

# RECORD OF SOCIETY OF ACTUARIES 1980 VOL. 6 NO. 1

## RISK CLASSIFICATION IN THE 1980'S

*Moderator: DAVID R. JOHNSTON. Panelists: CHARLES C. BLACK,  
ROBERT E. HUNSTAD, BARTLEY MUNSON*

1. Basic Concepts
  - a. Definition and Reasons for Risk Classification
  - b. Availability vs. Pricing Class
  - c. Equality vs. Equity (Special Interest Groups)
  - d. Appropriate Factors for Classification. (Examples: Age, Sex, Race, Handicap, Occupation). Controllable vs. Non-controllable factors
  - e. Academy Work on Risk Classification
2. Regulation - Will the shift from "free choice" to limited mandated "availability" for some groups and some cases to "availability and price" for others continue?
3. Future Company Practice
  - a. Special Classes - Impact on "Standard" Class
    - i. Preferred Risk -- Voluntary vs. Non-voluntary factors
    - ii. Non-smoker -- is there insurance data available?
    - iii. Guaranteed Issue
    - iv. Non-medical -- Paramedical
    - v. Special Enrollment (mass marketing)
    - vi. Packaging of Individual Policies Within a Group (balancing substandard and preferred risk)
    - vii. Other
  - b. Substandard Practices
    - i. Reinsurance Shopping -- Equity (shoppers' position relative to directly underwritten substandard business).
    - ii. Must every company make an offer to every applicant? Kansas, Michigan
    - iii. Special Product/Pricing Changes?
  - c. Changing trends in underwriting practices including factors such as occupation, avocation, morals, etc.
  - d. Underwriting Information
    - i. State Regulations and impact of Privacy Legislation
    - ii. Changes in Inspection Reports, MIB, etc.
    - iii. Medical Exams and Alternatives
    - iv. Other

MR. DAVID R. JOHNSTON: The topic of this panel - Risk Classification - is especially suited to the futuristic nature of this meeting. I am now going to display my entire knowledge of Risk Classification by addressing an aspect of topic 3(a)(ii), concerning non-smokers. On the audience's right is the non-smoking section; on the audience's left is the smoking section. You may think that is a fairly superficial knowledge of a subject, even for a moderator, but I am assured that important aspects of classification are as follows:

- classes must be mutually exclusive
- stability over the period of concern
- is available to all participants
- absence of ambiguity

Segregation of this room meets all these theoretical tests.

There has been much discussion of the subject in very recent years as a result of a number of forces. Many of these forces have been regulatory or legal in nature. Many members of the Society have been involved in the discussion and development of the subject.

The 1980's will see considerable change in attitudes toward Risk Classification, as more court decisions are made and laws changed. Also the availability of information to make classifications will be reduced due to privacy legislation and the rising costs of obtaining information. Obviously, the trend of these factors would be influenced differently by the different economic and regulatory policies and social trends in the three scenarios discussed this morning.

We have an especially expert panel today to discuss risk classification and its likely direction in the 80's.

Bart Munson is Chairman of the Academy of Actuaries' committee on Risk Classification. That committee produced an exposure draft of a statement of principles last fall. There may be a final draft later this year. Bart will be giving us his thoughts on the basic concepts of Risk Classification. He will also have some comments on current developments and consider how the effects of the scenarios would impact on the Academy's statement of principles.

We also have two people, Bob Hunstad and Charlie Black, who are very experienced in the regulatory scene in the United States and Canada respectively, and they will speak on that aspect of the subject as well as commenting on the direction that they think we are headed in our future practices.

I would like to now call on Bart for his remarks.

MR. BARTLEY L. MUNSON: Perhaps the most useful way to approach my portion of the first half of this session is to review the Statement of Principles on Risk Classification which our Academy Committee exposed last fall to all Academy Members and which we are currently revising for, we hope, approval for release by the Academy Board this June. This statement does, of course, relate well to the "basic concepts", as the first item in our program is headed.

We are considering here individual life and annuity business - individual as opposed to group but more importantly, for purpose of focusing on Risk Classification, on private insurance, not social or governmental insurance programs. Our program even asks us to consider what the effect of the 1980's will be on, and what our strategies should be for, a life insurance company. This is an important and proper ground rule to keep in mind in this Risk Classification session, for the principles are very different for private, as opposed to governmental, insurance.

Further, we are focusing on life insurance and annuities. The principles of Risk Classification are applicable to all insurance products, be they auto, health, life, pension or property (to use the five product line breakdown for which we have subcommittees in our Academy Committee's approach to this subject). They apply with varying weights, and they are under attack or pressure in different ways. Certainly the characteristics upon which classification systems are based vary among each of these product lines. We will try to focus on life insurance and annuities, while learning from the challenges to these principles as we see them unfolding, sometimes more rapidly and in more advanced form, in the other lines of insurance.

And to further develop our common base of understanding for our discussion, we might consider for a moment what we mean by risk classification and by insurance. As we struggle with the issues related to this subject, and attempt to express ourselves to non-actuaries and to those publics we service beyond the public of the insurance companies who employ us, we find it difficult to communicate effectively. At least part of that difficulty is due to our own lack of intentional, thoughtful consideration of terms we have only implicitly assumed we knew the meaning of, terms which those other publics have a vague notion of, at best.

