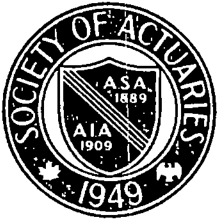
SOCIETY OF ACTUARIES

Article from:

The Actuary

May 1968 – volume 2 - Issue 5



The Actuary

The Newsletter of the Society of Actuaries

VOLUME 2, No. 5 MAY, 1968

GUARANTY FUND FOR PRIVATE PENSIONS

by Murray L. Becker

(Editor's Note: *Since the following article was written a Bill for the "Pension Benefit Security Act of* 1968" *has been introduced in the Senate* (S.3421) *and the House* (H.R. 17133). *This Bill proposes, among other items, the creation of a government corporation to insure the vested liability of pension plans*).

Dan M. McGill presented his recent paper on the subject of a guaranty fund for private pensions to the Senior Branch of the Actuaries Club of New York on March 26. Dr. McGill is Chairman and Research Director of the Pension Research Council, Wharton School.

The idea of some form of "reinsurance", in the event of pension plan termination, has been getting increasing attention in the last several years. Dr. McGill indicated the possibility of a guaranty fund for pension plans is very real and that legislation to establish such a program could be introduced next year. He feels that a guaranty scheme is feasible from a technical standpoint, if certain conditions are satisfied and adequate safeguards are built into the system.

Some of the conditions and safeguards would involve regulatory controls that many employers, unions, and others have generally opposed as being potentially detrimental to the continued sound growth of private pensions. Furthermore, the conditions and safeguards would so narrow the scope of the arrangement that the social objectives underlying the proposal might be largely defeated.

(*Continued on page* 7)

THE COLLEGE OF INSURANCE

by Walter Klem

Another source of candidates to fill the ranks of the life and casualty actuaries of tomorrow is envisioned in recent developments at The College of Insurance in New York. In September, 1967, a first class of 16 carefully selected high school graduates started on a work-study program that will bring them a B.S. degree in five years. A somewhat larger number of applicants has already been accepted and enrolled for the second class starting in September, 1968.

The curriculum of the B.S. course is specifically designed to turn out broad-gauged graduates whose education has been orientated toward the pursuit of an actuarial career. More than half the subject matter to be studied qualifies under a liberal arts heading. The remainder includes courses in business law, economics, electronic computing, and accounting, in addition to the fundamentals of insurance. An introduction to life contingencies is included in the last two of the eight instruction terms. Alternating with each instruction term of four months is a like work period with the student's employer and cooperating sponsor—insurance company, general insurance broker, consulting actuarial firm, insurance agency, or service organization. Theory and practice are thus combined in a total program which experience has demonstrated is ideally suited to fulfill the broad aim of the College of developing each student as a responsible citizen.

The College of Insurance was chartered in February, 1962. It is an outgrowth of the educational activities conducted by the Insurance Society of

(*Continued on page* 6)

SURPLUS SURPLUS — A REJOINDER

by John C. Wooddy

In the March issue of *The Actuary*, Irving Rosenthal commented on a portion of the Report of the Special Committee on Insurance Holding Companies in a note entitled "Surplus Surplus — Computers To The Rescue?"

In the main I agree more than I disagree with Mr. Rosenthal. My reaction to the proposals of the Special Committee, however, is somewhat less vehement than his.

In the first place, when the term "Surplus Surplus" first appears in the Report on Page 26, it seems fairly clear the Committee is limiting its applicability to property-liability insurance companies. It must be admitted, however, this interpretation is somewhat blurred by the discussion on Page 43. There the Committee indicates that the portion of the assets of existing insurers which might be permitted to be transferred to a holding company for use in other enterprises, be limited to "Surplus Surplus." However, the Report goes on to state on Page 45 that the application of this concept to life companies is not recommended at this time.

Companies Differ

For a non-life company, one year's incurred claims are much larger relative to assets, surplus, and premiums than for a life company. Consequently, the short-run prospect of insolvency from excess claims is far more significant than for a life company. Furthermore, it is fairly obvious that some companies are stronger and less likely to become insolvent from excess claims than others. The Committee suggests some attempt

(*Continued on page* 6)

College of Insurance

(*Continued from page* 1)

New York for more than 60 years. Though established only six years ago, the College has been fully accredited by the Middle States Association of Colleges and Secondary Schools.

