The entire Academy membership is subject to rigorous guides to professional conduct and standards of practice.

APPENDIX B

## PROPOSED AMENDMENTS TO HR 6525

BY THE

AMERICAN ACADEMY OF ACTUARIES

Note: All page numbers refer to the bill itself.

1. page 25, line 25            add two new sentences after "actuary" as follows:  
"The opinion of the accountant under this section shall not extend to actuarial matters certified to by the enrolled actuary. 'Actuarial matters' may be further defined by regulation by the Administration and shall include the items required to be included in the actuarial statement under subsection (d) of this section."
  
2. page 27, line 1            delete "liabilities" and substitute in its place "non-actuarial liabilities of the plan"
  
3. page 28, line 4            insert before "liabilities" the word "non-actuarial"

## STATEMENT 1980-28

October 10, 1980

Minnesota Insurance Division  
J. P. Koleski, Asst. Commissioner of Ins.  
500 Metro Square Building  
St. Paul, Minnesota 55101

Attention: Blanks Task Force

Dear Sir:

The Committee on Life Insurance Financial Reporting Principles of the American Academy of Actuaries has reviewed the revisions to the Annual Statement proposed and distributed by the A(1) Task Force and has the following comments:

The Committee endorses the principles adopted by the A(1) Task Force of simplifying the Annual Statement so that it is more meaningful to the users of this financial report.

The Committee agrees with the proposed eliminations of certain pages, Exhibits, and Schedules as outlined by the Task Force. In addition, the Committee recommends that the optional worksheet entitled "Analysis of Increase of Life Policy and Contract Reserves During the Year" be removed from the instructions. Such information is inappropriate for company financial reporting and can mislead attempts to anticipate company experience.

The Committee strongly recommends that the NAIC strive for the adoption of a uniform financial reporting blank in all jurisdictions.

The Committee presumes that, before final adoption of any changes, it will have adequate time to provide the A(1) Task Force with detailed suggested refinements.

Thank you for this opportunity to present our comments. We would be most willing to assist the A(1) Task Force or technical subcommittee in completing this project.

Respectively Submitted,

Burton D. Jay  
Chairman  
American Academy of Actuaries  
Committee on Life Insurance Financial Reporting Principles

## STATEMENT 1980-29

November 7, 1980

Director of Research and Technical Activities  
File Reference 1057-017  
Financial Accounting Standards Board  
High Ridge Park  
Stamford, Connecticut 06905

Dear Sir:

The Academy of Actuaries is responding to your invitation for comments on the Exposure Draft, Foreign Currency Translation.

We believe that the proposed statement would be a major improvement over Statement No. 8. As we have commented in the past, some aspects of Statement No. 8 are very troubling to actuaries. We believe that certain aspects of this Statement are not consistent with sound actuarial principles and that financial statements would be more meaningful and useful if those actuarial principles were recognized. In contrast to Statement No. 8, we believe that the proposed Statement would produce results consistent with the Industry Audit Guide and sound actuarial principles.

### Discussion

On October 31, 1977, the American Academy of Actuaries Committee on Life Insurance Company Financial Reporting Principles submitted a position paper to the FASB concerning Interpretation No. 15 of Statement No. 8. In that paper, it was stated that:

1. The principle of matching revenue and cost will not be satisfied in foreign currency translation if benefit reserves and deferred acquisition costs are not translated at the same rate of exchange.
2. The application of Interpretation No. 15 produces an immediate charge or credit to earnings which is completely unrelated to revenue and likely to be material.
3. Reserves used in financial statements prepared in the manner set forth by Interpretation No. 15 will not be computed in accordance with sound actuarial principles.

On August 14, 1978, a position paper was submitted to the FASB by the American Academy of Actuaries Committee on Financial Reporting Principles in response to the FASB's invitation for comments on FASB Statements No. 1-12. That paper presented three alternative proposals for revision of FASB Statement No. 8 and/or Interpretation No. 15:

1. A proposal that unamortized policy acquisition costs in a stock life insurance company be translated at current exchange rates rather than historical exchange rates.
2. A proposal that liabilities for future policy benefits in a stock life insurance company be translated partially at current exchange rates and partially at historical exchange rates.
3. A proposal that current exchange rates be used to translate all assets and liabilities arising from foreign enterprises.

It was stated that all three proposals would produce results consistent with the Industry Audit Guide and sound actuarial principles, and that adoption of one of the three proposals was necessary to avoid an inconsistency.

Under the proposed Statement, the basic measurement of all of the elements of a foreign entity's financial statements would be made in conformity with U.S. generally accepted accounting principles in terms of its functional currency. All of a foreign entity's assets and liabilities would be translated from that functional currency into the reporting currency using the current exchange rate. All revenues, expenses, gains, and losses would be translated to approximate the effect of using the exchange rates on the dates they are recognized.

#### Conclusion

The proposed standards for foreign currency translation are similar to proposal No. 3 in the American Academy of Actuaries August 14, 1978 position paper. We believe that in most cases the proposed FASB Statement would produce results consistent with the Industry Audit Guide and sound actuarial principles, and that adoption of this Statement would eliminate inconsistencies which currently exist under Statement No. 8 and Interpretation No. 15.

We thank you for the opportunity to provide our comments. We hope these comments will be helpful to you.

Sincerely,

Burton D. Jay, Chairman  
American Academy of Actuaries  
Committee on Life Insurance Financial Reporting Principles

BDJ:lw

## STATEMENT 1980-30

STATEMENT OF THE  
AMERICAN ACADEMY OF ACTUARIES  
TO THE PRESIDENT'S COMMISSION ON PENSIONS  
WITH RESPECT TO  
FEDERAL ADMINISTRATION OF  
PENSION PROGRAMS/ERISA FUNDING STANDARDS SESSION  
NOVEMBER 14, 1980

GEORGE B. SWICK, MAAA

### INTRODUCTION

My name is George B. Swick, and I am a member of the American Academy of Actuaries, an Associate of the Society of Actuaries, and a Fellow of the Conference of Actuaries in Public Practice.

I am appearing before you today on behalf of The President's Commission Advisory Committee of the American Academy of Actuaries.

Our presentation today deals with the subject of "funding standards". The specific questions to be addressed have been identified as follows:

1. What is the magnitude of unfunded liabilities of single and multiemployer pension funds?
2. What is their significance in terms of exposure for companies, stockholders, plan participants and the federal government?
3. Under current ERISA funding standards can this picture be expected to improve, deteriorate or remain the same?
4. Are actuarial methods of determining funding amounts sufficient?
5. Are methods of disclosing and reporting financial information sufficient and meaningful?
6. Should ERISA standards be applied to state and local and federal pension plans?

