The Actuary

The Newsletter of the Society of Actuaries

VOLUME 1, No. 8 DECEMBER, 1967

ROYAL COMMISSION REPORT ON TAXATION

by H. E. Harland

The report of the Royal Commission on Taxation is much more than merely a detailed recommendation of the best way of raising tax revenues. It expresses a philosophy that would profoundly alter the fabric of Canadian society. It conceives the tax structure to be the proper tool of government in aggressive and far-reaching policies of income redistribution and management of the economy.

The Commission has attempted to provide a logical basis for its recommendations by postulating a number of underlying concepts, as follows:

(1) The tax base should include all increases in discretionary economic power, regardless of source or nature. This concept has led to the comprehensive tax base, with inclusion of such items as implied benefits, realized capital gains, gifts, inheritances, etc., in addition to the types of income reached by the present law.

(2) Horizontal equity should be achieved. That is, persons in similar circumstances should pay similar taxes. This concept is clearly valid. However, there is a rather rigid adherence even in instances of minor importance. As a result, a number of specific recommendations are made, which would give a much more complicated law than we now have.

(3) Vertical equity should be achieved. That is, persons in different circumstances should pay appropriately different taxes. This concept is easy to agree with but impossible to implement to everyone's satisfaction. The Commission concluded that vertical equity demands a steeply progressive personal tax schedule. Even with the top personal rate limited to 50% as recommended,

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To All Our Readers,

A Happy New Year

The Editors

PHILADELPHIA CLUB DISCUSSES MUTUAL FUNDS, LIFE INSURANCE

Recently the Actuaries Club of Philadelphia had an informal discussion on mutual funds and life insurance companies.

John Hearst gave some figures to show that the interest of insurance companies in mutual funds and variable annuities seems to be catching up with the public's interest and the institutional investor's interest in common stocks. More and more retirement plans are providing variable annuities. The General Electric Company in its Saving and Security program has chartered a mutual fund as part of its employee benefit program.

The interest in equity investment reflects the higher yields which have been realized on these as compared to other types of investment. The College Retirement Equities Fund experience showed an average yield of about 10% over the last fifteen years.

Influences Prompting Entry

Henry J. Heintzberger discussed the relationship of life insurance and mutual funds from the viewpoint of a company which recently acquired a mutual fund management company. Some of the considerations which prompted entrance into the mutual fund market were:

- the interest of pension funds in common stock investments;
- formation and acquisition of life insurance companies by mutual funds, causing older life companies to form mutual funds in self-defense;

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HEALTH INSURANCE REPORT AT CHICAGO MEETING

by J. Henry Smith

At the moment we are enjoying a high degree of encouragement from government officials and welfare state advocates. There is a new spirit which seems to be based on the idea of partnership of government and private insurers; and we are being encouraged—even pressured—to make haste in shoring up our side of the partnership.

Three conferences have been convened by Secretary John W. Gardner of H. E. W. at the direction of President Johnson. The first, held in June, focused on medical costs. The second, in September, examined private health insurance, and the third, in October, discussed the group practice of medicine.

These have been summarized in *The Actuary*. All three conferences were highly significant to the health insurance business. Some of the main issues and challenges emerging are:

- The discussion apparently rested on the proposition, taken almost as an axiom, that it is now national policy that adequate medical care is a right owed to all.
- As presently conceived, government's role is to provide for those who cannot provide adequately for themselves — presumed to include all over 65; and also to encourage the private insurers to do the ideal job for the rest.
- There is a shift in emphasis from care for acute conditions to care for chronic and long-term conditions, mental health and preventive medicine. Insurance should accommodate itself to these new needs.
- Insurance benefits should be designed to encourage improvements in the pro-

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The Actuary

Published monthly (except July and August) by the SOCIETY OF ACTUARIES

Editor - - - - ANDREW C. WEBSTER

Associate Editors - JOHN B. CUMMING
MORTIMER SPIEGELMAN

Correspondence should be addressed:
The Actuary,
c/o Mr. Mortimer Spiegelman,
14th Floor, 1740 Broadway,
New York, N. Y. 10019

GUEST EDITORIAL

ONE of the distinctions of the business world in which we all live is that we don't have any report cards. If we did, I think ten years from now the actuary who has tried to cling to his traditional role might find written across his the most damning of modern euphemisms: *Underachieving*.