The total student enrollment in the College in all its branches is about 2,500 men and women. Day and night divisions operate twelve months a year on a campus that includes the headquarters at 150 William Street in New York City, an adjacent annex, and classrooms provided by sponsoring insurance companies throughout the city as well as in Westchester County, N.Y.

The faculty is an uncommon combination of able academicians and practicing insurance experts. The insurance library, which now houses among other collections those of the Society of Actuaries and the Casualty Actuarial Society, is one of the best in the world. The relatively new Ecker Library established in support of the liberal arts has been the source of commendation for its strength and balance.

The College is unique in serving the basic, and many of the special, academic needs of a single business—the insurance industry. In recognition of its increasing usefulness, the number of its sponsors is growing steadily throughout the country. □

Surplus Surplus

(*Continued from page* 1)

be made to quantify this qualitative observation and to give it practical effect in the investment latitude permitted to managements of stronger companies.

It is true that things are not always what they seem; and many of us have been around long enough to know that if objective standards for surplus surplus are established, strenuous efforts will be made to demonstrate the possession of such commodity where it does not exist. Still, we know from experience that no set of rules will insure the solvency of every carrier and that no regulatory system is infallible. Some cautious attempt to permit obviously super-solvent non-life companies somewhat greater investment freedom would seem to be worth trying.

I share Mr. Rosenthal's concern over the, shall we say, naive view expressed in the Report: that, in the near-term future, precise mathematical techniques will certainly be operational to ascertain, for regulatory and management purposes, the required amount of policyholders' surplus for a given amount of current premium writings, loss reserves and equity investments of non-life companies. The specific points he makes in the last two sections of his comment are quite valid for both life and nonlife companies. I would even go further and point out that management decisions with regard to assumption and reinsurance of risk can change the subsequent short-run risk mathematical evaluation of a life portfolio noticeably and of a non-life portfolio substantially. However, the fact that a mathematical analysis of a risk portfolio may have defects does not mean that such analysis should not be carried out. If we insisted that a mortality table be good for all time, we might never carry out mortality investigations.

Some things that the Committee states are very pertinent. The mathematical theory today is somewhat closer to realism than it was, say twenty years ago; and computers do make a difference. Even ten years ago the emphasis in the mathematical manipulation was to avoid multitudinous calculations. Present-day computers certainly do not solve the computation problem completely, but they do give more freedom in setting assumptions which will more nearly correspond with reality. In short, risk mathematical analyses are worth making; they are certainly not conclusive, but neither are they meaningless.

Establish Criteria

If the concept is to be adopted that some companies are to be allowed greater investment freedom on the basis of existing superior overall protection to policyholders, obviously, some objective criteria must be laid down. A time-honored method of approach to such a problem is to study the characteristics of, say, one hundred companies which one *knows* are eminently solvent and try to abstract some universal characteristics. A mathematical analysis of each such company's risk portfolio would, I believe, be one highly useful element in such a study.

Having abstracted a set of criteria, these would then be applied to other companies, particularly to as many as possible which one *knows* could not be permitted any latitude at all.

Analysis of the results of these procedures should produce a reasonable set of criteria.

I certainly agree that a single figure, such as the probability of *ruin* within five years for a particular company, taken in isolation would have little meaning. I believe an array of risk mathematical quantities, such as ruin probabilities and expected values of excess claims, when compared for a large number of companies, would yield information about the companies and, very likely, lead also to modifications in the mathematics.

I do have to point out, however, that extracting the necessary information from any company's records is not easy; and carrying out such a project would be quite demanding of time, money and technical competence. □

SOCIAL SECURITY NOTES

J. M. Ceccarelli, *Maximum Benefits Under the Social Security Amendments of* 1967, Actuarial Note No. 40, and *Illustrative Total Monthly Family Benefits Under the* 1967 *Amendments*, Actuarial Note No. 41, Social Security Administration, Washington, D.C., March 1968.

The first note gives the conditions under which the maximum primary insurance amount (PIA) of $218 under the OASDI system will actually be paid. Five tables are presented, showing what the new maximum PIA payable will be under certain conditions and giving information regarding the various sizes of family in order to receive the maximum family benefit payable.

The second note contains a table which shows the amounts of monthly family benefits payable under the OASDI system to various family groups for each possible average monthly wage. The text explains the method for calculating permanently-reduced benefits and the application of the maximum family benefit.

Copies of both notes are available without charge, upon request to Robert J. Myers, Chief Actuary, Social Security Administration, Washington, D. C. 20201. □