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BOOK REVIEW

Ashby Bladen, *How to Cope With The Developing Financial Crisis*, 192 pp., McGraw Hill, New York, 1979, $8.95.

by Stephen L. Brown

This book is about the very serious financial situation in which the U.S. finds itself today. Mr. Bladen writes from the perspective of the professional investor (he directs Guardian Life's investment activities), aiming his comments at the intelligent layman. Given the increasing need for actuaries to understand today's rapidly changing financial and political trends, this volume should be added to every actuary's "must read" list.

In his early chapters the author undertakes to explain some fairly complex subjects—money, credit and inflation—in a practical easy-to-understand manner. He traces the history of monetary systems, from those built upon money possessing intrinsic value up to today's condition in which money with intrinsic value has disappeared completely. He also takes the reader through several historic financial collapses, including the German hyperinflation of the 1920's.

It is also in these chapters that Mr. Bladen takes a few swipes at mathematical academics in general, and economists in particular. Some of his barbs *appear to be better aimed than others.* He takes theoretical economists to task for failing to take sufficient account of psychological factors; he argues that "changes in the burden of debts upon incomes affect the real economy largely through their impact upon the confidence with which borrowers and lenders view their future prospects"; but less persuasive is his complete dismissal of academic attempts to develop mathematical models of risk and other aspects of the investment process.

ELECTIONS 1979

The following are the results:

President-Elect	Robin B. Leckie
Vice Presidents	Daphne D. Bartlett
	Richard Humphrys
Secretary	Myles M. Gray
Treasurer	L. Blake Fewster
Director of Publications	Robert E. Hunstad
Board	James A. Attwood
	Samuel Eckler
	Paul H. Jackson
	Michael B. McGuinness
	Charles A. Ormsby
	Anna Maria Rappaport

APHORISM RESULTS

by Charles G. Groeschell, Competition Editor

The response to the first Competition was good, both in quality and volume. This produces a problem since every entry deserves some reference, but space prevents this.

By far the most prolific entrant was Stuart Marks with 14 aphorisms. Here are five of them:

Actuaries are a closed group.
Pension actuaries lead active lives.
Female actuaries bear new entrants.
Pension actuaries don't wear a three-piece suit until completion of ten years of consulting experience; (only then are they vested).
Actuaries are bored with history. The further back in time you go, the more they lose interest.

The first entrant was another Stuart (Klugman) who pointed out that he became a Fellow despite:

If you know the answers to exactly two of the three items on a triple true-false question, your guess at the third will be wrong.

From Robin Block's point of view:

There is nothing worse than demography. Corollary—You don't have to like it, you just have to study it.
Getting started is much more difficult than studying. Corollary—Talking about studying is more interesting than studying.

A SERVANT AT YOUR CALL— SOFASIM

by John C. Wooddy

The Society owns, on behalf of its members, a creation remarkable enough to have earned the sobriquet "genie". His, or her—the creature is impartially sexless—full name is Society of Actuaries Simulation Model; thus nicknamed SOFASIM, sō'fa-sim. It's a computer model capable of portraying the operations and future results of all or part of the individual non-par life insurance line of your company or of your competition, from specifications that you choose.

What SOFASIM Can Do For You

When given initial facts as you see them and assumptions you wish to simulate, the computer will produce, for each year simulated, 45 different balance sheets, operating statements, and related financial items. These include after-tax net gains from operations and stockholder dividends, if any; the sums of these will be discounted to the starting date at six percent, nine percent, and 12 percent interest. The final surplus may be discounted to the starting date and added to the discounted sum of stockholder dividends, producing a single index, the company's "present worth."

The model provides, if desired, stochastic (i.e., determined by chance) deaths, lapses, and sales, enabling you to investigate expected variability by Monte Carlo runs. SOFASIM's flexibility even permits you to do Monte Carlo runs on a variable (e.g., the interest rate) for which the model inherently gives no stochastic option. The possibilities are infinite for studying effects of new premiums and cash values, changes in investment policy or in interest rates, or in both, or margins needed in GAAP assumptions.

SOFASIM

You may examine the impact of a single change or of multiple changes, occurring immediately, or later, or developing incrementally as often as monthly. Developmental change may be slow, rapid, cyclical, or following a trend; instantaneous change may range from the barely noticeable to the catastrophic.