In the aggregate, these questions can be addressed under the broad heading of what might be referred to as the "quality of funding". Measurements of the quality of funding suffer from a lack of precise definition; actuaries often refer to it as "actuarial soundness".

#### QUALITY OF FUNDING

Within the broad context of "actuarial soundness", the quality of funding is the essence of actuarial work with respect to pension funding. Indeed, actuaries have been dealing with this issue since the first annuity contract was underwritten. My own firm has been dealing with this issue for almost 65 years. Actuaries were the first to call attention to the lack of actuarial soundness under the Social Security System.

A complete analysis of actuarial soundness would require extensive effort and is not the subject of this presentation, although these issues are addressed frequently in actuarial literature.

The purpose of this presentation is to outline those roles which are appropriate for the actuarial profession within this broad subject matter. While the views expressed in this presentation reflect those of the Committee, they are believed to represent the "main stream" of actuarial thinking, although many actuaries may have different views.

With regard to individual plans, the issues involved are extremely complex. Each pension plan is like an individual person with its own unique characteristics, such as:

- o Single employer plans
- o Multiemployer plans
- o Flat benefit plans
- o Career pay plans
- o Average final salary plans
- o One-person enterprises
- o Small companies
- o Large companies
- o New plans
- o Mature plans
- o Expanding industries
- o Contracting industries
- o Mergers
- o Acquisitions
- o Spin-offs
- o Plan terminations
- o Etc.

Thus, those who design publicly desirable funding standards, and publicly desirable disclosure standards, would do well to promulgate only broad standards in order to continue the broadest possible flexibility to deal with the wide variety of the practical world of pension funding, and with reliance on actuaries to deal with the unique characteristics of the individual plans.

No governmental agency, legislative body, or Commission can successfully cope with the myriad details involved, nor can any professional body do more than establish broad, effective, guidelines. The details of funding and the details of disclosure require careful analysis of the individual characteristics of each plan.

Although the statement may appear to be self-serving, given the complex nature of pension plans today reliance on the individual professional actuary, within broad professional and regulatory guidelines, is the only adequate solution to judging the actuarial soundness of any specific pension plan.

As with all the other issues, the discussion of the quality of funding bogs down at the outset over two essential definitional issues:

- o what is a pension plan, and
- o what is considered funding?

It is not the purpose of this presentation to express a definitive resolution of these terms. Nevertheless, the Commission would be well advised to address these definitional issues before suggesting policy guidelines in these areas.

The fact that ERISA did not clearly identify the word "pension" has been the cause of much confusion:

- o Should early retirement benefits designed to alleviate economic hardships -- or designed for any other purpose -- be considered "pensions" for purposes of quality of funding?
- o Should survivor benefits of pension plans be divorced from survivor benefits of other employee benefit programs for purposes of quality of funding?
- o Should the issue of quality of funding address post-retirement indexation needs?
- o Should the issue of quality of funding deal with the broadly perceived issue of lack of coverage?
- o Should problems related to the effect of inflation on defined contribution plans -- as the primary source of retirement income -- be related to quality of funding?

It is a truism that all such issues, and many others, relate to the quality of funding.

The second major definitional issue deals with the word "funding" itself. In looking at the resources available for funding pension plans, there are a number of levels of financial factors which could well be classified as "funding", including:

- o benefits fully guaranteed by an insurance carrier, either on an individual or group basis;
- o funds accumulated in defined contribution plans with allocation to individual employees;
- o funds accumulated in insurance contracts and/or trust funds with no specific allocation by employees;
- o accounts receivable by external accumulation funds by plan sponsors, but not yet paid;
- o reserves accumulated internally by plan sponsors reflecting excesses of pension expense charges over cash contributions to external accumulation funds (as specified in APB No. 8 and FASB No. 36);
- o potential tax liens against 30% of each plan sponsor's net worth under Title IV of ERISA;
- o withdrawal liabilities potentially chargeable to employers participating in multiemployer plans under the Multiemployer Pension Plan Amendments Act of 1980, and finally
- o premiums charged to plans and plan sponsors by the PBGC to meet its residual obligations under Title IV of ERISA.

Beyond these resources, and perhaps of primary importance, is the "continued viability of the employer as an entity willing and able to meet the funding requirements of the plan". (FASB No. 35, paragraph 58.)

In paragraph 59 of FASB No. 35, the Board went on to state that "the commitment and financial ability of the employer(s) to make future contributions to the plan are primary factors in assessing benefit security", although "not within the limits of financial accounting of the plan itself".

We believe there is no significant body of opinion within the actuarial profession which, for purposes of quality of funding, disputes the importance of the economic ability of the plan sponsor to continue the plan.

What, then, is the role of the professional actuary in dealing with the issue of funding?

In a general sense, the actuary's role is to assist pension plan sponsors in the development, and maintenance, of soundly funded pension plans. The way actuaries perform this function is to develop an appropriate long-term funding pattern based upon an aggregation of applicable and appropriate assumptions, and to adjust periodically (usually on an annual basis) for deviations from the selected assumptions. These deviations are called "actuarial gains and losses".

The actuary selects and then employs one of many generally recognized actuarial cost methods which, in conjunction with appropriate actuarial assumptions, establishes a long-term pattern of funding and, equally important, establishes the procedure for amortizing the emerging actuarial gains and losses.

## ACTUARIAL COST METHODS

Various actuarial funding methods have been described in the actuarial literature over the years, with some recognized in IRS regulations and/or in the language of ERISA itself. Many of these methods are identified in the Academy Year Book within Pension Plan Recommendations and Interpretations (attached as Appendix A; refer to Section 4).

Some actuaries have criticized the appropriateness of some of these methods in the actuarial literature and in professional meetings.

On balance, there is no one actuarial cost method which could be deemed 100% appropriate for all plans at all times and under all economic conditions. Thus, while some cost methods may be appropriate in only limited circumstances, they should not be proscribed for use in all situations.

In addition to considering traditional methods, particular attention should be paid to Recommendation A(3), Section 4.8 of Appendix A, which deals with the development of "new methods and techniques"; a most important consideration in the emerging computer age. By way of illustration, the Academy's Committee on Pension Actuarial Principles and Practices recently put out a "call for information" on the appropriateness of various actuarial cost methods (see Appendix B).