The word carries with it a compliment; a compliment as to capacity. And it carries with it a criticism; a criticism as to how well the actuary is capitalizing on his abilities. I suggest that the actuary must change from the comfort of his traditional role or run the risk of becoming irrelevant.

Today the actuary tends to work in the retrospective . . . setting his rates on historical evidence. But the actuary was the pioneer . . . and the ultimate test of the pioneer is his ability to keep pace. Looking ten years from now . . . with its situations and its demands . . . we have to question whether the traditional actuary might not be subject to the following comments: He takes a precise, but limited, view of life . . . He is superbly skilled with statistics, but often fails to include all the relevant data such as social and economic trends, inflation, rising costs and other available information that is pertinent to his answers . . . He is a master of problem solving, but often abdicates the role of defining what the problems are to be solved . . . Looking in the opposite direction from the problem, he often wants to end with analysis — offering neither interpretation, projection nor management recommendation . . . The actuary, in love with exactness, has a fear of the intuitive. He lets this carry over and contain his creative ability . . . The actuary functions within a business for most of his professional life, but neglects the necessary attitudes of a businessman.

The demands of the world in which we function are forcing us to change — to redefine our roles and our relationships within the organization — as well as that of the organization within the community. The actuary is being offered alternatives. The only alternative that is not being offered is that of maintaining his traditional role. If he tries to do so, he will be relegated — quietly, subtly, but efficiently — to the function of a technician. And the actuary will be superseded by a new level of organization — the operations researchers. This would be a mistake and a waste, because the new role being offered is ideally suited to the training, background, skills and experience of the actuary.

I am suggesting to many of you that you must change. You will make mistakes, but they will be mistakes of action . . . the mistakes of achievers. You are being presented with the challenge of change, and with an opportunity.

Sterling T. Tooker

NOTE: We present as our guest editor Sterling T. Tooker, President of The Travelers Insurance Companies, who spoke at the meeting of the Casualty Actuarial Society in Hartford recently. We are grateful indeed to Mr. Tooker and to the Society for the privilege of reproducing here excerpts from his stimulating address. The full text will be published in the forthcoming Proceedings of that Society.

VARIABLE ANNUITIES TOPIC AT CHICAGO MEETING

by Malcolm MacKinnon

There has been a sharp increase in the last two years in the adoption of state laws permitting the writing of variable annuities, according to a report at the Society's Annual Meeting in Chicago.

Group variable annuities may now be written in all states except Mississippi, Missouri, North Carolina, North Dakota, Pennsylvania and South Carolina. Individual variable annuities are now permitted in 30 states and the District of Columbia.

An excellent summary of the state legislation and regulation governing variable annuities is contained in a paper presented to the recent Conference of Actuaries in Public Practice by Maximilian Wallach, Actuary of the District of Columbia Department of Insurance.

NAIC Examination

Under certain circumstances, variable annuities may be sold only by a person who has taken a special examination. This is required under the Securities Exchange Act of 1934 and also by certain states. In conjunction with the SEC, the National Association of Insurance Commissioners has developed a variable annuity examination known as the NAIC examination. This two-part examination is administered by the states. Part I satisfies SEC requirements and Part II satisfies state requirements for the sale of variable annuities. To date, about 30 states have adopted this examination.

An important development was the formation of a sub-committee of the ALC-LIAA Joint Legislative Committee to study administrative and legislative developments in connection with federal and state regulation of segregated accounts and variable annuity contracts, both individual and group, with a view to determining if there should be an industry approach to the problems involved.

The sub-committee has set up two task forces. One is dealing with the regulatory problems involved where registration under the Investment Company Act of 1940 is required. This includes consideration of possible amendments to the federal securities statutes to deal specifically with variable annuities, diffi-

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Royal Commission

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the proposed rates applied to the comprehensive tax base would result in a considerably more progressive tax structure than the present.

(4) The tax system should be neutral. That is, tax considerations alone should not result in one method of organization or operation being favored over another. This concept, like that of horizontal equity, seems eminently fair and sound. However, I believe that the tax proposals are unnecessarily complicated in ways that offer, at best, only minor improvements in neutrality.

Life Insurance Taxes

With respect to the tax proposals for the life insurance industry, several issues arise. The most obvious and important is the question of whether any substantial change in taxation is necessary or desirable. The life insurance industry has made and continues to make a major contribution to Canada's economic growth and social well-being. Tax laws of the past and present clearly recognize the importance of this contribution. It should not be lightly dismissed in the framing of new tax laws.

