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PANEL DISCUSSION

LONG-RANGE PROSPECTS FOR THE ACTUARIAL PROFESSION

[NOTE.—This panel discussion was devoted principally to the two papers commissioned for the Society's twenty-fifth anniversary meeting. These papers[1] with their written discussions may be found elsewhere in this volume.]

CHAIRMAN ROBIN B. LECKIE: Mr. Lew in his presidential address pointed out that in virtually all countries the work of the actuary is being complicated by a greatly altered and seemingly unstable economic climate, with inflation accelerating in the face of restrictive monetary and fiscal policies. It was against this background that these papers were written. I would like to open our disscussion by having the authors describe their papers.

MR. JOHN M. BRAGG: My paper gives consideration to the prospects for Western civilization, then to the prospects for the insurance and pension industries, and finally to the prospects for the actuarial profession. The views of several sets of futurists are considered, with the paper detecting a common thread in the work of these people. The thread is that we are, using Toynbee's words, deep in a "time of troubles" but that the capacity may exist to enter upon a period of vitality. Reasons are given for believing that the actuarial profession and the insurance world are also in a time of troubles.

I express my own personal opinions, of course, and I list certain recent harmful preoccupations of the profession. The paper lists some further negatives that could affect the profession, with inflation perhaps the most important and difficult of all.

I include statistical descriptions of the profession and attempt to cope with the old question, What is an actuary? Continuing the thread of the argument, the paper considers reasons for hoping that the capacity may exist to enter upon a new period of vitality. The key is return to service of the public. The paper gives two pages of specific future developments which could increase the need for actuaries. Since we may have a 50

[1] John M. Bragg, "The Future of the Actuarial Profession as Viewed in A.D. 1974" (p. 335), with commentary as to the Canadian point of view by Cecil G. White (p. 409), and Samuel Eckler and Wendell A. Milliman, "Consulting Actuaries in Canada and the United States—1974" (p. 417).

per cent chance of writing our own future, the paper describes prescriptions for the future of the industry and the profession.

The future of the life insurance companies themselves is discussed, and a conclusion is reached that there will be fewer companies, particularly in the United States, but that the average company will become more complex. It is pointed out that only 20 per cent of United States life companies now employ members of the Society. I was rather astonished by that discovery. This percentage is increasing and will continue to increase, but perhaps it will never reach the 79 per cent mark found in Canada. Toward the end, the paper includes a very optimistic projection of future actuarial manpower needs, which was prepared by the Society's Committee to Encourage Interest in Actuarial Careers.

MR. CECIL G. WHITE: In my addendum to Jack Bragg's paper, I tried to extrapolate what he said and indicate the areas that also apply in Canada and the areas in which there are some differences in Canada. I have given also a little bit of Canadian actuarial history, particularly regarding the Canadian Institute of Actuaries, its formation, and its growth, which has been quite phenomenal over the last nine or ten years. I then go on to deal with some of the special characteristics we have in Canada, things like the French facts—for example, about 13 to 15 per cent of our members in Canada are francophones, but about 25 per cent of our students and new Fellows are francophones.

I mention some important events that have happened in Canada that have a major impact on the life insurance business, and, through the life insurance business, on the development of the actuarial profession. The paper ends on an optimistic note for the future of the profession and describes the many challenges that face us in Canada, some of which we hold in common with the challenges down in the United States.

CHAIRMAN LECKIE: Both of these papers point out the higher proportion of actuaries in Canada than in the United States, the reason for which we will develop later on, when we are examining the need for actuaries. Now we shall hear about the paper on consulting actuaries.

MR. WENDELL A. MILLIMAN: Much of our paper was based on information obtained from a questionnaire sent to all identifiable consulting actuarial firms in the United States and Canada where there was a member of one of the recognized actuarial organizations in the firm. The responses probably represented at least 90 per cent of the consulting actuaries in the profession. Most of these are involved in pension plan work; probably two-thirds or more of the consulting actuaries are engaged in full-time pension plan work.

The paper describes the relationship between the consulting actuaries and the various professional organizations serving the actuarial profession and reviews some of the developments that have influenced the growth of the consulting actuarial segment of the profession. We note that, since the time of the organization of the Society, when about 7 per cent of the active actuaries were consultants, the number has increased until today about 25 per cent of the active actuaries are in the consulting field. We describe the range of activities in which consultants are engaged, and we summarize what we visualize as the current unresolved problems of primary interest to the consulting actuaries.

