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NEW STUDY NOTES OF GENERAL INTEREST

Readers may wish to order single copies of one or more of the following new Study Notes. Those who do so will be billed for postage and modest overhead costs. (Subscribers to the Study Note Service already have these.)

Code	Title	Author	Pages
6-101-81	Actuarial Aspects of the Changing Canadian Demographic Profile	Robert L. Brown	21
6-102-81	Consumerist Issues in the Canadian Life Insurance Industry	James Witol	7
10LB-402-81	Gross Premiums and Profit Margins	David B. Atkinson	81
10LB-402-81	Term Insurance	Claude Thau	46
10PC-804-81	Reporting to Pension Plan Participants in Canada	Sylvain Dion	5
10PU-805-81	Reporting to Pension Plan Participants in the U.S.	Robert Davis	9
10LB-410-81	Pricing of Individual Insurance Products Sold Under Mass Solicitation Programs	John D. Ladley	11

L.N.C.

Trustees Report

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nomic assumptions used have changed during the years, but now that too is being effectively done in an Actuarial Note from Baltimore. All good actuaries are advised to write to Office of the Actuary, Social Security Administration, Baltimore, MD 21235, requesting a free copy of each of the following:

(1) Summary of the 1981 Reports of the Social Security Boards of Trustees, pp. 21;

(2) Actuarial Note No. 106, *Comparison of Actual Economic Experience and Assumptions in Trustees Reports*, 1971-80, Joseph A. Applebaum, pp. 3;

(3) Actuarial Study No. 85, *Social Security Area Population Projections*, 1981, Joseph F. Faber and John C. Wilkin, pp. 9.

A noteworthy feature of the 1981 Reports is that the number of sets of assumptions has been increased. There are now five Alternatives, labelled respectively, I—Optimistic; II-A—Intermediate (more robust economic expansion); II-B—Intermediate (less robust economic expansion); III—Pessimistic; and for 1981-1986 only, a non-numbered prospect called, rather rashly, Worst-Case. This last assumes, for instance, the following percentage increases in the Consumer Price Index: 1981, 12.8%; 1982, 13.6%; 1983, 11.6%; 1984, 10.9%; 1985, 9.7%; 1986, 8.6%.

The need for actuaries to press on with educational efforts about the system's workings is well illustrated by a Roper Survey finding, drawn to our attention by Mr. Robert J. Myers. From 2,000 face-to-face interviews with U.S. adults, Roper found that:

> "Americans think that the Social Security Administration spends a median of $52.10 of every $100 it takes in to support its bureaucracy, leaving less than $48 for benefit payments."

In explaining that the true expense figure is only one-thirty-fifth of the average supposition, any of our readers willing to set the record straight may find the following short table of rounded amounts useful:

TRUST FUND OPERATIONS 1980

Total of OASI, DI & HI—In Billions

Assets, Jan. 1, 1980		$ 43.5B
Contributions*	+	141.0
Interest Income	+	3.4
Benefits	−	145.6
Expenses	−	2.1**
Assets, Dec. 31, 1980		$ 40.2B

*net of transfers

**$1.49 of every $100 contributed!

E.J.M.

Deaths

Garry L. Gaudry, F.S.A. 1975

GREGORIAN CALENDAR QUADRICENTENNIAL, 1982

Assuming, as perhaps we may on an 8,500 circulation, that 40 people perused our April Editorial urging a 1982 calendar change to mark the 400th anniversary of Pope Gregory XIII's work, its yield was a stellar 10% response. Which would have been gratifying except that the solidly supporting response was only 2½%—thank you, Peter M. Thexton! The other 7½% cling obdurately to counter-proposals, thus: *J. Ross Gray* prefers to promote a brace of unrelated reforms. If he has his way, (A) each day will be divided into 100,000 "rosses" to replace the present 86,400 seconds, and (B) New Year's Day will mark "an astronomical event which means something." His choice for (B) is less than utterly clear, but he seems to favour January 8th (nearest approach of the Earth to the Sun), or December 25th (zero point on the Equation of Time). Possibly Mr. Gray will compromise on the mid-point between these two significant dates.

D. C. Townsend urges "return to unblemished principles", represented in his eye by the ancient Roman calendar of twelve 30-day months. Says he:

> "The last five days of each year would not officially exist, and agents, administrators, presidents, mail persons and telephone operators would use this time to pay homage to the god 'Bacchus'. Computer operators, accountants and actuaries would then be uninterrupted in their worship of their personal deity 'Year-end'. Once every four years, even those Yearendians would be permitted a nonexistent day."

Charles M. Underwood II seeks a way to eliminate the distinction between semi-monthly and bi-weekly payroll periods, and to enable imaginative planners to re-define holidays to fall on Mondays or Fridays and maintain a constant date. This he would achieve by a year consisting of thirteen 28-day months followed by one or two nonweekdays. Each month would begin on a Sunday. "I would also like", says he, "to see the months redefined to make September through December represent the seventh through tenth months, but am afraid that would be too much to ask."