The Commission has recognized the continuing social desirability of encourging provision for retirement income by means of tax incentives. It is difficult to understand why the socially desirable operation of life and health insurance should not be similarly regarded.

The Commission has proposed a tax at the company level on a net gain from operations approach. If this new tax is to apply, the recommended recalculation of policy reserves at some rate of interest exceeding 4% would be highly questionable. Presumably, the mortality table is to remain unchanged, although the report is silent on this score. The resulting reserves would in most cases be inadequate to cover guaranteed cash values or to meet the minimum reserve requirements of the Department of Insurance in Ottawa.

The Commission states that solvency of life insurance companies is the concern of the Department of Insurance, not of the tax structure. This is true, but it does not impress me as a reason for disallowing, for tax purposes, reserves which we must hold in order to stay in business.

The report recommends that no special surplus or contingency reserves be allowed in determining the companies' taxable gain from operations. This proposal may be questioned. The long-term commitments inherent in the life insurance business have no good parallels in other businesses. The report points out that industries such as petroleum and forestry often commit capital for periods of 50 years or more with no way of measuring accurately the income that will be derived in the future. This argument seems to miss the vital point that we not only take action today that will affect us 50 years from now, but we also guarantee the results to be achieved on that distant day.

The Commission has made a number of proposals for the taxation of policyholders. One of the most contentious of these is the tax on interest credited to reserves, calculated annually on an artificial reserve basis at some rate of interest exceeding 4%. Quite clearly, policyholders do not have the kind of access to this interest that they do to interest earned on bank accounts, bonds, policy proceeds on deposit, etc. They can make current use of the interest only by surrendering their policies or taking policy loans.

Serious Problem

The first of these courses would fundamentally alter the position of the policyholder, perhaps irreversibly. The second would entail policy loan interest charges exceeding the interest credited on reserves. Therefore the interest earned annually on reserves fails to meet the Commission's own tests of "availability to pay" and "discretionary economic power of tax units".

From the companies' point of view, the annual calculation and reporting of interest credited on an artificial reserve basis for every permanent ordinary insurance policy in force has serious implications. I cannot see how a company without access to a computer could reasonably comply. Even companies with large and sophisticated computer systems in operation would undoubtedly need very extensive systems changes.

A third important proposal affecting policyholders is the tax on mortality gains, to be effective sometime after other changes. Roughly speaking, a tax would be imposed on the excess of the amount paid on death over the value of the policy immediately prior to death. The cost of insurance would, however, be allowed as a deduction.

This proposal is open to serious challenge. The Commission itself admits that this element of their proposed tax structure would not generate any significant revenue, because mortality gains and losses tend to cancel out over the whole group of insured persons. The only purpose of the proposal is a supposed improvement in equity.

Our industry is based on the widely-held conviction that the fundamental risk-sharing feature of life insurance is socially desirable. In my opinion, a partial negation of the beneficial consequences of life insurance by a non-revenue-bearing tax provision would be improper in the extreme.

Public Reaction

Public reaction to the report has built up rather slowly. This may not be surprising in view of the enormous volume of reading facing the serious student. However, recent months have seen a crystallizing of views. Much informed comment has appeared in newspapers and magazines as well as on the air. In addition, a large number of written briefs has been addressed to the Minister of Finance before the Oct. 31 deadline.

The impression I have gained from public comment on the report is that a widespread opposition to enactment of its major recommendations has developed. This opposition is not localized in a few special industries or interests who feel that their ox is being too severely gored. A recurring theme is the danger of imposing tax revolution on an economy which is still not highly predictable and manageable, even over relatively short periods of time.

I sense also a great concern over the effect of the Commission's recommendations on the relative positions of the individual and the state. The report appears to have less regard for individual rights and privacy than many would like to see. Many objections have also been raised to the vastly increased record keeping and reporting problems posed by the recommendations of the Commission.

(*Editor's note*: This digest of the presentation by Mr. Harland at the Chicago Annual Meeting builds upon the series of articles in earlier issues of *The Actuary*, which outlined the major recommendations of the Carter Commission Report that bear upon life insurance.) ☐

Health Insurance Report

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vision of care, such as more ambulatory and home care. Ways should be found for insurers to link arms with medical practice groups.