MR. SAMUEL ECKLER: In many areas we found a remarkable similarity in the interests and expectations of consulting actuaries in Canada and in the United States. There are some minor differences that might be of interest. For example, in the United States, because of the relatively smaller number of actuaries, many insurance companies do not have actuaries or an adequate actuarial staff. Because of this situation, in the United States consulting actuaries as a group spend much more time in advising insurance companies than their Canadian counterparts do. Also, there are many very small actuarial firms in the United States, that is, one-actuary shops. This is explained by the services required for the life insurance industry in the United States that are not required in Canada. Another difference is the large number of consulting actuaries in Canada working for firms controlled outside Canada.

CHAIRMAN LECKIE: We are now going to discuss four general topics. Let us look, first, at the future development and involvement of the actuarial profession, then at professionalism and what that means for actuaries, at education of actuaries, and, finally, at the need for actuaries.

In his presidential address, Mr. Lew charged us to involve ourselves in the shifting of risk. We might ask the question, to what extent will the actuary expand from his current insurance and pension base?

MR. BRAGG: I believe we are going to stick fairly close to our insurance and pension base. We should be involved also in the construction of social indicators which would reveal the factors that impinge on mortality, morbidity, and therefore on the quality of life, for example, the determination of future manpower needs in various professional and employment sectors, the study of the effects on society of genetic engineering, sophisticated population projections (including, for example, the effects of adverse selective breeding in advanced countries), and perhaps the study of euthanasia and its effects—financial, medical, emotional, and social. We might also aid in the determination of the differing food needs of people in the light of impending world food shortages.

CHAIRMAN LECKIE: Will the initiative for this come from the insurance companies, or from the research arms of the universities, or are there going to be more actuaries in government?

MR. BRAGG: Some might be done by the private sector, but most will not be done in the private sector. The Society of Actuaries has just announced its participation in establishing a research foundation. This is the sort of thing in which that foundation might become involved.

MR. ECKLER: Over the next few years we have to be concerned with how realistic these programs are, and whether we will have the skills, the expertise, and the background to provide that kind of service. If we are going to become involved, we have to think in terms of a radical restructuring of our educational syllabus.

CHAIRMAN LECKIE: In the United Kingdom, actuaries are more deeply involved in the investment policy of their companies than are actuaries on this continent. Should actuaries be more active in investment policy here?

MR. WHITE: It has been customary in companies in the United Kingdom for the actuaries to be much more actively involved in the whole investment operation, from the policymaking level on through. I do not really understand why it has developed otherwise in North America. Perhaps the lack of both guaranteed cash values and detailed government regulation has led to a greater need for a contribution by actuaries in the United Kingdom.

CHAIRMAN LECKIE: Is there likely to be any greater control of consulting actuarial firms by nonactuaries in the future?

MR. MILLIMAN: I would expect that in the immediate future there will be an increasing tendency for consulting actuarial firms to be controlled by nonactuarial organizations, such as brokerage companies, C.P.A. firms, insurance companies, and management consulting firms.

The important question is whether the actuary who is working for a nonprofessional is, so to speak, master of his own soul, and I see nothing to complain about in this respect.

CHAIRMAN LECKIE: That leads to our next point—what it means to be a professional, a professional actuary. First, let us consider an insurance company actuary.

MR. WHITE: The life office professional has a rather difficult task because he is very much a part of the operation while at the same time he must maintain a certain separateness. He must be in the position, if necessary, to bring to management advice that runs counter to what might be the conventional wisdom of the time.

How does he do this? I think he achieves it first of all by his intellectual qualities and attainments. He strengthens it by his intellectual honesty in his dealings in the office. He also will add to it by his effectiveness in communication and by showing a genuine concern for people. We are in a business that is highly vested with public interest, and we have to be concerned about people and about that public interest.

CHAIRMAN LECKIE: The Committee on Independence has indicated that perhaps the consulting actuary is not as independent as we think. Are there any comments on this?

MR. ECKLER: In a philosophic sense, no one is really completely independent. We are all dependent within our life-style and, in what we do and how we work, dependent upon other people and other things. In practical terms, I think the concept of independence has some meaning for a consulting actuary. Where there is conflict between principles, convictions, and one's individual comfort, I think a consulting actuary can set up certain criteria of independence. For example, a consulting actuary who has one client or two major clients, would not be as independent in this sense as one who has a variety of clients.

MR. MILLIMAN: I think it is the willingness of the actuary to put his actuarial principles above his pocketbook that will test the man's professional integrity. In practice, I think the pressures probably are sometimes greater upon the consulting actuary, who is just getting started in business and does not have as much in the way of clientele, than they might be on the actuary in a large mutual company where the chief executive officer is himself an actuary.