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Publication Note

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priate need not be revolutionary. Much of what contributes to concerns about the present system stems from excessive liberalizations of benefit levels, especially those associated with the 1972 Amendments. It is to be hoped that over the years aberrations of this sort can be dealt with acceptably without revolutionary changes.

It is natural that a program affecting so many people and involving such huge sums will involve many differing views and difficult political problems. How to carry on effective, constructive examination of these issues and how to deal with the complex political aspects are challenges of a high order to all responsible segments of our population. Actuaries who have the advantage of having insights into many of these issues can be especially helpful to their fellow citizens. Mr. Robertson is commended for making a contribution to this end. ☐

Sightings

(Continued from page 4)

Heinlein's Podkayne of Mars (1963). In reporting that, on the planet Venus, murder is "a *very* serious violation of regulations", Podkayne adds:

> "You'll have your pay checked for years to offset both that employee's earning power for what would have been his working life, and his putative value to the Corporation, all calculated by the company's actuaries who are widely known to have no hearts at all, just liquid helium pumps."

Daniel Desfosses has been saving for us this two-year-old fragment from the *Worcester Evening Gazette*:

> "The (Massachusetts) Senate gave initial approval to a bill giving savings bank actuaries a $55,000 salary. Sen. David H. Locke, R-Wellesley, who tried to block the bill, complained, 'The highest salary ever endorsed by the Senate is . . . not for a great doctor or a great scientist, but an actuary'."

Kenneth A. Rothschild picked up, from the life story of Robert Noyce in *The Economist*, December 27, 1980:

> "He was sacked from college and trained to be an actuary, which he found thoroughly boring . . . He then went to MIT and got top grades in all subjects but one. (He found fame in electronics)."

E.J.M.

ADVERSE DEVIATION DELTAS

John C. Wooddy et al, *Adverse Deviation*, 1981, pp. 105, Society of Actuaries, Chicago, IL. $20.

The Society has published this monograph in which Mr. Wooddy and his project associates describe in useful detail the approach, devised by the Committee on Theory of Risk, to the problem of providing appropriately for the risks of adverse deviation in a GAAP valuation under the specifications of the *Audit Guide for Stock Life Insurance Companies*.

Such deviations may arise from chance fluctuation, secular variation, catastrophic variation, cyclical variation, incorrect classification, or insufficient knowledge of the mortality rates or other basic probabilities.

After a Preface and then James C. Hickman's Introduction, the contents are:

Chap. 1—The Problem
2—Development of the Solution
3—The Model, "SOFASIM"
4—How to Calculate GAAP Deltas

App. 1—Academy Recommendation 1 and its Interpretations
2—SOFASIM Assumptions and Some Results
3—Table of Corporate Bond Yields, 1899-1976

Bibliography

Mr. Wooddy points out that the SOFASIM model can be and is being used to solve a wider class of problems than just those under GAAP. The broad subject of Possible vs. Expected Values will be explored in Panel Discussion 6 at the Society meeting in Atlanta on October 20, 1981. Anyone who attends it is well advised to have read this clearly written book beforehand.

E.J.M.

THE E. & E. CORNER

Ques.: *Unsuccessful students are given their 0 through 5 score, describing their failure only in its degree. Why can't they be given particulars to show where the weakness was found, so they can concentrate future efforts productively?*

Ans.: As an experiment, we have begun providing an analysis of exam results to all failing candidates for Parts 3, 5A and 5B, two or three weeks after results are mailed. If this proves successful and is well received, we will try to extend it to other Parts.

Ques.: *Why is it sometimes so difficult to obtain application forms and sample questions?*

Ans.: We apologize for the difficulty that prompted this question. One person in the Society office, surrounded by an impressive array of materials, responds to these and other requests; when she's absent, substitutes do their best. Such service lapses—rare, we believe—should always be called to the attention of the office.

Ques.: *Why is Chapter 7 of Kellison's* The Theory of Interest *omitted from the Part 4 syllabus? Can one become an actuary without having learned what's in that chapter?*

Ans.: The miscellaneous topics that make up that chapter appear elsewhere in the Course of Reading. ☐

MAIL ALERT

Since September 1st you should have received the *Record*, Vol. 7, No. 1, covering our first 1981 Spring Meeting, and the *Transactions*, Vol. XXXII, 1980. If you haven't, better let Society headquarters in Chicago know you haven't.

Gregorian Calendar

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A plan exciting enough to ignite a unifying spark among progressive actuaries may lurk somewhere in all the above. But will this spark become a consuming fire before the end of (1582 + 400) A.D.?

E.J.M.