- Insurers must help in community planning of health facilities and in the establishment and functioning of medical review and utilization committees.

- We must overcome the deficiences of health insurance — its inadequate benefits, gaps in coverage and sometimes overly high expense.

Question of Target

As the second conference came to a close, Undersecretary Wilbur Cohen stated that his response to the question "Will Medicare be extended?" is ". . . if private insurance is able to provide adequate protection for high quality care to the 90-95% of the population at the prices they can afford, then little public pressure will develop to extend Medicare to those under 65 who are employed." His version of "adequate protection" seems to require that insurance cover at least 90% of all consumer expenditures for health care.

Charles Siegfried, President of the Health Insurance Association of America, challenged Mr. Cohen's parameters, saying: "I, for one, question the limit set by the Undersecretary as a target measure of coverage at which to shoot. For many persons health insurance coverage which covers much less than 90% of total medical bills will be highly satisfactory coverage. I don't think success or failure should be measured by this target point."

Community and area-wide planning of health facilities has become of considerable importance to health insurance. It is a part of a general problem. How should insurance relate to the organization of health care facilities, to quality of care, duplication, over-utilization, and other factors affecting the efficiency and cost? Such matters used to be left to the doctors, hospitals and others concerned, but the insurance industry cannot remain uninvolved.

"Landmark" Legislation

Area-wide planning received great emphasis late last fall when Congress passed (with remarkedly little fanfare) a piece of legislation that probably deserves the label "landmark." This act — the Comprehensive Health Planning Act of 1966 —abolished some 16 direct federal grant programs and replaced them by a "block" grant for the states to use as they saw fit.

It tied a big string to the package — a string in the form of a requirement that, in order to get federal funds, each state must embark on a system of planning for health. The Congress insisted that every state take responsibility for looking objectively at its health needs and resources, and that it set priorities and make decisions.

To help get the job underway, the Congress is providing funds for state and community planning. In the planning there is a requirement for active participation not only of the providers of care — the physicians, hospitals, environmental health specialists, etc., — but of the consumers as well.

"Partnership for Health"

This did not catch the health insurance business wholly unawares, in that the HIAA had previously been considering and experimenting with active involvement in such planning. With the stimulus of the new law, it proceeded early this year to effect a well-considered, integrated action program aimed to put private insurers into what is now called the "partnership for health."

A top-level policy group was established in the HIAA, with an operating committee in the Health Insurance Council. About 40 key company Presidents were asked to get to each state Governor the message that our industry felt the idea of comprehensive health planning was sound and that as an industry, as companies, and as individuals, we were prepared to be of assistance.

The Presidents were also asked to see that an experienced and effective person was assigned to each state to keep watch on health planning developments for the industry. The program is well underway and is being received very favorably indeed. At present there is, in all states but two, a "HiCHAP" Coordinator; most were on the job within 30 days of our industry decision to proceed.

HiCHAP

"HiCHAP" is shorthand for "Health Insurance Council, Community Health Action-Planning Project." The story is in the name:

Community Health — involving all of us where we live.

Action-Planning — not merely action for the sake of action, nor sterile planning, but planning *for* action *for* results.

These HiCHAP Coordinators have been busy talking with all of the people involved in community health planning — the physicians and hospital people, the voluntary planning groups, the public health officers, and the Governors. Our message is coming through: we are ready, willing and able to participate in the "partnership for health." And we are being asked in, usually as "representative of consumers," to use the language of the law.

Already insurance personnel — as individuals, of course, not as spokesmen for the industry — are being asked by Governors to sit on the new State Health Planning Councils.

Thus far, insurance people will be playing key roles in comprehensive health planning in perhaps 20 states. In at least four states, the Governor has named or is naming an insurance individual as Chairman of his Advisory Council. And insurance people are on perhaps half or more of the present 70 area-wide planning groups now in operation.

These are but a few of the more significant developments in health insurance lately. These are but a prelude to the future, where there will undoubtedly be more challenging developments. □

THE KLEM REPORT

The Report of the Committee on the Future Course of the Society, of which Walter Klem is Chairman, was discussed at a special meeting of the Board of Governors on Dec. 14.

The background of recommended changes in the operation of the Society and the Board's action thereon will be reported in detail shortly in a special letter to the members of the Society. □

PHILADELPHIA CLUB

(Continued from page 1)

- increased interest by the public, especially the younger generation, in equity purchases;
- increases of social insurance and employee benefit plans, which help to put individuals in a position for investing in equities.