We believe these activities reflect appropriate professional behavior. We also believe these issues can be resolved more effectively through the professional process than through the governmental regulatory process.

The guidelines under which these activities proceed are set forth in Opinion A-4 of the Academy's Opinions as to Professional Conduct (attached as Appendix C).

In summary then, it is our opinion that funding guidelines can only be promulgated in the most general of terms. Primary reliance on the actuarial soundness must be placed on the individual -- recognized professional -- actuary. In the pension area such recognition is clearly demonstrated by the "enrolled actuary" certification as required by ERISA.

An example of such a broad guideline would be to clearly permit funding as a level percentage of emerging payroll (or equivalent), so long as minimum funding requirements of ERISA are met. Actuarially determined funding patterns, applied on a consistent basis, should not be thwarted by the requirements of expense accounting rules.

#### DISCLOSURE

Current methods of disclosing and reporting financial information on pension plans are neither sufficient nor meaningful.

The actuarial profession played a major role in the development of the disclosure provisions of APB No. 8. This Opinion released in 1966 seemed quite adequate at the time. Pension plans were relatively new, the obligations relatively small, the securities prices higher, and inflation at a more acceptable level.

The situation in 1980 is quite different. All of the above characteristics have changed since 1966. Thus, disclosure is a much more complex issue. Development of meaningful disclosure, understandable by the typical plan participant, is a most difficult, if not impossible, task.

Throughout the deliberations leading to the issuance of FASB No. 35, the Academy consistently took a position comparable to that of the FASB dissenting opinion that the statement "establishes an unattainable objective for a plan's financial statements, it improperly includes what they consider to be actuarial statements within the financial statements rather than as supplementary information outside the financial statements, and it prescribes detailed reporting beyond reasonable usefulness to plan participants."

This does not mean that the actuarial profession has not cooperated with both the Accounting Principles Board and the Financial Accounting Standards Board. The profession has developed actuarial concepts to assist actuaries in developing the necessary actuarial information to be included in financial statements under generally accepted accounting principles. This is illustrated by Interpretations 1 and 2 (attached as Appendix D).

Well, then, what would actuaries propose for disclosure?

As previously indicated, each pension plan has unique characteristics and represents a unique funding problem.

Also, as previously indicated, the actuary's primary focus is the establishment of a funding pattern with appropriate amortization of emerging deviations (actuarial gains and losses). Left to their own devices, actuaries would generally establish a fairly conservative funding pattern.

We believe most actuaries would concur that the most important actuarial disclosure is the emerging progress against the funding pattern. That is,

a presentation of the past few years' funding progress, revealing such information as:

- o Is the funding improving or deteriorating?
- o What has been the effect of plan amendments on the funding pattern?
- o What has been the effect of changes in actuarial assumptions, and economic conditions, on the funding pattern?

These questions require "actuarial disclosure". Assets must be valued on an actuarial basis (not a fair market basis, which is misleading for the purpose of disclosure related to progress in the long-range funding process).

Supplemental (not primary) disclosure of the present value of vested benefits (APB No. 8) against the fair market value of available assets might then be appropriate.

Additional disclosure to the PBGC, and others, might also be appropriate with respect to plans which may be heading towards financial hardship.

The provisions contained in the new "Reorganization Status" of Title IV of ERISA, added by the Multiemployer Pension Plan Amendments Act of 1980, might form a basis for developing ground rules as to when such additional disclosure to the PBGC would be required for single employer plans.

In summary, we believe that the "accounting disclosure" required by FASB No. 35 can be misleading to plan participants, and that "actuarial disclosure" can be developed on a more realistic basis. Certainly the Academy of Actuaries would

be happy to accept the responsibility for the development of such "actuarial disclosure" with reliance on a certified "enrolled actuary" recognized by both government and the accounting profession.

Given the complexities of the problem, and the experience and expertise of the actuarial profession, we believe there is no reasonable alternative for the public interest than to rely on actuaries for meaningful disclosure of actuarial soundness.

This concept of "reliance" does not, in and of itself, reject the concept of audit; we in the actuarial profession truly believe that the concepts of reliance and audit can be worked out between the two professions, if approached objectively from the viewpoint of the public interest.

#### FUTURE FUNDING LEVELS

Many pension plans are currently well funded, while others -- primarily flat dollar benefits -- are not. Flat dollar, or career pay, plans, which require periodic amendment to keep pace with inflation and productivity gains, have, and will continue to have, a lag in funding as compared with the increasing present value of accrued benefits. This problem has been accentuated by the need to keep pace with the unusually high levels of inflation in recent years.

In the long run, strengthened funding can only come by means of (i) a reduction in inflationary pressures, (ii) a general strengthening of the economy, and (iii) a general strengthening of the securities markets. Even then, there will remain difficulties for individual plans due to changes in economic conditions for individual companies and individual industries.

Requirements for faster funding by legislative action would only add another deterrent to the ability of a plan sponsor to improve levels of retirement income and to expand coverage. We believe that more attention should be devoted to increased flexibility of funding, over specified minimum requirements.

Prior to 1974 (1980 for multiemployer plans) the risk of inadequate funding fell heavily upon covered employees. Now the situation is somewhat reversed, so that plan sponsors take added risk through (i) the potential claim against 30% of net worth for their own obligations for single employer plans, (ii) the withdrawal liability for multiemployer plans, and (iii) the premium payments to the PBGC for the uncovered obligations of all other plan sponsors.

In any examination of the adequacy of funding, the issue of risk sharing should be explored, including such issues, under Title IV of ERISA, as:

- o the existing provisions with respect to the phase-in of plan amendments;
- o the existing guarantees for benefits in excess of actuarial equivalents under early retirement provisions, and
- o the existing priority allocation of plan assets to pensioners on the roll for 3 or more years.

Having established more appropriate guarantees, if plan termination experience for single employer plans begin to show an unfavorable trend, plan reorganization provisions could be considered -- along the lines of those contained in the 1980 legislation for multiemployer plans.

With respect to multiemployer plans, time is needed to examine the effect of the 1980 legislation.

## SPECIAL PROBLEMS OF SMALL PLANS

Small businesses have been disinclined to establish and maintain pension plans, perhaps because:

- o pension plans are considered as too-costly a commitment in view of the uncertainties facing future business prospects, and
- o rules for deducting pension plan contributions do not permit sufficient flexibility during the early years of a new plan.