At the risk of being too fundamental, we should observe that insurance is a system for dealing with the economic uncertainty (or "risk") associated with chance occurrences. It does so by exchanging the uncertainty of the occurrence, the timing, and the financial magnitude of a particular event for a predetermined price (or "premium").

To establish a reasonable price for insuring an uncertain event, estimates must be made of the probabilities associated with the occurrence and magnitude of an insured event. These estimates are normally made through the use of past experience, coupled with projections of future trends, for groups of individuals with similar risk characteristics. Risk Classification refers to:

- . the decision whether or not applicants for insurance pose insurable (that is, acceptable) risks, and
- . the placement of insurable individuals into classes, which are made up of those with "similar risk characteristics".

The difficulty in risk classification, and the cause of pressures experienced today by the systems we've long been accustomed to that are under attack, and the disturbing implications of the three scenarios we heard about this morning, is the question of what are "similar risk characteristics" and how are these to be determined in fairness to the individuals insured?

Fundamental to any workable private, voluntary insurance system is the application of averages to individuals and the classification of risks to determine these averages. The Academy's Committee on Risk Classification believes that to achieve and maintain financially viable insurance systems, those who design, manage and regulate risk classification processes must look for three major results from the Risk Classification process:

1. The process must be fair. That is, equity among those insured must be achieved.
2. The process must protect the insurance system's financial soundness. That is, it must control adverse selection.
3. The process must permit economic incentives to operate advantageously and to encourage widespread availability of coverage.

Striking the appropriate balance among these three major results is not always easy; but they are clearly in the public's best interest; and they are not incompatible.

The considerations involved in the design of a successful classification system are many and varied. We feel any sound Risk Classification system must meet these design considerations:

1. The system should reflect expected cost differences, permitting the costs of insurance to be allocated in accordance with sound economic, actuarial and business principles.
2. The system should discriminate between individuals on the basis of cost related factors. The system should not discriminate against any individual or group of individuals through the use of prejudicial factors irrelevant to expected cost.
3. The system must be applied objectively.
4. The system must be practical. Classifications should be inexpensively but accurately determinable.
5. The system must be socially acceptable.
6. The system must be recognized as only a part of a broader insurance system. Risk Classification does not operate in a vacuum; it's part of a much bigger system.

Classification systems are generally based, whenever possible, on statistical observations of past experience, modified by informed judgment as to future trends. Thus, certain considerations of a statistical nature are involved. The following three characteristics are considered. Since they conflict with each other to a certain extent, they are not perfectly achievable but rather a proper balance is sought.

1. Homogeneity means that the expected costs for each individual within a class should be reasonably similar. That is, the potential for loss is approximately the same for each individual in the same class.

2. Credibility means that the experience in each class should be of sufficient volume to have reliably predictive value. It should be credible. Being able to predict the loss experience for a particular class of risks is not the same as predicting the experience for an individual risk in the class. It is both impossible and unnecessary to know or measure risk for a specific individual. This point is quite often forgotten. If the occurrence of an event and its attendant cost were known in advance, there would be no economic uncertainty involved--and no need for insurance.
3. Differentiation means that the expected costs for insureds in a given class, taken as a class, should be measurably different from those costs for another class. This does not preclude the actual claim experience of some individuals in one class from overlapping with the actual claim experience of some individuals in another class. It is both an anticipated and, indeed, statistically inevitable ramification of any sound Risk Classification system that there be some overlap.

The current debate on Risk Classification frequently deals with two considerations which, we believe, are not necessary to the validation of a Risk Classification system. Others believe they are necessary components. Probably all would be more comfortable if they are present. They are the considerations of causality and controllability.

1. The existence of a causal link between a certain factor in a Risk Classification system and the happening of the event insured against is understandably desirable. But a system need not have a demonstrable causal relationship between the factors and the anticipated costs. To illustrate, age by itself does not cause death. However, it is very clear age has a very reasonable relationship to loss potential under life insurance or annuities. Thus the system reflects an observed positive correlation between age and different cost levels.
2. Secondly, the ability of an individual to control the variables which are used for classifying the risks attendant to that individual is not a necessary element for a proper Risk Classification system. But it certainly has social and political appeal. The argument goes that one should not be penalized in the price he or she pays for insurance due to factors over which he or she has no control--such as one's sex. Or perhaps one's age. (I suppose it could also go that one should not be favored either, though it is never made that way!)

Neither causality nor controllability should be applied in an absolute way to disqualify a classification system or a particular variable within it.

Those are some highlight comments of what we have in our Statement of Principles and which will probably remain in that Statement when the Board gives final approval.

MR. JOHNSTON: Thank-you Bart. I would ask that the audience hold any questions or comments until the end of the panelists' presentations especially since each panelist will be up a couple of times. Next I would

like to have Bob Hunstad and Charlie Black comment on the current regulatory scene. Bob has worked very hard, particularly in Minnesota, on various Risk Classification issues and Charlie has been active in Canada in the Human Rights area for some time.