The company considered the advantages and disadvantages of establishing its own fund or of making an alliance with existing mutual funds and decided that since it was desirable for one management to dictate the marketing of the joint product, it should avoid any "foreign entanglements." Within three months of this decision, approximately 10% of the agents qualified as registered mutual fund representatives.

Replying to a question whether the company made its decision to establish a mutual fund to gain profits from the management company or to increase the income of agents, Mr. Heintzberger stated that the primary purpose was to increase the sale of life insurance.

Unit Investment Trust

Donald Grubbs discussed the establishment of mutual funds to fund individual variable annuities in order to avoid dual regulation by both insurance commissioners and the S.E.C. It is virtually impossible for a major life company to serve two regulators. The insurance company, however, can establish a unit investment trust invested wholly in a single mutual fund to provide individual variable annuities; this way the life company may be subject only to insurance regulation, and the mutual fund subject only to securities regulations. At least one company has followed this route.

He mentioned that an independent organization is currently training the life company agents to pass the securities examinations required to become registered representatives.

One actuary stated that he is opposed to mutual funds, separate accounts and variable annuities. Rather than promoting them, the life insurance industry should be doing more to discourage inflation. If more people are encouraged to buy investment programs based on equities as a means of offsetting inflation, he suggested there will be an increase in the number of people who have a desire for inflation which will, in turn, increase the probability that inflation will occur. He raised the question whether in the long run this would be in the best interest of the country.

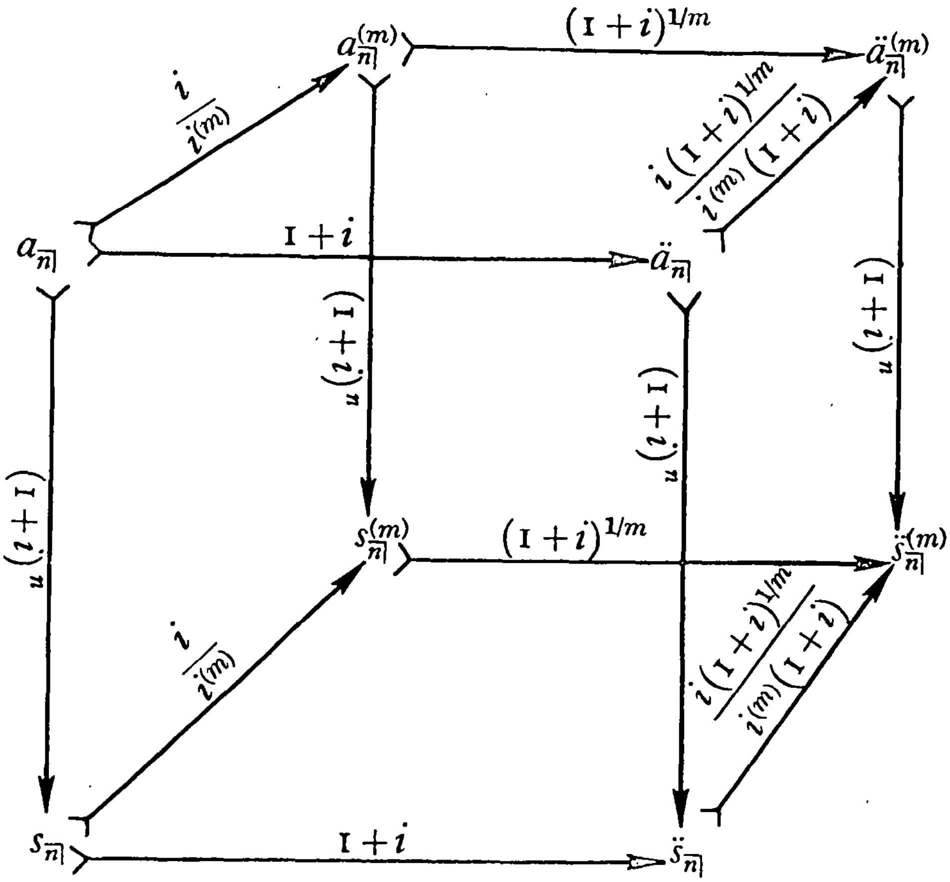
Kenneth H. Ross pointed out that one difference between mutual funds, separate accounts, and pooled funds of banks is that the latter two do not have any expense loading, whereas most mutual funds have a loading of about 8%. He discussed the variety of pooled funds of banks now available, indicating that some trustees now provide separate pools for stock investments, bond investments and mortgage investments. □