Consideration should be given to the specific problems of small corporations, and in particular the role that more flexibility in tax deductible contributions might play. Higher levels of permissible tax deductible contributions during the early years of a plan, or during the early years following a major plan amendment, might encourage smaller corporations to accept the longer-range commitment by establishing greater flexibility over the longer term.

## STATE AND LOCAL AND FEDERAL PLANS

While the social, political and constitutional issues involved are not within the province of the actuarial profession, certain observations seem appropriate.

Pay-as-you-go funding for federal programs has been deemed appropriate by Congress. The result often has been benefit design unrelated to the realities of funding, a process many actuaries have questioned over the years.

At this point, we need not dwell on funding of federal plans; the financial crisis for Social Security, Civil Service and Military pensions is now obvious. The issue of funding is now clearly interwoven with the issue of plan design.

In the area of state and local governmental plans, the actuarial profession has encouraged conservative funding policies, particularly in the process of developing plan design.

The actuarial profession stands ready, as it always has, to accept the challenge of improved funding policies for those state and local plans where the need for such improvement is deemed desirable. In particular, realistic actuarial projections should be made with respect to any proposed changes in plan design.

#### CONCLUSION

Actuarial soundness in the funding of pension plans is at the heart of the actuarial profession. No other group or profession can bring equal expertise and experience to these issues.

Unfortunately, in the past, the actuarial profession has not been adequately consulted in the legislative and regulatory process.

By way of illustration, an amendment to Section 103(d) of ERISA is contained in the 1980 multiemployer plan legislation, and could affect the role of the actuary in both single employer and multiemployer plans. This legislation, enacted without consultation with the actuarial profession, could have profound implications with respect to the "professional" relationship of an actuary with his client.

Any serious consideration of changes in funding requirements, and disclosure requirements, should involve heavy actuarial input. The American Academy of Actuaries stands ready and willing to be of meaningful assistance.

Thank you for your attention.

November 17, 1980

Mr. C. Peter McColough, Chairman  
President's Commission on Pension Policy  
736 Jackson Place, N.W.  
Washington, D.C. 20006

Dear Mr. McColough:

Following Friday's hearings of the Commission, I had an opportunity to speak briefly with Mr. Donald J. Kirk of the FASB. As a result, I believe a brief clarification of my testimony could be helpful to the Commission.

I am not familiar with the operating rules of the Commission, but if this letter could be added to my testimony, I would certainly appreciate it.

The issue is that, with the increasing importance of pension funding in the United States, adequate and appropriate disclosure is essential. Actuaries believe "actuarial disclosure" must be the primary focus of such disclosure.

The situation today is that the Department of Labor has taken the responsibility for such disclosure in Schedule B to Form 5500, with a plea for assistance from the actuarial profession. The FASB has taken the responsibility for such disclosure within audited financial statements, again with a plea for assistance from the actuarial profession. Meantime, while actuaries have been required to become certified by ERISA, the responsibility for adequate disclosure has not been given to actuaries, and actuaries have no vehicle within which actuarial disclosure can be promulgated.

The result has been neither adequate nor appropriate actuarial disclosure.

I believe that adequate and appropriate disclosure will be developed only if a clear mandate is given to require that:

- o actuarial disclosure be the primary disclosure;
- o other disclosure, under regulation or generally accepted accounting principles, be clearly designated as supplemental disclosure;
- o the actuarial profession promulgate specific rules for such disclosure, with appropriate public exposure in the developmental process.

Our written testimony presents some preliminary indication as to how such disclosure might appear.

I believe a clear call for such a mandate by the Commission would be a major step in the public interest.

Sincerely,

George B. Swick  
Chairman of the Board  
GBS:VPH

cc Donald J. Kirk  
Stephen G. Kellison  
Thomas C. Woodruff

STATEMENT 1980-31

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. • SUITE 515 • WASHINGTON, D.C. 20006 • (202) 223-8196

Commissioner H. Pete Hudson  
Department of Insurance  
509 State Office Building  
Indianapolis, IN 46204

Dear Commissioner Hudson:

This is a follow-up letter to the one I sent you last August in which I indicated the existence of the American Academy of Actuaries Committee On Life Insurance and our willingness to be of assistance in your efforts on life insurance disclosure.

The November 5 release of your proposed draft of the Life Insurance Disclosure System regulation prompts this follow-up. Without in any way wishing to judge the contents of that November 5 mailing or to presume the future action your task force wishes to take, I wanted you to know the actuarial profession, through my committee on this subject, stands ready to attempt to be useful to the NAIC.

Should you not be inclined to adopt the regulation in December but should you also be inclined to give continued serious consideration to the subject of developing a revised regulation, we'd be happy to consider a reasonable request from the NAIC to give some actuarial assistance. Of course, there's been no opportunity, nor will there be, for us to give any actuarial analysis before the December NAIC meeting. And if the draft, upon exposure, doesn't seem to warrant actuarial analysis, we'd also understand.

It seems to me this subject, while it involves many actuarial formulas, assumptions and calculations, revolves primarily about various marketing, consumer and regulatory questions. It's not clear where within that bundle of thorny issues we could be particularly useful.

But if there is anything in which the NAIC believes the actuarial profession could be of service, I'd be pleased to hear from you.

Sincerely,

*Jack E. Wood / kww*

Jack E. Wood  
Chairman  
Committee on Life Insurance

November 21, 1980

kww  
cc Carolyn Cobb

**AMERICAN ACADEMY OF ACTUARIES**

1835 K STREET, N.W. • SUITE 515 • WASHINGTON, D.C. 20006 • (202) 223-8196

November 21, 1980

Commissioner H. Pete Hudson  
Chairman  
National Assoc. of Ins. Commissioners  
350 Bishops Way  
Brookfield, WI 53005

RE: November 24 Hearing on Draft Model Life Insurance Disclosure System  
Regulation

Dear Commissioner Hudson:

Unfortunately, other commitments make it impossible for me to attend the public hearing on November 24. As Chairman of the Committee on Dividend Principles and Practices of the American Academy of Actuaries, I would like to make several observations about this Draft in relation to the work of both the Academy of Actuaries and the Society of Actuaries. While I have many reservations about the Draft Regulation, I will confine these observations to those items directly relevant to our work.

Establishment of Professional Standards

On October 31, 1980, the Board of Directors of the American Academy of Actuaries adopted by resolution Recommendations Concerning Actuarial Principles and Practices in Connection with Dividend Determination and Illustration for Individual Life Insurance Issued by Mutual Companies. These Recommendations will be published in the near future. Copies of the draft of these Recommendations had been previously sent to the (C3) Life Insurance Disclosure Task Force. These Recommended Principles and Practices will be effective for dividends illustrated or payable in 1982.