What The User Must Do

You give the computer detailed facts and assumptions to be simulated. You should group your starting insurance in force (if any) and future new business by principal plans and ages, bearing in mind that the more cells there are, the larger the cost. The same holds for the asset portfolio. The challenge lies in deciding what rates of future mortality, lapse, market interest and expenses to stipulate so as to get useful answers to your questions. You must also decide between stochastic and deterministic specifications for each element for which you have that choice.

How SOFASIM Deals With Critical Questions

Insurance expenses. Commissions are to be specified as percentages of premiums; you may introduce as many different scales as you wish, and you may use one set of scales for some issue years and others for other years. You express other insurance expenses in traditional format, specifying first-year and renewal costs per policy and per thousand of insurance as well as any constant overhead amount.

Investment policy. The range of assumed asset experiences is quite broad, considering that SOFASIM deals only in bond investments and cash. You may have callable as well as non-callable bonds; you decide your investment profile—years to maturity, callability, call prices, and conditions that will activate call provisions. SOFASIM has the unusual, perhaps unique, ability to operate in terms of specified future money market conditions rather than future company investment yields. It sells bonds when necessary to provide enough cash to pay benefits and expenses.

Income taxes. U.S. federal income tax is calculated in accordance with the Society's Study Note on this topic, recognizing Phase III situations, loss carryback, carryforward, etc.

SOFASIM's History

SOFASIM's genesis lay in a 1973 project by our Board of Governors to develop GAAP "deltas". This was assigned to the Joint Committee on Theory of Risk; the Board provided $50,000 for consulting fees and computer costs. The Committee hired Harry Markowitz as its consulting economist. Aided by several interested actuaries and Dr. Markowitz, the Committee proceeded to ask Dr. Markowitz to build a computer model of a stock life company. In 1977 the Board voted an additional $20,000 to finish this project. A report on the GAAP deltas exploration is now being written.

In the *Record,* Vol. 1, No. 4, pp. 969-93 you'll find the report of a 1975 Teaching Session on SOFASIM, and in forthcoming Vol. 5, No. 1 a Concurrent Session at the New Orleans Meeting on our model will be reported.

How To Summon This Henchman

Would that we could say, "Dial us and give your orders." It's not quite that simple. SOFASIM has been programmed on a time-sharing service (National CSS). Its language is SIM-SCRIPT, developed earlier specially for simulations by Harry Markowitz and others at RAND Corporation. SIM-SCRIPT manuals can be had from CACI, the company that owns and maintains its compiler. A SOFASIM manual is available for $30 from the Society; write to the Society office enclosing your check.

To use SOFASIM, one must establish an account with National CSS. You can expedite matters by phoning or writing Alice Goldstein, A.S.A., or this author. In the past, classes in SOFASIM have been conducted by Mrs. Goldstein and Dr. Barbara Markowitz.

Your cost will depend upon the number of plan-issue age-issue year groups

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AN INTERVIEW WITH ORLO R. NICHOLS, FSA 1979

by E. J. Moorhead

Let's not be so unfeeling as to deny our students the immemorial privilege of griping about how tough it is to pass the actuarial exams. But how does one meet the Society's requirements if one is without the blessing of eyesight? We asked Orlo R. Nichols, an actuary in the Social Security Administration, who has just become the first blind person to attain his Fellowship in the Society.

Orlo depended mainly on volunteers who recorded the study material or read it to him. Reading the actuarial notation was sometimes a problem for the volunteers who weren't actuaries. A volunteer reader in such a predicament would sometimes contact Orlo, who would listen to the description of the notation and then explain it to the reader. From those readings Orlo made extensive notes in braille. When it came to taking the exams, the Society furnished him the questions in braille. For multiple-choice questions he performed any necessary preliminary work in braille and then dictated the correct answer. For essay questions, he used a typewriter.

Orlo tells us that there are other blind students who have tackled some of the actuarial exams or who are now taking them. He says that the problem of getting a job is tougher than passing the exams. Some employers evidently fail to recognize how productive an actuary with this handicap can be. He hopes there'll be more employers as imaginative as Robert J. Myers, who hired Orlo when he came out of college.　□

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you specify, the complexity of your prescribed investment operation and the number of years simulated. Computer time for a typical 20-year batch (as opposed to on-line) run might cost about $50.

Can SOFASIM be installed on a company's own computer? Yes, but. . . . ! There's no problem in getting a tape of the program; the Society will sell this (at a price yet to be set). To accept SOFASIM, the computer must have at least 512K storage capacity and a SIM-SCRIPT compiler.

Ed. Note: We cordially invite any actuary, who has put this exciting Threepio to use, to tell our readers the highlights of your experiences.　□