MR. ROBERT E. HUNSTAD: One of the suggestions given to participants of this meeting was to reflect some basic concepts of futurism. One of these concepts is to first understand today's reality. My role this afternoon is to give my perception of that reality and to see how that should lead us, as actuaries, to current and future involvement in the Risk Classification issue.

Over the last several months, we have all heard a number of summaries of what has happened during the 1970's from television commentators, newspapers, and from various other sources. Also our keynote speaker, Jim O'Toole, made some remarks concerning the 1970's. Usually, the speaker or writer is attempting to synthesize around a theme that represents what happened in that decade and to transfer those experiences into predictions of what would happen in the 1980's.

If we look to the world in general, most would conclude that the decade just ended was a tumultuous time when many traditional values and relationships were severely questioned. And this was not unique to the 1970's; it began well back in the 1960's. This has been true in foreign relations, domestic policy, and all levels of business activity. The prognostication for the 80's is that this questioning is likely to continue--and to cause material changes in government as well as business.

In many instances, the types of questions asked and challenges issued elicited what might be characterized as inept response from those in authority: "We have always done it that way." "You do not understand our business." "They (whoever "they" are) cannot do this to us."

This has also been the case with the risk selection process. Severe challenges have been issued to traditional classification methods, serious questions raised about how classes are defined, and public policy issues raised to threaten any rational differentiation of insurance risks.

Some of our responses have been less than appropriate: "We cannot possibly accept that risk at standard rates." Many of our responses have been appropriate. The work that my fellow panelists describe represents more satisfactory answers--answers that seek to produce a result that will preserve what's best in the Risk Classification system, yet still provide satisfaction to those who would have us change.

My reason for being here relates to a couple of pieces of legislation that we have experienced in Minnesota. In 1975, the Minnesota legislature passed one of the first laws that dealt harshly with Risk Classification and significantly altered the way in which company Risk Classification practices must be viewed. This bill required that we not rate or reject any applicant who had a disability unless medical studies or actuarial projections indicated that action was justified. In 1978, another bill was proposed that would have required the same rates on all coverages for males and females. That bill did not pass.

The exposure that I have had in dealing with existing law and the legislative process leads me to make some general statements about the people who were advocating changes like this:

1. By and large they perceive something wrong or unfair in current practices.
2. They see no (or only limited) capability for voluntary "reform" on the part of the industry.
3. Their outlook is for the parties that they feel have been wronged--not necessarily for the general public or for the entire body of policyholders. To this extent, they represent special interests and will look towards the right result for those special interests rather than a result which is fair to all insureds or to all potential insureds.
4. They quite often do have statistical evidence in defense of their positions.
5. Their view of "good public policy" may not be the same as ours. This perhaps is the most difficult issue.

In dealing with these issues and with these individuals, it is important that we maintain an open mind towards the subject and a willingness to take the time to explain what our practices are and what those practices are designed to accomplish. In doing that, there are several things that we should keep in mind:

1. There are some legitimate complaints that should be solved by a change in practice. Perhaps there really is something wrong where there is currently only a perception of something being wrong. If we go back in history, there was a period in time when the insurance industry did not make coverages available to members of the female sex, for example, in the same measure as they were available to males. Disability income is perhaps a classic example. Some of our practices were changed because of the criticisms brought to bear on us--and rightfully so.
2. There may be a good number of complaints or positions however that are not based on fact. I use as an example, the introduction of the Dingell bill into the Senate by Senator Hatfield. In the questions and answers relating to his proposal, the following appears:

"If categorization by sex is not permitted in insurance policies, what other factors can be used?"

"Indeed, grouping by sex is a very convenient method of categorizing risks. That is why it is commonly used, particularly in life insurance. However, the industry has virtually ignored other, more accurate factors known to affect life expectancy, such as physical condition, family health history, occupation, obesity, leisure time activities, and habits such as smoking."

We have a basic educational problem here. I might agree with the Senator relative to smoking habits which has only recently become

a factor in Risk Classification. However, I would take strenuous objection to his inclusion of the other factors which have always been a vital part of our selection process.

3. There is a serious challenge to actuarial science in the use of an interpretation of statistics. The challenge is a difficult one, but one which can be met. I was amazed when we started to look into other sources of mortality statistics in connection with the Minnesota disability law to find a vast number of resource documents (i.e. clinical studies) that are available through the medical profession, both in the United States and Canada.
4. Another thing to keep in mind is the logical consequences of certain types of changes. For example, if public policy does at some future point dictate that a "noncontrollable" factor such as sex should not be a factor in Risk Classification, then that logic would seem to apply to other noncontrollable factors as well--a factor like age. I have some difficulty in concluding that the logic for having a public policy position that rates should not vary by sex has any fundamental difference with a similar policy that would call for no variation in rates because of age.
5. There is a related point dealing with the impact of certain regulations or legislation on the remaining body of policyholders. By definition, those who do not achieve an advantage because of a change in classification may have a disadvantage. For example, if automobile rates cannot vary by age and sex, young male drivers will benefit but all others will likely have an increase in rates. Claim rates will not decrease just because premiums go down.

