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The Actuary

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A PUBLICATIONS GAP?

Much of the recent effort within the Society's Publications Committee has been in the exploration of what has come to be called the "publications gap". A Task Force within the Committee believes that there is a considerable body of valuable editorial material, actual or potential, that goes unpublished because the several established Society publications — the *Transactions, Record, ARCH, The Actuary, Yearbook,* annual Committee reports, and the publications of the Sections — do not always provide an appropriate home. The Task Force seems to be especially concerned where timeliness and informality are important, but the material is too extensive for *The Actuary.*

In keeping with this premise the Task Force has recommended, and the Publications Committee has agreed, that a new publication should be instituted. Director of Publications Anthony Spano presented this recommendation at the May meeting of the Society's Board. At this same meeting Preston Bassett, the immediate past-president of the Society and the current president-elect of the Academy, suggested a new magazine-type publication, initially co-sponsored by the Society and the Academy, but eventually to represent the entire profession. The Society Board took no definitive action in May, though it later authorized a joint study of the Bassett proposal.

A modification of the Publications Committee recommendation was presented to the Executive Committee in late August. To avoid the proliferation of actuarial publications, and the considerable expense, effort, and delay of a new one, Mr. Spano proposed that *The Actuary* expand. Though *The Actuary* of the past has had no more than 8 pages published 10 times annually, these limitations are easily lifted. *The Actuary* is much more timely than the *Transactions* or the *Record,* and its style may be better suited to the additional material contemplated.

The Director of Publications' suggestion has appeal. *The Actuary* can expand easily, with little fanfare and not much risk of failure, especially as compared to launching a new publication; but the real advantage may lie in the opportunity afforded to test the existence of the publications gap.

The Actuary has great difficulty in finding any considerable body of material, already written or only imagined, that falls into the presumed gap. We look back upon unintentional 6-page issues, and upon beating the bushes to keep the quantity up. Perhaps the real problem is not a lack of publication opportunity for those actuaries willing and able to write, but rather that these persons are too few or submit too infrequently.

Until these matters may be resolved, by Board action or otherwise, *The Actuary* stands ready to publish articles or papers that in the past may have been considered too long, to expand its size or its publication frequency, and to help with the closure of any demonstrated publications gap. We hope that such expansion can and will take place.

We recognize the strong possibility, however, that the gap may prove to be a myth; and the pressing problem may be that of too little editorial material to meet the goals of the publications we already have.

C.L.T.

WORKDAY PROBLEMS

No new problems have so far been submitted for this embryo column devoted to matters that come up through everyday actuarial work. We have received an interesting discussion of the problem outlined in the May issue under the heading Loan Account Projection. We are pleased to publish the following, coming from Solomon Goldfinger and the New York Life.

****

At my company, considerable thought went into the problem described by Robert Likins of projecting loans on a closed block of business with a 5% policy loan rate. We did this as a component of the asset/liability model built for our individual lines of business.

The most important step in developing a formula that will work (and probably the one most often overlooked) is to dissect historical information of net increases in loans into its main components — (1) new loans less voluntary repayments, (2) loans cancelled by death and, (3) loan cancelled by surrender.

Assuming the experience of my company is not atypical of other companies, an attempt to correlate the combined effect of all 3 of these factors with interest rates will simply not work. The net increase in loans at my company for the last 3 or 4 years is considerably below our historical peak levels; this drop cannot be explained by any reduction in interest rates during most of this period. However, if one looks at the 3 components listed above, a different picture emerges: net increases in loans decreased over this period not because of any significant drop in new loan activity but because of sharply higher levels of loans cancelled by surrenders. The company might have reported a small increase in net loans for one of these years, but this might have been caused by several hundred million dollars of new loans, offset by several hundred million dollars of loans cancelled by surrender. An actuary concerned about cash flow should not necessarily derive much comfort from the fact that the net increase in loans is low.

Once the 3 main components of changes in loans are recognized, formulas to project each component

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Workday Problems

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separately are needed. The easiest is relating cancelled loans to death claims, since (presumably) this number is not much affected by voluntary actions by the policyholder. Developing factors for loans cancelled by surrender is a little more interesting. We found that the average loan on policies being surrendered was considerably higher than the average loan on all inforce policies. If this is found to be true of your company, this should be reflected in your model. In passing, this fact could have an important influence in understanding the effect of higher surrenders on profitability (especially if differences in policy loan activity are not recognized in dividends).

The next step is to correlate new loans net of voluntary repayments to interest rates. After testing various approaches, the one that worked for us was first, to express this amount as a percent of loan values available, and then to correlate the *change* in this percent to the *change* in interest rates (actually a moving average of interest rates).

This approach may sound more complicated than what the subject at first glance may deserve, but our formula has worked remarkably well over the last 3 years, where I suspect simpler approaches may not have held up as well. Perhaps more importantly, this approach provides further insight into the dynamics of loans, surrenders, dividends, and profitability. One final comment: Such things as dividend deposits and paid-up additions are often ignored in such model studies. The actuary should carefully evaluate whether, for his company, the impact of these items is significant. □

LIBRARY NEEDS

If anyone has a spare copy of the following book: *Concepts of Actuarial Soundness in Pension Plans* by Dorrance C. Bronson (published by Irwin for the Pension Research Council in the middle '50s), a donation to the SOA Library will be greatly appreciated.

Joan I. Chapa, Librarian

Mortality Experience Among Actuaries

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3. The following is the resulting abridged life table for Fellows of the Society:

n	l_n
0	10000
5	9623
10	9532
15	9427
20	9286
25	9078
30	8766
35	8300
40	7624
45	6683
50	5455
55	4067
60	2714

4. The total expected deaths is 222 as compared to the actual 184, so this table includes a 17% margin. Can we conclude that Fellows of the Society experienced mortality (over the 1920 to 1986 period) approximately equal to 1958 CSO, but rated back at least 10 years? Surely the average age of obtaining Fellowship was no less than 30.

5. The data is very scanty and the approach is not traditional. Actuaries may differ as to the procedure. Nonetheless, these results may be of interest. □

Pension Issues in UK

(Continued from page 1)

Although the Government presumably thought they were ensuring an increase in transfer values (there having been media comment that transfer values were too low), the values in the future are likely to be less. In the past some actuaries used for transfer value purposes the same interest rates as for funding, say 8 to 9%; but they will now be using 10 to 11%.

Personal Pensions

The Conservative Government, as a part of their enthusiasm for privatisation, are headed for a system in which people are encouraged to opt-out of a part of the State pension. They could do this through a "personal pension" funded by the rebate of part of the State plan contributions.

Some of us are concerned that the public will not understand the risks they run in substituting their own retirement account (which buys a uni-sex annuity at retirement) for a pension based on earnings; but our Secretary of State for Social Services has made at least two visits to the United States and is very impressed by your IRAs.

We hear that much of the in-flow to your IRAs is going into deposit-type investments. These do not seem very suitable for pension fund savings, which surely should be invested in a wide range of securities with a considerable emphasis on equities. Perhaps American actuaries might like to offer advice. Is this enthusiasm for individual accounts reasonable — or is it misplaced? And what about uni-sex annuities? □

Addition to the Program Booklet

An open committee meeting of the Task Force on Mutual Life Insurance Company Conversion will be held at 8:30 A.M. on Tuesday, Oct. 7, as a part of the Society of Actuaries annual meeting in Chicago. At that meeting, the draft report of the Task Force will be discussed. Advance copies of the draft report may be obtained from Terry D. Garver, Task Force Chairman, at his *Yearbook* address.