The Recommendations provide for a reasonably broad range of practices with respect to the determination and illustration of dividends. However, other practices may be encompassed, as long as they are disclosed. It is important to note that these Recommendations are not necessarily applicable to participating policies issued by stock companies, and they are not applicable to policies with elements of non-guaranteed pricing, such as indeterminate premium policies. Therefore, while there may be some uniformity in practice with respect to mutual life insurance companies, there can be no assurance that such uniformity would extend beyond such policies. Without such uniformity, comparability of cost illustration, regardless of what index is used, is questionable.

Even where the Recommendations are applicable, reasonable comparability of cost illustration is open to question. Some of the reasons for this lack of comparability are as follows:

Commissioner Hudson

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1. The Recommendations provide for disclosure of practices which may effect comparability. However, such disclosure by the actuary is required only to the company at this time. The Academy Committee has published two examples of disclosure at the regulatory and public levels, which show how a company might be required to provide meaningful information with respect to comparability. However, there are no such requirements in existence at the present time, and the published examples referred to here need refinement. The Academy Committee is pursuing such refinement with the intent of publishing improved examples in the spring of 1981.
2. Allocation of investment income either by investment generation methods or by portfolio average methods can have a substantial impact upon dividend illustration in a manner which makes it very difficult to compare fairly resulting illustrated costs. Substantial attention to the explanation between the differences in illustration and in possible result would need to be considered in any cost comparison between products offered by companies using these two different methods of investment allocation.
3. The Recommendations provide that illustrated dividends "appropriately reflect the current financial results of the company and are related to paid dividends in an equitable, justifiable manner." Any deviations from this Recommendation would be disclosed to the company. However, there is no current regulation requiring public disclosure. Also, since dividend illustrations are supposed to reflect a company's current capacity to pay dividends, it is probable that the actual dividends paid in the future will differ from those illustrated.

The Use of the Word "Probable" in the Proposed Cost Index is Inappropriate.

Since it is probable that dividends actually paid will differ from those illustrated, it is inappropriate to describe any cost index which depends upon illustrated dividends or any other non-guaranteed element of pricing as "probable".

The Use of Arbitrary Experience Parameters in Conjunction with Illustrated Dividends to Determine a Cost Index is Inconsistent with the Basic Principles of Dividend Determination.

Recommendation 2 of the Principles and Practices identifies the Contribution Principle as generally accepted practice in determining dividends. The Contribution Principle provides that the basic goal of dividend determination is to distribute the aggregate divisible surplus among policies in the same proportion as the policies are considered to have contributed to divisible surplus. Since the arbitrary factors described in the Draft Regulation will generally bear no direct relationship to the experience factors used by any specific company to determine divisible surplus, the resulting cost index will be flawed and open to manipulation, whether the policies involved are similar or dissimilar.

Because there has been no time for either the Committee on Dividend Principles and Practices or the Board of Directors of the Academy to

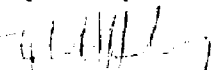
Commissioner Hudson

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consider these issues, no position can be taken by them with respect to the Draft Regulation. I personally oppose the Draft Regulation, since it does not adequately deal with the issues described above. I do, however, offer my personal help and that of the Academy Committee in offering suggestions in the future which might make this Regulation workable.

Respectfully submitted,

  
John H. Harding, Chairman  
AAA Committee on Dividend  
Principles and Practices

JHH:mw

cc: (C3) Life Insurance Disclosure Task Force Members  
AAA Committee on Dividend Principles and Practices  
Walter L. Grace  
Stephen G. Kellison ✓  
John K. Booth  
Anthony T. Spano

## STATEMENT 1980-32

November 30, 1980

American Academy of Actuaries  
Committee of Dividend Principles  
and Practices Report

Submitted by John H. Harding,  
Chairman

The report of the American Academy of Actuaries' Committee on Dividend Principles and Practices is as follows:

On October 31, 1980, the Board of Directors of the American Academy of Actuaries adopted the Recommendations Concerning Actuarial Principles and Practices in connection with Dividend Determination and Illustration for Individual Life Insurance Issued by Mutual Companies. These Recommendations will be effective for dividends payable in 1982, and they are basically the same as those distributed for comment in July of 1980. The Committee plans to publish and distribute the Recommendations by the end of the year.

The only major change was made with respect to the treatment of participating-stock life insurance companies. Previously, it was explicit that any stock life insurance company which met specific earnings limits with respect to its participating business could elect to comply. The earnings limitation is only one of many stock company issues for which Recommendations are still being developed. Therefore, the entire reference to stock companies has been deleted, for the time being. It is expected that stock life insurance companies can elect to comply with the adopted Recommendations.

As reported to you in June, the underlying theme of the Recommendations is disclosure of relevant practices to company management. The actuary responsible for the dividend scale will write a report to the company which outlines his methods and highlights any practices which are other than those provided for in the Recommendations or which are relevant to cost disclosure. Although disclosure at the corporate level is useful in itself, it is clear that we need provision for public disclosure. That disclosure should be required by the NAIC.

The Academy Committee published examples of disclosure that would be appropriate for Schedule M of the Annual Statement and for consumers. These were shown in exhibits B and C of its June report. Based upon comments we received, we believe that both exhibits can be improved. We hope to complete these improvements in the spring of 1981.

In summary, while the basic principles and practices have been adopted, we have a number of areas which need attention. Some of these, including the stock company issues and the checklist for actuaries can be worked on by the Academy of Actuaries and the Society of Actuaries. The other areas need attention by both the NAIC and the Academy of Actuaries. These are the critical areas of public disclosure. The Academy Committee, and I, personally, stand ready to assist you in developing such appropriate disclosure.

## STATEMENT 1980-33

Remarks Made by W. P. Cooper before the Meeting of the  
NAIC (B3) Subcommittee December 2, 1980

I am Warren P. Cooper, Senior Vice President and Actuary of the Insurance Company of North America, a company which has been and remains in favor of open competition rating for property and liability insurance.

However, today I wish to give you my thoughts in my role of Chairman of the Property and Liability Committee of the American Academy of Actuaries, though I must mention that the following remarks are not a true pronouncement of that Committee, since other members have not had a chance to review them.