While one of the scenarios presented as part of our background for this meeting may indicate that regulatory activities could diminish in this area, it is my strong feeling that we will encounter many more proposals in the future which will significantly threaten the Risk Classification process. We as actuaries need to continue our involvement along with underwriters, doctors, and others within the insurance industry to assure that there is good communication on these subjects.

MR. CHARLES C. BLACK: This afternoon it is my intention to discuss the subject of Risk Classification primarily from a Canadian viewpoint. That intention is blatantly discriminatory on the basis of national origin, but I hope you will agree that such discrimination is justified since my limited knowledge of the subject relates mainly to Canada.

I believe that many of the same trends are evident in both countries. The social structures in the two countries are essentially similar and there is plentiful communication across the border; thus it is not surprising that similar shifts in attitudes are occurring. There are some factors, however, which result in differences in timing, focus, or intensity of the winds of change. For example, Canada did not experience the same civil rights movement in the early 1960's. On the other hand, the concept of "Insurance as a Right or an Entitlement" is very highly developed in Canada, as evidenced by our national hospital and medical care programs and by government automobile insurance programs in three provinces.

In any event, the latter part of the 1960's and the 1970's has brought increasing criticism of the Risk Classification system, accompanied by consumer protection and anti-discrimination legislation which impacts or more importantly has the potential to impact on our methods of Risk Classification. Canada's federal system gives the provinces the primary legislative power over such matters as consumer protection, working conditions, etc., but there is some overlap between the federal and provincial areas of authority.

In the consumer protection area, several provinces passed legislation early in the 1970's covering the collection and use of personal information in inspection reports. This legislation appears similar to the U.S. fair credit reporting legislation and seems to be working smoothly. Most insurers had already altered their practices to meet or surpass the regulations and thus this legislation has had little direct impact. However, the collection and use of personal information remains a very sensitive issue. For some months now, a commission headed by Justice Krever has been studying the "privacy" area in Ontario. This commission has obtained extensive publicity whenever they release a few "horror" stories about inspection companies' practices with regard to auto accidents and casualty insurance or about other alleged intrusions by insurers on an individual's right to privacy. Two weeks ago the Canadian Life Insurance Association and the Canadian Association of Accident and Sickness Insurers released a set of guidelines regarding privacy. These guidelines will have little direct impact on the practices of most insurers who are already operating within the guidelines. However, this initiative has attracted substantial media interest, and the guidelines have already been tabled in the Ontario legislature along with a strong comment from the responsible Cabinet Minister that adherence to these guidelines may become a condition of licencing for insurers. The speed and depth of the reaction to an event which has little direct impact indicates how sensitive this issue is and how much political content it seems to have. As well as requiring great care in the handling of personal information, the continuing emphasis on the right to privacy, combined with increasingly individualistic lifestyles and reduced sense of neighbourhood, undoubtedly reduces the availability of such information for the Risk Classification process.

My personal involvement with Risk Classification has been in the anti-discrimination area, which is commonly referred to in Canada as "Human Rights", serving on committees of the two industry associations for several years. All Canadian jurisdictions now have Human Rights legislation in effect, prohibiting discrimination on bases such as race, religion, nationality, sex, age, marital status and, more recently physical and mental handicap. This legislation has evolved rapidly in recent years and while there has been little impact on Risk Classification under individual insurance to date, the potential impact is very great.

This legislation focused initially on equal access to employment, housing, etc. and some of the legislation included a total exemption for pension and insurance plans. As the legislation has been refined, however, the focus has shifted to other specific areas and such broad exemptions have been narrowed or removed. Considerable attention has been given to employee benefit plans, including such issues as equal monthly payments to males and females under money purchase pension plans, handling of maternity absences under disability income plans, etc. Several jurisdictions

have issued very specific regulations or guidelines for employee benefit plans.

Human Rights legislation has not focused specifically on individual insurance yet, though the sweep of the legislation in some jurisdictions is so broad that it could be applied to individual insurance or any other "service offered to the public". Indeed the broad wording of the legislation can be a serious problem. In my opening comments a few minutes ago I belaboured my national origin in an attempt to indicate that there are situations where discrimination is desirable, even essential. Unfortunately our legislators have not always been as careful.

For example, legislation was passed in the province of Alberta several years ago which prohibited discrimination on the basis of sex in services offered to the public as well as in housing, employment, etc. The term "discrimination" stands unadorned by such adjectives as "unfair", "unjustified" or "capricious". Government officials readily admitted that the wording was unnecessarily broad but declined to issue regulations or guidelines to clarify the intent. Shortly thereafter an insurance agent sold an annual premium deferred annuity to Ms. Peggy Ann Cairns. Subsequently Ms. Cairns lodged a complaint with the Human Rights commission, claiming that this contract was discriminatory since it would provide fewer dollars per month on maturity (some thirty years hence) than would a contract for the same premium issued to a male of the same age. A Board of Inquiry was set up to hear the complaint, together with several other complaints from young male drivers about their auto insurance rates. Several actuaries participated in the hearing and presented extensive statistical background for the classification that had been used. The Board ruled, however that

1. the contract was a service offered to the public,
2. the law prohibited "discrimination" in such services on the basis of sex,
3. the different monthly benefits on the basis of sex represented discrimination,
4. the justification for the different benefits was irrelevant under the terms of the law, and thus the deferred annuity contract violated the Human Rights Act.