ROLL, JORDAN, ROLL

The Second Edition of *Life Contingencies* by C. W. Jordan, F.S.A., is available at $9. Orders should be sent to The Society. The new edition adds a chapter on pension plans and disability benefits. The chapter on population problems has been rewritten and expanded. Changes were made to clarify the exposition and improve the form of the mathematical demonstrations. The exercise sets have been revised. □

Letter To Editor

FOLLOW THE ARROWS



Sir:

If you have as much trouble as I do trying to remember the relationships between the various annuity certain functions, you will welcome the attached diagram. For me, at least, it straightens out the relationship once and for all.

All you have to do to operate the diagram is follow the little arrows. If you multiply the function at the foot of the arrow by the factor on the arrow, you get the function at the head of the arrow.

If you want to go in the opposite direction, that is against the arrow, you divide by the factor on the arrow. And, of course, you can turn corners and go every which way, just so you follow the rules. In fact, by going all the way around and back again to the starting point you can easily prove that each function equals itself!

E. A. Dougherty

CANADIAN GROUP LIFE INSURANCE EXPERIENCE

by Richard D. Baldwin

The Canadian Institute of Actuaries recently made a study of the mortality experience during the calendar years 1963 - 1965 inclusive under Canadian group term life insurance policies. Twelve companies, currently insuring slightly under two-thirds of the total group life insurance in Canada, contributed data.

The experience was compiled separately for the three common disability provisions: (a) Waiver of Premium Disability Clause; (b) Extended Death Benefit Clause; (c) Total and Permanent Disability Clause.

Tabular claims were based on the 1960 Basic Group Table. The ratios of actual to tabular claims for rated and non-rated industries combined, by number of lives for all policies, were 91.1% for Waiver of Premium, 95.0% for Extended Death Benefit, and 99.2% for Total and Permanent Disability. Ratios from the Society of Actuaries 1960 to 1964 study were 91.9%, 90.9% and 93.0% respectively.

Structure of Study

Several splits were made in the Canadian study which are not available in the Society of Actuaries' results. The material, which was studied by both lives and amounts, was split by: (a) sex; (b) policies under 25 lives and 25 lives and over; and (c) territory and industry.

The amount study did not indicate any substantial adverse selection. The usual low mortality for female lives was evident. The small policies showed the higher mortality, although there was little difference between the results by lives and by amounts.

In order to obtain data which might be useful in rate setting, crude death, disability, and accidental death rates were derived by age under policies covering 25 lives or more in non-rated in- ... The rates were based on the

Compa

The ... adian study, when co... corresponding rates develo... the Society of Actuaries experience for the period 1960 to 1964 (published in *TSA* 1965 Reports), showed considerable irregularity, a likely consequence of the small volume of data. Compared with the Society data, the Canadian rates are lower for ages 20 and under; about the same at ages 21-25; about 7% higher at ages 26 - 30; from 3% to 11% lower for ages 31 - 55. For ages 56 - 85 the death rates derived from the Canadian study are reasonably close to those developed from the Society experience.

The accidental death rates for the total Canadian experience are higher than those derived from the Society data for ages 21 through 70. The Canadian rates were highest at ages 41 to 55; at these ages, they were close to 30% in excess of those in the Society study.

On the other hand, the study shows that the Canadian disability rates are lower than those derived from the Society data for nearly all ages 31 and over, both in the case of policies with the Waiver of Premium Clause and those with the Total and Permanent Disability Clause. □

Variable Annuities

(*Continued from page 2*)

culties currently being experienced under the 1934 Act, and the SEC's proposed amendments prohibiting the front end load and limiting sales charges in connection with mutual funds.

Task Force 2

The other task force is concentrating on regulatory problems involved where registration under the 1940 Act is not required. This includes consideration of the current SEC review of rules 3c-3 and 156, possible amendment of Section 3(c) (13) of the 1940 Act to give insured pension plans the same treatment as bank trusteed plans, and possible future problems under the 1940 Act.

LIAMA has just surveyed its members to determine the extent of their offerings or plans to offer mutual funds, variable annuities, segregated or separate funds and equity-based life products. It is expected that the results of the survey will be published in a few weeks. □