Based on the November 7 draft of the bill and the proposed amendments made available yesterday, I have concern that they might jeopardize the ability of the members of our profession to function vigorously and without legal uncertainties. My concerns apply to those actuaries within the community of insurers, to consulting actuaries and to our peers working in advisory organizations, but they apply especially to the last.

Let me give you two specific reasons as examples.

First on page 22 of the draft advisory organizations are prohibited from recommending "loss components that include loss projections (other than loss trending)," while on page 23 such organizations are empowered to prepare "pure premium data, adjusted for loss development and loss trending." These statements are contradictory, it would seem, with regard to development factors.

Second, and more important, the draft allows advisory organizations just to issue pure premiums. Pure premiums are only meaningful when exposures are defined. In many important lines of insurance, such as bonding, inland marine and most property lines, among the last most notably fire (which rates underlie Section I of many multiple peril programs, this is not the case.

I suggest that the draft does not adequately address the actuarial and associated aspects of many commercial lines of property and liability insurance. I recommend that it receive further exposure, particularly given the important amendments proposed at this meeting.

WPC:hr

## STATEMENT 1980-34

December 16, 1980

The Honorable James H. Scheuer  
Congress of the United States  
House of Representatives  
Subcommittee on Consumer Protection and Finance  
of the Committee on Interstate and Foreign Commerce  
Room 3275 - House Office Building Annex No. 2  
Washington, D.C. 20515

Dear Congressman Scheuer:

I am writing in response to the fourth paragraph of your letter of September 29, 1980 to Mr. Charles Hewitt, Jr. relating to the testimony he and I presented before your Subcommittee on HR 100 on August 29, 1980, on behalf of the American Academy of Actuaries.

I believe your questions are based on the testimony that is recorded in lines 1140-1252 of the hearing transcript. As I indicated there, no data are available by race for the insured population. Thus, the implication in my testimony, that differences in mortality of black and white persons are less among insured persons than among the general population, is based on the facts (1) that insured mortality is better than that for the general population; and (2) that life insurance is not typically bought by individuals in the lower economic classes, who experience worse than average mortality. Thus, the currently existing mortality differences by race in the general population (see page 3 of my attached supplementary testimony) are probably smaller or eliminated in the insured population when the impact of underwriting and economic class is considered.

Evidence of the difference in mortality between the insured population and the general population is shown below:

The Honorable James H. Scheuer  
 December 16, 1980  
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Death Rates Per 1,000

<u>Age</u>	<u>Insured Population (1)</u>		<u>General Population (2)</u>	
	<u>Males</u>	<u>Females</u>	<u>White Males</u>	<u>White Females</u>
20	1.19	.59	1.90	.44
30	1.18	.66	1.70	.84
40	2.20	1.60	3.40	1.93
45	3.62	2.48	5.55	3.08
50	6.17	3.74	8.92	4.66
55	10.03	5.52	14.52	6.99
60	16.50	8.58	22.58	10.27
65	26.17	12.44	33.86	15.63
70	39.92	20.05	49.16	25.13
75	61.64	39.06	72.31	42.55

(1) 1965-1970 Ultimate Basic Tables, Society of Actuaries, 1973.

(2) U.S. Life Tables, 1969-1971 (Congressman Dingell's Testimony, Page 7).

In all but one instance, the insured population's mortality experience is better than even the most favorable experience (that for whites) for the general population.

Because there are no current mortality statistics by race for the insured population, any conclusions about mortality differences by race can only be inferred from other sources. One such source is data on mortality differences by social class, since private insurance coverage is typically less extensive among those in the lowest socio-economic classes than among those in the higher classes.

Relatively little data are available on mortality rates by class. However, the following figures are from a study of male mortality rates in the U.S. in 1950, published in 1963 by the Public Health Service, Department of Health, Education and Welfare.

(Class I in this study was the highest social class (it included professional workers); Class V, the lowest class, included laborers.)

Ratios of Actual to Expected Mortality

<u>Age</u>	<u>Social Class</u>				
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
	<u>Total Males</u>				
20-24	47%	74%	73%	91%	172%
25-34	50	71	77	99	214
35-44	66	74	88	103	205
45-54	85	85	96	102	166
55-64	<u>94</u>	<u>91</u>	<u>104</u>	<u>98</u>	<u>126</u>
All	82%	85%	97%	100%	153%

The Honorable James H. Scheuer  
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Ratios of Actual to Expected Mortality

(Cont'd.)

Social Class

	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
	<u>White Males</u>				
<u>Age</u>					
20-24	47%	72%	71%	88%	131%
25-34	50	69	75	91	146
35-44	66	72	86	97	149
45-54	85	83	95	99	130
55-64	<u>94</u>	<u>89</u>	<u>104</u>	<u>97</u>	<u>109</u>
All	83%	84%	96%	97%	120%

These data indicate a definite deterioration in mortality experience with lowered social class. Thus, I believe they support the statements in my testimony.

Thank you for the opportunity to respond to your questions. I will be happy to be of any further assistance.

Sincerely,

*Stephen S. Barrett*

DDB:sep  
 Attachment

MORTALITY RATES AND LIFE EXPECTANCY  
BY SEX AND BY RACE

Pricing in private life insurance and pension systems involves many components: mortality, rate of lapse of insurance or employee terminations and interest rates, to name a few. An actuary, when pricing such a product, makes assumptions as to future experience of all these pricing components. These assumptions are usually based on past experience, but frequently are adjusted to consider changes which are likely to occur in the future. For example, in pricing a life insurance policy today, an actuary might assume somewhat improved mortality over that currently experienced, to reflect advances in medical techniques or improved health resulting from increased emphasis on physical fitness.

Thus, pricing for life insurance or pensions rarely involves the use of published mortality tables directly; instead, it uses assumptions which attempt to project the future mortality experience of the group to be insured. As a result, discussion of published population data is largely academic, since they are not typically used directly in pricing.

However, since data from the U.S. Life Tables 1969-71 were introduced into the record of these hearings by Congressman Dingell, some further analysis of such data might be helpful to the Subcommittee.

The tables shown in Congressman Dingell's testimony show mortality rates at various ages. Using these rates, I have prepared the following table:

Ratio of Mortality Rates

Age	White Males to Black Males	White Females to White Males
At Birth	59%	77%
At Age 10	69	74
20	51	23
30	30	49
40	35	57
45	42	55
50	50	52
55	59	48
60	68	45
65	77	46
70	82	51
75	92	59

This presentation of the data indicates that, while it is true that the ratio of white to black male mortality rates is more favorable than that of white female to male mortality rates at the early ages, this is not the case at later ages when mortality rates are highest. Since the incidence of mortality at ages through 40 is very low, whatever the race or sex, any differences between these rates have a minimal impact when translated into the price of a product which will run for the whole of life.