This portion of the ruling has received much more publicity than two other parts of the ruling which indicated that the Board had reservations about the law they were dealing with. They ruled that no damages should be awarded and urged that responsible officials examine the law to determine if this situation was indeed intended to be prohibited by this law. The Canadian Life Insurance Association has recommended that the Alberta Insurance Act be amended to clarify what Risk Classification is permissible, and we are hopeful that such clarification will be forthcoming.

Another complaint is being processed under the British Columbia Human Rights Code which prohibits any denial of service or discrimination against any individual unless reasonable cause exists for such denial or discrimination. In this instance a disability income benefit was denied

on the basis of previous counselling, and the complaint focused on the "reasonable cause" wording. Again, efforts to work with the officials to set some guidelines with respect to Risk Classification in insurance have not been successful to date.

I should also mention that we have been successful in working with officials in Ontario, Manitoba, New Brunswick and several other jurisdictions to develop regulations or guidelines which clarify how various aspects of employee benefit plans should be treated under Human Rights legislation.

This area of communicating to government officials and to the public some of the complexities of the insurance process and the need for Risk Classification is a very difficult one - also a very vital one. This seems to be one area where appearances are at least as important as facts, and we must not only act properly, but we must appear to act properly, as well.

I hope that these comments provide an overview of our current regulatory environment. As indicated, it is a very dynamic area and, while there has been little direct focus on individual insurance yet, the potential impact is very great, as is the need to monitor regulatory developments and to communicate effectively with government officials and various publics.

MR. JOHNSTON: Thank-you very much Charlie. You made some very interesting comments which help underline how political and newsworthy these developments are. You mentioned the Privacy Guidelines drawn up by the Canadian Life Insurance Association which are essentially a form of self-regulation. Just recently it was stated in the media that the Minister responsible for this area produced these guidelines so that it appears he is jumping on the bandwagon as well. There have been other events in the news recently which relate to privacy and these evidence the current interest in this area.

We have covered the basic concepts and have heard comments on the regulatory scene. Bart will now make some comments on current developments as they relate to his Academy Committee and will use them as a jumping off spot to start to look at the scenarios.

MR. MUNSON: For a moment, we can apply some of these theoretical and traditional considerations to what we see happening around us currently. Though not a part, specifically, of the three scenarios, we must realize that the 1980's are here already. I will use only two developments to illustrate. Probably others will come out in our discussion.

Perhaps most dramatic and soon to be hotly debated is the development in the U.S. Congress. On January 15, 1979, Representative Dingell of Michigan introduced HR100, and on August 1, 1979, he reintroduced it with 61 additional sponsors. It is entitled the "Nondiscrimination in Insurance Act of 1979". Less than a month ago, on March 25, Senator Hatfield, joined by four other Senators, introduced a parallel bill, S2477, in the Senate. These bills would prohibit the discrimination in availability of coverages or in the premiums charged for them or in the benefits paid, on the basis of an individual's race, color, religion, sex or national origin. This prohibition applies to all forms of insurance, (except the Social Security System) provided by any type of insurer, and to business contracted for after the effective date of the law plus busi-

ness already in force. We have verified that Congress does have the constitutional power to enact the retroactive feature. Clearly the prohibition of recognizing sex is the real issue and this is a pervasive and serious issue.

How does this square with the basic concepts we have just covered? Well, it would put a new interpretation on what is meant by "fair". There would be a redistribution of costs between the sexes, and in addition to the substantial expenses involved in somehow adjusting both the present business and future business to the sex-less basis, antiselection by sex due to different blends in the insured populations among insurers could be prevalent. The system would not reflect expected cost differences between the sexes. It would not discriminate between individuals on the basis of known cost related factors. Homogeneity of the data in a class, with both males and females, would be considerably reduced; the credibility or predictive value of the classes' statistics would exist only if the male/female blend remained stable. Causality would be reduced, for the fact that a person is a male seems clearly to cause that person to be in a group, by his maleness, which will not live as long as the female group of class.

The apparent political desire to relate systems to controllability is met, for one really does not control the sex he or she is born with--or even the sex one retains through life. And the need to have a classification system which is socially acceptable presumably is met if the law of the land, through the Representatives and Senators elected through our democratic process, defines the system we must have.

Predictably, people will be speaking on this issue when hearings are held in Congress. There will be speakers on both sides. Our Academy Committee plans to testify.

Senator Hatfield's letter to other senators which was a tool to muster support for the bill he introduced contained the following: "This legislation has been endorsed as a matter of high priority by the respected leadership conference on Civil Rights which represents approximately 150 organizations committed to further equal justice under the law. I hope you will join me in trying to achieve equal justice under the law." Our Academy committee does plan to testify and will speak on behalf of the profession, not for the industries affected by the bills. It is also interesting to note that testimony from the actuarial profession is highly regarded by many of the legislators and it behooves us to meet this demanding challenge and put together a formidable presentation.

