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FILE

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THE PURCHASE ACCOUNTING QUANDARY

by Joe B. Pharr

It is disconcerting news that an AICPA committee has been disbanded without agreeing on a question of importance to many actuaries—how to account for purchase of a life insurance company. It may be helpful to consider here, first, what the extreme possibilities are, and, second, what range of practical approaches might prove acceptable to both the accounting and actuarial professions.

The Extremes

The extreme value of actuarial liabilities on the high side is, of course, the undiscounted sum of future death benefits and cash maturity values; this would produce large future earnings. The extreme on the low side would be arrived at by a gross premium valuation on realistic assumptions; this would yield no gain or loss at all except to the extent that experience turns out differently from the assumptions selected. The earnings by whatever valuation of liabilities is used in practice must fall between these two extremes.

Three Approaches

Valuation methods observed by this author, diverse though they are, fall into three distinct categories. First is the defined valuation premium method in which the valuation premium is customarily defined as the gross premium reduced by a reasonable profit margin expressed as a percentage of premiums. Second is a variant of this employing deliberately conservative assumptions; for this, see Douglas A. Eckley's paper now in page proof form for Vol. XXXIV of the *Transactions*. The third category establishes benefit reserves on current as-

(Continued on page 2)

COMPUTERS IN THE SOCIETY OFFICE

Ed. Note: This article, aimed at acquainting our members with the steps, to the end of 1978, *by which computers came into service at our headquarters, is a composite of recollections by two who were Executive Directors at the time. Descriptions of the machines have been furnished by Bernard A. Bartels, then Administrative Officer. The story of* 1979 *to* 1983 *will be told in a later article.*

Gary N. See (Executive Director 1973-74):

Early consideration of having the Society's membership records computerized was stimulated by favorable—life saving, one might say—experience we had had in using an outside computer to keep track of students' examination records.

Membership growth was creating difficulties in many office activities. Publishing the *Year Book* using the old typesetting process was expensive and slow. The office found itself making more and more mailings, and particularly needed to be able to make selective mailings, e.g. to chief actuaries. Accuracy of our membership records was clearly declining. And assembling topic material for the Program Committee's work was posing problems that a computer could comfortably solve.

Peter W. Plumley (Executive Director 1975-78):

When I arrived on the scene in April 1975, an addressograph system was in use for Society, Academy and Conference mailings, the plates being filed in six or eight categories according to mailing needs. This system entailed modest expense but suffered from several large drawbacks, the most serious being our inability to make address and other changes promptly. Some thought had been given to choice of a specific com-

(Continued on page 3)

SOME THOUGHTS ON DISCOUNTING

by Richard M. Wenner

If you hypothesize a future that has a given set of non-level interest rates and are presented with a stream of cash flow emerging in that context, how would you calculate its present value? This is the nub of a problem that surfaces in determining the adequacy of a reserve in a manner which fully takes into account both the assets and liabilities involved. This can arise in valuing GICs and annuities under New York's version of the dynamic valuation law; that law requiries a demonstration of reserve adequacy when the more favorable (higher) valuation interest rate is used.

One approach would be to project along several possible future interest rate paths the cash flow of both the contract liabilities of the book of business in question and the assets that support them. The resultant net cash flows for a given interest rate path can then be converted to a single value through discounting or accumulating.

But how does one discount or accumulate in the case of a non-level interest rate path? Using a single interest rate would produce results of questionable meaning. That technique would implicitly assume that all future reinvestment would occur at that interest rate.

I believe what is needed in this situation is a form of the investment year method, which incorporates an assumed reinvestment strategy for handling cash flow (both positive and negative) emerging in any given year. How would it work?

Accumulation . . . Or Discounting

Consider first what might be called the "progressive accumulation approach". Under this approach the first year's cash

(Continued on page 4)

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EDITORIAL

SWALLOWING HARD

RELEASE of the package of recommendations by the National Commission on Social Security Reform places a responsibility on the shoulders of actuaries—particularly the many among us who consider ourselves well qualified to express opinions on this subject (see page 1 of this newsletter's October 1982 issue—that we must now take pains to discharge.

That responsibility is to spread the word. To see that citizens within our reach know what the recommendations are. To explain what they signify, and what their effects are likely to be. Most of all, to make sure that people recognize the chaos that impends if the Congress fails to enact them promptly into legislation.

The recommendations doubtless disappoint many of us. We may think them a sorry reflection of the word "Reform" in the Commission's title. We may deplore how much of their $169 billion is to come from the deficit-ridden U.S. Treasury rather than from genuine cutting back of swollen benefits or payroll tax increases that aren't cushioned by ingenious offsets. We may disapprove of the hardships that deferral of cost-of-living increases will visit upon those genuinely dependent upon their social security income. We may regret missed opportunities for making needed improvements in the system's benefit and tax structures.

But surely we agree that the package is the best, indeed the only, remedy that can be promptly given to this sick patient. Hence we must help to have the available medicine administered.

The last time actuaries were invited to get out and explain social security to the public, the results were less than a credit to our sense of community obligation. Will we do better this time?

The immediate task is to swallow hard (Commission Chairman Greenspan's apt expression), and to do whatever we can to encourage passage of the essential legislation. After that, we can and should examine, through Society and Club meetings, the much more that needs to be done.

E.J.M.

MAIL ALERT

Transactions, Vol. XXXIII should have reached you. If it hasn't, tell the Society office.

Purchase Accounting

(*Continued from page 1*)

sumptions and discounts future profits either at the rate being earned on the assets being purchased or else at a higher rate that allows for the investment risk and perhaps a profit margin. The first two of these approaches produce net liabilities only; the third produces a gross liability offset by the estimated value of the business in force.

These three categories reflect rational differences of opinion that have been recorded for many years in actuarial literature. The first reflects a preference for profit to be expressed as a percentage of premium revenue. The second favors use of conservative assumptions without definition of specific profit margins. The third is adopted by actuaries who prefer to view these matters in terms of the rate of return on investment. Thus, among actuaries, variances of opinion about purchase accounting are really no different from traditional preferences in our preminum and reserve calculations. The author's personal preference is for the third category, because of its similarities with the appraisal of value process, its consistency with historical GAAP considerations, and its perceived acceptability to accountants.

A Proposal

Why shouldn't any one of these three methods be permitted as a solution to the present purchase GAAP dilemma? This would leave just such issues as the extent to which margins for adverse deviations are required, and the distribution of financial figures between the left- and right-hand sides of the balance sheet, to be settled with our accounting breathren.

This proposal doesn't pretend to cover many questions that arise. All it does is to suggest that a range of acceptable solutions exists. No matter which approach is used, the actuary must develop earnings projections for comparison with prior experience and to assure that management's expectations will be realistic. □