Although the number referred to as "expectation of life" is not directly used in life insurance or pension pricing, it is more useful in an analysis of the impact of mortality at each age throughout life than is a series of individual mortality rates such as those presented by Congressman Dingell. Expectation of life is calculated in a manner which parallels the use of mortality in life insurance pricing, where the high mortality rates at older ages have more significance in the eventual premium rate than do the low mortality rates at the younger ages.

The following tables are drawn from the numbers in Appendix A, which are also from the National Center for Health Statistics but represent more recent information than that provided in Congressman Dingell's testimony:

Ratios of Expectation of Life at Birth

Year	All Other Races to All Whites	All Males to All Females
1900	69%	96%
1910	71	93
1920	83	98
1930	78	94
1940	83	93
1950	88	92
1960	90	91
1965	90	91
1970	91	90
1975	93	90
1977	93	90

The first column indicates that the wide disparity in life expectancy at birth between whites and other races in existence at the turn of the century has narrowed dramatically. The second column indicates the reverse - throughout this century, the difference between male and female life expectancies has become greater.

More detail, giving ratios of life expectancies at various ages for 1977, the most recent year available, are shown below:

Ratios of Expectation of Life at  
Various Ages; 1977

Age	All Other Races to All Whites	All Males to All Females
10	94%	89%
15	93	88
20	92	88
25	92	87
30	92	86
35	91	85
40	91	84
45	91	82
50	92	81
55	93	79
60	94	77
65	98	76
70	100	76
75	109	75
80	128	77
85 and over	140	80

The foregoing data indicate clearly that, at the present time, and for the general population, the differences in expectation of life at all ages between the sexes are substantially greater than those between the races.

Defense of separate pricing by sex does not mean that all actuaries are sexist, any more than defense of equal pricing for the races means that no actuaries are racist. We have had our consciousnesses raised over the last decades just like everyone else. Because of computers, we now have more data available to us than we used to, and thus are able to price with a great deal more sophistication than before. It is conceivable that actuaries might have found it necessary to question the legislation which mandated equal pricing by race, had better data been available to us at that time - not because of bigotry, but because of the insurance principle which demands that in a private system the price relate to the cost of the risk.

Similarly, had better data by sex been available, separate pricing for males and females might have been introduced earlier.

But this is in the past, and cannot be changed. Today it is a fact that differences in mortality by race have reduced to the point that they are not significant to the price of life insurance and pensions. Even if no laws were in existence today requiring equal pricing (in most states), it's unlikely that rate differentials would

exist for the simple economic reason that it would not be worth the effort to prepare and maintain dual rate scales reflecting only minor differences.

Today it is also a fact that significant mortality differentials by sex exist. If those differentials should diminish in the future, it will become illogical and uneconomic to reflect them in life insurance and pension pricing, and the premium differentials will disappear. Until that time, it would appear to be prudent to allow the observed differences to continue to be reflected in private, voluntary systems.

## Appendix A

## LIFE EXPECTANCY

The average length of a person's life in the United States has increased by more than 50% during this century.

Most of the improvement in life expectancy took place during the first half of the century. Little change has occurred since the mid-1950s. Between 1900 and 1955, life expectancy increased by 22.3 years, but since 1955, it has increased by only 3.6 years to 73.2 years in 1977.

But while this century's advances in medicine, public health and safety have added to people's lives, the benefits have not been distributed equally. By far the largest increase in life expectancy has been among the newborn as a result of sharp reductions in mortality among infants and young children. Increases in life expectancy have been progressively smaller at older ages, and smaller for men than for women at all ages.

The measure of life expectancy results from the calculation of the average number of years of life that remain to a group of persons now at the same age, based on a particular mortality table. The measurement refers to the entire group and cannot be taken to indicate how long a particular individual may expect to live.

The gain in life expectancy for women since the turn of the century has been greater than for men at nearly all ages. Female life expectancy at birth has increased by 28.8 years since 1900, while male life expectancy has increased by 23.5 years. The difference in the average length of life between men and women has increased. Life expectancy at age 40 was about 1.4 years longer for a woman than for a man at the turn of the century; it is now 6.4 years longer.

## Expectation of Life at Birth in the United States (Years)

Year	White			All Other			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1900	46.6	46.7	47.6	33.5	33.6	33.0	43.3	43.3	47.3
1910	45.6	52.0	50.3	33.8	37.5	35.8	43.4	51.8	50.0
1920	54.4	55.3	54.9	45.5	45.3	45.3	53.6	54.0	54.1
1930	58.7	63.8	61.4	47.3	49.2	48.1	58.1	61.8	59.7
1940	62.1	68.0	64.3	51.5	54.9	53.1	60.8	65.2	62.9
1950	66.6	72.2	69.1	59.1	62.9	60.8	65.5	71.1	68.2
1955	67.4	74.1	70.8	61.1	66.3	63.6	68.0	73.1	69.7
1961	67.8	74.5	71.0	61.9	67.0	64.4	67.0	73.8	70.2
1962	67.6	74.4	70.8	61.5	66.6	64.1	66.8	73.4	70.0
1963	67.3	74.4	70.8	60.8	66.3	63.6	66.1	72.4	69.9
1964	67.2	74.0	71.0	61.3	67.2	64.1	66.9	73.7	70.2
1965	67.6	74.7	71.0	61.1	67.4	64.1	66.6	73.7	70.2
1966	67.6	74.7	71.0	60.7	67.4	64.0	66.7	73.8	70.1
1967	67.8	75.1	71.3	61.1	68.2	64.8	67.0	74.2	70.5
1968	67.5	74.8	71.1	61.0	67.8	64.7	66.8	74.0	70.5
1969	67.6	75.1	71.3	60.8	68.4	64.5	66.8	74.3	70.4
1970	67.8	75.6	71.7	61.3	68.4	65.3	67.4	74.8	70.9
1971	68.3	75.8	72.0	61.6	69.7	65.6	67.4	75.0	71.1
1972	68.3	76.9	72.0	61.5	69.9	65.6	67.4	75.1	71.1
1973	68.4	76.1	72.2	61.9	70.1	65.9	67.6	75.3	71.3
1974	68.9	76.6	72.7	62.9	71.2	67.0	68.2	75.9	71.9
1975	69.4	77.2	73.2	63.8	72.3	67.9	68.7	76.5	72.5
1976	69.7	77.3	73.5	64.1	72.8	68.3	69.0	76.7	72.8
1977	70.0	77.7	73.8	64.6	73.1	68.8	69.3	77.1	73.2

Sources: National Center for Health Statistics, U.S. Department of Health, Education and Welfare, LIFE INSURANCE FACT BOOK 1979

In contrast, the difference in life expectancy between white and nonwhite Americans has been greatly reduced in this century. Generally, the gain for nonwhite males has exceeded that for white males at all ages. Nonwhite females showed the greatest gains at the younger and older ages. For white females, life expectancy improved most between the ages of about 45 and 65.