In another development which relates to the abandonment of sex distinctions, we as an Academy released a statement on April 2 which was prompted at least in part by the announcement by TIAA/CREF that they are abandoning sex distinctions in their retirement benefits. Our statement was headlined "American Academy of Actuaries Risk Classification Committee Favors Freedom to Differentiate Sexes In Risk Classification", and it included these remarks:

"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...it will begin using merged gender, or 'unisex', tables for the determination of benefits purchased from accumulated future contributions under its annuity contracts...

"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... Because of the longer life span of the average female compared to the average male, the cost of a life-time 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."

Clearly, the abandonment of sex distinction is the greatest challenge to the current Risk Classification system for life insurance and annuities in the 1980's. And as we look at our three scenarios, we might ask how recent developments, of which I have briefly described only two, would fare. For each scenario, let us look at its reasonableness, then its implications for Risk Classification.

- A. The High Inflation scenario offers an environment which will further these recent changes or pressures, whether or not we believe all of its described attributes will materialize. Much seems quite plausible.

The following three points seem particularly relevant to risk classification under the high inflation scenario:

1. Wage indexing will cause a direct pressure on insurance rate-making. For example, in instances where an actuarially justified rate increase is more than the permitted wage indexing, it will be politically difficult to have such rates approved. This, of course, would apply to products other than life and annuities, but it is worth noting that Senator Hatfield, in introducing his bill last month, identified inflation as another reason why pricing distinguished by sex was particularly offensive and harmful to consumers.

2. The absence of class action barriers will increase consumer suits over insurance Risk Classification activities. The actuarial profession should prepare itself for an in-depth defense in justification of all such activities and should begin grooming individuals who can articulate that justification to nonactuarial audiences. This advice is supported by the assumption of an increased communications network on behalf of consumerists.
3. The impact of consumerists on publicly held corporations has obvious significance for insurance Risk Classification.

B. The Incentive and Investment scenario is not easily accepted as plausible. It seems generally too large a change in direction in too short a time. The Risk Classification implications are not as clear, perhaps because they do not seem as dramatic. Competition in all areas of insurance will increase tremendously. Life insurers and actuaries who work for such insurers should be prepared for a continuing shift to term insurance, away from whole life, a trend that is inevitable with increasing competition. (That is predictable under the High Inflation scenario as well, of course.) Such a shift has obvious implications for the industry, but not so much Risk Classification as other facets of the business.

C. The Social Democracy scenario raises some very interesting Risk Classification implications.

There are several Risk Classification implications, none too pleasant:

1. If permanent wage and price controls are enacted, the same political considerations for ratemaking will be in effect as discussed under the High Inflation scenario. Pressures on ratemaking in other lines can affect Risk Classification for life insurance and annuities (witness Senator Hatfield's comments).
2. The existence of a consumer agency will also have sweeping impact on Risk Classification. Actuarial assumptions, data collection and trending factors will receive strong challenges.
3. Obviously pension portability changes Risk Classification considerations for the actuary.
4. Importantly, a strong labor party will provide increased challenges for the actuarial profession's Risk Classification activities. Such a party will urge a "socialism" bias in the ratemaking. That, clearly, is what we are hearing today as sex distinctions are being criticized.
5. Finally, with regard to this last scenario, I would confess that my attention was riveted by the reference to President Howard Metzenbaum. He is one of the four co-sponsors to Senator Hatfield's "Nondiscrimination In Insurance Act"; and he has just introduced his own bill after a year's exposure to what he had tentatively labelled his "Insurance Competition Improvement Act of 1979", which was full of direct challenges to the current Risk Classification systems.

MR. HUNSTAD: I would like to now introduce the topic of future company practice. There are a number of items on our agenda that can be discussed, but let me start with an opinion and we will hear more from the other panelists and from you.

Our present direction now is bringing us down two different roads. That first road aims towards the higher average size policies, the more affluent clientele. We have more competition in this area, and we see a greater and greater proliferation of classifications. Nonsmoking discounts are becoming quite common, and it seems quite possible that we will have other underwriting criteria used in the future to identify superstandard classes. Some companies have combined build with the nonsmoker discount, and others have developed a class of risks based on participation in physical fitness programs. Future classes may involve marathon runners, nondrinkers, etc.

The other road involves methods which are directed more to the mass market and look to streamline the selection process and thus tend to develop larger groups and less classification. Insurance sold through department stores, credit cards, banks, and payroll deduction offer the opportunity for streamlined underwriting and broad classification bases to minimize the overhead costs while conceding some additional mortality costs. Who knows, we may even have a group term life plan for Society of Actuaries members some day. Here, the current and future regulations requiring acceptance of certain types of risk will perhaps broaden the standard class even further.

Will these two systems exist side by side? Perhaps so, but perhaps we'll also see the day when some consumer publication or television news program does an exposé on the high price of insurance purchased through the mass market media. Of course, the contrast will be the low rates available to the superpreferred risk who buys his policy through an agent. If that sounds like the situation we have now with criticism of industrial insurance, that may be the right comparison.