CHAIRMAN LECKIE: How do you feel about developing some generally accepted actuarial principles?

MR. BRAGG: The development of guides to conduct and the various opinions that we have attached to these guides are dynamic by nature; we continue to change them as time and experience indicate. The question of written actuarial principles is, of course, one of these expressions. We do have one opinion about principles—actuarial principles with respect to pension plans. There are other rules now being developed. What we should avoid is the development of rigid principles—for example, this is the rate of interest one should use, or this is the costing method one should use. Principles should be in terms of generalized notions, what we should be doing in an actuarial report, and giving advice to the public.

I think there are various areas in which there is a need for written actuarial principles; I shall just mention one—the methods for calculating dividends on ordinary insurance.

MR. ECKLER: If I could put in a comment here, I feel that, if it were possible, it would be nice to have these actuarial principles. I would like to give them a good try, but I feel we would get into a great deal of difficulty.

CHAIRMAN LECKIE: It would be nice if we could have the notions but not the detail spelled out.

Turning to education of actuaries, what subjects should be stressed in our curriculum more than they may be now? In his address to us, Dr. Moos stated that many of the universities are putting out the instructed man rather than the educated man, and I am wondering if that is not also true in the Society.

MR. BRAGG: I would include among subjects for greater emphasis such things as economics and more information on the topics of investments, the effects of inflation, and perhaps government programs. However, we must not lose the basic mathematical core that we have in the educational program or in any way reduce its importance.

CHAIRMAN LECKIE: What additional subjects could be added to help develop the consulting actuary?

MR. ECKLER: I think that there is danger ahead if we attempt to include in a curriculum a whole panoply of disciplines and, like dilettantes, touch all these various areas but become experts in none. I think it is important that we be well informed about economics, sociology, and demography. We should spell out clearly what our discipline is—the mathematical core—and the application to human life of these various probabilistic techniques that we have developed. I think there has been an over emphasis in our curriculum on the practical rather than on the theoretical or on principles.

CHAIRMAN LECKIE: Assuming that we continue to have this mathematical risk core, who is to educate the actuaries of the future?

MR. WHITE: I will speak for Canada. It is essential that we give consideration to the greater use of universities in the training of actuaries. Other professions, almost any profession you care to name, currently use universities, and we are walking almost alone in not using them. I think that if we wish to continue to attract the best-qualified people into our profession, we must continue to broaden the educational base and enlarge the scope of our interests. High-caliber people will not be attracted into a narrowly defined profession. With the greater use of universities, the profession will be free to devote its time, abilities, and facilities to the subjects leading to fellowship and, moreover, be free to pursue courses under programs of continuing education.

CHAIRMAN LECKIE: Perhaps we should take a look at whether there will be any need for actuaries in the future. Let us look first at the consulting actuarial needs.

MR. MILLIMAN: The demand for additional actuaries has never been greater than it is right now, and, for the foreseeable future, the demand for actuaries will substantially exceed the supply.

CHAIRMAN LECKIE: Jack, a number of actuaries have commented to me that in your paper you had overestimated the need for actuaries. Have you any comment on that?

MR. BRAGG: Yes, I throw a lot of cold water on my own estimates in the paper. The Society's Committee on Careers made a survey in 1973. It shows that a 64 per cent increase will be needed in the Society's membership between 1973 and 1978. I think the survey was vastly overoptimistic; we are not going to need that many additional people in five years. However, water it down to, say, 25 per cent—it still shows a tremendous demand for actuarial help in the future.

CHAIRMAN LECKIE: Sam, do you have any thoughts on the need for consulting actuaries in Canada?

MR. ECKLER: If we can rearrange, change, or enlarge the image of the actuary, define in real terms what the actuary is doing and change his training, his qualifications, and the kinds of things he worries about and becomes expert in, I would forsee a very great future for the consulting actuary. However, we must take some action in redesigning the future. Practically, this means further development of public sector and government areas of work.

CHAIRMAN LECKIE: I would like to thank you all for presenting this challenge to the profession. We live in an age of change and discontinuity. There is no point in attempting to project the future on the basis of the past. But there are indicators, and personally, if I could on your behalf close on an optimistic note, I see a very great need for actuaries in the immediate future. Our education and development are on a base of knowledge that is needed in society. It follows that our profession will find its way and make the contributions necessary to continue the growth and development and create the change that molds society.