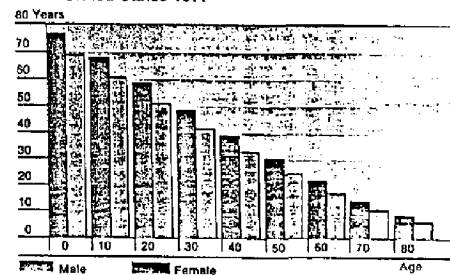
In 1977, the difference in life expectancy between white and nonwhite persons at birth was 4.6 years for females and 6.4 years for males, and this difference decreased with age.

## Expectation of Life at Various Ages in the United States 1977

Age	White			All Other			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0	70.0	77.7	73.8	64.6	73.1	68.8	69.3	77.1	73.2
1	70.0	77.6	73.8	65.2	72.6	69.4	69.4	77.1	73.2
5	68.2	73.7	69.9	61.8	69.8	65.0	65.6	73.2	69.4
10	61.3	68.8	65.0	58.8	65.0	60.0	60.6	68.0	64.5
15	56.5	63.9	60.2	51.8	60.3	55.0	55.9	63.4	59.5
20	51.9	59.1	55.4	47.2	55.2	51.2	51.3	58.6	54.8
25	47.3	54.3	50.8	42.8	50.5	46.8	46.6	53.8	50.3
30	42.7	49.4	46.1	38.9	45.8	42.2	42.2	49.0	45.0
35	38.0	44.6	41.3	34.3	41.2	37.7	37.6	44.2	40.9
40	33.4	39.8	36.6	30.2	35.7	32.4	32.1	39.5	36.3
45	29.0	35.2	32.1	26.3	32.4	29.5	28.7	34.3	31.0
50	24.7	30.7	27.7	22.7	29.3	25.5	24.5	30.4	27.4
55	20.8	26.8	23.8	19.4	24.6	21.9	20.9	26.2	23.0
60	17.1	22.3	19.8	16.5	21.0	18.7	17.0	22.1	19.7
65	13.9	18.4	15.3	14.0	17.6	15.0	13.9	18.0	16.3
70	11.1	14.8	13.1	11.4	14.9	13.1	11.4	14.7	13.1
75	8.6	11.3	10.3	8.7	12.3	11.2	8.7	11.6	10.4
80	6.8	8.8	8.0	6.7	11.3	10.2	6.9	9.0	8.2
85 and Over	5.3	6.9	6.2	7.3	9.6	8.7	5.5	6.9	6.4

Sources: National Center for Health Statistics, U.S. Department of Health, Education and Welfare

## Expectation of Life at Various Ages in the United States 1977



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September 29, 1980

Mr. Charles Hewitt, Jr.  
 American Academy of Actuaries  
 1835 K Street, N.W.  
 Suite 515  
 Washington, D. C. 20007

Dear Mr. Hewitt:

We appreciate the testimony which you and your colleagues, Mr. Daphne Bartlett and Mr. Stephen G. Kellison, presented before our Subcommittee on H.R. 100 on August 28, on behalf of the American Academy of Actuaries.

During your testimony, I asked you what would be the economic impact of enactment of H.R. 100. You responded that its results "cannot be made in an offhand statement here today, that a really careful study has to be made." You indicated such a study could be made "perhaps in six months," but that the American Academy of Actuaries couldn't do it. I suggested, however, that a study and report thereon by your Academy could render a significant public service.

Mr. Kellison stated that he would present the matter to the Academy's executive committee at its mid-September meeting and advise us "as to how such a study could be conducted in an actuarial sound manner," and indicated he would also present to his executive committee my request that the Academy, if possible, produce a study that would examine the problems and indicate what the solutions would be, assuming that the bill is enacted.

When you testified as to the difference in mortality of black and white persons, you stated that those differences are less among insured populations than among the general population. We would appreciate your providing us with (a) the basis for your assumption, and (b) copies of, or at least references to actual studies and data on this subject.

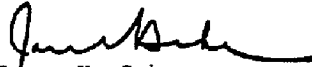
Mr. Charles Hewitt, Jr.  
Page 2  
September 29, 1980

We would appreciate your furnishing us with four copies of each of the requested items.

Thank you for your assistance.

With every warm best wish,

Yours,



James H. Scheuer  
Chairman

STATEMENT 1980-35

AMERICAN ACADEMY OF ACTUARIES

1835 K STREET, N.W. . SUITE 515 . WASHINGTON, D.C. 20006 . (202) 223-8196

December 30, 1980

Mr. Paul Rosenfeld  
Director, Actuarial Standards  
American Institute of Certified  
Public Accountants  
1211 Avenue of the Americas  
New York, New York 10036

Dear Mr. Rosenfeld:

The Subcommittee on Pension Accounting Matters of the American Academy of Actuaries has reviewed Exposure Draft 16 of the proposed International Accounting Standard on Accounting for Retirement Benefits in the Financial Statements of Employers.

In making its review of the proposed Standard, the Subcommittee noted that past service costs, including those arising from plan experience and changes in actuarial assumptions, could not be accounted for by means of charges over a specified number of years. Since past service costs frequently are amortized on this basis for funding purposes and prior service expense charges over a fixed period of time are permitted by APB Opinion No. 8, we recommend that the Standard be amended to permit any past service costs to be expensed by means of level annual charges over a fixed period not in excess of, say, 30 or 40 years.

Sincerely,



Douglas C. Borton  
Chairman, Pension Committee

cc: Mr. Stephen G. Kellison, Mrs. Mary H. Adams  
and Messrs. Norman A. Crowder III, Edwin F. Boynton,  
James F. A. Biggs, Yuang Chang, Edward H. Davis,  
Edward H. Friend, Donald E. Fuerst, Paul A. Gewirtz,  
Richard Q. Wendt, John Harry Williams