I am sure others will have different opinions on the future. I am not sure I am convinced of mine. I encourage you to speak up during our audience participation time.

MR. BLACK: Bart and Bob have covered these areas very well, and I can endorse almost all their comments. Before we open the topic for discussion by the audience, however, I might make two predictions about future developments in the Risk Classification issue.

Bart mentioned that resolution of the controversy surrounding classification on the basis of sex would be the most important issue in this area in the 1980's. I wonder. As I mentioned briefly, physical and mental handicap has begun to appear as a prohibited basis of discrimination in some Canadian jurisdictions. So far there has been a complete exemption for insurance plans, but we are now seeing efforts to set certain guidelines for employee benefits. For example, new federal regulations would require coverage of a handicapped employee under an LTD plan if there are more than 25 employees, subject to a pre-existing exclusion which can only extend for one year backward or forward from the date of eligibility. Will similar limitations emerge on our right to classify risks under in-

dividual insurance on the basis of physical or mental handicap? I find this possibility frightening and feel it could far overshadow the issue of sex-based classification. The definition of "handicap" is so broad that it includes progressive or terminal illnesses as well as stable situations and minor conditions such as the need for eye glasses. The variation of risk and the potential anti-selection in this area are much greater than under the sex-based classification issue, and our statistical information is much less complete in specific situations.

The issue of availability is a very important one and that there will be strong pressures to find a way to provide at least basic coverage for everyone, in effect to find a way to insure the uninsurable. Because of concern about expansion of government sponsored benefits in some provinces, the Canadian Association of Accident and Sickness Insurers has developed the framework of such a plan. It provides for the pooling of certain risks among all carriers and requires further development before it could be introduced (including legislation to sanction the industrywide pool). However, such initiatives may be necessary to meet the pressures for expanded availability in the 1980's.

One thing can be said with certainty - the Risk Classification issue will continue to be an exciting and challenging one for actuaries throughout this new decade.

MR. MUNSON: I would not disagree with Charlie's comment that the mental and physical handicap issue may be more important than the sex discrimination issue in the future because after all none of us can predict the future. I would only say that while we do have more statistics on the male/female classification they may not be worth anything. Our experience thus far has been to see the issue decided on social and political grounds with little if any regard for the statistics. Also, in measuring which issue will be more critical we should recognize that someone's sex is obvious but the same is not true for handicaps.

MR. DANIEL F. CASE: Bart Munson's definition of insurance as an exchange of the uncertainty of the risk for a predetermined premium could be modified, perhaps, to refer to an exchange of the uncertainty of the risk for the certainty of the premium. That, in turn, could give rise to a maxim: "Nothing is certain but death and insurance premiums."

Bart said that the number of risks in a class must be large enough to be credible. I do not quarrel with that, provided we are talking about the classes which are formed in order to analyze experience data. When it comes to classifying the risks for rating purposes, the classes can be made as small as the insurer chooses. Even if most of the insurer's rating classes (i.e., age-sex-substandard-class cells) have no more than a handful of individuals in them, the policyowners can still all be sharing the risk and can be doing so in an equitable manner. I mention this only because I have seen statements to the effect that grouping is at the heart of insurance. That is not so, except to the extent that grouping must be done in order to analyze data. Even there, of course, it is not always possible to obtain groups that are credibly large.

MR. MUNSON: Dan has been following this topic for some time in his role

as staff person of the American Council of Life Insurance responsible for Risk Classification. Dan says he would stress homogeneity more than credibility. It is questionable whether we will reach the point in the 1980's when we charge 6,000 different premiums for a portfolio of 10,000 lives. On the other hand we do not want to constrain ourselves by stressing the credibility aspect too heavily. This would preclude insurers from experimenting with different coverages and offering coverages to more groups of individuals. An example would be coverages of handicapped people.

MR. BRIAN L. HIRST: I would like to ask Bart and Bob if they feel this is a tug-of-war situation, especially where Senator Dingell is concerned, under which some form of discrimination will be allowed and others not. More specifically, rates may be allowed to vary with controllable factors (i.e. smoking status) but not with non-controllable factors (i.e. sex).

MR. HUNSTAD: There is an uncontrollable factor, age, which is included in Dingell's bill so that he is not making an exclusive division between controllable and uncontrollable factors.

MR. MUNSON: I would start off by making the obvious observation that it would take an actuary from State Mutual to remind us, as he ought, that while the profession is debating the issue of sex discrimination it has recently been demonstrated that the difference in mortality between smokers and nonsmokers is larger than that between males and females. Certainly if Dingell and his staff are not aware of this already they will be by the time of hearing. I do not know where he stands on the thrust of controllability.

MRS. DAPHNE D. BARTLETT: Our alternatives on the Risk Classification issue seem to be fight and lose or give up. Perhaps we should consider another choice - find a new method. We determine rates now by age and sex because we always have. An idea, and it is only a germ of an idea, is that the rating of individuals could be accomplished using a continuum of mortality ranging from in effect a zero chance of death to a one chance of death. People would be placed along this continuum irrespective of age, sex, etc. These factors would be considered together in placing them along the continuum only. Does anyone have any thoughts on this approach? Or is anybody implementing anything like that?

MR. HUNSTAD: I do not feel that I am in a combatitive role with legislators although I do disagree with what they are saying. We are working with them to help solve this whole issue of Risk Classification. Your idea about a continuum is difficult to deal with because it would be hard to justify why someone was placed at a given point. In order to justify the placement you would have to go back to first principles (e.e. separate out each factor affecting Risk Classification) which brings us to where we are now.

MR. MUNSON: We can live with unisex tables or different Risk Classification definitions if we have to. However in combining groups that are now separate, such as males and females, we should ensure that the public is aware of the implicit redistribution of income which results. This task of redistribution should really be done through taxes and subsidies. Certain checks and balances ought to be built in to ensure our Risk Classification system does not produce any undesired results.

MR. DAVID LIPKIN: In attempting to achieve a balance between equity and equality we may be more effective in presenting our argument if we point out to people that some groups will suffer under proposed legislation (i.e. female premiums for life insurance will increase under unisex tables). If we provide the whole story we would get the support of those groups who are aware of the negative ramifications.

MR. JOHNSTON: That is a valid point and it runs through the fabric of what we are all attempting to say today.

MR. CASE: Daphne's remarks have reminded me that I recently had occasion to look at the chapters on underwriting in the textbook by Huebner and Black. In one of those chapters, the author (who is now Professor Kenneth Black) shows a curve representing the distribution of life expectancies among a group of individuals of a given age. The curve plots percentages of expected mortality, with standard mortality being around 100%. Starting near the x-axis at a point somewhat to the left of 100% mortality, the curve rises rapidly to a peak somewhere around 100% and then declines, tapering off into a fairly long tail at the high mortality percentages. That is how I had always envisioned the distribution of expected mortalities at a given age. However, that is not how the insurance companies are classifying their individual insureds. With the distinction that the companies are making between males and females, the curve rises to one peak (only about half the height of Professor Black's peak) and then reaches a second peak somewhat farther along at the point of assumed male standard mortality. For companies which have introduced a nonsmoker discount, the assumed curve would be even more complicated.

The classes which insurance companies use are governed to a considerable extent by marketing considerations--such as the reluctance to have a standard class consisting of nonsmokers and calling the smokers "substandard". In resisting efforts to require unisex rating, the companies will have to plead for the privilege of using whatever rating classes they need in order to compete on a sound basis, provided they can justify the classes they use.

MR. ANDREW M. STIGLITZ: It appears that Senator Hatfield's education of the nonuse of certain Risk Classification factors such as blood pressure, good living habits, etc. is derived from the arguments in the pension area where these factors are not generally taken into account. However, it has been mentioned that in the Canadian annuity market insurers will offer preferred rates to annuitants who can present evidence of poor health. I wonder if someone could confirm that? My second question is to ask Bart if he could outline for us the nature of the Academy's presentation.

MR. JOHNSTON: I would be glad to answer the first question since I am with Crown Life, who is active in the annuity market in both Canada and the United States. I would suggest that about one half of the major annuity writing companies in Canada offer special rates to annuitants in poor health. Some time ago we experienced several problems in connection with Registered Retirement Savings Plans. These plans essentially force the annuitant to take a pension income by a prescribed age. That rule created inequities for annuitants in poor health. Consequently the Canadian Life Insurance Association suggested that one way to mitigate the problem was to have more insurers offer substandard annuities. This has led to increased participation in this area.

MR. MUNSON: I will try to give some idea of the nature of our committee's work. There is some controversy within the committee on whether we should give our testimony in layman's terms or whether we should make it a Society research paper. It has to be the former. We are wrestling with the length of our resenatation. We realize we will only have about 10 or 15 minutes to give our whole testimony. We will try to make the point we are not anti-female by giving examples of cases where one or the other sex is favoured in cost. We will attempt to comment on the prospective cost of complying with the bill, and presumably it is only a redistribution, assuming you ignore the administrative cost. We will also try to comment on the cost of retrospective change - this is very difficult to measure. We are not even sure of the interpretation of this aspect of the bill. We wish to give testimony on the mortality differences between males and females. However we may not have the required data to produce a compendium. Nobody has yet put together a complete package summarizing these differences other than a recent effort by the Canadian Life Insurance Association. We certainly would receive any efforts the membership could offer in this vein.

MR. PAUL T. ROTTER: Should we not argue the social issues here? The TIAA/CREF document was very interesting in that they admitted to different mortality by sex but because of social issues they were going to pay similar benefits. One cannot argue the industry will go broke if we use unisex tables. The Academy's presentation should focus on the social implications and ask if this is what the public wants. The technical material should go in the addendum.

MR. MUNSON: Certainly the committee feels the same way. We want to lend some actuarial expertise on this whole issue. I might comment on the TIAA/CREF situation. Our committee's press release was designed specifically to not condemn TIAA's action. We were very careful to recommend that actuaries have the freedom to discriminate by sex, not that they must.

